Department of Design and Construction

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE
VOLUME 1 – BID BOOKLET

TABLE OF CONTENTS

Introduction 2

Bid Submission Requirements 3

Notices to Bidders 4

- Pre Bid Questions (PBQs) 4
- NYC Contract Financing Loan Fund 4

M/WBE Notice to Prospective Contractors 5

Affirmation 13

Bid Schedule 15

Pre-Award Process 17

Project References 19

A. Contracts completed by the bidder 19

B. Contracts currently under construction by the bidder 20

C. Pending contracts not yet started by the bidder 21

Introduction

This Bid Booklet is intended to provide general information necessary for bidding on a DDC public works project and is part of the Contract Documents, as per Article 1.1 of the Standard Construction Contract.

As this contract is solicited via the PASSPort system, the bidder will be required to complete all of the PASSPort forms and questionnaires. These forms and questionnaires, along with the bidder's responses, will become part of the Bid Booklet.

Additional information on the PASSPort system can be found at the following website:
https://www1.nyc.gov/site/mocs/systems/passport-user-materials.page

Bid Submission Requirements

THE FOLLOWING MUST BE COMPLETED AND SUBMITTED FOR THE BID TO BE CONSIDERED RESPONSIVE:

1. Completed electronic bid submission in PASSPort;
    a. All required fields in PASSPort must be completed.
2. Bid security, if required.
    a. If Bid security is in a form of a bid bond, bidders must include it with their electronic PASSPort submission.
    b. If Bid security is in a form of a certified check, bidders must hand deliver the certified check.

BIDDERS ARE ADVISED THAT PAPER BID SUBMISSIONS WILL BE DEEMED NON-RESPONSIVE. BIDDERS MUST SUBMIT THEIR BIDS ELECTRONICALLY IN PASSPORT AND PROVIDE THE BID SECURITY FOR THE BID TO BE CONSIDERED RESPONSIVE.

THE FOLLOWING MAY RESULT IN THE BID BEING FOUND NON-RESPONSIVE:

1. Failure to upload required files or documents as part of a mandatory PASSPort Questionnaire response.
2. Uploading an incorrect file as part of a mandatory PASSPort Questionnaire response.

Notices to Bidders

Pre Bid Questions (PBQs)

Please be advised that PBQs must be submitted to the Agency Contact Person via PASSPort (in the RFx Discussions with buyer section) within the timeframe indicated in the PASSPort procurement.

NYC Contract Financing Loan Fund

If your business is working as a prime or subcontractor on a project with a City agency or City-funded entity, you may be eligible for a Contract Financing Loan from a participating lender coordinated with the NYC Department of Small Business Services (SBS). Loan repayment terms align with the contract payment schedule.

For more information: Call 311 or visit https://www1.nyc.gov/nycbusiness/article/contract-financing-loan-fund

M/WBE Notice to Prospective Contractors

PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT (9/2020 version)

ARTICLE I. M/WBE PROGRAM

Section 6-129 of the Administrative Code of the City of New York ("Section 6-129") establishes the program for participation in City procurement ("M/WBE Program") by minority-owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan") and are detailed below. Contracts solicited through the Procurement and Sourcing Solutions Portal (PASSPort) will contain a Schedule B in the format outlined in the Schedule B – M/WBE Utilization Plan & PASSPort rider. The provisions of this notice will apply to contracts subject to the M/WBE Program established by Section 6-129 regardless of solicitation source.

The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129.

References to MBEs or WBEs shall also include such businesses certified pursuant to the executive law where credit is required by section 311 of the New York City Charter or other provision of law.

Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts.

Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

PART A

PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD

AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS

1. The **MBE and/or WBE Participation Goals** established for this Contract or Task Orders issued pursuant to this Contract, ("**Participation Goals**"), as applicable, are set forth on Schedule B, Part 1 to this Contract (see Page 1, Line 1 Total Participation Goals) or will be set forth on Schedule B, Part 1 to Task Orders issued pursuant to this Contract, as applicable.

The **Participation Goals** represent a percentage of the total dollar value of the Contract or Task Order, as applicable, that may be achieved by awarding subcontracts to firms certified with DSBS as MBEs and/or WBEs, and/or by crediting the participation of prime contractors and/or qualified joint ventures as provided in Section 3 below, unless the goals have been waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

2. If **Participation Goals** have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the **Participation Goals**, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

3. If **Participation Goals** have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant **Participation Goal**, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant **Participation Goal**. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.

4. A. If **Participation Goals** have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part 2 (see Pages1-2) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor's required certification and affirmations. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals**, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the **Participation Goals** in accordance with Section 6-129 and Part A, Section 10 below.

B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE **Participation Goals**, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part 2 (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified **Participation Goals** by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals** that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed non-responsive.

(ii) **Participation Goals** on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If **Participation Goals** have been established on a Task Order, a contractor shall be required to submit a Schedule B – M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part 2 (see Pages 1-2) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor's required certification and affirmations. The contractor must engage in good faith efforts to meet the **Participation Goals** as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the **Participation Goals** in accordance with Section 6-129 and Part A, Section 10 below.

C. THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART 2). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART 3). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.

5. Where an **M/WBE** Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multi-year contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below $3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work.** In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the firms' commencement of work. A list of city-certified MBE and WBE firms may be obtained from the DSBS

website at www.nyc.gov/buycertified, by emailing DSBS at buyer@sbs.nyc.gov, by calling (212) 513-6451, or by visiting or writing DSBS at One Liberty Plaza, New York, New York, 10006, 11th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting www.nyc.gov/getcertified, emailing MWBE@sbs.nyc.gov, or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

7. Where an **M/WBE** Utilization Plan has been submitted, the Contractor shall, with each voucher for payment, and/or periodically as Agency may require, submit statements, certified under penalty of perjury, which shall include, but not be limited to,: the total amount the Contractor paid to its direct subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount direct subcontractors paid to indirect subcontractors; the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor by the Contractor, and, where applicable, hired by any of the Contractor's direct subcontractors; and the dates and amounts paid to each MBE or WBE. The Contractor shall also submit, along with its voucher for final payment: the total amount it paid to subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount its direct subcontractors paid directly to their indirect subcontractors; and a final list, certified under penalty of perjury, which shall include the name, address and contact information of each subcontractor that is an MBE or WBE, the work performed by, and the dates and amounts paid to each.

8. If payments made to, or work performed by, MBEs or WBEs are less than the amount specified in the Contractor's **M/WBE** Utilization Plan, Agency shall take appropriate action, in accordance with Section 6-129 and Article II below, unless the Contractor has obtained a modification of its **M/WBE** Utilization Plan in accordance with Section 6-129 and Part A, Section 11 below.

9. Where an **M/WBE** Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds the greater of 10 percent of the Contract or Task Order, as applicable, or $500,000, Agency shall review the scope of work for the Contract or Task Order, as applicable, and the scale and types of work involved in the change order, and determine whether the **Participation Goals** should be modified.

10. Pre-award waiver of **the Participation Goals**.

(a) A bidder or proposer, or contractor with respect to a Task Order, may seek a pre-award full or partial waiver of the Participation Goals in accordance with Section 6-129, which requests that Agency change one or more **Participation Goals** on the grounds that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, or by demonstrating that it has legitimate business reasons for proposing a lower level of subcontracting in its M/WBE Utilization Plan.

(b) To apply for a full or partial waiver of the **Participation Goals**, a bidder, proposer, or contractor, as applicable, must complete Part 3 of Schedule B **and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing to the Agency by email at MWBEModification@ddc.nyc.gov**. **Full or partial waiver requests that are received later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due may be rejected as untimely**. Bidders, proposers, or contractors, as applicable, who have submitted timely requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.

(c) If the Agency determines that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.

(d) Agency may grant a full or partial waiver of the **Participation Goals** to a bidder, proposer or contractor, as applicable, who demonstrates—before submission of the bid, proposal or Task Order, as applicable—that it has legitimate business reasons for proposing the level of

subcontracting in its **M/WBE** Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder, proposer or contractor, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts represented by the **Participation Goals**. In making such determination, Agency may consider whether the **M/WBE** Utilization Plan is consistent with past subcontracting practices of the bidder, proposer or contractor, as applicable, whether the bidder, proposer or contractor, as applicable, has made efforts to form a joint venture with a certified firm, and whether the bidder, proposer, or contractor, as applicable, has made good faith efforts to identify other portions of the Contract that it intends to subcontract.

11. Modification of **M/WBE** Utilization Plan. (a) A Contractor may request a modification of its **M/WBE** Utilization Plan after award of this Contract. **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below $3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor may request a Modification of its M/WBE Utilization Plan as part of its bid submission.** The Agency may grant a request for Modification of a Contractor's **M/WBE** Utilization Plan if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the **Participation Goals**. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:

(i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;

(ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;

(iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;

(iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the **M/WBE** Utilization Plan, and for which the Contractor claims an inability to retain MBEs or WBEs;

(v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;

(vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;

(vii) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;

(viii) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

Agency's M/WBE officer shall provide written notice to the Contractor of the determination.

(b) The Agency may modify the **Participation Goals** when the scope of the work has been changed by the Agency in a manner that affects the scale and types of work that the Contractor indicated in its **M/WBE Utilization Plan** would be awarded to subcontractors.

12. If the Contractor was required to identify in its bid or proposal the MBEs and/or WBEs they intended to use in connection with the performance of the Contract or Task Order, substitutions to the identified firms may only be made with the approval of the Agency, which shall only be given when the Contractor has proposed to use a firm that would satisfy the **Participation Goals** to the same extent as the firm previously identified, unless the Agency determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts. In making such determination, the Agency shall require evidence of the efforts listed in Section 11(a) above, as applicable, along with any other relevant factors.

13. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an **M/WBE** Utilization Plan and has committed to subcontract work to MBEs and/or WBEs in order to meet the **Participation Goals**, the Contractor will not be deemed in violation of the M/WBE Program requirements for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.

14. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its **M/WBE** Utilization Plan, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

15. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

PART B

MISCELLANEOUS

1. The Contractor shall take notice that, if this solicitation requires the establishment of a **M/WBE** Utilization Plan, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the **M/WBE** Utilization Plan.

2. Pursuant to DSBS rules, construction contracts that include a requirement for a **M/WBE** Utilization Plan shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.

3. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and/or WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and/or WBEs in contracts.

4. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).

5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE Program requirements set forth herein and the pertinent provisions of Section 6-129, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE Program requirements of this Contract and pertinent provisions of Section 6-129, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of MBEs and/or WBEs to meet the required **Participation Goals**.

ARTICLE II. ENFORCEMENT

1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.

2. Whenever Agency believes that the Contractor or a subcontractor is not in compliance with Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to any **M/WBE** Utilization Plan, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering the Contractor an opportunity to be heard. Agency shall then conduct an investigation to determine whether such Contractor or subcontractor is in compliance.

3. In the event that the Contractor has been found to have violated Section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to, any **M/WBE** Utilization Plan, Agency may determine that one of the following actions should be taken:

(a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;

(b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;

(c) making a finding that the Contractor is in default of the Contract;

(d) terminating the Contract;

(e) declaring the Contractor to be in breach of Contract;

(f) withholding payment or reimbursement;

(g) determining not to renew the Contract;

(h) assessing actual and consequential damages;

(i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional

procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;

(j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or

(k) taking any other appropriate remedy.

4. If an **M/WBE** Utilization Plan has been submitted, and pursuant to this Article II, Section 3, the Contractor has been found to have failed to fulfill its **Participation Goals** contained in its **M/WBE** Utilization Plan or the **Participation Goals** as modified by Agency pursuant to Article I, Part A, Section 11, Agency may assess liquidated damages in the amount of ten percent (10%) of the difference between the dollar amount of work required to be awarded to MBE and/or WBE firms to meet the **Participation Goals** and the dollar amount the Contractor actually awarded and paid, and/or credited, to MBE and/or WBE firms. In view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of Contractor's failure to meet the **Participation Goals**, the foregoing amount is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such failure, and not as a penalty. Agency may deduct and retain out of any monies which may become due under this Contract the amount of any such liquidated damages; and in case the amount which may become due under this Contract shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.

5. Whenever Agency has reason to believe that an MBE and/or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129(c)(8)), or has violated any provision of Section 6-129, Agency shall notify the Commissioner of DSBS who shall determine whether the certification of such business enterprise should be revoked.

6. Statements made in any instrument submitted to Agency pursuant to Section 6-129 shall be submitted under penalty of perjury and any false or misleading statement or omission shall be grounds for the application of any applicable criminal and/or civil penalties for perjury. The making of a false or fraudulent statement by an MBE and/or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.

7. The Contractor's record in implementing its **M/WBE** Utilization Plan shall be a factor in the evaluation of its performance. Whenever Agency determines that a Contractor's compliance with an **M/WBE** Utilization Plan has been unsatisfactory, Agency shall, after consultation with the City Chief Procurement Officer, file an advice of caution form for inclusion in PASSPort as caution data.

Affirmation

The Bidder affirms and declares:

1. The said bidder is of lawful age and the only one interested in this bid; and no person, firm or corporation other than hereinbefore named has any interest in this bid, or in the Contract proposed to be taken.

2. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief: (1) the prices in this bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; (2) unless otherwise required by law, the prices quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and (3) no attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

3. No councilman or other officer or employee or person whose salary is payable in whole or in part from the City Treasury is directly or indirectly interested in this bid, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.

4. The bidder is not in arrears to the City of New York upon debt or contract or taxes, and is not a defaulter, as surety or otherwise, upon any obligation of the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York or State of New York, nor is there any proceeding pending relating to the responsibility or qualification of the bidder to receive public contracts except as set forth on the Affirmation included as disclosed in PASSPort.

5. The bidder hereby affirms that is has paid all applicable City income, excise and other taxes for all it has conducted business activities in New York City.

6. The bidder, as an individual, or as a member, partner, director or officer of the bidder, if the same be a firm, partnership or corporation, executes this document expressly warranting and representing that should this bid be accepted by the City and the Contract awarded to him, he and his subcontractors engaged in the performance:

   (1) will comply with the provisions of Section 6-108 of the Administrative Code of the City of New York and the non-discrimination provisions of Section 220a of the New York State Labor Law, as more expressly and in detail set forth in the Agreement; (2) will comply with Section 6-109 of the Administrative Code of the City of New York in relation to minimum wages and other stipulations as more expressly and in detail set forth in the Agreement; (3) have complied with the provisions of the aforesaid laws since their respective effective dates, and (4) will post notices to be furnished by the City, setting forth the requirements of the aforesaid laws in prominent and conspicuous places in each and every plant, factory, building and structure where employees engaged in the performance of the Contract can readily view it, and will continue to keep such notices posted until the supplies, materials and equipment, or work labor and services required to be furnished or rendered by the Contractor have been finally accepted by the City. In the event of any breach or violation of the foregoing, the Contractor may be subject to damages, liquidated or otherwise, cancellation of the Contract and suspension as a

bidder for a period of three years. (The words, "the bidder", "he", "his", and "him" where used shall mean the individual bidder, firm, partnership or corporation executing this bid).

7. Compliance Report

   The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, (1) represents that his attention has been specifically drawn to Executive Order No. 50, dated April 25, 1980, on Equal Employment Compliance of the contract, and (2) warrants that he will comply with the provisions of Executive Order No. 50. The Employment Report must be submitted as part of the bid.

8. The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, executes this document expressly warranting that he will comply with: (1) the provision of the contract on providing records, Chapter 8.

9. By submission of this bid, the bidder certifies that it now has and will continue to have the financial capability to fully perform the work required for this contract. Any award of this contract will be made in reliance upon such certification. Upon request therefor, the bidder will submit written verification of such financial capability in a form that is acceptable to the department.

10. In accordance with Section 165 of the State Finance Law, the bidder agrees that tropical hardwoods, as defined in Section 165 of the State Finance Law, shall not be utilized in the performance of this Contract, except as the same are permitted by the foregoing provision of law.

11. The bidder has visited and examined the site of the work and has carefully examined the Contract in the form approved by the Corporation Counsel, and will execute the Contract and perform all its items, covenants and conditions, and will provide, furnish and deliver all the work, materials, supplies, tools and appliances for all labor and materials necessary or required for the hereinafter named work, all in strict conformity with the Contract, for the prices set forth in the Bid Schedule.

12. M/WBE UTILIZATION PLAN: By signing its bid, the bidder agrees to the M/WBE Vendor Certification and Required Affirmations set forth below, unless a full waiver of the Participation Goals is granted.

    I hereby:

    1) acknowledge my understanding of the M/WBE participation requirements as set forth in this Contract and the pertinent provisions of Section 6-129 of the Administrative Code of the City of New York and the rules promulgated thereunder;

    2) affirm that the information supplied in support of the M/WBE Utilization Plan is true and correct;

    3) agree, if awarded this Contract, to comply with the M/WBE participation requirements of this Contract, the pertinent provisions of Section 6-129, and the rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract;

    4) agree and affirm that it is a material term of this Contract that the Vendor will award the total dollar value of the M/WBE Participation Goals to certified MBEs and/or WBEs, unless a full waiver is obtained or such goals are modified by the Agency; and

    agree and affirm, if awarded this Contract, to make all reasonable, good faith efforts to meet the M/WBE Participation Goals, or If a partial waiver is obtained or such goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms.

Bid Price

item_code	item_label	itype_label	Bid Price
bid_1	Total Bid Price (From Bid Schedule)	Required Item	43918426.07000000

FORM OF BID BOND

KNOW ALL MEN BY THESE PRESENTS. That we, JLJ IV Enterprises, Inc.

hereinafter referred to as the "Principal", and Liberty Mutual Insurance Company

hereinafter referred to as the "Surety" are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "CITY", or to its successors and assigns in the penal sum of

Ten Percent of Proposal Price

($ 10% of P.P.), Dollars lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the Principal is about to submit (or has submitted) to the City the accompanying proposal, hereby made a part hereof, to enter into a contract in writing for Project ID: HED562 New 48" Trunk Water Main and Appurtenances in E. 233rd Street Etc., Borough of The Bronx, City of New York

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall not withdraw said Proposal without the consent of the City for a period of forty-five (45) days after the opening of bids and in the event of acceptance of the Principal's Proposal by the City, if the Principal shall:

(a) Within ten (10) days after notification by the City, execute in quadruplicate and deliver to the City all the executed counterparts of the Contract in the form set forth in the Contract Documents, in accordance with the proposal as accepted, and

(b) Furnish a performance bond and separate payment bond, as may be required by the City, for the faithful performance and proper fulfillment of such Contract, which bonds shall be satisfactory in all respects to the City and shall be executed by good and sufficient sureties, and

(c) In all respects perform the agreement created by the acceptance of said Proposal as provided in the Information for Bidders, bound herewith and made a part hereof, or if the City shall reject the aforesaid Proposal, then this obligation shall be null and void; otherwise to remain in full force and effect.

In the event that the Proposal of the Principal shall be accepted and the Contract be awarded to the Principal the Surety hereunder agrees subject only to the payment by the Principal of the premium therefore, if requested by the City, to write the aforementioned performance and payment bonds in the form set forth in the Contract Documents.

It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

There shall be no liability under this bond if, in the event of the acceptance of the Principal's Proposal by the City, either a performance bond or payment bond, or both, shall not be required by the City on or before the 30th day after the date on which the City signs the Contract.

The surety, for the value received, hereby stipulates and agrees that the obligations of the Surety and its bond shall in no way be impaired or affected by any postponements of the date upon which the City will receive or open bids, or by any extensions of the time within which the City may accept the Principal's Proposal, or by any waiver by the City of any of the requirements of the Information for Bidders, and the Surety hereby waives notice of any such postponements, extensions, or waivers.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers the 31st day of January, 2025.

(Seal)

JLJ IV Enterprises, Inc. (L.S.)
Principal

By: _____

(Seal)

Liberty Mutual Insurance Company
Surety

By: _____
Dana Granice, Attorney-In-Fact

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Queens ss:
On this 11 day of Febuary, 2025, before me personally came James Juliano to me known, who, being by me duly sworn, did depose and say that he/she/they resides at James Juliano at 98-05 21th St, Queens Village NY 11429
that he/she/they is the President of
JLJ IV Enterprises, Inc.
the corporation described in and which executed the foregoing instrument; that he/she/they knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he/she/they signed his name thereto by like order.

OUIDA NADINE CURTIS-JOHNSON
Notary Public - State of New York
No. 01CU0023690
Qualified in Queens County
My Commission Expires 04/18/2028

Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of _____ County of _____ ss:
On this _____ day of _____, _____, before me personally appeared _____ to me known and known to me to be one of the members of the firm of _____ described in and who executed the foregoing instrument, and he/she/they acknowledged to me that he/she/they executed the same as and for the act and deed of said firm.

_____

Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of _____ County of _____ ss:
On this _____ day of _____, _____, before me personally appeared _____ to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged that he/she/they executed the same.

_____

Notary Public

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF NEW YORK

COUNTY OF NASSAU

On this JAN 3 1 2025 before me personally came Dana Granice to me known, who, being by me duly sworn, did depose and say; that he/she resides in Suffolk County, State of New York, that he/she is the Attorney-In-Fact of the Liberty Mutual Insurance Company the corporation described in which executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that is was so affixed by the Board of Directors of said corporation; and that he/she signed his/her name thereto by like order; and the affiant did further depose and say that the Superintendent of Insurance of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State of New York, issued to Liberty Mutual Insurance Company (Surety) his/her certificate of qualification evidencing the qualification of said Company and its sufficiency under any law of the State of New York as surety and guarantor, and the propriety of accepting and approving it as such; and that such Certificate has not been revoked.

Notary Public

KAROLYNNE RAMIREZ
Notary Public-State of New York
No. 01RA6426462
Qualified in New York County
Commission Expires December 13, 2025

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No. 8211577 - 969603

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Camille Maitland, Colette R. Chisholm, Dana Granice, Desiree Cardlin, George O. Brewster, Gerard S. Macholz, Karolynne Ramirez, Katherine Acosta, Lee Ferrucci, Louis J Spina, Michelle Wannamaker, Nelly Renchiwich, Peter F. Jones, Robert T. Pearson, Susan Lupski, Thomas Bean, Vincent A. Walsh

all of the city of Uniondale state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 3rd day of April, 2024.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: _____
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 3rd day of April, 2024 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written

Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.
Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.
Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 31st day of January 2025

By: _____
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

Liberty Mutual. SURETY

LIBERTY MUTUAL INSURANCE COMPANY

FINANCIAL STATEMENT – DECEMBER 31, 2023

Assets		Liabilities	
Cash and Bank Deposits	$1,850,245,073.00	Unearned Premiums	$10,298,963,305.00
*Bonds – U.S Government	$3,859,565,383.00	Reserve for Claims and Claims Expense	$28,848,537,243.00
*Other Bonds	$21,048,805,773.00	Funds Held Under Reinsurance Treaties	$360,714,151.00
*Stocks	$19,937,271,802.00	Reserve for Dividends to Policyholders	$1,310,198.00
Real Estate	$122,228,711.00	Additional Statutory Reserve	$296,126,000.00
Agents' Balances or Uncollected Premiums	$8,208,660,427.00	Reserve for Commissions, Taxes and Other Liabilities	$7,622,413,466.63
Accrued Interest and Rents	$186,906,667.00	**Total**	**$47,428,064,363.63**
Other Admitted Assets	$15,677,869,683.63	Special Surplus Funds	$209,508,757.00
Total Admitted Assets	**$70,891,553,519.63**	Capital Stock	$10,000,075.00
		Paid in Surplus	$13,834,867,488.00
		Unassigned Surplus	$9,409,112,836.00
		Surplus to Policyholders	$23,463,489,156.00
		Total Liabilities and Surplus	**$70,891,553,519.63**

* Bonds are stated at amortized or investment value; Stocks at Association Market Values.
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2023, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 8th day of March, 2024.

LIBERTY MUTUAL INSURANCE COMPANY INCORPORATED 1912 MASSACHUSETTS

Timothy A. Mikolajewski

Timothy A. Mikolajewski, Assistant Secretary

LMS-1262/LMIC

(A) SPECIAL EXPERIENCE REQUIREMENTS FOR THE BIDDER:

The Special Experience Requirements set forth below apply to the bidder. Compliance with such Special Experience Requirements will be determined solely by the City prior to an award of contract. Failure to comply with the Special Experience Requirements will result in rejection of the bid as non-responsive.

The requirements in this Section (A) apply to this contract where indicated by an X (☒).

☒ The bidder must, within the last seven (7) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least one (1) project similar in scope and type to the required work. Such prior project may have been performed as a prime contractor, subcontractor or sub-subcontractor.

The similar scope and type of work must include one or more of the following, which may be met by multiple projects:

- ☐ Underground construction work adjacent to underground subways or railroads
- ☐ Underground construction work adjacent to district steam systems
- ☐ Roadway, sewer, and water construction work that includes utility work (support and protect, interference work, and / or utility capital work) that exceeds 25% of the total project cost.

The Special Experience Requirements next to the boxes marked with an X (☒) below apply to the bidder. If the bidder intends to perform such work itself, it must demonstrate compliance with the Special Experience Requirements. If the bidder intends to subcontract this work, the proposed subcontractor or sub-subcontractor must demonstrate compliance with the Special Experience Requirements. The contractor, subcontractor or sub-subcontractor (hereinafter referred to as the "Entity") that will perform any specific area of work indicated by the blackened box below, may have performed the required prior project(s) as a prime contractor, subcontractor or sub-subcontractor. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

☒ **Trunk Water Main Work:** The Entity that will perform the trunk water main work must, within the last seven (7) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least one (1) project similar in scope and type to the required work.

☐ **Best Management Practice Work:** Best Management Practice ("BMP") Work is any item of work in the Bid Schedule that begins with the prefix "BMP". The Entity that will perform any BMP Work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work.
For professional services in connection with BMP Work (i.e., monitoring and reporting services), the individual who will perform the required services must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work. Additional requirements are set forth below.

- ☐ The individual serving as the Restoration Specialist (Construction Monitor) must be a Registered Landscape Architect licensed by the state of New York or must have equivalent professional experience.

☐ The individual serving as the Erosion and Sediment Control Licensed/Certified Professional must be a Certified Professional in Erosion and Sediment Control (CPESC), certified by CPESC, Inc.

☐ **Micro-Tunneling/Pipe Jacking Work:** The Entity that will perform the micro-tunneling/pipe jacking work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

☐ **OTHER:** _____

_____

(B) SPECIAL EXPERIENCE REQUIREMENTS FOR ENTITIES PERFORMING SPECIFIC AREAS OF WORK:

The requirements in this Section (B) apply to this contract where indicated by an X (☒).

The Special Experience Requirements set forth below apply to the Entity that will perform the specific area of work. **Compliance with such Special Experience Requirements will be determined solely by the City after an award of contract. Within two (2) weeks of award of contract, the contractor will be required to submit the qualifications of the Entity that will perform the specific area of work.** If the bidder intends to perform such work itself, it must demonstrate compliance with the Special Experience Requirements. If the bidder intends to subcontract this work, the proposed subcontractor or sub-subcontractor must demonstrate compliance with the Special Experience Requirements. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

Special Experience Requirements apply to the Entity that will perform any specific area of work indicated by an X (☒). The Entity may have performed the required prior project(s) as a prime contractor, subcontractor or sub-subcontractor.

☒ **Hazmat Work:** Hazmat Work is any item of work in the Bid Schedule that begins with the prefix 8.01. The Entity that will perform any Hazmat Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least five (5) projects similar in scope and type to the required work.

☐ **Pile, CFA Pile, and/or Mini-Pile Work:** The Entity that will perform the Pile, CFA Pile and/or Mini-Pile Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

For professional services in connection with Pile Work (i.e., engineering and inspection services), the individual who will perform the required services must be a Professional Engineer licensed by the state of New York. Such individual must also comply with the above requirements for prior projects.

☒ **Construction Report, Monitoring and Post-Construction Report, and Continuous Real-Time Monitoring For Vibrations and Movements and Post-Construction Report Work:** The Entity that will perform the Construction Report, Monitoring For Vibrations And Movements, and Post-Construction Report Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

For professional services in connection with Reporting and Monitoring Work (i.e., engineering and inspection services), the individual who will perform the required services must be a Professional Engineer licensed by the state of New York. Such individual must also comply with the above requirements for prior projects.

☐ **OTHER:** _____

_____

QUALIFICATION FORM

Name of Contractor: **JLJ IV Enterprises, Inc,**

Name of Project: **MED608 – Trunk Water Mains in Washington Square Park**

Location of Project: **Manhattan, NY**

Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:

Name: **Iyad Marzouk, P.E.**

Title: **Engineer in Charge** Phone Number: **(646) 235-5258**

Brief description of the Project completed or the Project in progress: **Installation of approx.. 2,000lf of 48-in, and 300lf of 36-in steel TWMs, including BFV valves, and appurtenances. Also, installation of 15" and 18" ESVP sewers.**

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: **Prime**

Amount of Contract, Subcontract or Sub-subcontract: **$8,159,741.45**

Start Date and Completion Date: **9/8/2015 to 6/29/19**

****

Name of Contractor: **JLJ IV Enterprises, Inc.,**

Name of Project: **MED598 – Installation of TWM in W 30th St and Tie-in to Shaft**

Location of Project: **Manhattan, NY**

Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:

Name: **Iyad Marzouk, P.E**

Title: **Engineer in Charge** Phone Number: **(646) 235-5258**

Brief description of the Project completed or the Project in progress: **Installation of approx.. 1,500lf of 48-in, and 36-in steel TWMs, including BFV valves, flowmeters, regulators, and tying into Shaft 33B. Also, installation of 4'Wx6'6"H and 6'Wx7'H box sewers and 48-in RCP combined sewers.**

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: **Prime**

Amount of Contract, Subcontract or Sub-subcontract: **$22,577,178**

Start Date and Completion Date: **12/17/12 to 7/8/21**

NYC Mayor's Office of Contract Services

SCHEDULE B – M/WBE Utilization Plan

Part 1: M/WBE Participation Goals

Contract Overview (To be completed by contracting agency)

APT E-Pin# 85025B0027 FMS Project ID# HED562

Project Title New 48" Trunk Water Main and Appurtenances in E. 233rd Street Agency PIN# 8502023WM0008C

Contracting Agency NYC Department of Design & Construction Bid/Proposal Response Date TBD

Agency Address 30-30 Thomson Ave City Long Island City State NY ZIP 11101

Contact Person Elyza Mule Title M/WBE Outreach &Compliance Analyst

Telephone 718-391-1268 Email muleel@ddc.nyc.gov

Project Description (attach additional pages if necessary)

New Trunk Water Main and Appurtenances in E.233rd Street between Bronxwood Avenue and Baychester Avenue, Including Distribution of Water Main, Sewers And Street Lighting And Traffic Signal.

Bidder or proposer ☐ is required OR ☒ is not required to specifically identify the contact information of all M/WBE firms they intend to use as a subcontractor on this contract, including the M/WBE vendor name, address and telephone number in the space provided below in Part 2 Section 4.

M/WBE Participation Goals for Services

Enter the percentage amount for each category or for an unspecified Goal.

Prime Contract Industry: Construction

Category and Breakdown:

Unspecified 4.00 %

Black American 3.00 %

Hispanic American 5.00 %

Asian American ____ %

Women ____ %

Total Participation Goals 12.00 %
Line 1

Part 2: M/WBE Participation Plan

(To be completed by the bidder/proposer unless granted a full waiver, which must be submitted with the bid/proposal in lieu of this form)

Section 1: Prime Contractor Contact Information

Tax ID# 11-3630755 FMS Vendor ID# ____

Business Name JLJ IV Enterprises, Inc. Contact Person Michael F. Cervoni

Business Address 98-05 217th Street City Queens Village State NY ZIP 11429

Telephone 718-465-5600 Email mcervoni@jljiv.com

Section 3: Contractor M/WBE Utilization Plan

Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation. Check applicable box. The Proposer or Bidder will fulfill the M/WBE Participation Goals:

☐ As an M/WBE Prime Contractor that will self-perform and/or subcontract to other M/WBE firms a portion of the contract the value of which is at least the amount located on Lines 2 or 3 in the panels in Section 2, as applicable. The value of any work subcontracted to non-M/WBE firms will not be credited towards fulfillment of M/WBE Participation Goals. Please check all that apply to Prime Contractor: ☐ MBE ☐ WBE

☐ As a Qualified Joint Venture with an M/WBE partner, in which the value of the M/WBE partner's participation and/or the value of any work subcontracted to other M/WBE firms is at least the amount located on Lines 2 or 3 in the panels in Section 2, as applicable. The value of any work subcontracted to non-M/WBE firms will not be credited towards fulfillment of M/WBE Participation Goals.

☒ As a non-M/WBE Prime Contractor that will enter into subcontracts with M/WBE firms the value of which is at least the amount located on Lines 2 or 3 in the panels in Section 2, as applicable.

Section 2: M/WBE Utilization Goal Calculation

Prime Contractor Adopting Agency Participation Goals
For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency M/WBE Participation Goals.

Total Bid/Proposal Value $ 43,918,426.07

multiplied by x

Total Participation Goals 12.00 %
(Line 1 above)

Calculated M/WBE Participation Amount $ 5,270,212.00
Line 2

OR

Prime Contractor With Partial Waiver Approval Adopting Revised Participation Goals
For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Revised M/WBE Participation Goals.

Total Bid/Proposal Value $ ____

multiplied by x

Total Revised Participation Goals ____ %

Calculated M/WBE Participation Amount $ ____
Line 3

Tax ID# 11-3630755 APT E-Pin# 85025B0027

Section 4: General Contract Information

What is the expected percentage of the total contract dollar value that you expect to award in subcontracts for services, regardless of M/WBE status? 13.25 %

Enter a brief description of the type(s) and dollar value of subcontracts for all services you plan to subcontract if awarded this contract, along with the anticipated start and end dates for such subcontracts. For each item, indicate whether the work is designated for participation by an M/WBE. Where the contracting agency's solicitation has indicated a requirement that the bidder or proposer specifically identify the contact information of all M/WBEs they intend to use on this contract, vendors must also include the M/WBE vendor name, address and telephone number in the space provided below. Use additional sheets if necessary.

	Description of Work	Start Date (MM/YY)	End Date (MM/YY)	Planned $ Amount	Designated for M/WBE Y	Designated for M/WBE N	M/WBE Vendor Name	M/WBE Address	M/WBE Telephone
1.	Asphalt Paving/Restoration	03 / 26	05 / 28	$ 1,160,000.00	☑	☐	HHJR Construction (Black American)	280 N Main St, Freeport, NY 11520	(516) 623 - 9555
2.	Sidewalk/Curb Restoration	04 / 26	04 / 28	$ 200,000.00	☑	☐	KNR Management (Black American)	16831 106th Ave, Jamaica, NY 11433	(917) 655 - 9436
3.	Pest/Rodent Control/Survey	05 / 25	03 / 28	$ 60,000.00	☑	☐	Joes Pest Control (Hisp. American)	1007 Carroll St, Brooklyn, NY 11225	(718) 493 - 1845
4.	Arborist/Tree Consultant	05 / 25	04 / 28	$ 75,000.00	☑	☐	Branching Out Consult. (Hisp. American)	P.O. Box 20504, New York, NY 10009	(212) 837 - 2712
5.	Waterproofing	03 / 26	10 / 27	$ 125,000.00	☑	☐	D-Star Waterproofers (Hisp.American)	365 Babylon Tpk, Roosevelt, NY 11575	( ) -
6.	Trucking/Trans and Disp of Mat'l	06 / 25	04 / 28	$ 1,950,000.00	☑	☐	MAC Contracting of SI (Hisp. American)	186 Nugent St, Staten Island, NY 10306	(929) 364 - 413
7.	Landscaping	04 / 25	05 / 28	$ 106,000.00	☑	☐	Valley Tree & Landscape Svc (Women)	30 W Park Ave, Suite 201, Long Beach, NY 11561	(516) 889 - 7534
8.	Environmental	07 / 25	04 / 28	$ 1,750,000.00	☑	☐	ENP Environmental, Inc. (Women)	507A W Broadway, Long Beach, NY 11561	( ) -
9.	Elec/Street Lighting/Traffic Signal	05 / 25	03 / 28	$ 150,750.00	☐	☑	Weisbach Electric Corp.	111-01 14th Ave, College Point, NY 11356	(718) 670 - 7900
10.	Video of Sewers	08 / 26	06 / 27	$ 26,000.00	☐	☑	En-Tech Infrastructure, LLC	580 Goddard Ave, Chesterfield, MO 63005	( ) -

Section 5: Vendor Certification and Required Affirmations

I hereby:

1. *acknowledge my understanding of the M/WBE participation requirements as set forth herein and the pertinent provisions of Section 6-129 of the Administrative Code of the City of New York ("Section 6-129"), and the rules promulgated thereunder;*
2. *affirm that the information supplied in support of this M/WBE Utilization Plan is true and correct;*
3. *agree, if awarded this Contract, to comply with the M/WBE participation requirements of this Contract, the pertinent provisions of Section 6-129, and the rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract;*
4. *agree and affirm that it is a material term of this Contract that the Vendor will award the total dollar value of the M/WBE Participation Goals to certified MBEs and/or WBEs, unless a full waiver is obtained or such Goals are modified by the Agency; and*
5. *agree and affirm, if awarded this Contract, to make all reasonable, good faith efforts to meet the M/WBE Participation Goals, or If a partial waiver is obtained or such Goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms.*

Signature _____ Date 02/24/25

Print Name Michael F. Cervoni Title Project Executive

Tax ID# **11-3630755**

APT E-Pin# **85025B0027**

HED562 – Schedule B – Part 2, Section 4 – Continued:

Desc of Work	Start Date	End Date	Planned $	M/WBE (Y/N)	M/WBE Name	M/WBE Address	M/WBE Phone
11.Mechanical	10/27	03/28	$100,000	Unknown	Unknown	Unknown	Unknown
12. Steel Fab/Install	08/27	10/27	$150,000	Unknown	Unknown	Unknown	Unknown

2/24/25

SAFETY QUESTIONNAIRE

The Bidder must include, with its bid, all information requested on this Safety Questionnaire. Failure to provide a completed and signed Safety Questionnaire at the time of bid opening may result in disqualification of the bid as non-responsive. This Safety Questionnaire will be reviewed as per Section V of the Safety Requirements for Construction Contracts, found in Volume 2 of the Contract.

1. Bidder Information:

Company Name: JLJ IV ENTERPRISES, INC.

DDC Project Number: HED 562

Company Size: ☐ Ten (10) employees or less

☒ Greater than ten (10) employees

Company has previously worked for DDC: ☒ YES ☐ NO

2. Type(s) of Construction Work:

Identify the types of work that the Bidder has performed in the last three years, and the types of work that are part of this Contract.

TYPE OF WORK	LAST 3 YEARS	THIS PROJECT
General Building Construction	☐	☐
Residential Building Construction	☐	☐
Nonresidential Building Construction	☐	☐
Heavy Construction, except building	☒	☐
Highway and Street Construction	☒	☐
Heavy Construction, except highways	☒	☒
Plumbing, Heating, HVAC	☐	☐
Painting and Paper Hanging	☐	☐
Electrical Work	☐	☐
Masonry, Stonework and Plastering	☐	☐
Carpentry and Floor Work	☐	☐
Roofing, Siding, and Sheet Metal	☐	☐
Concrete Work	☐	☐
Specialty Trade Contracting	☐	☐
Asbestos Abatement		
Other (specify) N/A	☐	☐

3. Experience Modification Rate:

The Experience Modification Rate (EMR) is a rating generated by the National Council of Compensation Insurance (NCCI). This rating is used to determine the contractor's premium for worker's compensation insurance. The Bidder / Contractor may obtain its EMR by contacting its insurance broker or the NCCI. If the Bidder cannot obtain its EMR, it must submit a written explanation as to why.

The Bidder must indicate its Intrastate and Interstate EMR for the past three years. [Note: For contractors with less than three years of experience, the EMR will be considered to be 1.00].

YEAR	INTRASTATE RATE	INTERSTATE RATE
2024	0.95	0.95
2023	1.00	1.00
2022	1.19	1.19

If the Intrastate and/or Interstate EMR for any of the past three years is greater than 1.00, the Bidder / Contractor must attach, to this questionnaire, a written explanation for the rating and identify what corrective action was taken to correct the situation resulting in that rating.

4. OSHA Information:

☐ **YES** ☒ **NO** **Contractor has received a willful violation issued by OSHA or a New York City Department of Buildings (NYCDOB) construction-related violation within the last three years.**

☒ **YES** ☐ **NO** **Contractor has had an incident requiring OSHA notification within 8 hours (all work-related fatalities) or an incident requiring OSHA notification within 24 hours (work-related in-patient hospitalization, amputation and all loss of an eye).**

The OSHA Form 300 "Log of Work-Related Injuries and Illnesses" and OSHA Form 300A "Summary of Work-Related Injuries and Illnesses" must be submitted for the last three years for Contractors with more than ten employees.

The Bidder / Contractor must indicate the total number of hours worked by its employees, as reflected in payroll records for the past three (3) years.

The Bidder / Contractor must submit the Incident Rate for Lost Time Injuries (the Incident Rate) for the past three (3) years. The Incident Rate is calculated in accordance with the formula set forth below. For each given year, the total number of incidents is the total number of non-fatal injuries and illnesses reported on the OSHA Form 300 and OSHA Form 300A. The 200,000 hours represents the equivalent of 100 employees working forty hours a week, fifty (50) weeks per year.

$$\text{Incident Rate} = \frac{\text{Total Number of Incidents X 200,000}}{\text{Total Number of Hours Worked by Employees}}$$

YEAR	TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES	INCIDENT RATE
2024	643,702	1.86
2023	557,357	1.79
2022	357,000	1.68

If the Bidder's / Contractor's Incident Rate for any of the past three years is one point higher than the Incident Rate for the type of construction it performs (listed below), the Bidder / Contractor must attach, to this questionnaire, a written explanation for the relatively high rate.

General Building Construction	8.5
Residential Building Construction	7.0
Nonresidential Building Construction	10.2
Heavy Construction, except building	8.7
Highway and Street Construction	9.7
Heavy Construction, except highways	8.3
Plumbing, Heating, HVAC	11.3
Painting and Paper Hanging	6.9
Electrical Work	9.5
Masonry, Stonework and Plastering	10.5
Carpentry and Floor Work	12.2
Roofing, Siding, and Sheet Metal	10.3
Concrete Work	8.6
Specialty Trade Contracting	8.6

5. Safety Performance on Previous DDC Project(s)

☑ YES ☐ NO Fatality or an incident requiring OSHA notification within 24 hours (work-related in-patient hospitalization, amputation and all loss of an eye) on DDC Project(s) within the last three (3) years.

DDC Project Number(s): HWPED SEH, EL-SEL25

The Bidder hereby affirms that all the information provided in this Safety Questionnaire and all additional pages and/or attachments, if applicable, consist of accurate representations.

Date: 4/1/25 By: _____

(Signature of Bidder: Owner, Partner, Corporate Officer)

MICHAEL F. CERVONI, P.E.

Title: PROJECT EXECUTIVE

Bid Schedule

The Questionnaire in the PASSPort system contains the Bid Schedule. Items listed in the Bid Schedule shall comply with the requirements of the corresponding sections of the specifications detailed in the table below. All references to the Standard Specifications, Details, Standards and Drawings shall be to the version in effect at the time of bid.

NOTES:

- "XXX" in the table below signifies any possible combination of characters and spaces.
- The table below may contain item formats which are not included in the Bid Schedule. ***Please refer to the Bid Schedule to determine which specifications apply.***

Item Number Format	Applicable Specifications
4.XXX 6.XXX 7.XXX 8.XXX *(Except 8.01 XXX; see below)* 9.XXX HW-XXX	NYC Department of Transportation ("DOT") Standard Highway Specifications, as amended in the R-Pages, located in Volume 3 of 3 herein; ***AND*** NYC DOT Standard Details of Construction; ***OR,*** ***if the item is not contained within the Standard Specifications***, then see the applicable New Sections in the I-Pages, located in Volume 3 of 3 herein.
1.XXX 50.XXX through 55.XXX 60.XXX through 66.XXX 70.XXX through 79.XXX *(Except 79.11XXX; see below)* DSS XXX DSW XXX	NYC Department of Environmental Protection ("DEP") Standard Sewer and Water Main Specifications, as amended in the R-Pages and SW-Pages, located in Volume 3 of 3 herein; ***AND*** NYC DEP Specifications for Trunk Main Work; ***AND*** NYC DEP Sewer Design Standards; ***AND*** NYC DEP Water Main Standard Drawings; ***OR,*** ***if the item is not contained within the Standard Specifications,*** then see the Amendments to the Standard Sewer and Water Main Specifications in the SW-Pages, located in Volume 3 of 3 herein.
GI-XXX PM-XXX ROW XXX	New Sections in the I-Pages, located in Volume 3 of 3 herein ***AND*** NYC DEP Standards for Green Infrastructure.

Item Number Format	Applicable Specifications
UTL-XXX	Gas Cost Sharing Standard Specifications in the EP7-Pages, located in Volume 3 of 3 herein.
83X.XXX MX.XXX MP XXX NYC-XXX NYCT-XXX NYPD-XXX P XXX PK-XXX	New Sections in the I-Pages, located in Volume 3 of 3 herein.
BMP-XXX	Specifications for Construction of Best Management Practice (BMP) and Mitigation Area in the BMP-Pages, located in Volume 3 of 3 herein.
E XXX ME XXX	Specifications for the Specialty Electrical Works in the EL-Pages, located in Volume 3 of 3 herein.
SL-XXX	NYC DOT Division of Street Lighting Specifications ***AND*** NYC Division of Street Lighting Standard Drawings.
T-XXX	NYC DOT Specifications for Traffic Signals and Intelligent Transportation Systems ***AND*** NYC DOT Traffic Signal Standard Drawings.
JB XXX	Joint Bid Specifications in the JB-Pages, located in Volume 3 of 3 herein.
8.01 XXX	Specifications for Handling, Transportation and Disposal of Nonhazardous and Potentially Hazardous Contaminated Materials in the HAZ-Pages, located in Volume 3 of 3 herein.
67.XXX	Specifications for Abatement of Coal Tar Wrap Asbestos Containing Materials in the ASB-Pages, located in Volume 3 of 3 herein.
79.11XXX	Specifications for Abatement of Transit Authority Duct Insulation Asbestos Containing Materials in the ASB-Pages, located in Volume 3 of 3 herein.

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$43,991,426.07**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
1	4.02 AF-R	Bid Item	ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	25,458.00	S.Y.	$20.00	$509,160.00	
2	4.02 AG	Bid Item	ASPHALTIC CONCRETE WEARING COURSE, 3" THICK	787.00	S.Y.	$25.00	$19,675.00	
3	4.02 CA	Bid Item	BINDER MIXTURE	6,382.00	TONS	$200.00	$1,276,400.00	
4	4.04 H	Bid Item	CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	1,282.00	C.Y.	$500.00	$641,000.00	
5	4.05 AX	Bid Item	HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	100.00	C.Y.	$400.00	$40,000.00	
6	4.08 BA	Bid Item	CONCRETE CURB (21" DEEP)	450.00	L.F.	$30.00	$13,500.00	
7	4.09 AE	Bid Item	STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)	546.00	L.F.	$65.00	$35,490.00	
8	4.09 AF	Bid Item	STRAIGHT STEEL FACED CONCRETE CURB (27" DEEP)	300.00	L.F.	$70.00	$21,000.00	
9	4.09 BE	Bid Item	DEPRESSED STEEL FACED CONCRETE CURB (21" DEEP)	440.00	L.F.	$70.00	$30,800.00	
10	4.09 CE	Bid Item	CORNER STEEL FACED CONCRETE CURB (21" DEEP)	560.00	L.F.	$100.00	$56,000.00	
11	4.13 AAS	Bid Item	4" CONCRETE SIDEWALK (UNPIGMENTED)	12,303.00	S.F.	$10.00	$123,030.00	
12	4.13 BAS	Bid Item	7" CONCRETE SIDEWALK (UNPIGMENTED)	12,100.00	S.F.	$12.00	$145,200.00	
13	4.13 DE	Bid Item	EMBEDDED PREFORMED DETECTABLE WARNING UNITS	180.00	S.F.	$30.00	$5,400.00	
14	4.15	Bid Item	TOPSOIL	200.00	C.Y.	$25.00	$5,000.00	
15	4.16 AA	Bid Item	TREES REMOVED (4" TO UNDER 12" CALIPER)	5.00	EACH	$10.00	$50.00	
16	4.16 CA	Bid Item	TREES PLANTED, 3" TO 3-1/2" CALIPER, ALL TYPES	7.00	EACH	$10.00	$70.00	
17	4.18 A	Bid Item	MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	72.00	EACH	$10.00	$720.00	
18	4.18 B	Bid Item	MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	44.00	EACH	$10.00	$440.00	
19	4.18 C	Bid Item	MAINTENANCE TREE PRUNING (18" TO UNDER 24" CAL.)	34.00	EACH	$10.00	$340.00	
20	4.18 D	Bid Item	MAINTENANCE TREE PRUNING (24" CAL. AND OVER)	9.00	EACH	$10.00	$90.00	
21	4.19	Bid Item	SODDING	150.00	S.Y.	$10.00	$1,500.00	
22	4.2	Bid Item	SEEDING	500.00	S.Y.	$0.10	$50.00	
23	4.21	Bid Item	TREE CONSULTANT	954.00	P/HR	$75.00	$71,550.00	
24	50.21C3C024D	Bid Item	24" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	220.00	L.F.	$1,100.00	$242,000.00	
25	50.21C3C030D	Bid Item	30" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	1,860.00	L.F.	$1,200.00	$2,232,000.00	
26	50.21C3E024D	Bid Item	24" R.C.P. CLASS III COMBINED SEWER, ENCASED IN CONCRETE	225.00	L.F.	$1,150.00	$258,750.00	
27	50.21C3E030D	Bid Item	30" R.C.P. CLASS III COMBINED SEWER, ENCASED IN CONCRETE	150.00	L.F.	$1,175.00	$176,250.00	
28	50.21C4E024D	Bid Item	24" R.C.P. CLASS IV COMBINED SEWER, ENCASED IN CONCRETE	130.00	L.F.	$1,200.00	$156,000.00	
29	50.31CC15	Bid Item	15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	700.00	L.F.	$650.00	$455,000.00	
30	50.31CC18	Bid Item	18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	30.00	L.F.	$685.00	$20,550.00	
31	50.41C6E12	Bid Item	12" D.I.P. CLASS 56 COMBINED SEWER, ENCASED IN CONCRETE	120.00	L.F.	$1,200.00	$144,000.00	
32	50.41C6E16	Bid Item	16" D.I.P. CLASS 56 COMBINED SEWER, ENCASED IN CONCRETE	200.00	L.F.	$1,100.00	$220,000.00	
33	51.11P004	Bid Item	STANDARD 4'-0" DIAMETER PRECAST MANHOLE	10.00	EACH	$5,000.00	$50,000.00	
34	51.11P005	Bid Item	STANDARD 5'-0" DIAMETER PRECAST MANHOLE	6.00	EACH	$5,000.00	$30,000.00	
35	51.11P006	Bid Item	STANDARD 6'-0" DIAMETER PRECAST MANHOLE	1.00	EACH	$12,500.00	$12,500.00	
36	51.11P007	Bid Item	STANDARD 7'-0" DIAMETER PRECAST MANHOLE	1.00	EACH	$15,000.00	$15,000.00	
37	51.21S0A1000V	Bid Item	STANDARD MANHOLE TYPE A-1	15.00	EACH	$15,000.00	$225,000.00	
38	51.41S001	Bid Item	STANDARD CATCH BASIN, TYPE 1	11.00	EACH	$15,000.00	$165,000.00	
39	51.42S1SO	Bid Item	INCREMENTAL COST OF STANDARD CATCH BASIN TYPE 3 WITH CURB PIECE IN LIEU OF STANDARD CATCH BASIN TYPE 1	1.00	EACH	$15,000.00	$15,000.00	
40	52.11D12	Bid Item	12" DUCTILE IRON PIPE BASIN CONNECTION	450.00	L.F.	$500.00	$225,000.00	
41	52.31D06C16	Bid Item	6" DUCTILE IRON PIPE SPUR FOR HOUSE CONNECTION ON 16" D.I.P. COMBINED SEWER	2.00	EACH	$3,200.00	$6,400.00	
42	52.31V06C15	Bid Item	6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	12.00	EACH	$1,100.00	$13,200.00	
43	52.41V06R	Bid Item	6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	685.00	L.F.	$93.00	$63,705.00	
44	52.41V08R	Bid Item	8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	425.00	L.F.	$102.00	$43,350.00	
45	53.11DR	Bid Item	TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	3,740.00	L.F.	$2.00	$7,480.00	
46	6.02 AAN	Bid Item	UNCLASSIFIED EXCAVATION	3,932.00	C.Y.	$100.00	$393,200.00	
47	6.25 RS	Bid Item	TEMPORARY SIGNS	890.00	S.F.	$10.00	$8,900.00	
48	6.26	Bid Item	TIMBER CURB	8,890.00	L.F.	$15.00	$133,350.00	
49	6.27 A	Bid Item	DEMOLITION OF STRUCTURES	25.00	C.Y.	$275.00	$6,875.00	

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$43,991,426.07**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
50	6.28 AA	Bid Item	LIGHTED TIMBER BARRICADES	192.00	L.F.	$15.00	$2,880.00	
51	6.34 ADTP	Bid Item	TEMPORARY CHAIN LINK FENCE, 8'-0" HIGH (WITH TOP AND BOTTOM RAILS AND POSTS MOUNTED ON STEEL PLATES)	1,000.00	L.F.	$50.00	$50,000.00	
52	6.40 DU	Bid Item	ENGINEER'S FIELD OFFICE (JOINT USE) (TYPE DU)	42.00	MONTH	$20,000.00	$840,000.00	
53	6.43 D	Bid Item	DIGITAL PHOTOGRAPHS	650.00	SETS	$15.00	$9,750.00	
54	6.44	Bid Item	THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	12,380.00	L.F.	$1.00	$12,380.00	
55	6.49	Bid Item	TEMPORARY PAVEMENT MARKINGS (4" WIDE)	12,380.00	L.F.	$0.65	$8,047.00	
56	6.52 CG	Bid Item	CROSSING GUARD	7,812.00	P/HR	$150.00	$1,171,800.00	Unit price bid shall not be less than: $100.00
57	6.53	Bid Item	REMOVE EXISTING LANE MARKINGS (4" WIDE)	8,946.00	L.F.	$0.10	$894.60	
58	6.84 B	Bid Item	LOLLIPOP TYPE BUS STOP SIGNS	1.00	F.S	$25,000.00	$25,000.00	Price bid shall be for the Fixed Sum of: $25,000.00
59	6.87	Bid Item	PLASTIC BARRELS	2,080.00	EACH	$10.00	$20,800.00	
60	60.11R520	Bid Item	FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	3,900.00	L.F.	$275.00	$1,072,500.00	
61	60.11R606	Bid Item	FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	530.00	L.F.	$75.00	$39,750.00	
62	60.11R608	Bid Item	FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	810.00	L.F.	$100.00	$81,000.00	
63	60.11R612	Bid Item	FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	1,253.00	L.F.	$225.00	$281,925.00	
64	60.12D06	Bid Item	LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	650.00	L.F.	$75.00	$48,750.00	
65	60.12D08	Bid Item	LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS	1,015.00	L.F.	$100.00	$101,500.00	
66	60.12D12	Bid Item	LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	1,355.00	L.F.	$200.00	$271,000.00	
67	60.12D20	Bid Item	LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	4,100.00	L.F.	$250.00	$1,025,000.00	
68	60.13M0A24	Bid Item	FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	29.00	TONS	$25,000.00	$725,000.00	
69	60.21SP3T36	Bid Item	FURNISHING, DELIVERING AND LAYING 36-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS	300.00	L.F.	$1,600.00	$480,000.00	
70	60.21SP4T48	Bid Item	FURNISHING, DELIVERING AND LAYING 48-INCH STRAIGHT STEEL PIPE, 1/2-INCH WALL THICKNESS	3,460.00	L.F.	$1,750.00	$6,055,000.00	
71	60.22BR3T36	Bid Item	FURNISHING, DELIVERING AND LAYING 36-INCH STEEL BENDS AND REDUCERS, 3/8-INCH WALL THICKNESS	150.00	L.F.	$3,000.00	$450,000.00	
72	60.22BR4T48	Bid Item	FURNISHING, DELIVERING AND LAYING 48-INCH STEEL BENDS AND REDUCERS, 1/2-INCH WALL THICKNESS	200.00	L.F.	$4,000.00	$800,000.00	
73	60.23ST36T48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH X 36-INCH STEEL TEE	2.00	EACH	$62,000.00	$124,000.00	
74	60.24SB36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER STEEL BULKHEAD	2.00	EACH	$8,700.00	$17,400.00	
75	60.24SB48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH DIAMETER STEEL BULKHEAD	1.00	EACH	$12,200.00	$12,200.00	
76	60.25PSO	Bid Item	FURNISHING, DELIVERING AND INSTALLING PLATE STEEL OUTLETS ON STEEL PIPE, ACCESS MANHOLE OUTLETS WITH COVERS, AND NUTS AND BOLTS COMPLETE	20,000.00	LBS.	$20.00	$400,000.00	
77	60.27RSC36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER BOLTED, SPLIT SLEEVE-TYPE RESTRAINED COUPLING	6.00	EACH	$21,000.00	$126,000.00	
78	60.27RSC48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH DIAMETER BOLTED, SPLIT SLEEVE-TYPE RESTRAINED COUPLING	2.00	EACH	$30,000.00	$60,000.00	
79	60.28ARV3A	Bid Item	FURNISHING, DELIVERING AND INSTALLING BLOW OFF AND AIR RELEASE VALVES AND PIPES, ETC., COMPLETE FOR SHAFT CHAMBER 3A	1.00	L.S.	$150,000.00	$150,000.00	
80	60.28DHM3A	Bid Item	FURNISHING, DELIVERING AND INSTALLING DEHUMIDIFIER SYSTEM ETC. COMPLETE FOR SHAFT 3A	1.00	L.S.	$44,000.00	$44,000.00	
81	60.29CP	Bid Item	FURNISHING, INSTALLING AND TESTING CORROSION CONTROL AND/OR CATHODIC PROTECTION SYSTEM	1.00	L.S.	$200,000.00	$200,000.00	
82	60.81FM36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	2.00	EACH	$167,000.00	$334,000.00	

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$43,991,426.07**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
83	61.11DFM06	Bid Item	FURNISHING AND DELIVERING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	6.00	EACH	$2,350.00	$14,100.00	
84	61.11DFM12	Bid Item	FURNISHING AND DELIVERING 12-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	3.00	EACH	$2,000.00	$6,000.00	
85	61.11DFM20	Bid Item	FURNISHING AND DELIVERING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	5.00	EACH	$30,000.00	$150,000.00	
86	61.11DMM06	Bid Item	FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	26.00	EACH	$1,600.00	$41,600.00	
87	61.11DMM08	Bid Item	FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	6.00	EACH	$2,500.00	$15,000.00	
88	61.11DMM12	Bid Item	FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	11.00	EACH	$6,000.00	$66,000.00	
89	61.11DMM20	Bid Item	FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	13.00	EACH	$26,000.00	$338,000.00	
90	61.11TWC03	Bid Item	FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	4.00	EACH	$1,235.00	$4,940.00	
91	61.11TWC04	Bid Item	FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	3.00	EACH	$1,400.00	$4,200.00	
92	61.12DFM06	Bid Item	SETTING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	6.00	EACH	$240.00	$1,440.00	
93	61.12DFM12	Bid Item	SETTING 12-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	3.00	EACH	$200.00	$600.00	
94	61.12DFM20	Bid Item	SETTING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	5.00	EACH	$600.00	$3,000.00	
95	61.12DMM06	Bid Item	SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	26.00	EACH	$250.00	$6,500.00	
96	61.12DMM08	Bid Item	SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	6.00	EACH	$300.00	$1,800.00	
97	61.12DMM12	Bid Item	SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	11.00	EACH	$400.00	$4,400.00	
98	61.12DMM20	Bid Item	SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	13.00	EACH	$600.00	$7,800.00	
99	61.12TWC03	Bid Item	SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	4.00	EACH	$200.00	$800.00	
100	61.12TWC04	Bid Item	SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	3.00	EACH	$200.00	$600.00	
101	61.21BVB36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	2.00	EACH	$115,000.00	$230,000.00	
102	61.21BVB48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	2.00	EACH	$135,000.00	$270,000.00	
103	61.21BVM36	Bid Item	FURNISHING, DELIVERING, AND INSTALLING 36-INCH METAL SEATED BUTTERFLY VALVE, COMPLETE (NO BY-PASS)	4.00	EACH	$100,000.00	$400,000.00	
104	61.21BVO36	Bid Item	FURNISHING, DELIVERING, AND INSTALLING 36-INCH BUTTERFLY VALVE, COMPLETE	2.00	EACH	$110,000.00	$220,000.00	
105	62.11SD	Bid Item	FURNISHING AND DELIVERING HYDRANTS	30.00	EACH	$4,650.00	$139,500.00	
106	62.12SG	Bid Item	SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	30.00	EACH	$750.00	$22,500.00	
107	62.13RH	Bid Item	REMOVING HYDRANTS	22.00	EACH	$1.00	$22.00	
108	62.14FS	Bid Item	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	60.00	EACH	$397.42	$23,845.20	
109	63.11MH	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH CAST IRON MANHOLE HEADS AND COVERS	6.00	TONS	$975.00	$5,850.00	
110	63.11MS	Bid Item	FURNISHING, DELIVERING AND INSTALLING MANHOLE STEPS TYPE PS2-PF	215.00	EACH	$1.00	$215.00	
111	63.11VC	Bid Item	FURNISHING AND DELIVERING VARIOUS CASTINGS	67.00	TONS	$2,000.00	$134,000.00	
112	64.11EL	Bid Item	WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	15.00	EACH	$250.00	$3,750.00	

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TOTAL BID PRICE: **$43,991,426.07**

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Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
113	64.11ST	Bid Item	WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	85.00	EACH	$100.00	$8,500.00	
114	64.12COEG	Bid Item	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	150.00	L.F.	$1.00	$150.00	
115	64.12COLT	Bid Item	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	200.00	L.F.	$1.00	$200.00	
116	64.12ESEG	Bid Item	EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	150.00	L.F.	$1.00	$150.00	
117	64.12ESLT	Bid Item	EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	200.00	L.F.	$1.00	$200.00	
118	64.13WC20	Bid Item	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	7.00	EACH	$4,500.00	$31,500.00	
119	64.14A	Bid Item	REPLACEMENT OF SERVICE LINE UP TO 1 IN, UP TO 40 FT	9.00	EACH	$2,500.00	$22,500.00	
120	64.14AL	Bid Item	ADDITIONAL LENGTH OF SERVICE LINE UP TO 1 IN BEYOND 40 FT	300.00	L.F.	$45.00	$13,500.00	
121	64.14AM	Bid Item	REPLACEMENT OF SERVICE LINE UP TO 1 IN BETWEEN BUILDING CONTROL VALVE AND METER	50.00	L.F.	$65.00	$3,250.00	
122	64.14B	Bid Item	REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, UP TO 40 FT	8.00	EACH	$2,800.00	$22,400.00	
123	64.14BL	Bid Item	ADDITIONAL LENGTH OF SERVICE LINE 1 -1/4 TO 2 IN BEYOND 40 FT	220.00	L.F.	$80.00	$17,600.00	
124	64.14BM	Bid Item	REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, BETWEEN BUILDING CONTROL VALVE AND METER	50.00	L.F.	$100.00	$5,000.00	
125	64.14V	Bid Item	INSTALL NEW BUILDING CONTROL VALVE 2 IN AND UNDER	17.00	EACH	$425.00	$7,225.00	
126	65.11BR	Bid Item	FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	3,650.00	LBS.	$1.00	$3,650.00	
127	65.21PS	Bid Item	FURNISHING AND PLACING POLYETHYLENE SLEEVE	5,435.00	L.F.	$2.00	$10,870.00	Unit price bid shall not be less than: $2.00
128	65.31FF	Bid Item	FURNISHING, DELIVERING AND PLACING FILTER FABRIC	72,028.00	S.F.	$0.10	$7,202.80	Unit price bid shall not be less than: $0.10
129	65.41PS06	Bid Item	FURNISHING, DELIVERING AND INSTALLING 6-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	6.00	EACH	$775.00	$4,650.00	
130	65.41PS08	Bid Item	FURNISHING, DELIVERING AND INSTALLING 8-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	6.00	EACH	$425.00	$2,550.00	
131	65.41PS12	Bid Item	FURNISHING, DELIVERING AND INSTALLING 12-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	4.00	EACH	$600.00	$2,400.00	
132	65.41PS20	Bid Item	FURNISHING, DELIVERING AND INSTALLING 20-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	10.00	EACH	$1,735.00	$17,350.00	
133	65.41PS36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	10.00	EACH	$3,740.00	$37,400.00	
134	65.41PS48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	6.00	EACH	$6,600.00	$39,600.00	
135	65.51PC	Bid Item	FURNISHING AND PLACING CAST-IN-PLACE CONCRETE CLASS 40 AND PRECAST CONCRETE CLASS 50	760.00	C.Y.	$500.00	$380,000.00	
136	65.61SS	Bid Item	FURNISHING, DELIVERING AND PLACING STRUCTURAL, REINFORCING AND MISCELLANEOUS STEEL	250,350.00	LBS.	$1.00	$250,350.00	
137	65.71SG	Bid Item	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	4,780.00	C.Y.	$55.00	$262,900.00	
138	67.11AA48	Bid Item	INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING 48-INCH DIAMETER STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE	50.00	L.F.	$850.00	$42,500.00	
139	7.13 B	Bid Item	MAINTENANCE OF SITE	36.00	MONTH	$10,000.00	$360,000.00	
140	7.19	Bid Item	LOAD TRANSFER JOINT	250.00	L.F.	$40.00	$10,000.00	

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
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BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$43,991,426.07**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
141	7.35	Bid Item	PEDESTRIAN CHANNELIZER	12,380.00	L.F.	$12.00	$148,560.00	
142	7.88 AA	Bid Item	RODENT INFESTATION SURVEY AND MONITORING	1.00	L.S.	$15,000.00	$15,000.00	Unit price bid shall not be less than: $15,000.00
143	7.88 AB	Bid Item	RODENT BAIT STATIONS	1,120.00	EACH	$65.00	$72,800.00	Unit price bid shall not be less than: $65.00
144	7.88 AC	Bid Item	BAITING OF RODENT BAIT STATIONS	1,120.00	EACH	$11.00	$12,320.00	Unit price bid shall not be less than: $11.00
145	7.88 AD	Bid Item	WATERBUG BAIT APPLICATIONS	288.00	BLOCK	$75.00	$21,600.00	Unit price bid shall not be less than: $75.00
146	70.21DK	Bid Item	DECKING	13,260.00	S.Y.	$50.00	$663,000.00	
147	70.31FN	Bid Item	FENCING	20,860.00	L.F.	$2.00	$41,720.00	Unit price bid shall not be less than: $2.00
148	70.51EO	Bid Item	EXCAVATION OF BOULDERS IN OPEN CUT	800.00	C.Y.	$75.00	$60,000.00	Unit price bid shall not be less than: $75.00
149	70.61RE	Bid Item	ROCK EXCAVATION	500.00	C.Y.	$650.00	$325,000.00	
150	70.81CB	Bid Item	CLEAN BACKFILL	5,262.00	C.Y.	$15.00	$78,930.00	Unit price bid shall not be less than: $15.00
151	70.91SW12	Bid Item	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	4,370.00	S.F.	$1.00	$4,370.00	
152	70.91SW20	Bid Item	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER	7,510.00	S.F.	$1.00	$7,510.00	
153	72.11HF	Bid Item	HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS	53.00	C.Y.	$10.00	$530.00	
154	73.11AB	Bid Item	ADDITIONAL BRICK MASONRY	85.00	C.Y.	$62.50	$5,312.50	Unit price bid shall not be less than: $62.50
155	73.21AC	Bid Item	ADDITIONAL CONCRETE	185.00	C.Y.	$62.50	$11,562.50	Unit price bid shall not be less than: $62.50
156	73.31AE0	Bid Item	ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS)	395.00	C.Y.	$20.00	$7,900.00	Unit price bid shall not be less than: $20.00
157	73.41AG	Bid Item	ADDITIONAL SELECT GRANULAR BACKFILL	180.00	C.Y.	$15.00	$2,700.00	Unit price bid shall not be less than: $15.00
158	73.51AS	Bid Item	ADDITIONAL STEEL REINFORCING BARS	150.00	LBS.	$1.00	$150.00	Unit price bid shall not be less than: $1.00
159	76.11CR	Bid Item	CONSTRUCTION REPORT	1.00	L.S.	$40,000.00	$40,000.00	
160	76.21MR	Bid Item	MONITORING AND POST-CONSTRUCTION REPORT	1.00	L.S.	$50,000.00	$50,000.00	
161	8.01 C1	Bid Item	HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	4,970.00	TONS	$85.00	$422,450.00	Unit price bid shall not be less than: $85.00
162	8.01 C2	Bid Item	SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	51.00	SETS	$2,000.00	$102,000.00	Unit price bid shall not be less than: $2,000.00
163	8.01 H	Bid Item	HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	1,657.00	TONS	$400.00	$662,800.00	Unit price bid shall not be less than: $400.00
164	8.01 S	Bid Item	HEALTH AND SAFETY	1.00	L.S.	$20,000.00	$20,000.00	Unit price bid shall not be less than: $20,000.00
165	8.01 W1	Bid Item	REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	365.00	DAY	$1,700.00	$620,500.00	Unit price bid shall not be less than: $1,700.00
166	8.01 W2	Bid Item	SAMPLING AND TESTING OF CONTAMINATED WATER	365.00	SETS	$1,400.00	$511,000.00	Unit price bid shall not be less than: $1,400.00
167	8.02 A	Bid Item	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	1,000.00	S.F.	$2.00	$2,000.00	
168	9.04 HW	Bid Item	ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE	1.00	F.S	$50,000.00	$50,000.00	Price bid shall be for the Fixed Sum of: $50,000.00
169	9.06 HW	Bid Item	ALLOWANCE FOR DECORATIVE MESH FABRIC	1.00	F.S	$30,000.00	$30,000.00	Price bid shall be for the Fixed Sum of: $30,000.00
170	9.23	Bid Item	PRICE ADJUSTMENTS	1.00	F.S	$15,000.00	$15,000.00	Price bid shall be for the Fixed Sum of: $15,000.00
171	9.28	Bid Item	EXPANDED WORK ALLOWANCE	1.00	F.S	$1,576,000.00	$1,576,000.00	Price bid shall be for the Fixed Sum of: $1,576,000.00
172	9.3	Bid Item	STORM WATER POLLUTION PREVENTION	1.00	L.S.	$100,000.00	$100,000.00	
173	HW-900H	Bid Item	ALLOWANCE FOR CITY WORK ACCELERATION	1.00	F.S	$629,000.00	$629,000.00	Price bid shall be for the Fixed Sum of: $629,000.00
174	JB 100.1	Bid Item	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .1)	5.00	EACH	$1,500.00	$7,500.00	Unit price bid shall not be less than: $620.00
175	JB 100.2	Bid Item	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .2)	7.00	EACH	$2,000.00	$14,000.00	Unit price bid shall not be less than: $929.00
176	JB 101.1	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	7.00	EACH	$6,000.00	$42,000.00	Unit price bid shall not be less than: $3,099.00
177	JB 101.2	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	3.00	EACH	$8,500.00	$25,500.00	Unit price bid shall not be less than: $3,556.00
178	JB 101.3	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	2.00	EACH	$10,000.00	$20,000.00	Unit price bid shall not be less than: $4,796.00

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179	JB 102.1	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	3.00	EACH	$7,000.00	$21,000.00	Unit price bid shall not be less than: $3,861.00
180	JB 102.2	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .2)	2.00	EACH	$12,000.00	$24,000.00	Unit price bid shall not be less than: $4,338.00
181	JB 108.1	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	10.00	EACH	$1,200.00	$12,000.00	Unit price bid shall not be less than: $945.00
182	JB 108.2	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	10.00	EACH	$2,000.00	$20,000.00	Unit price bid shall not be less than: $1,627.00
183	JB 109.1	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	18.00	EACH	$2,000.00	$36,000.00	Unit price bid shall not be less than: $1,370.00
184	JB 109.2	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	12.00	EACH	$3,750.00	$45,000.00	Unit price bid shall not be less than: $1,904.00
185	JB 109.3	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	2.00	EACH	$4,500.00	$9,000.00	Unit price bid shall not be less than: $2,576.00
186	JB 111.1	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)	11.00	EACH	$6,500.00	$71,500.00	Unit price bid shall not be less than: $2,224.00
187	JB 111.2	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)	6.00	EACH	$8,000.00	$48,000.00	Unit price bid shall not be less than: $2,976.00
188	JB 111.3	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)	2.00	EACH	$12,000.00	$24,000.00	Unit price bid shall not be less than: $3,959.00
189	JB 200	Bid Item	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	80.00	L.F.	$300.00	$24,000.00	Unit price bid shall not be less than: $261.00
190	JB 225.1A	Bid Item	INSTALLATION AND REMOVAL OF CATCH BASIN WITH UTILITY INTERFERENCES	24.00	EACH	$12,000.00	$288,000.00	Unit price bid shall not be less than: $4,352.00
191	JB 225.2A	Bid Item	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	19.00	EACH	$8,000.00	$152,000.00	Unit price bid shall not be less than: $2,176.00
192	JB 225.3A	Bid Item	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	5.00	EACH	$6,000.00	$30,000.00	Unit price bid shall not be less than: $1,998.00
193	JB 300.1	Bid Item	SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH LESS THAN 5' DEEP	239.00	C.Y.	$350.00	$83,650.00	Unit price bid shall not be less than: $281.00
194	JB 300.2	Bid Item	SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH GREATER THAN 5' DEEP	10.00	C.Y.	$450.00	$4,500.00	Unit price bid shall not be less than: $319.00
195	JB 300A	Bid Item	SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG)	507.00	C.Y.	$500.00	$253,500.00	Unit price bid shall not be less than: $338.00
196	JB 303	Bid Item	FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL	1,800.00	C.Y.	$224.00	$403,200.00	Unit price bid shall not be less than: $224.00
197	JB 330E	Bid Item	SUPPORT AND PROTECTION OF UTILITY FACILITIES DURING EXCAVATION	707.00	L.F.	$400.00	$282,800.00	Unit price bid shall not be less than: $192.00
198	JB 330G	Bid Item	SUPPORTS FOR PARALLEL FULLY EXPOSED GAS MAINS IN TRENCH	82.00	EACH	$3,000.00	$246,000.00	Unit price bid shall not be less than: $1,764.00
199	JB 330T1	Bid Item	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED CITY TRENCH	150.00	L.F.	$330.00	$49,500.00	Unit price bid shall not be less than: $166.00
200	JB 330T2.1	Bid Item	COMMUNICATIONS FACILITY OPERATOR(S) REQUEST THE TRENCH BE WIDENED	100.00	L.F.	$700.00	$70,000.00	Unit price bid shall not be less than: $373.00
201	JB 330T2.2	Bid Item	COMMUNICATIONS FACILITY OPERATOR(S) REQUESTS THE TRENCH/SHEETING BE MODIFIED	16.00	L.F.	$483.00	$7,728.00	Unit price bid shall not be less than: $483.00
202	JB 351	Bid Item	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	2.00	EACH	$5,000.00	$10,000.00	Unit price bid shall not be less than: $1,533.00
203	JB 400	Bid Item	TEST PITS FOR UTILITY FACILITIES	696.00	C.Y.	$400.00	$278,400.00	Unit price bid shall not be less than: $355.00
204	JB 401	Bid Item	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	768.00	C.Y.	$600.00	$460,800.00	Unit price bid shall not be less than: $380.00
205	JB 402.1	Bid Item	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	250.00	L.F.	$199.00	$49,750.00	Unit price bid shall not be less than: $76.00
206	JB 402.1A	Bid Item	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	250.00	L.F.	$199.00	$49,750.00	Unit price bid shall not be less than: $87.00
207	JB 402.2	Bid Item	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	250.00	L.F.	$150.00	$37,500.00	Unit price bid shall not be less than: $50.00
208	JB 402.2A	Bid Item	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	250.00	L.F.	$199.00	$49,750.00	Unit price bid shall not be less than: $62.00

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$43,991,426.07**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
209	JB 402T.1A	Bid Item	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	3,500.00	L.F.	$120.00	$420,000.00	Unit price bid shall not be less than: $83.00
210	JB 402T.3	Bid Item	ACM REMOVAL AND DISPOSAL OF VERIZON/ECS CONDUITS WITH ASBESTOS CONTAINING MATERIAL TRANSITE PIPES (ACM-TP) UP TO AND INCLUDING 4" DIAMETER	25.00	L.F.	$600.00	$15,000.00	Unit price bid shall not be less than: $107.00
211	JB 402T.V1A	Bid Item	EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	1,050.00	L.F.	$120.00	$126,000.00	Unit price bid shall not be less than: $53.00
212	JB 405.1	Bid Item	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	400.00	C.Y.	$450.00	$180,000.00	Unit price bid shall not be less than: $398.00
213	JB 405.2	Bid Item	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRING SHEETING	50.00	C.Y.	$700.00	$35,000.00	Unit price bid shall not be less than: $482.00
214	JB 406	Bid Item	EXCAVATION FOR UTILITY STRUCTURE	30.00	C.Y.	$450.00	$13,500.00	Unit price bid shall not be less than: $332.00
215	JB 410.1	Bid Item	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% (TYPE .1)	245.00	C.Y.	$550.00	$134,750.00	Unit price bid shall not be less than: $397.00
216	JB 410.2	Bid Item	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% (TYPE .2)	245.00	C.Y.	$750.00	$183,750.00	Unit price bid shall not be less than: $473.00
217	JB 450.1	Bid Item	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	350.00	CREW/HR	$500.00	$175,000.00	Unit price bid shall not be less than: $382.00
218	JB 450.2	Bid Item	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	190.00	CREW/HR	$1,000.00	$190,000.00	Unit price bid shall not be less than: $538.00
219	JB 450.3	Bid Item	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	970.00	CREW/HR	$1,750.00	$1,697,500.00	Unit price bid shall not be less than: $1,294.00
220	JB 610.36	Bid Item	36" DIAMETER STEEL GAS PIPE	180.00	L.F.	$166.00	$29,880.00	Unit price bid shall not be less than: $166.00
221	JB 611.36	Bid Item	36" DIAMETER STEEL GAS PIPE FITTING	20.00	EACH	$4,325.00	$86,500.00	Unit price bid shall not be less than: $4,325.00
222	JB 615.16(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE - 16" DIAMETER	471.00	L.F.	$20.00	$9,420.00	
223	JB 615.8(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE - 8" DIAMETER	104.00	L.F.	$200.00	$20,800.00	
224	JB 615.9(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE - 12" DIAMETER	544.00	L.F.	$20.00	$10,880.00	
225	JB 616.1(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING- 1" DIAMETER	35.00	EACH	$10.00	$350.00	
226	JB 616.16(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING - 16" DIAMETER	105.00	EACH	$20.00	$2,100.00	
227	JB 616.7(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING - 6" DIAMETER	20.00	EACH	$20.00	$400.00	
228	JB 616.8(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING - 8" DIAMETER	56.00	EACH	$20.00	$1,120.00	
229	JB 616.9(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING - 12" DIAMETER	56.00	EACH	$20.00	$1,120.00	
230	JB 636 EB	Bid Item	ADJUSTMENT OF UTILITY HARDWARE (7" TO UNDER 14" WIDTH)	2.00	EACH	$500.00	$1,000.00	Unit price bid shall not be less than: $385.00
231	JB 636 EE	Bid Item	ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)	3.00	EACH	$1,500.00	$4,500.00	Unit price bid shall not be less than: $1,176.00
232	JB 636 EH	Bid Item	ADJUSTMENT OF UTILITY HARDWARE (75" TO UNDER 125" WIDTH)	2.00	EACH	$1,800.00	$3,600.00	Unit price bid shall not be less than: $1,485.00
233	JB 700	Bid Item	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	84.00	C.Y.	$250.00	$21,000.00	Unit price bid shall not be less than: $146.00
234	JB 711	Bid Item	USE SHEETING LINE AS FORM	30.00	L.F.	$10.00	$300.00	Unit price bid shall not be less than: $7.00
235	JB 802A	Bid Item	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	2,703.00	S.F.	$10.00	$27,030.00	Unit price bid shall not be less than: $6.00
236	JB 802B	Bid Item	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	156.00	L.F.	$15.00	$2,340.00	Unit price bid shall not be less than: $13.00
237	JB 803.2	Bid Item	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS (LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY)	100.00	L.F.	$100.00	$10,000.00	Unit price bid shall not be less than: $24.00
238	JB 850(CE)	Bid Item	PLACING RUBBER SHEETS FOR UTILITY FACILITIES	300.00	S.F.	$20.00	$6,000.00	
239	JB 9.28	Bid Item	UTILITY EXPANDED WORK ALLOWANCE	1.00	F.S	$1,050,000.00	$1,050,000.00	Price bid shall be for the Fixed Sum of: $1,050,000.00
240	SL-20.02.02A	Bid Item	FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION AS PER DWG. #-3788A FOR INSTALLING TYPE 30' DAVIT LAMPPOST. PRICE PER UNIT ITEM.	1.00	EACH	$2,418.10	$2,418.10	
241	SL-21.03.07	Bid Item	INSTALL TRANSFORMER BASE.	1.00	EACH	$1,260.00	$1,260.00	
242	SL-21.03.09	Bid Item	FURNISH FABRICATED STEEL TRANSFORMER BASE	1.00	EACH	$865.00	$865.00	
243	SL-22.03.16	Bid Item	FURNISH TYPE LED COBRA HEAD TYPE STREET LIGHT LUMINAIRE, SPECIFICATION #466 (MAX. 110 WATTS)	1.00	EACH	$405.00	$405.00	
244	SL-24.02.26	Bid Item	FURNISH AND INSTALL 4 Ft. STEEL ARM ON METAL LAMPPOST.	1.00	EACH	$3,540.00	$3,540.00	
245	T-1.1	Bid Item	INSTALL TYPE "S" OR "T" FOUNDATION	5.00	EACH	$2,348.10	$11,740.50	
246	T-1.18	Bid Item	REMOVE TYPE "A", "B", "S" OR "T" SERIES FOUNDATION	1.00	EACH	$257.58	$257.58	
247	T-1.3	Bid Item	INSTALL TYPE "M2-5S" FOUNDATION	1.00	EACH	$2,718.44	$2,718.44	
248	T-2.1	Bid Item	INSTALL TYPE "S-1" OR "T-1" SERIES POST	5.00	EACH	$1,060.00	$5,300.00	

Department of Design and Construction

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BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$43,991,426.07**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
249	T-2.22	Bid Item	REMOVE TYPE "S-1" OR "T-1" SERIES POST	1.00	EACH	$1,210.00	$1,210.00	
250	T-2.24	Bid Item	REMOVE TYPE "M" SERIES POST	1.00	EACH	$2,420.00	$2,420.00	
251	T-2.4	Bid Item	INSTALL ONE TYPE "M-2A" POLE WITH TRAFFIC SIGNAL MAST ARM ASSEMBLY	1.00	EACH	$2,420.00	$2,420.00	
252	T-2.6	Bid Item	INSTALL 5 FOOT MAST ARM EXTENSION W/CUSTOM FINISH	1.00	EACH	$455.00	$455.00	
253	T-2.7	Bid Item	INSTALL SHAFT ON "M-2" POST	1.00	EACH	$905.00	$905.00	
254	T-2.9	Bid Item	INSTALL MAST ARM ON EXISTING "M-2" TRAFFIC POST	1.00	EACH	$755.00	$755.00	
255	T-20000	Bid Item	FURNISH TEN FOOT ALUMINUM SIGNAL POST TYPE "S-1"	5.00	EACH	$880.00	$4,400.00	
256	T-20020	Bid Item	a) FURNISH 3/4" ANCHOR BOLT ASSEMBLIES FOR S-1 (EACH) (3 REQUIRED PER POST)	5.00	EACH	$85.00	$425.00	
257	T-20160	Bid Item	FURNISH 20 FOOT SIGNAL MAST ARM POLE ASSEMBLY TYPE "M-2"	1.00	EACH	$7,280.00	$7,280.00	
258	T-20170	Bid Item	M-2A POLE SHAFT WITH BOLT COVERINGS	1.00	EACH	$1,760.00	$1,760.00	
259	T-20184	Bid Item	a) FURNISH 5' EXTENSION ARM ASSEMBLY WITH FITTINGS	1.00	EACH	$495.00	$495.00	
260	T-20220	Bid Item	c) FURNISH 1-1/4" ANCHOR BOLT ASSEMBLIES FOR M-2 (EACH) (4 REQUIRED PER POST)	1.00	EACH	$425.00	$425.00	
261	T-3.21	Bid Item	REMOVE PEDESTRIAN SIGNAL OR SIGN UNIT OR OTHER ILLUMINATED SIGNS FROM ANY POST	10.00	EACH	$365.00	$3,650.00	
262	T-3.40	Bid Item	INSTALL ONE ACCESSIBLE PEDESTRIAN SIGNAL (APS) WITH APS INFORMATION SIGN ON METAL POLE	10.00	EACH	$985.00	$9,850.00	
263	T-3.6	Bid Item	INSTALL PEDESTRIAN SIGNAL ON ANY TYPE POST	10.00	EACH	$465.00	$4,650.00	
264	T-30013L	Bid Item	FURNISH ADJUSTABLE 3 SECTION 1-WAY, DIE CAST ALUMINUM TRAFFIC SIGNALS 8" - W/LED LENS	10.00	EACH	$520.00	$5,200.00	
265	T-31200	Bid Item	e) "VB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	8.00	EACH	$105.00	$840.00	
266	T-31340	Bid Item	f) "VB-P" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	7.00	EACH	$105.00	$735.00	
267	T-31351	Bid Item	g) "VB-2P" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	1.00	EACH	$245.00	$245.00	
268	T-31500AL	Bid Item	FURNISH 12" LENS & SIGNAL SECTION (LED AMBER ARROWS)	2.00	EACH	$290.00	$580.00	
269	T-31500GL	Bid Item	FURNISH 12" LENS & SIGNAL SECTION (LED GREEN ARROWS)	2.00	EACH	$290.00	$580.00	
270	T-31500RL	Bid Item	FURNISH 12" LENS & SIGNAL SECTION (LED RED ARROW)	2.00	EACH	$290.00	$580.00	
271	T-33001-L	Bid Item	FURNISH POLYCARBONATE PEDESTRIAN SIGNAL (16 X 16) W/LED COUNT LENS (SPECIFICATION A-L)	20.00	EACH	$365.00	$7,300.00	
272	T-33002	Bid Item	FURNISH AUDIBLE PEDESTRIAN SIGNAL UNIT	10.00	EACH	$775.00	$7,750.00	
273	T-4.22	Bid Item	INSTALL ANY TYPE OF ADVANCED SOLID STATE TRAFFIC SIGNAL CONTROLLER AND CABINET ON METAL POLE	1.00	EACH	$2,565.00	$2,565.00	
274	T-4.7	Bid Item	INSTALL CONTROLLER IN ANY CONTROL BOX	1.00	EACH	$1,210.00	$1,210.00	
275	T-4.8	Bid Item	REMOVE ONE CONTROL BOX AND CONTROLLER FROM ANY POST OR SUPPORT	1.00	EACH	$1,210.00	$1,210.00	
276	T-5.14	Bid Item	SAW CUT ROADWAY	290.00	L.F.	$3.50	$1,015.00	
277	T-5.34	Bid Item	RESTORING PERMANENT SIDEWALK	150.00	S.F.	$12.04	$1,806.00	
278	T-5.52	Bid Item	FURNISH AND INSTALL 2" HDPE UNDERGROUND CONDUIT IN UNPAVED AREA	350.00	L.F.	$52.35	$18,322.50	
279	T-5.54	Bid Item	PERMANENT RESTORATION OF PAVED ROADWAY	265.00	L.F.	$84.39	$22,363.35	
280	T-6.1	Bid Item	INSTALL CABLE (INCLUDES OVERHEAD)	350.00	L.F.	$7.25	$2,537.50	
281	T-60200	Bid Item	FURNISH AND INSTALL AUDIBLE PEDESTRIAN SIGNALS CABLE	275.00	L.F.	$10.70	$2,942.50	
282	T-99999	Bid Item	FURNISH 8 LOAD SWITCHES ADVANCED SOLID STATE TRAFFIC CONTROLLER (ASTC)	1.00	EACH	$20,380.00	$20,380.00	
283	UTL-6.01.1 (CE)	Bid Item	GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01)	22.00	EACH	$3,500.00	$77,000.00	Unit price bid shall not be less than: $1,040.00
284	UTL-6.01.12 (CE)	Bid Item	GAS MAIN CROSSING WATER MAIN 48" THRU 54" IN DIAMETER (S6.01)	30.00	EACH	$4,000.00	$120,000.00	Unit price bid shall not be less than: $810.00
285	UTL-6.01.2 (CE)	Bid Item	GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01)	9.00	EACH	$3,500.00	$31,500.00	Unit price bid shall not be less than: $1,770.00
286	UTL-6.01.8 (CE)	Bid Item	GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01)	19.00	EACH	$465.00	$8,835.00	Unit price bid shall not be less than: $465.00
287	UTL-6.01.9 (CE)	Bid Item	GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (S6.01)	72.00	EACH	$485.00	$34,920.00	Unit price bid shall not be less than: $485.00
288	UTL-6.02 (CE)	Bid Item	EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (S6.02)	30.00	EACH	$2,000.00	$60,000.00	Unit price bid shall not be less than: $715.00
289	UTL-6.03 (CE)	Bid Item	REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (S6.03)	4,500.00	L.F.	$15.00	$67,500.00	Unit price bid shall not be less than: $15.00
290	UTL-6.03.1A (CE)	Bid Item	REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (FOR CON EDISON WORK ONLY) (S6.03)	1,950.00	L.F.	$25.00	$48,750.00	Unit price bid shall not be less than: $25.00
291	UTL-6.04 (CE)	Bid Item	ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04)	18.00	EACH	$35.00	$630.00	Unit price bid shall not be less than: $35.00

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TOTAL BID PRICE: **$43,991,426.07**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	**Item Number**	**Line Type**	**Item Description**	**Engineer's Estimate of Quantity**	**Unit**	**Unit Price**	**Extended Amount**	**Price Criteria**
292	UTL-6.05 (CE)	Bid Item	ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05)	12.00	EACH	$65.00	$780.00	Unit price bid shall not be less than: $65.00
293	UTL-6.06 (CE)	Bid Item	SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06)	1,585.00	C.Y.	$200.00	$317,000.00	Unit price bid shall not be less than: $180.00
294	UTL-6.07 (CE)	Bid Item	TEST PITS FOR GAS FACILITIES (S6.07)	379.00	C.Y.	$250.00	$94,750.00	Unit price bid shall not be less than: $100.00
295	UTL-6.08A (CE)	Bid Item	PIER AND/OR PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAIN WITH LESS THAN 24" COVER (S6.08A)	4.00	EACH	$25,000.00	$100,000.00	Unit price bid shall not be less than: $5,800.00
296	UTL-6.09A (CE)	Bid Item	TRENCH EXCAVATION AND BACKFILL FOR GAS MAINS AND SERVICES. GAS INSTALLED BY OTHERS (FOR CON EDISON WORK ONLY). (S6.09)	1,115.00	C.Y.	$500.00	$557,500.00	Unit price bid shall not be less than: $200.00
297	UTL-GCS-2WS (CE)	Bid Item	GAS INTERFERENCES AND ACCOMMODATIONS	1.00	F.S	$50,000.00	$50,000.00	Price bid shall be for the Fixed Sum of: $50,000.00
		Subtotal	**SUBTOTAL**				**$42,791,426.07**	
298	6.39 B	Mob	MOBILIZATION	1.00	L.S.	$1,200,000.00	$1,200,000.00	BID PRICE OF MOBILIZATION SHALL NOT EXCEED 8% OF THE ABOVE SUB-TOTAL PRICE.

Pre-Award Process

The bidder is advised that as part of the pre-award review of its bid, it may be required to submit the information described in Sections (A) through (D) below. If required, the bidder must submit such information within five (5) business days following receipt of notification from DDC that it is among the low bidders. Such notification from DDC will be by email and will specify the types of information which must be submitted directly to DDC.

In the event the bidder fails to submit the required information within the specified time frame, its bid may be rejected as nonresponsive.

****

(A) **Project Reference Form**: If required, the bidder must complete and submit the Project Reference Form set forth in this Bid Booklet. The Project Reference Form consists of 3 parts: (1) Contracts Completed by the Bidder, (2) Contracts Currently Under Construction by the Bidder, and (3) Pending Contracts Not Yet Started by the Bidder.

(B) **Copy of License**: If required, the bidder must submit a copy of the license under which the bidder will be performing the work. Such license must clearly show the following: (1) Name of the Licensee, (2) License Number, and (3) Expiration date of the License. A copy of the license will be required from bidders for the following contracts: Plumbing Work, Electrical Work and Asbestos Abatement.

(C) **Financial Information**: If required, the bidder must submit the financial information described below:

(1) Audited Financial Statements: Financial statements (Balance Sheet and Income Statement) of the entity submitting the bid, as audited by an independent auditor licensed to practice as a certified public accountant (CPA). Audited financial statements for the three most recent fiscal years must be submitted. Each such financial statement must include the auditor's standard report.

If the bidder does not have audited financial statements, it must submit an affidavit attesting to the fact that the bidder does not have such statements. In addition, the bidder must submit the following documentation covering the three most recent fiscal years: signed federal tax returns, unaudited financial statements, and a "certified review letter" from a certified public accountant (CPA) verifying the unaudited financial statements.

Unless the most recent audited or unaudited financial statement was issued within ninety (90) days, the bidder must submit interim financial information that includes data on financial position and results of operation (income data) for the current fiscal year. Such information may be summarized on a monthly or quarterly basis or at other intervals.

(2) Schedule of Aged Accounts Receivable, including portion due within ninety (90) days.

(D) **Project Specific Information**: If required, the bidder must submit the project specific information described below:

(1) Statement indicating the number of years of experience the bidder has had and in what type of construction.

(2) Resumes of all key personnel to be involved in the project, including the proposed project superintendent.

(3) List of significant pieces of equipment expected to be used for the contract, and whether such equipment is owned or leased.

(4) Description of work expected to be subcontracted, and to what firms, if known.

(5) List of key material suppliers.

(6) Preliminary bar chart time schedule

(7) Contractor's expected means of financing the project. This should be based on the assumption that the contractor is required to finance 2X average monthly billings throughout the contract period.

(8) Any other issues the contractor sees as impacting his ability to complete the project according to the contract.

In addition to the information described in Sections (A) through (D) above, the bidder shall submit such additional information as the Commissioner may require, including without limitation, an explanation or justification for specific unit price items.

The bidder is further advised that it may be required to attend a pre-award meeting with DDC representatives. If such a meeting is convened, the bidder will be advised as to any additional material to be provided.

Project References

A. Contracts completed by the bidder

List all contracts substantially completed within the last 4 years, up to a maximum of 10, in descending order of date of substantial completion.

Project & Location	Contract Type	Contract Amount ($000)	Date Completed	Owner Reference & Tel. No.	Architect/Engineer Reference & Tel. No. (if different from owner)
NYCDDC HWPLZ004X	Plaza Reconstr.	$5,958,447	8/29/2022	Eric Sattler - NYCDDC 917-681-9913	
NYCDDC SANDHW06	Hwy. Reconstr.	$2,590,250	6/30/2022	Iyad Marzouk - NYCDDC 646-235-5258	
NYCDDC HWK1048B	Hwy. Reconstr.	$6,651,909	6/2/2022	Theoni Dellaportas - NYCDDC 347-752-0430	
NYCDDC HWPLZ003M	Plaza Reconstr.	$10,780,797	12/9/2021	Iyad Marzouk - NYCDDC 646-235-5258	
NYCDDC MED598	Trunk WM/ Sewers	$23,179,026	7/8/2021	Iyad Marzouk - NYCDDC 646-235-5258	
NYCDDC HWPLZ012M	Plaza Reconstr.	$4,829,047	12/15/2020	Dushyant Rajput - NYCDDC 646-879-1211	
NYCDDC HWCSCH4B3	School Safety	$4,448,947	6/22/2020	Lafayette Cisco - NYCDDC 646-235-8862	
NYCDDC HWK1670	Ped. Safety	$1,785,303	2/19/2020	Theoni Dellaportas - NYCDDC 347-752-0430	
NYCDDC MED608	Trunk WM/ Sewers	$8,939,669	8/1/2019	Iyad Marzouk - NYCDDC 646-235-5258	
NYCDDC EC-SEC23	Sewers	$32,200,000	1/2024	Michael Sullivan, P.E. - NYCDEP 347-924-2241	

B. Contracts currently under construction by the bidder

List all contracts currently under construction even if they are not similar to the contract being awarded.

Project & Location	Contract Type	Contract Amount ($000)	Subcontracted to Others ($000)	Uncompleted Portion ($000)	Date Scheduled to Complete	Owner Reference & Tel. No.	Architect/ Engineer Reference & Tel. No. (if different from owner)
NYCDDC SECBRM02	Catch Basins	$982,465	$19,650	$275,000	6/2025	Michael Sullivan, P.E. - DEP 347-924-2241	
NYCDDC SECBRQX02	Catch Basin	$2,285,737	$225,000	$87,500	8/2025	Michael Sullivan, P.E. - DEP 347-924-2241	
NYCDDC HWPEDSF4	Ped. Safety	$9,948,250	$1,100,000	$3,746,333	12/2025	Kalpesh Patel, P.E. - NYCDDC 212-313-3450	
NYCDDC HWPEDSF5	Ped. Safety	$15,854,595	$2,400,000	$6,331,090	7/2025	Kalpesh Patel, P.E. - NYCDDC 212-313-3450	
NYCDDC EC-SEC24	Emergency Sewers	$43,197,439	$5,750,000	$4,100,000	7/2025	Michael Sullivan, P.E. - DEP 347-924-2241	
NYCDDC HWP19KC2	Ped. Safety	$3,437,226	$450,000	$2,006,831	10/2025	Eric Sattler, P.E. - NYCDDC 718-391-19666	
NYCDDC EC-SEC25	Emergency Sewers	$25,000,000	$5,400,000	$19,250,000	12/2025	Michael Sullivan, P.E. - DEP 347-924-2241	

C. Pending contracts not yet started by the bidder

List all contracts awarded to or won by the bidder but not yet started.

Project & Location	Contract Type	Contract Amount ($000)	Date Scheduled to Start	Owner Reference & Tel. No.	Architect/Engineer Reference & Tel. No. (if different from owner)
N/A					

Department of Design and Construction

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE
30-30 THOMSON AVENUE
LONG ISLAND CITY, NY, 11101
TEL: 718.391.1000
WEB: www.nyc.gov/ddc

TO BE FILLED IN BY THE BIDDER:

BIDDER'S NAME:

_____

_____

BID SECURITY (CIRCLE ONE):
BID BOND / CERTIFIED CHECK

NUMBER OF ADDENDUMS RECEIVED AND ATTACHED TO BID:
____ ADDENDUMS

DDC CLIENT AGENCY:
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY:
IN HOUSE

DATE PREPARED:
10/04/2024

VOLUME 2 OF 3

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: HED562

INFORMATION FOR BIDDERS
CONTRACT
PERFORMANCE AND PAYMENT BONDS
PREVAILING WAGE SCHEDULE

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

INCLUDING DISTRIBUTION WATER MAIN, SEWERS, STREET LIGHTING, AND TRAFFIC SIGNAL WORK

TOGETHER WITH ALL WORK INCIDENTAL THERETO

BOROUGH OF THE BRONX

CITY OF NEW YORK

CITY OF NEW YORK

DEPARTMENT OF DESIGN AND CONSTRUCTION

INFORMATION FOR BIDDERS

December 2021

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CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION

INFORMATION FOR BIDDERS

TABLE OF CONTENTS

1.	Description and Location of Work	1
2.	Time and Place for Receipt of Bids	1
3.	Definitions	1
4.	Invitation For Bids and Contract Documents	1
5.	Pre-Bid Conference	1
6.	Agency Contact	1
7.	Bidder's Oath	1
8.	Examination and Viewing of Site, Consideration of Other Sources of Information and Changed Conditions	2
9.	Examination of Proposed Contract	2
10.	Form of Bid	2
11.	Irrevocability of Bid	3
12.	Acknowledgment of Amendments	3
13.	Bid Samples and Descriptive Literature	3
14.	Proprietary Information/Trade Secrets	3
15.	Pre-Opening Modification or Withdrawal of Bids	3
16.	Bid Evaluation and Award	3
17.	Late Bids, Late Withdrawals and Late Modifications	3
18.	Withdrawal of Bids.	3
19.	Mistake in Bids	4
20.	Low Tie Bids	4
21.	Rejection of Bids	5
22.	Right to Appeal Determinations of Non-Responsiveness or Non-Responsibility and Right to Protest Solicitations and Award	5
23.	Affirmative Action and Equal Employment Opportunity	5
25.	Complaints About the Bid Process	6
26.	Bid, Performance and Payment Security	6
27.	Failure to Execute Contract	7
28.	Bidder Responsibilities and Qualifications	7
29.	Employment Report	7
30.	Labor Law Requirements	8
31.	Insurance	8
32.	Lump Sum Contracts	8
33.	Unit Price Contracts	8

34.	Excise Tax	9
35.	Licenses and Permits	9
36.	Multiple Prime Contractors	9
37.	Locally Based Enterprise Requirements (LBE)	9
38.	Bid Submission Requirements	11
39.	Comptroller's Certificate	11
40.	Procurement Policy Board Rules	11
41.	DDC Safety Requirements	11

1. Description and Location of Work

The description and location of the work for which bids are requested are specified in the PASSPort RFx field "Description".

2. Time and Place for Receipt of Bids

Sealed bids shall be received on or before the date and hour specified in the PASSPort RFx, at which time they will be publicly opened and read aloud in the presence of the Commissioner or the Commissioner's or her representative, and any bidders who may desire to be present.

3. Definitions

The definitions set forth in the Procurement Policy Board Rules shall apply to this Invitation For Bids.

4. Invitation For Bids and Contract Documents

(A) Except for titles, sub-titles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience) the following, except for such portions thereof as may be specifically excluded, shall be deemed to be part of the Contract and the Invitation for Bids.

(1) All provisions required by law to be inserted in this Contract, whether actually inserted or not

(2) The Contract Drawings and Specifications

(3) The General Conditions, the General Requirements and the Special Conditions, if any

(4) The Contract

(5) The Information for Bidders; Request for Proposals; Notice of Solicitation and Proposal For Bids; Bid or Proposal, and the Bid Booklet

(6) The Budget Director's Certificate; all Addenda issued prior to the receipt of the bids; the Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed with the Work.

(B) For particulars as to this procurement, including quantity and quality of the purchase, extent of the work or labor to be performed, delivery and performance schedule, and any other special instructions, prospective bidders are referred to the Invitation For Bids Documents. A copy of such documents can be obtained in the PASSPort RFx.

5. Pre-Bid Conference

A pre-bid conference shall be held as set forth in the PASSPort RFx. Nothing stated at the pre-bid conference shall change the terms or conditions of the Invitation For Bids Documents, unless a change is made by written amendment as provided in Section 9 below. Failure to attend a mandatory pre-bid conference shall constitute grounds for the rejection of the bid.

6. Agency Contact

Any questions or correspondence relating to this bid solicitation shall be addressed to the Agency Contact person specified in the PASSPort RFx.

7. Bidder's Oath

(A) The bid shall be properly signed by an authorized representative of the bidder and the bid shall be verified by the written oath of the authorized representative who signed the bid, that the several matters stated and information furnished therein are in all aspects true.

(B) A materially false statement willfully or fraudulently made in connection with the bid or any of the forms completed and submitted with the bid may result in the termination of any Contract between the City and the Bidder. As a result, the Bidder may be barred from participating in future City contracts as well as be subject to possible criminal prosecution.

8. Examination and Viewing of Site, Consideration of Other Sources of Information and Changed Conditions

(A) Pre-Bidding (Investigation) Viewing of Site - Bidders must carefully view and examine the site of the proposed work, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions on, about or above the site relating to or affecting in any way the performance of the work to be done under the Contract which were or should have been indicated to a reasonably prudent bidder. To arrange a date for visiting the work site, bidders are to contact the Agency Contact person specified in The PASSPort RFx.

(B) Should the contractor encounter during the progress of the work subsurface conditions at the site materially differing from any shown on the Contract Drawings or indicated in the Specifications or such subsurface conditions as could not reasonably have been anticipated by the contractor and were not anticipated by the City, which conditions will materially affect the cost of the work to be done under the Contract, the attention of the Commissioner must be called immediately to such conditions before they are disturbed. The Commissioner shall thereupon promptly investigate the conditions. If the Commissioner finds that they do so materially differ, or that they could not reasonably have been anticipated by the contractor and were not anticipated by the City, the Contract may be modified with the Commissioner's written approval.

9. Examination of Proposed Contract

(A) Request for Interpretation or Correction: Prospective bidders must examine the Contract Documents carefully and before bidding must request the Commissioner in writing for an interpretation or correction of every patent ambiguity, inconsistency or error therein which should have been discovered by a reasonably prudent bidder. Such interpretation or correction, as well as any additional contract provisions the Commissioner may decide to include, will be issued in writing by the Commissioner as an addendum to the Contract, which will be transmitted to each person recorded as having received a copy of the Contract Documents from the Department. Transmission of such addendum will be by mail, e-mail, facsimile or hand delivery. Such addendum will also be posted at the place where the Contract Documents are available for the inspection of prospective bidders. Upon transmission as provided for herein, such addendum shall become a part of the Contract Documents, and binding on all bidders, whether or not actual notice of such addendum is shown.

(B) Only Commissioner's Interpretation or Correction Binding: Only the written interpretation or correction so given by the Commissioner shall be binding, and prospective bidders are warned that no other officer, agent or employee of the City is authorized to give information concerning, or to explain or interpret, the Contract.

(C) Documents given to a subcontractor for the purpose of soliciting the subcontractor's bid shall include either a copy of the bid cover sheet or a separate information sheet setting forth the project name, the Contract number (if available), the contracting agency and the Project's location.

10. Form of Bid

Each bid must be submitted upon the prescribed form and must contain: a) the name, residence and place of business of the person or persons making the same; b) the names of all persons interested therein, and if no other person is so interested, such fact must be distinctly stated; c) a statement to the effect that it is made without any connection with any other person making a bid for the same purpose and that it is in all respects fair and without collusion or fraud; d) a statement that no Council member or other officer or employee or person whose salary is payable in whole or part from the City Treasury is directly or indirectly interested therein or in the supplies, materials or equipment and work or labor to which it relates, or in any portion of the profits thereof; e) a statement that the bidder is not in arrears to the City or to any agency upon a debt or contract or taxes, and is not a defaulter as surety or otherwise upon any obligation to the City to any agency thereof, except as set forth in the bid.

THE BID SHALL BE TYPEWRITTEN OR WRITTEN LEGIBLY IN INK. THE BID SHALL BE SIGNED IN INK. ERASURES OR ALTERATIONS SHALL BE INITIALED BY THE SIGNER IN INK. FAILURE TO CONFORM TO THE REQUIREMENTS OF THIS SECTION 10 SHALL RESULT IN THE REJECTION OF THE BID.

11. Irrevocability of Bid

The prices set forth in the bid cannot be revoked and shall be effective until the award of the Contract, unless the bid is withdrawn as provided for in Sections 15 and 18 below.

12. Acknowledgment of Amendments

The receipt of any amendment to the Contract Documents shall be acknowledged by the bidder in its bid submission.

13. Bid Samples and Descriptive Literature

Bid samples and descriptive literature shall not be submitted by the bidder, unless expressly requested elsewhere in the Contract or Contract Documents. Any unsolicited bid samples or descriptive literature which are submitted shall not be examined or tested and shall not be deemed to vary any of the provisions of this Contract.

14. Proprietary Information/Trade Secrets

(A) The bidder shall identify those portions of the bid which it deems to be confidential, proprietary information or trade secrets, and provide justification why such materials shall not be disclosed by the City. All such materials shall be clearly indicated by stamping the pages on which such information appears, at the top and bottom thereof with the word "Confidential". Such materials stamped "Confidential" must be easily separable from the non-confidential sections of the bid.

(B) All such materials so indicated shall be reviewed by the Agency and any decision not to honor a request for confidentiality shall be communicated in writing to the bidder. For those bids which are unsuccessful, all such confidential materials shall be returned to the bidder. Prices, makes and model or catalog numbers of the items offered, deliveries, and terms of payment shall be publicly available after bid opening, regardless of any designation of confidentiality made by the bidder.

15. Pre-Opening Modification or Withdrawal of Bids

Bids may be modified or withdrawn by written notice received in the office designated in the PASSPort RFx, before the time and date set for the bid opening. If a bid is withdrawn in accordance with this Section, the bid security, if any, shall be returned to the bidder.

16. Bid Evaluation and Award

In accordance with the New York City Charter, the Procurement Policy Board Rules and the terms and conditions of this Invitation For Bids, this Contract shall be awarded, if at all, to the responsible bidder whose bid meets the requirements and evaluation criteria set forth in the Invitation For Bids, and whose bid price is either the most favorable bid price or, if the Invitation For Bids so states, the most favorable evaluated bid price. A bid may not be evaluated for any requirement or criterion that is not disclosed in the Invitation For Bids.

Restriction: No negotiations with any bidder shall be allowed to take place except under the circumstances and in the manner set forth in Section 21. Nothing in this Section shall be deemed to permit a contract award to a bidder submitting a higher quality item than that designated in the Invitation For Bids, if that bid is not also the most favorable bid.

17. Late Bids, Late Withdrawals and Late Modifications

Any bid received at the place designated in the solicitation after the time and date set for receipt of bids is late and shall not be considered. Any request for withdrawal or modification received at the place designated in the solicitation after the time and date set for receipt of bids is late and shall not be considered. The exception to this provision is that a late modification of a successful bid that makes the bid terms more favorable to the City shall be considered at any time it is received.

18. Withdrawal of Bids.

Except as provided for in Section 15, above, a bidder may not withdraw its bid before the expiration of forty-five (45) days after the date of the opening of bids; thereafter, a bidder may withdraw its bid only in writing and in advance of an actual award. If within sixty (60) days after the execution of the Contract, the Commissioner fails to fix the date

for commencement of work by written notice to the bidder, the bidder at the bidder's option, may ask to be relieved of the bidder's obligation to perform the work called for by written notice to the Commissioner. If such notice is given to the Commissioner, and the request to withdraw is granted, the bidder waives all claims in connection with this Contract.

19. Mistake in Bids

(A) Mistake Discovered Before Bid Opening: A bidder may correct mistakes discovered before the time and date set for bid opening by withdrawing or correcting the bid as provided in Section 15 above.

(B) Mistakes Discovered Before Award

(1) In accordance with General Municipal Law (Section 103, subdivision 11), where a unilateral error or mistake is discovered in a bid, such bid may be withdrawn upon written approval of the Agency Chief Contracting Officer if the following conditions are met:

(a) The mistake is known or made known to the agency prior to the awarding of the Contract or within 3 days after the opening of the bid, whichever period is shorter; and

(b) The price bid was based upon an error of such magnitude that enforcement would be unconscionable; and

(c) The bid was submitted in good faith and the bidder submits credible evidence that the mistake was a clerical error as opposed to a judgment error; and

(d) The error in the bid is actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor, material or services made directly in the compilation of the bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of the original work paper, documents, or materials used in the preparation of the bid sought to be withdrawn; and

(e) It is possible to place the agency in the same position as existed prior to the bid.

(2) Unless otherwise required by law, the sole remedy for a bid mistake in accordance with this Article shall be withdrawal of the bid, and the return of the bid bond or other security, if any, to the bidder. Thereafter, the agency may, in its discretion, award the Contract to the next lowest bidder or rebid the Contract. Any amendment to or reformation of a bid or a Contract to rectify such an error or mistake therein is strictly prohibited.

(3) If the mistake and the intended correct bid are clearly evident on the face of the bid document, the bid shall be corrected to the intended correct bid and may not be withdrawn. Examples of mistakes that may be corrected are typographical errors, errors in extending unit prices, transposition errors and arithmetical errors.

20. Low Tie Bids

(A) When two or more low responsive bids from responsible bidders are identical in price, meeting all the requirements and criteria set forth in the Invitation For Bids, the Agency Chief Contracting Officer will break the tie in the following manner and order of priority:

(1) Award to a certified New York City small, minority or woman-owned business entity bidder;

(2) Award to a New York City bidder;

(3) Award to a certified New York State small, minority or woman-owned business bidder;

(4) Award to a New York State bidder.

(B) If two or more bidders still remain equally eligible after application of paragraph (A) above, award shall be made by a drawing by lot limited to those bidders. The bidders involved shall be invited to attend the drawing. A witness shall be present to verify the drawing and shall certify the results on the bid tabulation sheet.

21. Rejection of Bids

(A) Rejection of Individual Bids: The Agency may reject a bid if:

(1) The bidder fails to furnish any of the information required pursuant to Section 24 or 28 hereof; or if

(2) The bidder is determined to be not responsible pursuant to the Procurement Policy Board Rules; or if

(3) The bid is determined to be non-responsive pursuant to the Procurement Policy Board Rules; or if

(4) The bid, in the opinion of the Agency Chief Contracting Officer, contains unbalanced bid prices and is thus non-responsive, unless the bidder can show that the prices are not unbalanced for the probable required quantity of items, or if the imbalance is corrected pursuant to Section 15.

(B) Rejection of All Bids: The Agency, upon written approval by the Agency Chief Contracting Officer, may reject all bids and may elect to resolicit bids if in its sole opinion it shall deem it in the best interest of the City so to do.

(C) Rejection of All Bids and Negotiation With All Responsible Bidders: The Agency Head may determine that it is appropriate to cancel the Invitation For Bids after bid opening and before award and to complete the acquisition by negotiation. This determination shall be based on one of the following reasons:

(1) All otherwise acceptable bids received are at unreasonable prices, or only one bid is received and the Agency Chief Contracting Officer cannot determine the reasonableness of the bid price, or no responsive bid has been received from a responsible bidder; or

(2) In the judgment of the Agency Chief Contracting Officer, the bids were not independently arrived at in open competition, were collusive, or were submitted in bad faith.

(B) When the Agency has determined that the Invitation for Bids is to be canceled and that use of negotiation is appropriate to complete the acquisition, the contracting officer may negotiate and award the Contract without issuing a new solicitation, subject to the following conditions:

(1) prior notice of the intention to negotiate and a reasonable opportunity to negotiate have been given by the contracting officer to each responsible bidder that submitted a bid in response to the Invitation for Bids;

(2) the negotiated price is the lowest negotiated price offered by a responsible bidder; and

(3) the negotiated price is lower than the lowest rejected bid price of a responsible bidder that submitted a bid in response to the Invitation for Bids.

22. Right to Appeal Determinations of Non-Responsiveness or Non-Responsibility and Right to Protest Solicitations and Award

The bidder has the right to appeal a determination of non-responsiveness or non-responsibility and has the right to protest a solicitation and award. For further information concerning these rights, the bidder is directed to the Procurement Policy Board Rules.

23. Affirmative Action and Equal Employment Opportunity

This Invitation For Bids is subject to applicable provisions of Federal, State and Local Laws and executive orders requiring affirmative action and equal employment opportunity.

24. PASSPort COMPLIANCE

All vendors that intend to do business with the City of New York must complete a disclosure process in order to be considered for a contract. This disclosure process was formerly completed using Vendor Information Exchange System (VENDEX) paper-based forms. The City of New York has moved collection of vendor disclosure information online. In early August 2017, the New York City Mayor's Office of Contract Services (MOCS) launched the Procurement and Sourcing Solutions Portal (PASSPort), a new online procurement system that replaced the paper-VENDEX process. In anticipation of awards, all bidders must create online accounts in the new PASSPort system, and

file all disclosure information using PASSPort. Paper submissions, including certifications of no changes to existing VENDEX packages, will not be accepted in lieu of complete online filings using PASSPort.

All vendors that intend to do business with the City, but specifically those that fall into any of the following categories, are required to enroll:

- Have a pending award with a City Agency; or
- Hold a current contract with a City Agency and have either an expiring VENDEX or expiring Certificate of No Change.

The Department of Design and Construction (DDC) and MOCS hereby notifies all proposers that the PASSPort system is available, and that disclosure filing completion is required prior to any award through this competitive bid.

To enroll in PASSPort and to access the PASSPort website (including online training), please visit www.nyc.gov/passport. Contact MOCS at passport@mocs.nyc.gov for additional information and technical support.

25. Complaints About the Bid Process

The New York City Comptroller is charged with the audit of contracts in New York City. Any vendor who believes that there has been unfairness, favoritism or impropriety in the bid process should inform the Comptroller, Office of Contract Administration, One Centre Street, Room 835, New York, New York; telephone number (212)669-2323.

26. Bid, Performance and Payment Security

(A) Bid Security: Each bid must be accompanied by bid security in an amount and type specified in the PASSPort RFx questionnaire. The bid security shall assure the City of New York of the adherence of the bidder to its proposal, the execution of the Contract, and the furnishing of Performance and Payment Bonds by the bidder, if required in the PASSPort RFx. Bid security shall be returned to the bidder as follows:

(1) Within ten (10) days after the bid opening, the Comptroller will be notified to return the deposits of all but the three (3) lowest bidders. Within five (5) days after the award, the Comptroller will be notified to return the deposits of the remaining two unsuccessful bidders.

(2) Within five (5) days after the execution of the Contract and acceptance of the Contractor's bonds, the Comptroller will be notified to return the bid security of the successful bidder or, if performance and payment bonds are not required, only after the sum retained under Article 21 of the Contract equals the amount of the bid security.

(3) Where all bids are rejected, the Comptroller will be notified to return the deposit of the three (3) lowest bidders at the time of rejection.

(B) Performance and Payment Security: Performance and Payment Security must be provided in an amount and type specified in the PASSPort RFx. The performance and payment security shall be delivered by the contractor prior to or at the time of execution of the Contract. If a contractor fails to deliver the required performance and payment security, its bid security shall be enforced, and an award of Contract may be made to the next lowest responsible and responsive bidder, or the contract may be rebid.

(C) Acceptable Types of Security: Acceptable types of security for bids, performance, and payment shall be limited to the following:

(1) a one-time bond in a form satisfactory to the City;

(2) a bank certified check or money order;

(3) obligations of the City of New York; or

(4) other financial instruments as determined by the Office of Construction in consultation with the Comptroller.

Whenever the successful bidder deposits obligations of the City of New York as performance and payment security, the Comptroller may sell and use the proceeds thereof for any purpose for which the principal or

surety on such bond would be liable under the terms of the Contract. If the money is deposited with the Comptroller, the successful bidder shall not be entitled to receive interest on such money from the City.

(D) Form of Bonds: Security provided in the form of bonds must be prepared on the form of bonds authorized by the City of New York. Forms for bid, performance, and payment bonds are included in the Invitation for Bids Documents. Such bonds must have as surety thereunder such surety company or companies as are: (1) approved by the City of New York; (2) authorized to do business in the State of New York, and (3) approved by the Department of the Treasury of the United States. Premiums for any required bonds must be included in the base bid.

The bidder is advised that submission of a bid bond where the surety on such bond fails to meet the criteria set forth herein, shall result in the rejection of the bid as non-responsive.

The Department of the Treasury of the United States advises that information concerning approved surety companies may be obtained as follows: (1) from the Government Printing Office at 215-364-6465; (2) through the Internet at https://www.fiscal.treasury.gov/surety-bonds/.

(E) Power of Attorney: Attorneys in fact who sign bid, performance, or payment bonds must file with each bond a certified copy of their power of attorney to sign said bonds.

27. Failure to Execute Contract

In the event of failure of the successful bidder to execute the Contract and furnish the required security within ten (10) days after notice of the award of the Contract, the deposit of the successful bidder or so much thereof as shall be applicable to the amount of the award made shall be retained by the City, and the successful bidder shall be liable for and hereby agrees to pay on demand the difference between the price bid and the price for which such Contract shall be subsequently awarded, including the cost of any required reletting and less the amount of such deposit. No plea of mistake in such accepted bid shall be available to the bidder for the recovery of the deposit or as a defense to any action based upon such accepted bid. Further, should the bidder's failure to comply with this Section cause any funding agency, body or group (Federal, State, City, Public, Private, etc.) to terminate, cancel or reduce the funding on this project, the bidder in such event shall be liable also to the City for the amount of actual funding withdrawn by such agency on this project, less the amount of the forfeited deposit.

28. Bidder Responsibilities and Qualifications

(A) Bidders must include with their bids all information necessary for a determination of bidder responsibility, as set forth in the Specifications.

(B) The Agency may require any bidder or prospective bidder to furnish all books of account, records, vouchers, statements or other information concerning the bidder's financial status for examination as may be required by the Agency to ascertain the bidder's responsibility and capability to perform the Contract. If required, a bidder must also submit a sworn statement setting forth such information as the Agency may require concerning present and proposed plant and equipment, the personnel and qualifications of the bidder's working organizations, prior experience and performance record.

(C) Oral Examination on Qualifications: In addition thereto, and when directed by the Agency, the bidder, or a responsible officer, agent or employee of the bidder, must submit to an oral examination to be conducted by the Agency in relation to the bidder's proposed tentative plan and schedule of operations, and such other matters as the Agency may deem necessary in order to determine the bidder's ability and responsibility to perform the work in accordance with the Contract. Each person so examined must sign and verify a stenographic transcript of such examination noting thereon such corrections as such person may desire to make.

(D) If the bidder fails or refuses to supply any of the documents or information set forth in paragraph (B) hereof or fails to comply with any of the requirements thereof, the Agency may reject the bid.

29. Employment Report

In accordance with Executive Order No. 50 (1980) as modified by Executive Order 108 (1986), the filing of a

completed Employment Report (ER) is a requirement of doing business with the City of New York for construction contractors with contracts of $1,000,000 or more and subcontractors with construction subcontracts of $750,000 or more. The required forms and information are included in the PASSPort Vendor Profile.

30. Labor Law Requirements

(A) General: The successful bidder will be required to comply strictly with all Federal, State and local labor laws and regulations.

(B) New York State Labor Law: This Contract is subject to New York State Labor Law Section 220, which requires that construction workers on the site be paid prevailing wages and supplements. The Contractor is reminded that all wage provisions of this Contract will be enforced strictly and failure to comply will be considered when evaluating performance. Noncompliance may result in the contractor being debarred by the City from future contracts. Complaints filed with the Comptroller may result in decisions which may debar a contractor from bidding contracts with any state governmental entity and other political subdivisions.

(C) Records: The Contractor is expected to submit accurate payroll reports and other required documents and verify attendance and job classifications being utilized in compliance with the law, Contract provisions and agency procedures.

31. Insurance

(A) Bidders are advised that the insurance requirements contained herein are regarded as material terms of the Contract. As required by Article 22 of the Contract, the contractor must effect and maintain with companies licensed and authorized to do business in the State of New York, the types of insurance set forth therein, when required by and in the amounts set forth in Schedule A of the General Conditions. Such required insurance must be provided from the date the contractor is ordered to commence work and up to the date of final acceptance of all required work.

(B) The contractor must, within ten days of receipt of the notice of award, submit the following insurance documentation: (a) original certificate of insurance for general liability in the amount required by Schedule A of the General Conditions, and (b) original certificates of insurance or other proof of coverage for workers' compensation and disability benefits, as required by Section 57 of the New York State Workers' Compensation Law and Section 220 of the Disability Benefits Law.

32. Lump Sum Contracts

(A) Comparison of Bids: Bids on Lump Sum Contracts will be compared on the basis of the lump sum price bid, adjusted for alternate prices bid, if any.

(B) Lump Sum Bids for "General Construction Work" which include excavation shall include all necessary excavation work defined in the Specifications as being included in the lump sum bid. The bidder shall also bid a unit price for the additional cost of excavating material which is defined in the Specifications as excavation for which additional payment will be made. The total estimated additional cost of removing such material will be taken as the quantity set forth in the Engineer's Estimate multiplied by the unit price bid. This total estimated cost of additional excavation shall be added to the lump sum bid for the General Construction Work for the purpose of comparing bids to determine the low bidder.

(C) Variations from Engineer's Estimate: The Engineer's Estimate of the quantity of excavation for which additional payment will be made is approximate only and is given solely to be used as a uniform basis for the comparison of bids and such estimate is not to be considered as part of this contract. The quantities actually required to complete the contract work may be more or less than the quantities in the Engineer's Estimate and, if so, no action for damages or for loss of profits shall accrue to the contractor by reason thereof.

33. Unit Price Contracts

(A) Comparison of Bids: Bids on Unit Price Contracts will be compared on the basis of a total estimated price,

arrived at by taking the sum of the estimated quantities of such items, in accordance with the Engineer's Estimate of Quantities set forth in the Bid Schedule, multiplied by the corresponding unit prices, and including any lump sum bids on individual items.

(B) Variations from Engineer's Estimate: Bidders are warned that the Engineer's Estimate of Quantities on the various items of work and materials is approximate only, given solely to be used as a uniform basis for the comparison of bids, and is not be considered part of this contract. The quantities actually required to complete the contract work may be less or more than so estimated, and if so, no action for damages or for loss of profits shall accrue to the contractor by reason thereof.

(C) Overruns: The terms and conditions applicable to overruns of unit price items are set forth in Article 26 of the Contract.

34. Excise Tax

Bidders are referred to the Specifications for information on Federal Excise Tax exemptions.

35. Licenses and Permits

The successful bidder will be required to obtain all necessary licenses and permits necessary to perform the work.

36. Multiple Prime Contractors

If more than one prime contractor will be involved on this project, all contractors are required to examine the Invitation for Bid packages for all other parts of the project.

37. Locally Based Enterprise Requirements (LBE)

This Contract is subject to the requirements of Administrative Code, Section 6-108.1, and the regulations promulgated thereunder. No construction contract will be awarded unless and until these requirements have been complied with in their entirety. The bidder is advised of the provisions set forth below, as well as the provisions with respect to the Locally Based Enterprise Program contained in Article 67 of the Contract. The contractor is advised that:

(A) If any portion of the Contract is subcontracted, not less than ten percent of the total dollar amount of the contract shall be awarded to locally based enterprises ("LBEs"); except, where less than ten percent of the total dollar amount of the Contract is subcontracted, such lesser percentage shall be so awarded.

(B) No contractor shall require performance and payment bonds from LBE subcontractors.

(C) No Contract shall be awarded unless the contractor first identifies in its bid:

(1) the percentage, dollar amount and type of work to be subcontracted; and

(2) the percentage, dollar amount and type of work to be subcontracted to LBEs.

(D) Within ten calendar days after notification of low bid, the apparent low bidder shall submit an "LBE Participation Schedule" to the contracting agency. If such schedule does not identify sufficient LBE subcontractors to meet the requirements of Administrative Code Section 6-108.1, the apparent low bidder shall submit documentation of its good faith efforts to meet such requirements.

(1) The "LBE Participation Schedule" shall include:

(a) the name and address of each LBE that will be given a subcontract,

(b) the percentage, dollar amount and type of work to be subcontracted to the LBE, and

(c) the dates when the LBE subcontract work will commence and end.

(2) The following documents shall be attached to the "LBE Participation Schedule":

(a) verification letters from each subcontractor listed in the "LBE Participation Schedule" stating that the LBE will enter into a formal agreement for work,

(b) certification documents of any proposed LBE subcontractor which is not on the LBE certified list, and

(c) copies of the certification letter of any proposed subcontractor which is an LBE.

(3) Documentation of good faith efforts to achieve the required LBE percentage shall include as appropriate but not limited to the following:

(a) attendance at prebid meetings, when scheduled by the agency, to advise bidders of contract requirements;

(b) advertisement where appropriate in general circulation media, trade association publications and small business media of the specific subcontracts that would be at least equal to the percentage goal for LBE utilization specified by the contractor;

(c) written notification to association of small, minority and women contractors soliciting specific subcontractors;

(d) written notification by certified mail to LBE firms that their interest in the contract is solicited for specific work items and their estimated values;

(e) demonstration of efforts made to select portions of the work for performance by LBE firms in order to increase the likelihood of achieving the stated goal;

(f) documented efforts to negotiate with LBE firms for specific subcontracts, including at a minimum:

(i) The names, address and telephone numbers of LBE firms that are contacted;

(ii) A description of the information provided to LBE firms regarding the plans and specifications for portions of the work to be performed;

(iii) Documentation showing that no reasonable price can be obtained from LBE firms;

(iv) A statement of why agreements with LBE firms were not reached;

(g) a statement of the reason for rejecting any LBE firm which the contractor deemed to be unqualified; and

(h) documentation of efforts made to assist the LBE firms contacted that needed assistance in obtaining required insurance.

(E) Unless otherwise waived by the Commissioner with the approval of the Office of Economic and Financial Opportunity, failure of a proposed contractor to provide the information required by paragraphs (C) and (D) above may render the bid non-responsive and the Contract may not be awarded to the bidder. If the contractor states that it will subcontract a specific portion of the work, but can demonstrate despite good faith efforts it cannot achieve its required LBE percentage for subcontracted work until after award of Contract, the Contract may be awarded, subject to a letter of compliance from the contractor stating that it will comply with Administrative Code Section 6-108.1 and subject to approval by the Commissioner. If the contractor has not met its required LBE percentage prior to award, the contractor shall demonstrate that a good faith effort has been made subsequent to award to obtain LBEs on each subcontract until its meets the required percentage.

(F) When a bidder indicates prior to award that no work will be subcontracted, no work may be subcontracted without the prior written approval of the Commissioner, which shall be granted only if the contractor in good faith seeks LBE subcontractors at least six weeks prior to the start of work.

(G) The contractor may not substitute or change any LBE which was identified prior to award of the contract without the written permission of the Commissioner. The contractor shall make a written application to the Commissioner for permission to make such substitution or change, explaining why the contractor needs to change its LBE subcontractor and how the contractor will meet its LBE subcontracting requirement. Copies of such application must be served on the originally identified LBE by certified mail return receipt requested,

as well as the proposed substitute LBE. The Commissioner shall determine whether or not to grant the contractor's request for substitution.

38. Bid Submission Requirements

The Bid Submission Requirements are set forth in the PASSPort RFx.

39. Comptroller's Certificate

This Contract shall not be binding or of any force unless it is registered by the Comptroller in accordance with Section 328 of the City Charter and the Procurement Policy Board Rules. This Contract shall continue in force only after annual appropriation of funds by the City of New York and certification as hereinabove set forth.

40. Procurement Policy Board Rules

This Invitation For Bids is subject to the Rules of the Procurement Policy Board of the City of New York. In the event of a conflict between said Rules and a provision of this Invitation For Bids, the Rules shall take precedence.

41. DDC Safety Requirements

The DDC Safety Requirements apply to the work to be performed pursuant to the Contract. The DDC Safety Requirements are set forth on the following pages.

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CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
SAFETY REQUIREMENTS FOR CONSTRUCTION CONTRACTS

January 2020

THE DDC SAFETY REQUIREMENTS FOR CONSTRUCTION CONTRACTS INCLUDE THE FOLLOWING SECTIONS:

I. POLICY ON SITE SAFETY

II. PURPOSE

III. DEFINITIONS

IV. RESPONSIBILITIES

V. SAFETY QUESTIONNAIRE

VI. SITE SAFETY PLAN

VII. KICK-OFF/PRE-CONSTRUCTION MEETINGS AND SAFETY REVIEW

VIII. EVALUATION DURING WORK IN PROGRESS

IX. SAFETY PERFORMANCE EVALUATION

I. POLICY ON SITE SAFETY

The City of New York Department of Design and Construction (DDC) is committed to a policy of injury and illness prevention and risk management for construction work that will ensure the safety and health of the workers engaged in the projects and the protection of the general public. Therefore, it is DDC's policy that work carried out by Contractors on DDC contracts must, at a minimum, comply with the most current versions of all applicable federal, state and city laws, rules, and regulations, including without limitation:

- Code of Federal Regulations, Title 29, Part 1926 (29 CFR 1926) and applicable Sub-parts of Part 1910 – U.S. Occupational Safety and Health Administration (OSHA);
- Federal Highway Administration – Manual on Uniform Traffic Control Devices (MUTCD);
- New York Codes, Rules and Regulations (NYCRR), Title 12, Part 23 – Protection in Construction, Demolition and Excavation Operations;
- New York Codes, Rules and Regulations (NYCRR), Title 16, Part 753 – Protection of Underground Facilities;
- New York City Administrative Code, Title 28 – New York City Construction Codes;
- Rules of the City of New York, Title 15, Chapter 13 – Rules Pertaining To the Prevention of the Emission of Dust from Construction Related Activities;
- Rules of the City of New York, Title 15, Chapter 28 – Citywide Construction Noise Mitigation;
- Rules of the City of New York, Title 34 Chapter 2 – NYCDOT Highway Rules.

The Contractor will be required to comply with all new and/or revised federal, state and city laws, rules, and regulations, issued during the course of the project, at the expense of the Contractor without any additional costs to the DDC.

II. PURPOSE

The purpose of this policy is to ensure that Contractors perform their work and supervise their employees in accordance with all applicable federal, state and city rules and regulations. Further, Contractors will be expected to minimize or eliminate jobsite and public hazards, through a planning, inspection, auditing and corrective action process. The goal is to control risks so that injuries, illnesses, and accidents to contractors' employees, DDC employees and the general public, as well as damage to city-owned and private property, are reduced to the lowest level feasible.

III. DEFINITIONS

Agency Chief Contracting Officer (ACCO): The ACCO will mean the person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the City Chief Procurement Officer (CCPO).

Competent Person: As defined by OSHA, an individual who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees or the general public, and who has authorization to take prompt corrective measures to eliminate them. This individual will have completed, at a minimum an authorized 30-hour OSHA Construction Safety Course. The Contractor may be required to provide more than one competent person due to construction operations and based on the number of active work sites.

Construction Safety Auditor: A representative of the Office of Construction Safety who provides inspection and assessment services to enhance health and safety on all DDC construction projects. The activities of the Construction Safety Auditor include performing site audits, reviewing safety plans, reviewing construction permits, drawings, verifying Contractor's compliance with applicable federal, state and city laws, rules, regulations, and DDC Contract Safety Requirements, etc. and rendering technical advice and assistance to DDC Resident Engineers and Project Managers.

Office of Construction Safety: A unit of DDC Safety and Site Support that assesses contractor's safety on DDC jobsites and advises responsible parties of needed corrective actions.

Registered Construction Superintendent: For certain projects, as defined in New York City Construction Codes – Title 28, the contractor will provide a Construction Superintendent registered with the NYC Department of Buildings and responsible for all duties as defined in Chapter 33 of Title 1 of the Rules of the City of New York.

Contractor: For purposes of these Safety Requirements, the term "Contractor" will mean any person or entity that enters into a contract for the performance of construction work on a DDC project. The term "Contractor" will include any person or entity which enters into any of the following types of contracts: (1) a prime construction contract for a specific project, (2) a prime construction contract using the Job Order Contracting System ("JOCS Contract"), and (3) a subcontract with a CM/Builder ("First Tier Subcontract").

Daily Safety Job Briefing: Daily jobsite safety briefings, given to all jobsite personnel at project site by the Contractor before work begins and/or if hazards or potential hazards are discovered while working, with the purpose of discussing the scheduled activities for the day, the hazards related to these activities, activity specific safety procedures, and Job Hazard Analysis associated with the scheduled construction work. Daily jobsite briefings will be documented, available at the jobsite, and will include at a minimum, topics, name and signature of the person conducting the briefing session, names and signatures of attendants, name of the designated competent person, contactor's name, DDC Project ID, date, time, and location.

Director – Office of Construction Safety: Responsible for the operations of the Office of Construction Safety and the DDC Site Safety management programs.

Job Hazard Analysis (JHA): A process of identifying the major job tasks and any potential site-specific hazards that may be present during construction and establishing the means and methods to eliminate or control those hazards. A JHA will be documented, available at the jobsite and will include at a minimum work tasks, being performed, identified hazards, control methods for the identified hazards, contractor's name, DDC Project ID, location, date, name and signature of certifying person. A JHA is a living document that will be re-evaluated and revised to address new hazards and tasks that may develop and will be present at the worksite and produced upon request.

Qualified Person: As defined by OSHA, an individual who, by possession of a recognized degree, certificate, license, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his or her ability to solve problems relating to the subject matter, the work, or the project. Qualified Persons are required under regulation to address issues pertaining, but without limit, to fall protection, scaffold design, maintenance and protection of traffic, and excavation protective system, among others.

Project Site: Those areas indicated in the Contract Documents where the Work is to be performed.

Project Safety Representative: The designated Project Safety Representative will have at a minimum an OSHA 30-hour Construction Safety Course and other safety training applicable to Contractor's/subcontractor's project work. This individual will be responsible to oversee safety performance of the required construction work, conduct documented daily safety inspections, and implement corrective actions to maintain a safe work site. The Project Safety Representative must have sufficient experience and skills necessary to thoroughly understand the health and safety hazards and controls and must have authority to undertake corrective actions. A dedicated full-time Project Safety Representative may be required on large projects and projects deemed by DDC to be particularly high risk. DDC reserves the right to request a dedicated full-time Project Safety Representative for any reason at any time during the course of the project at the expense of the Contractor without any additional costs to the DDC. The full-time Project Safety Representative will be present at the site during all work activities.

Resident Engineer ("RE"): Representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the work. The RE may be a consultant retained by DDC, including a Construction Management (CM) or Resident Engineer Inspection (REI) firm. If DDC has retained a CM, REI or other consultant firm to perform management and oversite for the Project (e.g., CM-Builder, CM-Design-Builder, Project Manager, Program Manager), that CM, REI or other consultant is the Resident Engineer for purposes of these Safety Requirements.

Safety Questionnaire: Used by DDC to evaluate Contractor's current and past safety performance. It is required to be completed by all Contractors initially when submitting bids for Construction work, or when being pre-qualified

and updated annually or as requested by the DDC.

Site Safety Manager: For certain projects, as defined in New York City Construction Codes – Title 28, the Contractor will provide a Site Safety Manager with a Site Safety Manager License issued by the New York City Department of Building.

Site Safety Plan: A site-specific safety plan developed by the Contractor for a DDC project. The Site Safety Plan will identify the project work scope, identify hazards associated with the project work and include project specific safety procedures and training appropriate and necessary to complete the work. The Site Safety Plan will be submitted within 30 days from the Award Date or as otherwise directed and is subject to review and acceptance by the Office of Construction Safety prior to the commencement of work at the site.

Unsafe or Unhealthy Condition: A condition that could be potentially hazardous to the health and safety of personnel or the public, and/or damaging to equipment, machinery, property, or the environment.

Weekly Safety Meetings: Weekly jobsite safety meetings, given to all jobsite personnel by Contractor, with the purpose of discussing general safety topics and job specific requirements encountered at the DDC work site. Weekly safety meetings will be documented and will include at a minimum, topics, name and signature of the person conducting the meeting, names and signatures of attendees, contractor's name, DDC Project ID, date, and location.

Work: The construction required by the Contractor's Contract Documents whether completed or partially completed, performed by the Contractor/ subcontractors. Work refers to the furnishing of labor, furnishing and incorporating materials and equipment into the construction and providing any service required by the Contract Documents to fulfill the Contractor's obligation to complete the Project. For the purposes of these Safety Requirements, the term "Work" includes all Utility Interference work (commonly referred to as "Section U", "EP-7", and "Joint Bid" work) performed in association with this Contract.

IV. RESPONSIBILITIES

All persons who manage, perform, and provide support for construction projects will conduct operations in compliance with the requirements identified in this Policy and all applicable governing regulatory agency requirements and guidelines pertaining to safety in construction.

A. Resident Engineer

1. Review and facilitate Contractor(s) Site Safety Plan submittals to DDC for acceptability.
2. Notify the Office of Construction Safety of the commencement of construction work.
3. Develop and implement a training verification process to ensure that all CM/REI, consultant, Contractor, and subcontractor employees are properly trained. Maintain all applicable initial and refresher training records and assures documentation availability on site.
4. Maintain documentation of and attend weekly safety meetings and daily safety job briefings.
5. Assure that Contractor(s) JHA's are current to reflect the work tasks being performed, hazards, and control methods to mitigate the identified hazards. Verify that all employees at the job site are trained on the JHAs and maintain supporting documentation on site.
6. Assure adequate planning for all critical construction activities (crane operation, excavation, confined space entry, etc.) including coordination between Contractor(s) /DDC/ other Agencies as required.
7. Maintain custody of all construction related permits, plans, approvals, drawings, etc., related to the project and assure their availability on site.
8. Recognize, minimize, or eliminate jobsite and public hazards, through required planning, inspection, verification, and corrective action process.
9. Monitor the conditions at the site for conformance with the Contractor's Site Safety Plan, DDC policies, permits, and all applicable regulations and documentation that pertain to construction safety.
10. Notify the Contractor and DDC immediately upon determination of any condition or activity existing which is not in compliance with the Contractor's Site Safety Plan, applicable federal, state or local codes or any

condition that presents a potential risk of injury to the public or workers or possible damage to property. Direct the Contractor to provide such labor, materials, equipment, and supervision to remedy such conditions.

11. Notify the Office of Construction Safety and the ACCO's Insurance and Risk Management Unit of project-related accidents, incidents, and near misses as per DDC's Construction Safety Emergency and Accident Notification and Response Procedure within two (2) hours.
12. In case of an accident, incident, or near miss, RE is responsible to protect the integrity of the accident site including but not limited to: the safeguarding of all evidence, documentation of all personnel on site at the time of the accident, gather facts related to all accidents, incidents, or near miss, and prepare required DDC Construction Accident Report as per DDC's Construction Safety Emergency and Accident Notification and Response Procedure. Maintain all records pertaining to accidents, incidents, and near miss and have them available upon request.
13. Notify the Office of Construction Safety within two (2) hours of the start of an inspection by any outside/ regulatory agency personnel, including NYS, OSHA, NYC DOB or any other City/State/Federal oversight entity and forward a copy of the inspection report within one business day of its receipt.
14. Escort and assist Construction Safety Auditors during all field and record audits.
15. Report any emergency conditions to the Office of Construction Safety immediately.

Note: In addition to the responsibilities listed above, if the Resident Engineer is a CM/REI or other non-City party hired by the City to manage the Project, the Resident Engineer is also required to do the following:

16. Provide personnel who are certified and or trained appropriately for the requirements of the project.
17. Perform an investigation for any project-related accidents, incidents, and near misses. Within 24-hours of the time of the accident, incident, or near miss, the CM/REI will submit an investigation report to the Office of Construction Safety. Such report will include proposed remedial measures and implementation of corrective actions to prevent recurrence.

DDC reserves the right to request that the CM/REI replace any CM/REI personnel for any reason at any time during the project.

B. Construction Contractors

Note: For CM-Build and CM-Design-Build Projects, the CM will meet all requirements listed in this section, as well as the Resident Engineer section above.

1. Submit a completed Safety Questionnaire and other safety performance related documentation with its bid or as part of a pre-qualification package.
2. Submit a Site Safety Plan within 30 days from the Award Date or as otherwise directed. The Site Safety Plan is subject to review and acceptance by the Office of Construction Safety prior to the commencement of work at the site. The Site Safety Plan will be revised and updated as necessary during the course of the project. If requested by the Office of Construction Safety, the Site Safety Plan must be developed and submitted for approval using a web-based system, the Site Safety Plan Application (SSP App).
3. Designate and identify a Project Safety Representative in the Site Safety Plan. The Contractor will immediately notify the Office of Construction Safety, in a form and manner acceptable to the Office of Construction Safety, of any permanent change to the designated Project Safety Representative. In the event the primary designated Project Safety Representative is temporary unable to perform his or her duties, an alternate Project Safety Representative will be provided. Resumes, outlining the qualification and experience for the Project Safety Representative (s) will be included in the Site Safety Plan and available upon request. DDC reserves the right to request the Contractor to replace a Project Safety Representative for any reason at any time during the course of the project.
4. Designate and identify a Competent Person(s) in the Site Safety Plan. Contractor/subcontractor may be required to provide more than one competent person due to construction operations and based on a number of work tasks/areas. DDC reserves the right to request the Contractor to replace a Competent Person or provide additional Competent Person(s) for any reason at any time during the course of the project. The Competent Person will be present at the site during all work activities.
5. For certain projects, as defined in New York City Construction Codes – Title 28, designate and identify the Licensed Site Safety Manager or Registered Construction Superintendent. Resumes, outlining the qualification and experience for the Licensed Site Safety Manager or Registered Construction Superintendent will be included in the Site Safety Plan and available upon request. The Contractor will immediately notify the Office

of Construction Safety, in a form and manner acceptable to the Office of Construction Safety, of any permanent change to the designated Site Safety Manager and/or Construction Superintendent. In the event the primary designated Site Safety Manager or Construction Superintendent is temporarily unable to perform his or her duties, an alternate Licensed Site Safety Manager and/or Registered Construction Superintendent will be provided. The Office of Construction Safety must be informed of such change. DDC reserves the right to request the Contractor to replace Site Safety Manager or Construction Superintendent for any reason at any time during the course of the project.

6. Develop a written Job Hazard Analysis (JHA) that identifies safety hazards and control methods for project specific work tasks. A preliminary JHA will be included in the Site Safety Plan submitted by the Contractor. A JHA is a living document that will be re-evaluated and revised to address new hazards and tasks that may develop during the course of the project and will be present at the worksite and produced upon request.
7. Develop project specific safety procedures to protect employees, general public, and property during all construction activities for the duration of the project.
8. Ensure that all employees are aware of the hazards associated with the project through documented formal and informal training and/or other communications. Conduct and document new employee and site-specific safety orientation for all Contractor and subcontractor personnel to review the hazards associated with the project as identified in the Site Safety Plan and the specific safety procedures and controls that will be used to protect workers, the general public and property. The Project Safety Representative will conduct this training prior to mobilization and if necessary during the course of the project. Documentation will be provided to the RE.
9. Prior to performing any work on DDC projects all Contractor's and subcontractor's employees will, at a minimum, have successfully completed, within the previous five calendar years, an OSHA 10-hour construction safety course.

   All training records (OSHA 10-hour, flagger, scaffold, fall protection, confined space, etc.) will be provided to the RE prior to mobilization, included in the Site Safety Plan, kept current during the course of the project, and available for review.
10. Conduct and document weekly safety meetings and daily job briefing sessions for the duration of the project. Attendance at weekly safety meetings and daily job briefing sessions is mandatory. A written record of weekly safety meetings will be available upon request and job briefing sessions will be available at the worksite.
11. As part of the Site Safety Plan, prepare site specific procedures, such as maintenance and protection of traffic plan, steel erection plan, confined space program, fall protection plan, demolition plan, site specific emergency evacuation plan, etc. (if not otherwise provided in the contract documents) and comply with all of its provisions.
12. Have immediately available for review at the project site where actual construction activities are being performed all applicable documentation, including but not limited to: JHAs for work tasks being performed, all required training records, MPT plan (where applicable), Noise and Dust Mitigation Plans, excavation protective system drawings (where applicable), Emergency Evacuation plan, fall protection program (where applicable), confined space program (where applicable), all required permits, daily job briefing records, all required documentation for crane operation (where applicable), daily inspection checklist, scaffold and sidewalk drawings (when applicable), safety data sheets for chemicals in use.
13. Comply with all federal, state and local safety and health rules, laws, and regulations.
14. Comply with all provisions of the Site Safety Plan.
15. Provide, replace, and adequately maintain at or around the project site, suitable and sufficient signage, lights, barricades and enclosures (fences, sidewalk sheds, netting, bracing, etc.). The project specific MPT plan will be developed, implemented, and reviewed during the course of the project.
16. The Project Safety Representative will conduct daily safety inspections, document the inspection results, implement corrective actions for the identified hazards. Maintain the inspection records and have them available upon request.
17. **Report unsafe or unhealthy conditions to the RE as soon as practical, but no more than 24 hours after discovery, and take prompt actions to remove or abate such conditions. Should an imminent dangerous condition be discovered, Contractor will stop all work in the area of danger until corrections are made.**
18. Report all accidents, incidents and near misses involving injuries to workers or the general public, as well as property damage, to the RE within one (1) hour.
19. Following an accident or incident, unless otherwise directed, the Contractor will not remove or alter any equipment, structure, material, or evidence related to the accident or incident. Exception: Immediate emergency procedures taken to secure structures, temporary construction, operations, or equipment that pose a continued imminent danger or facilitate assistance for persons who are trapped or who have sustained bodily injury. Take

additional measures as necessary to secure the accident or incident site and to protect against any further injury or property damage.

20. The Contractor will perform an investigation into the root cause of the accident, incident, or near miss. Within 24 hours of an accident, incident, or near miss, the Contractor will prepare and submit to the RE a written investigation report detailing findings, corrective actions, and hazard mitigation implementation to prevent recurrence.
21. Notify the RE within two (2) hours of the start of an inspection by any outside regulatory agency personnel, including OSHA, NYC DOB, or others.
22. Maintain all records pertaining to all required safety compliance documents, accidents and incidents reports. DDC reserves the right to request copy of any records pertaining to the safety of the project and required by DDC and other federal, state, and city agencies, including but not limited to permits, training records, safety inspection records, drawings, equipment records, etc.
23. Cooperate with DDC Office of Construction Safety/ RE and address DDC recommendations on safety, which will in no way relieve the Contractor of its responsibilities for safety on the project. The Contractor has sole responsibility for safety.

V. SAFETY QUESTIONNAIRE

DDC requires that all Contractors provide information regarding their current and past safety performance and programs. This will be accomplished by the use of the DDC Safety Questionnaire. As a part of the bid submittal package, the contractor will submit a completed DDC Safety Questionnaire listing company workers' compensation experience modification rating and OSHA Incident Rates for the three (3) years prior to the date of the bid opening. DDC may request a Contractor to update its Questionnaire at any time or to provide more detailed information. The Contractor will provide the requested information within 15 days.

The following criteria will be used by DDC in reviewing the Contractor's responsibility, which will be based on the information provided on the questionnaire:

Criteria 1: OSHA Injury and Illness Rates (I&IR) are no greater than the average for the industry (based on the most current Bureau of Labor Statistics data for the Contractors SIC code); and

Criteria 2: Insurance workers compensation Experience Modification Rate (EMR) equal to or less than 1.0; and

Criteria 3: Any willful violations issued by OSHA or NYC DOB within the last three (3) years; and

Criteria 4: A fatality (worker or member of public) and injuries, requiring OSHA notification, experienced on or near Contractor's worksite within the last three (3) years; and

Criteria 5: Past safety performance on DDC projects (accidents; status of site safety plan submittals; etc.)

Criteria 6: OSHA violation history for the last three (3) years;

Criteria 7: Contractor will provide OSHA Injury and Illness Records (currently OSHA 300 and 300A Logs) for the last three (3) years.

If the Contractor fails to meet the basic criteria listed above, the Office of Construction Safety may request, through the ACCO, more details concerning the Contractor's safety experience. DDC may request the Contractor to provide copies of, among other things, accident investigation reports, OSHA records, OSHA and NYC DOB citations, EPA citations and written corrective action plan.

VI. SITE SAFETY PLAN

Within thirty (30) days from the Award Date or as otherwise directed, the Contractor will submit the Site Safety Plan. The Site Safety Plan will identify project work scope, safety hazards associated with the project tasks, and include specific safety procedures and training appropriate and necessary to complete the work. The Site Safety Plan is subject to review and acceptance by the Office of Construction Safety prior to the commencement of work at the site. Due to the project work scope and project duration, the Office of Construction Safety may grant a conditional acceptance for a Site Safety Plan without all sections being complete. In a case of a "Conditional Acceptance" of a Site Safety Plan,

the Contractor will provide the remaining sections previously incomplete and/or not submitted for review and acceptance by the Office of Construction Safety prior to the commencement of the construction activities. The Office of Construction Safety reserves the right to withdraw the initial "Conditional Acceptance" if the Contractor fails to provide the remaining sections of a Site Safety Plan. Failure by the Contractor to submit an acceptable Site Safety Plan will be grounds for default.

Site Safety Plan requirements: The Site Safety Plan will be a written document and will apply to all project specific Contractor and subcontractor operations, and will have at a minimum, the following elements with each described in a separate section (It may be necessary to modify the basic format for certain unique or high-risk projects, such as tunnels or high-rise construction). All Site Safety Plan sections will be numbered in the order listed below. For sections, which are not applicable for the type of the work being performed by the Contractor on DDC project, the Contractor will in writing indicate "Not applicable based on the project work scope." The Site Safety Plan will include Contractor's name, DDC project ID, project location (s), and development and revision dates. The Site Safety Plan will include the sections, attachments, and appendixes provided in the Site Safety Plan. All pages of the Site Safety Plan will be numbered. If requested by the Office of Construction Safety, the Site Safety Plan must be developed and submitted for approval using a web-based system, the Site Safety Plan Application (SSP App).

1. Project Work Scope – Detailed information regarding work tasks that will be performed by Contractor and subcontractors under the project.
2. Responsibility and Organization – Contractor's organization chart with responsible personnel for the project, including titles, names, contact information, roles, and responsibilities. All Contractor's personnel required by the DDC Safety Requirements will be identified.
3. Safety Training and Education – OSHA 10 Hours training, requirements for daily safety briefings and weekly safety meetings, any work task specific training, responsible staff for implementation of training program for the project.
4. Job Hazard Analysis (JHA) – Project specific Job Hazard Analysis including work tasks, identified hazards, hazard control methods (administrative, engineering, PPE) to protect workers, property and general public, Contractor's name, project id, location, name and signature of a certifying person, hazard assessment date.
5. Protection of Public – Project specific procedures covering safety of the general public during all project construction activities.
6. Hazard Corrective Actions - Procedures for hazard identification, including responsible person(s), frequency of safety inspections, implementation of corrective actions, safety inspection checklist.
7. Accident/Exposure Investigation – Project specific procedures for accident/incident/near miss investigation and implementation of corrective actions. Accident/incident/near miss notification procedure of DDC project staff (timer frame and responsible personnel).
8. Recording and Reporting Injuries – Procedures to meet 29 CFR 1904 requirements.
9. First Aid and Medical Attention – Responsible staff, location and inspection of First Aid kit, directions to local hospitals; emergency telephone numbers.
10. Project Specific Fire Protection and Prevention Program – Project specific procedures, including responsible staff, fire alarm system/methods, hot work procedures, etc.
11. Housekeeping Procedure.
12. Project Specific Illumination Procedure.
13. Project Specific Sanitation Procedure.
14. Personal Protective Equipment (PPE), including Respiratory Protection Program and Hearing Conservation Program, if required.
15. Hazard Communication Program – Contractor's Hazard Communication Program, responsible staff; training; SDS records, project specific list of chemicals; location of the program and SDS records.
16. Means of Egress – Information regarding free and unobstructed egress from all parts of the building or structure; exit marking; maintenance of means of egress, etc.
17. Employee Emergency Action Plan – Project specific: responsible staff, emergency alarm system/devices, evacuation procedure, procedure to account for employees after evacuation, etc.
18. Evacuation Plan – Project specific evacuation plan (drawing/scheme) with exists and evacuation routes.
19. Ionizing/Nonionizing Radiation – Competent person, license and qualification requirements, type of radiation, employee's exposure and protection, safety procedures, etc.

20. Material Handling, Storage, Use and Disposal – Project specific information regarding material storage, disposal, and handling: procedures, plan/drawings, etc.
21. Signs, Signals, and Barricades – Use of danger/warning signs, safety instruction signs, sidewalk closure and pedestrian fencing and barricades (if not included in the MPT plan), etc.
22. Tools – Hand and Power – Safety procedures for the type of tools to be used.
23. Scaffold – Project specific scaffold types, procedures, training requirements, scaffold drawings, designed, sealed, and signed by NYS Licensed Professional Engineer, or as otherwise directed; competent person, criteria for project specific scaffold, falling object protection, procedures for aerial lifts/scissor lifts.
24. Welding and Cutting – Project specific procedure for welding and cutting, including all necessary safety requirements such as fire prevention, personal protective equipment, hot work permits (if not covered by Contractor's Fire Prevention and Protection program, FDNY certificate requirements).
25. Electrical Safety – Project specific procedures, including lock out-tag out.
26. Fall Protection – Project specific information regarding selected fall protection systems, fall protection plan, responsible staff.
27. Cranes, Derrick, Hoists, Elevators, Conveyors – project specific equipment information including type, rated load capacity, manufacture specification requirements, competent person, exposure to falling load, inspection, recordkeeping, clearance requirements, communication procedure, ground lines, permits.
28. Excavation Safety – Competent person; excavation procedures; project specific protective system, including drawings, designed, sealed, and signed by NYS Licensed Professional Engineer, or as otherwise directed.
29. Protection of Underground Facilities and Utilities Procedure, including responsible staff and responsibilities.
30. Concrete and Masonry Construction Procedures
31. Maintenance and Protection of Traffic Plan – Project specific MPT plan, designed, sealed, and signed by NYS Licensed Professional Engineer, or as otherwise directed; flagmen training, public safety, etc.
32. Steel Erection – Site specific erection plan, requirements for applicable written notifications, competent person, fall protection plan, training requirements, etc.
33. Demolition – Engineering survey, including written evidence, disconnection of all effected utilities, identification of all hazardous chemicals, materials, gases, etc., floor openings, chutes, inspection and maintenance of all stairs/passageways, removal of materials/debris/structural elements, lock out/tag out, competent person.
34. Blasting and the Use of Explosives – Project specific safety procedures, warning signs, training/qualification, transportation, storage and use of explosives, inspection.
35. Stairways and Ladders – Types of stairs and ladders, safety procedures, training requirements.
36. Alcohol and Drug Abuse Policy
37. Rodents and Vermin Controls
38. Toxic and Hazardous Substances – Safety procedures for substances that Contractor's and subcontractor's employees can be exposed on project.
39. Noise Mitigation Plan – Completed project specific Noise Mitigation Plan, and noise mitigation procedures.
40. Confined Space Program – Project specific Confined Space Program, responsible staff, training records, equipment information, rescue procedure, list of project specific confined spaces, forms.
41. Construction Vehicles/Heavy Equipment – Type of construction vehicles/heavy equipment to be used on site, procedures
42. Dust Mitigation Plan – Completed project specific Dust Mitigation Plan, and dust mitigation procedures.
43. Working Over and Near Water. Diving Operations – safety procedures including personal protective equipment, fall protection, rescue services, etc.

The most critical component of the Site Safety Plan is the Job Hazard Analysis (JHA) section. The JHA form is a written document prepared by the Contractor. The Contractor will conduct a site and task assessment to identify the tasks and any potential safety or environmental hazards related to performance of the work, eliminate or implement controls for the potential hazards, and identify proper personal protective equipment for the task. The JHA will be communicated to all Contractor/subcontractor personnel on site. The JHA will include safety hazard identification and controls to protect employees, general public, and property.

The initial JHA will be included in the Contractor's Site Safety Plan and the current JHA form will be available at the construction site for reference. A JHA is a living document that will be re-evaluated and revised to address new hazards and tasks that may develop and will be present at the worksite and produced upon request.

VII. KICK-OFF MEETINGS/PRE-CONSTRUCTION AND SAFETY REVIEW

Prior to the start of construction activities on all DDC projects, RE will invite the Office of Construction Safety to the construction kick-off meeting. The Office of Construction Safety representative(s) will participate in this meeting with the Contractor and RE for the purpose of:

A. Reviewing DDC Contract Safety Requirements
B. Reviewing site-specific safety issues based on a project work scope, location, and any other factors which may impact safety of workers and general public.
C. Reviewing the Site Safety Plan and JHA requirements.
D. Reviewing Accident/Incident reporting and investigation procedures.
E. Reviewing designated safety contacts, roles, and responsibilities.
F. Discussing planned inspections and audits of the site by the Office of Construction Safety personnel.

VIII. EVALUATION DURING WORK IN PROGRESS

The Contractor's adherence to these Safety Requirements will be monitored throughout the project. This will be accomplished by the following:

A. Use of a safety checklist by a representative of the Office of Construction Safety (or other designated DDC representative) and the RE during regular inspections and comprehensive audits of the job site. Field Exit Conferences will be held with the RE and Contractor Project Safety Representatives.
B. The RE will continually monitor the safety and environmental performance of the Contractor's employees and work methods. Deficiencies will be brought to the attention of the Contractor's Project Safety Representative on site for immediate correction. The RE will maintain a written record of these deficiencies and have these records available upon request. Any critical deficiencies will be immediately reported to the Office of Construction Safety via telephone (718)391-1911.
C. If the Contractor's safety performance during the project is not up to DDC standards (safety performance measure, accident/incident rate, etc.) the Director – Office of Construction Safety, or his/her designee will meet with the Contractor's Project Safety Representative and other representatives, the RE, and the DDC Environmental Specialist (if environmental issues are involved). The purpose of this meeting is to 1) determine the level of non-compliance; 2) explain and clarify the safety/environmental provisions; 3) agree on a future course of action to correct the deficiencies.
D. If the deficiencies continue, the Commissioner may, without limitation, declare the Contractor in default.
E. The Contractor will within 1 hour inform the RE of all accidents/incidents/near misses including all fatalities, any injuries to employees or members of the general public, and property damage (e.g., structural damage, equipment rollovers, utility damage, loads dropped from crane). The RE will notify the Office of Construction Safety as per DDC's Construction Safety Emergency and Accident Notification and Response Procedure and will maintain a record of all Contractor accidents/incidents for the project.
F. The Contractor and the RE will notify the Office of Construction Safety within two (2) hours of the start of any NYS-DOL/ NYC-COSH/ OSHA/ EPA inspections.

IX. SAFETY PERFORMANCE EVALUATION

The Contractor's safety record, including accident/incident history and DDC safety inspection results, will be considered as part of the Contractor's performance evaluation at the conclusion of the project. Poor safety performance during the course of the project will be a reason to rate a Contractor unsatisfactory which may be reflected in the City's PASSPort system and will be considered for future procurement actions as set forth in the City's Procurement Policy Board Rules.

NOTICE TO BIDDERS

Please be advised that the following Riders to the March 2017 New York City Standard Construction Contract have been attached and incorporated in this Invitation for Bid:

- Rider regarding Non-Compensable Delays and Grounds for Extension;
- Rider regarding NYC Earned Safe and Sick Time Act;
- Rider regarding City Fleet and Truck Safety Requirements for City Contractors.

Other than provisions specifically delineated in the Riders, all other terms of the March 2017 New York City Standard Construction Contract continue to apply in full force and effect.

RIDER TO NEW YORK CITY STANDARD CONSTRUCTION CONTRACT (MARCH 2017) REGARDING NON-COMPENSABLE DELAYS AND GROUNDS FOR EXTENSION

The following provisions supersede the corresponding provisions in the March 2017 version of the New York City Standard Construction Contract:

1. Section **11.5.1** provides as follows:

   11.5.1 The acts or omissions of public or government bodies (other than **City** agencies) or of any third parties who are disclosed in the **Contract Documents,** or those third parties who are ordinarily encountered or who are generally recognized as related to the **Work**, including but not limited to, **Other Contractors**, utilities or private enterprises;

2. Section **11.5.6** provides as follows:

   11.5.6 Climatic conditions, storms, floods, droughts, tidal waves, fires, hurricanes, earthquakes, landslides or other catastrophes or acts of God; acts of war or of the public enemy or terrorist acts; disruption, outage or power failure caused by a utility's inability or failure to provide service, pandemics, epidemics, outbreaks of infectious disease or any other public health emergency; other states of emergency declared by the City, State or Federal government , quarantine restrictions, and freight embargoes; including the **City's** reasonable responses to any of the above; and

3. Section **13.3** provides as follows:

   13.3 Grounds for Extension: If such application is made, the **Contractor** shall be entitled to an extension of time for delay in completion of the **Work** caused solely:

   13.3.1 By any of the acts or omissions of the **City**, its officials, agents or employees set forth in Articles **11.4.1.1** through **11.4.1.9**; or

   13.3.2 By or attributable to any of the items set forth in Articles **11.5.1** through **11.5.7**.

   13.3.3 The **Contractor** shall, however, be entitled to an extension of time for such causes only for the number of **Days** of delay which the **ACCO** or the Board may determine to be due solely to such causes, and then only if the **Contractor** shall have strictly complied with all of the requirements of Articles 9 and 10.

NYC EARNED SAFE AND SICK TIME ACT CONTRACT RIDER

(To supersede Section 4.06 of the January 2018 Appendix A and Section 35.5 of the March 2017 Standard Construction Contract and to be attached to other City contracts and solicitations)

A. *Introduction and General Provisions.*

1. The Earned Safe and Sick Time Act ("ESSTA"), codified at Title 20, Chapter 8 of the New York City Administrative Code, also known as the "Paid Safe and Sick Leave Law," requires covered employees (as defined in Admin. Code § 20-912) in New York City ("City") to be provided with paid safe and sick time. Contractors of the City or of other governmental entities may be required to provide safe and sick time pursuant to the ESSTA. The ESSTA is enforced by the City's Department of Consumer and Worker Protection ("DCWP"), which has promulgated 6 RCNY §§ 7-101 and 201 *et seq*. ("DCWP Rules").

2. The Contractor agrees to comply in all respects with the ESSTA and the DCWP Rules, and as amended, if applicable, in the performance of this agreement. The Contractor further acknowledges that such compliance is a material term of this agreement and that failure to comply with the ESSTA in performance of this agreement may result in its termination.

3. The Contractor must notify (with a copy to DCWP at ComplianceMonitoring@dcwp.nyc.gov) the Agency Chief Contracting Officer of the City Agency or other entity with whom it is contracting in writing within 10 days of receipt of a complaint (whether oral or written) or notice of investigation regarding the ESSTA involving the performance of this agreement. Additionally, the Contractor must cooperate with DCWP's guidance and must comply with DCWP's subpoenas, requests for information, and other document demands as set forth in the ESSTA and the DCWP Rules. More information is available at https://www1.nyc.gov/site/dca/about/paid-sick-leave-what-employers-need-to-know.page.

4. Upon conclusion of a DCWP investigation, Contractor will receive a findings letter detailing any employee relief and civil penalties owed. Pursuant to the findings, Contractor will have the opportunity to settle any violations and cure the breach of this agreement caused by failure to comply with the ESSTA either i) without a trial by entering into a consent order or ii) appearing before an impartial judge at the City's administrative tribunal. In addition to and notwithstanding any other rights and remedies available to the City, non-payment of relief and penalties owed pursuant to a consent order or final adjudication within 30 days of such consent order or final adjudication may result in the termination of this agreement without further opportunity to settle or cure the violations.

5. The ESSTA is briefly summarized below for the convenience of the Contractor. The Contractor is advised to review the ESSTA and the DCWP Rules in their entirety. The Contractor may go to www.nyc.gov/PaidSickLeave for resources for employers, such as Frequently Asked Questions, timekeeping tools and model forms, and an event calendar of upcoming presentations and webinars at which the Contractor can get more information about how to comply with the ESSTA and the DCWP Rules. The Contractor acknowledges that it is responsible for compliance with the ESSTA and the DCWP Rules notwithstanding any inconsistent language contained herein.

B. *Pursuant to the ESSTA and DCWP Rules: Applicability, Accrual, and Use.*

1. An employee who works within the City must be provided paid safe and sick time.[1] Employers with one hundred or more employees are required to provide 56 hours of safe and sick time for an employee each calendar year. Employers with fewer than one hundred employees are required to provide 40 hours of sick leave each calendar year. Employers must provide a minimum of one hour of safe and sick time for every 30 hours worked by an employee and compensation for such safe and sick time must be provided at the greater of the employee's regular hourly rate or the minimum wage at the time the paid safe or sick time is taken. Employers are not discouraged or prohibited from providing more generous safe and sick time policies than what the ESSTA requires.

2. Employees have the right to determine how much safe and sick time they will use, provided that an employer may set a reasonable minimum increment for the use of safe and sick time not to exceed four hours per day. For the use of safe time or sick time beyond the set minimum increment, an employer may set fixed periods of up to thirty minutes beyond the minimum increment. In addition, an employee may carry over up to 40 or 56 hours of unused safe and sick time to the following calendar year, provided that no employer is required to carry over unused paid safe and sick time if the employee is paid for such unused safe and sick time and the employer provides the employee with at least the legally required amount of paid safe and sick time for such employee for the immediately subsequent calendar year on the first day of such calendar year.

3. An employee entitled to safe and sick time pursuant to the ESSTA may use safe and sick time for any of the following:

a. such employee's mental illness, physical illness, injury, or health condition or the care of such illness, injury, or condition or such employee's need for medical diagnosis or preventive medical care;

b. such employee's care of a family member (an employee's child, spouse, domestic partner, parent, sibling, grandchild, or grandparent, the child or parent of an employee's spouse or domestic partner, any other individual related by blood to the employee, and any other individual whose close association with the employee is the equivalent of a family relationship) who has a mental illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;

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[1] Pursuant to the ESSTA, if fewer than five employees work for the same employer, and the employer had a net income of less than one million dollars during the previous tax year, such employer has the option of providing such employees uncompensated safe and sick time.

c. closure of such employee's place of business by order of a public official due to a public health emergency;

d. such employee's need to care for a child whose school or childcare provider has been closed due to a public health emergency; or

e. when the employee or a family member has been the victim of a family offense matter, sexual offense, stalking, or human trafficking:

1. to obtain services from a domestic violence shelter, rape crisis center, or other shelter or services program for relief from a family offense matter, sexual offense, stalking, or human trafficking;
2. to participate in safety planning, temporarily or permanently relocate, or take other actions to increase the safety of the employee or employee's family members from future family offense matters, sexual offenses, stalking, or human trafficking;
3. to meet with a civil attorney or other social service provider to obtain information and advice on, and prepare for or participate in any criminal or civil proceeding, including but not limited to, matters related to a family offense matter, sexual offense, stalking, human trafficking, custody, visitation, matrimonial issues, orders of protection, immigration, housing, discrimination in employment, housing or consumer credit;
4. to file a complaint or domestic incident report with law enforcement;
5. to meet with a district attorney's office;
6. to enroll children in a new school; or
7. to take other actions necessary to maintain, improve, or restore the physical, psychological, or economic, health or safety of the employee or the employee's family member or to protect those who associate or work with the employee.

4. An employer must not require an employee, as a condition of taking safe and sick time, to search for a replacement. However, where the employee's need for safe and sick time is foreseeable, an employer may require an employee to provide reasonable notice of the need to use safe and sick time. For an absence of more than three consecutive work days, an employer may require reasonable documentation that the use of safe and sick time was needed for a reason listed in Admin. Code § 20-914; and/or written confirmation that an employee used safe and sick time pursuant to the ESSTA. However, an employer may not require documentation specifying the nature of a medical condition, require disclosure of the details of a medical condition, or require disclosure of the details of a family offense matter, sexual offense, stalking, or human trafficking, as a condition of providing safe and sick time. Health information and information concerning family offenses, sexual offenses, stalking or human trafficking obtained solely due to an

employee's use of safe and sick time pursuant to the ESSTA must be treated by the employer as confidential. An employer must reimburse an employee for all reasonable costs or expenses incurred in obtaining such documentation for the employer.

5. An employer must provide to all employees a written policy explaining its method of calculating sick time, policies regarding the use of safe and sick time (including any permissible discretionary conditions on use), and policies regarding carry-over of unused time at the end of the year, among other topics. It must provide the policy to employees using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny safe and sick time to an employee because of non-compliance with such a policy.

6. An employer must provide a pay statement or other form of written documentation that informs the employee of the amount of safe/sick time accrued and used during the relevant pay period and the total balance of the employee's accrued safe/sick time available for use.

7. Safe and sick time to which an employee is entitled must be paid no later than the payday for the next regular payroll period beginning after the safe and sick time was used.

C. *Exemptions and Exceptions*. Notwithstanding the above, the ESSTA does not apply to any of the following:

1. an independent contractor who does not meet the definition of employee under N.Y. Labor Law § 190(2);

2. an employee covered by a valid collective bargaining agreement, if the provisions of the ESSTA are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the ESSTA for such employee;

3. an audiologist, occupational therapist, physical therapist, or speech language pathologist who is licensed by the New York State Department of Education and who calls in for work assignments at will, determines their own schedule, has the ability to reject or accept any assignment referred to them, and is paid an average hourly wage that is at least four times the federal minimum wage;

4. an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;

5. an employee whose work is compensated by a qualified scholarship program as that term is defined in the Internal Revenue Code, Section 117 of Chapter 20 of the United States Code; or

6. a participant in a Work Experience Program (WEP) under N.Y. Social Services Law § 336-c.

D. *Retaliation Prohibited.* An employer shall not take any adverse action against an employee that penalizes the employee for, or is reasonably likely to deter the employee from or interfere with the employee exercising or attempting in good faith to exercise any right provided by the ESSTA. In addition, an employer shall not interfere with any investigation, proceeding, or hearing pursuant to the ESSTA.

E. *Notice of Rights.*

1. An employer must provide its employees with written notice of their rights pursuant to the ESSTA. Such notice must be in English and the primary language spoken by an employee, provided that DCWP has made available a translation into such language. Downloadable notices are available on DCWP's website at https://www1.nyc.gov/site/dca/about/Paid-Safe-Sick-Leave-Notice-of-Employee-Rights.page. The notice must be provided to the employees by a method that reasonably ensures personal receipt by the employee.

2. Any person or entity that willfully violates these notice requirements is subject to a civil penalty in an amount not to exceed $50.00 for each employee who was not given appropriate notice.

F. *Records*. An employer must retain records documenting its compliance with the ESSTA for a period of at least three years, and must allow DCWP to access such records in furtherance of an investigation related to an alleged violation of the ESSTA.

G. *Enforcement and Penalties.*

1. Upon receiving a complaint alleging a violation of the ESSTA, DCWP must investigate such complaint. DCWP may also open an investigation to determine compliance with the ESSTA on its own initiative. Upon notification of a complaint or an investigation by DCWP, the employer must provide DCWP with a written response and any such other information as DCWP may request. If DCWP believes that a violation of the ESSTA has occurred, it has the right to issue a notice of violation to the employer .

2. DCWP has the power to grant an employee or former employee all appropriate relief as set forth in Admin. Code § 20-924(d). Such relief may include, but is not limited to, treble damages for the wages that should have been paid; statutory damages for unlawful retaliation; and damages, including statutory damages, full compensation for wages and benefits lost, and reinstatement, for unlawful discharge. In addition, DCWP may impose on an employer found to have violated the ESSTA civil penalties not to exceed $500.00 for a first violation, $750.00 for a second violation within two years of the first violation, and $1,000.00 for each succeeding violation within two years of the previous violation. When an employer has a policy or practice of not providing or refusing to allow the use of safe and sick time to its employees, DCWP may seek penalties and relief on a per employee basis.

3. Pursuant to Admin. Code § 20-924.2, (a) where reasonable cause exists to believe that an employer is engaged in a pattern or practice of violations of the ESSTA, the Corporation Counsel may commence a civil action on behalf of the City in a court of competent jurisdiction by filing a complaint setting forth facts relating to such pattern or practice and requesting relief, which may include injunctive relief, civil penalties and any other appropriate relief. Nothing in § 20-924.2 prohibits DCWP from exercising its authority under section 20-924 or the Charter, provided that a civil action pursuant to § 20-924.2 shall not have previously been commenced.

H. *More Generous Polices and Other Legal Requirements.* Nothing in the ESSTA is intended to discourage, prohibit, diminish, or impair the adoption or retention of a more generous safe and sick time policy, or the obligation of an employer to comply with any contract, collective bargaining agreement, employment benefit plan or other agreement providing more generous safe and sick time. The ESSTA provides minimum requirements pertaining to safe and sick time and does not preempt, limit, or otherwise affect the applicability of any other law, regulation, rule, requirement, policy or standard that provides for greater accrual or use by employees of safe and sick leave or time, whether paid or unpaid, or that extends other protections to employees. The ESSTA may not be construed as creating or imposing any requirement in conflict with any federal or state law, rule or regulation.

New York City Mayoral Executive Order No. 39 Rider

City Fleet and Truck Safety Requirements for City Contractors

Version: 11/19/24

Section 1.01 Background

This rider is included in the Agreement and made a part thereof pursuant to the provisions of Mayoral Executive Order 39 of 2024.

Section 1.02 Definitions

A. Capitalized terms not otherwise defined in this rider shall have the meaning ascribed to them in the Agreement.

B. Agreement: The agreement between the City and the Contractor, to which this rider has been added and made a part.

C. City-contracted Vehicle means a Truck (as hereinafter defined) or any other motor vehicle that the Contractor anticipates providing in accordance with this Agreement or using in performing its obligations under this Agreement on a weekly or more frequent basis[1]. This includes those vehicles anticipated to be provided or used by subcontractors to fulfill the scope of a subcontract for work to be performed under a contract that is subject to the Executive Order, regardless of monetary value of the subcontract, if the vehicle is utilized on a weekly or more frequent basis.

D. Contracting Agency: the City agency or office through which the City of New York has entered into this Agreement.

[1] The following vehicles are not considered City-contracted vehicles and are thus not subject to Executive Order 39: any motor vehicle or truck that is utilized pursuant to (1) contracts registered prior to July 1, 2024, including the renewal, extension, or modification of such contracts; (2) an agency on-call emergency contract; (3) an emergency procurement made pursuant to section 3-06 of title 9 of the Rules of the City of New York or pursuant to an executive order of the Mayor or Governor issued under section 24 or section 29-A of the New York State Executive Law; (4) intergovernmental contracts; (5) government-to-government contracts between the City and any State or Federal government agency; and (6) a contract for utilities, as identified in subdivision (b) of section 825 of the New York City Charter.

E. Contractor: the entity providing services under this Agreement.

F. Executive Order: Mayoral Executive Order 39 of 2024, as it may be amended.

G. High Vision Truck: A Truck with a cab-over or cab-forward design wherein the driver sits in front of the front axle as opposed to conventional cab design wherein the engine and front axle are in front of the driver. The distance from the forward of the center of the vehicle bumper at which the driver can see the top of a 3-foot cone shall not exceed eight feet and the distance beyond the exterior of the passenger side door at which the driver can first see the top of the 4-foot cone shall not exceed six feet.

H. Registration: Registration of this Agreement pursuant to Section 328 of the New York City Charter.

I. Telematics: Automatic vehicle location systems that track vehicle location and speed and alert the driver and another designated person(s) to such location and speed in real time.

J. Truck: A City-contracted Vehicle with a manufacturer's gross vehicle weight rating exceeding 10,000 pounds. The term does not include off-road construction vehicles.

K. Truck Surround Cameras: A system of cameras, sensors, and alerts placed on a Truck that provides a Truck operator with a full view of all four sides of the Truck.

L. Vehicle Safety Plan: A plan with regard to City-contracted Vehicles, approved by the Contracting Agency, that includes the components listed in Section 2.03(A) through (F) of this rider.

Section 2.01 Vehicle Requirements

All City-contracted Vehicles shall conform to the following requirements:

A. Truck Surround Cameras: All Trucks, other than High Vision Trucks, shall be outfitted with truck surround cameras in accordance with the following schedule:
   a. Contracts involving 10 or fewer Trucks: No later than 12 months from Registration.
   b. Contracts involving more than 10 Trucks: No later than 18 months from Registration.
   c. New or replacement Truck acquired after work under this Agreement has begun: Truck must be outfitted with Truck Surround Cameras within 12 months from the date of first using such Truck.
   d. Contractor must submit to the Contracting Agency photographic and purchase order evidence, that is satisfactory to the Contracting Agency, of compliance with this Paragraph (A).

B. Truck Side-guards: Contractor shall provide side-guards for City-contracted Vehicles as applicable pursuant to Section 6-141 of the New York City Administrative Code.

C. Telematics: All City-contracted Vehicles must be installed with Telematics. Data gathered by Telematics must be made available in a manner that is satisfactory to the Contracting Agency.

Section 2.02 Safety Requirements

Contractor shall provide the following:

A. Licensing: Contractors shall ensure proper licensing for all drivers who operate City-contracted Vehicles. Contractors shall ensure that all drivers operating City-contracted Vehicles are enrolled in the New York State License Notification System (LENS) and that all out-of-state licenses are being monitored by Contractor. Contractor must notify the Contracting Agency of any license suspensions and/or arrests tied to unsafe or illegal vehicle operation by any drivers of City-contracted Vehicles.

B. Training: Contractor must provide the Contracting Agency documentation, satisfactory to the Contracting Agency, showing:
    a. That all drivers of City-contracted Vehicles have taken a New York State approved defensive driving class within six months after Registration; or
    b. That all drivers of City-contracted Vehicles have attended a New York State-approved defensive driving class within 3 years prior to Registration; or
    c. That all drivers of City-contracted Vehicles have received alternative safe driver training acceptable to the Contracting Agency that is documented to the satisfaction of the Contracting agency.

C. Crash tracking: Contractors must notify the Contracting Agency of any and all collisions that take place involving City-contracted Vehicles while performing services under this Agreement.

Section 2.03 Vehicle Safety Plan

Within one month after Registration, the Contractor must submit, for review and approval, to Contracting Agency, at the address set forth in the Agreement for notices to the City, and DCAS Fleet (C/O Chief Fleet Management Officer, 23rd Floor South, Municipal Building, 1 Centre Street, NY, NY 10007) a proposed vehicle safety plan that shall include at the minimum the components listed in Paragraphs (A) through (E) below. If directed by the Contracting Agency,

Contractor shall revise said proposed vehicle safety plan in accordance with the directions of the Contracting Agency, and until the Contracting Agency issues its approval thereof, Contractor shall submit a revised proposed vehicle safety plan to the Contracting Agency in each case, within 15 days after receipt by Contractor of directions to that effect from the Contracting Agency. Upon approval of the proposed vehicle safety plan, said proposed plan shall be considered the Vehicle Safety Plan and Contractor shall comply with the terms thereof. Each second anniversary of the approval of the Vehicle Safety Plan the Contractor shall submit an update thereof. The Vehicle Safety Plan shall include at the minimum the following components:

A. Vehicle List: List of City-contracted Vehicles, including the year, make, model, VIN and license plate number of each City-contracted Vehicle;

B. Safety Training: Documentation showing that all drivers of City-contracted Vehicles have completed the training detailed in section 2.02(B) of this Rider;

C. Technology: A list of all relevant technology investments installed on City-contracted vehicles, including but not limited to the technology listed in section 2.01 of this Rider;

D. Crash Tracking: An explanation of Contractor's process of monitoring and reviewing collisions including plans to notify Contracting Agency of collisions that take place while performing services under this Agreement;

E. Corrective Action: A corrective action program for drivers of City-contracted Vehicles that engage in unsafe or dangerous driving behaviors and license monitoring; and

F. Additional Safety Measures: Contractor must indicate if there are any additional safety technologies, safety practices, training, or other procedures that are utilized for City-contracted Vehicles during the term of this Agreement.

Section 3.01 Liquidated Damages

A. Contractor acknowledges that its failure to comply with the provisions of this Vehicle Safety Plan will cause loss and damage to the City, the precise extent of which is difficult to ascertain in monetary terms. For this reason, the parties desire to provide fair and reasonable compensation to the City for such losses, which compensation shall not be construed as a penalty. It is therefore agreed that, in addition to any other liquidated damages that the Contractor shall be required to pay to the City in accordance with the provisions of the Agreement, Contractor shall pay to the City the following:
    a. The sum of $500.00 for each instance of a failure by the Contractor to submit a Vehicle Safety Plan in accordance with the provisions of Section 2.03.

b. The sum of $500.00 for each instance of a failure by the Contractor to comply with the provisions of Section 2.02(A) [Licensing].
c. The sum of $500.00 for each instance of a failure by the Contractor to comply with the provisions of Section 2.02(B) [Training].
d. The sum of $500.00 for each instance of a failure by the Contractor to comply with the provisions of Section 2.02(C) [Crash Tracking].
e. The sum of $500.00 for each instance of a failure by the Contractor to comply with the provisions of Section 2.01(C) [Telematics].
f. The sum of $3,000 for each instance of a failure by the Contractor to comply with the provisions of Section 2.01(A).
g. The Contracting Agency will provide at least 5 working days of notice to the Contractor and opportunity to rectify before implementing these liquidated damages.

B. Liquidated damages received pursuant to this Agreement are not intended to be nor shall they be treated as either a partial or full waiver or discharge of the City's right to indemnification, or the Contractor's obligation to indemnify the City, or to any other remedy provided for in this Agreement or by Law. The City may deduct and retain out of the monies which may become due under this Agreement, the amount of any such liquidated damages; and in case the amount which may become due hereunder shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.

CITY OF NEW YORK

STANDARD CONSTRUCTION CONTRACT

March 2017

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CITY OF NEW YORK STANDARD CONSTRUCTION CONTRACT

TABLE OF CONTENTS

(NO TEXT ON THIS PAGE) 6
CHAPTER I: THE CONTRACT AND DEFINITIONS 7
ARTICLE 1. THE CONTRACT 7
ARTICLE 2. DEFINITIONS 7
CHAPTER II: THE WORK AND ITS PERFORMANCE 10
ARTICLE 3. CHARACTER OF THE WORK 10
ARTICLE 4. MEANS AND METHODS OF CONSTRUCTION 10
ARTICLE 5. COMPLIANCE WITH LAWS 11
ARTICLE 6. INSPECTION 16
ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICESAND INDEMNIFICATION 17
CHAPTER III: TIME PROVISIONS 18
ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK 18
ARTICLE 9. PROGRESS SCHEDULES 18
ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVAL 19
ARTICLE 11. NOTICE OF CONDITIONS CAUSING DELAY AND DOCUMENTATION OF DAMAGES CAUSED BY DELAY 19
ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS 23
ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE 24
ARTICLE 14. COMPLETION AND FINAL ACCEPTANCE OF THE WORK 27
ARTICLE 15. LIQUIDATED DAMAGES 28
ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION 29
CHAPTER IV: SUBCONTRACTS AND ASSIGNMENTS 29
ARTICLE 17. SUBCONTRACTS 29
ARTICLE 18. ASSIGNMENTS 31
CHAPTER V: CONTRACTOR'S SECURITY AND GUARANTEE 32
ARTICLE 19. SECURITY DEPOSIT 32
ARTICLE 20. PAYMENT GUARANTEE 32
ARTICLE 21. RETAINED PERCENTAGE 35
ARTICLE 22. INSURANCE 35
ARTICLE 23. MONEY RETAINED AGAINST CLAIMS 41
ARTICLE 24. MAINTENANCE AND GUARANTY 42
CHAPTER VI: CHANGES, EXTRA WORK, AND DOCUMENTATION OF CLAIM 43
ARTICLE 25. CHANGES 43
ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK 43
ARTICLE 27. RESOLUTION OF DISPUTES 46
ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK OR WORK ON ATIME & MATERIALS BASIS 50
ARTICLE 29. OMITTED WORK 51
ARTICLE 30. NOTICE AND DOCUMENTATION OF COSTS AND DAMAGES;PRODUCTION OF FINANCIAL RECORDS 51
CHAPTER VII: POWERS OF THE RESIDENT ENGINEER, THE ENGINEER ORARCHITECT

AND THE COMMISSIONER 52
ARTICLE 31. THE RESIDENT ENGINEER 52
ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER 53
ARTICLE 33. THE COMMISSIONER 53
ARTICLE 34. NO ESTOPPEL 54
CHAPTER VIII: LABOR PROVISIONS 54
ARTICLE 35. EMPLOYEES 54
ARTICLE 36. NO DISCRIMINATION 61
ARTICLE 37. LABOR LAW REQUIREMENTS 63
ARTICLE 38. PAYROLL REPORTS 68
ARTICLE 39. DUST HAZARDS 69
CHAPTER IX: PARTIAL AND FINAL PAYMENTS 69
ARTICLE 40. CONTRACT PRICE 69
ARTICLE 41. BID BREAKDOWN ON LUMP SUM 69
ARTICLE 42. PARTIAL PAYMENTS 70
ARTICLE 43. PROMPT PAYMENT 70
ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT 71
ARTICLE 45. FINAL PAYMENT 72
ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT 73
ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION 73
CHAPTER X: CONTRACTOR'S DEFAULT 74
ARTICLE 48. COMMISSIONER'S RIGHT TO DECLARE CONTRACTOR IN DEFAULT 74
ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT 75
ARTICLE 50. QUITTING THE SITE 75
ARTICLE 51. COMPLETION OF THE WORK 75
ARTICLE 52. PARTIAL DEFAULT 76
ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK 76
ARTICLE 54. OTHER REMEDIES 76
CHAPTER XI: MISCELLANEOUS PROVISIONS 77
ARTICLE 55. CONTRACTOR'S WARRANTIES 77
ARTICLE 56. CLAIMS AND ACTIONS THEREON 77
ARTICLE 57. INFRINGEMENT 78
ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES 78
ARTICLE 59. SERVICE OF NOTICES 78
ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT 78
ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED 79
ARTICLE 62. TAX EXEMPTION 79
ARTICLE 63. INVESTIGATION(S) CLAUSE 80
ARTICLE 64. TERMINATION BY THE CITY 82
ARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE 85
ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT 85
ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM 86
ARTICLE 68. ANTITRUST 87
ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS 87
ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB 89
ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS 89
ARTICLE 72. CONFLICTS OF INTEREST 89

ARTICLE 73. MERGER CLAUSE **89**
ARTICLE 74. STATEMENT OF WORK **89**
ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR **90**
ARTICLE 76. ELECTRONIC FUNDS TRANSFER **90**
ARTICLE 77. RECORDS RETENTION **90**
ARTICLE 78. EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER SOURCES OF INFORMATION AND CHANGED SITE CONDITIONS **90**
ARTICLE 79. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT **91**
PERFORMANCE BOND #1 ..... **99**
PERFORMANCE BOND #2 ..... **103**
PAYMENT BOND **107**

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WITNESSETH:

The parties, in consideration of the mutual agreements contained herein, agree as follows:

CHAPTER I: THE CONTRACT AND DEFINITIONS

ARTICLE 1. THE CONTRACT

1.1 Except for titles, subtitles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience), the following, except for such portions thereof as maybe specifically excluded, shall be deemed to be part of this **Contract**:

1.1.1 All provisions required by law to be inserted in this **Contract**, whether actuallyinserted or not;

1.1.2 The Contract Drawings and Specifications;

1.1.3 The General Conditions and Special Conditions, if any;

1.1.4 The **Contract**;

1.1.5 The Information for Bidders; Request for Proposals; Notice of Solicitation andProposal For Bids; Bid or Proposal, and, if used, the Bid Booklet;

1.1.6 All Addenda issued prior to the receipt of the bids; the Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed or the Order to Work.

1.2 Should any conflict occur in or between the Drawings and Specifications, the **Contractor** shall be deemed to have estimated the most expensive way of doing the **Work**, unless the **Contractor** shall have asked for and obtained a decision in writing from the **Commissioner** of the **Agency** that is entering into this **Contract**, before the submission of its bid, as to what shall govern.

ARTICLE 2. DEFINITIONS

2.1 The following words and expressions, or pronouns used in their stead, shall, wherever they appear in this Contract, be construed as follows, unless a different meaning is clear from the context:

2.1.1 **"Addendum"** or **"Addenda"** shall mean the additional Contract provisions and/or technical clarifications issued in writing by the Commissioner prior to the receipt of bids.

2.1.2 **"Agency"** shall mean a city, county, borough or other office, position, department, division, bureau, board or commission, or a corporation, institution or agency of government, the expenses of which are paid in whole or in part from the City treasury.

2.1.3 **"Agency Chief Contracting Officer" (ACCO)** shall mean a person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the CCPO, or his/her duly authorized representative.

2.1.4 **"Allowance"** shall mean a sum of money which the Agency may include in the total amount of the Contract for such specific contingencies as the Agency believes may be necessary to complete the Work, *e.g.*, lead or asbestos remediation, and for which the Contractor will be paid on the basis of stipulated unit prices or a formula set forth in the Contract or negotiated between the parties provided, however, that if the Contractor is not directed to use the Allowance, the Contractor shall have no right to such money and it shall be deducted from the total amount of the Contract.

2.1.5 **"City"** shall mean the City of New York.

2.1.6 **"City Chief Procurement Officer" (CCPO)** shall mean a person delegated authority by the Mayor to coordinate and oversee the procurement activity of Mayoral agency staff, including the ACCO and any offices which have oversight responsibility for the procurement of construction, or his/her duly authorized representative.

2.1.7 **"Commissioner"** shall mean the head of the Agency that has entered into this Contract, or his/her duly authorized representative.

2.1.8 **"Comptroller"** shall mean the Comptroller of the City of New York.

2.1.9 **"Contract"** or **"Contract Documents"** shall mean each of the various parts of the contract referred to in Article 1 hereof, both as a whole and severally.

2.1.10 **"Contract Drawings"** shall mean only those drawings specifically entitled as such and listed in the Specifications or in any Addendum, or any drawings furnished by the Commissioner, pertaining or supplemental thereto.

2.1.11 **"Contract Work"** shall mean everything required to be furnished and done by the Contractor by any one or more of the parts of the Contract referred to in Article 1, except Extra Work as hereinafter defined.

2.1.12 **"Contractor"** shall mean the entity which executed this Contract, whether a corporation, firm, partnership, joint venture, individual, or any combination thereof, and its, their, his/her successors, personal representatives, executors, administrators, and assigns, and any person, firm, partnership, joint venture, individual, or corporation which shall at any time be substituted in the place of the Contractor under this Contract.

2.1.13 **"Days"** shall mean calendar days, except where otherwise specified.

2.1.14 **"Engineer"** or **"Architect"** or **"Project Manager"** shall mean the person so designated in writing by the Commissioner in the Notice to Proceed or the Order to Work to act as such in relation to this Contract, including a private Architect or Engineer or Project Manager, as the case may be. Subject to written approval by the Commissioner, the Engineer, Architect or Project Manager may designate an authorized representative.

2.1.15 **"Engineering Audit Officer" (EAO)** shall mean the person so designated by the Commissioner to perform responsible auditing functions hereunder.

2.1.16 **"Extra Work"** shall mean Work other than that required by the Contract at the time of award which is authorized by the Commissioner pursuant to Chapter VI of this Contract.

2.1.17 **"Federal-Aid Contract"** shall mean a contract in which the United States (federal) Government provides financial funding as so designated in the Information for Bidders.

2.1.18 **"Final Acceptance"** shall mean final written acceptance of all the Work by the Commissioner, a copy of which shall be sent to the Contractor.

2.1.19 **"Final Approved Punch List"** shall mean a list, approved pursuant to Article 14.2.2, specifying those items of Work to be completed by the Contractor after Substantial Completion and dates for the completion of each item of Work.

2.1.20 **"Law"** or **"Laws"** shall mean the Constitution of the State of New York, the New York City Charter, the New York City Administrative Code, a statute of the United States or of the State of New York, a local law of the City of New York, any ordinance, rule or regulation having the force of law, or common law.

2.1.21 **"Materialman"** shall mean any corporation, firm, partnership, joint venture, or individual, other than employees of the Contractor, who or which contracts with the Contractor or any Subcontractor, to fabricate or deliver, or who actually fabricates or delivers, plant, materials or equipment to be incorporated in the Work.

2.1.22 **"Means and Methods of Construction"** shall mean the labor, materials, temporary structures, tools, plant, and construction equipment, and the manner and time of their use, necessary to accomplish the result intended by this Contract.

2.1.23**"Notice to Proceed" or "Order to Work"** shall mean the written notice issued bythe Commissioner specifying the time for commencement of the Work and the Engineer, Architect or Project Manager.

2.1.24 **"Other Contractor(s)"** shall mean any contractor (other than the entity which executed this Contract or its Subcontractors) who or which has a contract with the City for work on or adjacent to the building or Site of the Work.

2.1.25 **"Payroll Taxes"** shall mean State Unemployment Insurance (SUI), Federal Unemployment Insurance (FUI), and payments pursuant to the Federal Insurance Contributions Act (FICA).

2.1.26 **"Project"** shall mean the public improvement to which this Contract relates.

2.1.27 **"Procurement Policy Board" (PPB)** shall mean the Agency of the City of New York whose function is to establish comprehensive and consistent procurement policies and rules which shall have broad application throughout the City.

2.1.28 **"Required Quantity"** in a unit price Contract shall mean the actual quantity of any item of Work or materials which is required to be performed or furnished in order to comply with the Contract.

2.1.29 **"Resident Engineer"** shall mean the representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the Work.

2.1.30 **"Site"** shall mean the area upon or in which the Contractor's operations are carried on, and such other areas adjacent thereto as may be designated as such by the Engineer.

2.1.31 **"Small Tools"** shall mean items that are ordinarily required for a worker's job

function, including but not limited to, equipment that ordinarily has no licensing, insurance or substantive storage costs associated with it; such as circular and chain saws, impactdrills, threaders, benders, wrenches, socket tools, etc.

2.1.32 **"Specifications"** shall mean all of the directions, requirements, and standards of performance applying to the Work as hereinafter detailed and designated under the Specifications.

2.1.33 **"Subcontractor"** shall mean any person, firm or corporation, other than employees of the Contractor, who or which contracts with the Contractor or with its subcontractors to furnish, or actually furnishes labor, or labor and materials, or labor and equipment, or superintendence, supervision and/or management at the Site. Wherever the word Subcontractor appears, it shall also mean sub-Subcontractor.

2.1.34 **"Substantial Completion"** shall mean the written determination by the Engineer that the Work required under this Contract is substantially, but not entirely, complete and the approval of the **Final Approved Punch List**.

2.1.35 **"Work"** shall mean all services required to complete the Project in accordance with the Contract Documents, including without limitation, labor, material, superintendence, management, administration, equipment, and incidentals, and obtaining any and all permits, certifications and licenses as may be necessary and required to complete the Work, and shall include both Contract Work and Extra Work.

CHAPTER II: THE WORK AND ITS PERFORMANCE

ARTICLE 3. CHARACTER OF THE WORK

3.1 Unless otherwise expressly provided in the **Contract Drawings**, **Specifications,** and **Addenda**, the **Work** shall be performed in accordance with the best modern practice, utilizing, unless otherwise specified in writing, new and unused materials of standard first grade quality and workmanship anddesign of the highest quality, to the satisfaction of the **Commissioner**.

ARTICLE 4. MEANS AND METHODS OF CONSTRUCTION

4.1 Unless otherwise expressly provided in the **Contract Drawings**, **Specifications,** and **Addenda**, the **Means and Methods of Construction** shall be such as the **Contractor** may choose; subject, however, to the **Engineer's** right to reject the **Means and Methods of Construction** proposed by the **Contractor** which in the opinion of the **Engineer**:

4.1.1 Will constitute or create a hazard to the **Work**, or to persons or property; or

4.1.2 Will not produce finished **Work** in accordance with the terms of the **Contract**; or

4.1.3 Will be detrimental to the overall progress of the **Project**.

4.2 The **Engineer's** approval of the **Contractor's Means and Methods of Construction**, orhis/her failure to exercise his/her right to reject such means or methods, shall not relieve the **Contractor** of its obligation to complete the **Work** as provided in this **Contract**; nor shall the exercise of such rightto reject

create a cause of action for damages.

ARTICLE 5. COMPLIANCE WITH LAWS

5.1 The **Contractor** shall comply with all **Laws** applicable to this **Contract** and to the **Work** to be done hereunder.

5.2 Procurement Policy Board Rules: This **Contract** is subject to the Rules of the **PPB** ("**PPB** Rules") in effect at the time of the bid opening for this **Contract**. In the event of a conflict between the **PPB** Rules and a provision of this **Contract**, the **PPB** Rules shall take precedence.

5.3 Noise Control Code provisions.

5.3.1 In accordance with the provisions of Section 24-216(b) of the Administrative Code of the **City** ("Administrative Code"), Noise Abatement Contract Compliance, devices and activities which will be operated, conducted, constructed or manufactured pursuant to this **Contract** and which are subject to the provisions of the **City** Noise Control Code shall be operated, conducted, constructed, or manufactured without causing a violation of the Administrative Code. Such devices and activities shall incorporate advances in the art of noise control development for the kind and level of noise emitted or produced by such devices and activities, in accordance with regulations issued by the **Commissioner** of the **City** Department of Environmental Protection.

5.3.2 The **Contractor** agrees to comply with Section 24-219 of the Administrative Code and implementing rules codified at 15 Rules of the City of New York ("RCNY") Section 28-100 *et seq*. In accordance with such provisions, the **Contractor**, if the **Contractor** is the responsible party under such regulations, shall prepare and post a Construction Noise Mitigation Plan at each **Site**, in which the **Contractor** shall certify that all construction tools and equipment have been maintained so that they operate at normal manufacturers operating specifications. If the **Contractor** cannot make this certification, it must have in place an Alternative Noise Mitigation Plan approved by the **City** Department of Environmental Protection. In addition, the **Contractor**'s certified Construction Noise Mitigation Plan is subject inspection by the **City** Department of Environmental Protection in accordance with Section 28-101 of Title 15 of RCNY. No **Contract Work** may take place at a **Site** unless there is a Construction Noise Mitigation Plan or approved Alternative Noise Mitigation Plan in place. In addition, the **Contractor** shall create and implement a noise mitigation training program. Failure to comply with these requirements may result in fines and other penalties pursuant to the applicable provisions of the Administrative Code and RCNY.

5.4 Ultra Low Sulfur Diesel Fuel: In accordance with the provisions of Section 24-163.3 of the Administrative Code, the **Contractor** specifically agrees as follows:

5.4.1 Definitions. For purposes of this Article 5.4, the following definitions apply:

5.4.1(a) "Contractor" means any person or entity that enters into a Public Works Contract with a **City Agency**, or any person or entity that enters into an agreement with such person or entity, to perform work or provide labor or services related to such Public Works Contract.

5.4.1(b) "Motor Vehicle" means any self-propelled vehicle designed for transporting

persons or property on a street or highway.

5.4.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition,or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.4.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this term shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) horsepower or less and that are not used in any construction program or project.

5.4.1(e) "Public Works Contract" means a contract with a **City Agency** for a construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; a contract with a **City Agency** for the preparation for any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; or a contract with a **City Agency** for any final work involved in the completion of any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge.

5.4.1(f) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

5.4.2 Ultra Low Sulfur Diesel Fuel

5.4.2(a) All **Contractors** shall use Ultra Low Sulfur Diesel Fuel in diesel-powered Nonroad Vehicles in the performance of this **Contract**.

5.4.2(b) Notwithstanding the requirements of Article 5.4.2(a), **Contractors** may use diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm)to fulfill the requirements of this Article 5.4.2, where the Commissioner of the **City** Department of Environmental Protection ("DEP Commissioner") has issued a determination that a sufficient quantity of Ultra Low Sulfur Diesel Fuel is not available to meet the needs of **Agencies** and **Contractors**. Any such determination shall expire after six (6) months unless renewed.

5.4.2(c) **Contractors** shall not be required to comply with this Article 5.4.2 where the **City Agency** letting this **Contract** makes a written finding, which is approved, in writing, by the DEP Commissioner, that a sufficient quantity of Ultra Low Sulfur Diesel Fuel, or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is not available to meet the requirements of Section 24-163.3 of the Administrative Code, provided that such **Contractor** in its fulfillment of the requirements of this **Contract**, to the extent practicable, shall use whatever quantity of Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per

million (30 ppm) is available. Any finding made pursuant to this Article 5.4.2(c) shall expire after sixty (60) **Days**, at which time the requirements of this Article 5.4.2 shall be in full force and effect unless the **City Agency** renews the finding in writing and such renewal is approved by the DEP Commissioner.

5.4.2(d) **Contractors** may check on determinations and approvals issued by the DEP Commissioner pursuant to Section 24-163.3 of the Administrative Code, if any, at www.dep.nyc.gov or by contacting the **City Agency** letting this **Contract**.

5.4.2(e) The requirements of this Article 5.4.2 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

5.4.3 Best Available Technology

5.4.3(a) All **Contractors** shall utilize the best available technology for reducing the emission of pollutants for diesel-powered Nonroad Vehicles in the performance of this **Contract**. For determinations of best available technology for each type of diesel-powered Nonroad Vehicle, **Contractors** shall comply with the regulations of the **City** Department of Environmental Protection, as and when adopted, Chapter 14 of Title 15 of the Rules of the City of New York (RCNY). The **Contractor** shall fully document all steps in the best available technology selection process and shall furnish such documentation to the **City Agency** or the DEP Commissioner upon request. The **Contractor** shall retain all documentation generated in the best available technology selection process for as long as the selected best available technology is in use.

5.4.3(b) No **Contractor** shall be required to replace best available technology for reducing the emission of pollutants or other authorized technology utilized for a diesel-powered Nonroad Vehicle in accordance with the provisions of this Article 5.4.3 within three (3) years of having first utilized such technology for such vehicle.

5.4.3(c) This Article 5.4.3 shall not apply to any vehicle used to satisfy the requirements of a specific Public Works Contract for fewer than twenty (20) **Days**.

5.4.3(d) The **Contractor** shall not be required to comply with this Article 5.4.3 with respect to a diesel-powered Nonroad Vehicle under the following circumstances:

5.4.3(d)(i) Where the **City Agency** makes a written finding, which is approved, in writing, by the DEP Commissioner, that the best available technology for reducing the emission of pollutants as required by this Article 5.4.3 is unavailable for such vehicle, the **Contractor** shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle.

5.4.3(d)(ii) Where the DEP Commissioner has issued a written waiver based upon the Contractor having demonstrated to the DEP Commissioner that the use of the best available technology for reducing the emission of pollutants might endanger the operator of such vehicle or those working near such vehicle, due to engine malfunction, the **Contractor** shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle, which would not endanger the operator of such vehicle or those working near such vehicle.

5.4.3(d)(iii) In determining which technology to use for the purposes of Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above, the **Contractor** shall primarily consider the reduction in emissions of particulate matter and secondarily consider the reduction in emissions of nitrogen oxides associated with the use of such technology, which shall in no event result in an increase in the emissions of either such pollutant.

5.4.3(d)(iv) The **Contractor** shall submit requests for a finding or a waiver pursuant to this Article 5.4.3(d) in writing to the DEP Commissioner, with a copy to the **ACCO** of the **City Agency** letting this **Contract**. Any finding or waiver made or issued pursuant to Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above shall expire after one hundred eighty (180) **Days**, at which time the requirements of Article 5.4.3(a) shall be in full force and effect unless the **City Agency** renews the finding, in writing, and the DEP Commissioner approves such finding, in writing, or the DEP Commissioner renews the waiver, in writing.

5.4.3(e) The requirements of this Article 5.4.3 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

5.4.4 Section 24-163 of the Administrative Code. The **Contractor** shall comply with Section 24-163 of the Administrative Code related to the idling of the engines of motor vehicles while parking.

5.4.5 Compliance

5.4.5(a) The **Contractor's** compliance with Article 5.4 may be independently monitored. If it is determined that the **Contractor** has failed to comply with any provision of Article 5.4, any costs associated with any independent monitoring incurred by the **City** shall be reimbursed by the **Contractor**.

5.4.5(b) Any **Contractor** who violates any provision of Article 5.4, except as provided in Article 5.4.5(c) below, shall be liable for a civil penalty between the amounts of one thousand ($1,000) and ten thousand ($10,000) dollars, in addition to twice the amount of money saved by such **Contractor** for failure to comply with Article 5.4.

5.4.5(c) No **Contractor** shall make a false claim with respect to the provisions of Article 5.4 to a **City Agency**. Where a **Contractor** has been found to have done so, such **Contractor** shall be liable for a civil penalty of twenty thousand ($20,000) dollars, in addition to twice the amount of money saved by such **Contractor** in association with having made such false claim.

5.4.6 Reporting

5.4.6(a) For all Public Works Contracts covered by this Article 5.4, the **Contractor** shall report to the **City Agency** the following information:

5.4.6(a)(i) The total number of diesel-powered Nonroad Vehicles used to fulfill the requirements of this Public Works Contract;

5.4.6(a)(ii) The number of such Nonroad Vehicles that were powered by Ultra Low Sulfur Diesel Fuel;

5.4.6(a)(iii) The number of such Nonroad Vehicles that utilized the best available technology for reducing the emission of pollutants, including a breakdown by vehicle model and the type of technology;

5.4.6(a)(iv) The number of such Nonroad Vehicles that utilized such other authorized technology in accordance with Article 5.4.3, including a breakdown by vehicle model and the type of technology used for each such vehicle;

5.4.6(a)(v) The locations where such Nonroad Vehicles were used; and

5.4.6(a)(vi) Where a determination is in effect pursuant to Article 5.4.2(b) or 5.4.2(c), detailed information concerning the **Contractor's** efforts to obtain Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm).

5.4.6(b) The **Contractor** shall submit the information required by Article 5.4.6(a) at the completion of **Work** under the Public Works Contract and on a yearly basis no later than August 1 throughout the term of the Public Works Contract. The yearly report shall cover **Work** performed during the preceding fiscal year (July 1 - June 30).

5.5 Ultra Low Sulfur Diesel Fuel. In accordance with the Coordinated Construction Act for Lower Manhattan, as amended:

5.5.1 Definitions. For purposes of this Article 5.5, the following definitions apply:

5.5.1(a) "Lower Manhattan" means the area to the south of and within the following lines: a line beginning at a point where the United States pierhead line in the Hudson River as it exists now or may be extended would intersect with the southerly line of West Houston Street in the Borough of Manhattan extended, thence easterly along the southerly side of West Houston Street to the southerly side of Houston Street, thence easterly along the southerly side of Houston Street to the southerly side of East Houston Street, thence northeasterly along the southerly side of East Houston Street to the point where it would intersect with the United States pierhead line in the East River as it exists now or may be extended, including tax lots within or immediately adjacent thereto.

5.5.1(b) "Lower Manhattan Redevelopment Project" means any project in Lower Manhattan that is funded in whole or in part with federal or State funding, or any project intended to improve transportation between Lower Manhattan and the two air terminals in the **City** known as LaGuardia Airport and John F. Kennedy International Airport, or between Lower Manhattan and the air terminal in Newark known as Newark Liberty International Airport, and that is funded in whole or in part with federal funding.

5.5.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.5.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower (HP) and greater, and that is not a Motor Vehicle or a vehicle used

solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this terms shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) HP or less and that are not used in any construction program or project.

5.5.1(e) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

5.5.2 Requirements. **Contractors** and **Subcontractors** are required to use only Ultra Low Sulfur Diesel Fuel to power the diesel-powered Nonroad Vehicles with engine HP rating of fifty (50) HP and above used on a Lower Manhattan Redevelopment Project and, where practicable, to reduce the emission of pollutants by retrofitting such Nonroad Vehicles with oxidation catalysts, particulate filters, or technology that achieves lowest particulate matter emissions.

5.6 Pesticides. In accordance with Section 17-1209 of the Administrative Code, to the extent that the **Contractor** or any **Subcontractor** applies pesticides to any property owned or leased by the **City**, the **Contractor,** and any **Subcontractor** shall comply with Chapter 12 of the Administrative Code.

5.7 Waste Treatment, Storage, and Disposal Facilities and Transporters. In connection withthe **Work**, the **Contractor** and any **Subcontractor** shall use only those waste treatment, storage, and disposal facilities and waste transporters that possess the requisite license, permit or other governmental approval necessary to treat, store, dispose, or transport the waste, materials or hazardous substances.

5.8 Environmentally Preferable Purchasing. The **Contractor** shall ensure that products purchased or leased by the **Contractor** or any **Subcontractor** for the **Work** that are not specified by the **City** or are submitted as equivalents to a product specified by the **City** comply with the requirements of the New York City Environmentally Preferable Purchasing Program contained in Chapter 11 of Title 43 of the RCNY, pursuant to Chapter 3 of Title 6 of the Administrative Code.

ARTICLE 6. INSPECTION

6.1 During the progress of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall at all times afford the representatives of the **City** every reasonable, safe, and proper facility for inspecting all **Work** done or being done at the **Site** and also for inspecting the manufacture or preparation of materials and equipment at the place of such manufacture or preparation.

6.2 The **Contractor's** obligation hereunder shall include the uncovering or taking down of finished **Work** and its restoration thereafter; provided, however, that the order to uncover, take down and restore shall be in writing, and further provided that if **Work** thus exposed proves satisfactory, and if the **Contractor** has complied with Article 6.1, such uncovering or taking down and restoration shall be considered an item of **Extra Work** to be paid for in accordance with the provisions of Article 26. If the **Work** thus exposed proves unsatisfactory, the **City** has no obligation to compensate the **Contractor** for the uncovering, taking down or restoration.

6.3 Inspection and approval by the **Commissioner**, the **Engineer**, **Project Manager**, or **Resident Engineer**, of finished **Work** or of **Work** being performed, or of materials and equipment at the place of manufacture or preparation, shall not relieve the **Contractor** of its obligation to perform the **Work** in strict accordance with the **Contract**. Finished or unfinished **Work** not found to be in strict accordance with the

Contract shall be replaced as directed by the **Engineer**, even though such **Work** may have been previously approved and paid for. Such corrective **Work** is **Contract Work** and shall not be deemed **Extra Work**.

6.4 Rejected **Work** and materials shall be promptly taken down and removed from the **Site**, which must at all times be kept in a reasonably clean and neat condition.

ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICESAND INDEMNIFICATION

7.1 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall be under an absolute obligation to protect the finished and unfinished **Work** against any damage, loss, injury, theft and/or vandalism and in the event of such damage, loss, injury, theft and/or vandalism,it shall promptly replace and/or repair such **Work** at the **Contractor's** sole cost and expense, as directed by the **Resident Engineer**. The obligation to deliver finished **Work** in strict accordance with the **Contract** prior to **Final Acceptance** shall be absolute and shall not be affected by the **Resident Engineer's** approval of, or failure to prohibit, the **Means and Methods of Construction** used by the **Contractor**.

7.2 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall take all reasonable precautions to protect all persons and the property of the **City** and of others from damage, loss or injury resulting from the **Contractor's**, and/or its **Subcontractors'** operations under this **Contract.** The **Contractor's** obligation to protect shall include the duty to provide, place or replace, and adequately maintain at or about the **Site** suitable and sufficient protection such as lights, barricades, and enclosures.

7.3 The **Contractor** shall comply with the notification requirements set forth below in the event of any loss, damage or injury to **Work**, persons or property, or any accidents arising out of the operations of the **Contractor** and/or its **Subcontractors** under this **Contract**.

7.3.1 The **Contractor** shall make a full and complete report in writing to the **Resident Engineer** within three (3) **Days** after the occurrence.

7.3.2 The **Contractor** shall also send written notice of any such event to all insurance carriers that issued potentially responsive policies (including commercial general liability insurance carriers for events relating to the **Contractor**'s own employees) no later than twenty (20) days after such event and again no later than twenty (20) days after the initiation of any claim and/or action resulting therefrom. Such notice shall contain the following information: the number of the insurance policy, the name of the Named Insured, the date and location of the incident, and the identity of the persons injured or property damaged. For any policy on which the **City** and/or the **Engineer**, **Architect**, or **Project Manager** are Additional Insureds, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Additional Insured, such other AdditionalInsureds, as well as the Named Insured."

7.3.2(a) Whenever such notice is sent under a policy on which the **City** is an Additional Insured, the **Contractor** shall provide copies of the notice to the **Comptroller,** the **Commissioner** and the **City** Corporation Counsel. The copy to the **Comptroller** shall be sent to the Insurance Unit, NYC Comptroller's Office, 1 Centre Street – Room 1222, New York, New York, 10007. The copy to the **Commissioner** shall be sent to the address set forth in Schedule A of the General Conditions. The copy to the **City** Corporation Counsel shall be sent to Insurance Claims Specialist, Affirmative Litigation

Division, New York City Law Department, 100 Church Street, New York, New York 10007.

7.3.2(b) If the **Contractor** fails to provide any of the foregoing notices to anyappropriate insurance carrier(s) in a timely and complete manner, the **Contractor**shall indemnify the **City** for all losses, judgments, settlements, and expenses, including reasonable attorneys' fees, arising from an insurer's disclaimer of coverage citing late notice by or on behalf of the **City**.

7.4 To the fullest extent permitted by law, the **Contractor** shall defend, indemnify, and hold the **City**, its employees, and officials (the "Indemnitees") harmless against any and all claims (including but not limited to claims asserted by any employee of the **Contractor** and/or its **Subcontractors**) and costs and expenses of whatever kind (including but not limited to payment or reimbursement of attorneys' fees and disbursements) allegedly arising out of or in any way related to the operations of the **Contractor** and/or its **Subcontractors** in the performance of this **Contract** or from the **Contractor's** and/or its **Subcontractors'** failure to comply with any of the provisions of this **Contract** or of the **Law**. Such costs and expenses shall include all those incurred in defending the underlying claim and those incurred in connection with the enforcement of this Article 7.4 by way of cross-claim, third-party claim, declaratory action or otherwise. The parties expressly agree that the indemnification obligation hereunder contemplates (1) full indemnity in the event of liability imposed against the Indemnitees without negligence and solely by reason of statute, operation of **Law** or otherwise; and (2) partial indemnity in the event of any actual negligence on the part of the Indemnitees either causing orcontributing to the underlying claim (in which case, indemnification will be limited to any liability imposed over and above that percentage attributable to actual fault whether by statute, by operation of **Law**, or otherwise). Where partial indemnity is provided hereunder, all costs and expenses shall be indemnified on a pro rata basis.

7.4.1 Indemnification under Article 7.4 or any other provision of the **Contract** shall operate whether or not **Contractor** or its **Subcontractors** have placed and maintained the insurance specified under Article 22.

7.5 The provisions of this Article 7 shall not be deemed to create any new right of action in favor of third parties against the **Contractor** or the **City**.

CHAPTER III: TIME PROVISIONS

ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK

8.1 The **Contractor** shall commence the **Work** on the date specified in the **Notice to Proceed** or the **Order to Work**. The time for performance of the **Work** under the **Contract** shall be computed from the date specified in the **Notice to Proceed** or the **Order to Work**. **TIME BEING OF THE ESSENCE** to the **City**, the **Contractor** shall thereafter prosecute the **Work** diligently, using such **Means and Methods of Construction** as are in accord with Article 4 herein and as will assure its completion not later than the date specified in this Contract, or on the date to which the time for completion may be extended.

ARTICLE 9. PROGRESS SCHEDULES

9.1 To enable the **Work** to be performed in an orderly and expeditious manner, the **Contractor**, within fifteen (15) **Days** after the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Engineer**, shall submit to the **Engineer** a proposed progress schedule based on the Critical Path Methodin the form of

a bar graph or in such other form as specified by the **Engineer**, and monthly cash flow requirements, showing:

9.1.1 The anticipated time of commencement and completion of each of the variousoperations to be performed under this **Contract**; and

9.1.2 The sequence and interrelation of each of these operations with the others and with those of other related contracts; and

9.1.3 The estimated time required for fabrication or delivery, or both, of all materials and equipment required for the **Work**, including the anticipated time for obtaining required approvals pursuant to Article 10; and

9.1.4 The estimated amount in dollars the **Contractor** will claim on a monthly basis.

9.2 The proposed schedule shall be revised as directed by the **Engineer**, until finally approved by the **Engineer**, and after such approval, subject to the provisions of Article 11, shall be strictly adhered to by the **Contractor**.

9.3 If the **Contractor** shall fail to adhere to the approved progress schedule, or to the schedule as revised pursuant to Article 11, it shall promptly adopt such other or additional **Means and Methods of Construction**, at its sole cost and expense, as will make up for the time lost and will assure completion in accordance with the approved progress schedule. The approval by the **City** of a progress schedule which is shorter than the time allotted under the **Contract** shall not create any liability for the **City** if the approved progress schedule is not met.

9.4 The **Contractor** will not receive any payments until the proposed progress schedule is submitted.

ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVAL

10.1 From time to time as the **Work** progresses and in the sequence indicated by the approved progress schedule, the **Contractor** shall submit to the **Engineer** a specific request in writing for each item of information or approval required by the **Contractor**. These requests shall state the latest date upon which the information or approval is actually required by the **Contractor**, and shall be submitted in a reasonable time in advance thereof to provide the **Engineer** a sufficient time to act upon such submissions, or any necessary re-submissions thereof.

10.2 The **Contractor** shall not have any right to an extension of time on account of delays due to the **Contractor's** failure to submit requests for the required information or the required approval in accordance with the above requirements.

ARTICLE 11. NOTICE OF CONDITIONS CAUSING DELAY AND DOCUMENTATION OF DAMAGES CAUSED BY DELAY

11.1 After the commencement of any condition which is causing or may cause a delay in completion of the **Work**, including conditions for which the **Contractor** may be entitled to an extension of time, the following notifications and submittals are required:

11.1.1 Within fifteen (15) **Days** after the **Contractor** becomes aware or reasonably should be

aware of each such condition, the **Contractor** must notify the **Resident Engineer** or **Engineer**, as directed by the **Commissioner**, in writing of the existence, nature and effect of such condition upon the approved progress schedule and the **Work**, and must state why and in what respects, if any, the condition is causing or may cause a delay. Such notice shall include a description of the construction activities that are or could be affected by the condition and may include any recommendations the **Contractor** may have to address the delay condition and any activities the **Contractor** may take to avoid or minimize the delay.

11.1.2 If the **Contractor** shall claim to be sustaining damages for delay as provided for in this Article 11,within forty-five (45) **Days** from the time such damages are first incurred for each such condition, the **Contractor** shall submit to the **Commissioner** a verified written statement of the details and estimates of the amounts of such damages, including categories of expected damages and projected monthly costs, together with documentary evidence of such damages as the **Contractor** may have at the time of submission ("statement of delay damages"), as further detailed in Article 11.6. The **Contractor** may submit the above statement within such additional time as may be granted by the **Commissioner** in writing upon written request therefor.

11.1.3 Articles 11.1.1 and 11.1.2 do not relieve the **Contractor** of its obligation to comply with the provisions of Article 44.

11.2 Failure of the **Contractor** to strictly comply with the requirements of Article 11.1.1 may, inthe discretion of the **Commissioner**, be deemed sufficient cause to deny any extension of time on account of delay arising out of such condition. Failure of the **Contractor** to strictly comply with the requirements of both Articles 11.1.1 and 11.1.2 shall be deemed a conclusive waiver by the **Contractor** of any and all claims for damages for delay arising from such condition and no right to recover on such claims shall exist.

11.3 When appropriate and directed by the **Engineer**, the progress schedule shall be revised by the **Contractor** until finally approved by the **Engineer**. The revised progress schedule must be strictly adhered to by the **Contractor**.

11.4 Compensable Delays

11.4.1 The **Contractor** agrees to make claim only for additional costs attributable to delayin the performance of this **Contrac**t necessarily extending the time for completion of the **Work** or resulting from acceleration directed by the **Commissioner** and required to maintain the progress schedule, occasioned solely by any act or omission to act of the **City** listed below. The **Contractor** also agrees that delay from any other cause shall be compensated, if at all, solely by an extension of time to complete the performance of the **Work**.

11.4.1.1 The failure of the **City** to take reasonable measures to coordinate and progress the **Work** to the extent required by the **Contract**, except that the City shall not be responsible for the **Contractor's** obligation to coordinate and progress the **Work** of its **Subcontractors**.

11.4.1.2 Unreasonable delays attributable to the review of shop drawings, the issuance of change orders, or the cumulative impact of change orders that were not brought about by any act or omission of the **Contractor**.

11.4.1.3 The unavailability of the **Site** caused by acts or omissions of the **City**..

11.4.1.4 The issuance by the **Engineer** of a stop work order that was not brought about through any act or omission of the **Contractor**.

11.4.1.5 Differing site conditions or environmental hazards that were neitherknown nor reasonably ascertainable on a pre-bid inspection of the **Site**or review

of the bid documents or other publicly available sources, and that are not ordinarily encountered in the **Project**'s geographical area or neighborhood or in the type of **Work** to be performed.

11.4.1.6 Delays caused by the **City's** bad faith or its willful, malicious, or grossly negligent conduct;

11.4.1.7 Delays not contemplated by the parties;

11.4.1.8 Delays so unreasonable that they constitute an intentional abandonment of the **Contract** by the **City**; and

11.4.1.9 Delays resulting from the **City's** breach of a fundamental obligation of the **Contract**.

11.4.2 No claim may be made for any alleged delay in **Substantial Completion** of the **Work** if the **Work** will be or is substantially completed by the date of **Substantial Completion** provided for in Schedule A unless acceleration has been directed by the **Commissioner** to meet the date of **Substantial Completion** set forth in Schedule A, or unless there is a provision in the **Contract** providing for additional compensation for early completion.

11.4.3 The provisions of this Article 11 apply only to claims for additional costs attributable to delay and do not preclude determinations by the **Commissioner** allowing reimbursements for additional costs for **Extra Work** pursuant to Articles 25 and 26 of this **Contract**. To the extent that any cost attributable to delay is reimbursed as part of a change order, no additional claim for compensation under this Article 11 shall be allowed.

11.5 Non-Compensable Delays. The **Contractor** agrees to make no claim for, and is deemed to have included in its bid prices for the various items of the **Contract**, the extra/additional costs attributable to any delays caused by or attributable to the items set forth below. For such items, the **Contractor** shall be compensated, if at all, solely by an extension of time to complete the performance of the **Work**, in accordance with the provisions of Article 13. Such extensions of time will be granted, if at all, pursuant to the grounds set forth in Article 13.3.

11.5.1 The acts or omissions of any third parties, including but not limited to **Other Contractors**, public/ governmental bodies (other than **City Agencies**), utilities or private enterprises, who are disclosed in the **Contract Documents** or are ordinarily encountered or generally recognized as related to the **Work**;

11.5.2 Any situation which was within the contemplation of the parties at the time of entering into the **Contract**, including any delay indicated or disclosed in the **Contract Documents** or that would be generally recognized by a reasonably prudent contractor as related to the nature of the **Work**, and/or the existence of any facility or appurtenance owned, operated or maintained by any third party, as indicated or disclosed in the **Contract Documents** or ordinarily encountered or generally recognized as related to the nature of the **Work**;

11.5.3 Restraining orders, injunctions or judgments issued by a court which were caused by a Contractor's submission, action or inaction or by a Contractor's **Means and Methods of Construction**, or by third parties, unless such order, injunction or judgment was the result of an act or omission by the **City**;

11.5.4 Any labor boycott, strike, picketing, lockout or similar situation;

11.5.5 Any shortages of supplies or materials, or unavailability of equipment, required by the **Contract Work**;

11.5.6 Climatic conditions, storms, floods, droughts, tidal waves, fires, hurricanes, earthquakes, landslides or other catastrophes or acts of God, or acts of war or of the public enemy or terrorist acts, including the **City's** reasonable responses thereto; and

11.5.7 **Extra Work** which does not significantly affect the overall completion of the **Contract**, reasonable delays in the review or issuance of change orders or field orders and/or in shop drawing reviews or approvals.

11.6 Required Content of Submission of Statement of Delay Damages

11.6.1 In the verified written statement of delay damages required by Article 11.1.2, the following information shall be provided by the **Contractor**:

11.6.1.1 For each delay, the start and end dates of the claimed periods of delay and, in addition, a description of the operations that were delayed, an explanation of how they were delayed, and the reasons for the delay, including identifying the applicable act or omission of the City listed in Article 11.4.

11.6.1.2 A detailed factual statement of the claim providing all necessary dates, locations and items of **Work** affected by the claim.

11.6.1.3 The estimated amount of additional compensation sought and a breakdown of that amount into categories as described in Article 11.7.

11.6.1.4 Any additional information requested by the **Commissioner**.

11.7 Recoverable Costs

11.7.1 Delay damages may be recoverable for the following costs actually and necessarily incurred in the performance of the **Work**:

11.7.1.1 Direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits, based on time and materials records;

11.7.1.2 Necessary materials (including transportation to the **Site**), based on time and material records;

11.7.1.3 Reasonable rental value of necessary plant and equipment other than small tools, plus fuel/energy costs according to the applicable formula set forth in Articles 26.2.4 and/or 26.2.8, based on time and material records;

11.7.1.4 Additional insurance and bond costs;

11.7.1.5 Extended **Site** overhead, field office rental, salaries of field office staff, on-site project managers and superintendents, field office staff vehicles, **Project-**specific storage, field office utilities and telephone, and field office consumables;

11.7.1.6 Labor escalation costs based on actual costs;

11.7.1.7 Materials and equipment escalation costs based on applicable industry indices unless documentation of actual increased cost is provided;

11.7.1.8 Additional material and equipment storage costs based on actual documented costs and additional costs necessitated by extended manufacturer warranty periods; and

11.7.1.9 Extended home office overhead calculated based on the following formula:

(1) Subtract from the original **Contract** amount the amount earned by original contractual **Substantial Completion** date (not

including change orders);
(2) Remove 15% overhead and profit from the calculation in item (1) by dividing the results of item (1) by 1.15;
(3) Multiply the result of item (2) by 7.25% for the total home office overhead;
(4) Multiply the result of item (3) by 7.25% for the total profit; and
(5) The total extended home office overhead will be the total of items (3) and (4).

11.7.2 Recoverable Subcontractor Costs. When the **Work** is performed by a **Subcontractor**, the **Contractor** may be paid the actual and necessary costs of such subcontracted **Work** as outlined above in Articles 11.7.1.1 through 11.7.1.8, and an additional overhead of 5% of the costs outlined in Articles 11.7.1.1 through 11.7.1.3.

11.7.3 Non-Recoverable Costs. The parties agree that the **City** will have no liability for the following items and the **Contractor** agrees it shall make no claim for the following items:

11.7.3.1 Profit, or loss of anticipated or unanticipated profit, except as provided in Article 11.7.1.9;
11.7.3.2 Consequential damages, including, but not limited to, construction or bridge loans or interest paid on such loans, loss of bonding capacity, bidding opportunities, or interest in investment, or any resulting insolvency;
11.7.3.3 Indirect costs or expenses of any nature except those included in Article 11.7.1;
11.7.3.4 Direct or indirect costs attributable to performance of **Work** where the **Contractor**, because of situations or conditions within its control, hasnot progressed the **Work** in a satisfactory manner; and
11.7.3.5 Attorneys' fees and dispute and claims preparation expenses.

11.8 Any claims for delay under this Article 11 are not subject to the jurisdiction of the Contract Dispute Resolution Board pursuant to the dispute resolution process set forth in Article 27.

11.9 Any compensation provided to the **Contractor** in accordance with this Article 11 will be made pursuant to a claim filed with the **Comptroller**. Nothing in this Article 11 extendsthe time for the **Contractor** to file an action with respect to a claim within six months after **Substantial Completion** pursuant to Article 56.

ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS

12.1 During the progress of the **Work**, **Other Contractors** may be engaged in performing other work or may be awarded other contracts for additional work on this **Project**. In that event, the **Contractor** shall coordinate the **Work** to be done hereunder with the work of such **Other Contractors** and the **Contractor** shall fully cooperate with such **Other Contractors** and carefully fit its own **Work** to that provided under other contracts as may be directed by the **Engineer**. The **Contractor** shall not commit or permit any act which will interfere with the performance of work by any **Other Contractors**.

12.2 If the **Engineer** determines that the **Contractor** is failing to coordinate its **Work** with the work of **Other Contractors** as the **Engineer** has directed, then the **Commissioner** shall have the right to withhold any payments otherwise due hereunder until the **Contractor** completely complies with the **Engineer's** directions.

12.3 The **Contractor** shall notify the **Engineer** in writing if any **Other Contractor** on this **Project** is failing to coordinate its work with the **Work** of this **Contract**. If the **Engineer** finds such charges to be true, the **Engineer** shall promptly issue such directions to the **Other Contractor** with respect thereto as the situation may require. The **City** shall not, however, be liable for any damages suffered by any **Other Contractor's** failure to coordinate its work with the **Work** of this **Contract** or by reason of the **Other Contractor's** failure to promptly comply with the directions so issued by the **Engineer**, or by reason of any **Other Contractor's** default in performance, it being understood that the **City** does not guarantee the responsibility or continued efficiency of any contractor. The **Contractor** agrees to make no claim against the **City** for any damages relating to or arising out of any directions issued by the **Engineer** pursuant to this Article 12 (including but not limited to the failure of any **Other Contractor** to comply or promptly comply with such directions), or the failure of any **Other Contractor** to coordinate its work, or the default in performance of any **Other Contractor**.

12.4 The **Contractor** shall indemnify and hold the **City** harmless from any and all claims or judgments for damages and from costs and expenses to which the **City** may be subjected or which it may suffer or incur by reason of the **Contractor's** failure to comply with the **Engineer's** directions promptly; and the **Comptroller** shall have the right to exercise the powers reserved in Article 23 with respect to any claims which may be made for damages due to the **Contractor's** failure to comply with the **Engineer's** directions promptly. Insofar as the facts and **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent provided by **Law**.

12.5 Should the **Contractor** sustain any damage through any act or omission of any **Other Contractor** having a contract with the **City** for the performance of work upon the **Site** or of work which may be necessary to be performed for the proper prosecution of the **Work** to be performed hereunder, or through any act or omission of a subcontractor of such **Other Contractor**, the **Contractor** shall have no claim against the **City** for such damage, but shall have a right to recover such damage from the **Other**

12.5 **Contractor** under the provision similar to the following provisions which apply to this Contract and have been or will be inserted in the contracts with such Other Contractors:

> 12.5.1 Should any **Other Contractor** having or who shall hereafter have a contract with the **City** for the performance of work upon the **Site** sustain any damage through any act or omission of the **Contractor** hereunder or through any act or omission of any **Subcontractor** of the **Contractor**, the **Contractor** agrees to reimburse such **Other Contractor** for all such damages and to defend at its own expense any action based upon such claim and if any judgment or claim (even if the allegations of the action are without merit) against the **City** shall be allowed the **Contractor** shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith and agrees to indemnify and hold the **City** harmless from all such claims. Insofar as the facts and **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent provided by **Law**.

12.6 The **City's** right to indemnification hereunder shall in no way be diminished, waived or discharged by its recourse to assessment of liquidated damages as provided in Article 15, or by the exercise of any other remedy provided for by **Contract** or by **Law**.

ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE

13.1 If performance by the **Contractor** is delayed for a reason set forth in Article 13.3, the **Contractor** may be allowed a reasonable extension of time in conformance with this Article 13 and the **PPB**

Rules.

13.2 Any extension of time may be granted only by the **ACCO** or by the Board for the Extension of Time (hereafter "Board") (as set forth below) upon written application by the **Contractor**.

13.3 Grounds for Extension: If such application is made, the **Contractor** shall be entitled to an extension of time for delay in completion of the **Work** caused solely:

13.3.1 By the acts or omissions of the **City**, its officials, agents or employees; or

13.3.2 By the act or omissions of **Other Contractors** on this **Project**; or

13.3.3 By supervening conditions entirely beyond the control of either party hereto (such as, but not limited to, acts of God or the public enemy, excessive inclement weather, war or other national emergency making performance temporarily impossible or illegal, or strikes or labor disputes not brought about by any act or omission of the **Contractor**).

13.3.4 The **Contractor** shall, however, be entitled to an extension of time for such causes only for the number of **Days** of delay which the **ACCO** or the Board may determine to be due solely to such causes, and then only if the **Contractor** shall have strictly complied with all of the requirements of Articles 9 and 10.

13.4 The **Contractor** shall not be entitled to receive a separate extension of time for each of several causes of delay operating concurrently, but, if at all, only for the actual period of delay in completion of the **Work** as determined by the **ACCO** or the Board, irrespective of the number of causes contributing to produce such delay. If one of several causes of delay operating concurrently results from any act, fault or omission of the **Contractor** or of its **Subcontractors** or **Materialmen**, and would of itself (irrespective of the concurrent causes) have delayed the **Work**, no extension of time will be allowed for the period ofdelay resulting from such act, fault or omission.

13.5 The determination made by the **ACCO** or the Board on an application for an extension of time shall be binding and conclusive on the **Contractor**.

13.6 The **ACCO** or the Board acting entirely within their discretion may grant an application for an extension of time for causes of delay other than those herein referred.

13.7 Permitting the **Contractor** to continue with the **Work** after the time fixed for its completion has expired, or after the time to which such completion may have been extended has expired, or the making of any payment to the **Contractor** after such time, shall in no way operate as a waiver on the part of the **City** of any of its rights under this **Contract**.

13.8 Application for Extension of Time:

13.8.1 Before the **Contractor's** time extension request will be considered, the **Contractor** shall notify the **ACCO** of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the **ACCO** identifying:

13.8.1(a) The **Contractor**; the registration number; and **Project** description;

13.8.1(b) Liquidated damage assessment rate, as specified in the **Contract**;

13.8.1(c) Original total bid price;

13.8.1(d) The original **Contract** start date and completion date;

13.8.1(e) Any previous time extensions granted (number and duration); and

13.8.1(f) The extension of time requested.

13.8.2 In addition, the application for extension of time shall set forth in detail:

13.8.2(a) The nature of each alleged cause of delay in completing the **Work**;

13.8.2(b) The date upon which each such cause of delay began and ended and the number of **Days** attributable to each such cause;

13.8.2(c) A statement that the **Contractor** waives all claims except for those delineated in the application, and the particulars of any claims which the **Contractor** does not agree to waive. For time extensions for **Substantial Completion** and final completion payments, the application shall include a detailed statement of the dollar amounts of each element of claim item reserved; and

13.8.2(d) A statement indicating the **Contractor's** understanding that the time extension is granted only for purposes of permitting continuation of **Contract** performance and payment for **Work** performed and that the **City** retains its right to conduct an investigation and assess liquidated damages as appropriate in the future.

13.9 Analysis and Approval of Time Extensions:

13.9.1 For time extensions for partial payments, a written determination shall be made by the **ACCO** who may, for good and sufficient cause, extend the time for the performance of the **Contract** as follows:

13.9.1(a) If the **Work** is to be completed within six (6) months, the time for performance may be extended for sixty (60) **Days**;

13.9.1(b) If the **Work** is to be completed within less than one (1) year but more than six (6) months, an extension of ninety (90) **Days** may be granted;

13.9.1(c) If the **Contract** period exceeds one (1) year, besides the extension granted in Article 13.9.1(b), an additional thirty (30) **Days** may be granted for each multipleof six (6) months involved beyond the one (1) year period; or

13.9.1(d) If exceptional circumstances exist, the **ACCO** may extend the time for performance beyond the extensions in Articles 13.9.1(a), 13.9.1(b), and 13.9.1(c). In that event, the **ACCO** shall file with the Mayor's Office of Contract Services a written explanation of the exceptional circumstances.

13.9.2 For extensions of time for **Substantial Completion** and final completion payments, the **Engineer**, in consultation with the **ACCO**, shall prepare a written analysis of the delay (including a preliminary determination of the causes of delay, the beginning and end dates for each such cause of delay, and whether the delays are excusable under the terms of this **Contract**). The report shall be subject to review by and approval of the Board, which shall have authority to question its analysis and determinations and request additional facts or documentation. The report as reviewed and made final by the Board shall be made a part of the **Agency** contract file. Neither the report itself nor anything contained therein shall operate as a

waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

13.9.3 Approval Mechanism for Time Extensions for **Substantial Completion** or Final Completion Payments: An extension shall be granted only with the approval of the Board which is comprised of the **ACCO** of the **Agency**, the **City** Corporation Counsel, and the **Comptroller**, or their authorized representatives.

13.9.4 Neither the granting of any application for an extension of time to the **Contractor** or any **Other Contractor** on this **Project** nor the papers, records or reports related to any application for or grant of an extension of time or determination related thereto shall be referred to or offered in evidence by the **Contractor** or its attorneys in any action or proceeding.

13.10 No Damage for Delay: The **Contractor** agrees to make no claim for damages for delay in the performance of this **Contract** occasioned by any act or omission to act of the **City** or any of its representatives, except as provided for in Article 11.

ARTICLE 14. COMPLETION AND FINAL ACCEPTANCE OF THE WORK

14.1 Date for **Substantial Completion**: The **Contractor** shall substantially complete the **Work** within the time fixed in Schedule A of the General Conditions, or within the time to which such **Substantial Completion** may be extended.

14.2 Determining the Date of **Substantial Completion**: The **Work** will be deemed to be substantially complete when the two conditions set forth below have been met.

14.2.1 Inspection: The **Engineer** or **Resident Engineer**, as applicable, has inspected the **Work** and has made a written determination that it is substantially complete.

14.2.2 Approval of **Final Approved Punch List** and Date for **Final Acceptance**: Following inspection of the **Work**, the **Engineer/Resident Engineer** shall furnish the **Contractor** with a final punch list, specifying all items of **Work** to be completed and proposing dates for the completion of each specified item of **Work**. The **Contractor** shall then submit in writing to the **Engineer/Resident Engineer** within ten (10) **Days** of the **Engineer/Resident Engineer** furnishing the final punch list either acceptance of the dates or proposed alternative dates for the completion of each specified item of **Work**. If the **Contractor** neither accepts the dates nor proposes alternative dates within ten (10) **Days**, the schedule proposed by the **Engineer/Resident Engineer** shall be deemed accepted. If the **Contractor** proposes alternative dates, then, within a reasonable time after receipt, the **Engineer/Resident Engineer**, in a written notification to the **Contractor**, shall approve the **Contractor's** completion dates or, if they are unable to agree, the **Engineer/Resident Engineer** shall establish dates for the completion of each item of **Work**. The latest completion date specified shall be the date for **Final Acceptance** of the **Work**.

14.3 Date of **Substantial Completion**. The date of approval of the **Final Approved Punch List**, shall be the date of **Substantial Completion**. The date of approval of the **Final Approved Punch List** shall be either (a) if the **Contractor** approves the final punch list and proposed dates for completion furnished by the **Engineer/Resident Engineer**, the date of the **Contractor**'s approval; or (b) if the **Contractor** neither accepts the dates nor proposes alternative dates, ten (10) **Days** after the **Engineer/Resident Engineer** furnishes the **Contractor** with a final punch list and proposed dates for completion; or (c) if the **Contractor** proposes alternative dates, the date that the **Engineer/Resident Engineer** sends written notification to the

Contractor either approving the **Contractor**'s proposed alternative dates or establishing dates for the completion for each item of **Work**.

14.4 Determining the Date of **Final Acceptance**: The **Work** will be accepted as final and complete as of the date of the **Engineer**'s/**Resident Engineer**'s inspection if, upon such inspection, the **Engineer/Resident Engineer** finds that all items on the **Final Approved Punch List** are complete andno further **Work** remains to be done. The **Commissioner** will then issue a written determination of **Final Acceptance**.

14.5 Request for Inspection: Inspection of the **Work** by the **Engineer/Resident Engineer** for the purpose of **Substantial Completion** or **Final Acceptance** shall be made within fourteen (14) **Days** after receipt of the **Contractor's** written request therefor.

14.6 Request for Re-inspection: If upon inspection for the purpose of **Substantial Completion** or **Final Acceptance**, the **Engineer/Resident Engineer** determines that there are items of **Work** still to be performed, the **Contractor** shall promptly perform them and then request a re-inspection. If upon re-inspection, the **Engineer/Resident Engineer** determines that the **Work** is substantially complete or finally accepted, the date of such re-inspection shall be the date of **Substantial Completion** or **Final Acceptance**. Re-inspection by the **Engineer/Resident Engineer** shall be made within ten (10) **Days** after receipt of the **Contractor's** written request therefor.

14.7 Initiation of Inspection by the **Engineer/Resident Engineer**: If the **Contractor** does not request inspection or re-inspection of the **Work** for the purpose of **Substantial Completion** or **Final Acceptance**, the **Engineer/Resident Engineer** may initiate such inspection or re-inspection.

ARTICLE 15. LIQUIDATED DAMAGES

15.1 In the event the **Contractor** fails to substantially complete the **Work** within the time fixed for such **Substantial Completion** in Schedule A of the General Conditions, plus authorized time extensions, or if the **Contractor**, in the sole determination of the **Commissioner**, has abandoned the **Work**, the **Contractor** shall pay to the **City** the sum fixed in Schedule A of the General Conditions, for each and every **Day** that the time consumed in substantially completing the **Work** exceeds the time allowed therefor; which said sum, in view of the difficulty of accurately ascertaining the loss which the **City** will suffer by reason of delay in the **Substantial Completion** of the **Work** hereunder, is hereby fixed and agreed as the liquidated damages that the **City** will suffer by reason of such delay, and not as a penalty. This Article 15 shall also apply to the **Contractor** whether or not the **Contractor** is defaulted pursuant to Chapter X of this **Contract**. Neither the failure to assess liquidated damages nor the granting of any time extension shall operate as a waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

15.2 Liquidated damages received hereunder are not intended to be nor shall they be treated as either a partial or full waiver or discharge of the **City's** right to indemnification, or the **Contractor's** obligation to indemnify the **City**, or to any other remedy provided for in this **Contract** or by **Law**.

15.3 The **Commissioner** may deduct and retain out of the monies which may become due hereunder, the amount of any such liquidated damages; and in case the amount which may become due hereunder shall be less than the amount of liquidated damages suffered by the **City**, the **Contractor** shall be liable to pay the difference.

ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION

16.1 Unless otherwise provided for in the **Specifications**, the **Commissioner** may take over, use, occupy or operate any part of the **Work** at any time prior to **Final Acceptance**, upon written notification to the **Contractor**. The **Engineer** or **Resident Engineer**, as applicable, shall inspect the part of the**Work** to be taken over, used, occupied, or operated, and will furnish the **Contractor** with a written statement of the **Work**, if any, which remains to be performed on such part. The **Contractor** shall not object to, nor interfere with, the **Commissioner's** decision to exercise the rights granted by Article 16. In the event the **Commissioner** takes over, uses, occupies, or operates any part of the **Work:**

16.1.1 the **Engineer/Resident Engineer** shall issue a written determination of **Substantial Completion** with respect to such part of the **Work**;

16.1.2 the **Contractor** shall be relieved of its absolute obligation to protect such part of the unfinished **Work** in accordance with Article 7;

16.1.3 the **Contractor's** guarantee on such part of the **Work** shall begin on the date of such use by the **City**; and;

16.1.4 the **Contractor** shall be entitled to a return of so much of the amount retained in accordance with Article 21 as it relates to such part of the **Work**, except so much thereof as may be retained under Articles 24 and 44.

CHAPTER IV: SUBCONTRACTS AND ASSIGNMENTS

ARTICLE 17. SUBCONTRACTS

17.1 The **Contractor** shall not make subcontracts totaling an amount more than the percentage of the total **Contract** price fixed in Schedule A of the General Conditions, without prior written permission from the **Commissioner**. All subcontracts made by the **Contractor** shall be in writing. No **Work** may be performed by a **Subcontractor** prior to the **Contractor** entering into a written subcontract with the **Subcontractor** and complying with the provisions of this Article 17.

17.2 Before making any subcontracts, the **Contractor** shall submit a written statement to the **Commissioner** giving the name and address of the proposed **Subcontractor**; the portion of the **Work** and materials which it is to perform and furnish; the cost of the subcontract; the VENDEX questionnaire if required; the proposed subcontract if requested by the **Commissioner**; and any other information tending to prove that the proposed **Subcontractor** has the necessary facilities, skill, integrity, past experience, and financial resources to perform the **Work** in accordance with the terms and conditions of this **Contract**.

17.3 In addition to the requirements in Article 17.2, **Contractor** is required to list the **Subcontractor** in the web based Subcontractor Reporting System through the City's Payee Information Portal (PIP), available at www.nyc.gov/pip.[1]For each **Subcontractor** listed, **Contractor** is required to provide the following information: maximum contract value, description of **Subcontractor's** Work, start and end date of the subcontract and identification of the **Subcontractor**'s industry. Thereafter, **Contractor** will be required to report in the system the payments made to each **Subcontractor** within 30 days of making the

[1] In order to use the new system, a PIP account will be required. Detailed instructions on creating a PIP account and using the new system are also available at www.nyc.gov/pip. Additional assistance with PIP may be obtained by emailing the Financial Information Services Agency Help Desk at pip@fisa.nyc.gov.

payment. If any of the required information changes throughout the Term of the **Contract**, **Contractor** will be required to revise the information in the system.

Failure of the **Contractor** to list a **Subcontractor** and/or to report **Subcontractor** payments in a timely fashion may result in the **Commissioner** declaring the **Contractor** in default of the **Contract** and will subject **Contractor** to liquidated damages in the amount of $100 per day for each day that the **Contractor** fails to identify a **Subcontractor** along with the required information about the **Subcontractor** and/or fails to report payments to a **Subcontractor**, beyond the time frames set forth herein or in the notice from the **City**. Article 15 shall govern the issue of liquidated damages.

17.4 If an approved **Subcontractor** elects to subcontract any portion of its subcontract, the proposed sub-subcontract shall be submitted in the same manner as directed above.

17.5 The **Commissioner** will notify the **Contractor** in writing whether the proposed **Subcontractor** is approved. If the proposed **Subcontractor** is not approved, the **Contractor** may submit another proposed **Subcontractor** unless the **Contractor** decides to do the **Work**. No **Subcontractor** shall be permitted to enter or perform any work on the **Site** unless approved.

17.6 Before entering into any subcontract hereunder, the **Contractor** shall provide the proposed **Subcontractor** with a complete copy of this document and inform the proposed **Subcontractor** fully and completely of all provisions and requirements of this **Contract** relating either directly or indirectly to the **Work** to be performed and the materials to be furnished under such subcontract, and every such **Subcontractor** shall expressly stipulate that all labor performed and materials furnished by the **Subcontractor** shall strictly comply with the requirements of this **Contract.**

17.7 Documents given to a prospective **Subcontractor** for the purpose of soliciting the **Subcontractor's** bid shall include either a copy of the bid cover or a separate information sheet setting forth the **Project** name, the **Contract** number (if available), the **Agency** (as noted in Article 2.1.6), and the **Project's** location.

17.8 The **Commissioner's** approval of a **Subcontractor** shall not relieve the **Contractor** of any of its responsibilities, duties, and liabilities hereunder. The **Contractor** shall be solely responsible to the **City** for the acts or defaults of its **Subcontractor** and of such **Subcontractor's** officers, agents, and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the **Contractor** to the extent of its subcontract.

17.9 If the **Subcontractor** fails to maintain the necessary facilities, skill, integrity, past experience, and financial resources (other than due to the **Contractor's** failure to make payments where required) to perform the **Work** in accordance with the terms and conditions of this **Contract**, the **Contractor** shall promptly notify the **Commissioner** and replace such **Subcontractor** with a newly approved **Subcontractor** in accordance with this Article 17.

17.10 The **Contractor** shall be responsible for ensuring that all **Subcontractors** performing **Work** at the **Site** maintain all insurance required by **Law**.

17.11 The **Contractor** shall promptly, upon request, file with the **Engineer** a conformed copy of the subcontract and its cost. The subcontract shall provide the following:

17.11.1 Payment to **Subcontractors**: The agreement between the **Contractor** and its **Subcontractor** shall contain the same terms and conditions as to method of payment for **Work**, labor, and materials, and as to retained percentages, as are contained in this **Contract**.

17.11.2 Prevailing Rate of Wages: The agreement between the **Contractor** and its **Subcontractor** shall include the prevailing wage rates and supplemental benefits to be paid in accordance with Labor Law Section 220.

17.11.3 Section 6-123 of the Administrative Code: Pursuant to the requirements of Section 6-123 of the Administrative Code, every agreement between the **Contractor** and a **Subcontractor** in excess of fifty thousand ($50,000) dollars shall include a provision that the **Subcontractor** shall not engage in any unlawful discriminatory practice as defined in Title VIII of the Administrative Code (Section 8-101 *et seq*.).

17.11.4 All requirements required pursuant to federal and/or state grant agreement(s), if applicable to the **Work**.

17.12 The **Commissioner** may deduct from the amounts certified under this **Contract** to be due to the **Contractor**, the sum or sums due and owing from the **Contractor** to the **Subcontractors** according to the terms of the said subcontracts, and in case of dispute between the **Contractor** and its **Subcontractor**, or **Subcontractors**, as to the amount due and owing, the **Commissioner** may deduct and withhold from the amounts certified under this **Contract** to be due to the **Contractor** such sum or sums as may be claimed by such **Subcontractor**, or **Subcontractors**, in a sworn affidavit, to be due and owing until such time as such claim or claims shall have been finally resolved.

17.13 On contracts where performance bonds and payment bonds are executed, the **Contractor** shall include on each requisition for payment the following data: **Subcontractor's** name, value of the subcontract, total amount previously paid to **Subcontractor** for **Work** previously requisitioned, and the amount, including retainage, to be paid to the **Subcontractor** for **Work** included in the requisition.

17.14 On **Contracts** where performance bonds and payment bonds are not executed, the **Contractor** shall include with each requisition for payment submitted hereunder, a signed statement from each and every **Subcontractor** and/or **Materialman** for whom payment is requested in such requisition. Such signed statement shall be on the letterhead of the **Subcontractor** and/or **Materialman** for whom payment is requested and shall (i) verify that such **Subcontractor** and/or **Materialman** has been paid in full for all **Work** performed and/or material supplied to date, exclusive of any amount retained and any amount included on the current requisition, and (ii) state the total amount of retainage to date, exclusive of any amount retained on the current requisition.

ARTICLE 18. ASSIGNMENTS

18.1 The **Contractor** shall not assign, transfer, convey or otherwise dispose of this **Contract**, or the right to execute it, or the right, title or interest in or to it or any part thereof, or assign, by power of attorney or otherwise any of the monies due or to become due under this **Contract**, unless the previous written consent of the **Commissioner** shall first be obtained thereto, and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments.

18.2 Such assignment, transfer, conveyance or other disposition of this **Contract** shall not be valid until filed in the office of the **Commissioner** and the **Comptroller**, with the written consent of the **Commissioner** endorsed thereon or attached thereto.

18.3 Failure to obtain the previous written consent of the **Commissioner** to such an assignment,

transfer, conveyance or other disposition, may result in the revocation and annulment of this **Contract**. The **City** shall thereupon be relieved and discharged from any further liability to the **Contractor**, its assignees, transferees or sublessees, who shall forfeit and lose all monies therefor earned under the **Contract**, except so much as may be required to pay the **Contractor's** employees.

18.4 The provisions of this clause shall not hinder, prevent, or affect an assignment by the **Contractor** for the benefit of its creditors made pursuant to the **Laws** of the State of New York.

18.5 This **Contract** may be assigned by the **City** to any corporation, agency or instrumentality having authority to accept such assignment.

CHAPTER V: CONTRACTOR'S SECURITY AND GUARANTEE

ARTICLE 19. SECURITY DEPOSIT

19.1 If performance and payment bonds are required, the **City** shall retain the bid security to ensure that the successful bidder executes the **Contract** and furnishes the required payment and performance security within ten (10) **Days** after notice of the award of the **Contract**. If the successful bidder fails to execute the **Contract** and furnish the required payment and performance security, the **City** shall retain such bid security as set forth in the Information for Bidders. If the successful bidder executes the **Contract** and furnishes the required payment and performance security, the **City** shall return the bid security within a reasonable time after the furnishing of such bonds and execution of the **Contract** by the **City**.

19.2 If performance and payment bonds are not required, the bid security shall be retained by the **City** as security for the **Contractor**'s faithful performance of the **Contract**. If partial payments are provided, the bid security will be returned to the **Contractor** after the sum retained under Article 21 equals the amount of the bid security, subject to other provisions of this **Contract**. If partial payments are not provided, the bid security will be released when final payment is certified by the **City** for payment.

19.3 If the **Contractor** is declared in default under Article 48 prior to the return of the deposit, or if any claim is made such as referred to in Article 23, the amount of such deposit, or so much thereof as the **Comptroller** may deem necessary, may be retained and then applied by the **Comptroller**:

19.3.1 To compensate the **City** for any expense, loss or damage suffered or incurred by reason of or resulting from such default, including the cost of re-letting and liquidated damages; or

19.3.2 To indemnify the **City** against any and all claims.

ARTICLE 20. PAYMENT GUARANTEE

20.1 On **Contracts** where one hundred (100%) percent performance bonds and payment bonds are executed, this Article 20 does not apply.

20.2 In the event the terms of this **Contract** do not require the **Contractor** to provide a payment bond or where the **Contract** does not require a payment bond for one hundred (100%) percent of the **Contract** price, the **City** shall, in accordance with the terms of this Article 20, guarantee payment of all lawful claims for:

20.2.1 Wages and compensation for labor performed and/or services rendered; and

20.2.2 Materials, equipment, and supplies provided, whether incorporated into the **Work** or not, when demands have been filed with the **City** as provided hereinafter by any person, firm, or corporation which furnished labor, material, equipment, supplies, or any combination thereof, in connection with the **Work** performed hereunder (hereinafter referred to as the "beneficiary") at the direction of the **City** or the **Contractor**.

20.3 The provisions of Article 20.2 are subject to the following limitations and conditions:

20.3.1 If the **Contractor** provides a payment bond for a value that is less than one hundred (100%) percent of the value of the **Contract Work**, the payment bond provided by the **Contractor** shall be primary (and non-contributing) to the payment guarantee provided under this Article 20.

20.3.2 The guarantee is made for the benefit of all beneficiaries as defined in Article 20.2 provided that those beneficiaries strictly adhere to the terms and conditions of Article 20.3.4 and 20.3.5.

20.3.3 Nothing in this Article 20 shall prevent a beneficiary providing labor, services or material for the **Work** from suing the **Contractor** for any amounts due and owing the beneficiary by the **Contractor**.

20.3.4 Every person who has furnished labor or material, to the **Contractor** or to a **Subcontractor** of the **Contractor**, in the prosecution of the **Work** and who has not been paid in full therefor before the expiration of a period of ninety (90) **Days** after the date on which the last of the labor was performed or material was furnished by him/her for which the claim is made, shall have the right to sue on this payment guarantee in his/her own name for the amount, or the balance thereof, unpaid at the time of commencement of the action; provided, however, that a person having a direct contractual relationship with a **Subcontractor** of the **Contractor** but no contractual relationship express or implied with the **Contractor** shall not have a right of action upon the guarantee unless he/she shall have given written notice to the **Contractor** within one hundred twenty (120) **Days** from the date on which the last of the labor was performed or the last of the material was furnished, for which his/her claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the material was furnished or for whom the labor was performed. The notice shall be served by delivering the same personally to the **Contractor** or by mailing the same by registered mail, postage prepaid, in an envelope addressed to the **Contractor** at any place where it maintains an office or conducts its business; provided, however, that where such notice is actually received by the **Contractor** by other means,such notice shall be deemed sufficient.

20.3.5 Except as provided in Labor Law Section 220-g, no action on this payment guarantee shall be commenced after the expiration of the one-year limitations period set forth in Section 137(4)(b) of the State Finance Law.

20.3.6 The **Contractor** shall promptly forward to the **City** any notice or demand received pursuant to Article 20.3.4. The **Contractor** shall inform the **City** of any defenses to the notice or demand and shall forward to the **City** any documents the **City** requests concerning the notice or demand.

20.3.7 All demands made against the **City** by a beneficiary of this payment guarantee shall be presented to the **Engineer** along with all written documentation concerning the demand which the **Engineer** deems reasonably appropriate or necessary, which may include, but shall not be

limited to: the subcontract; any invoices presented to the **Contractor** for payment; the notarized statement of the beneficiary that the demand is due and payable, that a request for payment has been made of the **Contractor** and that the demand has not been paid by the **Contractor** within the time allowed for such payment by the subcontract; and copies of any correspondence between the beneficiary and the **Contractor** concerning such demand. The **City** shall notify the **Contractor** that a demand has been made. The **Contractor** shall inform the **City** of any defenses to the demand and shall forward to the **City** any documents the **City** requests concerning the demand.

20.3.8 The **City** shall make payment only if, after considering all defenses presented by the **Contractor**, it determines that the payment is due and owing to the beneficiary making the demand.

20.3.9 No beneficiary shall be entitled to interest from the **City**, or to any other costs, including, but not limited to, attorneys' fees, except to the extent required by State Finance Law Section 137.

20.3.10

20.4 Upon the receipt by the **City** of a demand pursuant to this Article 20, the **City** may withhold from any payment otherwise due and owing to the **Contractor** under this **Contract** an amount sufficient to satisfy the demand.

20.4.1 In the event the **City** determines that the demand is valid, the **City** shall notify the **Contractor** of such determination and the amount thereof and direct the **Contractor** to immediately pay such amount to the beneficiary. In the event the **Contractor**, within seven (7) **Days** of receipt of such notification from the **City**, fails to pay the beneficiary, such failure shall constitute an automatic and irrevocable assignment of payment by the **Contractor** to the beneficiary for the amount of the demand determined by the **City** to be valid. The **Contractor**, without further notification or other process, hereby gives its unconditional consent to such assignment of payment to the beneficiary and authorizes the **City**, on its behalf, to take all necessary actions to implement such assignment of payment, including without limitation the execution of any instrument or documentation necessary to effectuate such assignment.

20.4.2 In the event that the amount otherwise due and owing to the **Contractor** by the **City** is insufficient to satisfy such demand, the **City** may, at its option, require payment from the **Contractor** of an amount sufficient to cover such demand and exercise any other right to require or recover payment which the **City** may have under **Law** or **Contract**.

20.4.3 In the event the **City** determines that the demand is invalid, any amount withheld pending the **City**'s review of such demand shall be paid to the **Contractor**; provided, however, no lien has been filed. In the event a claim or an action has been filed, the terms and conditions set forth in Article 23 shall apply. In the event a lien has been filed, the parties will be governed by the provisions of the Lien Law of the State of New York.

20.5 The provisions of this Article 20 shall not prevent the **City** and the **Contractor** from resolving disputes in accordance with the **PPB** Rules, where applicable.

20.6 In the event the **City** determines that the beneficiary is entitled to payment pursuant to this Article 20, such determination and any defenses and counterclaims raised by the **Contractor** shall be taken into account in evaluating the **Contractor's** performance.

20.7 Nothing in this Article 20 shall relieve the **Contractor** of the obligation to pay the claims of all

persons with valid and lawful claims against the **Contractor** relating to the **Work**.

20.8 The **Contractor** shall not require any performance, payment or other bonds of any **Subcontractor** if this **Contract** does not require such bonds of the **Contractor**.

20.9 The payment guarantee made pursuant to this Article 20 shall be construed in a manner consistent with Section 137 of the State Finance Law and shall afford to persons furnishing labor or materials to the **Contractor** or its **Subcontractors** in the prosecution of the **Work** under this **Contract** all of the rights and remedies afforded to such persons by such section, including but not limited to, the right to commence an action against the **City** on the payment guarantee provided by this Article 20 within the one-year limitations period set forth in Section 137(4)(b).

ARTICLE 21. RETAINED PERCENTAGE

21.1 If this **Contract** requires one hundred (100%) percent performance and payment security, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, five (5%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.2 If this **Contract** does not require one hundred (100%) percent performance and payment security and if the price for which this **Contract** was awarded does not exceed one million ($1,000,000) dollars, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, five (5%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.3 If this **Contract** does not require one hundred (100%) percent performance and payment security and if the price for which this **Contract** was awarded exceeds one million ($1,000,000) dollars, then as further security for the faithful performance of this **Contract,** the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, up to ten (10%) percent of the value of **Work** certified for payment in each partial payment voucher. The percentage to be retained is set forth in Schedule A of the General Conditions.

ARTICLE 22. INSURANCE

22.1 Types of Insurance: The **Contractor** shall procure and maintain the following types of insurance if, and as indicated, in Schedule A of the General Conditions (with the minimum limits and special conditions specified in Schedule A). Such insurance shall be maintained from the date the **Contractor** is required to provide Proof of Insurance pursuant to Article 22.3.1 through the date of completion of all required **Work** (including punch list work as certified in writing by the **Resident Engineer**), except for insurance required pursuant to Article 22.1.4, which may terminate upon **Substantial Completion** of the **Contract**. All insurance shall meet the requirements set forth in this Article 22. Wherever this Article requires that insurance coverage be "at least as broad" as a specified form (including all ISO forms), there is no obligation that the form itself be used, provided that the **Contractor** can demonstrate that the alternative form or endorsement contained in its policy provides coverage at least as broad as the specified form.

22.1.1 Commercial General Liability Insurance: The **Contractor** shall provide Commercial General Liability Insurance covering claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this **Contract**. Coverage under this insurance shall be at least as broad as that provided by the latest edition of Insurance

Services Office ("ISO") Form CG 0001. Such insurance shall be "occurrence" based rather than "claims-made" and include, without limitation, the following types of coverage: premises operations; products and completed operations; contractual liability (including the tort liability of another assumed in a contract); broad form property damage; independent contractors; explosion, collapse and underground (XCU); construction means and methods; and incidental malpractice. Such insurance shall contain a "per project" aggregate limit, as specified in Schedule A, that applies separately to operations under this **Contract**.

22.1.1(a) Such Commercial General Liability Insurance shall name the **City** as an Additional Insured. Coverage for the City shall specifically include the **City's** officials and employees, be at least as broad as the latest edition of ISO Form CG 20 10 and provide completed operations coverage at least as broad as the latest edition of ISO Form CG 20 37.

22.1.1(b) Such Commercial General Liability Insurance shall name all other entities designated as additional insureds in Schedule A but only for claims arising from the **Contractor's** operations under this **Contract**, with coverage at least as broad as the latest edition of ISO Form CG 20 26.

22.1.1(c) If the **Work** requires a permit from the Department of Buildings pursuant to 1 RCNY Section 101-08, the **Contractor** shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08 or greater limits required by the Agency in accordance with Schedule A. If the **Work** does not require such a permit, the minimum limits shall be those provided for in Schedule A.

22.1.1(d) If any of the **Work** includes repair of a waterborne vessel owned by or to be delivered to the **City**, such Commercial General Liability shall include, or be endorsed to include, Ship Repairer's Legal Liability Coverage to protect against, without limitation, liability arising from navigation of such vessels prior to delivery to and acceptance by the **City**.

22.1.2 Workers' Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance: The **Contractor** shall provide, and shall cause its **Subcontractors** to provide, Workers Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance in accordance with the **Laws** of the State of New York on behalf of all employees providing services under this **Contract** (except for those employees, if any, for which the **Laws** require insurance only pursuant to Article 22.1.3).

22.1.3 United States Longshoremen's and Harbor Workers Act and/or Jones Act Insurance: If specified in Schedule A of the General Conditions or if required by **Law**, the **Contractor** shall provide insurance in accordance with the United States Longshoremen's and Harbor Workers Act and/or the Jones Act, on behalf of all qualifying employees providing services under this **Contract**.

22.1.4 Builders Risk Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall provide Builders Risk Insurance on a completed value form for the total value of the **Work** through **Substantial Completion** of the **Work** in its entirety. Such insurance shall be provided on an All Risk basis and include coverage, without limitation, for windstorm (including named windstorm), storm surge, flood and earth movement. Unless waived by the **Commissioner**, it shall include coverage for ordinance and law, demolition and increased costs of construction, debris removal, pollutant clean up and removal, and expediting costs. Such insurance shall cover, without limitation, (a) all buildings and/or structures involved in the

Work, as well as temporary structures at the **Site**, and (b) any property that is intended to become a permanent part of such building or structure, whether such property is on the **Site**, in transit or in temporary storage. Policies shall name the **Contractor** as Named Insured and list the **City** as both an Additional Insuredand a Loss Payee as its interest may appear.

22.1.4(a) Policies of such insurance shall specify that, in the event a loss occurs at an occupied facility, occupancy of such facility is permitted without the consent of the issuing insurance company.

22.1.4(b) Such insurance may be provided through an Installation Floater, at the **Contractor's** option, if it otherwise conforms with the requirements of this Article 22.1.4.

22.1.5 Commercial Automobile Liability Insurance: The **Contractor** shall provide Commercial Automobile Liability Insurance for liability arising out of ownership, maintenance or use of any owned (if any), non-owned and hired vehicles to be used in connection with this **Contract**. Coverage shall be at least as broad as the latest edition of ISO Form CA0001. If vehicles are used for transporting hazardous materials, the Automobile Liability Insurance shall be endorsed to provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90.

22.1.6 Contractors Pollution Liability Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work**to maintain, Contractors Pollution Liability Insurance covering bodily injury and property damage. Such insurance shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants (including asbestos), including any loss, cost or expense incurred as a result of any cleanup of pollutants (including asbestos) or in the investigation, settlement or defense of any claim, action, or proceedings arising from the operations under this **Contract**. Such insurance shall be in the **Contractor's** name and list the **City** as an Additional Insured and any other entity specified in Schedule A. Coverage shall include, without limitation, (a) loss of use of damaged property or of property that has not been physically injured, (b) transportation, and (c) non- owned disposal sites.

22.1.6(a) Coverage for the **City** as Additional Insured shall specifically include the **City's** officials and employees and be at least as broad as provided to the **Contractor** for this **Project**.

22.1.6(b) If such insurance is written on a claims-made policy, such policy shall have a retroactive date on or before the effective date of this **Contract**, and continuous coverage shall be maintained, or an extended discovery period exercised, for a period of not less than three (3) years from the time the **Work** under this **Contract** is completed.

22.1.7 Marine Insurance:

22.1.7(a) Marine Protection and Indemnity Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the**Subcontractor** doing such Work to maintain, Marine Protection and Indemnity Insurance with coverage at least as broad as Form SP-23. The insurance shall provide coverage for the **Contractor** or **Subcontractor** (whichever is doing this **Work**) and for the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured for bodily injury and property damage arising from marine operations under this

Contract. Coverage shall include, without limitation, injury or death of crew members (if not fully provided through other insurance), removal of wreck, damage to piers, wharves and other fixed or floating objects and loss of or damage to any other vessel or craft, or to property on such other vessel or craft.

22.1.7(b) Hull and Machinery Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Hull and Machinery Insurance with coverage for the **Contractor** or **Subcontractor** (whichever is doing this Work) and for the **City** (together with its officials and employees) as Additional Insured at least as broad as the latest edition of American Institute Tug Form for all tugs used under this **Contract** and Collision Liability at least as broad as the latest edition of American Institute Hull Clauses.

22.1.7(c) Marine Pollution Liability Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the**Subcontractor** doing such Work to maintain, Marine Pollution Liability Insurance covering itself (or the Subcontractor doing such Work) as Named Insured and the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured. Coverage shall be at least as broad as that provided by the latest edition of Water Quality Insurance Syndicate Form and include, without limitation, liability arising from the discharge or substantial threat ofa discharge of oil, or from the release or threatened release of a hazardous substance including injury to, or economic losses resulting from, the destruction of or damage toreal property, personal property or natural resources.

22.1.8 The **Contractor** shall provide such other types of insurance, at such minimum limits and with such conditions, as are specified in Schedule A of the General Conditions.

22.2 General Requirements for Insurance Coverage and Policies:

22.2.1 All required insurance policies shall be maintained with companies that may lawfully issue the required policy and have an A.M. Best rating of at least A-/VII or a Standard and Poor's rating of at least A, unless prior written approval is obtained from the **City** Corporation Counsel.

22.2.2 The **Contractor** shall be solely responsible for the payment of all premiums for all required policies and all deductibles and self-insured retentions to which such policies are subject, whether or not the **City** is an insured under the policy.

22.2.3 In his/her sole discretion, the **Commissioner** may, subject to the approval of the **Comptroller** and the **City** Corporation Counsel, accept Letters of Credit and/or custodial accounts in lieu of required insurance.

22.2.4 The **City's** limits of coverage for all types of insurance required pursuant to Schedule A of the General Conditions shall be the greater of (i) the minimum limits set forth in Schedule A or (ii) the limits provided to the **Contractor** as Named Insured under all primary, excess, and umbrella policies of that type of coverage.

22.2.5 The **Contractor** may satisfy its insurance obligations under this Article 22 through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.

22.2.6 Policies of insurance provided pursuant to this Article 22 shall be primary and non-contributing to any insurance or self-insurance maintained by the **City**.

22.3 Proof of Insurance:

22.3.1 For all types of insurance required by Article 22.1 and Schedule A, except for insurance required by Articles 22.1.4 and 22.1.7, the **Contractor** shall file proof of insurance in accordance with this Article 22.3 within ten (10) **Days** of award. For insurance provided pursuant to Articles 22.1.4 and 22.1.7, proof shall be filed by a date specified by the **Commissioner** or ten (10) **Days** prior to the commencement of the portion of the **Work** covered by such policy, whichever is earlier.

22.3.2 For Workers' Compensation Insurance provided pursuant to Article 22.1.2, the **Contractor** shall submit one of the following forms: C-105.2 Certificate of Workers' Compensation Insurance; U-26.3 - State Insurance Fund Certificate of Workers' Compensation Insurance; Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. For Disability Benefits Insurance provided pursuant to Article 22.1.2, the Contractor shall submit DB-120.1 - Certificate Of Insurance Coverage Under The NYS Disability Benefits Law, Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. ACORD forms are not acceptable.

22.3.3 For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the **Contractor** shall submit one or more Certificates of Insurance on forms acceptable to the **Commissioner**. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the **City** and any other entity specified in Schedule A is an Additional Insured thereunder; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the City is an Additional Insured thereunder; (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number); and (e) the number assigned to the **Contract** by the **City**. All such Certificates of Insurance shall be accompanied by either a duly executed "Certification by Insurance Broker or Agent" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

22.3.4 Documentation confirming renewals of insurance shall be submitted to the **Commissioner** prior to the expiration date of coverage of policies required under this **Contract**. Such proofs of insurance shall comply with the requirements of Articles 22.3.2 and 22.3.3.

22.3.5 The **Contractor** shall be obligated to provide the **City** with a copy of any policy of insurance provided pursuant to this Article 22 upon the demand for such policy by the **Commissioner** or the **City** Corporation Counsel.

22.4 Operations of the **Contractor**:

22.4.1 The **Contractor** shall not commence the **Work** unless and until all required certificates have been submitted to and accepted by the **Commissioner**. Acceptance by the

Commissioner of a certificate does not excuse the **Contractor** from securing insurance consistent with all provisions of this Article 22 or of any liability arising from its failure todo so.

22.4.2 The **Contractor** shall be responsible for providing continuous insurance coverage in the manner, form, and limits required by this **Contract** and shall be authorized to perform **Work** only during the effective period of all required coverage.

22.4.3 In the event that any of the required insurance policies lapse, are revoked, suspended or otherwise terminated, for whatever cause, the **Contractor** shall immediately stop all **Work**, and shall not recommence **Work** until authorized in writing to do so by the **Commissioner**. Upon quitting the **Site**, except as otherwise directed by the **Commissioner**, the **Contractor** shall leave all plant, materials, equipment, tools, and supplies on the **Site**. **Contract** time shall continue to run during such periods and no extensions of time will be granted. The **Commissioner** may also declare the **Contractor** in default for failure to maintain required insurance.

22.4.4 In the event the **Contractor** receives notice, from an insurance company or other person, that any insurance policy required under this Article 22 shall be cancelled or terminated (or has been cancelled or terminated) for any reason, the **Contractor** shall immediately forward a copy of such notice to both the **Commissioner** and the New York City Comptroller, attn: Office of Contract Administration, Municipal Building, One Centre Street, room 1005, New York, New York 10007. Notwithstanding the foregoing, the**Contractor** shall ensure that there is no interruption in any of the insurance coverage required under this Article 22.

22.4.5 Where notice of loss, damage, occurrence, accident, claim or suit is required under an insurance policy maintained in accordance with this Article 22, the **Contractor** shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this **Contract** (including notice to Commercial General Liability insurance carriers for events relating to the **Contractor**'s own employees) no later than 20 days after such event. For any policy where the **City** is an Additional Insured, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. The **Contractor** shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

22.4.6 In the event of any loss, accident, claim, action, or other event that does or can give rise to a claim under any insurance policy required under this Article 22, the **Contractor** shall at all times fully cooperate with the **City** with regard to such potential or actual claim.

22.5 **Subcontractor** Insurance: In the event the **Contractor** requires any **Subcontractor** to procure insurance with regard to any operations under this **Contract** and requires such **Subcontractor** to name the **Contractor** as an **Additional Insured** thereunder, the **Contractor** shall ensure that the **Subcontractor** name the **City**, including its officials and employees, as an Additional Insured with coverage at least as broad as the most recent edition of ISO Form CG 20 26.

22.6 Wherever reference is made in Article 7 or this Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth in Schedule A of the General Conditions. In the event no address is set forth in Schedule A, such documents

are to be sent to the **Commissioner's** address as provided elsewhere in this **Contract**.

22.7 Apart from damages or losses covered by insurance provided pursuant to Articles 22.1.2, 22.1.3, or 22.1.5, the **Contractor** waives all rights against the **City**, including its officials and employees, for any damages or losses that are covered under any insurance required under this Article 22 (whether or not such insurance is actually procured or claims are paid thereunder) or any other insurance applicableto the operations of the **Contractor** and/or its employees, agents, or **Subcontractors**.

22.8 In the event the **Contractor** utilizes a self-insurance program to satisfy any of the requirements of this Article 22, the **Contractor** shall ensure that any such self-insurance program provides the **City** with all rights that would be provided by traditional insurance under this Article 22, including but not limited to the defense and indemnification obligations that insurers are required to undertake in liability policies.

22.9 Materiality/Non-Waiver: The **Contractor's** failure to secure policies in complete conformity with this Article 22, or to give an insurance company timely notice of any sort required in this **Contract** or to do anything else required by this Article 22 shall constitute a material breach of this **Contract**. Such breach shall not be waived or otherwise excused by any action or inaction by the **City** at any time.

22.10 Pursuant to General Municipal Law Section 108, this **Contract** shall be void and of no effect unless **Contractor** maintains Workers' Compensation Insurance for the term of this **Contract** tothe extent required and in compliance with the New York State Workers' Compensation Law.

22.11 Other Remedies: Insurance coverage provided pursuant to this Article 22 or otherwise shall not relieve the **Contractor** of any liability under this **Contract**, nor shall it preclude the **City** from exercising any rights or taking such other actions available to it under any other provisions of this **Contract** or **Law**.

ARTICLE 23. MONEY RETAINED AGAINST CLAIMS

23.1 If any claim shall be made by any person or entity (including **Other Contractors** with the **City** on this **Project**) against the **City** or against the **Contractor** and the **City** for any of the following:

(a) An alleged loss, damage, injury, theft or vandalism of any of the kinds referred to in Articles 7 and 12, plus the reasonable costs of defending the **City**, which in the opinion of the **Comptroller** may not be paid by an insurance company (for any reason whatsoever);or

(b) An infringement of copyrights, patents or use of patented articles, tools, etc., asreferred to in Article 57; or

(c) Damage claimed to have been caused directly or indirectly by the failure of the **Contractor** to perform the **Work** in strict accordance with this **Contract,**

the amount of such claim, or so much thereof as the **Comptroller** may deem necessary, may be withheld by the **Comptroller**, as security against such claim, from any money due hereunder. The **Comptroller**, in his/her discretion, may permit the **Contractor** to substitute other satisfactory security in lieu of the monies so withheld.

23.2 If an action on such claim is timely commenced and the liability of the **City**, or the **Contractor**,

or both, shall have been established therein by a final judgment of a court of competent jurisdiction, or if such claim shall have been admitted by the **Contractor** to be valid, the **Comptroller** shall pay such judgment or admitted claim out of the monies retained by the **Comptroller** under the provisions of this Article 23, and return the balance, if any, without interest, to the **Contractor**.

ARTICLE 24. MAINTENANCE AND GUARANTY

24.1 The **Contractor** shall promptly repair, replace, restore or rebuild, as the **Commissioner** may determine, any finished **Work** in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during the one (1) year period subsequent to the date of **Substantial Completion** (or use and occupancy in accordance with Article 16), except where other periods of maintenance and guaranty are provided for in Schedule A.

24.2 As security for the faithful performance of its obligations hereunder, the **Contractor**, upon filing its requisition for payment on **Substantial Completion**, shall deposit with the **Commissioner** a sum equal to one (1%) percent of the price (or the amount fixed in Schedule A of the General Conditions) in cash or certified check upon a state or national bank and trust company or a check of such bank and trust company signed by a duly authorized officer thereof and drawn to the order of the **Comptroller**, or obligations of the **City**, which the **Comptroller** may approve as of equal value with the sum so required.

24.3 In lieu of the above, the **Contractor** may make such security payment to the **City** byauthorizing the **Commissioner** in writing to deduct the amount from the **Substantial Completion** payment which shall be deemed the deposit required above.

24.4 If the **Contractor** has faithfully performed all of its obligations hereunder the **Commissioner** shall so certify to the **Comptroller** within five (5) **Days** after the expiration of one (1) year from the date of **Substantial Completion** and acceptance of the **Work** or within thirty (30) **Days** after the expirationof the guarantee period fixed in the **Specifications**. The security payment shall be repaid to the **Contractor** without interest within thirty (30) **Days** after certification by the **Commissioner** to the **Comptroller** that the **Contractor** has faithfully performed all of its obligations hereunder.

24.5 Notice by the **Commissioner** to the **Contractor** to repair, replace, rebuild or restore such defective or damaged **Work** shall be timely, pursuant to this article, if given not later than ten (10) **Days** subsequent to the expiration of the one (1) year period or other periods provided for herein.

24.6 If the **Contractor** shall fail to repair, replace, rebuild or restore such defective or damaged **Work** promptly after receiving such notice, the **Commissioner** shall have the right to have the **Work** done by others in the same manner as provided for in the completion of a defaulted **Contract**, under Article 51.

24.7 If the security payment so deposited is insufficient to cover the cost of such **Work**, the **Contractor** shall be liable to pay such deficiency on demand by the **Commissioner**.

24.8 The **Engineer's** certificate setting forth the fair and reasonable cost of repairing, replacing, rebuilding or restoring any damaged or defective **Work** when performed by one other than the **Contractor**, shall be binding and conclusive upon the **Contractor** as to the amount thereof.

24.9 The **Contractor** shall obtain all manufacturers' warranties and guaranties of all equipment and materials required by this **Contract** in the name of the **City** and shall deliver same to the **Commissioner**. All of the **City's** rights and title and interest in and to said manufacturers' warranties and guaranties may be assigned by the **City** to any subsequent purchasers of such equipment and materials or lessees of the

premises into which the equipment and materials have been installed.

CHAPTER VI: CHANGES, EXTRA WORK, AND DOCUMENTATION OF CLAIM

ARTICLE 25. CHANGES

25.1 Changes may be made to this **Contract** only as duly authorized in writing by the **Commissioner** in accordance with the **Law** and this **Contract**. All such changes, modifications, and amendments will become a part of the **Contract**. **Work** so ordered shall be performed by the **Contractor**.

25.2 **Contract** changes will be made only for **Work** necessary to complete the **Work** included inthe original scope of the **Contract** and/or for non-material changes to the scope of the **Contract**.Changes are not permitted for any material alteration in the scope of **Work** in the **Contract**.

25.3 The **Contractor** shall be entitled to a price adjustment for **Extra Work** performed pursuant toa written change order. Adjustments to price shall be computed in one or more of the following ways:

25.3.1 By applicable unit prices specified in the **Contract**; and/or

25.3.2 By agreement of a fixed price; and/or

25.3.3 By time and material records; and/or

25.3.4 In any other manner approved by the **CCPO**.

25.4 All payments for change orders are subject to pre-audit by the **Engineering Audit Officer** and may be post-audited by the **Comptroller** and/or the **Agency**.

ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK

26.1 Overrun of Unit Price Item: An overrun is any quantity of a unit price item which the **Contractor** is directed to provide which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule.

26.1.1 For any unit price item, the **Contractor** will be paid at the unit price bid for any quantity up to one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule. If during the progress of the **Work**, the actual quantity of any unit price item required to complete the **Work** approaches the estimated quantity forthat item, and for any reason it appears that the actual quantity of any unit price item necessary to complete the **Work** will exceed the estimated quantity for that item by twenty- five (25%) percent, the **Contractor** shall immediately notify the **Engineer** of such anticipated overrun. The **Contractor** shall not be compensated for any quantity of a unit price item provided which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule without written authorization from the **Engineer**.

26.1.2 If the actual quantity of any unit price item necessary to complete the **Work** will exceed one hundred twenty five (125%) percent of the estimated quantity for that item set forth in the bid schedule, the **City** reserves the right and the **Contractor** agrees to negotiate a new unit price for such item. In no event shall such negotiated new unit price exceed the unit bid price. If the **City** and **Contractor** cannot agree on a new unit price, then the **City** shall order the **Contractor** and the **Contractor** agrees to provide additional quantities of the item on the

basis of time and material records for the actual and reasonable cost as determined under Article 26.2, but in no event at a unit price exceeding the unit price bid.

26.2 **Extra Work:** For **Extra Work** where payment is by agreement on a fixed price in accordance with Article 25.3.2, the price to be paid for such **Extra Work** shall be based on the fair and reasonable estimated cost of the items set forth below. For **Extra Work** where payment is based on time and material records in accordance with Article 25.3.3, the price to be paid for such **Extra Work** shall be the actual and reasonable cost of the items set forth below, calculated in accordance with the formula specified therein, if any.

26.2.1 Necessary materials (including transportation to the **Site**); plus

26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits; plus

26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such **Extra Work**; plus

26.2.4 Reasonable rental value of **Contractor**-owned (or **Subcontractor**-owned, as applicable), necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour: (.035) x (HP rating) x (Fuel cost/gallon). Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75%) percent of such rental rates; second shift shall be sixty (60%) percent of the first shift rate; and third shift shall be forty (40%) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the **Contractor** (or **Subcontractor**, as applicable)**,** as determined by the **Commissioner**. In establishing cost reimbursement for non-operating **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the **City** may restrict reimbursement to a purchase-salvage/life cycle basis if less than the computed rental costs; plus

26.2.5 Necessary installation and dismantling of such plant and equipment, including transportation to and from the **Site**, if any, provided that, in the case of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) equipment rented from a third party, the cost of installation and dismantling are not allowable if such costs are included in the rental rate; plus

26.2.6 Necessary fees charged by governmental entities; plus

26.2.7 Necessary construction-related service fees charged by non-governmental entities, such as landfill tipping fees; plus

26.2.8 Reasonable rental costs of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per hour of operation: (.035) x (HP rating) x (Fuel cost/gallon). In lieu of renting, the **City** reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus

26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the **City** for the performance of the **Extra Work** which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus

26.2.10 Additional costs incurred as a result of the **Extra Work** for performance and payment bonds; plus

26.2.11 Twelve percent (12%) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus

26.2.12 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes; plus

26.2.13 Five (5%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.

26.3 Where the **Extra Work** is performed in whole or in part by other than the **Contractor's** own forces pursuant to Article 26.2, the **Contractor** shall be paid, subject to pre-audit by the **Engineering Audit Officer**, the cost of such **Work** computed in accordance with Article 26.2 above, plus an additional allowance of five (5%) percent to cover the **Contractor's** overhead and profit.

26.4 Where a change is ordered, involving both **Extra Work** and omitted or reduced **Contract Work,** the **Contract** price shall be adjusted, subject to pre-audit by the **EAO**, in an amount based on the difference between the cost of such **Extra Work** and of the omitted or reduced **Work**.

26.5 Where the **Contractor** and the **Commissioner** can agree upon a fixed price for **Extra Work** in accordance with Article 25.3.2 or another method of payment for **Extra Work** in accordance with Article 25.3.4, or for **Extra Work** ordered in connection with omitted **Work**, such method, subject to pre-audit by the **EAO**, may, at the option of the **Commissioner**, be substituted for the cost plus a percentage method provided in Article 26.2; provided, however, that if the **Extra Work** is performed by a **Subcontractor**, the **Contractor** shall not be entitled to receive more than an additional allowance of five (5%) percent for overhead and profit over

the cost of such **Subcontractor's Work** as computed in accordance with Article 26.2.

ARTICLE 27. RESOLUTION OF DISPUTES

27.1 All disputes between the **City** and the **Contractor** of the kind delineated in this Article 27.1 that arise under, or by virtue of, this **Contract** shall be finally resolved in accordance with the provisions of this Article 27 and the **PPB** Rules. This procedure for resolving all disputes of the kind delineated herein shall be the exclusive means of resolving any such disputes.

27.1.1 This Article 27 shall not apply to disputes concerning matters dealt with in other sections of the **PPB** Rules, or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software.

27.1.2 This Article 27 shall apply only to disputes about the scope of **Work** delineated by the **Contract**, the interpretation of **Contract** documents, the amount to be paid for **Extra Work** or disputed work performed in connection with the **Contract**, the conformity of the **Contractor's Work** to the **Contract**, and the acceptability and quality of the **Contractor's Work**; such disputes arise when the **Engineer**, **Resident Engineer**, **Engineering Audit Officer**, or other designee of the **Commissioner** makes a determination with which the **Contractor** disagrees.

27.2 All determinations required by this Article 27 shall be made in writing clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Article 27 shall be deemed a non-determination without prejudice that will allow application to the next level.

27.3 During such time as any dispute is being presented, heard, and considered pursuant to this Article 27, the **Contract** terms shall remain in force and the **Contractor** shall continue to perform **Work** as directed by the **ACCO** or the **Engineer**. Failure of the **Contractor** to continue **Work** as directed shall constitute a waiver by the **Contractor** of its claim.

27.4 Presentation of Disputes to **Commissioner**.

Notice of Dispute and Agency Response. The **Contractor** shall present its dispute in writing ("Notice of Dispute") to the **Commissioner** within thirty (30) Days of receiving written notice of the determination or action that is the subject of the dispute. This notice requirement shall not be read to replace any other notice requirements contained in the **Contract**. The Notice of Dispute shall include all the facts, evidence, documents, or other basis upon which the **Contractor** relies in support of its position, as well as a detailed computation demonstrating how any amount of money claimed by the **Contractor** inthe dispute was arrived at. Within thirty (30) Days after receipt of the detailed written submission comprising the complete Notice of Dispute, the **Engineer**, **Resident Engineer**, **Engineering Audit Officer**, or other designee of the **Commissioner** shall submit to the **Commissioner** all materials he or she deems pertinent to the dispute. Following initial submissions to the **Commissioner**, either party may demand of the other the production of any document or other material the demanding party believes may be relevant to the dispute. The requested party shall produce all relevant materials that are not otherwise protected by a legal privilege recognized by the courts of New York State. Any question of relevancy shall be determined by the **Commissioner** whose decision shall be final. Willful failure of the **Contractor** to produce any requested material whose relevancy the **Contractor** has not disputed, or whose relevancy has been affirmatively determined, shall constitute a waiver by the **Contractor** of its claim.

27.4.1 **Commissioner** Inquiry. The **Commissioner** shall examine the material and may, in his or her discretion, convene an informal conference with the **Contractor**, the **ACCO**, and the **Engineer**, **Resident Engineer**, **Engineering Audit Officer**, or other designee of the **Commissioner** to resolve the issue by mutual consent prior to reaching a determination. The **Commissioner** may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The **Commissioner's** ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the **Commissioner** participated therein. The **Commissioner** may or, at the request of any party to the dispute, shall compel the participation of any **Other Contractor** with a contract related to the **Work** of this **Contract**, and that **Contractor** shall be bound by the decision of the **Commissioner**. Any **Other Contractor** thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the **Contractor** initiating the dispute.

27.4.2 **Commissioner** Determination. Within thirty (30) **Days** after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the **Commissioner** shall make his or her determination and shall deliver or send a copy of such determination to the **Contractor**, the **ACCO,** and **Engineer**, **Resident Engineer**,**Engineering Audit Officer**, or other designee of the **Commissioner**, as applicable, together with a statement concerning how the decision may be appealed.

27.4.3 Finality of **Commissioner's** Decision. The **Commissioner's** decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The **City** may not take a petition to the Contract Dispute Resolution Board. However, should the **Contractor** take such a petition, the **City** may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the **Contractor** and more favorable to the **City** than the decision of the **Commissioner**.

27.5 Presentation of Dispute to the **Comptroller**. Before any dispute may be brought by the **Contractor** to the Contract Dispute Resolution Board, the **Contractor** must first present its claim to the **Comptroller** for his or her review, investigation, and possible adjustment.

27.5.1 Time, Form, and Content of Notice. Within thirty (30) **Days** of its receipt of a decision by the **Commissioner,** the **Contractor** shall submit to the **Comptroller** and to the **Commissioner** a Notice of Claim regarding its dispute with the **Agency**. The Notice of Claim shall consist of (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written decision of the **Commissioner**; and (iii) a copy of all materials submitted by the **Contractor** to the **Agency**, including the Notice of Dispute. The **Contractor** may not present to the **Comptroller** any material not presented to the **Commissioner**, except at the request of the **Comptroller**.

27.5.2 Response. Within thirty (30) **Days** of receipt of the Notice of Claim, the **Agency** shall make available to the **Comptroller** a copy of all material submitted by the **Agency** to the **Commissioner** in connection with the dispute. The **Agency** may not present to the **Comptroller** any material not presented to the **Commissioner** except at the request of the **Comptroller**.

27.5.3 **Comptroller** Investigation. The **Comptroller** may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Sections 7-201 and 7-203 of the Administrative Code. In addition, the **Comptroller** may demand of either party, and such party shall provide, whatever additional material the **Comptroller** deems pertinent to the claim, including original business records of the **Contractor**. Willful failure of the **Contractor** to produce within fifteen (15) **Days** any material requested by the **Comptroller** shall constitute a waiver by the **Contractor** of its claim. The **Comptroller** may also schedule an informal conference to be attended by the **Contractor**, **Agency** representatives, and any other personnel desired by the **Comptroller**.

27.5.4 Opportunity of **Comptroller** to Compromise or Adjust Claim. The **Comptroller** shall have forty-five (45) **Days** from his or her receipt of all materials referred to in Article 27.5.3 to investigate the disputed claim. The period for investigation and compromise may be further extended by agreement between the **Contractor** and the **Comptroller**, to a maximum of ninety (90) **Days** from the **Comptroller's** receipt of all materials. The **Contractor** may not present its petition to the Contract Dispute Resolution Board until the period for investigation and compromise delineated in this Article 27.5.4 has expired. In compromising or adjusting any claim hereunder, the **Comptroller** may not revise or disregard the terms of the **Contract** between the parties.

27.6 Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board composed of:

27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;

27.6.2 The **CCPO** or his/her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and

27.6.3 A person with appropriate expertise who is not an employee of the **City**. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established and administered by OATH with appropriate background to act as decision-makers in a dispute. Such individual may not have a contract or dispute with the **City** or be an officer or employee of any company or organization that does, or regularly represents persons, companies, or organizations having disputes with the **City**.

27.7 Petition to the Contract Dispute Resolution Board. In the event the claim has not been settled or adjusted by the **Comptroller** within the period provided in this Article 27, the **Contractor**, within thirty (30) **Days** thereafter, may petition the Contract Dispute Resolution Board to review the

Commissioner's determination.

27.7.1 Form and Content of Petition by **Contractor**. The **Contractor** shall present its dispute to the Contract Dispute Resolution Board in the form of a petition, which shall include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written Decision of the **Commissioner,** (iii) copies of all materials submitted by the **Contractor** to the Agency; (iv) a copy of the written decision of the **Comptroller**, if any, and (v) copies of all correspondence with, or written material submitted by the **Contractor**, to the **Comptroller**. The **Contractor** shall concurrently submit four (4) complete sets of the Petition: one set to the **City** Corporation Counsel (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the **City** Corporation Counsel. In addition, the **Contractor** shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the **Commissioner** and the **Comptroller**.

27.7.2 **Agency** Response. Within thirty (30) **Days** of its receipt of the Petition by the **City** Corporation Counsel, the **Agency** shall respond to the brief written statement of the **Contractor** and make available to the Contract Dispute Resolution Board all material it submitted to the **Commissioner** and **Comptroller**. Three (3) complete copies of the **Agency** response shall be provided to the Contract Dispute Resolution Board and one to the **Contractor**. Extensions of time for submittal of the **Agency** response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) Days.

27.7.3 Further Proceedings. The Contract Dispute Resolution Board shall permit the **Contractor** to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the **Agency** to present its case in response to the **Contractor** by submission of memoranda, briefs, and oral argument. If requested by the **City** Corporation Counsel, the **Comptroller** shall provide reasonable assistance in the preparation of the **Agency's** case. Neither the **Contractor** nor the **Agency** may support its case with any documentation or other material that was not considered by the **Comptroller**, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.

27.7.4 Contract Dispute Resolution Board Determination. Within forty-five (45) **Days** of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) **Days**, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the **Contract**. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.

27.7.5 Notification of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board shall send a copy of its decision to the **Contractor**, the **ACCO**, the Engineer, the **Comptroller**, the **City** Corporation Counsel, the CCPO, and the **PPB**. A decision in favor of the **Contractor** shall be subject to the prompt payment provisions of the **PPB** Rules. The

Required Payment Date shall be thirty (30) Days after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.

27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of **Law**, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.

27.8 Any termination, cancellation, or alleged breach of the **Contract** prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the **Commissioner** or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK OR WORK ON ATIME & MATERIALS BASIS

28.1 While the **Contractor** or any of its **Subcontractors** is performing **Work** on a time and material basis or **Extra Work** on a time and material basis ordered by the **Commissioner** under Article 25, or where the **Contractor** believes that it or any of its **Subcontractors** is performing **Extra Work** but a final determination by **Agency** has not been made, or the **Contractor** or any of its **Subcontractors** is performing disputed **Work** (whether on or off the **Site**), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the **Contractor** shall furnish the **Resident Engineer** daily with three (3) copies of written statements signed by the **Contractor's** representative at the **Site** showing:

28.1.1 The name, trade, and number of each worker employed on such **Work** or engaged in complying with such determination or order, the number of hours employed, and the character of the **Work** each is doing; and

28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such **Work** or compliance with such determination or order, and from whom purchased or rented.

28.2 A copy of such statement will be countersigned by the **Resident Engineer**, noting thereon any items not agreed to or questioned, and will be returned to the **Contractor** within two (2) **Days** after submission.

28.3 The **Contractor** and its **Subcontractors**, when required by the **Commissioner**, or the **Comptroller**, shall also produce for inspection, at the office of the **Contractor** or **Subcontractor**, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports, and cancelled checks, and any other documents relating to showing the nature and quantity of the labor, materials, plant and equipment actually used in the performance of such **Work**, or in complying with such determination or order, and the amounts expended therefor, and shall permit the **Commissioner** and the

Comptroller to make such extracts therefrom, or copies thereof, as they or either of them may desire.

28.4 In connection with the examination provided for herein, the **Commissioner**, upon demand therefor, will produce for inspection by the **Contractor** such records as the **Agency** may have withrespect to such **Extra Work** or disputed **Work** performed under protest pursuant to order of the **Commissioner**, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the **Contractor's** claim.

28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such **Work** or compliance with such determination or order.

ARTICLE 29. OMITTED WORK

29.1 If any **Contract Work** in a lump sum **Contract**, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid **Contract** is omitted by the **Commissioner** pursuant to Article 33, the **Contract** price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of **Work** omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.

29.2 If the whole of a lump sum item or units of any other item is so omitted by the **Commissioner** in a unit price, lump sum, or percentage-bid **Contract**, then no payment will be made therefor except as provided in Article 29.4.

29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of **Work** omitted subject to Article 29.4.

29.4 In the event the **Contractor**, with respect to any omitted **Work**, has purchased any non-cancelable material and/or equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated into the **Work**, the **Contractor** shall be paid for such material and/or equipment in accordance with Article 64.2.1(b); provided, however, such payment is contingent upon the **Contractor's** delivery of such material and/or equipment in acceptable condition to a location designated by the **City**.

29.5 The **Contractor** agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted **Work**.

ARTICLE 30. NOTICE AND DOCUMENTATION OF COSTS AND DAMAGES; PRODUCTION OF FINANCIAL RECORDS

30.1 If the **Contractor** shall claim to be sustaining damages by reason of any act or omission of the **City** or its agents, it shall submit to the **Commissioner** within forty-five (45) **Days** from the time such damages are first incurred, and every thirty (30) **Days** thereafter to the extent additional damages are being incurred for the same condition, verified statements of the details and the amounts of such damages, together with documentary evidence of such damages. The **Contractor** may submit any of the above statements within such additional time as may be granted by the **Commissioner** in writing upon written request therefor. Failure of the **Commissioner** to respond in writing to a written request for additional time within thirty (30) **Days** shall be deemed a denial of the request. On failure of the **Contractor** to strictly comply with

the foregoing provisions, such claims shall be deemed waived and no right to recover on such claims shall exist. Damages that the **Contractor** may claim in any action or dispute resolution procedure arising under or by reason of this **Contract** shall not be different from or in excess of the statements and documentation made pursuant to this Article 30. This Article 30.1 does not apply to claims submitted to the **Commissioner** pursuant to Article 11 or to claims disputing a determination under Article 27.

30.2 In addition to the foregoing statements, the **Contractor** shall, upon notice from the **Commissioner**, produce for examination at the **Contractor's** office, by the **Engineer**, **Architect** or **Project Manager**, all of its books of account, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**, and submit itself and persons in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.3 In addition to the statements required under Article 28 and this Article 30, the **Contractor** and/or its **Subcontractor** shall, within thirty (30) **Days** upon notice from the **Commissioner** or **Comptroller**, produce for examination at the **Contractor's** and/or **Subcontractor's** office, by a representative of either the **Commissioner** or **Comptroller**, all of its books of account, bid documents, financial statements, accountant workpapers, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**. Further, the **Contractor** and/or its **Subcontractor** shall submit any person in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.4 Unless the information and examination required under Article 30.3 is provided by the **Contractor** and/or its **Subcontractor** upon thirty (30) **Days'** notice from the **Commissioner** or **Comptroller**, or upon the **Commissioner's** or **Comptroller's** written authorization to extend the time to comply, the **City** shall be released from all claims arising under, relating to or by reason of this **Contract**, except for sums certified by the **Commissioner** to be due under the provisions of this **Contract**. It is further stipulated and agreed that no person has the power to waive any of the foregoing provisions and that in any action or dispute resolution procedure against the **City** to recover any sum in excess of the sums certified by the **Commissioner** to be due under or by reason of this **Contract**, the **Contractor** must allege in its complaint and prove, at trial or during such dispute resolution procedure, compliance with the provisions of this Article 30.

30.5 In addition, after the commencement of any action or dispute resolution procedure by the **Contractor** arising under or by reason of this **Contract**, the **City** shall have the right to require the **Contractor** to produce for examination under oath, up until the trial of the action or hearing before the Contract Dispute Resolution Board, the books and documents described in Article 30.3 and submit itself and all persons in its employ for examination under oath. If this Article 30 is not complied with as required, then the **Contractor** hereby consents to the dismissal of the action or dispute resolutionprocedure.

CHAPTER VII: POWERS OF THE RESIDENT ENGINEER, THE ENGINEER ORARCHITECT AND THE COMMISSIONER

ARTICLE 31. THE RESIDENT ENGINEER

31.1 The **Resident Engineer** shall have the power to inspect, supervise, and control the performance

of the **Work**, subject to review by the **Commissioner**. The **Resident Engineer** shall not, however, have the power to issue an **Extra Work** order, except as specifically designated in writing bythe **Commissioner**.

ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER

32.1 The **Engineer** or **Architect** or **Project Manager**, in addition to those matters elsewhere herein delegated to the **Engineer** and expressly made subject to his/her determination, direction or approval, shall have the power, subject to review by the **Commissioner**:

32.1.1 To determine the amount, quality, and location of the **Work** to be paid for hereunder; and

32.1.2 To determine all questions in relation to the **Work**, to interpret the **Contract Drawings**, **Specifications**, and **Addenda**, and to resolve all patent inconsistencies or ambiguities therein; and

32.1.3 To determine how the **Work** of this **Contract** shall be coordinated with **Work** of **Other Contractors** engaged simultaneously on this **Project**, including the power to suspend any part of the **Work**, but not the whole thereof; and

32.1.4 To make minor changes in the **Work** as he/she deems necessary, provided such changes do not result in a net change in the cost to the **City** or to the **Contractor** of the **Work** to be done under the **Contract**; and

32.1.5 To amplify the **Contract Drawings**, add explanatory information and furnish additional **Specifications** and drawings, consistent with this **Contract**.

32.2 The foregoing enumeration shall not imply any limitation upon the power of the **Engineer** or **Architect** or **Project Manager**, for it is the intent of this **Contract** that all of the **Work** shall generally be subject to his/her determination, direction, and approval, except where the determination, direction or approval of someone other than the **Engineer** or **Architect** or **Project Manager** is expressly called for herein.

32.3 The **Engineer** or **Architect** or **Project Manager** shall not, however, have the power to issuean **Extra Work** order, except as specifically designated in writing by the **Commissioner**.

ARTICLE 33. THE COMMISSIONER

33.1 The **Commissioner**, in addition to those matters elsewhere herein expressly made subject to his/her determination, direction or approval, shall have the power:

33.1.1 To review and make determinations on any and all questions in relation to this **Contract** and its performance; and

33.1.2 To modify or change this **Contract** so as to require the performance of **Extra Work** (subject, however, to the limitations specified in Article 25) or the omission of **Contract Work**; and

33.1.3 To suspend the whole or any part of the **Work** whenever in his/her judgment such suspension is required:

33.1.3(a) In the interest of the **City** generally; or

33.1.3(b) To coordinate the **Work** of the various contractors engaged on this **Project** pursuant to the provisions of Article 12; or

33.1.3(c) To expedite the completion of the entire **Project** even though the completion of this particular **Contract** may thereby be delayed.

ARTICLE 34. NO ESTOPPEL

34.1 Neither the **City** nor any **Agency**, official, agent or employee thereof, shall be bound, precluded or estopped by any determination, decision, approval, order, letter, payment or certificate made or given under or in connection with this **Contract** by the **City**, the **Commissioner**, the **Engineer**, the **Resident Engineer**, or any other official, agent or employee of the **City**, either before or after the final completion and acceptance of the **Work** and payment therefor:

34.1.1 From showing the true and correct classification, amount, quality or character of the **Work** actually done; or that any such determination, decision, order, letter, payment or certificate was untrue, incorrect or improperly made in any particular, or that the **Work**, or any part thereof, does not in fact conform to the requirements of this **Contract**; and

34.1.2 From demanding and recovering from the **Contractor** any overpayment made to it, or such damages as the **City** may sustain by reason of the **Contractor's** failure to perform each and every part of its **Contract**.

CHAPTER VIII: LABOR PROVISIONS

ARTICLE 35. EMPLOYEES

35.1 The **Contractor** and its **Subcontractors** shall not employ on the **Work**:

35.1.1 Anyone who is not competent, faithful and skilled in the **Work** for which he/she shall be employed; and whenever the **Commissioner** shall inform the **Contractor**, in writing, that any employee is, in his/her opinion, incompetent, unfaithful or disobedient, that employee shall be discharged from the **Work** forthwith, and shall not again be employed upon it; or

35.1.2 Any labor, materials or means whose employment, or utilization during the course of this **Contract**, may tend to or in any way cause or result in strikes, work stoppages, delays, suspension of **Work** or similar troubles by workers employed by the **Contractor** or its **Subcontractors**, or by any of the trades working in or about the buildings and premises where **Work** is being performed under this **Contract**, or by **Other Contractors** or their **Subcontractors** pursuant to other contracts, or on any other building or premises owned or operated by the **City**, its **Agencies**, departments, boards or authorities. Any violation by the **Contractor** of this requirement may, upon certification of the **Commissioner**, be considered as proper and sufficient cause for declaring the **Contractor** to be in default, and for the **City** to take action against it as set forth in Chapter X of this **Contract**, or such other article of this **Contract** as the Commissioner may deem proper; or

35.1.3 In accordance with Section 220.3-e of the Labor Law of the State of New York (hereinafter "Labor Law"), the **Contractor** and its **Subcontractors** shall not employ on the **Work** any apprentice, unless he/she is a registered individual, under a bona fide program registered with the New York State Department of Labor. The allowable ratio of apprentices to journey-level workers in any craft classification shall not be greater than the ratio permitted to the **Contractor** as to its work force on any job under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the **Comptroller** of the **City** for the classification of **Work** actually performed. The **Contractor** or **Subcontractor** will be required to furnish written evidence of the registration of its program and apprentices as well as all the appropriate ratios and wage rates, for the area of the construction prior to using any apprentices on the **Contract Work**.

35.2 If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand ($250,000) dollars, all laborers, workers, and mechanics employed in the performance of the **Contract** on the public work site, either by the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by the **Contract**, shall be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration.

35.3 In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the Administrative Code, respectively,

35.3.1 The **Contractor** shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this **Contract** to (a) the Commissioner of the Department of Investigation, (b) a member of the New York City Council, the Public Advocate, or the **Comptroller**, or (c) the **CCPO**, **ACCO**, **Agency** head, or **Commissioner**.

35.3.2 If any of the **Contractor**'s officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 35.3.1, he or she shall be entitled to bring a cause of action against the **Contractor** to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (a) an injunction to restrain continued retaliation, (b) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (c) reinstatement of full fringe benefits and seniority rights, (d) payment of two times back pay, plus interest, and (e) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.

35.3.3 The **Contractor** shall post a notice provided by the **City** in a prominent and accessible place on any site where work pursuant to the **Contract** is performed that contains information about:

35.3.3(a) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising outof or in connection with the **Contract**; and

35.3.3(b) the rights and remedies afforded to its employees under Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection withthe

reporting of allegations of fraud, false claims, criminality or corruption in connection with the **Contract**.

35.3.4 For the purposes of this Article 35.3, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.

35.3.5 This Article 35.3 is applicable to all of the **Contractor**'s **Subcontractors** having subcontracts with a value in excess of $100,000; accordingly, the **Contractor** shall include this rider in all subcontracts with a value a value in excess of $100,000.

35.4 Article 35.3 is not applicable to this **Contract** if it is valued at $100,000 or less. Articles 35.3.1, 35.3.2, 35.3.4, and 35.3.5 are not applicable to this **Contract** if it was solicited pursuant to a finding of an emergency.

35.5 Paid Sick Leave Law.

35.5.1 Introduction and General Provisions.

35.5.1(a) The Earned Sick Time Act, also known as the Paid Sick Leave Law ("PSLL"), requires covered employees who annually perform more than 80 hours of work in New York City to be provided with paid sick time[2]. Contractors of the **City** or of other governmental entities may be required to provide sick time pursuant to the PSLL.

35.5.1(b) The PSLL became effective on April 1, 2014, and is codified at Title 20, Chapter 8, of the New York City Administrative Code. It is administered by the City's Department of Consumer Affairs ("DCA"); DCA's rules promulgated under the PSLL are codified at Chapter 7 of Title 6 of the Rules of the City of New York ("Rules").

35.5.1(c) The **Contractor** agrees to comply in all respects with the PSLL and the Rules, and as amended, if applicable, in the performance of this **Contract**. The **Contractor** further acknowledges that such compliance is a material term of this **Contract** and that failure to comply with the PSLL in performance of this **Contract** may result in its termination.

35.5.1(d) The **Contractor** must notify the **Agency Chief Contracting Officer** of the **Agency** with whom it is contracting in writing within ten (10) days of receipt of a complaint (whether oral or written) regarding the PSLL involving the performance of this **Contract**. Additionally, the **Contractor** must cooperate with DCA's education efforts and must comply with DCA's subpoenas and other document demands as set forth in the PSLL and Rules.

35.5.1(e) The PSLL is summarized below for the convenience of the **Contractor**. The **Contractor** is advised to review the PSLL and Rules in their entirety. On the

[2] Pursuant to the PSLL, if fewer than five employees work for the same employer, as determined pursuant to New York City Administrative Code § 20-912(g), such employer has the option of providing such employees uncompensated sick time.

website www.nyc.gov/PaidSickLeave there are links to the PSLL and the associated Rules as well as additional resources for employers, such as Frequently Asked Questions, timekeeping tools and model forms, and an event calendar of upcoming presentations and webinars at which the **Contractor** can get more information about how to comply with the PSLL. The **Contractor** acknowledges that it is responsible for compliance with the PSLL notwithstanding any inconsistent language contained herein.

35.5.2 Pursuant to the PSLL and the Rules: Applicability, Accrual, and Use.

35.5.2(a) An employee who works within the City of New York for more than eighty hours in any consecutive 12-month period designated by the employer as its "calendar year" pursuant to the PSLL ("Year") must be provided sick time. Employers must provide a minimum of one hour of sick time for every 30 hours worked by an employee and compensation for such sick time must be provided at the greater of the employee's regular hourly rate or the minimum wage. Employers are not required to provide more than 40 hours of sick time to an employee in any Year.

35.5.2(b) An employee has the right to determine how much sick time he or she will use, provided that employers may set a reasonable minimum increment for the use of sick time not to exceed four hours per **Day**. In addition, an employee may carry over up to 40 hours of unused sick time to the following Year, provided that no employer is required to allow the use of more than forty hours of sick time in a Year or carry over unused paid sick time if the employee is paid for such unused sick time and the employer provides the employee with at least the legally required amount of paid sick time for such employee for the immediately subsequent Year on the first **Day** of such Year.

35.5.2(c) An employee entitled to sick time pursuant to the PSLL may use sick time for any of the following:

i. such employee's mental illness, physical illness, injury, or health condition or the care of such illness, injury, or condition or such employee's need for medical diagnosis or preventive medical care;
ii. such employee's care of a family member (an employee's child, spouse, domestic partner, parent, sibling, grandchild or grandparent, or the child or parent of an employee's spouse or domestic partner) who has a mental illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;
iii. closure of such employee's place of business by order of a public official due to a public health emergency; or
iv. such employee's need to care for a child whose school or childcare providerhas been closed due to a public health emergency.

35.5.2(d) An employer must not require an employee, as a condition of taking sick time, to search for a replacement. However, an employer may require an employee to provide: reasonable notice of the need to use sick time; reasonable documentation that the use of sick time was needed for a reason above if for an absence of more than three consecutive work days; and/or written confirmation that an employee used sick time pursuant to the PSLL. However, an employer may not require documentation specifying the nature of a medical condition or otherwise require disclosure of the details of a medical condition as a condition of providing sick time and health information obtained solely due to an employee's use of sick time pursuant to the PSLL must be treated by the

employer as confidential.

35.5.2(e) If an employer chooses to impose any permissible discretionary requirement as a condition of using sick time, it must provide to all employees a written policy containing those requirements, using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny sick time to an employee because of non-compliance with such a policy.

35.5.2(f) Sick time to which an employee is entitled must be paid no later than the payday for the next regular payroll period beginning after the sick time was used.

35.5.3 Exemptions and Exceptions. Notwithstanding the above, the PSLL does not apply to any of the following:

35.5.3(a) an independent contractor who does not meet the definition of employee under section 190(2) of the New York State Labor Law;

35.5.3(b) an employee covered by a valid collective bargaining agreement in effect on April 1, 2014, until the termination of such agreement;

35.5.3(c) an employee in the construction or grocery industry covered by a valid collective bargaining agreement if the provisions of the PSLL are expressly waived in such collective bargaining agreement;

35.5.3(d) an employee covered by another valid collective bargaining agreement if such provisions are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the PSLL for such employee;

35.5.3(e) an audiologist, occupational therapist, physical therapist, or speech language pathologist who is licensed by the New York State Department of Education and who calls in for work assignments at will, determines his or her own schedule, has the ability to reject or accept any assignment referred to him or her, and is paid an average hourly wage that is at least four times the federal minimum wage;

35.5.3(f) an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;

35.5.3(g) an employee whose work is compensated by a qualified scholarship program as that term is defined in the Internal Revenue Code, Section 117 of Chapter 20 of the United States Code; or

35.5.3(h) a participant in a Work Experience Program (WEP) under section 336-c of the New York State Social Services Law.

35.5.4 Retaliation Prohibited. An employer may not threaten or engage in retaliation against an employee for exercising or attempting in good faith to exercise any right provided by the PSLL. In addition, an employer may not interfere with any investigation, proceeding, or hearing pursuant to the PSLL.

35.5.5 Notice of Rights.

35.5.5(a) An employer must provide its employees with written notice of their rights pursuant to the PSLL. Such notice must be in English and the primary language spoken

by an employee, provided that DCA has made available a translation into such language. Downloadable notices are available on DCA's website at http://www.nyc.gov/html/dca/html/law/PaidSickLeave.shtml.

35.5.5(b) Any person or entity that willfully violates these notice requirements is subject to a civil penalty in an amount not to exceed fifty dollars for each employee who was not given appropriate notice.

35.5.6 Records. An employer must retain records documenting its compliance with the PSLL for a period of at least three years, and must allow DCA to access such records in furtherance of an investigation related to an alleged violation of the PSLL.

35.5.7 Enforcement and Penalties.

35.5.7(a) Upon receiving a complaint alleging a violation of the PSLL, DCA has the right to investigate such complaint and attempt to resolve it through mediation. Within 30 **Days** of written notification of a complaint by DCA, or sooner in certain circumstances, the employer must provide DCA with a written response and such other information as DCA may request. If DCA believes that a violation of the PSLL has occurred, it has the right to issue a notice of violation to the employer.

35.5.7(b) DCA has the power to grant an employee or former employee all appropriate relief as set forth in New York City Administrative Code § 20-924(d). Such relief may include, among other remedies, treble damages for the wages that should have been paid, damages for unlawful retaliation, and damages and reinstatement for unlawful discharge. In addition, DCA may impose on an employer found to have violated the PSLL civil penalties not to exceed $500 for a first violation, $750 for a second violation within two years of the first violation, and
$1,000 for each succeeding violation within two years of the previous violation.

35.5.8 More Generous Polices and Other Legal Requirements. Nothing in the PSLL is intended to discourage, prohibit, diminish, or impair the adoption or retention of a more generous sick time policy, or the obligation of an employer to comply with any contract,

collective bargaining agreement, employment benefit plan or other agreement providing more generous sick time. The PSLL provides minimum requirements pertaining to sick time and does not preempt, limit or otherwise affect the applicability of any other law, regulation, rule, requirement, policy or standard that provides for greater accrual or use by employees of sick leave or time, whether paid or unpaid, or that extends other protections to employees. The PSLL may not be construed as creating or imposing any requirement in conflict with any federal or state law, rule or regulation.

35.6 HireNYC: Hiring and Reporting Requirements. This Article 35.6 applies to construction contracts of $1,000,000 or more. The **Contractor** shall comply with the requirements of Articles 35.6.1-35.6.5 for all non-trades jobs (e.g., for an administrative position arising out of **Work** ant located in New York City). The **Contractor** shall reasonably cooperate with SBS and the **City** on specific outreach events, including "Hire-on-the-Spot" events, for the hiring of trades workers in connection with the **Work**. If provided elsewhere in this **Contract**, this **Contract** is subject to a project labor agreement.

35.6.1 Enrollment. The **Contractor** shall enroll with the HireNYC system, found at www.nyc.gov/sbs, within thirty (30) days after the registration of this **Contract** pursuant to Section 328 of the New York City Charter. The **Contractor** shall provide information about the business, designate a primary contact and say whether it intends to hire for any entry

to mid-level job opportunities arising from this **Contract** and located in New York City, and, if so, the approximate start date of the first hire.

35.6.2 Job Posting Requirements.

35.6.2(a) Once enrolled in HireNYC, the **Contractor** agrees to update the HireNYC portal with all entry to mid-level job opportunities arising from this **Contract** and located in New York City, if any, which shall be defined as jobs requiring no more than an associate degree, as provided by the New York State Department of Labor (see Column F of https://labor.ny.gov/stats/2012-2022- NYS- Employment-Prospects.xls). The information to be updated includes the types of entry and mid-level positions made available from the work arising from the **Contract** and located in New York City, the number of positions, the anticipated schedule of initiating the hiring process for these positions, and the contact information for the **Contractor's** representative charged with overseeing hiring. The **Contractor** must update the HireNYC portal with any hiring needs arising from the contract and located in New York City, and the requirements of the jobs to be filled, no less than three weeks prior to the intended first day of employment for each new position, except with the permission of SBS, not to be unreasonably withheld, and must also update the HireNYC portal as set forth below.

35.6.2(b) After enrollment through HireNYC and submission of relevant information, SBS will work with the **Contractor** to develop a recruitment plan which will outline the candidate screening process, and will provide clear instructions as to when, where, and how interviews will take place. HireNYC will screen applicants based on employer requirements and refer applicants whom it believes are qualified to the **Contractor** for interviews. The **Contractor** must interview referred applicants whom it believes are qualified.

35.6.2(c) After completing an interview of a candidate referred by HireNYC, the **Contractor** must provide feedback via the portal within twenty (20) business days to indicate which candidates were interviewed and hired, if any. In addition, the **Contractor** shall provide the start date of new hires, and additional information reasonably related to such hires, within twenty (20) business days after the start date. In the event the **Contractor** does not have any job openings covered by this Rider in any given year, the **Contractor** shall be required to provide an annual update to HireNYC to that effect. For this purpose, the reporting year shall run from the date of the registration of the **Contract** pursuant to Charter section 328 and each anniversary date.

35.6.2(d) These requirements do not limit the **Contractor's** ability to assess the qualifications of prospective workers, and to make final hiring and retention decisions. No provision of this Article 35.6 shall be interpreted so as to require the **Contractor** to employ any particular worker.

35.6.2(e) In addition, the provisions of this Article 35.6 shall not apply to positions that the **Contractor** intends to fill with employees employed pursuant to the job retention provision of Section 22-505 of the Administrative Code of the City of New York. The **Contractor** shall not be required to report such openings with HireNYC. However, the **Contractor** shall enroll with the HireNYC system pursuant to Article 35.6.1, above, and, if such positions subsequently become open, then the remaining provisions of this Article 35.6 will apply.

35.6.3 Breach and Liquidated Damages. If the **Contractor** fails to comply with the termsof the **ContrSact** and this Article 35.6 (l) by not enrolling its business with HireNYC; (2) by not informing HireNYC, as required, of open positions; or (3) by failing to interview a qualified candidate, the **Agency** may assess liquidated damages in the amount of two- thousand five hundred dollars ($2,500) per breach. For all other events of noncompliance with the terms of this Article 35.6, the **Agency** may assess liquidated damages in the amount of five hundred dollars ($500) per breach. Furthermore, in the event the **Contractor** breaches the requirements of this Article 35.6 during the term of the **Contract**, the **City** may hold the **Contractor** in default of this **Contract**.

35.6.4 Audit Compliance. In addition to the auditing requirements set forth in other partsof the **Contract**, the **Contractor** shall permit SBS and the **City** to inspect any and all records concerning or relating to job openings or the hiring of individuals for work arising from the **Contract** and located in New York City. The **Contractor** shall permit an inspection within seven (7) business days of the request.

35.6.5 Other Reporting Requirements. The **Contractor** shall report to the **City**, on amonthly basis, all information reasonably requested by the **City** that is necessary for the **City** to comply with any reporting requirements imposed by **Law**, including any requirement that the **City** maintain a publicly accessible database. In addition, the **Contractor** agrees to comply with all reporting requirements imposed by **Law**, or as otherwise requested by the **City**.

35.6.6 Federal Hiring Requirements. If this **Contract** is federally funded (as indicated elsewhere in this Contract), the **Contractor** shall comply with all federal hiring requirements as may be set forth in this **Contract**, including, as applicable: (a) Section 3 of the HUD Act of 1968, which requires, to the greatest extent feasible, economic opportunities for 30 percent of new hires be given to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing and Executive Order 11246, which prohibits discrimination in employment due to race, color, religion,sex or national origin, and requires the implementation of goals for minority and female participation for work involving any construction trade.

ARTICLE 36. NO DISCRIMINATION

36.1 The **Contractor** specifically agrees, as required by Labor Law Section 220-e, as amended, that:

36.1.1 In the hiring of employees for the performance of **Work** under this **Contract** or any subcontract hereunder, neither the **Contractor**, **Subcontractor**, nor any person acting on behalf of such **Contractor** or **Subcontractor**, shall by reason of race, creed, color or national origin discriminate against any citizen of the State of New York who is qualifiedand available to perform the **Work** to which the employment relates;

36.1.2 Neither the **Contractor**, **Subcontractor**, nor any person on its behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of **Work** under this **Contract** on account of race, creed, color or national origin;

36.1.3 There may be deducted from the amount payable to the **Contractor** by the **City** under this **Contract** a penalty of fifty ($50.00) dollars for each person for each **Day** during which such person was discriminated against or intimidated in violation of the provisions of this

Contract; and

36.1.4 This **Contract** may be cancelled or terminated by the **City** and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Article 36.

36.1.5 This Article 36 covers all construction, alteration and repair of any public building or public work occurring in the State of New York and the manufacture, sale, and distribution of materials, equipment, and supplies to the extent that such operations are performed within the State of New York pursuant to this **Contract**.

36.2 The **Contractor** specifically agrees, as required by Section 6-108 of the Administrative Code,as amended, that:

36.2.1 It shall be unlawful for any person engaged in the construction, alteration or repairof buildings or engaged in the construction or repair of streets or highways pursuant to a **Contract** with the **City** or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a **Contract** with the **City** to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.

36.2.2 It shall be unlawful for any person or any servant, agent or employee of any person, described in Article 36.1.2, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color or creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.

36.2.3 Breach of the foregoing provisions shall be deemed a violation of a material provision of this **Contract**.

36.2.4 Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Article 36.2 shall, upon conviction thereof, be punished by a fine of not more than one hundred ($100.00) dollars or by imprisonment for not more than thirty (30) **Days**, or both.

36.3 This **Contract** is subject to the requirements of Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules and regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. By signing this **Contract**, the **Contractor** agrees that it:

36.3.1 Will not engage in any unlawful discrimination against any employee or applicantfor employment because of race, creed, color, national origin, sex, age, disability, marital status or sexual orientation with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, ratesof pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment; and

36.3.2 Will not engage in any unlawful discrimination in the selection of **Subcontractors** on the basis of the owner's race, color, creed, national origin, sex, age, disability, marital status or sexual orientation; and

36.3.3 Will state in all solicitations or advertisements for employees placed by or on behalf of the **Contractor** that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, creed, color, national origin, sex, age, citizens status,

disability, marital status, sexual orientation, or that it is an equal employment opportunity employer; and

36.3.4 Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder; and

36.3.5 Will furnish, before the award of the **Contract**, all information and reports, including an employment report, that are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the **City** Department of Business Services, Division of Labor Services (**DLS**) and will permit access to its books, records, and accounts by the **DLS** for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.

36.4 The **Contractor** understands that in the event of its noncompliance with the nondiscrimination clauses of this **Contract** or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this **Contract** and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of the **DLS**, the Director of the **DLS** may direct the **Commissioner** to impose any or all of the following sanctions:

36.4.1 Disapproval of the **Contractor**; and/or

36.4.2 Suspension or termination of the **Contract**; and/or

36.4.3 Declaring the **Contractor** in default; and/or

36.4.4 In lieu of any of the foregoing sanctions, the Director of the **DLS** may impose an employment program.

In addition to any actions taken under this **Contract**, failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in a **City Agency** declaring the **Contractor** to be non-responsible in future procurements. The **Contractor** further agrees that it will refrain from entering into any **Contract** or **Contract** modification subject to E.O. 50 and the rules and regulations promulgated thereunder with a **Subcontractor** who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder.

36.5 The **Contractor** specifically agrees, as required by Section 6-123 of the AdministrativeCode, that:

36.5.1 The **Contractor** will not engage in any unlawful discriminatory practice in violation of Title 8 of the Administrative Code; and

36.5.2 Any failure to comply with this Article 36.5 may subject the **Contractor** to the remedies set forth in Section 6-123 of the Administrative Code, including, where appropriate, sanctions such as withholding of payment, imposition of an employment program, finding the **Contractor** to be in default, cancellation of the **Contract**, or any other sanction or remedy provided by **Law** or **Contract**.

ARTICLE 37. LABOR LAW REQUIREMENTS

37.1 The **Contractor** shall strictly comply with all applicable provisions of the Labor Law, as

amended. Such compliance is a material term of this **Contract**.

37.2 The **Contractor** specifically agrees, as required by Labor Law Sections 220 and 220-d, as amended, that:

37.2.1 Hours of **Work**: No laborer, worker, or mechanic in the employ of the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by this **Contract** shall be permitted or required to work more than eight (8) hours in any one (1) **Day**, or more than five (5) **Days** in any one (1) week, except as provided in the Labor Law and in cases of extraordinary emergency including fire, flood, or danger to life or property, or in the case of national emergency when so proclaimed by the President of the United States of America.

37.2.2 In situations in which there are not sufficient laborers, workers, and mechanics who may be employed to carry on expeditiously the **Work** contemplated by this **Contract** as a result of such restrictions upon the number of hours and **Days** of labor, and the immediate commencement or prosecution or completion without undue delay of the **Work** is necessary for the preservation of the **Site** and/or for the protection of the life and limb of the persons using the same, such laborers, workers, and mechanics shall be permitted or required to work more than eight (8) hours in any one (1) **Day**; or five (5) **Days** in any one (1) week; provided, however, that upon application of any **Contractor**, the **Commissioner** shall have first certified to the Commissioner of Labor of the State of New York (hereinafter "Commissioner of Labor") that such public **Work** is of an important nature and that a delay in carrying it to completion would result in serious disadvantage to the public; and provided, further, that such Commissioner of Labor shall have determined that such an emergency does in fact exist as provided in Labor Law Section 220.2.

37.2.3 Failure of the **Commissioner** to make such a certification to the Commissioner of Labor shall not entitle the **Contractor** to damages for delay or for any cause whatsoever.

37.2.4 Prevailing Rate of Wages: The wages to be paid for a legal day's **Work** to laborers, workers, or mechanics employed upon the **Work** contemplated by this **Contract** or upon any materials to be used thereon shall not be less than the "prevailing rate of wage" as defined in Labor Law Section 220, and as fixed by the **Comptroller** in the attached Schedule of Wage Rates and in updated schedules thereof. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the **Work** is being performed.

37.2.5 Requests for interpretation or correction in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the **Work** under this **Contract**. In the event that a trade not listed in the **Contract** is in fact employed during the performance of this **Contract**, the **Contractor** shall be required to obtain from the **Agency** the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this **Contract** at the price at which the **Contract** was awarded.

37.2.6 Minimum Wages: Except for employees whose wage is required to be fixed pursuant to Labor Law Section 220, all persons employed by the **Contractor** and any **Subcontractor** in the manufacture or furnishing of the supplies, materials, or equipment, or the furnishing of work, labor, or services, used in the performance of this **Contract**, shall be paid, without subsequent deduction or rebate unless expressly authorized by **Law**, not less than the sum mandated by **Law**.

37.3 Working Conditions: No part of the **Work**, labor or services shall be performed or rendered by

the **Contractor** in any plants, factories, buildings or surroundings or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of this **Contract**. Compliance with the safety, sanitary, and factory inspection **Laws** of the state in which the **Work** is to be performed shall be prima facie evidence of compliance with this Article 37.3.

37.4 Prevailing Wage Enforcement: The **Contractor** agrees to pay for all costs incurred by the **City** in enforcing prevailing wage requirements, including the cost of any investigation conducted by or on behalf of the **Agency** or the **Comptroller,** where the **City** discovers a failure to comply with any of the requirements of this Article 37 by the **Contractor** or its **Subcontractor(s)**. The **Contractor** also agrees that, should it fail or refuse to pay for any such investigation, the **Agency** is hereby authorized to deduct from a **Contractor's** account an amount equal to the cost of such investigation.

37.4.1 The Labor Law Section 220 and Section 220-d, as amended, provide that this **Contract** shall be forfeited and no sum paid for any **Work** done hereunder on a second conviction for willfully paying less than:

37.4.1(a) The stipulated prevailing wage scale as provided in Labor Law section 220, as amended, or

37.4.1(b) The stipulated minimum hourly wage scale as provided in Labor Law section 220-d, as amended.

37.4.2 For any breach or violation of either working conditions (Article 37.3) or minimum wages (Article 37.2.6) provisions, the party responsible therefor shall be liable to the **City** for liquidated damages, which may be withheld from any amounts due on any contracts with the **City** of such party responsible, or may be recovered in actions brought by the **City** Corporation Counsel in the name of the **City**, in addition to damages for any other breach of this **Contract**, for a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this **Contract**. In addition, the **Commissioner** shall have the right to cancel contracts and enter into other contracts for the completion of the original contract, with or without public letting, and the original **Contractor** shall be liable for any additional cost. All sums withheld or recovered as deductions, rebates, refunds, or underpayment of wages hereunder, shall be held in a special deposit account and shall be paid without interest, on order of the **Comptroller**, directly to the employees who have been paid less than minimum rates of pay as set forth herein and on whose account such sums were withheld or recovered, provided that no claims by employees for such payments shall be entertained unless made within two (2) years from the date of actual notice to the **Contractor** of the withholding or recovery of such sums by the **City**.

37.4.3 A determination by the **Comptroller** that a **Contractor** and/or its **Subcontractor** willfully violated Labor Law Section 220 will be forwarded to the **City's** five District Attorneys for review.

37.4.4 The **Contractor's** or **Subcontractor's** noncompliance with this Article 37.4 and Labor Law Section 220 may result in an unsatisfactory performance evaluation and the **Comptroller** may also find and determine that the **Contractor** or **Subcontractor** willfully violated the New York Labor **Law**.

37.4.4(a) An unsatisfactory performance evaluation for noncompliance with this Article 37.4 may result in a determination that the **Contractor** is a non-responsible bidder on subsequent procurements with the **City** and thus a rejection of a future award

of a contract with the **City**, as well as any other sanctions provided for by **Law**.

37.4.4(b) Labor Law Section 220-b, as amended, provides that when two (2) final determinations have been rendered against a **Contractor** or **Subcontractor** within any consecutive six (6) year period determining that such **Contractor** or **Subcontractor** has willfully failed to pay the prevailing rate of wages or to provide supplements in accordance with the Labor Law and this Article 37.4, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public works projects are rendered simultaneously, such **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the second final determination. If the final determination involves the falsification of payroll records or the kickback of wages or supplements, the **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the first final determination.

37.4.4(c) Labor Law Section 220, as amended, provides that the **Contractor** or **Subcontractor** found to have violated this Article 37.4 may be directed to make payment of wages or supplements including interest found to be due, and the **Contractor** or **Subcontractor** may be directed to make payment of a further sum as a civil penalty in an amount not exceeding twenty-five (25%) percent of the total amount found to be due.

37.5 The **Contractor** and its **Subcontractors** shall within ten (10) **Days** after mailing of a Notice of Award or written order, post in prominent and conspicuous places in each and every plant, factory, building, and structure where employees of the **Contractor** and its **Subcontractors** engaged in the performance of this **Contract** are employed, notices furnished by the **City**, in relation to prevailing wages and supplements, minimum wages, and other stipulations contained in Sections 220 and 220-h of the Labor Law, and the **Contractor** and its **Subcontractors** shall continue to keep such notices posted in such prominent and conspicuous places until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services required to be furnished or rendered under this **Contract**.

37.6 The **Contractor** shall strictly comply with all of the provisions of Articles 37.6.1 through 37.6.5, and provide for all workers, laborers or mechanics in its employ, the following:

37.6.1 Notices Posted At **Site**: Post, in a location designated by the **City**, schedules of prevailing wages and supplements for this **Project**, a copy of all re-determinations of such schedules for the **Project**, the Workers' Compensation **Law** Section 51 notice, all other notices required by **Law** to be posted at the **Site**, the **City** notice that this **Project** is a public works project on which each worker is entitled to receive the prevailing wages and supplements for the occupation at which he or she is working, and all other notices which the **City** directs the **Contractor** to post. The **Contractor** shall provide a surface for such notices which is satisfactory to the **City**. The **Contractor** shall maintain and keep current such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The **Contractor** shall post such notices before commencing any **Work** on the **Site** and shall maintain such notices until all **Work** on the **Site** is complete; and

37.6.2 Daily **Site** Sign-in Sheets: Maintain daily **Site** sign-in sheets, and require that **Subcontractors** maintain daily **Site** sign-in sheets for its employees, which include blank spaces for an employee's name to be both printed and signed, job title, date started and Social Security number, the time the employee began work and the time the employee left

work, until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services to be furnished or rendered under this **Contract** unless exception is granted by the **Comptroller** upon application by the **Agency**. In the alternative, subject to the approval of the **CCPO**, the **Contractor** and **Subcontractor** may maintain an electronic or biometric sign-in system, which provides the information required by this Article 37.6.2; and

37.6.3 Individual Employee Information Notices: Distribute a notice to each worker, laborer or mechanic employed under this **Contract**, in a form provided by the **Agency**, that this **Project** is a public works project on which each worker, laborer or mechanic is entitled to receive the prevailing rate of wages and supplements for the occupation at which he orshe is working. If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand ($250,000) dollars, such notice shall also include a statement that each worker, laborer or mechanic must be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration. Such notice shall be distributed to each worker before he or she starts performing any **Work** of this **Contract** and with the first paycheck after July first of each year. "Worker, laborer or mechanic" includes employees of the **Contractor** and all **Subcontractors** and all employees of suppliers entering the **Site**. At the time of distribution, the **Contractor** shall have each worker, laborer or mechanic sign a statement, in a form provided by the **Agency**, certifying that the worker has received the notice required by this Article 37.6.3, which signed statement shall be maintained with the payroll records required by this **Contract**; and

37.6.3(a) The **Contractor** and each **Subcontractor** shall notify each worker, laborer or mechanic employed under this **Contract** in writing of the prevailing rate of wages for their particular job classification. Such notification shall be given to every worker, laborer, and mechanic on their first pay stub and with every pay stub thereafter; and

37.6.4 **Site** Laminated Identification Badges: The **Contractor** shall provide laminated identification badges which include a photograph of the worker's, laborer's or mechanic's face and indicate the worker's, laborer's or mechanic's name, trade, employer's name, and employment starting date (month/day/year). Further, the **Contractor** shall require as acondition of employment on the **Site**, that each and every worker, laborer or mechanic wear the laminated identification badge at all times and that it may be seen by any representative of the **City**. The **Commissioner** may grant a written waiver from the requirement that the laminated identification badge include a photograph if the **Contractor** demonstrates that the identity of an individual wearing a laminated identification badge can be easily verified by another method; and

37.6.5 Language Other Than English Used On **Site**: Provide the **ACCO** notice when three (3) or more employees (worker and/or laborer and/or mechanic) on the **Site**, at any time, speak a language other than English. The **ACCO** will then provide the **Contractor** the notices described in Article 37.6.1 in that language or languages as may be required. The **Contractor** is responsible for all distributions under this Article 37; and

37.6.6 Provision of Records: The **Contractor** and **Subcontractor(s)** shall produce within five (5) **Days** on the **Site** of the **Work** and upon a written order of the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, or the **Comptroller,** such records as are required to be kept by this Article 37.6; and

37.6.7 The **Contractor** and **Subcontractor(s)** shall pay employees by check or direct deposit. If this **Contract** is for an amount greater than one million ($1,000,000) dollars, checks issued by the **Contractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**). For any subcontract for an amount greater than seven hundred fifty thousand ($750,000) dollars, checks issued by a **Subcontractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be usedif approved by the **Agency**); and

37.6.8 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 37.6.1 through 37.6.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.7 The **Contractor** and its **Subcontractors** shall keep such employment and payroll records as are required by Section 220 of the Labor Law. The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of this Article 37.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract.**

37.8 At the time the **Contractor** makes application for each partial payment and for final payment, the **Contractor** shall submit to the **Commissioner** a written payroll certification, in the form provided by this **Contract**, of compliance with the prevailing wage, minimum wage, and other provisions and stipulations required by Labor Law Section 220 and of compliance with the training requirements of Labor Law Section 220-h set forth in Article 35.2. This certification of compliance shall be a condition precedent to payment and no payment shall be made to the **Contractor** unless and until each such certification shall have been submitted to and received by the **Commissioner**.

37.9 This **Contract** is executed by the **Contractor** with the express warranty and representation that the **Contractor** is not disqualified under the provisions of Section 220 of the Labor Law from the award of the **Contract**.

37.10 Any breach or violation of any of the foregoing shall be deemed a breach or violation of a material provision of this **Contract**, and grounds for cancellation thereof by the **City**.

ARTICLE 38. PAYROLL REPORTS

38.1 The **Contractor** and its **Subcontractor(s)** shall maintain on the **Site** during the performanceof the **Work** the original payrolls or transcripts thereof which the **Contractor** and its **Subcontractor(s)** are required to maintain and shall submit such original payrolls or transcripts, subscribed and affirmed by it as true, within thirty (30) **Days** after issuance of its first payroll, and every thirty (30) **Days** thereafter, pursuant to Labor Law Section 220(3-a)(a)(iii). The **Contractor** and **Subcontractor(s)** shall submit such original payrolls or transcripts along with each and every payment requisition. If payment requisitions are not submitted at least once a month, the **Contractor** and its **Subcontractor(s)** shall submit original payrolls and transcripts both along with its payment requisitions and independently of its payment requisitions.

38.2 The **Contractor** shall maintain payrolls or transcripts thereof for six (6) years from the date of completion of the **Work** on this **Contract**. If such payrolls and transcripts are maintained outside of New York City after the completion of the **Work** and their production is required pursuant to this Article 38, the **Contractor** shall produce such records in New York City upon request by the City.

38.3 The **Contractor** and **Subcontractor(s)** shall comply with any written order, direction, or request made by the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law**

Investigator(s), or the **Comptroller**, to provide to the requesting party any of the following information and/or records within five (5) **Days** of such written order, direction, or request:

38.3.1 Such original payrolls or transcripts thereof subscribed and affirmed by it as true and the statements signed by each worker pursuant to this Chapter VIII; and/or

38.3.2 Attendance sheets for each **Day** on which any employee of the **Contractor** and/or any of the **Subcontractor(s)** performed **Work** on the **Site**, which attendance sheet shall be in a form acceptable to the **Agency** and shall provide information acceptable to the **Agency** to identify each such employee; and/or

38.3.3 Any other information to satisfy the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)** or the **Comptroller**, that this Chapter VIII and the Labor Law, as to the hours of employment and prevailing rates of wages and/or supplemental benefits, are being observed.

38.4 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 38.1 and/or 38.2 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

ARTICLE 39. DUST HAZARDS

39.1 Should a harmful dust hazard be created in performing the **Work** of this **Contract**, for the elimination of which appliances or methods have been approved by the Board of Standards and Appeals of the City of New York, such appliances and methods shall be installed, maintained, and effectively operated during the continuance of such harmful dust hazard. Failure to comply with this provision after notice shall make this **Contract** voidable at the sole discretion of the **City**.

CHAPTER IX: PARTIAL AND FINAL PAYMENTS

ARTICLE 40. CONTRACT PRICE

40.1 The **City** shall pay, and the **Contractor** agrees to accept, in full consideration for the **Contractor's** performance of the **Work** subject to the terms and conditions hereof, the lump sum priceor unit prices for which this **Contract** was awarded, plus the amount required to be paid for any **Extra Work** ordered by the **Commissioner** under Article 25, less credit for any **Work** omitted pursuant to Article 29.

ARTICLE 41. BID BREAKDOWN ON LUMP SUM

41.1 Within fifteen (15) **Days** after the commencement date specified in the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Resident Engineer**, the **Contractor** shall submitto the **Resident Engineer** a breakdown of its bid price, or of lump sums bid for items of the **Contract**, showing the various operations to be performed under the **Contract**, as directed in the progress schedule required under Article 9, and the value of each of such operations, the total of such items to equal the lump sum price bid. Said breakdown must be approved in writing by the **Resident Engineer**.

41.2 No partial payment will be approved until the **Contractor** submits a bid breakdown that is acceptable to the **Resident Engineer**.

41.3 The **Contractor** shall also submit such other information relating to the bid breakdown as directed by the **Resident Engineer**. Thereafter, the breakdown may be used only for checking the **Contractor's** applications for partial payments hereunder, but shall not be binding upon the **City**, the **Commissioner**, or the **Engineer** for any purpose whatsoever.

ARTICLE 42. PARTIAL PAYMENTS

42.1 From time to time as the **Work** progresses satisfactorily, but not more often than once each calendar month (except where the **Commissioner** approves in writing the submission of invoices on a more frequent basis and for invoices relating to **Work** performed pursuant to a change order), the **Contractor** may submit to the **Engineer** a requisition for a partial payment in the prescribed form, which shall contain an estimate of the quantity and the fair value of the **Work** done during the payment period.

42.2 Partial payments may be made for materials, fixtures, and equipment in advance of their actual incorporation in the **Work**, as the **Commissioner** may approve, and upon the terms and conditions set forth in the General Conditions.

42.3 The **Contractor** shall also submit to the **Commissioner** in connection with every application for partial payment a verified statement in the form prescribed by the **Comptroller** setting forth the information required under Labor Law Section 220-a.

42.4 Within thirty (30) **Days** after receipt of a satisfactory payment application, and within sixty (60) **Days** after receipt of a satisfactory payment application in relation to **Work** performed pursuant to a change order, the **Engineer** will prepare and certify, and the **Commissioner** will approve, a voucher for a partial payment in the amount of such approved estimate, less any and all deductions authorized to be made by the **Commissioner** under the terms of this **Contract** or by **Law**.

ARTICLE 43. PROMPT PAYMENT

43.1 The Prompt Payment provisions of the **PPB** Rules in effect at the time of the bid will be applicable to payments made under this **Contract**. The provisions require the payment to the **Contractor** of interest on payments made after the required payment date, except as set forth in the **PPB** Rules.

43.2 The **Contractor** shall submit a proper invoice to receive payment, except where the **Contract** provides that the **Contractor** will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.

43.3 Determination of interest due will be made in accordance with the **PPB** Rules.

43.4 If the **Contractor** is paid interest, the proportionate share(s) of that interest shall be forwarded by the **Contractor** to its **Subcontractor(s)**.

43.5 The **Contractor** shall pay each **Subcontractor** or **Materialman** not later than seven (7) **Days** after receipt of payment out of amounts paid to the **Contractor** by the **City** for **Work** performed by the **Subcontractor** or **Materialman** under this **Contract**.

43.5.1 If **Contractor** fails to make any payment to any **Subcontractor** or **Materialman** within seven (7) **Days** after receipt of payment by the **City** pursuant to this Article 43.5,

then the **Contractor** shall pay interest on amounts due to such **Subcontractor** or **Materialman** at the rate of interest in effect on the date such payment is made by the **Contractor** computed in accordance with Section 756-b (1)(b) of the New York General Business Law. Accrual of interest shall commence on the **Day** immediately following the expiration of the seventh **Day** following receipt of payment by the **Contractor** from the **City** and shall end on the date on which payment is made.

43.6 The **Contractor** shall include in each of its subcontracts a provision requiring each **Subcontractor** to make payment to each of its **Subcontractors** or **Materialmen** for **Work** performed under this **Contract** in the same manner and within the same time period set forth above.

ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT

44.1 The **Contractor** shall submit with the **Substantial Completion** requisition:

44.1.1 A final verified statement of any pending Article 27 disputes in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed,and an itemized statement and breakdown of the amount claimed for each such delay.

44.1.1(a) With respect to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City** Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 44.1.1(a) is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor** upon acceptance of the **Substantial Completion** payment pursuant to this Article 44, will have waived any such claims.

44.1.2 A **Final Approved Punch List**.

44.1.3 Where required, a request for an extension of time to achieve **Substantial Completion** or final extension of time.

44.2 The **Commissioner** shall issue a voucher calling for payment of any part or all of the balance due for **Work** performed under the **Contract**, including monies retained under Article 21, less any and all deductions authorized to be made by the **Commissioner**, under this **Contract** or by **Law**, and less twice the amount the **Commissioner** considers necessary to ensure the completion of the balance of the **Work** by the **Contractor**. Such a payment shall be considered a partial and not a final payment. No **Substantial Completion** payment shall be made under this Article 44 where the **Contractor** failed to complete the **Work** within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of **Work** have been acted upon pursuant to Article 13.

44.3 No further partial payments shall be made to the **Contractor** after **Substantial Completion**, except the **Substantial Completion** payment and payment pursuant to any **Contractor's** requisition that were properly filed with the **Commissioner** prior to the date of **Substantial Completion**; however, the **Commissioner** may grant a waiver for further partial payments after the date of **Substantial Completion** to permit payments for change order **Work** and/or release of retainage and deposits pursuant to Articles 21 and 24. Such waiver shall be in writing.

44.4 The **Contractor** acknowledges that nothing contained in this Article 44 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 45. FINAL PAYMENT

45.1 After completion and **Final Acceptance** of the **Work**, the **Contractor** shall submit all required certificates and documents, together with a requisition for the balance claimed to be due under the **Contract**, less the amount authorized to be retained for maintenance under Article 24. Such submission shall be within 90 days of the date of the **Commissioner's** written determination of **Final Acceptance**, or within such additional time as may be granted by the **Commissioner** in writing. If the **Contractor** fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the **Contractor** and the **Contractor** shall be deemed to have forfeited its right to payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the **Commissioner**.

45.2 Amended Verified Statement of Claims: The **Contractor** shall also submit with the final requisition any amendments to the final verified statement of any pending dispute resolution procedures in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) that have occurred subsequent to **Substantial Completion**, setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each such item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay. With reference to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City** Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 45.2, is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor**, upon acceptance of the Final Payment pursuant to Article 46, will have waived any such claims.

45.3 Preparation of Final Voucher: Upon determining the balance due hereunder other than on account of claims, the **Engineer** will prepare and certify, for the Commissioner's approval, a voucher for final payment in that amount less any and all deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**. In the case of a lump sum **Contract**, the **Commissioner** shall certify the voucher for final payment within thirty (30) **Days** from the date of completion and acceptance of the **Work**, provided all requests for extensions of time have been acted upon.

45.3.1 All prior certificates and vouchers upon which partial payments were made, being merely estimates made to enable the **Contractor** to prosecute the **Work** more advantageously, shall be subject to correction in the final voucher, and the certification of the **Engineer**

thereon and the approval of the **Commissioner** thereof, shall be conditions precedent to the right of the **Contractor** to receive any money hereunder. Such final voucher shall be binding and conclusive upon the **Contractor**.

45.3.2 Payment pursuant to such final voucher, less any deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**, shall constitute the final payment, and shall be made by the **Comptroller** within thirty (30) **Days** after the filing of such voucher in his/her office.

45.4 The **Contractor** acknowledges that nothing contained in this Article 45 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT

46.1 The acceptance by the **Contractor**, or by anyone claiming by or through it, of the final payment, whether such payment be made pursuant to any judgment of any court, or otherwise, shall constitute and operate as a release of the **City** from any and all claims of and liability to the **Contractor** for anything heretofore done or furnished for the **Contractor** relating to or arising out of this **Contract** and the **Work** done hereunder, and for any prior act, neglect or default on the part of the **City** or any of its officials, agents or employees, excepting only a claim against the **City** for the amounts deducted or retained in accordance with the terms and provisions of this **Contract** or by **Law**, and excepting any claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44and 45.

46.2 The **Contractor** is warned that the execution by it of a release, in connection with the acceptance of the final payment, containing language purporting to reserve claims other than those herein specifically excepted from the operation of this Article 46, or those for amounts deducted by the **Commissioner** from the final requisition or from the final payment as certified by the **Engineer** and approved by the **Commissioner**, shall not be effective to reserve such claims, anything stated to the **Contractor** orally or in writing by any official, agent or employee of the **City** to the contrary notwithstanding.

46.3 Should the **Contractor** refuse to accept the final payment as tendered by the **Comptroller**, it shall constitute a waiver of any right to interest thereon.

46.4 The **Contractor**, however, shall not be barred by this Article 46 from commencing an action for breach of **Contract** to the extent permitted by **Law** and by the terms of the **Contract** for any claims that are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45 or that arose after submission of the final payment requisition, provided that a detailed and verified statement of claim is served upon the contracting **Agency** and **Comptroller** not later than forty (40) **Days** after the making of such final payment by electronic funds transfer (EFT)or the mailing of such final payment. The statement shall specify the items upon which the claim will be based and any such claim shall be limited to such items.

ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION

47.1 All works of art, including paintings, mural decorations, stained glass, statues, bas-reliefs, and other sculptures, monuments, fountains, arches, and other structures of a permanent character intendedfor ornament or commemoration, and every design of the same to be used in the performance of this **Contract**, and the design of all bridges, approaches, buildings, gates, fences, lamps, or structures to be erected, pursuant

to the terms of this **Contract**, shall be submitted to the Art Commission, d/b/a the Public Design Commission of the City of New York, and shall be approved by the Public Design Commission prior to the erection or placing in position of the same. The final payment shall not become due or payable under this **Contract** unless and until the Public Design Commission shall certify that the design for the **Work** herein contracted for has been approved by the said Public Design Commission, and that the same has been executed in substantial accordance with the design so approved, pursuant to the provisions of Chapter 37, Section 854 of the **City** Charter, as amended.

CHAPTER X: CONTRACTOR'S DEFAULT

ARTICLE 48. COMMISSIONER'S RIGHT TO DECLARE CONTRACTOR IN DEFAULT

48.1 In addition to those instances specifically referred to in other Articles herein, the **Commissioner** shall have the right to declare the **Contractor** in default of this **Contract** if:

48.1.1 The **Contractor** fails to commence **Work** when notified to do so by the **Commissioner**; or if

48.1.2 The **Contractor** shall abandon the **Work**; or if

48.1.3 The **Contractor** shall refuse to proceed with the **Work** when and as directed by the **Commissioner**; or if

48.1.4 The **Contractor** shall, without just cause, reduce its working force to a number which, if maintained, would be insufficient, in the opinion of the **Commissioner**, to complete the **Work** in accordance with the progress schedule; or if

48.1.5 The **Contractor** shall fail or refuse to increase sufficiently such working force when ordered to do so by the **Commissioner**; or if

48.1.6 The **Contractor** shall sublet, assign, transfer, convert or otherwise dispose of this **Contract** other than as herein specified; or sell or assign a majority interest in the **Contractor**; or if

48.1.7 The **Contractor** fails to secure and maintain all required insurance; or if

48.1.8 A receiver or receivers are appointed to take charge of the **Contractor's** property or affairs; or if

48.1.9 The **Commissioner** shall be of the opinion that the **Contractor** is or has been unnecessarily or unreasonably or willfully delaying the performance and completion of the **Work**, or the award of necessary subcontracts, or the placing of necessary material and equipment orders; or if

48.1.10 The **Commissioner** shall be of the opinion that the **Contractor** is or has been willfully or in bad faith violating any of the provisions of this **Contract**; or if

48.1.11 The **Commissioner** shall be of the opinion that the **Work** cannot be completed within the time herein provided therefor or within the time to which such completion may have been extended; provided, however, that the impossibility of timely completion is, in the

Commissioner's opinion, attributable to conditions within the **Contractor's** control; orif

48.1.12 The **Work** is not completed within the time herein provided therefor or within the time to which the **Contractor** may be entitled to have such completion extended; or if

48.1.13 Any statement or representation of the **Contractor** in the **Contract** or in any document submitted by the **Contractor** with respect to the **Work**, the **Project**, or the **Contract** (or for purposes of securing the **Contract**) was untrue or incorrect when made; or if

48.1.14 The **Contractor** or any of its officers, directors, partners, five (5%) percent shareholders, principals, or other persons substantially involved in its activities, commits any of the acts or omissions specified as the grounds for debarment in the **PPB** Rules.

48.2 Before the **Commissioner** shall exercise his/her right to declare the **Contractor** in default, the **Commissioner** shall give the **Contractor** an opportunity to be heard, upon not less than two (2) **Days**' notice.

ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT

49.1 The right to declare the **Contractor** in default for any of the grounds specified or referred to in Article 48 shall be exercised by sending the **Contractor** a notice, signed by the **Commissioner**, setting forth the ground or grounds upon which such default is declared (hereinafter referred to as a "Notice of Default").

49.2 The **Commissioner's** determination that the **Contractor** is in default shall be conclusive, final, and binding on the parties and such a finding shall preclude the **Contractor** from commencing a plenary action for any damages relating to the **Contract**. If the **Contractor** protests the determination of the **Commissioner**, the **Contractor** may commence an action in a court of competent jurisdiction of the State of New York under Article 78 of the New York Civil Practice Law and Rules.

ARTICLE 50. QUITTING THE SITE

50.1 Upon receipt of such notice the **Contractor** shall immediately discontinue all further operations under this **Contract** and shall immediately quit the **Site**, leaving untouched all plant, materials, equipment, tools, and supplies then on the **Site**.

ARTICLE 51. COMPLETION OF THE WORK

51.1 The **Commissioner**, after declaring the **Contractor** in default, may then have the **Work** completed by such means and in such manner, by contract with or without public letting, or otherwise, as he/she may deem advisable, utilizing for such purpose such of the **Contractor's** plant, materials, equipment, tools, and supplies remaining on the **Site**, and also such **Subcontractors**, as he/she may deem advisable.

51.2 After such completion, the **Commissioner** shall make a certificate stating the expense incurred in such completion, which shall include the cost of re-letting and also the total amount of liquidated damages (at the rate provided for in the **Contract**) from the date when the **Work** should have been completed by the **Contractor** in accordance with the terms hereof to the date of actual completion of the **Work**. Such certificate shall be binding and conclusive upon the **Contractor**, its sureties, and any person claiming under the **Contractor**, as to the amount thereof.

51.3 The expense of such completion, including any and all related and incidental costs, as so certified by the **Commissioner**, and any liquidated damages assessed against the **Contractor**, shall be charged against and deducted out of monies which are earned by the **Contractor** prior to the date of default. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

ARTICLE 52. PARTIAL DEFAULT

52.1 In case the **Commissioner** shall declare the **Contractor** in default as to a part of the **Work** only, the **Contractor** shall discontinue such part, shall continue performing the remainder of the **Work** in strict conformity with the terms of this **Contract**, and shall in no way hinder or interfere with any **Other Contractor(s)** or persons whom the **Commissioner** may engage to complete the **Work** as to which the **Contractor** was declared in default.

52.2 The provisions of this Chapter relating to declaring the **Contractor** in default as to the entire **Work** shall be equally applicable to a declaration of partial default, except that the **Commissioner** shall be entitled to utilize for completion of the part of the **Work** as to which the **Contractor** was declared in default only such plant, materials, equipment, tools, and supplies as had been previously used by the **Contractor** on such part.

ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK

53.1 In completing the whole or any part of the **Work** under the provisions of this Chapter X, the **Commissioner** shall have the power to depart from or change or vary the terms and provisions of this **Contract**, provided, however, that such departure, change or variation is made for the purpose of reducing the time or expense of such completion. Such departure, change or variation, even to the extent of accepting a lesser or different performance, shall not affect the conclusiveness of the **Commissioner's** certificate of the cost of completion referred to in Article 51, nor shall it constitute a defense to an action to recover the amount by which such certificate exceeds the amount which would have been payable to the **Contractor** hereunder but for its default.

ARTICLE 54. OTHER REMEDIES

54.1 In addition to the right to declare the **Contractor** in default pursuant to this Chapter X, the **Commissioner** shall have the absolute right, in his/her sole discretion and without a hearing, to complete or cause to be completed in the same manner as described in Articles 51 and 53, any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List**. A written notice of the exercise of this right shall be sent to the **Contractor** who shall immediately quit the **Site** in accordance with the provisions of Article 50.

54.2 The expense of completion permitted under Article 54.1, including any and all related and incidental costs, as so certified by the **Commissioner**, shall be charged against and deducted out of monies which have been earned by the **Contractor** prior to the date of the exercise of the right set forth in Article 54.1; the balance of such monies, if any, subject to the other provisions of this **Contract**, to be paid to the **Contractor** without interest after such completion. Should the expense of such completion, as certified by

the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

54.3 The previous provisions of this Chapter X shall be in addition to any and all other remedies available under **Law** or in equity.

54.4 The exercise by the **City** of any remedy set forth herein shall not be deemed a waiver by the **City** of any other legal or equitable remedy contained in this **Contract** or provided under **Law**.

CHAPTER XI: MISCELLANEOUS PROVISIONS

ARTICLE 55. CONTRACTOR'S WARRANTIES

55.1 In consideration of, and to induce, the award of this **Contract** to the **Contractor**, the **Contractor** represents and warrants:

55.1.1 That it is financially solvent, sufficiently experienced and competent to performthe **Work**; and

55.1.2 That the facts stated in its bid and the information given by it pursuant to the Information for Bidders is true and correct in all respects; and

55.1.3 That it has read and complied with all requirements set forth in the **Contract**.

ARTICLE 56. CLAIMS AND ACTIONS THEREON

56.1 Any claim, that is not subject to dispute resolution under the **PPB** Rules or this **Contract**, against the **City** for damages for breach of **Contract** shall not be made or asserted in any action, unless the **Contractor** shall have strictly complied with all requirements relating to the giving of notice and of information with respect to such claims, as herein before provided.

56.2 Nor shall any action be instituted or maintained on any such claims unless such action is commenced within six (6) months after **Substantial Completion**; except that:

56.2.1 Any claims arising out of events occurring after **Substantial Completion** and before **Final Acceptance** of the **Work** shall be asserted within six (6) months of **Final Acceptance** of the **Work**;

56.2.2 If the **Commissioner** exercises his/her right to complete or cause to complete any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List** pursuant to Article 54, any such action shall be commenced within six (6) months from the date the **Commissioner** notifies the **Contractor** in writing that he/she has exercised such right. Any claims for monies deducted, retained or withheld under the provisions of this **Contract** shall be assertedwithin six (6) months after the date when such monies otherwise become due and payable hereunder; and

56.2.3 If the **Commissioner** exercises his/her right to terminate the **Contract** pursuant to Article 64, any such action shall be commenced within six (6) months of the date the **Commissioner** exercises said right.

ARTICLE 57. INFRINGEMENT

57.1 The **Contractor** shall be solely responsible for and shall defend, indemnify, and hold the **City** harmless from any and all claims (even if the allegations of the lawsuit are without merit) and judgments for damages and from costs and expenses to which the **City** may be subject to or which it may suffer or incur allegedly arising out of or in connection with any infringement by the **Contractor** of any copyright, trade secrets, trademark or patent rights or any other property or personal right of any third party by the **Contractor** and/or its **Subcontractors** in the performance or completion of the **Work**. Insofar as the facts or **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent permitted by **Law**.

ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES

58.1 No claim whatsoever shall be made by the **Contractor** against any official, agent or employee of the **City** for, or on account of, anything done or omitted to be done in connection with this **Contract**.

ARTICLE 59. SERVICE OF NOTICES

59.1 The **Contractor** hereby designates the business address, fax number, and email address specified in its bid, as the place where all notices, directions or other communications to the **Contractor** may be delivered, or to which they may be mailed. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless receipt of the fax or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage pre- paid envelope.

59.2 **Contractor's** notice address, email address, or fax number may be changed at any time by an instrument in writing, executed and acknowledged by the **Contractor**, and delivered to the **Commissioner**.

59.3 Nothing herein contained shall, however, be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the **Contractor** personally, or, if the **Contractor** is a corporation, upon any officer thereof.

ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT

60.1 If this **Contract** contains any unlawful provision not an essential part of the **Contract** and which shall not appear to have been a controlling or material inducement to the making thereof, the same shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the **Contract** without affecting the binding force of the remainder.

ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED

61.1 It is the intent and understanding of the parties to this **Contract** that each and every provision of **Law** required to be inserted in this **Contract** shall be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is to be deemed to be inserted herein, and if, through mistake or otherwise, any such provision is not inserted, or is not inserted in correct form, then this **Contract** shall forthwith upon the application of either party be amended by such insertion so as to comply strictly with the **Law** and without prejudice to the rights of either party hereunder.

ARTICLE 62. TAX EXEMPTION

62.1 The **City** is exempt from payment of Federal, State, and local taxes, including sales and compensating use taxes of the State of New York and its cities and counties on all tangible personal property sold to the **City** pursuant to the provisions of this **Contract**. These taxes are not to be included in bids. However, this exemption does not apply to tools, machinery, equipment or other property leased by or to the **Contractor**, **Subcontractor** or **Materialman** or to tangible personal property which, even though it is consumed, is not incorporated into the completed **Work** (consumable supplies) and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**. The **Contractor** and its **Subcontractors** and **Materialmen** shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on such leased tools, machinery, equipment or other property and upon all such consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**.

62.2 The **Contractor** agrees to sell and the **City** agrees to purchase all tangible personal property, other than consumable supplies and other tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**, that is required, necessary or proper for or incidental to the construction of the **Project** covered by this **Contract**. The sum paid under this **Contract** for such tangible personal property shall be in full payment and consideration for the sale of such tangible personal property.

62.2.1 The **Contractor** agrees to construct the **Project** and to perform all **Work**, labor and services rendered, necessary, proper or incidental thereto for the sum shown in the bid forthe performance of such **Work**, labor, and services, and the sum so paid pursuant to this **Contract** for such **Work**, labor, and services, shall be in full consideration for the performance by the **Contractor** of all its duties and obligations under this **Contract** in connection with said **Work,** labor, and services.

62.3 20 NYCRR Section 541.3(d) provides that a **Contractor**'s purchases of tangible personal property that is either incorporated into real property owned by a governmental entity or purchased for and sold to a governmental entity are exempt from sales and use tax. The **City** shall not pay sales tax for any such tangible personal property that it purchases from the **Contractor** pursuant to the **Contract.** With respect to such tangible personal property, the **Contractor**, at the request of the **City**, shall furnish to the **City** such bills of sale and other instruments as may be required by the **City**, properly executed, acknowledged and delivered assuring to the **City** title to such tangible personal property, free of liens and/or encumbrances, and the **Contractor** shall mark or otherwise identify all such tangible personal property as the property of the **City**.

62.4 Title to all tangible personal property to be sold by the **Contractor** to the **City** pursuant to the provisions of the **Contract** shall immediately vest in and become the sole property of the **City** upon delivery of such tangible personal property to the **Site**. Notwithstanding such transfer of title, the **Contractor** shall

have the full and continuing responsibility to install such tangible personal property in accordance with the provisions of this **Contract**, protect it, maintain it in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional tangible personal property in place of any that may be lost, stolen or rendered unusable, without cost to the **City**, until such time as the **Work** covered by the **Contract** is fully accepted by the **City**. Such transfer of title shall in no way affect any of the **Contractor's** obligations hereunder. In the event that, after title has passed to the **City**, any of the tangible personal property is rejected as being defective or otherwise unsatisfactory, title to all such tangible personal property shall be deemed to have been transferred back to the **Contractor**.

62.5 The purchase by **Subcontractors** or **Materialmen** of tangible personal property to be sold hereunder shall be a purchase or procurement for resale to the **Contractor** (either directly or through other **Subcontractors**) and therefore not subject to the aforesaid sales and compensating use taxes, provided that the subcontracts and purchase agreements provide for the resale of such tangible personal property and that such subcontracts and purchase agreements are in a form similar to this **Contract** with respect to the separation of the sale of consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work** from the **Work** and labor, services, and any other matters to be provided, and provided further that the subcontracts and purchase agreements provide separate prices for tangible personal property and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for tangible personal property from the payments for other **Work** and labor and other things to be provided.

62.6 The **Contractor** and its **Subcontractors** and **Materialmen** shall furnish a **Contractor** Exempt Purchase Certificate to all persons, firms or corporations from which they purchase tangible personal property for the performance of the **Work** covered by this **Contract**.

62.7 In the event any of the provisions of this Article 62 shall be deemed to be in conflict with any other provisions of this **Contract** or create any ambiguity, then the provisions of this Article 62 shall control.

ARTICLE 63. INVESTIGATION(S) CLAUSE

63.1 The parties to this **Contract** agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a United States, a State of New York (State) or a **City** governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit or license that is the subject of the investigation, audit or inquiry.

63.2 If any person who has been advised that his/her statement, and any information from such statement, will not be used against him/her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision or public authority thereof, or the Port Authority of NewYork and New Jersey, or any local development corporation within the **City**, or any public benefit corporation organized under the **Laws** of the State of New York, or;

63.3 If any person refuses to testify for a reason other than the assertion of his/her privilege against self incrimination in an investigation, audit or inquiry conducted by a **City** or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interestin, and is

seeking testimony concerning the award of, or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision thereof or any local development corporation within the **City**, then;

63.4 The **Commissioner** whose **Agency** is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon not less than five (5) **Days**' written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.

63.5 If any non-governmental party to the hearing requests an adjournment, the **Commissioner** who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license, pending the final determination pursuant to Article 63.7 without the **City** incurring any penalty or damages for delay or otherwise.

63.6 The penalties which may attach after a final determination by the **Commissioner** may include but shall not exceed:

63.6.1 The disqualification for a period not to exceed five (5) years from the date of an adverse determination for any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the **City**; and/or

63.6.2 The cancellation or termination of any and all such existing **City** contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this **Contract**, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the **City** incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the **City**.

63.7 The **Commissioner** shall consider and address in reaching his/her determination and inassessing an appropriate penalty the factors in Articles 63.7.1 and 63.7.2. The **Commissioner** may also consider, if relevant and appropriate, the criteria established in Articles 63.7.3 and 63.7.4, in addition to any other information which may be relevant and appropriate:

63.7.1 The party's good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.

63.7.2 The relationship of the person who refused to testify to any entity that is a party tothe hearing, including but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility theperson has within the entity.

63.7.3 The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the **City**.

63.7.4 The effect a penalty may have on an unaffiliated and unrelated party or entity thathas a significant interest in an entity subject to penalties under Article 63.6, provided that the party

or entity has given actual notice to the **Commissioner** upon the acquisition of the interest, or at the hearing called for in Article 63.4, gives notice and proves that such interest was previously acquired. Under either circumstance the party or entity shall present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such person or entity.

63.8 Definitions:

63.8.1 The term "license" or "permit" as used in this Article 63 shall be defined as a license, permit, franchise or concession not granted as a matter of right.

63.8.2 The term "person" as used in this Article 63 shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

63.8.3 The term "entity" as used in this Article 63 shall be defined as any firm, partnership, corporation, association, joint venture, or person that receives monies, benefits, licenses, leases, or permits from or through the **City** or otherwise transacts business with the **City**.

63.8.4 The term "member" as used in this Article 63 shall be defined as any person associated with another person or entity as a partner, director, officer, principal or employee.

63.9 In addition to and notwithstanding any other provision of this **Contract**, the **Commissioner** may in his/her sole discretion terminate this **Contract** upon not less than three (3) **Days'** written notice in the event the **Contractor** fails to promptly report in writing to the **Commissioner** of the Department of Investigations ("DOI") of the **City** any solicitation of money, goods, requests for future employment or other benefit or thing of value, by or on behalf of any employee of the **City** or other person, firm, corporation or entity for any purpose which may be related to the procurement or obtaining of this **Contract** by the **Contractor**, or affecting the performance of this **Contract**.

ARTICLE 64. TERMINATION BY THE CITY

64.1 In addition to termination pursuant to any other article of this **Contract**, the **Commissioner** may, at any time, terminate this **Contract** by written notice to the **Contractor**. In the event of termination, the **Contractor** shall, upon receipt of such notice, unless otherwise directed by the **Commissioner**:

64.1.1 Stop **Work** on the date specified in the notice;

64.1.2 Take such action as may be necessary for the protection and preservation of the **City's** materials and property;

64.1.3 Cancel all cancelable orders for material and equipment;

64.1.4 Assign to the **City** and deliver to the **Site** or another location designated by the **Commissioner**, any non-cancelable orders for material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract** and not incorporated in the **Work**;

64.1.5 Take no action which will increase the amounts payable by the **City** under this
64.1.5 **Contract**.

64.2 In the event of termination by the **City** pursuant to this Article 64, payment to the **Contractor** shall be in accordance with Articles 64.2.1, 64.2.2 or 64.2.3, to the extent that each respective article applies.

64.2.1 Lump Sum Contracts or Items: On all lump sum **Contracts**, or on lump sum items in a **Contract**, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.1(a) and 64.2.1(b), less all payments previously made pursuant to this **Contract**. On lump sum **Contracts** only, the **City** will also pay the **Contractor** an additional sum as provided in Article 64.2.1(c).

64.2.1(a) For **Work** completed prior to the notice of termination, the **Contractor** shall be paid a pro rata portion of the lump sum bid amount, plus approved change orders, based upon the percent completion of the **Work**, as determined by the **Commissioner**. For the purpose of determining the pro rata portion of the lump sum bid amount to which the **Contractor** is entitled, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be dispositive. The **Commissioner's** determination hereunder shall be final, binding, and conclusive.

64.2.1(b) For non-cancelable material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated in the **Work**, the **Contractor** shall be paid the lesser of the following, less salvage value:

64.2.1(b)(i) The Direct Cost, as defined in Article 64.2.4; or

64.2.1(b)(ii) The fair and reasonable value, if less than Direct Cost, of such material and equipment, plus necessary and reasonable delivery costs.

64.2.1(b)(iii) In addition, the **Contractor** shall be paid five (5%) percent of the amount described in Article 64.2.1(b)(i) or Article 64.2.1(b)(ii), whichever applies.

64.2.1(c) Except as otherwise provided in Article 64.2.1(d), on all lump sum **Contracts**, the **Contractor** shall be paid the percentage indicated below applied to the difference between the total lump sum bid amount and the total of all payments made prior to the notice of termination plus all payments allowed pursuant to Articles 64.2.1(a) and 64.2.1(b):

64.2.1(c)(i) Five (5%) percent of the first five million ($5,000,000) dollars; and

64.2.1(c)(ii) Three (3%) percent of any amount between five million ($5,000,000) dollars and fifteen million ($15,000,000) dollars; plus

64.2.1(c)(iii) One (1%) percent of any amount over fifteen million ($15,000,000) dollars.

64.2.1(d) In the event the **City** terminates a lump sum **Contract** pursuant to this Article 64 within ninety (90) **Days** after registration of the **Contract** with the **Comptroller**, the **Contractor** shall be paid one (1%) percent of the difference between the lump sum bid amount and the total of all payments made pursuant to this Article 64.2.

64.2.2 Unit Price Contracts or Items: On all unit price **Contracts**, or on unit price items in a

Contract, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.2(a) and 64.2.2(b), less all payments previously made pursuant to this **Contract**:

64.2.2(a) For all completed units, the unit price stated in the **Contract**, and

64.2.2(b) For units that have been ordered but are only partially completed, the **Contractor** will be paid:

64.2.2(b)(i) A pro rata portion of the unit price stated in the **Contract** based upon the percent completion of the unit and

64.2.2(b)(ii) For non-cancelable material and equipment, payment willbe made pursuant to Article 64.2.1(b).

64.2.3 Time and Materials Contracts or Items Based on Time and Material Records: On all **Contracts** or items in a **Contract** where payment for the **Work** is based on time and material records, the **Contractor** shall be paid in accordance with Article 26, less all payments previously made pursuant to this **Contract**.

64.2.4 Direct Costs: Direct Costs as used in this Article 64.2 shall mean:

64.2.4(a) The actual purchase price of material and equipment, plus necessary and reasonable delivery costs,

64.2.4(b) The actual cost of labor involved in construction and installation at the **Site**, and

64.2.4(c) The actual cost of necessary bonds and insurance purchased pursuant to requirements of this **Contract** less any amounts that have been or should be refunded by the **Contractor's** sureties or insurance carriers.

64.2.4(d) Direct Costs shall not include overhead.

64.3 In no event shall any payments under this Article 64 exceed the **Contract** price for such items.

64.4 All payments pursuant to Article 64 shall be in the nature of liquidated damages and shall be accepted by the **Contractor** in full satisfaction of all claims against the **City**.

64.5 The **City** may deduct or set off against any sums due and payable pursuant to this Article 64, any deductions authorized by this **Contract** or by **Law** (including but not limited to liquidated damages) and any claims it may have against the **Contractor**. The **City's** exercise of the right to terminate the **Contract** pursuant to this Article 64 shall not impair or otherwise effect the **City's** right to assert any claims it may have against the **Contractor** in a plenary action.

64.6 Where the **Work** covered by the **Contract** has been substantially completed, as determined in writing by the **Commissioner**, termination of the **Work** shall be handled as an omission of **Work** pursuant to Articles 29 and 33, in which case a change order will be issued to reflect an appropriate reduction in the **Contract** sum, or if the amount is determined after final payment, such amount shall be paid by the **Contractor**.

ARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE

65.1 This **Contract** shall be deemed to be executed in the **City** regardless of the domicile of the **Contractor**, and shall be governed by and construed in accordance with the **Laws** of the State of New York and the **Laws** of the United States, where applicable.

65.2 The parties agree that any and all claims asserted against the **City** arising under this **Contract** or related thereto shall be heard and determined in the courts of the State of New York ("New York State Courts") located in the **City** and County of New York. To effect this **Contract** and intent, the **Contractor** agrees:

65.2.1 If the **City** initiates any action against the **Contractor** in Federal court or in a New York State Court, service of process may be made on the **Contractor** either in person, wherever such **Contractor** may be found, or by registered mail addressed to the **Contractor** at its address as set forth in this **Contract**, or to such other address as the **Contractor** may provide to the **City** in writing; and

65.2.2 With respect to any action between the **City** and the **Contractor** in a New York State Court, the **Contractor** hereby expressly waives and relinquishes any rights it might otherwise have:

65.2.2(a) To move to dismiss on grounds of forum non conveniens;

65.2.2(b) To remove to Federal Court; and

65.2.2(c) To move for a change of venue to a New York State Court outside New York County.

65.2.3 With respect to any action brought by the **City** against the **Contractor** in a Federal Court located in the **City**, the **Contractor** expressly waives and relinquishes any right it might otherwise have to move to transfer the action to a Federal Court outside the **City**.

65.2.4 If the **Contractor** commences any action against the **City** in a court located other than in the **City** and County of New York, upon request of the **City**, the **Contractor** shall either consent to a transfer of the action to a New York State Court of competent jurisdiction located in the **City** and County of New York or, if the Court where the action is initially brought will not or cannot transfer the action, the **Contractor** shall consent to dismiss such action without prejudice and may thereafter reinstate the action in a New York State Court of competent jurisdiction in New York County.

65.3 If any provision(s) of this Article 65 is held unenforceable for any reason, each and all other provision(s) shall nevertheless remain in full force and effect.

ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT

66.1 The **Contractor** agrees that neither the **Contractor** nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions ofthe Federal Export Administration Act of 1979, as amended, or the regulations of the United States Department of Commerce (Commerce Department) promulgated thereunder.

66.2 Upon the final determination by the Commerce Department or any other agency of the United States as to, or conviction of the **Contractor** or a substantially-owned affiliated company thereof for participation in an international boycott in violation of the provisions of the Export Administration Act of 1979, as amended, or the regulations promulgated thereunder, the **Comptroller** may, at his/her option, render forfeit and void this **Contract**.

66.3 The **Contractor** shall comply in all respects, with the provisions of Section 6-114 of the Administrative Code and the rules and regulations issued by the **Comptroller** thereunder.

ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM

67.1 This **Contract** is subject to the requirements of Section 6-108.1 of the Administrative Code and regulations promulgated thereunder. No construction contract shall be awarded unless and until these requirements have been complied with in their entirety; however, compliance with this Article 67 is not required if the Agency sets Subcontractor Participation Goals for Minority- and Women-Owned Business Enterprises (M/WBEs).

67.2 Unless specifically waived by the **Commissioner** with the approval of the Division of Economic and Financial Opportunity of the **City** Department of Business Services, if any portion of the **Contract** is subcontracted, not less than ten (10%) percent of the total dollar amount of the **Contract** shall be awarded to locally based enterprises (LBEs); except that where less than ten (10%) percent of the total dollar amount of the **Contract** is subcontracted, such lesser percentage shall be so awarded.

67.3 The **Contractor** shall not require performance and payment bonds from LBE **Subcontractors**.

67.4 If the **Contractor** has indicated prior to award that no **Work** will be subcontracted, no **Work** shall be subcontracted without the prior approval of the **Commissioner**, which shall be granted only if the **Contractor** makes a good faith effort beginning at least six (6) weeks before the **Work** is to be performed to obtain LBE **Subcontractors** to perform the **Work**.

67.5 If the **Contractor** has not identified sufficient LBE **Subcontractors** prior to award, it shall sign a letter of compliance stating that it complies with Section 6-108.1 of the Administrative Code, recognizes that achieving the LBE requirement is a condition of its **Contract**, and shall submit documentation demonstrating its good faith efforts to obtain LBEs. After award, the **Contractor** shall begin to solicit LBE's to perform subcontracted **Work** at least six (6) weeks before the date such **Work** is to be performed and shall demonstrate that a good faith effort has been made to obtain LBEs on each subcontract until it meets the required percentage.

67.6 Failure of the **Contractor** to comply with the requirements of Section 6-108.1 of the Administrative Code and the regulations promulgated thereunder shall constitute a material breach of this **Contract**. Remedy for such breach may include the imposition of any or all of the following sanctions:

67.6.1 Reducing the **Contractor's** compensation by an amount equal to the dollar value of the percentage of the LBE subcontracting requirement not complied with;

67.6.2 Declaring the **Contractor** in default;

67.6.3 If the **Contractor** is an LBE, de-certifying and declaring the **Contractor** ineligible to participate in the LBE program for a period of up to three (3) years.

ARTICLE 68. ANTITRUST

68.1 The **Contractor** hereby assigns, sells, and transfers to the **City** all right, title, and interest in and to any claims and causes of action arising under the antitrust **Laws** of New York State or of the United States relating to the particular goods or services purchased or procured by the **City** under this **Contract**.

ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS

69.1 Notice To All Prospective **Contractors**:

69.1.1 Local Law No. 34 of 1991 became effective on September 10, 1991 and added Section 6-115.1 of the Administrative Code. The local **Law** provides for certain restrictions on **City Contracts** to express the opposition of the people of the **City** to employment discrimination practices in Northern Ireland to promote freedom of work-place opportunity.

69.1.2 Pursuant to Section 6-115.1, prospective **Contractors** for **Contracts** to provide goods or services involving an expenditure of an amount greater than ten thousand ($10,000.) dollars, or for construction involving an amount greater than fifteen thousand ($15,000.) dollars, are asked to sign a rider in which they covenant and represent, as a material condition of their **Contract**, that any business operations in Northern Ireland conducted by the **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** will be conducted in accordance with the MacBride Principles of nondiscrimination in employment.

69.1.3 Prospective **Contractors** are not required to agree to these conditions. However, in the case of **Contracts** let by competitive sealed bidding, whenever the lowest responsible bidder has not agreed to stipulate to the conditions set forth in this notice and another bidder who has agreed to stipulate to such conditions has submitted a bid within five (5%) percent of the lowest responsible bid for a **Contract** to supply goods, services or contraction of comparable quality, the **Agency** shall refer such bids to the Mayor, the Speaker or other officials, as appropriate, who may determine, in accordance with applicable **Law**, that it is in the best interest of the **City** that the **Contract** be awarded to other than the lowest responsible pursuant to Section 313(b)(2) of the **City** Charter.

69.1.4 In the case of **Contracts** let by other than competitive sealed bidding, if a prospective **Contractor** does not agree to these conditions, no **Agency**, elected official or the **City** Council shall award the **Contract** to that bidder unless the **Agency** seeking to use the goods, services or construction certifies in writing that the **Contract** is necessary for the **Agency** to perform its functions and there is no other responsible **Contractor** who will supply goods, services or construction of comparable quality at a comparable price.

69.2 In accordance with Section 6-115.1 of the Administrative Code, the **Contractor** stipulates that such **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** either:

69.2.1 Have no business operations in Northern Ireland, or

69.2.2 Shall take lawful steps in good faith to conduct any business operations they have in

Northern Ireland in accordance with the MacBride Principles, and shall permit independent monitoring of their compliance with such principles.

69.3 For purposes of this Article, the following terms shall have the following meanings:

69.3.1 "MacBride Principles" shall mean those principles relating to nondiscrimination in employment and freedom of work-place opportunity which require employers doing business in Northern Ireland to:

69.3.1(a) increase the representation of individuals from under-represented religious groups in the workforce, including managerial, supervisory, administrative, clerical and technical jobs;

69.3.1(b) take steps to promote adequate security for the protection of employees from under-represented religious groups both at the work-place and while traveling toand from **Work**;

69.3.1(c) ban provocative religious or political emblems from the workplace;

69.3.1(d) publicly advertise all job openings and make special recruitment efforts to attract applicants from under-represented religious groups;

69.3.1(e) establish layoff, recall, and termination procedures which do not in practice favor a particular religious group;

69.3.1(f) abolish all job reservations, apprenticeship restrictions and different employment criteria which discriminate on the basis of religion;

69.3.1(g) develop training programs that will prepare substantial numbers of current employees from under-represented religious groups for skilled jobs, including the expansion of existing programs and the creation of new programs to train, upgrade, and improve the skills of workers from under-represented religious groups;

69.3.1(h) establish procedures to asses, identify, and actively recruit employees from under-represented religious groups with potential for further advancement; and

69.3.1(i) appoint a senior management staff member to oversee affirmative actionefforts and develop a timetable to ensure their full implementation.

69.4 The **Contractor** agrees that the covenants and representations in Article 69.2 are material conditions to this **Contract**. In the event the **Agency** receives information that the **Contractor** who made the stipulation required by this Article 69 is in violation thereof, the **Agency** shall review such information and give the **Contractor** an opportunity to respond. If the **Agency** finds that a violation has occurred, the **Agency** shall have the right to declare the **Contractor** in default in default and/or terminate this **Contract** for cause and procure supplies, services or **Work** from another source in the manner the **Agency** deems proper. In the event of such termination, the **Contractor** shall pay to the **Agency**, or the **Agency** in its sole discretion may withhold from any amounts otherwise payable to the **Contractor**, the difference between the **Contract** price for the uncompleted portion of this **Contract** and the cost to the **Agency** of completing performance of this **Contract** either itself or by engaging another **Contractor** or **Contractors**. In the case of a requirement **Contract**, the **Contractor** shall be liable for such difference in price for the entire amount of supplies required by the **Agency** for the uncompleted term of **Contractor's Contract**. In the case of a construction **Contract**, the **Agency** shall also have the right to hold the **Contractor** in partial or total default in

accordance with the default provisions of this **Contract**, and/or may seek debarment or suspension of the **Contractor**. The rights and remedies of the **Agency** hereunder shall be in addition to, and not in lieu of, any rights and remedies the **Agency** has pursuant to this **Contract** or by operation of **Law**.

ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB

70.1 The **Contractor** shall electronically file all alteration type-2 and alteration type-3 applications via the New York City Development Hub Web site, except applications for the following types of minor alterations: enlargements, curb cuts, legalizations, fire alarms, builders pavement plans, and jobs filed on Landmark Preservation Commission calendared properties. All such filings must be professionally certified. Information about electronic filing via the New York City Development Hub is available on the **City** Department of Buildings Web site at www.nyc.gov/buildings.

ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS

71.1 Tropical hardwoods, as defined in Section 165 of the New York State Finance Law (Finance Law), shall not be utilized in the performance of this **Contract** except as expressly permitted by Section 165 of the Finance Law.

ARTICLE 72. CONFLICTS OF INTEREST

72.1 Section 2604 of the **City** Charter and other related provisions of the **City** Charter, the Administrative Code, and the Penal Law are applicable under the terms of this **Contract** in relation to conflicts of interest and shall be extended to **Subcontractors** authorized to perform **Work**, labor and services pursuant to this **Contract** and further, it shall be the duty and responsibility of the **Contractor** to so inform its respective **Subcontractors**. Notice is hereby given that, under certain circumstances, penalties may be invoked against the donor as well as the recipient of any form of valuable gift.

ARTICLE 73. MERGER CLAUSE

73.1 The written **Contract** herein, contains all the terms and conditions agreed upon by the parties hereto, and no other agreement, oral or otherwise, regarding the subject matter of this **Contract** shall be deemed to exist or to bind any of the parties hereto, or to vary any of the terms contained herein.

ARTICLE 74. STATEMENT OF WORK

74.1 The **Contractor** shall furnish all labor and materials and perform all **Work** in strictaccordance with the **Specifications** and **Addenda** thereto, numbered as shown in Schedule A.

ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR

75.1 The **City** will pay and the **Contractor** will accept in full consideration for the performance of the **Contract**, subject to additions and deductions as provided herein, the total sum shown in Schedule A, this said sum being the amount at which the **Contract** was awarded to the **Contractor** at a public letting thereof, based upon the **Contractor's** bid for the **Contract**.

ARTICLE 76. ELECTRONIC FUNDS TRANSFER

76.1 In accordance with Section 6-107.1 of the Administrative Code, the **Contractor** agrees to accept payments under this **Contract** from the **City** by electronic funds transfer (EFT). An EFT is any transfer of funds, other than a transaction originated by check, draft or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument or computer or magnetic tape so as to order, instruct or authorize a financial institution to debit or credit an account. Prior to the first payment made under this **Contract**, the **Contractor** shall designate one financial institution or other authorized payment agent and shall complete the attached "EFT Vendor Payment Enrollment Form" in order to provide the Commissioner of the **City** Department of Finance with information necessary for the **Contractor** to receive electronic funds transfer payments through a designated financial institution or authorized payment agent. The crediting of the amount of a payment to the appropriate account on the books of a financial institution or other authorized payment agent designated by the **Contractor** shall constitute full satisfaction by the **City** for the amount of the payment under this **Contract**. The account information supplied by the **Contractor** to facilitate the electronic funds transfer shall remain confidential to the fullest extent provided by **Law**.

76.2 The **Commissioner** may waive the application of the requirements of this Article 76 to payments on contracts entered into pursuant to Section 315 of the **City** Charter. In addition, the Commissioner of the Department of Finance and the Comptroller may jointly issue standards pursuant to which the **Agency** may waive the requirements of this Article 76 for payments in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the interest of the **City**.

ARTICLE 77. RECORDS RETENTION

77.1 The **Contractor** agrees to retain all books, records, and other documents relevant to this **Contract** for six years after the final payment or termination of this **Contract**, whichever is later. **City**, state, and federal auditors and any other persons duly authorized by the **City** shall have full access to and the right to examine any such books, records, and other documents during the retention period.

ARTICLE 78. EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER SOURCES OF INFORMATION AND CHANGED SITE CONDITIONS

78.1 Pre-Bidding (Investigation) Viewing of Site – Bidders must carefully view and examine the **Site** of the proposed **Work**, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions and hazards on, about or above the **Site** relating to or affecting in any way the performance of the **Work** to be done under the **Contract** that were or should have been known by a reasonably prudent bidder. To arrange a date for visiting the **Site**,

bidders are to contact the **Agency** contact person specified in the bid documents.

78.2 Should the **Contractor** encounter during the progress of the Work site conditions or environmental hazards at the **Site** materially differing from any shown on the **Contract Drawings** or indicated in the **Specifications** or such conditions or environmental hazards as could not reasonablyhave been anticipated by the **Contractor**, which conditions or hazards will materially affect the cost of the **Work** to be done under the **Contract**, the attention of the **Commissioner** must be called immediately to such conditions or hazards before they are disturbed. The **Commissioner** shall thereupon promptly investigate the conditions or hazards. If the **Commissioner** finds that they do so materially differ, and that they could not have been reasonably anticipated by the **Contractor**, the **Contract** may be modified with the **Commissioner**'s written approval.

ARTICLE 79. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT

ARTICLE I. M/WBE PROGRAM

Section 6-129 of the Administrative Code of the City of New York ("Section 6-129") establishes the program for participation in City procurement ("M/WBE Program") by minority- owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6- 129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan") and are detailed below.

The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129.

References to MBEs or WBEs shall also include such businesses certified pursuant to the executive law where credit is required by section 311 of the New York City Charter or other provision of law.

Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts.

Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

PART A: PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS

1. The MBE and/or WBE Participation Goals established for this Contract or Task Orders issued pursuant to this Contract, ("Participation Goals"), as applicable, are set forth on Schedule B, Part 1 to this Contract (see Page 1, Line 1 Total Participation Goals) or will be set forth on Schedule B, Part 1 to Task Orders issued pursuant to this Contract, as applicable.

The Participation Goals represent a percentage of the total dollar value of the Contract or Task Order, as applicable, that may be achieved by awarding subcontracts to firms certified with DSBS as MBEs and/or WBEs, and/or by crediting the participation of prime contractors and/or qualified joint ventures as provided in Section 3 below, unless the goals have been waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

2. If Participation Goals have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the Participation Goals, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

3. If Participation Goals have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant Participation Goal, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant Participation Goal. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.

4. A. If Participation Goals have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part 2 (see Pages1-2) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor's required certification and affirmations. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the Participation Goals, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE Participation Goals, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part 2 (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the Participation Goals that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed non- responsive.

(ii) Participation Goals on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If Participation Goals have been established on a Task Order, a contractor shall be required to submit a Schedule B – M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part 2 (see Pages 1-2) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor's required certification and affirmations. The contractor must engage in good faith efforts to meet the Participation Goals as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

C. THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART 2). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART 3). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.

5. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multi- year contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below $3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the Participation Goals. Such certification must occur prior to the firms' commencement of work. A list of city-certified MBE and WBE firms may be obtained from the DSBS website at www.nyc.gov/buycertified, by emailing DSBS at buyer@sbs.nyc.gov, by calling (212) 513-6451, or by visiting or writing DSBS at One Liberty Plaza ., New York, New York, 10006, 11th floor. Eligible firms that have not yet

been certified may contact DSBS in order to seek certification by visiting www.nyc.gov/getcertified, emailing MWBE@sbs.nyc.gov, or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

7. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, with each voucher for payment, and/or periodically as Agency may require, submit statements, certified under penalty of perjury, which shall include, but not be limited to,: the total amount the Contractor paid to its direct subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount direct subcontractors paid to indirect subcontractors; the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor by the Contractor, and, where applicable, hired by any of the Contractor's direct subcontractors; and the dates and amounts paid to each MBE or WBE. The Contractor shall also submit, along with its voucher for final payment: the total amount it paid to subcontractors, and, where applicable pursuant to Section 6- 129(j), the total amount its direct subcontractors paid directly to their indirect subcontractors; and a final list, certified under penalty of perjury, which shall include the name, address and contact information of each subcontractor that is an MBE or WBE, the work performed by, and the dates and amounts paid to each.

8. If payments made to, or work performed by, MBEs or WBEs are less than the amount specified in the Contractor's M/WBE Utilization Plan, Agency shall take appropriate action, in accordance with Section 6-129 and Article II below, unless the Contractor has obtained a modification of its M/WBE Utilization Plan in accordance with Section 6-129 and Part A, Section 11 below.

9. Where an M/WBE Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds the greater of 10 percent of the Contract or Task Order, as applicable, or $500,000, Agency shall review the scope of work for the Contract or Task Order, as applicable, and the scale and types of work involved in the change order, and determine whether the Participation Goals should be modified.

10. Pre-award waiver of the Participation Goals. (a) A bidder or proposer, or contractor with respect to a Task Order, may seek a pre-award full or partial waiver of the Participation Goals in accordance with Section 6-129, which requests that Agency change one or more Participation Goals on the grounds that the Participation Goals are unreasonable in light of the availability of certified firms to perform the services required, or by demonstrating that it has legitimate business reasons for proposing a lower level of subcontracting in its M/WBE Utilization Plan.

(b) To apply for a full or partial waiver of the Participation Goals, a bidder, proposer, or contractor, as applicable, must complete Part 3 of Schedule B **and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing by email at MWBEModification@ddc.nyc.gov. Full or partial waiver requests that are received later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due may be rejected as untimely.** Bidders, proposers, or contractors, as applicable, who have submitted timely requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.

(c) If the Agency determines that the Participation Goals are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.

(d) Agency may grant a full or partial waiver of the Participation Goals to a bidder, proposer or contractor, as applicable, who demonstrates—before submission of the bid, proposal or Task Order, as applicable—that it has legitimate business reasons for proposing the level of subcontracting in its M/WBE Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited

to, whether the bidder, proposer or contractor, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts represented by the Participation Goals. In making such determination, Agency may consider whether the M/WBE Utilization Plan is consistent with past subcontracting practices of the bidder, proposer or contractor, as applicable, whether the bidder, proposer or contractor, as applicable, has made efforts to form a joint venture with a certified firm, and whether the bidder, proposer, or contractor, as applicable, has made good faith efforts to identify other portions of the Contract that it intends to subcontract.

11. Modification of M/WBE Utilization Plan. (a) A Contractor may request a modification of its M/WBE Utilization Plan after award of this Contract. PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below $3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor may request a Modification of its M/WBE Utilization Plan as part of its bid submission. The Agency may grant a request for Modification of a Contractor's M/WBE Utilization Plan if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the Participation Goals. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:

(i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
(ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
(iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;
(iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the M/WBE Utilization Plan, and for which the Contractor claims an inability to retain MBEs or WBEs;
(v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
(vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;
(vii) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;
(viii) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

Agency's M/WBE officer shall provide written notice to the Contractor of the determination.

(b) The Agency may modify the Participation Goals when the scope of the work has been changed by the Agency in a manner that affects the scale and types of work that the Contractor indicated in its M/WBE Utilization Plan would be awarded to subcontractors.

12. If the Contractor was required to identify in its bid or proposal the MBEs and/or WBEs they intended to use in connection with the performance of the Contract or Task Order, substitutions to the identified firms may only be made with the approval of the Agency, which shall only be given when the Contractor has proposed to use a firm that would satisfy the Participation Goals to the same extent as the firm previously identified, unless the Agency determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts. In making such determination, the Agency shall require evidence of the

efforts listed in Section 11(a) above, as applicable, along with any other relevant factors.

13. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an M/WBE Utilization Plan and has committed to subcontract work to MBEs and/or WBEs in order to meet the Participation Goals, the Contractor will not be deemed in violation of the M/WBE Program requirements for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.

14. If Participation Goals have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its M/WBE Utilization Plan, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

15. If Participation Goals have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

PART B: MISCELLANEOUS

The Contractor shall take notice that, if this solicitation requires the establishment of a M/WBE Utilization Plan, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the M/WBE Utilization Plan.

1. Pursuant to DSBS rules, construction contracts that include a requirement for a M/WBE Utilization Plan shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.

2. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and/or WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and/or WBEs in contracts.

3. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).

4. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE Program requirements set forth herein and the pertinent provisions of Section 6-129, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE Program requirements of this Contract and pertinent provisions of Section 6-129, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of MBEs and/or WBEs to meet the required Participation Goals.

ARTICLE II. ENFORCEMENT

1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.

2. Whenever Agency believes that the Contractor or a subcontractor is not in compliance with Section 6-129

or the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to any M/WBE Utilization Plan, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering the Contractor an opportunity to be heard. Agency shall then conduct an investigation to determine whether such Contractor or subcontractor is in compliance.

3. In the event that the Contractor has been found to have violated Section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to, any M/WBE Utilization Plan, Agency may determine that one of the following actions should be taken:

(a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
(b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
(c) making a finding that the Contractor is in default of the Contract;
(d) terminating the Contract;
(e) declaring the Contractor to be in breach of Contract;
(f) withholding payment or reimbursement;
(g) determining not to renew the Contract;
(h) assessing actual and consequential damages;
(i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;
(j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
(k) taking any other appropriate remedy.

4. If an M/WBE Utilization Plan has been submitted, and pursuant to this Article II, Section 3, the Contractor has been found to have failed to fulfill its Participation Goals contained in its M/WBE Utilization Plan or the Participation Goals as modified by Agency pursuant to Article I, Part A, Section 11, Agency may assess liquidated damages in the amount of ten percent (10%) of the difference between the dollar amount of work required to be awarded to MBE and/or WBE firms to meet the Participation Goals and the dollar amount the Contractor actually awarded and paid, and/or credited, to MBE and/or WBE firms. In view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of Contractor’s failure to meet the Participation Goals, the foregoing amount is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such failure, and not as a penalty. Agency may deduct and retain out of any monies which may become due under this Contract the amount of any such liquidated damages; and in case the amount which may become due under this Contract shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.

5. Whenever Agency has reason to believe that an MBE and/or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129(c)(8)), or has violated any provision of Section 6- 129, Agency shall notify the Commissioner of DSBS who shall determine whether the certification of such business enterprise should be revoked.

6. Statements made in any instrument submitted to Agency pursuant to Section 6-129 shall be submitted under penalty of perjury and any false or misleading statement or omission shall be grounds for the application of any applicable criminal and/or civil penalties for perjury. The making of a false or fraudulent statement by an MBE and/or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.

7. The Contractor's record in implementing its M/WBE Utilization Plan shall be a factor in the evaluation of

its performance. Whenever Agency determines that a Contractor's compliance with an M/WBE Utilization Plan has been unsatisfactory, Agency shall, after consultation with the City Chief Procurement Officer, file an advice of caution form for inclusion in PASSPort as caution data.

Docusign Envelope ID: 58D15D15-FCB7-4B23-ACAE-7EB33B019ADA

CONTRACT SIGNATURE PAGE

This Contract is entered by and between the City of New York ("City"), acting by and through the **DEPARTMENT OF DESIGN AND CONSTRUCTION**, and **JLJ IV ENTERPRISES INC** ("Contractor").

This Contract consists of this contract signature page as well as the following documents ("Contract Documents") which are located in the Documents tab of the PASSPort record titled **85025B0027-HED562**.

1. HED562 - Bid Bonds - Apr 30 2025 6:44PM
2. HED562 - CERTIFICATE BY BROKER - NOTARIZED - May 7 2025 12:54PM
3. HED562 - Disability Insurance - May 7 2025 12:55PM
4. HED562 - Insurance Certificate - May 7 2025 12:55PM
5. HED562 - Performance and Payment Bonds - May 7 2025 12:55PM
6. HED562 - QUALIFICATION FORM 2021-04(1) - Apr 30 2025 6:45PM
7. HED562 - Workers Comp Insurance - May 7 2025 12:55PM
8. HED562 Addendum 8 signed - Feb 4 2025 5:29PM
9. HED562 Addendum 9 - Feb 11 2025 11:04PM
10. HED562 Addendum1 - Dec 12 2024 8:08PM
11. HED562 Addendum10 - Feb 19 2025 5:22PM
12. HED562 Addendum2 - Dec 13 2024 9:11PM
13. HED562 Addendum3 - Dec 17 2024 5:15PM
14. HED562 Addendum4 - Dec 23 2024 7:46PM
15. HED562 Addendum6 - Jan 7 2025 4:55PM
16. HED562 Addendum7 - Jan 14 2025 1:54PM
17. HED562 Bid Schedule 01.28.25 Addendum8 - Jan 30 2025 5:01PM
18. HED562 FINAL CONTRACT DRAWINGS - Oct 31 2024 6:11PM
19. HED562 Plan Holders List Addendum4 - Dec 21 2024 7:49PM
20. HED562 Plan Holders List Addendum10 - Feb 14 2025 3:53PM
21. HED562 SER Requirements (Infra) 2023-09 - Apr 30 2025 6:23PM
22. HED562 VOL2 OF 3 Addendum10 - Feb 14 2025 4:02PM
23. HED562 VOL3 OF 3 Addendum8 01.31.2025 - Jan 31 2025 5:34PM
24. HED562_Bidder 1_JLJ IV Enterprises_Bid Schedule - Apr 30 2025 1:36PM
25. HED562-Addendum5 - Jan 2 2025 3:45PM
26. HED562-HAZMAT 09.16.2024 PART1 OF 3 - Oct 21 2024 7:05PM

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27. HED562-HAZMAT 09.16.2024 PART2 OF 3(1) - Oct 21 2024 7:16PM
28. HED562-HAZMAT 09.16.2024 PART3 OF 3 - Oct 21 2024 7:17PM
29. NYSDOL Cert of Contractor Reg - 1-2-25 - Apr 30 2025 6:44PM
30. Proposal_Bid_85025B0027001.pdf - Apr 30 2025 1:05PM
31. RFx Document_85025B0027001 (1).pdf - Apr 30 2025 1:05PM
32. Temporary Access Form(Addendum1) - Dec 12 2024 6:05PM
33. V1 Infra Bid Booklet PASSPort 2024-07 - Oct 4 2024 10:30AM

The above order does not represent an order of precedence. The Contract shall be governed by the order of precedence, if any, in the Contract Documents or by ordinary contract principles if no such order of precedence exists.

Each party is signing this Contract electronically on the date stated in that party's electronic signature.

The City of New York
By: **DEPARTMENT OF DESIGN AND CONSTRUCTION**

DocuSigned by:
ERIC MACFARLANE
1A87ABA0188B41C...
(Signature)

Name: ERIC MACFARLANE

Title: First Deputy Commissioner

Date: 5/9/2025 | 07:43:18 PDT

Contractor
By: **JLJ IV ENTERPRISES INC**

Signed by:
James Juliano
A16CBA936FB748B...
(Signature)

Name: James Juliano

Title: President

Date: 5/9/2025 | 07:38:32 PDT

Docusign Envelope ID: 58D15D15-FCB7-4B23-ACAE-7EB33B019ADA

Signatures

Number of pages (including this one): 3

- ✓ Document signed electronically, the signatories agreeing that it is authentic between them.
- ✓ By signing this document, the signatories acknowledge and agree that they have carefully read this document and approve all its terms.

Nom: Juliano James
Fonction: President

Place: 98-05 217th street, queens village
Date: 5/9/2025 | 07:38:32 PDT
Signed by:
James Juliano
A16CBA936FB748B...

Nom: Macfarlane Eric
Fonction:

Place: lic ny
Date: 5/9/2025 | 07:43:18 PDT
DocuSigned by:
ERIC MACFARLANE
1A87ABA0188B41C...

PERFORMANCE BOND #1

Performance Bond #1 (4 Pages): Use if the total contract price is $5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA")for participation in its Bond Guarantee Program.

PERFORMANCE BOND #1 (Page 1)

KNOW ALL PERSONS BY THESE PRESENTS:,
That we, _____

_____

_____

hereinafter referred to as the "Principal,"
and, _____

_____

_____

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns in the penal sum of _____

_____

_____

($_____) Dollars, lawful money of the United States for the payment of whichsaid sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

_____

_____

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth infull;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns, shall well and faithfully perform the said Contract and all modifications, amendments, additions and alterations thereto that may hereafter be made, according to its terms and its true intent and meaning, including repair and or replacement of defective work and guarantees of maintenance for the periods stated in the Contract, and shall fully indemnify and save harmless the City from all cost and damage which it may suffer by reason of the Principal's default of the Contract, and shall fully reimburse and repay the City for all outlay and expense which the City may incur in making good any such default and shall protect the said City of New York against, and pay any and all amounts, damages, cost and judgments which may or shall be recovered against said City or its officers or agents or which the said City of New York may be called upon to pay any person or corporation by reason of any damages arising or growing out of the Principal's default of the Contract, then this obligation shall be nulland void, otherwise to remain in full force and effect.

The Surety (Sureties), for value received, hereby stipulates and agrees, upon written notice from the Citythat the City has determined that the Principal is in default of the Contract, to (1) pay the City the cost tocomplete the contract as determined by the City in excess of the balance of the Contract held by the City, plus any damages or costs to which the City is entitled, up to the full amount of the above penal sum, (2)fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof, or (3) tender a completion Contractor that is acceptable to the City. The Surety (Sureties) further agrees, at its option, either to notify the City that it elects to pay the city thecost of completion plus any applicable damages and costs under option (1) above, or to commence anddiligently perform the Work specified in the Contract, including physical site work, within twenty-five
(25) business days after written notice thereof from the City and, if the Surety elects to fully perform and complete the Work, then to complete all Work within the time set forth in the Contract or such other timeas agreed to between the City and Surety in accordance with the Contract. If the Surety elects to tender payment pursuant to (1) above, then the Surety shall tender such amount within fifteen (15) business days notification from the City of the cost of completion. The Surety and the City reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to pay the City the costof completion, to commence and complete all Work as provided herein, or to tender a completion contractor.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected byany extension of time, modification, omission, addition, or change in or to the said Contract or the Workto be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions,changes, payments, and waivers, and hereby expressly stipulates and agrees that any and all things doneand omitted to be done by and in relation to subcontractors shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal. Notwithstanding the above, if the City makes payments to the Principal before the time required by the contract that in the aggregate exceed $100,000 or 10% of the Contract price, whichever is less, and that have not become earned prior to the Principal being found to be in default, then all payments made to the Principal before the time required by the Contract shall be added to the remaining contract value available to be paid forthe completion of the Contract as if such sums had not been paid to the Principal, but shall not provide abasis for non-performance of its obligation to pay the City the cost of completion, to commence and to complete all Work as provided herein, or to tender a completion contractor.

IN WITNESS WHEREOF, The Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this

_____ day of _____, 20_____.(Seal)

_____(L.S.)
Principal

(Seal)

By: _____.

Surety

By: _____.
_____.
(Seal) Surety

By: _____.
_____.
(Seal) Surety

By: _____.
_____.
(Seal) Surety

By: _____.
_____.
(Seal) Surety

By: _____.

Bond Premium Rate _____.

Bond Premium Cost _____.

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by aduly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the numberof counterparts of the Contract.

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of_____County of_____ss:

On this_____day of_____, 20_____before me personally came_____,
to me known, who, being by me duly sworn did depose and say that he/she residesat _____
_____; that he/she is the _____
of the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

_____
Notary Public or Commissioner of Deeds.

ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP

State of_____County of_____ss:

On this_____day of_____, 20_____before me personally came_____,
to me known, who, being by me duly sworn did dispose and say that he/she residesat _____
_____; that he/she is_____partner of _____, a limited/general partnership existing under the laws of the State of _____, the partnership described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act ofsaid partnership.

_____
Notary Public or Commissioner of Deeds.

ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL

State of_____County of_____ss:

On this_____day of_____, 20_____before me personally came_____,
to me known, who, being by me duly sworn did depose and say that he/she residesat _____
_____, and that he/she is the individual whose name is subscribed to the within instrument and acknowledged to me that by his/her signature on the instrument, said individual executed the instrument.

_____
Notary Public or Commissioner of Deeds

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

* * * * * * * *

Affix Acknowledgments and Justification of Sureties.

Bond No. 015227136

PERFORMANCE BOND #2

Performance Bond #2 (4 pages): Use if the total contract price is more than $5 Million.

PERFORMANCE BOND #2 (Page 1)

PERFORMANCE BOND #2KNOW ALL PERSONS BY THESE PRESENTS:,

That we, JLJ IV Enterprises, Inc.

hereinafter referred to as the "Principal,"
and, Liberty Mutual Insurance Company

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns in the penal sum of Forty Three Million Nine Hundred Ninety One Thousand Four Hundred Twenty Six and 07/100

($ $ 43,991,426.07) Dollars, lawful money of the United States for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

Project ID: HED562., New 48" Trunk Water Main and Appurtenances in E. 233rd Street Etc., Borough of The Bronx, City of New York

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth infull;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns, shall well and faithfully perform the said Contract and all modifications, amendments, additions and alterations thereto that may hereafter be made, according to its terms and its true intent and meaning, including repair and or replacement of defective work and guarantees of maintenance for the periods stated in the Contract, and shall fully indemnify and save harmless the Cityfrom all cost and damage which it may suffer by reason of the Principal's default of the Contract, and shall fully reimburse and repay the City for all outlay and expense which the City may incur in making

good any such default and shall protect the said City of New York against, and pay any and all amounts,damages, cost and judgments which may or shall be recovered against said City or its officers or agents orwhich the said City of New York may be called upon to pay any person or corporation by reason of anydamages arising or growing out of the Principal's default of the Contract, then this obligation shall be nulland void, otherwise to remain in full force and effect.

The Surety (Sureties), for value received, hereby stipulates and agrees, upon written notice from the Citythat the City has determined that the Principal is in default of the Contract, to either (1) pay the full amount of the above penal sum in complete discharge and exoneration of this bond and of all the liabilities of the Surety relating to this bond, or (2) fully perform and complete the Work to be performed under theContract, pursuant to the terms, conditions, and covenants thereof. The Surety (Sureties) further agrees, at its option, either to tender the penal sum or to commence and diligently perform the Work specified in theContract, including physical site work, within twenty-five (25) business days after written notice thereoffrom the City and to complete all Work within the time set forth in the Contract or such other time as agreed to between the City and Surety in accordance with the Contract. The Surety and the City reserveall rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to commence and to complete all Work as provided herein.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected byany extension of time, modification, omission, addition, or change in or to the said Contract or the Workto be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any Work to be performed or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any andall things done and omitted to be done by and in relation to assignees, subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal.

IN WITNESS WHEREOF, The Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this

2nd day of May 20 25.

(Seal)

JLJ IV Enterprises, Inc. (L.S.)
Principal

(Seal)

By: JAMES JULIANO, PRESIDENT

Surety Liberty Mutual Insurance Company

By: Dana Granice, Attorney-In-Fact
Surety

(Seal)

By:
Surety

(Seal)

By:
Surety

(Seal)

By:
Surety

(Seal)

By:

Bond Premium Rate $10.35 Sliding Scale

Bond Premium Cost $304,599.00

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by aduly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the numberof counterparts of the Contract.

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of NEW YORK County of NASSAU ss:

On this 2nd day of MAY, 20 25 before me personally came JAMES IULIANO to me known, who, being by me duly sworn did depose and say that he resides at PLAINVIEW MINOR, N.Y. ; that he/she is the PRESIDENT of the corporation described in and which executed the foregoing instrument; that he/she signed his/her name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

Notary Public or Commissioner of Deeds.

DEJAN PAPRIC
NOTARY PUBLIC-STATE OF NEW YORK
No. 01PA0034859
Qualified in Nassau County
My Commission Expires 03-14-2029

ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP

State of _____ County of _____ ss:

On this _____ day of _____, 20 _____ before me personally came _____, to me known, who, being by me duly sworn did depose and say that he/she resides at _____; that he/she is _____ partner of _____, a limited/general partnership existing under the laws of the State of _____, the partnership described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of said partnership.

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL

State of _____ County of _____ ss:

On this _____ day of _____, 20 _____ before me personally came _____, to me known, who, being by me duly sworn did depose and say that he/she resides at _____, and that he/she is the individual whose name is subscribed to the within instrument and acknowledged to me that by his/her signature on the instrument, said individual executed the instrument.

Notary Public or Commissioner of Deeds

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

* * * * * * * *

Affix Acknowledgments and Justification of Sureties.

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF NEW YORK

COUNTY OF NASSAU

On this MAY 02 2025 before me personally came Dana Granice to me known, who, being by me duly sworn, did depose and say; that he/she resides in Suffolk County, State of New York, that he/she is the Attorney-In-Fact of the Liberty Mutual Insurance Company the corporation described in which executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that is was so affixed by the Board of Directors of said corporation; and that he/she signed his/her name thereto by like order; and the affiant did further depose and say that the Superintendent of Insurance of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State of New York, issued to Liberty Mutual Insurance Company (Surety) his/her certificate of qualification evidencing the qualification of said Company and its sufficiency under any law of the State of New York as surety and guarantor, and the propriety of accepting and approving it as such; and that such Certificate has not been revoked.

Notary Public

KAROLYNNE RAMIREZ
Notary Public-State of New York
No. 01RA6426462
Qualified in New York County
Commission Expires December 13, 2025

POWER OF ATTORNEY

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8213933-969603

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Camille Maitland; Colette R. Chisholm, Dana Granice, Desiree Cardlin, George O Brewster, Gerard S Macholz, Karolynne Ramirez, Katherine Acosta, Lee Ferrucci, Louis J Spina, Michelle Wannamaker, Nelly Renchiwich; Peter F. Jones, Robert T Pearson, Susan Lupski, Thomas Bean, Vincent A Walsh

all of the city of Uniondale state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 29th day of April, 2025.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: _____
Nathan J. Zangerle, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 29th day of April, 2025 before me personally appeared Nathan J. Zangerle, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.

Commonwealth of Pennsylvania Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 26, 2029
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.
Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.
Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Nathan J. Zangerle, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 2nd day of May, 2025.

By: _____
Renee C. Llewellyn, Assistant Secretary

LMS-12873 LMIC OCIC WAIC Multi Co 02/24

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

Liberty Mutual. SURETY

LIBERTY MUTUAL INSURANCE COMPANY

FINANCIAL STATEMENT – DECEMBER 31, 2024

Assets		Liabilities	
Cash and Bank Deposits	$4,608,826,756.00	Unearned Premiums	$9,890,896,878.00
*Bonds – U.S Government	$4,281,375,446.74	Reserve for Claims and Claims Expense	$29,467,071,865.00
*Other Bonds	$21,566,489,527.26	Funds Held Under Reinsurance Treaties	$341,948,172.00
*Stocks	$15,589,644,012.00	Reserve for Dividends to Policyholders	$954,025.00
Real Estate	$86,497,925.00	Additional Statutory Reserve	$150,547,865.00
Agents' Balances or Uncollected Premiums	$7,512,975,129.00	Reserve for Commissions, Taxes and Other Liabilities	$5,049,906,410.00
Accrued Interest and Rents	$225,249,712.00	**Total**	**$47,104,416,171.00**
Other Admitted Assets	$19,367,663,200.00	Special Surplus Funds	$174,153,086.00
		Capital Stock	$10,000,075.00
		Paid in Surplus	$13,209,595,772.00
		Unassigned Surplus	$13,415,980,561.00
		Surplus to Policyholders	$27,435,067,490.00
Total Admitted Assets	**$74,539,483,661.00**	**Total Liabilities and Surplus**	**$74,539,483,661.00**

* Bonds are stated at amortized or investment value; Stocks at Association Market Values.
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2024, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 8th day of March, 2025.

LIBERTY MUTUAL INSURANCE COMPANY INCORPORATED 1912 MASSACHUSETTS

Timothy A. Mikolajewski

Timothy A. Mikolajewski, Assistant Secretary

LMS-1262/LMIC

Bond No. 015227136

PAYMENT BOND

Use for any contract for which a Payment Bond is required.

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we, JLJ IV Enterprises, Inc.

hereinafter referred to as the "Principal", and Liberty Mutual Insurance Company

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns, in the penal sum of

Forty Three Million Nine Hundred Ninety One Thousand Four Hundred Twenty Six and 07/100

($ $ 43,991,426.07) Dollars, lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

Project ID: HED562., New 48" Trunk Water Main and Appurtenances in E. 233rd Street Etc., Borough of The Bronx, City of New York

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns and other Subcontractors to whom Work under this Contract is sublet and his or their successors and assigns shall promptly pay or cause to be paid all lawful claims for

(a) Wages and compensation for labor performed and services rendered by all persons engaged in the prosecution of the Work under said Contract, and any amendment or extension thereof or addition thereto, whether such persons be agents servants or employees of the Principal or any such Subcontractor, including all persons so engaged who perform the work of laborers or mechanics at or in the vicinity of the site of the Project regardless of any contractual relationship between the Principal or such Subcontractors, or his or their successors or assigns, on the one hand and such laborers or mechanics on the other, but not including office employees not regularly stationed at the site of the project; and

(b) Materials and supplies (whether incorporated in the permanent structure or not), as well as teams, fuels, oils, implements or machinery furnished, used or consumed by said Principal or any subcontractor at or in the vicinity of the site of the Project in the prosecution of the Work under said Contract and any amendment or extension thereof or addition thereto; then this obligation shall be void, otherwise to remain infull force and effect.

This bond is subject to the following additional conditions, limitations and agreements:

(a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialmen or laborer having a just claim, as well as the City itself.

(b) All persons who have performed labor, rendered services or furnished materials and supplies,as aforesaid, shall have a direct right of action against the Principal and his, its or their successors and assigns, and the Surety (Sureties) herein, or against either or both or any of them and their successors and assigns. Such persons may sue in their own name, and may prosecute the suit to judgment and execution without the necessity of joining with any other persons as party plaintiff.

(c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs of otherwise, obtained by either or both of them against a laborer or materialman in a suit brought by either a laborer or materialman under this bond for moneys allegedly due for performing work or furnishing material.

(d) The Surety (Sureties) or its successors and assigns shall not be liable for any compensation recoverable by an employee or laborer under the Workmen's Compensation Law.

(e) In no event shall the Surety (Sureties), or its successors or assigns, be liable for a greater sum than the penalty of this bond or be subject to any suit, action or proceeding hereon that is instituted by any person, firm, or corporation hereunder later than two years after the complete performance of said Contract and final settlement thereof.

The Principal, for himself and his successors and assigns, and the Surety (Sureties), for itself and its successors and assigns, do hereby expressly waive any objection that might be interposed as to the rightof the City to require a bond containing the foregoing provisions, and they do hereby further expressly waiveany defense which they or either of them might interpose to an action brought hereon by any person, firm or corporation, including subcontractors, materialmen and third persons, for work, labor, services, supplies or material performed rendered, or furnished as aforesaid upon the ground that there is no law authorizing the City to require the foregoing provisions to be place in this bond.

And the Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties), and its bonds shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or of the said Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any part thereof, or of any Work to be performed, or any moneys due to become due thereunder and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, Subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done or in relation to said Principal.

IN WITNESS WHEREOF, the Principal and the Surety (Sureties) have hereunto set their handsand seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed andthese presents to be signed by their proper officers, this 2nd day of May, 2025.

(Seal) JLJ IV Enterprises, Inc. (L.S.)Principal

By: JAMES JULIANO, PRESIDENT

(Seal) Liberty Mutual Insurance Company Surety

By: Dana Granice, Attorney-In-Fact

(Seal) _____ Surety

By: _____

(Seal) _____ Surety

By: _____

(Seal) _____ Surety

By: _____

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by aduly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the numberof counterparts of the Contract.

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of NEW YORK County of NASSAU ss:

On this 2nd day of MAY, 2025, before me personally came JAMES JULIANO to me known, who, being by me duly sworn did depose and say that he resides at PLANDOME MANOR, NY that he is the PRESIDENT of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

DEJAN PAPRIC
NOTARY PUBLIC-STATE OF NEW YORK
No. 01PA0034859
Qualified in Nassau County
My Commission Expires 03-14-2029

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of_____County of_____ss:

On this_____day of_____,_____, before me personally appeared _____ to me known, and known to me to be one of the members of the firm of _____ described in and who executed the foregoing instrument; and he acknowledged to me that he executed the same as and for the act and deed of said firm.

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of_____County of_____ss:

On this _____ day of_____,_____, before me personally appeared _____ to me known, and known to me to be the person described in and who executed the foregoing instrument; and acknowledged that he executed the same.

Notary Public or Commissioner of Deeds

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bondis executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

* * * * * * * *

Affix Acknowledgments and Justification of Sureties.

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF NEW YORK

COUNTY OF NASSAU

On this MAY 02 2025 before me personally came Dana Granice to me known, who, being by me duly sworn, did depose and say; that he/she resides in Suffolk County, State of New York, that he/she is the Attorney-In-Fact of the Liberty Mutual Insurance Company the corporation described in which executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that is was so affixed by the Board of Directors of said corporation; and that he/she signed his/her name thereto by like order; and the affiant did further depose and say that the Superintendent of Insurance of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State of New York, issued to Liberty Mutual Insurance Company (Surety) his/her certificate of qualification evidencing the qualification of said Company and its sufficiency under any law of the State of New York as surety and guarantor, and the propriety of accepting and approving it as such; and that such Certificate has not been revoked.

Notary Public

KAROLYNNE RAMIREZ
Notary Public-State of New York
No. 01RA6426462
Qualified in New York County
Commission Expires December 13, 2025

Liberty Mutual. SURETY

POWER OF ATTORNEY

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8213933-969603

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Camille Maitland; Colette R. Chisholm, Dana Granice, Desiree Cardlin, George O Brewster, Gerard S Macholz, Karolynne Ramirez, Katherine Acosta, Lee Ferrucci, Louis J Spina, Michelle Wannamaker, Nelly Renchiwich, Peter F. Jones, Robert T Pearson, Susan Lupski, Thomas Bean, Vincent A Walsh

all of the city of Uniondale state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 29th day of April, 2025.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: _____
Nathan J. Zangerle, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 29th day of April, 2025 before me personally appeared Nathan J. Zangerle, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.

Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2029
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.
Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.
Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Nathan J. Zangerle, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 2nd day of May, 2025.

By: _____
Renee C. Llewellyn, Assistant Secretary

LMS-12873 LMIC OCIC WAIC Multi Co 02/24

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

Liberty Mutual. SURETY

LIBERTY MUTUAL INSURANCE COMPANY

FINANCIAL STATEMENT – DECEMBER 31, 2024

Assets		Liabilities	
Cash and Bank Deposits	$4,608,826,756.00	Unearned Premiums	$9,890,896,878.00
*Bonds – U.S Government	$4,281,375,446.74	Reserve for Claims and Claims Expense	$29,467,071,865.00
*Other Bonds	$21,566,489,527.26	Funds Held Under Reinsurance Treaties	$341,948,172.00
*Stocks	$15,589,644,012.00	Reserve for Dividends to Policyholders	$954,025.00
Real Estate	$86,497,925.00	Additional Statutory Reserve	$150,547,865.00
Agents' Balances or Uncollected Premiums	$7,512,975,129.00	Reserve for Commissions, Taxes and Other Liabilities	$5,049,906,410.00
Accrued Interest and Rents	$225,249,712.00	**Total**	**$47,104,416,171.00**
Other Admitted Assets	$19,367,663,200.00	Special Surplus Funds	$174,153,086.00
Total Admitted Assets	**$74,539,483,661.00**	Capital Stock	$10,000,075.00
		Paid in Surplus	$13,209,595,772.00
		Unassigned Surplus	$13,415,980,561.00
		Surplus to Policyholders	$27,435,067,490.00
		Total Liabilities and Surplus	**$74,539,483,661.00**

* Bonds are stated at amortized or investment value; Stocks at Association Market Values.
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2024, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 8th day of March, 2025.

LIBERTY MUTUAL INSURANCE COMPANY INCORPORATED 1912 MASSACHUSETTS

Timothy A. Mikolajewski

Timothy A. Mikolajewski, Assistant Secretary

LMS-1262/LMIC

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 5/5/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER New York City, NY-Hub International Northeast 5 Bryant Park 4th Floor Woodbury NY 11797	**CONTACT NAME:** Dylan Mitchell **PHONE (A/C, No, Ext):** 212 338-2373 **FAX (A/C, No):** **E-MAIL ADDRESS:** Dylan.Mitchell@hubinternational.com
INSURED JLJIVEN-03 JLJ IV Enterprises Inc. 98-05 217th Street Queens Village NY 11429	**INSURER(S) AFFORDING COVERAGE** — **NAIC #** **INSURER A :** The Travelers Indemnity Company — 25658 **INSURER B :** The Phoenix Insurance Company — 25623 **INSURER C :** Starr Indemnity and Liability — 38318 **INSURER D :** Travelers Property Casualty Company of America — 25674 **INSURER E :** **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** 1358258071 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:	Y	Y	VTC2K-CO-2W267911-IND-25	2/1/2025	2/1/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 2,000,000 $ 300,000 $ 5,000 $ 2,000,000 $ 4,000,000 $ 4,000,000 $
A	**AUTOMOBILE LIABILITY** X ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY	Y	Y	VTC2K-CAP-2W267923-IND-25	2/1/2025	2/1/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ $ $ $
A	[ ] **UMBRELLA LIAB** [X] OCCUR X **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $	Y	Y	CUP-3X459489-25-25	2/1/2025	2/1/2026	EACH OCCURRENCE AGGREGATE 	$ 3,000,000 $ 3,000,000 $
B	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	Y	UB-2W835353-25-25-D	2/1/2025	2/1/2026	[ ] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
C D	Excess Liability Property & Inland Marine			1000585552251 QT-630-A6899380-TIL-25	2/1/2025 2/1/2025	2/1/2026 2/1/2026	Occurence/Aggregate Leased & Rented Equip	$5M / $5M $250,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: HED562

THE FOLLOWING ARE INCLUDED AS ADDITIONAL INSUREDS: City of New York, including its officials and employees, with coverage at least as broad as ISO Form CG 20 10 and CG 20 37, The Consolidated Edison Company of New York, Inc. (“Coned”), Empire City Subway Company, LTD (“ECS”), and. Altice USA, Inc. (“Altice”)

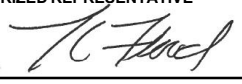
CERTIFICATE HOLDER

New York City Department of Design & Construction
30-30 Thomson Ave
Long Island City NY 11101

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



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CITY OF NEW YORK

CERTIFICATION BY INSURANCE BROKER OR AGENT

The undersigned insurance broker or agent represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

Hub International Northeast Ltd

[Name of broker or agent (typewritten)]

5 Bryant Park, 4th Fl, New York, NY 10018

[Address of broker or agent (typewritten)]

ken.schreiber@hubinternational.com

[Email address of broker or agent (typewritten)]

(212) 338-2270

[Phone number/Fax number of broker or agent (typewritten)]

Kenneth R. Schreiber

[Signature of authorized official, broker, or agent]

Kenneth Schreiber, President, Commercial Lines

[Name and title of authorized official, broker, or agent (typewritten)]

State of New York

County of New York ss.:

Sworn to before me this 6th day of May 2025

KAREN JOHNSON
STATE OF NEW YORK
NOTARY PUBLIC
Qualified in Kings County
01JO6439924
MY COMMISSION EXPIRES 08/29/2026

K Johnson

NOTARY PUBLIC FOR THE STATE OF New York

Karen Johnson
NOTARY PUBLIC, State of New York
No. 01JO6439924
Qualified in Kings County
Commission Expires August 29, 2026

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

1a. Legal Name & Address of Insured (use street address only) JLJ IV Enterprises Inc. 98-05 217th Street Queens Village, NY 11429 Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)*	1b. Business Telephone Number of Insured 718 465-5600 1c. NYS Unemployment Insurance Employer Registration Number of Insured 1d. Federal Employer Identification Number of Insured or Social Security Number 11-3630755
2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) New York City Department of Design & Construction 30-30 Thomson Ave Long Island City, NY 11101	3a. Name of Insurance Carrier The Phoenix Insurance Company 3b. Policy Number of Entity Listed in Box "1a" UB-2W835353-25-25-D 3c. Policy effective period 2/1/2025 to 2/1/2026 3d. The Proprietor, Partners or Executive Officers are [X] included. (Only check box if all partners/officers included) [ ] all excluded or certain partners/officers excluded.

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. **(To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy).** The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate. (These notices may be sent by regular mail.) **Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.**

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Dylan Mitchell
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: Dylan Mitchell 5/5/2025
(Signature) (Date)

Title: Assistant Vice President

Telephone Number of authorized representative or licensed agent of insurance carrier: 201-338-2000

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.

Workers' Compensation Law

Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.

1. The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any compensation to any such employee if so employed.

2. The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter.

NEW YORK STATE Workers' Compensation Board

CERTIFICATE OF INSURANCE COVERAGE
NYS DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by NYS disability and Paid Family Leave benefits carrier or licensed insurance agent of that carrier

1a. Legal Name & Address of Insured (use street address only)
JLJIV ENTERPRISES INC
98-05 217TH STREET
QUEENS VILLAGE, NY 11429

Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)*

1b. Business Telephone Number of Insured
718-465-5600

1c. Federal Employer Identification Number of Insured or Social Security Number
11-3630755

2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)
New York City Department of Design & Construction
30-30 Thomson Avenue
New York, NY 11101

3a. Name of Insurance Carrier
Standard Security Life Insurance Company of New York

3b. Policy Number of Entity Listed in Box 1a
R10583-003

3c. Policy Effective Period
10/1/2014 to 5/4/2026

4. Policy provides the following benefits:
- [x] A. Both disability and Paid Family Leave benefits.
- [ ] B. Disability benefits only.
- [ ] C. Paid Family Leave benefits only.

5. Policy covers:
- [x] A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.
- [ ] B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS disability and/or Paid Family Leave benefits insurance coverage as described above.

Date Signed 5/5/2025 By Talin Conti
(Signature of insurance carrier's authorized representative or NYS licensed insurance agent of that insurance carrier)

Telephone Number (212) 355-4141 Name and Title TALIN CONTI/MGR. POLICY SERVICES

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be emailed to PAU@wcb.ny.gov or it can be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4B, 4C or 5B of Part 1 has been checked)

State of New York
Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law(Article 9 of the Workers' Compensation Law) with respect to all of their employees.

Date Signed _____ By _____
(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number _____ Name and Title _____

Please Note: *Only insurance carriers licensed to write NYS disability and Paid Family Leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1.* ***Insurance brokers are NOT authorized to issue this form.***

Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box 3 on this form is certifying that it is insuring the business referenced in Box 1a for disability and/or Paid Family Leave benefits under the NYS Disability and Paid Family Leave Benefits Law. The insurance carrier or its licensed agent will send this Certificate of Insurance Coverage (Certificate)to the entity listed as the certificate holder in Box 2.

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from coverage indicated on this Certificate. (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier.

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This Certificate may be used as evidence of a NYS disability and/or Paid Family Leave benefits contract of insurance only while the underlying policy is in effect.

Please Note: Upon the cancellation of the disability and/or Paid Family Leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Insurance Coverage for NYS disability and/or Paid Family Leave Benefits or other authorized proof that the business is complying with the mandatory coverage requirements of the NYS Disability and Paid Family Leave Benefits Law.

NYS DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

§220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and not withstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand and twenty-one, the payment of family leave benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand eighteen, the payment of family leave benefits for all employees has been secured as provided by this article.

LABOR LAW ARTICLE 8 - NYC PUBLIC WORKS

Workers, Laborers and Mechanics employed on a public work project must receive not less than the prevailing rate of wage and benefits for the classification of work performed by each upon such public work. Pursuant to New York Labor Law Article 8 the Comptroller of the City of New York has promulgated this schedule solely for Workers, Laborers and Mechanics engaged by private contractors on New York City public work projects. Prevailing rates are required to be annexed to and form part of the public work contract pursuant to Labor Law section 220 (3).

This schedule is a compilation of separate determinations of the prevailing rate of wage and supplements made by the Comptroller for each trade classification listed herein pursuant to Labor Law section 220 (5). The source of the wage and supplement rates, whether a collective bargaining agreement, survey data or other, is listed at the end of each classification.

Agency Chief Contracting Officers should contact the Bureau of Labor Law's Classification Unit with any questions concerning trade classifications, prevailing rates or prevailing practices with respect to procurement on New York City public work contracts. Contractors are advised to review the Comptroller's Prevailing Wage Schedule before bidding on public work contracts. Contractors with questions concerning trade classifications, prevailing rates or prevailing practices with respect to public work contracts in the procurement stage must contact the contracting agency responsible for the procurement.

Any error as to compensation under the prevailing wage law or other information as to trade classification, made by the contracting agency in the contract documents or in any other communication, will not preclude a finding against the contractor of prevailing wage violation.

Any questions concerning trade classifications, prevailing rates or prevailing practices on New York City public work contracts that have already been awarded may be directed to the Bureau of Labor Law's Classification Unit by calling (212) 669-4443. All callers must have the agency name and contract registration number available when calling with questions on public work contracts. Please direct all other compliance issues to: laborlaw@comptroller.nyc.gov or Bureau of Labor Law, Attn: Paul Brumlik, Office of the Comptroller, 1 Centre Street, Room 651, New York, N.Y. 10007.

Pursuant to Labor Law § 220 (3-a) (a), the appropriate schedule of prevailing wages and benefits must be posted in a prominent and accessible place at all public work sites along with the Construction Poster provided on our web site at comptroller.nyc.gov/wages. In addition, covered employees must be given the appropriate schedule of prevailing wages and benefits along with the Worker Notice provided on our web site at the time the public work project begins, and with the first paycheck to each such employee after July first of each year.

This schedule is applicable to work performed during the effective period, unless otherwise noted. Changes to this schedule are published on our web site comptroller.nyc.gov/wages. Contractors must pay the wages and supplements in effect when the worker, laborer, mechanic performs the work. Preliminary schedules for future one-year periods appear in the City Record on or about June 1 each succeeding year. Final schedules appear on or about July 1 in the City Record and on our web site comptroller.nyc.gov/wages.

Prevailing rates and ratios for apprentices are published in the Construction Apprentice Prevailing Wage Schedule. Pursuant to Labor Law § 220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant, registered with the

New York State Department of Labor, may be paid at the apprentice rates. Apprentices who are not so registered must be paid as journey persons.

New York City public work projects awarded pursuant to a Project Labor Agreement ("PLA") in accordance with Labor Law section 222 may have different labor standards for shift, premium and overtime work. Please refer to the PLA's pre-negotiated labor agreements for wage and benefit rates applicable to work performed outside of the regular workday. More information is available at the Mayor's Office of Contract Services (MOCS) web page at:

https://www1.nyc.gov/site/mocs/legal-forms/project-labor-agreements.page

All the provisions of Labor Law Article 8 remain applicable to PLA work including, but not limited to, the enforcement of prevailing wage requirements by the Comptroller in accordance with the trade classifications in this schedule; however, we will enforce shift, premium, overtime and other non-standard rates as they appear in a project's pre-negotiated labor agreement.

In order to meet their obligation to provide prevailing supplemental benefits to each covered employee, employers must either:

1) **Provide bona fide fringe benefits which cost the employer no less than the prevailing supplemental benefits rate; or**
2) **Supplement the employee's hourly wage by an amount no less than the prevailing supplemental benefits rate; or**
3) **Provide a combination of bona fide fringe benefits and wage supplements which cost the employer no less than the prevailing supplemental benefits rate in total.**

Although prevailing wage laws do not require employers to provide bona fide fringe benefits (as opposed to wage supplements) to their employees, other laws may. For example, the Employee Retirement Income Security Act, 29 U.S.C. § 1001 et seq., the Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 et seq., and the New York City Paid Sick Leave Law, N.Y.C. Admin. Code § 20-911 et seq., require certain employers to provide certain benefits to their employees. Labor agreements to which employers are a party may also require certain benefits. The Comptroller's Office does not enforce these laws or agreements.

Employers must provide prevailing supplemental benefits at the straight time rate for each hour worked unless otherwise noted in the classification.

Paid Holidays, Vacation and Sick Leave when listed must be paid or provided in addition to the prevailing hourly supplemental benefit rate.

For more information, please refer to the Comptroller's Prevailing Wage Law Regulations in Title 44 of the Rules of the City of New York, Chapter 2, available at comptroller.nyc.gov/wages.

Paul Brumlik
Director of Classifications
Bureau of Labor Law

ADDENDUM

List of Amended Classifications

1. BOILERMAKER
2. CORE DRILLER
3. DERRICKPERSON AND RIGGER
4. FLAGGER
5. FLOOR COVERER
6. HAZARDOUS MATERIAL HANDLER
7. HOUSE WRECKER
8. IRON WORKER - ORNAMENTAL
9. IRON WORKER – STRUCTURAL
10. LABORER - HEAVY & HIGHWAY
11. LABORER - PAVER & ROADBUILDER
12. LABORER - PAVER & ROADBUILDER LINE STRIPING (ROADWAY)
13. MARBLE MECHANIC
14. MASON TENDER
15. MOSAIC MECHANIC
16. PAINTER - BRIDGE & STRUCTURAL STEEL
17. PLASTERER - TENDER
18. PLUMBER (MECHNICAL EQUIPMENT AND SERVICE)
19. SHEET METAL WORKER
20. SHEET METAL WORKER - SPECIALTY
21. STEAMFITTER
22. TAPER
23. TILE FINISHER
24. TILE LAYER – SETTER
25. TUNNEL WORKER

TABLE OF CONTENTS

CLASSIFICATION	PAGE
ASBESTOS HANDLER	6
BLASTER	6
BOILERMAKER	7
BRICKLAYER	8
CARPENTER - BUILDING COMMERCIAL	9
CARPENTER - HEAVY CONSTRUCTION WORK	10
CARPENTER - HIGH RISE CONCRETE FORMS	11
CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST	12
CARPENTER - WOOD WATER STORAGE TANK	13
CEMENT & CONCRETE WORKER	14
CEMENT MASON	15
CORE DRILLER	16
DERRICKPERSON AND RIGGER	17
DIVER	19
DOCKBUILDER - PILE DRIVER	19
DRIVER: TRUCK (TEAMSTER)	20
ELECTRICIAN	23
ELECTRICIAN - ALARM TECHNICIAN	25
ELECTRICIAN-STREET LIGHTING WORKER	26
ELEVATOR CONSTRUCTOR	28
ELEVATOR REPAIR & MAINTENANCE	29
ENGINEER	30
ENGINEER - CITY SURVEYOR AND CONSULTANT	35
ENGINEER - FIELD (BUILDING CONSTRUCTION)	36
ENGINEER - FIELD (HEAVY CONSTRUCTION)	37
ENGINEER - FIELD (STEEL ERECTION)	38
ENGINEER - OPERATING	39
FLAGGER	47
FLOOR COVERER	47
GLAZIER	48
GLAZIER - REPAIR & MAINTENANCE	49
HAZARDOUS MATERIAL HANDLER	50
HEAT AND FROST INSULATOR	51
HOUSE WRECKER	52
IRON WORKER - ORNAMENTAL	53
IRON WORKER - STRUCTURAL	54
LABORER	55
LABORER – HEAVY & HIGHWAY	55
LABORER - PAVER & ROADBUILDER	56
LABORER - PAVER & ROADBUILDER LINE STRIPING (ROADWAY)	58

LANDSCAPING 59
MARBLE MECHANIC 61
MASON TENDER 62
MASON TENDER (INTERIOR DEMOLITION WORKER) 63
METALLIC LATHER 64
MILLWRIGHT 65
MOSAIC MECHANIC 66
PAINTER 67
PAINTER - BRIDGE & STRUCTURAL STEEL 68
PAINTER - METAL POLISHER 69
PAINTER - SIGN 70
PAPERHANGER 71
PAVER AND ROADBUILDER 72
PAVER AND ROADBUILDER - LINE STRIPING (ROADWAY) 72
PLASTERER 72
PLASTERER - TENDER 73
PLUMBER 74
PLUMBER (MECHNICAL EQUIPMENT AND SERVICE) 75
PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION) 76
PLUMBER: PUMP & TANK 77
POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER 78
ROOFER 79
SHEET METAL WORKER 79
SHEET METAL WORKER - SPECIALTY 81
SHIPYARD WORKER 82
SIGN ERECTOR 83
STEAMFITTER 84
STEAMFITTER - REFRIGERATION AND AIR CONDITIONER 85
STONE MASON - SETTER 86
TAPER 87
TELECOMMUNICATION WORKER 87
TILE FINISHER 89
TILE LAYER - SETTER 90
TIMBERPERSON 90
TUNNEL WORKER 91
UTILITY LOCATOR 93
WELDER 95

ASBESTOS HANDLER

SEE HAZARDOUS MATERIAL HANDLER

BLASTER

Blaster

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $58.21
Supplemental Benefit Rate per Hour: $54.03

Blaster - Hydraulic Trac Drill

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $52.35
Supplemental Benefit Rate per Hour: $54.03

Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $51.52
Supplemental Benefit Rate per Hour: $54.03

Blaster - Journeyperson

(Laborer, Chipper/Jackhammer including Walk Behind Self Propelled Hydraulic Asphalt and Concrete Breakers and Hydro (Water) Demolition, Powder Carrier, Hydraulic Chuck Tender, Chuck Tender and Nipper)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $45.00
Supplemental Benefit Rate per Hour: $54.03

Blaster - Magazine Keepers: (Watch Person)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $22.50
Supplemental Benefit Rate per Hour: $54.03

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Christmas Day

Paid Holidays

Labor Day
Thanksgiving Day

Shift Rates

When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

BOILERMAKER

Boilermaker

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $67.38
Supplemental Benefit Rate per Hour: $49.33
Supplemental Note: For time and one half overtime - $73.42 For double overtime - $97.51

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $68.88
Supplemental Benefit Rate per Hour: $49.83
Supplemental Note: For time and one half overtime - $74.17 For double overtime - $98.51

Overtime Description

For Repair and Maintenance work:
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
For New Construction work:
Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

Quadruple time the regular rate for work on the following holiday(s).
Labor Day

Paid Holidays
Good Friday
Day after Thanksgiving
Day before Christmas
Day before New Year's Day

Shift Rates
On jobs requiring two (2) or three (3) shifts, the first shift shall work eight (8) hours at the regular straight-time hourly rate. The second shift shall work eight (8) hours and receive eight hours at the regular straight time hourly rate plus two dollars ($2.00) per hour. The third shift shall work eight (8) hours and receive eight hours at the regular straight time hourly rate plus two dollars and twenty-five cents ($2.25) per hour.

(Local #5)

BRICKLAYER

Bricklayer

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $59.09
Supplemental Benefit Rate per Hour: $43.05

Overtime Description
Time and one half the regular rate after a 7 hour day. If working on a job that is predominately Pointer, Cleaner, Caulker work, then Time and one half the regular rate after an 8 hour day.

Overtime
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
The second shift wage rate shall be a 15% wage premium with no premium for supplemental benefits. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, eight hours will be paid at straight time rate for seven hours of work.

(Bricklayer District Council)

CARPENTER - BUILDING COMMERCIAL

Building Commercial

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $57.05
Supplemental Benefit Rate per Hour: $48.33

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day

Columbus Day
Presidential Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
The second shift will receive one hour at the double time rate of pay for the last hour of the shift; eight hours pay for seven hours of work, nine hours pay for eight hours of work. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

CARPENTER - HEAVY CONSTRUCTION WORK
(Construction of Engineered Structures and Building Foundations including all form work)

Heavy Construction Work

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $60.59
Supplemental Benefit Rate per Hour: $55.84

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate and the supplemental benefits shall be paid at the straight time rate. When two (2) or more shifts of Carpenters are employed, single time will be paid for each shift.

(Carpenters District Council)

CARPENTER - HIGH RISE CONCRETE FORMS
(Excludes Engineered Structures and Building Foundations)

Carpenter High Rise A

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $51.48
Supplemental Benefit Rate per Hour: $44.74

Carpenter High Rise B

Carpenter High Rise B worker is excluded from high risk operations such as erection decking, perimeter debris netting, leading edge work, self-climbing form systems, and the installation of cocoon systems unless directly supervised by a Carpenter High Rise A worker.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $40.89
Supplemental Benefit Rate per Hour: $18.05

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day

Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
The second shift wage rate shall be 113% of the straight time hourly wage rate. However, any shift beginning after 5:00 P.M. shall be paid at time and one half the regular hourly rate. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST

Carpenter - Hod Hoist

(Assisted by Mason Tender)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $55.00
Supplemental Benefit Rate per Hour: $48.90

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day

Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
The second shift will receive 112% of the straight time hourly rate. Benefit fund contributions shall be paid at the straight time rate. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

CARPENTER - WOOD WATER STORAGE TANK

Tank Mechanic

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $37.83
Supplemental Benefit Rate per Hour: $25.32

Tank Helper

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $29.69
Supplemental Benefit Rate per Hour: $25.32

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Day after Thanksgiving
1/2 day on Christmas Eve if work is performed in the A.M.
Christmas Day

1/2 day on New Year's Eve if work is performed in the A.M.

Vacation

Employed for one (1) year.....one (1) week vacation (40 hours)
Employed for three (3) years.....two (2) weeks vacation (80 hours)
Employed for more than twenty (20) years.....three (3) weeks vacation (120 hours)

SICK LEAVE:
Two (2) sick days after being employed for twenty (20) years.

(Carpenters District Council)

CEMENT & CONCRETE WORKER

Building Work

Cement & Concrete Worker

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $47.28
Supplemental Benefit Rate per Hour: $32.20
Supplemental Note: $36.70 on Saturdays; $41.20 on Sundays & Holidays

Cement & Concrete Worker - (Hired after 2/6/2016)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $36.80
Supplemental Benefit Rate per Hour: $24.20
Supplemental Note: $26.70 on Saturdays; $29.20 on Sundays & Holidays

Overtime Description

Time and one half the regular rate after 7 hour day (time and one half the regular rate after an 8 hour day when working with Dockbuilders on pile cap forms and for work below street level to the top of the foundation wall, not to exceed 2 feet or 3 feet above the sidewalk-brick shelf, when working on the foundation and structure.)

Overtime

Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day

Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
1/2 day before Christmas Day
1/2 day before New Year's Day

Shift Rates
On shift work extending over a twenty-four hour period, all shifts are paid at straight time.

(Cement & Concrete Workers District Council 16)

CEMENT MASON

Cement Mason

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $57.72
Supplemental Benefit Rate per Hour: $34.51
Supplemental Note: Supplemental benefit time and one half rate: $62.72; Double time rate: double the base supplemental benefit rate.

Overtime Description
Time and one-half the regular rate after an 8 hour day, double time the regular rate after 10 hours. Time and one-half the regular rate on Saturday, double time the regular rate after 10 hours. Double time the regular rate on Sunday. Four Days a week at Ten (10) hours straight time is allowed.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
Any worker who reports to work on Christmas Eve or New Year's Eve pursuant to his employer's instruction shall be entitled to three (3) hours afternoon pay without working.

Shift Rates

For off shift work, (at times other than the regular 7:00 A.M. to 3:30 P.M. work day) a cement mason shall be paid at the regular hourly rate plus a 25% per hour differential.

(Local #780) (BCA)

CORE DRILLER

Test Boring

Core Driller

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $46.25
Supplemental Benefit Rate per Hour: $33.36

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $47.88
Supplemental Benefit Rate per Hour: $34.35

Core Driller Helper

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $36.28
Supplemental Benefit Rate per Hour: $33.36

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $37.58
Supplemental Benefit Rate per Hour: $34.35

Core Driller Helper(Third year in the industry)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $32.62
Supplemental Benefit Rate per Hour: $33.36

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $33.80
Supplemental Benefit Rate per Hour: $34.35

Core Driller Helper (Second year in the industry)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $28.98

Supplemental Benefit Rate per Hour: $33.36

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $30.04
Supplemental Benefit Rate per Hour: $34.35

Core Driller Helper (First year in the industry)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $25.32
Supplemental Benefit Rate per Hour: $33.36

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $26.26
Supplemental Benefit Rate per Hour: $34.35

Overtime Description
Time and one half the regular rate for work on a holiday plus Holiday pay when worked.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular rate for work on the following holiday(s).

Paid Holidays
New Year's Day
Memorial Day
Independence Day
Labor Day
Veteran's Day
Thanksgiving Day
Christmas Day

Shift Rates
When two (2) or more shifts are employed, single time shall be paid for each shift, but those employees employed on a shift other than from 8:00 A.M. to 5:00 P.M. shall, in addition, receive two dollars ($2.00) per hour differential for each hour worked. When three (3) shifts are needed, each shift shall work seven and one-half (7 ½) hours paid for eight (8) hours of labor and be permitted one-half (½) hour for mealtime.

(Carpenters District Council)

DERRICKPERSON AND RIGGER

Derrick Person & Rigger

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $60.40
Supplemental Benefit Rate per Hour: $60.14

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $60.40
Supplemental Benefit Rate per Hour: $61.78

Derrick Person & Rigger - Site Work

Assists the Stone Mason-Setter in the setting of stone and paving stone.

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $47.54
Supplemental Benefit Rate per Hour: $47.70

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $47.93
Supplemental Benefit Rate per Hour: $48.70

Overtime Description
The first two hours of overtime on weekdays and the first seven hours of work on Saturdays are paid at time and one half for wages and supplemental benefits. All additional overtimes is paid at double time for wages and supplemental benefits.

Overtime
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
1/2 day on Christmas Eve if work is performed in the A.M.

(Local #197)

DIVER

Diver (Marine)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $75.46
Supplemental Benefit Rate per Hour: $55.84

Diver Tender (Marine)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $55.00
Supplemental Benefit Rate per Hour: $55.84

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
When three shifts are utilized each shift shall work seven and one half-hours (7 1/2 hours) and paid for 8 hours, allowing for one half hour for lunch.

(Carpenters District Council)

DOCKBUILDER - PILE DRIVER

Dockbuilder - Pile Driver

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $60.59
Supplemental Benefit Rate per Hour: $55.84

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate and the supplemental benefits shall be paid at the straight time rate. When two (2) or more shifts of Dockbuilders are employed, single time will be paid for each shift.

(Carpenters District Council)

DRIVER: TRUCK (TEAMSTER)

Driver - Dump Truck

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $44.17
Supplemental Benefit Rate per Hour: $59.15
Supplemental Note: Over 40 hours worked: at time and one half rate - $25.50; at double time rate - $34.00

Driver - Tractor Trailer

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $47.32
Supplemental Benefit Rate per Hour: $56.90
Supplemental Note: Over 40 hours worked: at time and one half rate - $25.50; at double time rate - $34.00

Driver - Euclid & Turnapull Operator

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $47.88
Supplemental Benefit Rate per Hour: $56.90
Supplemental Note: Over 40 hours worked: at time and one half rate - $25.50; at double time rate - $34.00

Overtime Description
For Paid Holidays: Holiday pay for all holidays shall be prorated based two hours per day for each day worked in the holiday week, not to exceed 8 hours of holiday pay. For Thanksgiving week, the prorated share shall be 5 1/3 hours of holiday pay for each day worked in Thanksgiving week.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

Paid Holidays
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

Shift Rates
Off shift work commencing between 6:00 P.M. and 5:00 A.M. shall work eight and one half (8 1/2) hours allowing for one half hour for lunch

Driver Redi-Mix (Sand & Gravel)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $43.29
Supplemental Benefit Rate per Hour: $50.77
Supplemental Note: Over 40 hours worked: time and one half rate $20.48; double time rate $27.30

Overtime Description
For Paid Holidays: Employees who do not work on a contractual holiday shall be compensated two (2) hours extra pay in straight time wages and benefits for every day on which the Employee does not pass up a day's work during the calendar week (Sunday through Saturday) of the holiday, up to a maximum of ten (10) hours in wages and eight (8) hours in benefit contributions for the holiday

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
Martin Luther King Jr. Day
President's Day
Columbus Day
Veteran's Day

Triple time the regular rate for work on the following holiday(s).
New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Thanksgiving Day
Christmas Day

(Local #282)

ELECTRICIAN

(Including installation of low voltage cabling carrying data, video and/or voice on building construction/alteration/renovation projects.)

Electrician "A" (Regular Day / Day Shift)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $62.00
Supplemental Benefit Rate per Hour: $62.25
*** Supplemental Note: See Supplemental Benefit Rate per Hour Note below**

Electrician "A" (Regular Day Overtime after 7 hrs / Day Shift Overtime after 8 hrs)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $93.00
Supplemental Benefit Rate per Hour: $64.24
*** Supplemental Note: See Supplemental Benefit Rate per Hour Note below**

Electrician "A" (Swing Shift)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $72.75
Supplemental Benefit Rate per Hour: $70.56
*** Supplemental Note: See Supplemental Benefit Rate per Hour Note below**

Electrician "A" (Swing Shift Overtime after 7.5 hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $109.13
Supplemental Benefit Rate per Hour: $72.91
*** Supplemental Note: See Supplemental Benefit Rate per Hour Note below**

Electrician "A" (Graveyard Shift)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $81.49
Supplemental Benefit Rate per Hour: $77.61
*** Supplemental Note: See Supplemental Benefit Rate per Hour Note below**

Electrician "A" (Graveyard Shift Overtime after 7 hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $122.24
Supplemental Benefit Rate per Hour: $80.23
*** Supplemental Note: See Supplemental Benefit Rate per Hour Note below**

*** Supplemental Benefit Rate per Hour Note**
In addition to the Supplemental Benefit Rates per Hour listed above, the employer must provide an additional 6.2% of taxable gross pay earned on covered work only. This additional Supplemental Benefit Rate will terminate when the employee has contributed the maximum annual Social Security tax required by law, on all work performed.

Overtime
Time and one half the regular rate after a 7 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Overtime Holidays
Time and one half the regular rate for work on a holiday.
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
For multiple shifts of temporary light and/or power, the temporary light and/or power employee shall be paid for 8 hours at the straight time rate. For three or less workers performing 8 hours temporary light and/or power the supplemental benefit rate is $24.36, effective 04/13/2023 the supplemental benefit rate is $24.78 - See * Supplemental Benefit Rate per Hour Note above.

Electrician "M" (First 8 hours)

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $32.00
Supplemental Benefit Rate per Hour: $27.20
First and Second Year "M" Wage Rate Per Hour: $27.50
First and Second Year "M" Supplemental Rate: $24.79

Electrician "M" (Overtime After First 8 hours)

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $48.00
Supplemental Benefit Rate per Hour: $29.23
First and Second Year "M" Wage Rate Per Hour: $41.25
First and Second Year "M" Supplemental Rate: $26.52

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

(Local #3)

ELECTRICIAN - ALARM TECHNICIAN
(Scope of Work - Inspect, test, repair, and replace defective, malfunctioning, or broken devices, components and controls of Fire, Burglar and Security Systems)

Alarm Technician

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $37.40

Supplemental Benefit Rate per Hour: $21.44
Supplemental Note: $19.31 only after 8 hours worked in a day

Overtime Description
Time and one half the regular rate for work on the following holidays: Columbus Day, Veterans Day, Day after Thanksgiving.
Double time the regular rate for work on the following holidays: New Year's day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Paid Holidays
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates
Night Differential is based upon a ten percent (10%) differential between the hours of 4:00 P.M. and 12:30 A.M. and a fifteen percent (15%) differential for the hours 12:00 A.M. to 8:30 A.M.

Vacation
At least 1 year of employment.....ten (10) days
5 years or more of employment.....fifteen (15) days
10 years of employment.....twenty (20) days
Plus one Personal Day per year

Sick Days:
One day per Year. Up to 4 vacation days may be used as sick days.

(Local #3)

ELECTRICIAN-STREET LIGHTING WORKER

Electrician - Electro Pole Electrician

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $62.00

Supplemental Benefit Rate per Hour: $62.85
*** Supplemental Note: See Supplemental Benefit Rate per Hour Note below**

Electrician - Electro Pole Foundation Installer

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $47.66
Supplemental Benefit Rate per Hour: $48.72
*** Supplemental Note: See Supplemental Benefit Rate per Hour Note below**

Electrician - Electro Pole Maintainer

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $41.61
Supplemental Benefit Rate per Hour: $44.45
*** Supplemental Note: See Supplemental Benefit Rate per Hour Note below**

*** Supplemental Benefit Rate per Hour Note**
In addition to the Supplemental Benefit Rates per Hour listed above, the employer must provide an additional 6.2% of taxable gross pay earned on covered work only. This additional Supplemental Benefit Rate will terminate when the employee has contributed the maximum annual Social Security tax required by law, on all work performed.

Overtime Description

Electrician - Electro Pole Electrician: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week.
Electrician - Electro Pole Foundation Installer: Time and one half the regular rate after 8 hours within a 24 hour period and Saturday and Sunday.
Electrician - Electro Pole Maintainer: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week. Saturdays and Sundays may be used as a make-up day at straight time when a day is lost during the week to inclement weather.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

(Local #3)

ELEVATOR CONSTRUCTOR

Elevator Constructor

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate per Hour: $80.35
Supplemental Benefit Rate per Hour: $41.23

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate per Hour: $83.27
Supplemental Benefit Rate per Hour: $42.33

Overtime Description
For New Construction: work performed after an 8 hour day, Saturday, Sunday or between 4:30pm and 7:00am shall be paid at double time rate.

Existing buildings: work performed after an 8 hour day, Saturday, Sunday or between 5:30pm and 7:00 am shall be paid time and one half.

Overtime
Double time the regular rate for work on the following holiday(s).

Paid Holidays
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Vacation
Employer contributes 8% of regular basic hourly rate as vacation pay for employees with more than 15 years of service, and 6% for employees with 5 to 15 years of service, and 4% for employees with less than 5 years of service.

(Local #1)

ELEVATOR REPAIR & MAINTENANCE

Elevator Service/Modernization Mechanic

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate per Hour: $63.16
Supplemental Benefit Rate per Hour: $41.18

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate per Hour: $65.54
Supplemental Benefit Rate per Hour: $42.28

Overtime Description
For Scheduled Service Work: Double time - work scheduled in advance by two or more workers performed on Sundays, Holidays, and between midnight and 7:00am.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.
Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates
Afternoon shift - regularly hourly rate plus a (15%) fifteen percent differential. Graveyard shift - time and one half the regular rate.

Vacation
Employer contributes 8% of regular basic hourly rate as vacation pay for employees with more than 15 years of service, and 6% for employees with 5 to 15 years of service, and 4% for employees with less than 5 years of service.

(Local #1)

ENGINEER

Engineer - Heavy Construction Operating Engineer I

Cherrypickers 20 tons and over and Loaders (rubber tired and/or tractor type with a manufacturer's minimum rated capacity of six cubic yards and over).

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $76.57
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $122.51

Engineer - Heavy Construction Operating Engineer II

Backhoes, Basin Machines, Groover, Mechanical Sweepers, Bobcat, Boom Truck, Barrier Transport (Barrier Mover) & machines of similar nature. Operation of Churn Drills and machines of a similar nature, Stetco Silent Hoist and machines of similar nature, Vac-Alls, Meyers Machines, John Beam and machines of a similar nature, Ross Carriers and Travel Lifts and machines of a similar nature, Bulldozers, Scrapers and Turn-a-Pulls: Tugger Hoists (Used exclusively for handling excavated material); Tractors with attachments, Hyster and Roustabout Cranes, Cherrypickers. Austin Western, Grove and machines of a similar nature, Scoopmobiles, Monorails, Conveyors, Trenchers: Loaders-Rubber Tired and Tractor: Barber Greene and Eimco Loaders and Eimco Backhoes; Mighty Midget and similar breakers and Tampers, Curb and Gutter Pavers and Motor Patrol, Motor Graders and all machines of a similar nature. Locomotives 10 Tons or under. Mini-Max, Break-Tech and machines of a similar nature; Milling machines, robotic and demolition machines and machines of a similar nature, shot blaster, skid steer machines and machines of a similar nature including bobcat, pile rig rubber-tired excavator (37,000 lbs. and under), 2 person auger.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $74.14
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $118.62

Engineer - Heavy Construction Operating Engineer III

Minor Equipment such as Tractors, Post Hole Diggers, Ditch Witch (Walk Behind), Road Finishing Machines, Rollers five tons and under, Tugger Hoists, Dual Purpose Trucks, Fork Lifts, and Dempsey Dumpers, Fireperson.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $70.09
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $112.14

Engineer - Heavy Construction Maintenance Engineer I

Installing, Repairing, Maintaining, Dismantling of all equipment including Steel Cutting, Bending and Heat Sealing Machines, Mechanical Heaters, Grout Pumps, Bentonite Pumps & Plants, Screening Machines, Fusion Coupling Machines, Tunnel Boring Machines Moles and Machines of a similar nature, Power Packs, Mechanical

Hydraulic Jacks; all drill rigs including but not limited to Churn, Rotary Caisson, Raised Bore & Drills of a similar nature; Personnel, Inspection & Safety Boats or any boats used to perform functions of same, Mine Hoists, Whirlies, all Climbing Cranes, all Tower Cranes, including but not limited to Truck Mounted and Crawler Type and machines of similar nature; Maintaining Hydraulic Drills and machines of a similar nature; Well Point System-Installation and dismantling; Burning, Welding, all Pumps regardless of size and/or motor power, except River Cofferdam Pumps and Wells Point Pumps; Motorized Buggies (three or more); equipment used in the cleaning and televising of sewers, but not limited to jet-rodder/vacuum truck, vacall/vactor, closed circuit television inspection equipment; high powered water pumps, jet pumps; screed machines and concrete finishing machines of a similar nature; vermeers.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $73.76
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $118.02

Engineer - Heavy Construction Maintenance Engineer II

On Base Mounted Tower Cranes

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $98.47
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $157.55

Engineer - Heavy Construction Maintenance Engineer III

On Generators, Light Towers

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $46.95
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $75.12

Engineer - Heavy Construction Maintenance Engineer IV

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $48.29
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $77.26

Engineer - Heavy Construction Service Engineer

Gradalls: Concrete Pumps: Power Houses: Driving Truck Cranes: Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2024 - 6/30/2025

Wage Rate per Hour: $65.99
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $105.58

Engineer - Heavy Construction Service Mechanic

Shovels: Cranes: Draglines: Backhoes: Keystones: Pavers: Trenching Machines: Gunite Machines: Compressors (three (3) or more in Battery): Crawler Cranes- having a straight lattice boom with no attachment or luffing boom, no jib and no auxiliary attachment.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $44.09
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $70.54

Engineer - Steel Erection Maintenance Engineers

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $70.95
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $113.52

Engineer - Steel Erection Oiler I

On a Truck Crane

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $66.10
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $105.76

Engineer - Steel Erection Oiler II

On a Crawler Crane

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $47.74
Supplemental Benefit Rate per Hour: $48.85
Supplemental Note: $90.30 on overtime
Shift Wage Rate: $76.38

Overtime Description

On jobs of more than one shift, if the next shift employee fails to report for work through any cause over which the employer has no control, the employee on duty who works the next shift continues to work at the single time rate.

Overtime

Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.
Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Engineer - Building Work Maintenance Engineers I

Installing, repairing, maintaining, dismantling (of all equipment including: Steel Cutting and Bending Machines, Mechanical Heaters, Mine Hoists, Climbing Cranes, Tower Cranes, Linden Peine, Lorain, Liebherr, Mannes, or machines of a similar nature, Well Point Systems, Deep Well Pumps, Concrete Mixers with loading Device, Concrete Plants, Motor Generators when used for temporary power and lights), skid steer machines of a similar nature including bobcat.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $62.34
Supplemental Benefit Rate per Hour: $47.94
Supplemental Note: $88.48 on overtime

Engineer - Building Work Maintenance Engineers II

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $47.29
Supplemental Benefit Rate per Hour: $47.94
Supplemental Note: $88.48 on overtime

Engineer - Building Work Oilers I

All gasoline, electric, diesel or air operated Gradealls: Concrete Pumps, Overhead Cranes in Power Houses: Their duties shall be to assist the Engineer in oiling, greasing and repairing of all machines; Driving Truck

Cranes: Driving and Operating Fuel and Grease Trucks, Cherrypickers (hydraulic cranes) over 70,000 GVW, and machines of a similar nature.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $59.02
Supplemental Benefit Rate per Hour: $47.94
Supplemental Note: $88.48 on overtime

Engineer - Building Work Oilers II

Oilers on Crawler Cranes, Backhoes, Trenching Machines, Gunite Machines, Compressors (three or more in Battery).

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $42.55
Supplemental Benefit Rate per Hour: $47.94
Supplemental Note: $88.48 on overtime

Overtime Description
On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

Overtime
Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.
Double time the regular rate for work on the following holiday(s).

Paid Holidays
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

Shift Rates
When two (2) or more shifts are employed, single time will be paid for each shift.

(Local #15)

ENGINEER - CITY SURVEYOR AND CONSULTANT

Party Chief

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $44.73
Supplemental Benefit Rate per Hour: $28.36
Supplemental Note: Overtime Benefit Rate - $33.87 per hour (time & one half) $39.37 per hour (double time).

Instrument Person

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $36.30
Supplemental Benefit Rate per Hour: $28.36
Supplemental Note: Overtime Benefit Rate - $33.87 per hour (time & one half) $39.37 per hour (double time).

Rodperson

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $30.97
Supplemental Benefit Rate per Hour: $28.36
Supplemental Note: Overtime Benefit Rate - $33.87 per hour (time & one half) $39.37 per hour (double time).

Rodperson 1st Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $25.00
Supplemental Benefit Rate per Hour: $28.36
Supplemental Note: Overtime Benefit Rate - $33.87 per hour (time & one half) $39.37 per hour (double time).

Overtime Description

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

ENGINEER - FIELD (BUILDING CONSTRUCTION)

(Construction of Building Projects, Concrete Superstructures, etc.)

Field Engineer - BC Party Chief

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $68.86
Supplemental Benefit Rate per Hour: $43.03
Supplemental Note: Overtime Benefit Rate - $60.85 per hour (time & one half) $78.66 per hour (double time).

Field Engineer - BC Instrument Person

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $50.03
Supplemental Benefit Rate per Hour: $43.03
Supplemental Note: Overtime Benefit Rate - $60.85 per hour (time & one half) $78.66 per hour (double time).

Field Engineer - BC Rodperson

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $30.96
Supplemental Benefit Rate per Hour: $43.03
Supplemental Note: Overtime Benefit Rate - $60.85 per hour (time & one half) $78.66 per hour (double time).

Overtime Description

Time and one half the regular rate after a 7 hour work and time and one half the regular rate for Saturday for the first seven hours worked, Double time the regular time rate for Saturday for work performed in excess of seven hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (HEAVY CONSTRUCTION)

(Construction of Roads, Tunnels, Bridges, Sewers, Building Foundations, Engineering Structures etc.)

Field Engineer - HC Party Chief

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $79.02
Supplemental Benefit Rate per Hour: $46.67
Supplemental Note: Overtime benefit rate - $66.19 per hour (time & one half), $85.70 per hour (double time).

Field Engineer - HC Instrument Person

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $56.62
Supplemental Benefit Rate per Hour: $46.67
Supplemental Note: Overtime benefit rate - $66.19 per hour (time & one half), $85.70 per hour (double time).

Field Engineer - HC Rodperson

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $46.66
Supplemental Benefit Rate per Hour: $46.67
Supplemental Note: Overtime benefit rate - $66.19 per hour (time & one half), $85.70 per hour (double time).

Field Engineer - HC Rodperson 1st Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $25.00
Supplemental Benefit Rate per Hour: $46.67
Supplemental Note: Overtime benefit rate - $66.19 per hour (time & one half), $85.70 per hour (double time).

Overtime Description

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day

Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (STEEL ERECTION)

Field Engineer - Steel Erection Party Chief

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $74.95
Supplemental Benefit Rate per Hour: $45.01
Supplemental Note: Overtime benefit rate - $63.69 per hour (time & one half), $82.37 per hour (double time).

Field Engineer - Steel Erection Instrument Person

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $56.03
Supplemental Benefit Rate per Hour: $45.01
Supplemental Note: Overtime benefit rate - $63.69 per hour (time & one half), $82.37 per hour (double time).

Field Engineer - Steel Erection Rodperson

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $36.15
Supplemental Benefit Rate per Hour: $45.01
Supplemental Note: Overtime benefit rate - $63.69 per hour (time & one half), $82.37 per hour (double time).

Field Engineer - Steel Erection Rodperson 1st Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $25.00
Supplemental Benefit Rate per Hour: $45.01
Supplemental Note: Overtime benefit rate - $63.69 per hour (time & one half), $82.37 per hour (double time).

Overtime Description

Time and one half the regular rate for Saturday for the first eight hours worked.
Double time the regular rate for Saturday for work performed in excess of eight hours.

Overtime

Time and one half the regular rate after an 8 hour day.
Double time the regular rate for Sunday.
Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - OPERATING

Operating Engineer - Road & Heavy Construction I

Back Filling Machines, Cranes, Mucking Machines and Dual Drum Paver.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $92.72
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $148.35

Operating Engineer - Road & Heavy Construction II

Backhoes, Power Shovels, Hydraulic Clam Shells, Steel Erection, Moles and machines of a similar nature.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $95.96
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $153.54

Operating Engineer - Road & Heavy Construction III

Mine Hoists (Cranes, etc. when used as Mine Hoists)

Effective Period: 7/1/2024 - 6/30/2025

Wage Rate per Hour: $99.01
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $158.42

Operating Engineer - Road & Heavy Construction IV

Gradealls, Keystones, Cranes on land or water (with digging buckets), Bridge Cranes, Vermeer Cutter and machines of a similar nature, Trenching Machines.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $96.64
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $154.62

Operating Engineer - Road & Heavy Construction V

Pile Drivers & Rigs (working alongside Dock Builder foreperson): Derrick Boats, Tunnel Shovels.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $94.76
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $151.62

Operating Engineer - Road & Heavy Construction VI

Mixers (Concrete with loading attachment), Concrete Pavers, Cableways, Land Derricks, Power Houses (Low Air Pressure Units).

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $90.08
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $144.13

Operating Engineer - Road & Heavy Construction VII

Barrier Movers, Barrier Transport and Machines of a Similar Nature.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $73.00
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $116.80

Operating Engineer - Road & Heavy Construction VIII

Utility Compressors

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $56.95
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $71.45

Operating Engineer - Road & Heavy Construction IX

Horizontal Boring Rig

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $85.75
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $137.20

Operating Engineer - Road & Heavy Construction X

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $78.92
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $126.27

Operating Engineer - Road & Heavy Construction XI

Compressors (Portable 3 or more in battery), Driving of Truck Mounted Compressors, Well-point Pumps, Tugger Machines Well Point Pumps, Churn Drill.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $61.57
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $98.51

Operating Engineer - Road & Heavy Construction XII

All Drills and Machines of a similar nature.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $91.03
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $145.65

Operating Engineer - Road & Heavy Construction XIII

Concrete Pumps, Concrete Plant, Stone Crushers, Double Drum Hoist, Power Houses (other than above).

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $88.22
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $141.15

Operating Engineer - Road & Heavy Construction XIV

Concrete Mixer

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $84.38
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $135.01

Operating Engineer - Road & Heavy Construction XV

Compressors (Portable Single or two in Battery, not over 100 feet apart), Pumps (River Cofferdam) and Welding Machines, Push Button Machines, All Engines Irrespective of Power (Power-Pac) used to drive auxiliary equipment, Air, Hydraulic, etc.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $57.32
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $91.71

Operating Engineer - Road & Heavy Construction XVI

Concrete Breaking Machines, Hoists (Single Drum), Load Masters, Locomotives (over ten tons) and Dinkies over ten tons, Hydraulic Crane-Second Engineer.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $80.64
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $129.02

Operating Engineer - Road & Heavy Construction XVII

On-Site concrete plant engineer, On-site Asphalt Plant Engineer, and Vibratory console.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $81.22
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours

Shift Wage Rate: $129.95

Operating Engineer - Road & Heavy Construction XVIII

Tower Crane

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $116.04
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $185.66

Operating Engineer - Paving I

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $90.08
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $144.13

Operating Engineer - Paving II

Asphalt Roller

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $87.81
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $140.50

Operating Engineer - Paving III

Asphalt Plants

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $74.42
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $119.07

Operating Engineer - Concrete I

Cranes

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $96.22
Supplemental Benefit Rate per Hour: $36.90

Supplemental Note: $67.50 overtime hours

Operating Engineer - Concrete II

Compressors

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $57.75
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours

Operating Engineer - Concrete III

Micro-traps (Negative Air Machines), Vac-All Remediation System.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $77.14
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours

Operating Engineer - Steel Erection I

Three Drum Derricks

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $100.14
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $160.22

Operating Engineer - Steel Erection II

Cranes, 2 Drum Derricks, Hydraulic Cranes, Fork Lifts and Boom Trucks.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $96.26
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $154.02

Operating Engineer - Steel Erection III

Compressors, Welding Machines.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $56.34
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $90.14

Operating Engineer - Steel Erection IV

Compressors - Not Combined with Welding Machine. (Public Works Only)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $53.69
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
Shift Wage Rate: $85.90

Operating Engineer - Building Work I

Forklifts, Plaster (Platform machine), Plaster Bucket, Concrete Pump and all other equipment used for hoisting material.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $73.52
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours

Operating Engineer - Building Work II

Compressors, Welding Machines (Cutting Concrete-Tank Work), Paint Spraying, Sandblasting, Pumps (with the exclusion of Concrete Pumps), All Engines irrespective of Power (Power-Pac) used to drive Auxiliary Equipment, Air, Hydraulic, Jacking System, etc.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $55.18
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours

Operating Engineer - Building Work III

Double Drum

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $91.26
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours

Operating Engineer - Building Work IV

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $96.60
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours

Operating Engineer - Building Work V

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $81.62
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours

Operating Engineer - Building Work VI

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $80.76
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours

Operating Engineer - Building Work VII

Rack & Pinion and House Cars

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $64.33
Supplemental Benefit Rate per Hour: $36.90
Supplemental Note: $67.50 overtime hours
For New House Car projects Wage Rate per Hour $51.45
For New House Car projects: Supplemental Benefit overtime hours: $52.20

Overtime Description
On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

For House Cars and Rack & Pinion only: Overtime paid at time and one-half for all hours in excess of eight hours in a day, Saturday, Sunday and Holidays worked.

Overtime
Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.
Double time the regular rate for work on the following holiday(s).

Paid Holidays
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving

Christmas Day

Shift Rates

When two (2) or more shifts are employed, single time will be paid for each shift.
For Steel Erection Only: Shifts may be worked at the single time rate at other than the regular working hours (8:00 A.M. to 4:30 P.M.) on the following work ONLY: Heavy construction jobs on work below the street level, over railroad tracks and on building jobs.

(Operating Engineer Local #14)

FLAGGER

Flagger to be paid at the rate of the journeyperson or apprentice in the trade performing the underlying work.

In accordance with the Comptroller's Prevailing Wage Memorandum Regarding Flag Persons dated June 1, 2024, this title includes traffic control duty only for City public works contracts and subcontracts solicited on or after July 1, 2024.

On City public works contracts and subcontracts solicited on or after July 1, 2024, traffic control worker to be paid at the rate of the journeyperson or apprentice in the trade performing the underlying work.

If the trade performing the underlying work does not regularly employ a flagger or traffic control worker, then one of the following titles must be used on such projects:
Laborer - Heavy & Highway
Laborer - Paver & Roadbuilder
Laborer - Paver & Roadbuilder Line Striping (Roadway)

FLOOR COVERER

(Interior vinyl composition tile, sheath vinyl linoleum and wood parquet tile including site preparation and synthetic turf not including site preparation)

Floor Coverer

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $55.05
Supplemental Benefit Rate per Hour: $47.88

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $57.05
Supplemental Benefit Rate per Hour: $48.33

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Day after Thanksgiving
Day before Christmas
Christmas Day
Day before New Year's Day

Shift Rates
Two shifts may be utilized with the first shift working 8 a.m. to the end of the shift at straight time rate of pay. The wage rate for the second shift consisting of 7 hours shall be paid at 114.29% of straight time wage rate. The wage rate for the second shift consisting of 8 hours shall be paid 112.5% of the straight time wage rate. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

GLAZIER
(New Construction, Remodeling, and Alteration)

Glazier

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $49.00
Supplemental Benefit Rate per Hour: $55.77

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

(Local #1281)

GLAZIER - REPAIR & MAINTENANCE
(For the Installation of Glass - All repair and maintenance work on a particular building.)

Craft Jurisdiction for repair, maintenance and fabrication

Plate glass replacement, Storm windows and storm doors, Herculite door repairs, Door closer repairs, Glass tinting.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $27.45
Supplemental Benefit Rate per Hour: $27.93

Overtime
Time and one half the regular rate after an 8 hour day.
Double time the regular rate for Sunday.
Time and one half the regular rate for work on the following holiday(s).
Time and one half the regular hourly rate after 40 straight time hours in any work week.

Paid Holidays
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Local #1281)

HAZARDOUS MATERIAL HANDLER
(Removal, abatement, encapsulation or decontamination of asbestos, lead, mold, or other toxic or hazardous waste/materials)

Handler

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $39.00
Supplemental Benefit Rate per Hour: $21.65

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $39.20
Supplemental Benefit Rate per Hour: $22.90

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Sunday.
Time and one half the regular hourly rate after 40 straight time hours in any work week.

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day
Easter

Paid Holidays
None

(Local #78 and Local #12A)

HEAT AND FROST INSULATOR

Heat & Frost Insulator

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $70.96
Supplemental Benefit Rate per Hour: $36.06

Overtime Description
Supplemental Benefit contributions are to be made at the applicable overtime rates.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Triple time the regular rate for work on the following holiday(s).
Labor Day

Paid Holidays
None

Shift Rates
The first shift shall work seven hours at the regular straight time rate. The second and third shift shall work seven hours the regular straight time hourly rate plus a fourteen percent wage and benefit premium. There must be a first shift to work the second shift, and a second shift to work the third shift. Off-hour jobs in occupied buildings may be worked on weekdays with an increment of one-dollar ($1.00) per hour and eight (8) hours pay for seven (7) hours worked.

(Local #12) (BCA)

HOUSE WRECKER
(TOTAL DEMOLITION)

House Wrecker - Tier A

On all work sites the first, second, eleventh and every third House Wrecker thereafter will be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). Other House Wreckers may be Tier B House Wreckers.

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $39.48
Supplemental Benefit Rate per Hour: $31.92

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $39.61
Supplemental Benefit Rate per Hour: $32.29

House Wrecker - Tier B

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $28.71
Supplemental Benefit Rate per Hour: $24.33

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $28.84
Supplemental Benefit Rate per Hour: $24.70

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL

Iron Worker - Ornamental

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $47.65
Supplemental Benefit Rate per Hour: $65.75
Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $47.90
Supplemental Benefit Rate per Hour: $66.74
Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

Overtime Description
Monday through Friday- the first eight hours are paid at straight time, the 9th and 10th hours are paid at time and one-half the regular rate, all additional weekday overtime is paid at double the regular rate. Saturdays- the first eight hours are paid at time and one-half the regular rate, double time thereafter. Sunday-all shifts are paid at double time. Four Days a week at Ten (10) hours straight time is allowed.

Overtime
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
When two or three shifts are employed on a job, Monday through Friday, each shift will be paid eight (8) hours at the straight time rate for eight (8) hours of work; at time and one-half the regular straight time rate for the first two (2) hours of overtime worked beyond eight (8) hours; and at double time for all work thereafter. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants,

eight (8) hours will be paid at straight time rate for seven (7) hours of work, and all overtime shall be paid at time and one-half the regular straight time rates. On Saturday, Sundays and Holidays, time and one-half the regular straight time rate shall be paid for all work up to seven (7) hours and double time shall be paid for all work thereafter.

(Local #580)

IRON WORKER - STRUCTURAL

Iron Worker - Structural

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $58.20
Supplemental Benefit Rate per Hour: $89.27
Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $58.45
Supplemental Benefit Rate per Hour: $90.77
Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

Overtime Description
Monday through Friday- the first eight hours are paid at straight time, the 9th and 10th hours are paid at time and one-half the regular rate, all additional weekday overtime is paid at double the regular rate. Saturdays- the first eight hours are paid at time and one-half the regular rate, double time thereafter. Sunday-all shifts are paid at double time. Four Days a week at Ten (10) hours straight time is allowed.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

Shift Rates

Monday through Friday - First Shift: First eight hours are paid at straight time, the 9th & 10th hours are paid at time and a half, double time paid thereafter. Second and third Shifts: First eight hours are paid at time and one-half, double time thereafter. Saturdays: All shifts, first eight hours paid at time and one-half, double time thereafter: Sunday all shifts are paid at double time.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday.

(Local #40 & #361)

LABORER

see LABORER – HEAVY & HIGHWAY

LABORER – HEAVY & HIGHWAY

(Foundation, Concrete, Excavating, Street Pipe Layer and Common)

Laborer - Heavy & Highway

Excavation and foundation work for buildings, heavy construction, street pipe laying, engineering work, and hazardous waste removal in connection with the above work. Landscaping tasks in connection with heavy construction work, engineering work and building projects. Projects include, but are not limited to pollution plants, sewers, parks, subways, bridges, highways, etc. In accordance with the Comptroller's Prevailing Wage Memorandum Regarding Flag Persons dated June 1, 2024, for City public work contracts and subcontracts solicited on or after July 1, 2024 only, includes traffic control duty associated with such projects.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $45.00
Supplemental Benefit Rate per Hour: $54.03

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Christmas Day

Paid Holidays

Labor Day
Thanksgiving Day

Shift Rates

When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

LABORER - PAVER & ROADBUILDER

Laborer - Paver & Roadbuilder

Paving and road construction work, regardless of material used, including but not limited to preparation of job sites, removal of old surfaces, asphalt and/or concrete, by whatever method, including but not limited to milling; laying of concrete; laying of asphalt for temporary, patchwork, and utility paving (but not production paving); site preparation and incidental work for installation of rubberized materials and similar surfaces; installation and repair of temporary construction fencing; slurry/seal coating, paving stones, maintenance of safety surfaces; play equipment installation, and other related work. In accordance with the Comptroller's Prevailing Wage Memorandum Regarding Flag Persons dated June 1, 2024, for City public work contracts and subcontracts solicited on or after July 1, 2024 only, includes traffic control duty associated with such projects.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $45.48
Supplemental Benefit Rate per Hour: $53.55
Supplemental Note: For time and one half overtime - $58.18 For double overtime - $62.80

Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $49.35
Supplemental Benefit Rate per Hour: $53.55
Supplemental Note: For time and one half overtime - $58.18 For double overtime - $62.80

Production Paver & Roadbuilder - Shoveler

General laborer (except removal of surfaces - see Paver and Roadbuilder-Laborer) including but not limited to tamper, AC paint and liquid tar work.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $45.48
Supplemental Benefit Rate per Hour: $53.55
Supplemental Note: For time and one half overtime - $58.18 For double overtime - $62.80

Production Paver & Roadbuilder - Raker

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $49.35
Supplemental Benefit Rate per Hour: $53.55
Supplemental Note: For time and one half overtime - $58.18 For double overtime - $62.80

Production Paver & Roadbuilder - Screed Person

(Production paving is asphalt paving when using a paving machine or on a project where a paving machine is traditionally used)

Adjustment of paving machinery on production paving jobs.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $49.95
Supplemental Benefit Rate per Hour: $53.55
Supplemental Note: For time and one half overtime - $58.18 For double overtime - $62.80

Overtime Description
If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 25%.

For Paid Holidays: Holiday pay for all holidays shall be prorated based two hours per day for each day worked in the holiday week, not to exceed 8 hours of holiday pay.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day

Paid Holidays
Memorial Day
Independence Day
Labor Day
Thanksgiving Day

Shift Rates

When two shifts are employed, the work period for each shift shall be a continuous eight (8) hours. When three shifts are employed, each shift will work seven and one half (7 ½) hours but will be paid for eight (8) hours at the straight time rate since only one half (1/2) hour is allowed for meal time.
When two or more shifts are employed, single time will be paid for each shift.

(Local #1010)

LABORER - PAVER & ROADBUILDER LINE STRIPING (ROADWAY)

(Road markings, applications of striping and surface coatings on Roadways, Bus lanes, Bike lanes & Pedestrian Plazas)

Striping - Machine Operator (Thermoplastic & Epoxy)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $41.00
Supplemental Benefit Rate per Hour: $19.27
Supplemental Note: For time and one half overtime - $20.52 For double overtime - $21.77

Lineperson - Crew Chief

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $45.00
Supplemental Benefit Rate per Hour: $19.27
Supplemental Note: For time and one half overtime - $20.52 For double overtime - $21.77

Laborer: Striping Assistant - Green Infrastructure - Traffic Control

In accordance with the Comptroller's Prevailing Wage Memorandum Regarding Flag Persons dated June 1, 2024, for City public work contracts and subcontracts solicited on or after July 1, 2024 only, includes traffic control duty associated with such projects.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $39.00
Supplemental Benefit Rate per Hour: $19.27
Supplemental Note: For time and one half overtime - $20.52 For double overtime - $21.77

Overtime Description

For Paid Holidays: Employees will only receive Holiday Pay for holidays not worked if said employee worked both the regularly scheduled workday before and after the holiday.

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.
Time and one half the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Vacation

Vacation Employees with one to two years service shall accrue vacation based on hours worked: 250 hours worked - 1 day vacation; 500 hours worked - 2 days vacation; 750 hours worked - 3 days vacation; 900 hours worked - 4 days vacation; 1,000 hours worked - 5 days vacation. Employees with two to five years service receive two weeks vacation. Employees with five to twenty years service receive three weeks vacation. Employees with twenty to twenty-five years service receive four weeks vacation. Employees with 25 or more years service receive five weeks vacation.

(Local #1010)

LANDSCAPING

(Landscaping tasks, such as tree pruning, tree removing and spraying in connection with Green Infrastructure maintenance and the planting of street trees and trees in City parks, but not when such activities are performed as part of construction or reconstruction projects.)

Landscaper (Year 6 and above)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $37.77
Supplemental Benefit Rate per Hour: $18.05

Landscaper (Year 3 - 5)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $36.56
Supplemental Benefit Rate per Hour: $18.05

Landscaper (up to 3 years)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $33.55
Supplemental Benefit Rate per Hour: $18.05

Groundperson

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $33.55
Supplemental Benefit Rate per Hour: $18.05

Tree Remover / Pruner

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $43.81
Supplemental Benefit Rate per Hour: $18.05

Landscaper Sprayer (Pesticide Applicator)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $31.75
Supplemental Benefit Rate per Hour: $18.05

Watering - Plant Maintainer

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $25.69
Supplemental Benefit Rate per Hour: $18.05

Overtime Description

For all overtime work performed, supplemental benefits shall include an additional seventy-five ($0.75) cents per hour.

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays

New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Shift Rates

Work performed on a 4pm to 12am shift has a 15% differential. Work performed on a 12am to 8am shift has a 20% differential.

(Local #175)

MARBLE MECHANIC

Marble Setter

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $58.92
Supplemental Benefit Rate per Hour: $44.01

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $59.21
Supplemental Benefit Rate per Hour: $44.46

Marble Finisher

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $45.44
Supplemental Benefit Rate per Hour: $41.06

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $45.67
Supplemental Benefit Rate per Hour: $41.36

Marble Polisher

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $44.47
Supplemental Benefit Rate per Hour: $33.96

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $44.68
Supplemental Benefit Rate per Hour: $34.31

Marble Maintenance Finisher

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $27.72
Supplemental Benefit Rate per Hour: $15.31

Effective Period: 1/20/2025 - 6/30/2025

Wage Rate per Hour: $27.99
Supplemental Benefit Rate per Hour: $15.44

Overtime Description
Supplemental Benefit contributions are to be made at the applicable overtime rates.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

(Local #7)

MASON TENDER
Building Laborer

Mason Tender

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $41.45
Supplemental Benefit Rate per Hour: $33.24

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $41.80
Supplemental Benefit Rate per Hour: $34.14

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

Shift Rates

The employer may work two (2) shifts with the first shift at the straight time wage rate and the second shift receiving eight (8) hours paid for seven (7) hours work at the straight time wage rate. When it is not possible to conduct alteration work during regular working hours in a building occupied by tenants, the rule for the second shift will apply

(Local #79)

MASON TENDER (INTERIOR DEMOLITION WORKER)

Mason Tender Tier A

Tier A Interior Demolition Worker performs all burning, chopping, and other technically skilled tasks related to interior demolition work.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $38.00
Supplemental Benefit Rate per Hour: $26.54

Mason Tender Tier B

Tier B Interior Demolition Worker performs manual work and work incidental to demolition work, such as loading and carting of debris from the work site to an area where it can be loaded in to bins/trucks for removal. Also performs clean-up of the site when demolition is completed.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $27.19

Supplemental Benefit Rate per Hour: $20.86

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

(Local #79)

METALLIC LATHER

Metallic Lather

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $46.45
Supplemental Benefit Rate per Hour: $54.80
Supplemental Note: For time and one half overtime - $66.55 For double overtime - $86.60

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Christmas Day

Paid Holidays
1/2 day on Christmas Eve if work is performed in the A.M.
1/2 day on New Year's Eve if work is performed in the A.M.

Shift Rates
Off-shift work outside of normal working hours shall receive straight time rate plus $12 per hour for the first eight (8) hours.

(Local #46)

MILLWRIGHT

Millwright

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $59.35
Supplemental Benefit Rate per Hour: $58.67

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

Paid Holidays
1/2 day on Christmas Eve if work is performed in the A.M.
1/2 day on New Year's Eve if work is performed in the A.M.

Shift Rates

Second and third shifts receives the straight time rate of pay plus fifteen (15%) percent allowing for one half hour for a meal. There must be a first shift to work a second and third shift. All additional hours worked shall be paid at the time and one-half rate of pay plus fifteen (15%) percent for weekday hours.

(Local #740)

MOSAIC MECHANIC

Mosaic Mechanic - Mosaic & Terrazzo Mechanic

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $53.98
Supplemental Benefit Rate per Hour: $47.12

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $54.33
Supplemental Benefit Rate per Hour: $47.82

Mosaic Mechanic - Mosaic & Terrazzo Finisher

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $52.37
Supplemental Benefit Rate per Hour: $47.12

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $52.72
Supplemental Benefit Rate per Hour: $47.82

Mosaic Mechanic - Machine Operator Grinder

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $52.37
Supplemental Benefit Rate per Hour: $47.12

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $52.72
Supplemental Benefit Rate per Hour: $47.82

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Good Friday
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

(Local #7)

PAINTER

Painter - Brush & Roller

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $44.00
Supplemental Benefit Rate per Hour: $42.46
Supplemental Note: $50.56 on overtime

Spray & Scaffold / Decorative / Sandblast

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $47.00
Supplemental Benefit Rate per Hour: $42.46
Supplemental Note: $50.56 on overtime

Overtime
Time and one half the regular rate after a 7 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day

Day after Thanksgiving
Christmas Day

Paid Holidays
None

(District Council of Painters #9)

PAINTER - BRIDGE & STRUCTURAL STEEL

Painters on Structural Steel

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $56.00
Supplemental Benefit Rate per Hour: $52.78

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $56.25
Supplemental Benefit Rate per Hour: $55.09

Painter - Power Tool

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $63.00
Supplemental Benefit Rate per Hour: $52.78
Overtime Wage Rate: $6.50 above the "Painters on Structural Steel" overtime rate.

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $64.70
Supplemental Benefit Rate per Hour: $55.09
Overtime Wage Rate: $7.00 above the "Painters on Structural Steel" overtime rate.

Overtime Description
Supplemental Benefits shall be paid for each hour worked, up to forty (40) hours per week for the period of May 1st to November 15th or up to fifty (50) hours per week for the period of November 16th to April 30th.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Memorial Day
Independence Day

Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
Second shift is paid at regular hourly wage rates plus a ten percent (10%) differential. There must be a first shift to work a second shift.

(Local #806)

PAINTER - METAL POLISHER

METAL POLISHER

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $34.00
Supplemental Benefit Rate per Hour: $12.36

METAL POLISHER - NEW CONSTRUCTION

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $34.95
Supplemental Benefit Rate per Hour: $12.36

METAL POLISHER - SCAFFOLD OVER 34 FEET

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $37.50
Supplemental Benefit Rate per Hour: $12.36

ASSISTANT METAL POLISHER

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $26.50
Supplemental Benefit Rate per Hour: $11.92

ASSISTANT METAL POLISHER - NEW CONSTRUCTION

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $27.25

Supplemental Benefit Rate per Hour: $11.92

ASSISTANT METAL POLISHER - SCAFFOLD OVER 34 FEET

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $29.00
Supplemental Benefit Rate per Hour: $11.92

Overtime Description
All work performed on Saturdays shall be paid at time-in-a half. The exception being; for suspended scaffold work and work deemed as a construction project; an eight (8) hour shift lost during the week due to circumstances beyond the control of the employer, up to a maximum of eight (8) hours per week, may be worked on Saturday at the straight time rate.

Holiday Pay
Double time the regular rate for work on the following Holiday plus the day's pay. Only employees who have completed one year of service, including any trial period shall be eligible for holiday pay.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Paid Holidays
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates
Four Days a week at Ten (10) hours straight a day.

Local 8A-28A

PAINTER - SIGN

Sign Painter

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $48.07
Supplemental Benefit Rate per Hour: $27.25

Assistant Sign Painter

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $40.85
Supplemental Benefit Rate per Hour: $25.90

Overtime Description
If any employee is required to work on any of the paid holidays then the employee shall receive double time rate of wages as well as the holiday pay for that day.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Paid Holidays
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Vacation
At least 1 year of employment.....1 week
2 years or more of employment.....2 weeks
8 years or more of employment.....3 weeks

(Local #8A-28A)

PAPERHANGER

Paperhanger

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $48.02
Supplemental Benefit Rate per Hour: $43.14
Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

Overtime
Time and one half the regular rate after a 7 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
Evening shift - 4:30 P.M. to 12:00 Midnight (regular rate of pay); any work performed before 7:00 A.M. shall be at time and one half the regular base rate of pay.

(District Council of Painters #9)

PAVER AND ROADBUILDER
SEE LABORER - PAVER AND ROADBUILDER

PAVER AND ROADBUILDER - LINE STRIPING (ROADWAY)
SEE LABORER - PAVER AND ROADBUILDER - LINE STRIPING (ROADWAY)

PLASTERER

Plasterer

Effective Period: 7/1/2024 - 7/31/2024
Wage Rate per Hour: $52.10
Supplemental Benefit Rate per Hour: $25.35

Effective Period: 8/1/2024 - 6/30/2025
Wage Rate per Hour: $52.99
Supplemental Benefit Rate per Hour: $26.10

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
When it is not possible to conduct work during regular working hours (between 6:30am and 4:30pm), a shift differential shall be paid at the regular hourly rate plus a twelve percent (12%) per hour differential. Workers on shift work shall be allowed a paid one-half hour meal break.

(Local #262)

PLASTERER - TENDER

Plasterer - Tender

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $41.45
Supplemental Benefit Rate per Hour: $33.24

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $41.80
Supplemental Benefit Rate per Hour: $34.14

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
When work commences outside regular work hours, workers receive an hour additional (differential) wage and supplement payment. Eight hours pay for seven hours work or nine hours pay for eight hours work.

(Mason Tenders District Council)

PLUMBER

Plumber

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $74.95
Supplemental Benefit Rate per Hour: $43.00
Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Plumber - Temporary Services

Temporary Services - When there are no Plumbers on the job site, there may be three shifts designed to cover the entire twenty-four hour period, including weekends if necessary, at the following rate straight time.

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $60.04
Supplemental Benefit Rate per Hour: $34.32

Overtime Description
Where the plumbing contract price is one and one half million dollars ($1,500,000.00) or less, double time the regular rate after an 8 hour day.

Overtime
Double time the regular rate after a 7 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates
30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday. 50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

PLUMBER (MECHNICAL EQUIPMENT AND SERVICE)
(Mechanical Equipment and Service work shall include any repair and/or replacement of the present plumbing system.)

Plumber

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $48.20
Supplemental Benefit Rate per Hour: $21.36

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $48.90
Supplemental Benefit Rate per Hour: $22.26

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

(Plumbers Local # 1)

PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $52.07
Supplemental Benefit Rate per Hour: $30.82

Overtime

Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates
30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday. 50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

PLUMBER: PUMP & TANK
Oil Trades (Installation and Maintenance)

Plumber - Pump & Tank

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $73.00
Supplemental Benefit Rate per Hour: $32.81

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
All work outside the regular workday (8:00 A.M. to 3:30 P.M.) is to be paid at time and one half the regular hourly rate

(Plumbers Local #1)

POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER

(Exterior Building Renovation)

Journeyperson

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $63.43
Supplemental Benefit Rate per Hour: $31.50

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

Shift Rates

All work outside the regular work day (an eight hour workday between the hours of 6:00 A.M. and 4:00 P.M.) is to be paid at time and one half the regular rate. However, the employer may establish one (1) or two (2) shifts starting at or after 4:00 P.M. to be paid at the regular hourly rate plus a 10% differential. For projects bid and performed after July 1, 2023, the first shift shall be paid at the regular hourly rate plus a 5% differential.

(Bricklayer District Council)

ROOFER

Roofer

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $48.50
Supplemental Benefit Rate per Hour: $38.81

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
Second shift - Regular hourly rate plus a 10% differential. Third shift - Regular hourly rate plus a 15% differential. There must be a first shift to work the second shift, and a second shift to work the third shift. All other work outside the regular work day (an eight hour workday between the hours of 5:00 A.M. and 4:00 P.M.) is to be paid at time and one half the regular rate.

(Local #8)

SHEET METAL WORKER

Sheet Metal Worker

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $53.60
Supplemental Benefit Rate per Hour: $58.43
Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $54.60
Supplemental Benefit Rate per Hour: $60.18

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Sheet Metal Worker - Fan Maintenance

(The temporary operation of fans or blowers in new or existing buildings for heating and/or ventilation, and/or air conditioning prior to the completion of the project.)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $42.88
Supplemental Benefit Rate per Hour: $58.43

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $43.68
Supplemental Benefit Rate per Hour: $60.18

Sheet Metal Worker - Duct Cleaner

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $19.57
Supplemental Benefit Rate per Hour: $12.72

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
Work that can only be performed outside regular working hours (eight hours of work between 7:30 A.M. and 3:30 P.M.) - First shift (work between 3:30 P.M. and 11:30 P.M.) - 10% differential above the established hourly rate. Second shift (work between 11:30 P.M. and 7:30 A.M.) - 15% differential above the established hourly rate.

For Fan Maintenance: On all full shifts of fan maintenance work the straight time hourly rate of pay will be paid for each shift, including nights, Saturdays, Sundays, and holidays.

(Local #28)

SHEET METAL WORKER - SPECIALTY
(Decking & Siding)

Sheet Metal Specialty Worker

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $50.10
Supplemental Benefit Rate per Hour: $30.04
Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $50.50
Supplemental Benefit Rate per Hour: $31.26
Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

(Local #28)

SHIPYARD WORKER

Shipyard Mechanic - First Class

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $31.50
Supplemental Benefit Rate per Hour: $3.98

Shipyard Mechanic - Second Class

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $23.86
Supplemental Benefit Rate per Hour: $3.77

Shipyard Laborer - First Class

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $25.85
Supplemental Benefit Rate per Hour: $3.78

Shipyard Laborer - Second Class

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $18.87
Supplemental Benefit Rate per Hour: $3.72

Shipyard Dockhand - First Class

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $24.20
Supplemental Benefit Rate per Hour: $3.77

Shipyard Dockhand - Second Class

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $19.37
Supplemental Benefit Rate per Hour: $3.63

Overtime Description

Work performed on holiday is paid double time the regular hourly wage rate plus holiday pay.

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular hourly rate after 40 straight time hours in any work week.

Paid Holidays

New Year's Day
Martin Luther King Jr. Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Based on Survey Data

SIGN ERECTOR

(Sheet Metal, Plastic, Electric, and Neon)

Sign Erector

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $58.00
Supplemental Benefit Rate per Hour: $63.44

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.
Time and one half the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

Time and one half the regular hourly rate is to be paid for all hours worked outside the regular workday either (7:00 A.M. through 2:30 P.M.) or (8:00 A.M. through 3:30 P.M.)

(Local #137)

STEAMFITTER

Steamfitter

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $61.80
Supplemental Benefit Rate per Hour: $61.14
Supplemental Note: Overtime supplemental benefit rate: $121.54

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $61.80
Supplemental Benefit Rate per Hour: $61.89
Supplemental Note: Overtime supplemental benefit rate: $123.04

Steamfitter -Temporary Services

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $46.97
Supplemental Benefit Rate per Hour: $49.65

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $46.97
Supplemental Benefit Rate per Hour: $50.22

Overtime Description
Double time after a 7 hour day except for Temporary Services.

Overtime
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
May be performed outside of the regular workday except Saturday, Sunday and Holidays. When shift work is performed the wage rate for regular time worked is a 15% percent premium on wage and 15% percent premium on supplemental benefits.

Local 638

STEAMFITTER - REFRIGERATION AND AIR CONDITIONER
(Maintenance and Installation Service Person)

Refrigeration and Air Conditioner Mechanic

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $46.10
Supplemental Benefit Rate per Hour: $21.96

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Independence Day
Labor Day
Veteran's Day
Thanksgiving Day
Christmas Day

Double time and one half the regular rate for work on the following holiday(s).
Martin Luther King Jr. Day
President's Day
Memorial Day
Columbus Day

Paid Holidays
New Year's Day
Martin Luther King Jr. Day

President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

(Local #638-B)

STONE MASON - SETTER

Stone Mason - Setter

(Assisted by Derrickperson and Rigger)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $57.35
Supplemental Benefit Rate per Hour: $55.47

Overtime
Time and one half the regular rate after a 7 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
1/2 day on Christmas Eve if work is performed in the A.M.

Shift Rates
For all work outside the regular workday (8:00 A.M. to 3:30 P.M. Monday through Friday), the pay shall be straight time plus a ten percent (10%) differential.

(Bricklayers District Council)

TAPER

Drywall Taper

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $48.47
Supplemental Benefit Rate per Hour: $33.51

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $48.47
Supplemental Benefit Rate per Hour: $34.71

Overtime
Time and one half the regular rate after a 7 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Good Friday
Memorial Day
Independence Day
Columbus Day
Thanksgiving Day
Day before Christmas
Christmas Day
Day before New Year's Day

Paid Holidays
Labor Day

(Local #1974)

TELECOMMUNICATION WORKER

(Install/maintain/repair telecommunications cables carrying data, video, and/or voice except for installation on building construction/alteration/renovation projects.)

Telecommunication Worker

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $47.03
Supplemental Benefit Rate per Hour: $23.15
Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. $22.84 for Staten Island only.

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Lincoln's Birthday
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

Paid Holidays

New Year's Day
Lincoln's Birthday
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees have the option of observing either Martin Luther King's Birthday or the day after Thanksgiving instead of Lincoln's Birthday

Shift Rates

For any workday that starts before 8A.M. or ends after 6P.M. there is a 10% differential for the applicable worker's hourly rate.

Vacation

After 6 months.....one week.
After 12 months but less than 7 years.....two weeks.
After 7 or more but less than 15 years.....three weeks.

After 15 years or more but less than 25 years.....four weeks.

(C.W.A.)

TILE FINISHER

Tile Finisher

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $49.46
Supplemental Benefit Rate per Hour: $32.86

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $49.59
Supplemental Benefit Rate per Hour: $33.31

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TILE LAYER - SETTER

Tile Layer - Setter

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $64.40
Supplemental Benefit Rate per Hour: $36.01

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $64.62
Supplemental Benefit Rate per Hour: $36.51

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates
Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TIMBERPERSON

Timberperson

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $55.59
Supplemental Benefit Rate per Hour: $55.41

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate. Benefits for off-shift work shall be paid at the straight time rate.

(Local #1556)

TUNNEL WORKER

Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $73.50
Supplemental Benefit Rate per Hour: $64.93

Tunnel Workers (Compressed Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $70.88
Supplemental Benefit Rate per Hour: $62.88

Top Nipper (Compressed Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $69.69
Supplemental Benefit Rate per Hour: $61.64

Outside Lock Tender, Outside Gauge Tender,Muck Lock Tender (Compressed Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $68.30
Supplemental Benefit Rate per Hour: $60.64

Bottom Bell & Top Bell Signal Person: Shaft Person (Compressed Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $68.30
Supplemental Benefit Rate per Hour: $60.64

Changehouse Attendant: Powder Watchperson (Compressed Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $60.18
Supplemental Benefit Rate per Hour: $56.85

Blasters (Free Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $70.12
Supplemental Benefit Rate per Hour: $62.33

Tunnel Workers (Free Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $67.08
Supplemental Benefit Rate per Hour: $59.73

All Others (Free Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $62.01
Supplemental Benefit Rate per Hour: $55.28

Microtunneling (Free Air Rates)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $53.66
Supplemental Benefit Rate per Hour: $47.78

Overtime Description

For work performed during excavation and primary concrete tunnel lining phases - Double time the regular rate after an 8 hour day and Saturday, Sunday and on the following holiday(s) listed below.
For Repair-Maintenance Work on Existing Equipment and Facilities - Time and one half the regular rate after a 8 hour day, Saturday, Sunday and double time the regular rate for work on the following holiday(s) listed below.
For Small-Bore Micro Tunneling Machines - Time and one-half the regular rate shall be paid for all overtime.
For work not listed above - Time and one half the regular rate after an 8 hour day and Saturday and double time the regular rate on Sunday and on the following holiday(s) listed below.

Paid Holidays

New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

(Local #147)

UTILITY LOCATOR

(Locate & mark underground utilities including gas for street excavation and utility line repairs)

Utility Locator (Year 7 and above)

Effective Period: 7/1/2024 - 8/25/2024
Wage Rate per Hour: $31.56
Supplemental Benefit Rate per Hour: $1.43

Effective Period: 8/26/2024 – 6/30/2025
Wage Rate per Hour: $35.50
Supplemental Benefit Rate per Hour: $1.43

Utility Locator (Year 5 Second 6 months & Year 6)

Effective Period: 7/1/2024 - 8/25/2024
Wage Rate per Hour: $22.85
Supplemental Benefit Rate per Hour: $1.43

Effective Period: 8/26/2024 – 6/30/2025

Wage Rate per Hour: **$35.50**
Supplemental Benefit Rate per Hour: **$1.43**

Utility Locator (Year 5 fist 6 months)

Effective Period: 7/1/2024 - 8/25/2024
Wage Rate per Hour: **$22.85**
Supplemental Benefit Rate per Hour: **$1.43**

Effective Period: 8/26/2024 - 6/30/2025
Wage Rate per Hour: **$34.80**
Supplemental Benefit Rate per Hour: **$1.43**

Utility Locator (Year 4)

Effective Period: 7/1/2024 - 8/25/2024
Wage Rate per Hour: **$21.54**
Supplemental Benefit Rate per Hour: **$1.43**

Effective Period: 8/26/2024 - 6/30/2025
Wage Rate per Hour: **$31.54**
Supplemental Benefit Rate per Hour: **$1.43**

Utility Locator (Year 3)

Effective Period: 7/1/2024 - 8/25/2024
Wage Rate per Hour: **$20.30**
Supplemental Benefit Rate per Hour: **$1.43**

Effective Period: 8/26/2024 - 6/30/2025
Wage Rate per Hour: **$28.28**
Supplemental Benefit Rate per Hour: **$1.43**

Utility Locator (Year 2)

Effective Period: 7/1/2024 - 8/25/2024
Wage Rate per Hour: **$19.13**
Supplemental Benefit Rate per Hour: **$1.43**

Effective Period: 8/26/2024 - 6/30/2025
Wage Rate per Hour: **$25.02**
Supplemental Benefit Rate per Hour: **$1.43**

Utility Locator (Year 1)

Effective Period: 7/1/2024 - 8/25/2024
Wage Rate per Hour: **$18.04**
Supplemental Benefit Rate per Hour: **$1.43**

Effective Period: 8/26/2024 - 6/30/2025

Wage Rate per Hour: $21.76
Supplemental Benefit Rate per Hour: $1.43

Utility Locator (Up to 1 year)

Effective Period: 7/1/2024 - 8/25/2024
Wage Rate per Hour: $17.00
Supplemental Benefit Rate per Hour: $1.43
Supplemental Note: No benefits for the first 90 days of employment.

Effective Period: 8/26/2024 - 6/30/2025
Wage Rate per Hour: $18.50
Supplemental Benefit Rate per Hour: $1.43
Supplemental Note: No benefits for the first 90 days of employment.

Overtime
Time and one half the regular rate for work on the following holiday(s).
Time and one half the regular hourly rate after 40 straight time hours in any work week.

Paid Holidays
New Year's Day
Memorial Day
Independence Day
Thanksgiving Day
Christmas Day

Shift Rates
10% shift differential to employees working any shift starting between noon and 5 AM.

Vacation
For up to 1 year 0 hours
For year 1 - 2 48 hours per year
For year 3 - 9 96 hours per year
For year 10 or more 144 hours per year

Sick Days:
For up to 1 year employee receives 40 hours paid sick leave.
For year 1 employee earns 2 hours of paid sick leave for every 100 overtime hours worked.
For year 2 - 9 years employee earns 4 hours of paid sick leave for every 100 overtime hours worked.
For year 10 or more employee earns 6 hours of paid sick leave for every 100 overtime hours worked.

(C.W.A.)

WELDER

WELDER AND FIREWATCH TO BE PAID AT THE RATE OF THE JOURNEYPERSON OR REGISTERED APPRENTICE IN THE TRADE PERFORMING THE WORK.

OFFICE OF THE COMPTROLLER

CITY OF NEW YORK

CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Pursuant to Labor Law § 220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant and registered with the New York State Department of Labor, may be paid at the apprentice rates in this schedule. Apprentices who are not so registered must be paid as journey persons in accordance with the trade classification of the work they actually performed.

Apprentice ratios are established to ensure the proper safety, training and supervision of apprentices. A ratio establishes the number of journey workers required for each apprentice in a program and on a job site. Ratios are interpreted as follows: in the case of a 1:1, 1:4 ratio, there must be one journey worker for the first apprentice, and four additional journey workers for each subsequent apprentice.

ADDENDUM

List of Amended Classifications

1. BOILERMAKER
2. FLOOR COVERER
3. HAZARDOUS MATERIAL HANDLER
4. HOUSE WRECKER
5. IRON WORKER – ORNAMENTAL
6. IRON WORKER – STRUCTURAL
7. LABORER - HEAVY & HIGHWAY
8. MASON TENDER
9. PLASTERER – TENDER
10. TAPER

TABLE OF CONTENTS

CLASSIFICATION	PAGE
BOILERMAKER	4
BRICKLAYER	5
CARPENTER	6
CARPENTER - HIGH RISE CONCRETE FORMS	7
CEMENT AND CONCRETE WORKER	8
CEMENT MASON	8
DERRICKPERSON & RIGGER (STONE)	9
DOCKBUILDER/PILE DRIVER	10
ELECTRICIAN	10
ELEVATOR CONSTRUCTOR	12
ELEVATOR REPAIR & MAINTENANCE	13
ENGINEER	14
ENGINEER - OPERATING	15
FLOOR COVERER	15
GLAZIER	16
HAZARDOUS MATERIAL HANDLER	17
HEAT & FROST INSULATOR	18
HOUSE WRECKER	19
IRON WORKER - ORNAMENTAL	20
IRON WORKER - STRUCTURAL	21
LABORER - HEAVY & HIGHWAY	22
LABORER - PAVER & ROADBUILDER	22
LABORER - PAVER AND ROADBUILDER - LINE STRIPING (ROADWAY)	23
MARBLE MECHANICS	23
MASON TENDER	25
MASON TENDER (INTERIOR DEMOLITION WORKER)	26
METALLIC LATHER	27
MILLWRIGHT	27
PAINTER	28
PAINTER - BRIDGE & STRUCTURAL STEEL	29
PAINTER - METAL POLISHER	29
PLASTERER	30
PLASTERER - TENDER	31
PLUMBER	32
POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER	33
ROOFER	34
SHEET METAL WORKER	35
SIGN ERECTOR	36
STEAMFITTER	37
STEAMFITTER - REFRIGERATION & AIR CONDITIONER	38
STONE MASON - SETTER	39
TAPER	40
TILE LAYER - SETTER	41
TIMBERPERSON	42

BOILERMAKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Boilermaker (First Year)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $34.95

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $35.27

Boilermaker (Second Year: 1st Six Months)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $36.99

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $37.34

Boilermaker (Second Year: 2nd Six Months)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $39.06

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $39.44

Boilermaker (Third Year: 1st Six Months)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $41.09

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $41.50

Boilermaker (Third Year: 2nd Six Months)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate Per Hour: 85% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $43.17

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate Per Hour: 85% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $43.59

Boilermaker (Fourth Year: 1st Six Months)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $45.23

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $45.68

Boilermaker (Fourth Year: 2nd Six Months)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate Per Hour: 95% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $47.28

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate Per Hour: 95% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $47.76

(Local #5)

BRICKLAYER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Bricklayer (First 750 Hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $27.60

Bricklayer (Second 750 Hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $27.60

Bricklayer (Third 750 Hours)

Effective Period: 7/1/2024 - 6/30/2025

Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $27.60

Bricklayer (Fourth 750 Hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $27.60

Bricklayer (Fifth 750 Hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $27.60

Bricklayer (Sixth 750 Hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 95% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $27.60

(Bricklayer District Council)

CARPENTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Carpenter (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour For Building Apprentice: $22.20
Supplemental Benefit Rate Per Hour For Building Apprentice: $17.70

Wage Rate Per Hour For Heavy Apprentice: $26.98
Supplemental Benefit Rate Per Hour For Heavy Apprentice: $37.89

Carpenter (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour For Building Apprentice: $25.20
Supplemental Benefit Rate Per Hour For Building Apprentice: $19.20

Wage Rate Per Hour For Heavy Apprentice: $32.58
Supplemental Benefit Rate Per Hour For Heavy Apprentice: $37.89

Carpenter (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour For Building Apprentice: $29.45
Supplemental Benefit Rate Per Hour For Building Apprentice: $22.80

Wage Rate Per Hour For Heavy Apprentice: $40.96
Supplemental Benefit Rate Per Hour For Heavy Apprentice: $37.89

Carpenter (Fourth Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour For Building Apprentice: $37.33
Supplemental Benefit Rate Per Hour For Building Apprentice: $24.80

Wage Rate Per Hour For Heavy Apprentice: $49.35
Supplemental Benefit Rate Per Hour For Heavy Apprentice: $37.89

(Carpenters District Council)

CARPENTER - HIGH RISE CONCRETE FORMS

(Ratio of Apprentice to Journeyperson: 1 to 1, 2 to 5)

Carpenter - High Rise (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $18.27
Supplemental Benefit Rate per Hour: $17.55

Carpenter - High Rise (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $24.70
Supplemental Benefit Rate per Hour: $17.68

Carpenter - High Rise (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $31.28
Supplemental Benefit Rate per Hour: $17.81

Carpenter - High Rise (Fourth Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $38.90

Supplemental Benefit Rate per Hour: $17.96

(Carpenters District Council)

CEMENT AND CONCRETE WORKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Cement & Concrete Worker (First 1333 hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 53% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $16.44

Cement & Concrete Worker (Second 1333 hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 69% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $21.72

Cement & Concrete Worker (Last 1334 hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 85% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $23.00

(Cement Concrete Workers District Council)

CEMENT MASON

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Cement Mason (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $23.39
Supplemental Benefit Rate per Hour: $16.11

Cement Mason (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $28.29
Supplemental Benefit Rate per Hour: $16.41

Cement Mason (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $33.69
Supplemental Benefit Rate per Hour: $16.52

(Local #780)

DERRICKPERSON & RIGGER (STONE)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Derrickperson & Rigger (stone) - First Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 50% of Journeyperson's rate

Derrickperson & Rigger (stone) - Second Year: 1st Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

Derrickperson & Rigger (stone) - Second Year: 2nd Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

Derrickperson & Rigger (stone) - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

(Local #197)

DOCKBUILDER/PILE DRIVER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Dockbuilder/Pile Driver (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: $26.98
Supplemental Benefit Rate Per Hour: $37.89

Dockbuilder/Pile Driver (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: $32.58
Supplemental Benefit Rate Per Hour: $37.89

Dockbuilder/Pile Driver (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: $40.96
Supplemental Benefit Rate Per Hour: $37.89

Dockbuilder/Pile Driver (Fourth Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: $49.35
Supplemental Benefit Rate Per Hour: $37.89

(Carpenters District Council)

ELECTRICIAN

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Electrician (First Term: 0-6 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $18.00
Supplemental Benefit Rate per Hour: $17.18
Overtime Supplemental Rate Per Hour: $18.38

Electrician (First Term: 7-12 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $18.50
Supplemental Benefit Rate per Hour: $17.44
Overtime Supplemental Rate Per Hour: $18.67

Electrician (Second Term: 0-6 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $19.50
Supplemental Benefit Rate per Hour: $17.97
Overtime Supplemental Rate Per Hour: $19.26

Electrician (Second Term: 7-12 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $20.50
Supplemental Benefit Rate per Hour: $18.49
Overtime Supplemental Rate Per Hour: $19.85

Electrician (Third Term: 0-6 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $21.50
Supplemental Benefit Rate per Hour: $19.02
Overtime Supplemental Rate Per Hour: $20.44

Electrician (Third Term: 7-12 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $22.50
Supplemental Benefit Rate per Hour: $19.54
Overtime Supplemental Rate Per Hour: $21.03

Electrician (Fourth Term: 0-6 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $23.50
Supplemental Benefit Rate per Hour: $20.06
Overtime Supplemental Rate Per Hour: $21.62

Electrician (Fourth Term: 7-12 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $25.50
Supplemental Benefit Rate per Hour: $21.11
Overtime Supplemental Rate Per Hour: $22.80

Electrician (Fifth Term: 0-12 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $27.50
Supplemental Benefit Rate per Hour: $24.79
Overtime Supplemental Rate Per Hour: $26.52

Electrician (Fifth Term: 13-18 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $32.00
Supplemental Benefit Rate per Hour: $27.20
Overtime Supplemental Rate Per Hour: $29.23

Overtime Description
Overtime Wage paid at time and one half the regular rate

(Local #3)

ELEVATOR CONSTRUCTOR
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Elevator (Constructor) - First Year

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $34.78

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $35.48

Elevator (Constructor) - Second Year

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $35.42

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $36.16

Elevator (Constructor) - Third Year

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: $36.71

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: $37.53

Elevator (Constructor) - Fourth Year

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: $38.00

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: $38.90

(Local #1)

ELEVATOR REPAIR & MAINTENANCE

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Elevator Service/Modernization Mechanic (First Year)

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Per Hour: $34.75

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Per Hour: $35.45

Elevator Service/Modernization Mechanic (Second Year)

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Benefit Per Hour: $35.39

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Benefit Per Hour: $36.13

Elevator Service/Modernization Mechanic (Third Year)

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Per Hour: $36.68

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Per Hour: $37.50

Elevator Service/Modernization Mechanic (Fourth Year)

Effective Period: 7/1/2024 - 3/16/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Per Hour: $37.96

Effective Period: 3/17/2025 - 6/30/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Per Hour: $38.86

(Local #1)

ENGINEER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

Engineer - First Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $27.47
Supplemental Benefit Rate per Hour: $34.30

Engineer - Second Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $34.34
Supplemental Benefit Rate per Hour: $34.30

Engineer - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $37.77
Supplemental Benefit Rate per Hour: $34.30

Engineer - Fourth Year

Effective Period: 7/1/2024 - 6/30/2025

Wage Rate per Hour: $41.21
Supplemental Benefit Rate per Hour: $34.30

(Local #15)

ENGINEER - OPERATING

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

Operating Engineer - First Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 40% of Operating Engineer - Road & Heavy Construction V's Rate
Supplemental Benefit Per Hour: $26.40

Operating Engineer - Second Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 50% of Operating Engineer - Road & Heavy Construction V's Rate
Supplemental Benefit Per Hour: $26.40

Operating Engineer - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 60% of Operating Engineer - Road & Heavy Construction V's Rate
Supplemental Benefit Per Hour: $26.40

(Local #14)

FLOOR COVERER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Floor Coverer (First Year)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $25.20
Supplemental Benefit Rate per Hour: $17.25

Effective Period: 1/20/2025 - 6/30/2025

Wage Rate per Hour: **$26.04**
Supplemental Benefit Rate per Hour: **$17.47**

Floor Coverer (Second Year)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: **$28.20**
Supplemental Benefit Rate per Hour: **$18.75**

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: **$29.10**
Supplemental Benefit Rate per Hour: **$19.01**

Floor Coverer (Third Year)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: **$32.45**
Supplemental Benefit Rate per Hour: **$22.35**

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: **$33.55**
Supplemental Benefit Rate per Hour: **$22.61**

Floor Coverer (Fourth Year)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: **$40.33**
Supplemental Benefit Rate per Hour: **$24.35**

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: **$41.63**
Supplemental Benefit Rate per Hour: **$24.64**

(Carpenters District Council)

GLAZIER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Glazier (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Glazier (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Glazier (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Glazier (Fourth Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #1281)

HAZARDOUS MATERIAL HANDLER

(Ratio of Apprentice Journeyperson: 1 to 1, 1 to 3)

Handler (First 1000 Hours)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $20.00
Supplemental Benefit Rate per Hour: $15.10

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $20.20
Supplemental Benefit Rate per Hour: $16.35

Handler (Second 1000 Hours)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $21.00
Supplemental Benefit Rate per Hour: $15.10

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $21.20
Supplemental Benefit Rate per Hour: $16.35

Handler (Third 1000 Hours)

Effective Period: 7/1/2024 - 1/19/2025

Wage Rate per Hour: $24.00
Supplemental Benefit Rate per Hour: $15.10

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $24.20
Supplemental Benefit Rate per Hour: $16.35

Handler (Fourth 1000 Hours)

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $26.00
Supplemental Benefit Rate per Hour: $15.10

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $26.20
Supplemental Benefit Rate per Hour: $16.35

(Local #78)

HEAT & FROST INSULATOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Heat & Frost Insulator (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Heat & Frost Insulator (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Heat & Frost Insulator (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Heat & Frost Insulator (Fourth Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

(Local #12)

HOUSE WRECKER
(TOTAL DEMOLITION)
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

House Wrecker - First Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $21.55
Supplemental Benefit Rate per Hour: $11.27

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $21.75
Supplemental Benefit Rate per Hour: $11.62

House Wrecker - Second Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $23.30
Supplemental Benefit Rate per Hour: $11.27

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $23.50
Supplemental Benefit Rate per Hour: $11.62

House Wrecker - Third Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $24.80
Supplemental Benefit Rate per Hour: $11.27

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $25.00
Supplemental Benefit Rate per Hour: $11.62

House Wrecker - Fourth Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $27.30
Supplemental Benefit Rate per Hour: $11.27

Effective Period: 1/20/2025 - 6/30/2025

Wage Rate per Hour: **$27.50**
Supplemental Benefit Rate per Hour: **$11.62**

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Iron Worker (Ornamental) - First Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: **$25.98**
Supplemental Benefit Rate per Hour: **$16.00**

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: **$27.40**
Supplemental Benefit Rate per Hour: **$16.00**

Iron Worker (Ornamental) - Second Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: **$28.45**
Supplemental Benefit Rate per Hour: **$18.00**

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: **$30.02**
Supplemental Benefit Rate per Hour: **$18.00**

Iron Worker (Ornamental) - Third Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: **$30.80**
Supplemental Benefit Rate per Hour: **$19.00**

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: **$32.49**
Supplemental Benefit Rate per Hour: **$19.00**

Iron Worker (Ornamental) - Fourth Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: **$34.39**
Supplemental Benefit Rate per Hour: **$21.00**

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $36.27
Supplemental Benefit Rate per Hour: $21.00

(Local #580)

IRON WORKER - STRUCTURAL

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Iron Worker (Structural) - 1st Six Months

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $30.23
Supplemental Benefit Rate per Hour: $61.90

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $30.36
Supplemental Benefit Rate per Hour: $62.91

Iron Worker (Structural) - 7- 18 Months

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $30.83
Supplemental Benefit Rate per Hour: $61.90

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $30.96
Supplemental Benefit Rate per Hour: $62.91

Iron Worker (Structural) - 19 - 36 months

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $31.44
Supplemental Benefit Rate per Hour: $61.90

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $31.57
Supplemental Benefit Rate per Hour: $62.91

(Local #40 and #361)

LABORER - HEAVY & HIGHWAY

(Ratio Apprentice to Journeyperson: 1 to 1, 1 to 3)

Laborer - Heavy & Highway - First 1000 hours

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $54.03

Laborer - Heavy & Highway - Second 1000 hours

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: 54.03

Laborer - Heavy & Highway - Third 1000 hours

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: 54.03

Laborer - Heavy & Highway - Fourth 1000 hours

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Rate Per Hour: $54.03

(Local #731)

LABORER - PAVER & ROADBUILDER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Paver and Roadbuilder - First Year (Minimum 1000 hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $31.36
Supplemental Benefit Rate per Hour: $26.67

Paver and Roadbuilder - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $33.00
Supplemental Benefit Rate per Hour: $26.67

(Local#1010)

LABORER - PAVER AND ROADBUILDER - LINE STRIPING (ROADWAY)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Paver and Roadbuilder - Line Striping (Roadway) - First Year (Minimum 1000 hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $31.36
Supplemental Benefit Rate per Hour: $19.27

Paver and Roadbuilder - Line Striping (Roadway) - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $33.00
Supplemental Benefit Rate per Hour: $19.27

(Local #1010)

MARBLE MECHANICS

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Cutters & Setters - First 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

Cutters & Setters - Second 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 45% of Journeyperson's rate

Cutters & Setters - Third 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Cutters & Setters - Fourth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

Cutters & Setters - Fifth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Cutters & Setters - Sixth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

Cutters & Setters - Seventh 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

Cutters & Setters - Eighth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

Cutters & Setters - Ninth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

Cutters & Setters - Tenth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

Polishers & Finishers - First 900 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

Polishers & Finishers - Second 900 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

Polishers & Finishers - Third 900 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

(Local #7)

MASON TENDER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Mason Tender - First Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $22.05
Supplemental Benefit Rate per Hour: $10.77

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $21.75
Supplemental Benefit Rate per Hour: $11.62

Mason Tender - Second Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $23.80
Supplemental Benefit Rate per Hour: $10.77

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $23.50
Supplemental Benefit Rate per Hour: $11.62

Mason Tender - Third Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $25.30
Supplemental Benefit Rate per Hour: $10.77

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $25.00
Supplemental Benefit Rate per Hour: $11.62

Mason Tender - Fourth Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $27.80
Supplemental Benefit Rate per Hour: $10.77

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $27.50
Supplemental Benefit Rate per Hour: $11.62

(Local #79)

MASON TENDER (INTERIOR DEMOLITION WORKER)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Mason Tender (Interior Demolition) - First Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $21.30
Supplemental Benefit Rate per Hour: $10.97

Mason Tender (Interior Demolition) - Second Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $23.05
Supplemental Benefit Rate per Hour: $10.97

Mason Tender (Interior Demolition) - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $24.55
Supplemental Benefit Rate per Hour: $10.97

Mason Tender (Interior Demolition) - Fourth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $27.05

Supplemental Benefit Rate per Hour: $10.97

(Local #79)

METALLIC LATHER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Metallic Lather (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $22.55
Supplemental Benefit Rate per Hour: $17.87

Metallic Lather (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $23.60
Supplemental Benefit Rate per Hour: $16.87

Metallic Lather (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $24.60
Supplemental Benefit Rate per Hour: $15.92

Metallic Lather (Fourth Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $25.65
Supplemental Benefit Rate per Hour: $14.92

(Local #46)

MILLWRIGHT

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Millwright (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $32.16
Supplemental Benefit Rate per Hour: $37.78

Millwright (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $37.61
Supplemental Benefit Rate per Hour: $41.48

Millwright (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $43.06
Supplemental Benefit Rate per Hour: $45.83

Millwright (Fourth Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $53.96
Supplemental Benefit Rate per Hour: $52.59

(Local #740)

PAINTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Painter - Brush & Roller - First Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $17.60
Supplemental Benefit Rate per Hour: $19.09

Painter - Brush & Roller - Second Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $22.00
Supplemental Benefit Rate per Hour: $24.46

Painter - Brush & Roller - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $26.40
Supplemental Benefit Rate per Hour: $28.80

Painter - Brush & Roller - Fourth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $35.20
Supplemental Benefit Rate per Hour: $37.24

(District Council of Painters)

PAINTER - BRIDGE & STRUCTURAL STEEL

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Painter - Bridge & Structural Steel (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Painter - Bridge & Structural Steel (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Painter - Bridge & Structural Steel (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #806)

PAINTER - METAL POLISHER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Metal Polisher (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $19.67
Supplemental Benefit Rate per Hour: $8.66
New Construction - Wage Rate Per Hour: $20.06
Scaffold Over 34 Feet - Wage Rate Per Hour: $22.17

Metal Polisher (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $21.63
Supplemental Benefit Rate per Hour: $8.66
New Construction - Wage Rate Per Hour: $22.07
Scaffold Over 34 Feet - Wage Rate Per Hour: $24.13

Metal Polisher (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $23.60
Supplemental Benefit Rate per Hour: $8.66
New Construction - Wage Rate Per Hour: $24.14
Scaffold Over 34 Feet - Wage Rate Per Hour: $26.10

(Local 8A-28)

PLASTERER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)
(Each Term is 800 Hours.)

Plasterer - First Term

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $17.48

Plasterer - Second Term

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: $18.63

Plasterer - Third Term

Effective Period: 7/1/2024 - 6/30/2025

Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: $20.93

Plasterer - Fourth Term

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: $22.10

(Local #262)

PLASTERER - TENDER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Plasterer Tender - First Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $21.55
Supplemental Benefit Rate per Hour: $11.27

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $21.75
Supplemental Benefit Rate per Hour: $11.62

Plasterer Tender - Second Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $23.30
Supplemental Benefit Rate per Hour: $11.27

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $23.50
Supplemental Benefit Rate per Hour: $11.62

Plasterer Tender - Third Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $24.80
Supplemental Benefit Rate per Hour: $11.27

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $25.00
Supplemental Benefit Rate per Hour: $11.62

Plasterer Tender - Fourth Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $27.30
Supplemental Benefit Rate per Hour: $11.27

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $27.50
Supplemental Benefit Rate per Hour: $11.62

(Local #79)

PLUMBER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Plumber - First Year: 1st Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $19.00
Supplemental Benefit Rate per Hour: $5.43

Plumber - First Year: 2nd Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $21.00
Supplemental Benefit Rate per Hour: $6.43

Plumber - Second Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $30.22
Supplemental Benefit Rate per Hour: $22.73

Plumber - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $32.32
Supplemental Benefit Rate per Hour: $22.73

Plumber - Fourth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $35.17
Supplemental Benefit Rate per Hour: $22.73

Plumber - Fifth Year: 1st Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $36.57
Supplemental Benefit Rate per Hour: $22.73

Plumber - Fifth Year: 2nd Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $48.64
Supplemental Benefit Rate per Hour: $22.73

(Plumbers Local #1)

POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER

(Exterior Building Renovation)
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - First Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $32.76
Supplemental Benefit Rate per Hour: $15.10

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Second Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $37.09
Supplemental Benefit Rate per Hour: $20.30

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $42.97
Supplemental Benefit Rate per Hour: $24.05

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Fourth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $51.60
Supplemental Benefit Rate per Hour: $25.05

(Bricklayer District Council)

ROOFER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Roofer - First Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 38% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $7.67

Roofer - Second Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 45% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $17.69

Roofer - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $19.61

Roofer - Fourth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $23.45

Roofer - Fifth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $29.22

(Local #8)

SHEET METAL WORKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Sheet Metal Worker (0-6 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 25% of Journeyperson's rate
Supplemental Rate Per Hour: $7.64

Sheet Metal Worker (7-18 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 35% of Journeyperson's rate
Supplemental Rate Per Hour: $21.49

Sheet Metal Worker (19-30 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 45% of Journeyperson's rate
Supplemental Rate Per Hour: $29.09

Sheet Metal Worker (31-36 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $34.41

Sheet Metal Worker (37-42 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $34.41

Sheet Metal Worker (43-48 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: $42.42

Sheet Metal Worker (49-54 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: $42.42

Sheet Metal Worker (55-60 Months)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: $47.76

(Local #28)

SIGN ERECTOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Sign Erector - First Year: 1st Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 35% of Journeyperson's rate
Supplemental Rate Per Hour: $17.84

Sign Erector - First Year: 2nd Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Rate Per Hour: $20.25

Sign Erector - Second Year: 1st Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 45% of Journeyperson's rate
Supplemental Rate Per Hour: $22.66

Sign Erector - Second Year: 2nd Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $25.09

Sign Erector - Third Year: 1st Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $33.83

Sign Erector - Third Year: 2nd Six Months

Effective Period: 7/1/2024 - 6/30/2025

Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: $36.81

Sign Erector - Fourth Year: 1st Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: $40.63

Sign Erector - Fourth Year: 2nd Six Months

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: $43.70

Sign Erector - Fifth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: $46.76

Sign Erector - Sixth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: $49.80

(Local #137)

STEAMFITTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Steamfitter - First Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

Steamfitter - Second Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.

Steamfitter - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate and Supplemental Rate per Hour: 60% of Journeyperson's rate.

Steamfitter - Fourth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate and Supplemental Rate Per Hour: 70% of Journeyperson's rate.

Steamfitter - Fifth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate and Supplemental Rate Per Hour: 80% of Journeyperson's rate.

(Local #638)

STEAMFITTER - REFRIGERATION & AIR CONDITIONER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Refrigeration & Air Conditioner (First Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $22.31
Supplemental Benefit Rate per Hour: $14.47

Refrigeration & Air Conditioner (Second Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $26.94
Supplemental Benefit Rate per Hour: $15.91

Refrigeration & Air Conditioner (Third Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $31.38
Supplemental Benefit Rate per Hour: $17.41

Refrigeration & Air Conditioner (Fourth Year)

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate per Hour: $37.90
Supplemental Benefit Rate per Hour: $19.44

(Local #638-B)

STONE MASON - SETTER

(Ratio Apprentice of Journeyperson: 1 to 1, 1 to 2)

Stone Mason - Setters - First 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Second 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Third 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Fourth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Fifth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Sixth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: 100% of Journeyperson's rate
Supplemental Rate Per Hour: 50% of Journeyperson's rate

(Bricklayers District Council)

TAPER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Drywall Taper - First Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $21.75
Supplemental Benefit Rate per Hour: $15.00

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $22.13
Supplemental Benefit Rate per Hour: $14.40

Drywall Taper - Second Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $24.24
Supplemental Benefit Rate per Hour: $24.71

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $24.24
Supplemental Benefit Rate per Hour: $24.56

Drywall Taper - Third Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $29.08
Supplemental Benefit Rate per Hour: $26.67

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $29.08
Supplemental Benefit Rate per Hour: $26.59

Drywall Taper - Fourth Year

Effective Period: 7/1/2024 - 1/19/2025
Wage Rate per Hour: $38.78
Supplemental Benefit Rate per Hour: $30.59

Effective Period: 1/20/2025 - 6/30/2025
Wage Rate per Hour: $38.78
Supplemental Benefit Rate per Hour: $30.65

(Local #1974)

TILE LAYER - SETTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Tile Layer - Setter - First 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour:35% of Journeyperson's rate

Tile Layer - Setter - Second 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour 40% of Journeyperson's rate

Tile Layer - Setter - Third 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Tile Layer - Setter - Fourth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

Tile Layer - Setter - Fifth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Tile Layer - Setter - Sixth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

Tile Layer - Setter - Seventh 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

Tile Layer - Setter - Eighth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

Tile Layer - Setter - Ninth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour:80% of Journeyperson's rate

Tile Layer - Setter - Tenth 750 Hours

Effective Period: 7/1/2024 - 6/30/2025
Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

(Local #7)

TIMBERPERSON

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Timberperson - First Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: $24.96
Supplemental Rate Per Hour: $37.69

Timberperson - Second Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: $30.07
Supplemental Rate Per Hour: $37.69

Timberperson - Third Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: $37.72
Supplemental Rate Per Hour: $37.69

Timberperson - Fourth Year

Effective Period: 7/1/2024 - 6/30/2025
Wage Rate Per Hour: $45.38
Supplemental Rate Per Hour: $37.69

(Local #1536)

THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
1 CENTRE STREET ROOM 1120
NEW YORK, N.Y. 10007-2341

TELEPHONE: (212) 669-3622
FAX NUMBER: (212) 669-8499

Leonard A. Mancusi
SENIOR ASSISTANT COMPTROLLER

ALAN G. HEVESI
COMPTROLLER

MEMORANDUM

November 6, 2000

To *Agency Chief Contracting Officers*

From: *Leonard A. Mancusi*

Re: *Security at Construction Sites*

Prior to the enactment of Administrative Code §6-109, security guards on construction sites were not subject to prevailing wages. Security guards under the New York State labor law are covered under §230 which provides that prevailing wages are to be paid for security guards in existing buildings. §6-109 of the Administrative Code which was enacted in 1996 closed this loophole by including all security guards working pursuant to a city contract as a prevailing wage trade.

Although some construction contract boilerplate language has been amended to include §6-109, sub-contractors performing security services have advised us that they were not aware of this provision and, since traditionally, security guards were not a covered trade on construction sites, and they were not advised by a prime contractor that they would have to pay prevailing wages, they have not been doing so.

To avoid the possibility of issuing stop payments against prime contractors for the failure of their security service sub-contractors to pay

prevailing wages, we suggest that you write to all your existing security guard sub-contractors and their primes and in the future, upon approval of a security guard sub-contractor, advise the contractors of their obligation to pay prevailing wages under §6-109 of the Administrative Code.

As always, your cooperation is appreciated.

LAM:er
ACCO.SECURITY AT SITES

THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BUREAU OF LABOR LAW
1 CENTRE STREET
NEW YORK, NY 10007

BRAD LANDER
COMPTROLLER

COMPTROLLER'S PREVAILING WAGE MEMORANDUM REGARDING FLAG PERSONS

June 1, 2024

This memorandum supersedes and replaces the Comptroller's Prevailing Wage Memoranda dated May 21, 1998 and related clarification dated March 13, 2001 concerning Flag Persons. This memorandum sets forth the superseding determination of the New York City Comptroller concerning the applicability of Article 8, Section 220 of the New York Labor Law (the "Labor Law") to individuals who perform traffic control duty or "flagger" tasks in connection with public works construction projects within the jurisdiction of the City of New York. The guidance set forth herein is effective July 1, 2024 and applies only to public works contracts and subcontracts solicited on or after such date.

For purposes of this memorandum, "traffic control duty" means tasks necessary or appropriate to alleviate congestion by directing the flow of pedestrian and/or vehicular traffic away from the vicinity of the construction site using a sign or flag. Workers performing traffic control duty in connection with a public works construction project, whether or not such workers are on, adjacent to, or in close proximity to the construction site, are performing the work of a construction "laborer," as directing traffic away from the job site serves to protect the public and safeguard the work crew. Such workers are thus subject to the prevailing wage requirements of Article 8, Section 220 of the Labor Law as "laborers, workmen, or mechanics." Accordingly, the Prevailing Rate of Wages and Supplements applies to such individuals.

Additionally, workers who perform "flagger" tasks relating to the protection of the public and/or work crew, including but not limited to erecting traffic cones, setting up construction site barriers, and directing the movement of trucks or construction equipment in, on, and off the site, also are subject to the requirements of Article 8, Section 220 of the Labor Law and the Prevailing Rate of Wages and Supplements.

This position is consistent with the New York State Department of Labor's position under Article 8 of the New York Labor Law and the U.S. Department of Labor's position under the Davis-Bacon Act and will promote and streamline compliance with prevailing wage requirements on the various public works construction projects within New York City.

If the trade performing the underlying work performs its own flagging or traffic control, e.g., bridge painters, the flagger or traffic control worker shall receive the same wages as the underlying trade. In the absence of an underlying trade, the flagger or traffic control worker shall receive the wages as set forth in the "Flagger" section of the New York City Comptroller's Construction Worker Prevailing Wage Schedule.

Contractors, agencies, and members of the public are encouraged to contact the Bureau of Labor Law to seek clarification regarding specific instances to ensure compliance with prevailing wage regulations and this memorandum.

Department of Design and Construction

DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

VOLUME 2 OF 3

PROJECT ID: HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

INCLUDING DISTRIBUTION WATER MAIN, SEWERS, STREET LIGHTING, AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto
BOROUGH OF THE BRONX
CITY OF NEW YORK

_____

Contractor

_____

Dated_____, 20___

_____

APPROVED AS TO FORM
CERTIFIED AS TO LEGAL AUTHORITY

_____

Acting Corporation Counsel

_____

Dated_____, 20___

_____

Department of Design and Construction

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE
30-30 THOMSON AVENUE
LONG ISLAND CITY, NY, 11101
TEL: 718.391.1000
WEB: www.nyc.gov/ddc

TO BE FILLED IN BY THE BIDDER:

BIDDER'S NAME:

_____

_____

BID SECURITY (CIRCLE ONE):
BID BOND / CERTIFIED CHECK

NUMBER OF ADDENDUMS RECEIVED AND ATTACHED TO BID:
_____ADDENDUMS

***DDC CLIENT AGENCY*:**
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY:
IN HOUSE

DATE PREPARED:
10/04/2024

VOLUME 3 OF 3

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: HED562

SCHEDULE A SPECIFICATIONS AND REVISIONS TO STANDARD SPECIFICATIONS

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

INCLUDING DISTRIBUTION WATER MAIN, SEWERS, STREET LIGHTING, AND TRAFFIC SIGNAL WORK.

TOGETHER WITH ALL WORK INCIDENTAL THERETO

BOROUGH OF THE BRONX

CITY OF NEW YORK

VOLUME 3 OF 3

TABLE OF CONTENTS

SECTION	DESCRIPTION
SPECIFICATIONS AND STANDARDS OF NEW YORK CITY	
SCHEDULE A	GENERAL CONDITIONS TO CONSTRUCTION CONTRACT
R – PAGES	REVISIONS TO STANDARD SPECIFICATIONS
I – PAGES	NEW SECTIONS
S – PAGES	SPECIAL PROVISIONS
SW – PAGES	SEWER AND WATER MAIN SPECIFICATIONS
ASB-PAGES	ASBESTOS MATERIAL ABATEMENT SPECIFICATION
EP7 - PAGES	GAS COST SHARING (EP-7) STANDARD SPECIFICATIONS
HAZ – PAGES	SUPPLEMENTAL DOCUMENTATION FOR USE WITH SPECIFICATIONS FOR HANDLING, TRANSPORTATION AND DISPOSAL OF NONHAZARDOUS AND POTENTIALLY HAZARDOUS CONTAMINATED MATERIALS
JB – PAGES (5.0)	JOINT BID

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SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following specifications and standards are incorporated into the Contract Documents by reference as though fully set forth herein.

1. Standard Specifications and Drawings for New York City Department of Transportation (NYCDOT) are available:
   Online at: http://www1.nyc.gov/site/ddc/resources/publications.page
   a. NYC DOT Standard Highway Specifications
   b. NYC DOT Standard Details of Construction
   Online at: https://www1.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec
   c. NYC DOT Division of Street Lighting Standard Drawings
   Online at: https://www1.nyc.gov/html/dot/downloads/pdf/nycdot-street-lighting-standard-drawings.pdf
   d. NYC DOT Standard Specifications for Traffic Signals
   e. NYC DOT Standard Drawings for Traffic Signals
   For purchase between 9:00 A.M. and 3:00 P.M. Bid Window, at 55 Water St., Ground Floor, NYC, N.Y. 10041. Tel. (212) 839-9435.
   f. NYC DOT Division of Street Lighting Specifications

2. The 2010 Americans with Disabilities Act (ADA) Standards; available online at: https://www.ada.gov/regs2010/2010ADAStandards/2010ADAstandards.htm

3. The 2013 Public Rights-of-Way Accessibility Guidelines (PROWAG); available online at: https://www.access-board.gov/files/prowag/PROW-SUP-SNPRM-2013.pdf

4. Standard Specifications and Drawings for New York City Department of Environmental Protection (NYCDEP) are available online at: http://www1.nyc.gov/site/ddc/resources/publications.page
   a. NYC DEP Standard Sewer and Water Main Specifications, August 8, 2022
   b. NYC DEP Instructions to Architect/Engineers Specifications for Concrete, January 1992
   c. NYC DEP General Specification 11-Concrete, November 1991
   d. NYC DEP Sewer Design Standards, March 27, 2023
   e. NYC DEP Water Main Standard Drawings, September 19, 2024
   f. Specifications for Trunk Main Work, July 2014
   g. Standard Green Infrastructure Specifications August 1, 2024

5. Standard Design and Guidelines for Green Infrastructure Practices, latest version, available only online at: https://www1.nyc.gov/assets/dep/downloads/pdf/water/stormwater/green-infrastructure/green-infrastructure-standard-designs.pdf

6. Standard Specifications and Drawings for New York City Fire Department Communications facilities of New York City are available online at https://www1.nyc.gov/assets/fdny/downloads/pdf/about/fdny-plant-operations-standard-drawings-specifications.pdf or for pick up from the FDNY Facilities Management Bureau, Plant Operations Engineering, 316 Sgt. Beers Avenue Cluster 1 Box 16, Fort Totten, N.Y. 11359. Contact: Mr. Ed Durkin, Tel. (718) 281-3933

7. Tree Planting Standards of the City of New York Parks & Recreation are available at the following Department of Parks & Recreation website: http://www.nycgovparks.org/pagefiles/53/Tree-Planting-Standards.pdf

8. Standards and Specifications for Utility Joint Bid work are available online at http://www1.nyc.gov/site/ddc/resources/publications.page
   a. CET SPECIFICATIONS AND SKETCHES, dated November 2010
   b. JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR MANHATTAN, Issued August 1, 2005

SCHEDULE A

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT (INCLUDING GENERAL CONDITIONS RELATED TO ARTICLE 22 – INSURANCE)

PART I. REQUIRED INFORMATION

INFORMATION FOR BIDDERS SECTION 26 BID SECURITY The **Contractor** shall obtain a bid security in the amount indicated to the right.	Required provided the TOTAL BID PRICE set forth on the Bid Form is $1,000,000. or more. Certified Check: 2% of Bid Amount or Bond: 10% of Bid Amount
INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS The **Contractor** shall obtain performance and payment bonds in the amount indicated to the right.	Required for contracts in the amount of $1,000,000 or more. Performance Security and Payment Security shall each be in an amount equal to 100% of the Contract Price.
INFORMATION FOR BIDDERS DEPARTMENT OF DESIGN AND CONSTRUCTION SAFETY REQUIREMENTS The **Contractor** shall provide the safety personnel as indicated to the right.	■ Project Safety Representative ■ Dedicated, full-time Project Safety Manager
CONTRACT ARTICLE 14 DATE FOR SUBSTANTIAL COMPLETION The **Contractor** shall substantially complete the **Work** in the number of calendar days indicated to the right.	See Page SA-4
CONTRACT ARTICLE 15 LIQUIDATED DAMAGES If the **Contractor** fails to substantially complete the **Work** within the time fixed for substantial completion plus authorized time extensions or if the **Contractor**, in the sole determination of the **Commissioner**, has abandoned the **Work**, the **Contractor** shall pay to the **City** the amount indicated to the right.	$ 11,000.00 for each consecutive calendar day over substantial completion time
CONTRACT ARTICLE 17. SUB-CONTRACTOR The **Contractor** shall not make subcontracts totaling an amount more than the percentage of the total **Contract** price indicated to the right.	Not to exceed 35% of the **Contract** price

CONTRACT ARTICLE 21. **RETAINAGE** The **Commissioner** shall deduct and retain until the substantial completion of the **Work** the percent value of the **Work** indicated to the right.	5 % of the value of the **Work**
CONTRACT ARTICLE 22. **(Per Directions Below)**	See pages SA-5 through SA-12
CONTRACT ARTICLE 24. **DEPOSIT GUARANTEE** As security for the faithful performance of its obligations, the **Contractor**, upon filing its requisition for payment on **Substantial Completion**, shall deposit with the **Commissioner** a sum equal to the percentage of the **Contract** price indicated to the right.	1% of **Contract** price
CONTRACT ARTICLE 24. **PERIOD OF GUARANTEE** Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to the right.	Eighteen (18) Months, excluding Trees Twenty-four (24) Months for Tree Planting
CONTRACT ARTICLE 75. **COMPENSATION TO BE PAID TO CONTRACTOR** The **City** shall pay and the **Contractor** shall accept in full consideration for the performance of the **Contract**, subject to additions and deductions as provided herein**,** the total sum **shown in the column to the right,** being the amount at which the **Contract** was awarded to the **Contractor** at a public letting thereof, based upon the **Contractor's** bid for the **Contract.**	Amount for which the **Contract** was Awarded: _____ _____ Dollars ($_____)
CONTRACT ARTICLE 79. **PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT**	See M/WBE Utilization Plan in the PASSPort Procurement M/WBE Considerations Section

STANDARD HIGHWAY SPECIFICATIONS SECTION 6.40 LIQUIDATED DAMAGES FOR ENGINEER'S FIELD OFFICE If the Contractor fails to satisfactorily provide the field office and all equipment specified in **Section 6.40 - Engineer's Field Office**, and/or if a cited deficiency exceed seventy two (72) hours after notice from the Engineer in writing, or is permitted to recur, liquidated damages will be assessed in the amount specified herein for each subsequent calendar day or part thereof that a cited deficiency resulting in nonpayment, as described in **Section 6.40.5**, is not corrected.	$ 800.00 for each calendar day of deficiency
STANDARD HIGHWAY SPECIFICATIONS SECTION 6.70 LIQUIDATED DAMAGES FOR MAINTENANCE AND PROTECTION OF TRAFFIC	$ 400.00 for each instance of failure to comply with the Maintenance and Protection of Traffic requirements within three (3) hours after written notice from the Engineer. $ 800.00 for each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation.
STANDARD HIGHWAY SPECIFICATIONS SECTION 7.13 LIQUIDATED DAMAGES FOR MAINTENANCE OF SITE If the Contractor fails to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of **Section 7.13 - Maintenance of Site**, the Contractor shall pay to the City of New York, until such notice has been complied with or rescinded, the sum specified above per calendar day, for each instance of such failure, as liquidated damages and not as a penalty, for such default.	$ 2200.00 for each calendar day, for each occurrence

Date for Substantial Completion (Reference: Article 14)

The Contractor shall substantially complete the Work within the Final Contract Duration determined in accordance with the terms and conditions set forth herein.

The Base Contract Duration for this project is 1095 consecutive calendar days ("ccds").

The Final Contract Duration shall be the Base Contract Duration when a check mark is indicated before the word "NO", below, and shall be the Base Contract Duration adjusted by the table set forth below when a check mark is indicated before the word "YES", below.

√ YES _____ NO

When the Final Contract Duration is indicated above to be adjusted by the table below, the table may increase the Base Contract Duration depending on the date of scheduled substantial completion to avoid a scheduled substantial completion of the Work during the winter months. The date of scheduled substantial completion shall be determined by adding the Base Contract Duration to the date specified to commence work in the written Notice to Proceed. The Final Contract Duration shall then be determined as follows:

(a) Find the row that corresponds to the month of substantial completion based on the Base Contract Duration added to the date specified to commence work in the written Notice to Proceed.

(b) Find the number of days to be added to the Base Contract Duration in the table below. Add that number of days to the Base Contract Duration to obtain the Final Contract Duration in consecutive calendar days.

Month of Substantial Completion based on the Base Contract Duration	Number of Days of adjustment
January	150
February	120
March	90
April	60
May	30
June	0
July	0
August	0
September	0
October	0
November –December 15	0
December 16 – December 31	180

In addition, should Item No. 9.30, "Storm Water Pollution Prevention," exist in the Contract and the Commissioner determines that the required Storm Water Pollution Prevention Plan (SWPPP) does not conform to NYSDEC's recommended Standards, an additional 60 ccd will be added to the above Final Contract Duration, at the sole discretion of the Commissioner.

(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS

Note: All certificate(s) of insurance submitted pursuant to Contract Article 22.3. 3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- **For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;**
- **Policy limits consistent with the requirements listed below;**
- **Additional insureds or loss payees consistent with the requirements listed below; and**
- **The number assigned to the Contract by the City (in the "Description of Operations" field).**

Insurance indicated by a blackened box (■) or by X in a □ to left will be required under this contract

Types of Insurance (per Article 22 in its entirety, including listed paragraph)	Minimum Limits and Special Conditions
■ Commercial General Liability Art. 22.1.1	The minimum limits shall be $ 3,000,000 per occurrence and $ 6,000,000 per project aggregate applicable to this **Contract.** Additional Insureds: 1. City of New York, including its officials and employees, with coverage at least as broad as ISO Form CG 20 10 and CG 20 37, 2. All person(s) or organization(s), if any, that Article 22.1.1(b) of the **Contract** requires to be named as Additional Insured(s), with coverage at least as broad as ISO Form CG 20 26. The Additional Insured endorsement shall either specify the entity's name, if known, or the entity's title (e.g., Project Manager), 3. The Consolidated Edison Company of New York, Inc. ("Coned") 4. Empire City Subway Company, LTD ("ECS") 5. Altice USA, Inc. ("Altice")

■ Workers' Compensation Art. 22.1.2 ■ Disability Benefits Insurance Art. 22.1.2 ■ Employers' Liability Art. 22.1.2 ☐ Jones Act Art. 22.1.3 ☐ U.S. Longshoremen's and Harbor Workers Compensation Act Art. 22.1.3	Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction. **Note:** The following forms are acceptable: (1) New York State Workers' Compensation Board Form No. C-105.2, (2) State Insurance Fund Form No. U-26.3, (3) New York State Workers' Compensation Board Form No. DB-120.1 and (4) Request for WC/DB Exemption Form No. CE-200. The City will not accept an ACORD form as proof of Workers' Compensation or Disability Insurance. Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. Law. ☐ Additional Requirements:
☐ Builders' Risk Art. 22.1.4	☐ Required: 100% of total bid amount ☐ Required: 100 % of total bid amount for Item(s): **Contractor** the Named Insured; the **City** both an Additional Insured and one of the loss payees as its interests may appear. If the **Work** does not involve construction of a new building or gut renovation work, the **Contractor** may provide an installation floater in lieu of Builders Risk insurance. Note: Builders Risk Insurance may terminate upon **Substantial Completion** of the **Work** in its entirety.

■ Commercial Auto Liability Art. 22.1.5	$ 2,000,000 per accident combined single limit If vehicles are used for transporting hazardous materials, the **Contractor** shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90 Additional Insureds:
☐Contractors Pollution Liability Art. 22.1.6	$ 5,000,000 per occurrence $ 5,000,000 aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
☐ Marine Protection and Indemnity Art. 22.1.7(a)	$_____ each occurrence $_____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
☐ Hull and Machinery Insurance Art. 22.1.7(b)	$_____ per occurrence $_____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____

☐ Marine Pollution Liability Art. 22.1.7(c)	$ 1,000,000 per occurrence $ 1,000,000 aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
[OTHER] Art. 22.1.8 ☐ Railroad Protection Liability Policy (ISO-RIMA or equivalent form) approved by Permittor covering the work to be performed at the designated site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured's own property and conforming to the following: • Policy Endorsement CG 28 31 - Pollution Exclusion Amendment is required to be endorsed onto the policy when environmental-related work and/or exposures exist. • Indicate the Name and address of the Contractor to perform the work, the Contract # and the name of the railroad property where the work is being performed and the Agency Permit. • Evidence of Railroad Protective Liability Insurance, must be provided in the form of the Original Policy. A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within 30 days of the Binder Approval.	$ 2,000,000 per occurrence $ 6,000,000 annual aggregate Named Insureds: 1. The New York City Transit Authority ("NYCT"), the Manhattan and Bronx Surface Transit Operating Authority ("MaBSTOA"), the Staten Island Rapid Transit Operating Authority ("SIRTOA"), the Metropolitan Transportation Authority ("MTA") including its subsidiaries and affiliates, MTA Construction & Development Company ("MTA C&D"), MTA Bus Company ("MTA Bus").

[OTHER] Art. 22.1.8

■ Professional Liability

A. The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of $1,000,000 per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Contract arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor's Professional Engineer or anyone employed by the Contractor's Professional Engineer.

B. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor's Professional Engineer shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.

[OTHER] Art. 22.1.8 ■ Engineer's Field Office **Section 6.40, Standard Highway Specifications**	Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of <u>$40,000</u>

[OTHER] Art. 22.1.8

☐ The Following Additional Insurance Must Be Provided:

Umbrella/Excess Liability Insurance - The Contractor shall provide Umbrella/Excess Liability Insurance in the minimum amount of $10,000,000 per Occurrence and $10,000,000 in Aggregate. The policy terms and condition should be at least as broad as the underlying policies. The underlying policies should comply with the insurance provision as outlined by the contract. Defense cost should be in addition to the limit of liability. The City of New York, including its officials and employees, should be included as additional insured as respects to the noted project.

Per **Article 22.2.5** of the **Standard Construction Contract**: The Contractor may satisfy its insurance obligations as defined in this Schedule A through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.

SCHEDULE A
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART III. CERTIFICATES OF INSURANCE

All certificates of insurance (except certificates of insurance solely evidencing Workers' Compensation Insurance, Employer's Liability Insurance, and/or Disability Benefits Insurance) must be accompanied by one of the following:

(1) the Certification by Insurance Broker or Agent on the following page setting forth the required information and signatures;

-- OR --

(2) copies of all policies as certified by an authorized representative of the issuing insurance carrier that are referenced in such certificate of insurance. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

CITY OF NEW YORK

CERTIFICATION BY INSURANCE BROKER OR AGENT

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

_____
[Name of broker or agent (typewritten)]

_____
[Address of broker or agent (typewritten)]

_____
[Email address of broker or agent (typewritten)]

_____
[Phone number/Fax number of broker or agent (typewritten)]

_____
[Signature of authorized official, broker, or agent]

_____
[Name and title of authorized official, broker, or agent (typewritten)]

State of ……)
) ss.:
County of ……)

Sworn to before me this _____ day of _____, 20____

_____
NOTARY PUBLIC FOR THE STATE OF _____

SCHEDULE A

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)

PART IV. ADDRESS OF COMMISSIONER

Wherever reference is made in Article 7 or Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents must be sent through email to insurance@ddc.nyc.gov. Hard copy documents of the above requirement are no longer required.

(NO FURTHER TEXT ON THIS PAGE)

R - PAGES

REVISIONS TO STANDARD SPECIFICATIONS

NOTICE

The Specification Bulletin(s) ("SB(s)") referenced in this Section (R-Pages) may consist of revisions to the following Standard Specifications:

- New York City Department of Transportation ("NYC DOT") Standard Highway Specifications, dated 5/16/2022;
- New York City Department of Environmental Protection ("NYC DEP") Standard Sewer and Water Main Specifications, dated 8/8/2022;
- NYC Department of Environmental Protection ("NYC DEP") Standard Green Infrastructure Specifications, dated 8/1/2024; and
- NYC DEP Specifications for Trunk Main Work, dated 7/2014.

The SB(s) modify and supersede portions of the applicable Standard Specifications. The provisions contained in this Contract's I-Pages, S-Pages and SW-Pages may further modify the applicable Standard Specifications.

The following active SB(s) are included as part of this contract:

- *SB 22-006 – INCREMENTAL COST NEAR TRANSIT FACILITIES*
- *SB 23-001 – SEWER DESIGN STANDARDS*
- *SB 23-002 – PIPE BOLLARD*
- *SB 23-003 – MOBILIZATION*
- *SB 23-004 – SUSTAINABLE CONSTRUCTION*
- *SB 24-001 – CEMENT, PORTLAND*
- *SB 24-002 – SHEETING AND BRACING*
- *SB 24-003 – CORNER CURB*
- *SB 24-004 – PIGMENTING*
- *SB 24-006 – REINFORCED CONCRETE SEWERS*
- *SB 24-007 – DRAINS TO BE KEPT CLEAN*
- *SB 24-008 – PAYMENT REQUISITIONS*
- *SB 24-010 – FLAGGERS, CROSSING GUARDS, AND PEDESTRIAN MANAGERS*

- *SB 24-011 – ALLOWANCE FOR RAILROAD FACILITY PERMITTING (ALL TYPES)*
- *SB 24-012 – ASPHALT, FUEL, AND STEEL PRICE ADJUSTMENT*
- *SB 24-013 – ENGINEER'S FIELD OFFICE*
- *SB 24-014 – MAINTENANCE OF SITE*
- *SB 24-015 – SUSTAINABLE CONSTRUCTION REQUIREMENTS*

The SB(s) are available online at:
http://www1.nyc.gov/site/ddc/resources/specification-bulletins.page

(NO FURTHER TEXT ON THIS PAGE)

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I - Pages

NEW SECTIONS

NOTICE

UNLESS OTHERWISE NOTED, ALL SECTIONS, SUBSECTIONS, ARTICLES, OR SUBARTICLES AS REFERRED TO HEREIN WITHIN THESE NEW SECTION SPECIFICATIONS MUST BE THOSE OF THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION'S (NYCDOT'S) CURRENT STANDARD HIGHWAY SPECIFICATIONS WITH CURRENT ADDITIONS, MODIFICATIONS AND REVISIONS TO THE STANDARD HIGHWAY SPECIFICATIONS (R-PAGES).

THE STANDARD HIGHWAY SPECIFICATIONS ARE NOT INCLUDED IN THESE I-PAGES. SEE THE NYCDOT STANDARD HIGHWAY SPECIFICATIONS BOOKS FOR STANDARD SPECIFICATIONS TEXTS.

(NO TEXT ON THIS PAGE)

TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE NO.
7.35	PEDESTRIAN CHANNELIZER	I-2
7.70 TPR	TEMPORARY PEDESTRIAN RAMP	I-4
8.01	HANDLING, TRANSPORTING, AND DISPOSAL OF POTENTIAL AND IDENTIFIED CONTAMINATED AND HAZARDOUS MATERIALS	I-6
8.01 C1	HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	I-10
8.01 C2	SAMPLING AND TESTING OF NON-HAZARDOUS CONTAMINATED/ POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	I-17
8.01 H	HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	I-21
8.01 S	HEALTH AND SAFETY	I-27
8.01 W1	REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	I-32
8.01 W2	SAMPLING AND TESTING OF CONTAMINATED WATER	I-38
9.28	EXPANDED WORK ALLOWANCE	I-40
9.30	STORMWATER POLLUTION PREVENTION	I-42
HW-900H	ALLOWANCE FOR CITY WORK ACCELERATION	I-46

SECTION 7.35 - Pedestrian Channelizer

7.35.1. INTENT.

This section describes the work of providing interlocking Pedestrian Channelizers to be used as temporary pedestrian access route between pedestrian and construction work areas when directed by the Engineer.

Pedestrian channelizer must provide the same level of pedestrian guidance as concrete or plastic barrier, but must be light weight, easier to transport, install and remove with interlocking arrangements.

7.35.2. MATERIALS.

The work will consist of furnishing, maintaining, relocating, and removing Pedestrian Channelizer in sidewalk areas as per the specifications, as shown on the Contract Drawings, or where otherwise directed by the Engineer.

Pedestrian Channelizer units must meet the requirements of the following standards:

a. 2010 ADA Standards for Accessible Design
b. 2013 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG)
c. 2009 Manual on Uniform Traffic Control Devices (MUTCD), with FHWA Revisions and NYS Supplements

Product must meet the crash test and evaluation criteria contained in the American Association of State Highway and Transportation Officials' (AASHTO) Manual for Assessing Safety Hardware (MASH) and have a FHWA acceptance letter.

Acceptable products include:

a. ADA PEDESTRIAN BARRICADE – STRONG WALL by PLASTICADE
b. ADA COMPLIANT PEDESTRIAN BARRICADE like Safety Rail & SafetyWall by PSS
c. Urbanite 57000 Series by Urbanite
d. Plastic Safety System Safety Wall by PAUL PETERSON SAFETY DIVISION
e. Or approved equivalent

7.35.3. METHODS.

Pedestrian Channelizer units of the various sizes required must be furnished to the site, complete, ready to use. All units must be in good condition and acceptable to the Engineer. Pedestrian Channelizer installed must meet the requirements of the standards listed in **Section 7.35.2** above.

The Contractor must install pedestrian channelizer by placing them where shown on the Contract Drawings or where otherwise directed by the Engineer. Adjacent units must be interlocked. Weights (sand or water ballast in the unit, sandbags, concrete blocks, etc.) must be used per the manufacturer’s recommendations, as necessary to ensure stability, or as directed by the Engineer. Weights must not interfere with pedestrian travel. The minimum number of interlocked barricade units in a given run must be two (2), unless otherwise approved by the Engineer. Where less than three (3) units are required and approved by the Engineer, additional measures must be taken by the Contractor to stabilize the shorter length of interlocking barricade and prevent overturning.

At corners, units four (4) feet or less in length must be used to form smooth curved runs of barricade. Contractor must continuously maintain the temporary pedestrian steel barricades, where shown on the Contract Drawings or directed by the Engineer, until ordered by the Engineer to remove the barricades at the completion of a work stage. If a unit or units of barricades become damaged or otherwise unacceptable to the Engineer, the Contractor must replace said units within twenty-four (24) hours of notice by the Engineer, at no additional cost to the City.

7.35.4. MEASUREMENT.

The quantity to be measured for payment will be the number of linear feet of Pedestrian Channelizer constructed and placed, complete, based upon the summation of the lengths of the individual units so constructed and placed.

Payment will be made for only the initial installation at any location. Whenever Pedestrian Channelizer are moved to a new location, as required by the Contract Drawings or directed by the Engineer, payment will be made in the same manner as if it were an initial installation. Whenever the Contractor proposes to move Pedestrian Channelizer to a new location, it is subject to approval of the Engineer and must be in accordance with the latest approved progress schedule. Minor movement of the pedestrian channelizer within a work area will not be considered as a movement to a new location and will not entitle the Contractor to additional payment. Minor movement within a work area includes, but is not limited to

- Movement from one side of the roadway to the other side
- Movement to adjust the roadway or work zone width
- Movement required to access the work zone or to secure the work zone
- Linear movement of less than one block within an established work zone
- Rearrangement within a work area

No payment will be made: for non-interlocked units of barricade; for barricade units greater than four (4') feet in length used in corner quadrants; for movements of pedestrian channelizer made for the Contractor's convenience; for movement of barricades at a given location at the end of a work period and subsequent replacement at the same location at the beginning of the next work period; for movement of barricades at a given location during a work period and subsequent replacement at the same location during the same work period; or for the interchanging of barricades between initial installations.

7.35.5. PRICE TO COVER.

The contract price bid per linear foot for PEDESTRIAN CHANNELIZER will cover the cost of furnishing all labor, materials, plant, equipment, insurance, and necessary incidentals required to furnish, install, maintain, relocate, and remove PEDESTRIAN CHANNELIZER, complete with weights for stability, in accordance with the Contract Drawings, the specifications, and the directions of the Engineer.

Where there is no scheduled item for temporary PEDESTRIAN CHANNELIZER, the cost of furnishing, installation, maintenance, relocation, and subsequent removal of PEDESTRIAN CHANNELIZER as required will be deemed included in the unit price bid for the Maintenance and Protection of Traffic Item.

Payment will be made under:

Item No.	Item	Pay Unit
7.35	Pedestrian Channelizer	L.F.

SECTION 7.70 TPR – Temporary Pedestrian Ramp

(Not a Pay Item)

7.70TPR.1. INTENT.

This section describes the work of providing Temporary Pedestrian Ramps (TPRs) near new pedestrian construction work areas and the ADA guidelines. TPRs should provide access to sidewalk routes when pedestrian ramps are not accessible due to construction activities going on or around pedestrian ramps.

The work will consist of furnishing, installation, maintaining, relocating, and removing temporary pedestrian ramps in order to access sidewalk areas as shown on the Contract Drawings or where otherwise directed by the Engineer.

TPR must consist of temporary pedestrian ramp units having a geometry similar to that shown on the contract drawings, as directed the Engineer and complying with the following requirements:

1. TPR running slope must not exceed 1:12 ramp slope, which equals 4.8 degrees slope or one foot of wheelchair ramp for each inch of rise. For instance, a 30 inch rise requires a 30 foot handicap wheelchair ramp.
2. Cross slope must not exceed 1:48.
3. Handrails must be provided on both sides if rise is more than 6 inches.
4. A minimum 5' x 5' flat, unobstructed area at the top and bottom of the ramp
5. A Minimum width of 36 inches of clear space across the wheelchair ramp.
6. Maximum run of 30 feet will be allowed ramp before a rest or turn platform.
7. Ramp handrail height will be between 34" and 38" in height on both sides of the wheelchair ramps.
8. The TPR must allow for normal street drainage.

Note: At areas with grass strips, ramp to be located at closest concrete walk or driveway by means of ground level decking on grass connecting to the concrete sidewalk or driveway etc.

7.70TPR.2. MATERIALS AND METHODS.

1. LUMBER TPR: Lumber should have a slip-resistant surface. Use pressure treated wood for most of the wood material. Lumber must be preservative-treated southern pine, grade #2 or better. Pressure treated lumber must resists rot and decay with level of treatment as per American Wood Council latest standards. Decking board for the TPR will be at a minimum 2” thick.

2. ALUMINUM TPR: Aluminum should be high traction (e.g., textured extruded aluminum surface), dock plate with a coefficient of friction not less than 0.5 and made from high strength, lightweight aluminum; it should be slip-resistant and have a self-adjusting ground transition plate. The Ramp, Step, and Platform system is designed to be a rigid, free-standing structure. All footplates should be fastened securely to a concrete surface or 12” minimum diameter footings in order to achieve full structural integrity. Footing depth will depend on local building code.

Fastening all platforms to the building or modular building with lag screws is highly recommended.

3. FIBERGLASS/PLASTIC TPR: Fiberglass/ Plastic ramps should be able to take minimum wheelchairs, foot traffic etc., not less than 550 lbs., should be ADA compliant and adapts to varying curb heights from minimum of 2.5” to 7”. Should be anti-slip with high visibility surface and must be bolted for maximum stability and security. Coefficient of friction will not be less than 0.5.

All ramp handrails and ramp guardrails are designed to withstand a concentrated load of 200 pounds applied in any direction on the top of the rail.

All Ramp handrails are designed to be continuous along ramp runs and in between the inside corner of 90 degree and 180 degree turns in ramp direction. Handrails are not interrupted by posts or other obstructions.

Platforms and landings will be designed to carry a uniform live load of 100 pounds per square foot and a concentrated vertical load of 300 pounds in an area of one square foot.

Walking surfaces for serial number 1, 2 and 3 above must be designed to have a coefficient of friction no less than 0.50 in all directions of travel.

7.70TPR.3. METHODS.

All units must be in good condition and acceptable to the Engineer.

The Contractor must install the TPR by placing them where shown on the Contract Drawings, specifications and as directed by the Engineer. All the modular ramps will be assembled as per manufacturer's instructions.

If the modular ramps are pre-assembled and transported to their locations, Contractor must use utmost care in the delivery and installation of these units.

Units can also be fabricated/constructed at site with the approval of the Engineer.

Contractor must continuously maintain the TPR, where shown on the Contract Drawings or directed by the Engineer, until ordered by the Engineer to remove the completion of a work stage. Should a unit or units of barricades become damaged or otherwise unacceptable to the Engineer, the Contractor must replace said units within twenty-four (24) hours of notice by the Engineer, at no additional cost to the City.

7.70TPR.4. MEASUREMENT AND PAYMENT.

The price of Temporary Pedestrian Ramp (TPR) will be deemed included in the prices bid for all the scheduled contract items.

The Section below supersedes and replaces Sections 8.01, 8.01 C1, 8.01 C2, 8.01H, 8.01S, 8.01W1, and 8.01 W2 of NYC DOT Standard Specifications dated May 16, 2022

SECTION 8.01 Handling, Transporting, and Disposal of Potential and Identified Contaminated and Hazardous Materials

8.01.1. DESCRIPTION. This Section provides common references and requirements for **Sections 8.01 C1**, **8.01 C2**, **8.01H**, **8.01S**, **8.01W1**, and **8.01 W2**.

8.01.2. MATERIALS. None.

8.01.3. METHODS.

(A) NYCDEP Limitations for Discharge to Sewer

NYCDEP Bureau of Wastewater Treatment – Limitations for Effluent to Sanitary or Combined Sewers

Parameter[1]	Daily Limit	Units	Sample Type	Monthly Limit
Non-polar material[2]	50	mg/l	Instantaneous	---
pH	5-11	SU's	Instantaneous	---
Temperature	< 150	Degree F	Instantaneous	---
Flash Point	> 140	Degree F	Instantaneous	---
Cadmium	2 0.69	mg/l mg/l	Instantaneous Composite	--- ---
Chromium (VI)	5	mg/l	Instantaneous	---
Copper	5	mg/l	Instantaneous	---
Lead	2	mg/l	Instantaneous	---
Mercury	0.05	mg/l	Instantaneous	---
Nickel	3	mg/l	Instantaneous	---
Zinc	5	mg/l	Instantaneous	---
Benzene	134	ppb	Instantaneous	57
Carbontetrachloride	---	---	Composite	---
Chloroform	---	---	Composite	---
1,4 Dichlorobenzene	---	---	Composite	---
Ethylbenzene	380	ppb	Instantaneous	142
MTBE (Methyl-Tert-Butyl-Ether)	50	ppb	Instantaneous	---
Naphthalene	47	ppb	Composite	19
Phenol	---	---	Composite	---
Tetrachloroethylene (Perc)	20	ppb	Instantaneous	---
Toluene	74	ppb	Instantaneous	28
1,2,4 Trichlorobenzene	---	---	Composite	---
1,1,1 Trichloroethane	---	---	Composite	---
Xylenes (Total)	74	ppb	Instantaneous	28
PCB's (Total)[3]	1	ppb	Composite	---
Total Suspended Solids (TSS)	350[4]	mg/l	Instantaneous	---
CBOD[5]	---	---	Composite	---
Chloride[5]	---	---	Instantaneous	---
Total Nitrogen[5]	---	---	Composite	---
Total Solids[5]	---	---	Instantaneous	---

Notes for table above:

1. All handling and preservation of collected samples and laboratory analyses of samples must be performed in accordance with 40 C.F.R. pt. 136. If 40 C.F.R. pt. 136 does not cover the pollutant in question, the handling, preservation, and analysis must be performed in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater." All analyses must be performed using a detection level less than the lowest applicable regulatory discharge limit. If a parameter does not have a limit, then the detection level is defined as the least of the Practical Quantitation Limits identified in NYSDEC's Analytical Detectability and Quantitation Guidelines for Selected Environmental Parameters, December 1988.

2. Analysis for ***non-polar materials*** must be done by USEPA method 1664 Rev. A. Non-Polar Material will mean that portion of the oil and grease that is not eliminated from a solution containing N–Hexane, or any other extraction solvent the USEPA will prescribe, by silica gel absorption.

3. Analysis for PCBs is required if ***both*** conditions listed below are met:

   a. if proposed discharge ≥ 10,000 gpd;
   b. if duration of a discharge > 10 Days.

   Analysis for PCBs must be done by USEPA method 608 with MDL=<65 ppt. PCB's (total) is the sum of PCB-1242 (Arochlor 1242), PCB-1254 (Arochlor 1254), PCB-1221 (Arochlor 1221), PCB-1232 (Arochlor 1232), PCB-1248 (Arochlor 1248), PCB-1260 (Arochlor 1260) and PCB-1016 (Arochlor 1016).

4. For discharge ≥ 10,000 gpd, the TSS limit is 350 mg/l. For discharge < 10,000 gpd, the limit is determined on a case-by-case basis.

5. Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids and Total Nitrogen are required if proposed discharge ≥ 10,000 gpd.

(B) Applicable Regulations

Applicable regulations include, but are not limited to:

1. 49 CFR 100 to 179 - DOT Hazardous Materials Transport and Manifest System Requirements
2. 6 NYCRR 375-6 - NYSDEC Remedial Program Soil Cleanup Objectives
3. 6 NYCRR 360-1 NYSDEC Solid Waste Management Facilities
4. 6 NYCRR 364- Waste Transporter permits
5. Local restrictions on transportation of waste/debris
6. 40 CFR 260 to 272 - Hazardous Waste Management (RCRA)
7. 6 NYCRR 371 - Identification and Listing of Hazardous Wastes
8. 6 NYCRR 372 - Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities
9. 6 NYCRR 373-1 - Hazardous Waste Treatment, Storage and Disposal Facility Permitting Requirements
10. 6 NYCRR 376 - Land Disposal Restrictions
11. Posted weight limitations on roads or bridges
12. Transportation Skills Programs, Inc. 1985 - Hazardous Materials and Waste Shipping Papers and Manifests
13. Other local restrictions on transportation of waste/debris
14. Occupational Safety and Health Administration (OSHA), Standards and Regulations, 29 CFR 1910 (General Industry)
15. OSHA 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response
16. OSHA Safety and Health Standards 29 CFR 1926 (Construction Industry)
17. OSHA 29 CFR 1910.146 Confined Space Entry Standard
18. Standard Operating Safety Guidelines, USEPA Office of Emergency and Remedial Response Publication, 9285.1-03

19. NIOSH / OSHA / USCG / USEPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1986)
20. U.S. Department of Health and Human Services (DHHS) "NIOSH Sampling and Analytical Methods," DHHS (NIOSH) Publication 84-100
21. ANSI, Practice for Respiratory Protection, Z88.2 (1980)
22. ANSI, Emergency Eyewash and Shower Equipment, Z41.1 (1983)
23. ANSI, Protective Footwear, Z358.1 (1981)
24. ANSI, Physical Qualifications for Respirator Use, Z88.6 (1984)
25. ANSI, Practice for Occupational and Educational Eye and Face Protection, Z87.1 (1968)
26. Water Pollution Control Federation "Manual of Practice No. 1, Safety in Wastewater Works"
27. NFPA No. 327 "Standard Procedures for Cleaning and Safeguarding Small Tanks and Containers"
28. Occupational Safety and Health Act Confined Space Entry Standard 29 CFR 1910.146.87
29. Department of Transportation 49 CFR 100 through 179
30. Department of Transportation 49 CFR 387 (46 FR 30974, 47073)
31. Environmental Protection Agency 40 CFR 136 (41 FR 52779)
32. Environmental Protection Agency 40 CFR 262 and 761
33. Resource Conservation and Recovery Act (RCRA)
34. Any transporter of hazardous or non-hazardous materials must be licensed in the State of New York and all other states traversed in accordance with all applicable regulations.

(C) Definitions

Contaminated Groundwater and Decontamination Fluids: Groundwater within the excavation trench or decontamination water that contains regulated compounds above the NYCDEP Discharge to Sewer Effluent limits.

Disposal or Treatment Facility: A facility licensed to accept either non-hazardous regulated waste or hazardous waste for either treatment or disposal.

Exclusion Zone: Work area that will be limited to access by Contractor personnel specifically trained to enter the work area only. The exclusion zone will be set up to secure the area from the public and untrained personnel. The project health and safety program will apply to all construction personnel including persons entering the work area.

Hazard Assessment: An assessment of any physical hazards that may be encountered on a work site.

Hazardous Soils: Soils that exhibit any of the characteristics of a hazardous waste, namely ignitability, corrosivity, reactivity, and toxicity, as defined in 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.

Hazardous Substance Evaluation: An evaluation of the possible or known presence of any hazardous substances that may be encountered on a job site. This evaluation is included in the Health and Safety Plan and will include the identification and description of any hazardous substances expected to be encountered. Material Safety Data Sheets (MSDS) will be included for each substance.

Health and Safety Plan: A plan employed at a work site that describes all the measures that will be taken to assure that all work is conducted in a safe manner, and that the health of the workers and the public will be insured.

Material Handling Plan: A plan outlining the methods that will be employed to handle, transport and dispose of contaminated materials.

Non-Hazardous Contaminated Soils: Soils which exhibit a distinct chemical or petroleum odor or exhibit elevated photoionization detector readings but are not classified as hazardous waste under 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.

New York State Health Department's Environmental Laboratory Approval Program: A program by which the state of New York approves and accredits environmental testing laboratories.

PCBs: Polychlorinated biphenyls are a group of toxic compounds commonly used as a coolant in transformers and other electrical components.

Photoionization Detector: A handheld instrument used to measure volatile organic compounds in air. The instrument ionizes the organic molecules through the use of an ultraviolet lamp.

RCRA Hazardous Waste Characteristics: Characteristics of a material which may indicate the material is hazardous. These include ignitability corrosivity, reactivity, and toxicity.

Total Petroleum Hydrocarbons: An analytical procedure used to determine the total amount of petroleum compounds in a material.

(D) Phase I and Phase II Investigation Reports

If Phase I and / or Phase II investigation reports have been prepared for the Project, they will be included in the HAZ-Pages in Volume 3 of the Contract.

If there are no Phase I and / or Phase II investigation reports in the HAZ-Pages in Volume 3 of the Contract, but 8.01 bid items are included in the Bid Schedule, the Contractor is to assume the excavated soil is contaminated and bid on the quantities listed. The Contractor must use the Contractor's engineering judgement for pricing those items.

8.01.4. MEASUREMENT AND PAYMENT. No separate payment will be made for complying with the requirements of this Section.

ITEM 8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL

8.01 C1.1 WORK TO INCLUDE.

A. General

This work will consist of the handling, transportation, and disposal of non-hazardous contaminated soils. The materials covered by this specification are soils that are contaminated with petroleum or other chemicals (including but not limited to metals, pesticides, polychlorinated biphenyls [PCBs], volatile organic compounds [VOCs], semi-volatile organic compounds [SVOCs], etc.) but cannot be classified as hazardous waste. For the purpose of this specification, soil will be defined as any material excavated below the pavement (concrete and/or asphalt) and pavement base (concrete and/or asphalt). Soil will also be defined as any material excavated from wetlands and/or wetlands adjacent area, or any areas that are not covered with hard pavement (e.g., concrete, asphalt), such as grass or dirt areas.

Soil to be excavated can be classified as non-contaminated, non-hazardous contaminated, or hazardous soil. Non-contaminated soils are defined as soils not exhibiting any of the following characteristics:

- Exceedances of New York State Department of Environmental Conservation (NYSDEC) Part 375-6 Restricted Commercial Soil Cleanup Objectives (SCOs) for street work, with the exception of benzo(a)pyrene which will have a limit of 3 parts per million (ppm), Restricted Residential SCOs for work areas in parkland, Residential SCOs for work in housing project areas, and Protection of Ecological Resources SCOs for work in wetlands and/or wetlands adjacent area.
- Elevated Photo-Ionization Detector (PID) readings (readings of greater than 10 parts per million [ppm] on a calibrated PID), which is subsequently confirmed by laboratory analysis specified under 8.01 C2.1.B.3
- Visual evidence of contamination, such as the presence of staining, discoloration, which is subsequently confirmed by laboratory analysis and exhibits exceedances of applicable SCOs.
- Petroleum and/or chemical odors, which are subsequently confirmed by laboratory analysis and exhibits exceedances of applicable SCOs.
- Physical evidence of coal ash, municipal solid waste, dredged spoils, or greater than 50% of the material is construction and demolition debris.

Non-hazardous contaminated soils are defined as soils exhibiting one or more of the above characteristics. Non-hazardous contaminated soils must be handled, transported, and disposed of in accordance with the specifications for Item 8.01 C1 – Handling, Transporting and Disposal of Non-Hazardous Contaminated Soil.

Hazardous soils are defined as soils showing exceedances of Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Levels for Hazardous Waste published in Resource Conservation and Recovery Act (RCRA), 6 New York Codes, Rules, and Regulations (NYCRR) Part 371, or 40 Code of Federal Regulations (CFR) Section 261. Hazardous soils must be handled, transported, and disposed of in accordance with the specifications of this section.

This entire specification 8.01 covers the handling, transportation, and disposal of non-hazardous contaminated soils and hazardous soils only. Non-contaminated soil can be reused at the Project site, provided it meets other Contract requirements. Non-hazardous contaminated soils and hazardous soils cannot be reused. Excess non-contaminated soil becomes the property and responsibility of the Contractor.

The Contractor must ensure that all operations associated with the handling, sampling, loading,

transportation, and disposal of non-hazardous contaminated soils are in compliance with all applicable Federal, State, and City statutes and regulations.

The Contractor must supply all equipment, material and labor required to conduct the specified work of this Item. The Contractor must document the excavation, handling, transportation and disposal of non-hazardous contaminated soils with analytical reports, manifests, photos, and clean fill documentation.

B. Request for Approval of Subcontractors

In accordance with Article 17 of the Contract, a subcontractor/subconsultant, such as the Environmental Consultant and the waste hauler, is not permitted to start work until approved by the Engineer. If the Contractor performs work using a subcontractor/subconsultant prior to approval, the Contractor will not be paid for the work performed by that subcontractor/subconsultant and the Contractor may be subject to penalties including, but not limited to, initiation of default proceedings.

The Contractor must submit a completed original Request for Approval of Subcontractors (RFAS) form and all required documents, such as legal identity, project reference list, Corporate Health and Safety Plan (HASP), waste transporter permits, Occupational Safety and Health Administration (OSHA) 10 certification, Hazardous Waste and Emergency Response (HAZWOPER) certification, etc., to the Engineer at least 30 days prior to the scheduled subcontract work start date. The Engineer must then submit the original RFAS to DDC Safety and Site Support, Office of Environmental and Hazmat Services (OEHS) for review and approval. If the RFAS is denied by OEHS, OEHS will issue the final denial and return the original RFAS to the Engineer. If the RFAS is approved by OEHS, OEHS will forward the original RFAS package and an approval memo to the DDC Agency Chief Contracting Officer (ACCO) for further review and approval. The ACCO's Vendor Integrity Unit and Office of Contract Opportunity (OCO) will review the subcontractor/subconsultant's overall business integrity and compliance with the vendor integrity requirements in the PASSPort system, Executive Order 50, Local Law 1, and Minority- and Women-Owned Business Enterprise/ Disadvantaged Business Enterprise (MWBE/DBE) participation as per the Contract. ACCO will issue the final Approval or Denial. The original RFAS will be returned to the Engineer, who will subsequently notify and return the original RFAS to the Contractor.

C. Environmental Consultant

The Contractor must retain an independent Environmental Consultant to obtain all permits, prepare the plans required in the specification 8.01 and as per DDC issued templates, and perform all field screening, sampling, air monitoring, and other health and safety services. The Contractor is not permitted to self-perform this work. The Environmental Consultant must be approved under the RFAS process and must demonstrate the minimum requirements as set forth below:

1. The Environmental Consultant project supervisor on site and other designated key personnel must have a minimum of three (3) years of experience in the environmental field dealing with issues associated with contaminated/hazardous soils. Such experience must include oversight of environmental investigations, specifically including VOC and dust monitoring services as a routine part of daily operations.

2. The Environmental Consultant must be experienced in work of similar nature, size, and complexity and must have previous experience in working with DDC.

3. The Environmental Consultant must furnish a list of at least five (5) projects completed within the last 3 years, identifying the location, nature of services provided, owner, owner's contact, contact's working telephone number, project duration and value of the projects..

D. Sampling and Analysis

Prior to the performance of soil sampling, the Contractor will submit a Field Sampling Plan (FSP). Soil sampling must not be conducted until OEHS has approved the FSP. The Contractor must conduct sampling and analysis of the impacted soils as specified under Item 8.01 C2 – Sampling and Testing of Non-Hazardous Contaminated/Potentially Hazardous Soil for Disposal Purposes.

The laboratory results must be forwarded to OEHS for review to determine if the soils would be handled and disposed of as non-hazardous contaminated soils or hazardous soils.

E. Material Handling Plan

At least 45 days prior to the commencement of work, the Contractor must submit to the OEHS for review a Material Handling Plan (MHP). The MHP must be approved by the OEHS prior to the Contractor beginning any soil excavation work. The MHP must, at a minimum, consist of:

1. The Contractor's procedures for identifying non-hazardous contaminated soils during excavation, including the specific model and manufacturer of intended organic vapor monitoring equipment and calibration procedures to be used. It should also include the training and experience of the personnel who will operate the equipment.
2. The Contractor's procedures for safely handling non-hazardous contaminated soils. The procedures must include personnel safety and health as well as environmental protection considerations.
3. For the proposed laboratory for analysis of representative soil samples, provide the following: (a) name, (b) address, (c) telephone number, and (d) New York State Department of Health's (NYSDOH) Environmental Laboratories Accreditation Program (ELAP) status.
4. Identification of the Contractor's proposed waste transporter(s) (hauler). This information must include:
    a) Name and Waste Transporter Permit Number;
    b) Address;
    c) Name of responsible contact for the waste transporter;
    d) Telephone number for the contact;
    e) All necessary permit authorizations for each type of waste transported; and,
    f) Previous experience in performing the type of work specified herein.
5. The name and location of the facility where an off-site scale is located. The Contractor must outline the procedures for controlling trucks leaving the work site and enroute to the off-site scale.
6. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures may include, but are not limited to, agreements from the intended disposal facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility.
7. A backup facility must be provided, should the staging/stockpile areas become unavailable, insufficient in area, or presented by some other unforeseen difficulty.
8. Identification of the Contractor's two proposed Treatment Storage or Disposal (TSD) facilities for contaminated soils (primary and back-up) for final disposal of the soils. Both primary and backup TSD facilities must be currently state-licensed disposal facilities approved to receive contaminated soil. The information required for each facility must include:
    a. General Information
        i. Facility name and the State identification number;
        ii. Facility location;
        iii. Name of responsible contact for the facility;
        iv. Telephone number for contact;
        v. Signed letter of agreement to accept waste as specified in this Specification. The letter must indicate agreement to handle and accept the specified

estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed necessary; and,

vi. Unit of measure utilized at disposal facility for costing purposes.

b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility.

c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued.

d. The Contractor must specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor must identify the capacity available in the units and the capacity reserved for the subject waste.

e. The Contractor must provide the date of the proposed facility's last compliance inspection.

f. A list of all active (unresolved) compliance orders (or agreements), enforcement notices, or notices of violations issued to the proposed facility must be provided. The source and nature of the cause of violation must be stated, if known.

9. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

8.01 C1.2 MATERIALS.

A. The Contractor must provide containers as specified in the United States Department of Transportation (USDOT) regulations.

B. The Contractor must provide polyethylene sheeting, which is to be placed under (20mil. thickness minimum) and over (10 mil. thickness minimum) soil piles.

C. The Contractor must assure that the waste transporter's appropriate choice of vehicles and operating practices are fitted to prevent spillage or leakage of non-hazardous contaminated material during transportation.

D. The Contractor must provide, install, and maintain any temporary stockpiling or loading facilities on site as required until completion of material handling activities. The location and design of any such facilities must be included in the MHP.

8.01 C1.3 CONSTRUCTION DETAILS.

A. Material Handling

1. Immediately after excavation of non-hazardous contaminated soil, the Contractor must:

a. Load material directly onto trucks/tankers/roll offs for disposal off site; or,

b. If interim stockpiling is required, place non-hazardous contaminated soil on a minimum of 20 mil. polyethylene sheeting and cover it securely by minimum of 10 mil. polyethylene sheeting to protect against cross contamination, airborne dust, leaching or runoff of contaminants into the subsurface, groundwater, or stormwater. Weight or secure the sheeting by appropriate means and seal seams as approved by the DDC to prevent tearing or removal by wind or weather. Grade surrounding surface to provide for positive drainage away from pile. Each stockpile must not exceed 500 cubic yards. Non-hazardous contaminated soils must be stockpiled separately from non-contaminated and hazardous soil at an off-site location approved by DDC or secured on-site by the Contractor, meeting all required Federal, State and Local stipulations. Stockpiles must be at least 800 feet away from any sensitive receptors, such as schools, daycare center, hospitals, nursing homes, etc., and at least 100 feet away from any water body.

2. Institute appropriate procedures and security measures to ensure the protection of site personnel and the public from non-hazardous contaminated materials as described in the approved MHP, Environmental Health & Safety Plan (EHASP), and Item 8.01 S - Health and Safety.

3. Any soil encountered that appears to contain unknown contaminants (based on visual, odor, or other observation), or that vary substantially from the material originally identified must be segregated in stockpiles and the Environmental Consultant promptly notified to collect soil samples for analysis. Construct stockpiles to the same requirements as stated in subsection (A)(1)(b) above.

4. Provide any dewatering that is necessary to complete the work. Contaminated water must be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

5. Provide and operate field organic vapor test equipment, a PID or a flame ionization detector (FID), to detect general organic vapor levels at intervals of approximately 50 cubic yards of soil excavated, when visual or odor observations indicate the material may substantially differ from the soil previously excavated, and/or as directed by the Environmental Consultant.

B. Off-Site Transportation to Disposal Facility

1. General

a. The Contractor must furnish all labor, equipment, supplies and incidental costs required to transport non-hazardous contaminated material from the work area to the off-site disposal facility, and any other items and services required for transporting non-hazardous contaminated material for disposal at an off-site facility.

b. The Contractor will be responsible for tracking all materials and vehicles from the site to the off-site scale at the final TSD facility.

c. The Contractor must submit to the Engineer the certified tare and gross weight slips for each load received at the accepted facility which must be attached to each returned manifest. These documents must be maintained and kept with project field records.

d. Non-hazardous contaminated soils must be delivered to the disposal or treatment facility within 30 calendar days after excavation.

e. The Contractor must coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule.

f. The Contractor must inspect all vehicles leaving the project site to ensure that non-hazardous contaminated soils adhering to the wheels or undercarriage are removed prior to the vehicle leaving the site.

g. The Contractor must obtain letters of commitment from the waste haulers and the TSD facility to haul and accept shipments when directed by the Engineer in consultation with OEHS.

h. The Contractor must provide waste profile forms to OEHS for review and approval before transporting non-hazardous contaminated soil to the approved TSD facility.

2. Hauling

a. The Contractor must coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities must be measured and recorded upon arrival at the disposal facility. If any deviation between the two (2) records occurs, the matter is to be reported immediately to the Engineer and to be resolved by the Contractor to the satisfaction of the Engineer.

b. The Contractor will be held responsible, at its own cost, for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.

c. The Contractor must ensure that trucks are protected against contamination by properly covering and lining them with polyethylene sheeting or by decontaminating them prior to and between acceptance of loads. Trucks with loaded non-hazardous contaminated soil must be covered securely with tarps before leaving the project site to prevent generation of airborne dust during hauling.

d. The Contractor will be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.

e. The Contractor must only use the transporter(s) identified in the approved MHP for the performance of work. A revised MHP or an addendum to the original approved MHP must be submitted to OEHS for review and approval at no additional cost to the City for any use of substitute or additional transporters.

f. The Contractor must develop, document, and implement a policy for accident prevention.

g. The Contractor must not combine non-hazardous contaminated materials from other projects with material from this project.

h. No material will be transported until approval by the Engineer is obtained.

3. Off-Site Disposal

a. The Contractor must use only the disposal facility(ies) identified in the approved MHP for the performance of the work. A revised MHP or an addendum to the original approved MHP must be submitted to OEHS for review and approval at no additional cost to the City for any use of substitutions or additions of disposal facilities.

b. The Contractor must be responsible for acceptance of the materials at an approved facility, for ensuring that the facility is properly permitted to accept the stated materials, and for ensuring that the facility provides the stated treatment and/or disposal services.

c. The City reserves the right to contact and visit the TSD facility, and regulatory agencies to verify the agreement to accept the stated materials and to verify any other information provided.

d. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The alternate facility(ies) must be approved in writing by the Engineer in the same manner and with the same requirements as for the original facility(ies). This must be done at no extra cost or delay to the City.

e. The Contractor must obtain manifest forms and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest must be submitted to the Engineer within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. The signed manifests must be maintained and kept with the project field records. Any manifest discrepancies must be reported immediately to the Engineer and be resolved by the Contractor to the satisfaction of the Engineer.

4. Equipment and Vehicle Decontamination

a. The Contractor must design and construct a portable decontamination station to be used to decontaminate equipment and vehicles that have been used to handle contaminated soil. The cost for this work will be paid under Item 8.01 S - Health and Safety.

b. Water generated during the decontamination process must be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

8.01 C1.4 METHOD OF MEASUREMENT.

A. Quantities for contaminated soils will be measured in tons. The tonnage will be determined by off-site truck scales, as per Subsection 8.01 C1(3)(B)(1), that are capable of generating load tickets.

B. Final disposal of hazardous soil will be paid for under Item 8.01 H – Handling, Transporting and Disposal of Hazardous Soil.

C. Disposal of contaminated water will be paid for under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water. Backfill will be paid for under its respective item as specified in the Contract Documents.

D. The Environmental Consultant will be paid under Item 8.01 S – Health and Safety.

8.01 C1.5 PRICE TO COVER.

The unit bid price per ton for Item 8.01 C1 must include the cost of furnishing all labor, materials, equipment plan, and insurance for excavation, handling, transportation, disposal, documentation, fees, permits, loading, stockpiling, hauling, and any other incidentals necessary to complete all the work as specified herein for handling, transporting, and disposal of non-hazardous contaminated soil.

Payment will be made under:

ITEM NUMBER	DESCRIPTION	PAY UNIT
8.01 C1	Handling, Transporting and Disposal of Non-Hazardous Contaminated Soil	Tons

ITEM 8.01 C2 SAMPLING AND TESTING OF Non-hazardous CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES

8.01 C2.1 WORK TO INCLUDE.

A. Description

The work will consist of collecting and analyzing representative samples of soil to be excavated in-situ and/or ex-situ from stockpiles for parameters typically requested by the disposal facilities to determine if the soil to be excavated is suitable for reuse, or to be hauled off-site for disposal purposes as contaminated and/or hazardous soil.

B. Sampling and Laboratory Analysis

1. At least forty-five (45) days prior to the commencement of work, the Contractor's Environmental Consultant must submit an FSP and an Investigation Health and Safety Plan (Investigation HASP) to OEHS for review and approval, prior to conducting the field sampling. The FSP must include, at a minimum, the following information:

    a. Project information;

    b. Description of sample collection methodology for soil which appears to contain contaminants based on PID readings and field observation;

    c. Type of analyses;

    d. Sample preservation and handling;

    e. Training and experience of the personnel who will collect the samples;

    f. Equipment decontamination;

    g. Analytical laboratory's name, address, New York State Department of Health's ELAP certification number, and telephone number;

    h. Map of the project area;

    i. Sample location plan; and,

    j. Chain of Custody.

    The Investigation HASP must identify actual and potential hazards associated with planned sampling field activities and stipulate appropriate health and safety procedures, so as to minimize field personnel exposures to physical, biological, and chemical hazards that may be present in the sampling media. The Investigation HASP must include, at a minimum, the following information:

    a. Project information;

    b. Description of work to be performed;

    c. Names of responsible health and safety personnel;

    d. Worker training;

    e. Job hazard analysis;

    f. Confined Space Entry Plan (if applicable);

    g. Personal monitoring (if applicable);

    h. Community Air Monitoring Plan (CAMP, if applicable);

    i. Personnel Protection Equipment (PPE);

j. Decontamination;

k. Safety rules;

l. Spill prevention and control, dust control, vapor/odor suppression procedures;

m. Identification of nearest hospital and route; and,

n. Emergency Incident Reporting.

2. The Contractor's Environmental Consultant must collect one (1) grab sample and one (1) composite sample per 500 cubic yards of soil to be excavated in-situ and/or ex-situ from stockpiles. Sample locations must be placed A) throughout or along areas within the project limits, and B) within any portion of the project area that exhibits any of the characteristics described in Section 8.01 C1.1 A (evidence of potential contamination via elevated PID readings, olfactory or visual evidence). For in-situ sampling, each grab soil sample must be collected from either the 6-inch interval above the water table (when encountered), or the 6-inch interval above the bottom of the proposed excavation depth (where recovery allowed), or from the 6-inch interval showing the highest potential for contamination based on field observation. For composite soil sampling, grid sampling must be performed for projects with excavation depth deeper than six (6) feet below grade. Each composite sample must consist of five (5) grab samples and discrete aliquots collected from various intervals along the depth of excavation at each sampling boring location. For stockpiled soils, each composite sample must consist of five (5) grab samples collected from various depths within each soil stockpile, at least two feet below the soil surface. For drummed soil, one (1) composite sample per 10 drums must be collected. Each composite soil sample must consist of one (1) grab sample from each of the 10 drums.

3. Laboratory sampling should include analyses for VOCs, Polycyclic Aromatic Hydrocarbons (PAHs), PCBs, Toxicity Characteristic Leaching Procedure (TCLP) Metals (Resource Conservation and Recovery Act [RCRA] 8), the three RCRA Characteristics, ignitability, reactivity, and corrosivity, and Paint Filter Test. Additionally, should the disposal facility(ies) require specific analyses to accept material, the additional analyses should be included at no additional cost to the City.

4. Should the Contractor seek to remove non-contaminated excess soils from the site, the Contractor will be required to coordinate the Beneficial Use Determination (BUD) with NYSDEC prior to moving the soils in accordance with the 6 New York Code, Rules, and Regulations (NYCRR) Parts 360.12 and 360.13. The Contractor must keep the Engineer informed of the approval status and removal schedule of any and all soils being removed from the site which are not going to an approved disposal facility.

5. The quality of the data from the sampling program is the Contractor's responsibility. The Contractor must furnish all qualified personnel, materials, equipment and instruments necessary to carry out the sampling. Unless directed otherwise, all sampling procedures must follow the NYSDEC sampling guidelines and protocols. All sampling must be conducted by a qualified person trained in sampling protocols using standard accepted practices for obtaining representative samples.

6. Each grab and composite sample must be analyzed for all parameters required by disposal facilities accepting contaminated and hazardous soil, in addition to any specific criteria a sample is being analyzed for.

7. All sample containers must be marked and identified with legible sample labels, which must indicate the project name, sample location and/or container, the sample number, the date and time of sampling, preservatives utilized and other information that may be useful in determining the character of the sample. Chain-of-custody must be tracked from laboratory issuance of sample containers through laboratory receipt of the samples.

8. The Contractor must maintain a bound sample logbook. The Contractor must provide the Engineer access to it at all times and must turn it over to the Engineer in good condition at the completion of the work. The following information, at a minimum, must be recorded to the log:

    a. Sample identification number;

    b. Sample location;

    c. Field observation;

    d. Sample type;

    e. Analyses;

    f. Date/time of collection;

    g. Collector's name;

    h. Sample procedures and equipment utilized; and,

    i. Date sent to laboratory and name of laboratory.

9. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described in subsection 8.01 C2(1)(B)(4) if the situation warrants. The substitute sampling parameters will be of equal or lesser monetary value than those described in subsection 8.01 C2(1)(B)(4), as determined by industry laboratory pricing standards.

10. Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the sampling location and must be properly disposed after use.

11. The Contractor's Environmental Consultant must prepare a Field Sampling Result Report (FSSR), tabulate the analytical results, and compare the data to the applicable NYSDEC Part 375.6 SCOs and TCLP for Hazardous Waste published in RCRA and 6 NYCRR Part 371, or 40 CFR Section 261. If the soil is to be disposed of in a disposal facility outside of the State of New York, the soil sampling data must also be compared to the applicable regulatory criteria established by the state in which the disposal facility is located. The FSSR, with the tabulated tables and laboratory analytical data, must be submitted to OEHS for review and approval prior to any soil reuse or disposal activities.

12. Soils exceeding any of the hazardous characteristic criteria meet the legal definition of hazardous soils (rather than non-hazardous contaminated soils) and must be transported or disposed of under Item 8.01 H – Handling, Transporting and Disposal of Hazardous Soil. All analyses must be done by a laboratory that has received approval from the ELAP for the methods to be used. The Contractor must specify the laboratory in the MHP.

13. The Contractor must contact the disposal facility where the waste will be sent for permanent disposal and arrange to collect any additional samples required by the facility. The cost associated with additional sampling and testing must be included in the bid price of this Item.

8.01 C2.2 METHOD OF MEASUREMENT.

Quantities for samples must be measured as the number of sets of samples that are tested. A set will be defined as one (1) grab and one (1) composite samples per 500 cubic yards to be analyzed for the full range of parameters as specified in subsection 8.01 C2(1)(B)(3).

8.01 C2.3 PRICE TO COVER.

The unit price bid per set for Item 8.01 C2 will include the cost of furnishing all labor, materials, equipment, plan, and insurance necessary for sampling, handling, transporting, testing, documentation, fees, permits, and any other incidentals necessary to complete the work as specified herein for in-situ and ex-situ soil sampling and analysis for waste disposal parameters.

Payment will be made under:

Item No.	Description	Pay Unit
8.01 C2	SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	SETS

ITEM 8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL

8.01 H.1 WORK TO INCLUDE.

A. General

This work will consist of the handling, transportation, and disposal of hazardous soils, which are defined as soils showing exceedances of TCLP for Hazardous Waste published in RCRA, 6 NYCRR Part 371, or 40 CFR Section 261. Hazardous soil can also be contaminated soils, as defined in Item 8.01 C1, but must be handled, transported, and disposed of as hazardous soil under Item 8.01 H, in accordance with the specifications herein. For the purpose of this specification, soil will be defined as any materials excavated below the pavement and base for pavement. Soil will also be defined as any material excavated from wetlands and/or wetlands adjacent areas, or any areas that are not covered with hard pavement (e.g., concrete, asphalt), such as grass or dirt areas.

The Contractor must ensure that all operations associated with the handling, sampling, loading, transportation, and disposal of hazardous materials are in compliance with the applicable Federal, State, and Local statutes and regulations, including Local Law 72 which becomes effective upon discovery of a TCLP lead exceedance. A sampling report, along with the executive summary, must be transmitted to OEHS within 48 hours of discovery to post on DDC website, as required by Local Law 72.

The Contractor must supply all equipment, material and labor required to conduct the specified work under this section. The Contractor must document the excavation, handling, sampling, and testing, transportation, and disposal of hazardous soils. The City must be listed in the disposal documents as the waste generator.

The Contractor must decontaminate all equipment prior to its removal from the exclusion zone and/or following contact with hazardous materials, as detailed in Item 8.01 S - Health and Safety. Water generated during the decontamination process must be disposed of under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

The Contractor must retain an Environmental Consultant, meeting the requirements specified in Section 8.01 C1, and the Contractor is not permitted to self-perform this work. The Environmental Consultant must conduct sampling for laboratory analysis of soil to be excavated to determine whether the soil is contaminated and/or hazardous.

Hazardous soils are defined as soils showing exceedances of Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Levels for Hazardous Waste published in Resource Conservation and Recovery Act (RCRA), 6 New York Codes, Rules, and Regulations (NYCRR) Part 371, or 40 Code of Federal Regulations (CFR) Section 261. Hazardous soils must be handled, transported, and disposed of in accordance with the specifications of this section.

All work under Item 8.01 H must be performed under the direct supervision of the Contractor's Environmental Consultant, as approved by the OEHS.

B. Material Handling Plan:

At least 45 days prior to the commencement of work, the Contractor must submit to the OEHS for review an MHP. The MHP must be approved by the OEHS prior to the Contractor beginning any soil excavation work. The MHP must, at a minimum, consist of:

1. The Contractor's procedures for identifying hazardous soils during excavation, including the specific model and manufacturer of intended organic vapor monitoring equipment and calibration procedures to be used. It should also include the training and experience of the personnel who will operate the equipment.
2. The Contractor's procedures for safely handling hazardous soils or soils which have not yet been tested but are believed to be potentially hazardous. The procedures must include personnel safety and health, as well as environmental protection considerations.
3. Name, address, NYSDOH ELAP status and telephone number of the proposed laboratory for analysis of representative soil samples.

4. Identification of the Contractor's proposed waste transporter(s).This information must include:
    1. Name and Waste Transporter Permit Number;
    2. Address;
    3. Name of responsible contact for the waste transporter;
    4. Telephone number for the contact;
    5. All necessary permit authorizations for each type of waste transported; and,
    6. Previous experience in performing the type of work specified herein.
5. The name and location of the facility where an off-site scale is located. The Contractor must outline the procedures on controlling trucks leaving the work site and enroute to the off-site scale.
6. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures may include, but are not limited to, agreements from the intended disposal facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility.
7. A backup facility must be provided, should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
8. Identification of the Contractor's two proposed Treatment Storage or Disposal (TSD) facilities for hazardous soils (primary and back-up) for final disposal of the hazardous soils. Both primary and backup TSD facilities must be currently USEPA or State-approved RCRA TSD facilities for hazardous soils. The information required for each facility must include:
    a. General Information
        i. Facility name and the USEPA identification number;
        ii. Facility location;
        iii. Name of responsible contact for the facility;
        iv. Telephone number for contact;
        v. Signed letter of agreement to accept waste as specified in this Specification. The letter must indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed necessary; and,
        vi. Unit of measure utilized at disposal facility for costing purposes.
    b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility.
    c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued.
    d. The Contractor must specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor must identify the capacity available in the units and the capacity reserved for the subject waste.
    e. The Contractor must provide the date of the proposed facility's last compliance inspection under RCRA.

f. A list of all active (unresolved) compliance orders (or agreements), enforcement notices, or notices of violations issued to the proposed facility must be provided. The source and nature of the cause of violation must be stated, if known.

9. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

8.01 H.2 MATERIALS.

A. The Contractor must provide containers as specified in the USDOT regulations.

B. The Contractor must provide polyethylene sheeting, which is to be placed under (20 mil. thickness minimum) and over (10 mil. thickness minimum) soil piles.

C. The Contractor must assure that the waste transporter's appropriate choice of vehicles and operating practices are fitted to prevent spillage or leakage of contaminated material during transportation.

D. The Contractor must provide, install, and maintain any temporary stockpiling or loading facilities on site as required until completion of material handling activities. The location and design of any such facilities must be included in the MHP.

8.01 H.3 CONSTRUCTION DETAILS.

A. Material Handling

1. Immediately after excavation of hazardous soil, the Contractor must:

a. Load material directly onto drums/trucks/tankers/roll offs for disposal off site. Containers must be labeled as hazardous soil while being held for disposal; or

b. If interim stockpiling is required, place hazardous soil on a minimum of 20 mil. polyethylene sheeting and cover it securely with polyethylene sheeting a minimum of 10 mil. to protect against cross contamination, airborne dust, leaching or runoff of contaminants into the subsurface, groundwater, or stormwater. Weight or secure the sheeting by appropriate means and seal seams as approved by the Engineer to prevent tearing or removal by wind or weather. Grade surrounding surface to provide for positive drainage away from pile. Each stockpile must not exceed 500 cubic yards. Hazardous soils must be stockpiled separately from uncontaminated and contaminated soil at an off-site location approved by the Engineer or secured on-site by the Contractor, meeting all required Federal, State and Local stipulations. Stockpiles must be labelled as hazardous soil and situated at least 800 feet away from any sensitive receptors, such as schools, daycare center, hospitals, nursing homes, etc., and at least 100 feet away from any water body.

2. Institute appropriate procedures and security measures to ensure the protection of site personnel and the protection of the public from hazardous soils as described in the approved MHP, EHASP, and Item 8.01 S – Environmental Health and Safety.

3. Any soil encountered that appears to contain unknown contaminants (based on visual, odor, or other observation), or that vary substantially from the material originally identified must be segregated in stockpiles and the Environmental Consultant promptly notified to collect soil samples for analysis. Construct stockpiles to the same requirements as stated in subsection (A)(1)(b) above.

4. Provide any dewatering that is necessary to complete the work. Contaminated water must be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

5. Provide and operate field organic vapor test equipment, a PID or an FID, to detect general organic vapor levels at intervals of approximately 50 cubic yards of soil excavated, when visual or odor observations indicate the material may substantially differ from the soil previously excavated and/or as directed by the Environmental Consultant.

C. Off-Site Transportation to Disposal Facility

1. General

a. The Contractor must furnish all labor, equipment, supplies and incidental costs required to transport hazardous material from the work area to the off-site disposal facility, and any other items and services required for transporting hazardous material for disposal at an off-site facility.

b. The Contractor is responsible for obtaining the USEPA hazardous waste generator identification number for the City. The application must be submitted to OEHS for review and approval prior to submission to USEPA. The Contractor must prepare the annual hazardous waste report for the project and submit to the NYSDEC and USEPA.

c. The Contractor will be responsible for tracking all material/vehicles from the site to the off-site scale and to the approved disposal facility.

d. The Contractor must provide to the Engineer certified tare and gross weight slips for each load received at the accepted facility which must be attached to each returned manifest. These documents must be maintained and kept with project field records.

e. Hazardous soils must be delivered to the disposal or treatment facility within 30 calendar days after excavation.

f. The Contractor must coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule.

g. The Contractor must inspect all vehicles leaving the project site to ensure that hazardous soils adhering to the wheels or undercarriage are removed prior to the vehicle leaving the site.

h. The Contractor must obtain letters of commitment from the waste haulers and the TSD facility to haul and accept shipments.

i. The Contractor must provide waste profile forms to OEHS for review and approval before transporting hazardous soil to the approved TSD facility.

2. Hauling

a. The Contractor must coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities must be measured and recorded upon arrival at the disposal facility. If any deviation between the two records occurs, the matter is to be reported immediately to the Engineer and be resolved by the Contractor to the satisfaction of the Engineer.

b. The Contractor will be responsible, at its own cost, for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.

c. The Contractor must ensure that trucks are protected against contamination by properly covering and lining them with polyethylene sheeting or by decontaminating them prior to and between acceptance of loads. Trucks with loaded hazardous soil must be covered securely with tarp before leaving the project site to prevent generation of airborne dust during hauling.

d. The Contractor will be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.

e. The Contractor must only use the transporter(s) identified in the approved MHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from NYSDEC may transport hazardous soil. A revised MHP or an addendum to the original approved MHP must be submitted to OEHS for review and approval at no additional cost to the City for any use of substitute or additional transporters.

f. The Contractor must develop, document, and implement a policy for accident prevention.

g. The Contractor must not combine hazardous materials from other projects with material from this project.

h. No material will be transported until approval by the Engineer is obtained.

3. Off-Site Disposal

a. The Contractor must use only the disposal facility(ies) identified in the approved MPH for the performance of the work. A revised MHP or an addendum to the original approved MHP must be submitted to OEHS for review and approval at no additional cost to the City for any use of substitutions or additions of disposal facility.

b. The Contractor will be responsible for acceptance of the materials at an approved facility, for ensuring that the facility is properly permitted to accept the stated materials, and for ensuring that the facility provides the stated treatment and/or disposal services.

c. The City reserves the right to contact and visit the TSD facility and regulatory agencies to verify the agreement to accept the stated materials and to verify any other information provided.

d. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The alternate facility(ies) must be approved in writing by the Engineer in the same manner and with the same requirements as for the original facility(ies). This must be done at no extra cost or delay to the City.

e. The Contractor must obtain manifest forms, and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest must be submitted to the Engineer within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. The signed manifests must be maintained and kept with the project field records. Any manifest discrepancies must be reported immediately to the Engineer and be resolved by the Contractor to the satisfaction of the Engineer.

f. The Contractor must submit all results and weights to the Engineer.

g. The Contractor is responsible to pay all fees associated with the generation and disposal of all excavated hazardous waste. These fees include, but are not limited to, the New York State Department of Finance and Taxation (DFT) quarterly fees for hazardous waste and the NYSDEC annual hazardous waste regulatory fee program. The Contractor must submit a copy of proof of payment to the Engineer and OEHS.

4. Equipment and Vehicle Decontamination

a. The Contractor must design and construct a portable decontamination station to be used to decontaminate equipment and vehicles that have been used to handle hazardous soil. The cost for this work will be paid under Item 8.01 S - Health and Safety.

b. Water generated during the decontamination process must be disposed of in accordance with Item 8.01 W1 – Removal, Treatment, and Discharge/Disposal of Contaminated Water.

8.01 H.4 METHOD OF MEASUREMENT.

A. Quantities for hazardous soils will be measured in tons. The tonnage will be determined by off-site truck scales, as per Subsection 8.01 H3(C)(1)(C), that are capable of generating load tickets.

B. Final disposal of non-contaminated soil will be paid for under Item 8.01 C1 – Handling, Transporting and Disposal of Non-Hazardous Contaminated Soil.

C. Disposal of decontamination water will be paid for under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

D. Backfill will be paid for under its respective item as specified in the contract document.

E. The Environmental Consultant will be paid under Item 8.01 S – Health and Safety.

8.01 H.5 PRICE TO COVER.

The unit bid price bid per ton for Item 8.01 H will include the cost of furnishing all labor, materials, equipment, plan, and insurance for excavation, handling, transportation, disposal, documentation, fees, permits, loading, stockpiling, hauling, and any other incidentals necessary to complete all the work as specified herein for handling, transporting, and disposal of hazardous soil.

Payment will be made under:

Item No.	Description	Pay Unit
8.01 H	HANDLING, TRANSPORTING, AND DISPOSAL OF HAZARDOUS SOIL	TONS

ITEM 8.01 S Health And Safety

8.01 S.1 WORK TO INCLUDE.

Health and Safety Requirements

A. Scope of Work

It is the Contractor's responsibility to stage and conduct the Contractor's work in a safe manner. The Contractor must implement an EHASP for non-hazardous contaminated or hazardous soil intrusive activities as set forth in OSHA Standards 1910.120 and 1926.650-652. The Contractor must ensure that all workers have at a minimum hazard awareness training. The Contractor must segregate contaminated work area in secured exclusion zones. These zones must limit access to Contractor personnel specifically trained to enter the work area. The exclusion zone must be set up to secure the area from the public and untrained personnel. The project health and safety program will apply to all construction personnel including persons entering the work area. In addition, the Contractor must protect the public from on-site hazards, including subsurface contaminants associated with on-site activities. The EHASP must be signed off by a Certified Industrial Hygienist and reviewed and approved by OEHS.

Work must include, but not be limited to:

1. Implementation of a baseline medical program.
2. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and providing all other health and safety measures.
3. Providing, installing, operating and maintaining on-site emergency medical first aid equipment as specified in this section for which payment is not provided under other pay items in this Contract.
4. Providing, installing, operating, maintaining and decommissioning all equipment and personnel decontamination facilities specified within this section, including, but not limited to, the decontamination pad, decontamination water supply, decontamination water collection equipment and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract.
5. Provide the minimum health and safety requirements for excavation activities within the limits of this Contract.
6. Implement and enforce an EHASP: The EHASP as presented in these specifications is dynamic with provisions for change to reflect new information, new practices or procedures, changing site environmental conditions or other situations which may affect site workers and the public. The EHASP will also address measures for community protection, accident prevention, personnel protection, emergency response/contingency planning, air monitoring, odor control and hazardous chemicals expected on site. Providing a Confined Space Entry Program as defined in the Occupational Safety and Health Act, Confined Space Entry Standard, 29 CFR 1910.146.

B. Environmental Consulting Services

The Contractor must retain an Environmental Consultant to obtain all permits and perform all field screening, air monitoring, community air monitoring, soil and water sampling, and health and safety services.

1. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its Environmental Consultant must ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated materials must have completed a minimum of forty (40) hours of Health and Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program must be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the Environmental Consultant must provide site specific training.
2. The Contractor must ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations must receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

C. Submittals

1. The Contractor must submit a written EHASP, as specified herein, to OEHS for review and approval. The written EHASP must be submitted, within thirty (30) calendar days after the availability of analytical results of the soil and groundwater testing, as required under Section 8.01 C2 and Section 8.01 W2. The Contractor must make all necessary revisions required by OEHS and resubmit the EHASP to OEHS for acceptance. Start-up work for the project will not be permitted until written acceptance has been issued by OEHS.
2. Daily safety logs must be maintained by the Contractor and must be submitted to the Engineer either on request or on completion of the work. Training logs must be maintained by the Contractor and submitted to the Engineer either on request or on completion of the work. Daily logs on air monitoring during excavation activities must be prepared and maintained by the Contractor and submitted to the Engineer either on request or upon completion of the work.
3. A closeout report must be submitted by the Contractor to the Engineer upon completion of the work within the defined exclusion zones. This report must summarize the daily safety and monitoring logs and provides an overview of the Contractor's performance regarding environmental and safety issues. The report must carefully document all areas where contamination has been found including pictures, addresses of locations, and potential sources.
4. Medical Surveillance Examinations: The Contractor must submit to the Engineer the name, office address and telephone number of the medical consultant utilized. Evidence of baseline medical examinations together with the evidence of the ability to wear National Institute for Occupational Safety and Health (NIOSH) approved respirators (as specified in American National Standards Institute (ANSI) Z88.6) must be provided to the Engineer for all construction personnel who are to enter the exclusion zones.
5. Accident Reports: All accidents, spills, or other health and safety incidents must be reported to the Engineer.

D. Health and Safety Plan

The EHASP must comply with OSHA regulations 29 CFR 1910.120/1926.65. This document must at a minimum contain the following:

1. Description of work to be performed
2. Site description
3. Key personnel
4. Worker training procedures
5. Work practices and segregation of work area
6. Hazardous substance evaluation
7. Hazard assessment

8. Personal and community air monitoring procedures and action levels
9. Personal protective equipment
10. Decontamination procedures
11. Safety rules
12. Emergency procedures
13. Spill prevention and control, as well as spill reporting procedures
14. Dust control, vapor/odor suppression procedures
15. Identification of the nearest hospital and route
16. Confined space procedures
17. Excavation safety procedures

8.01 S.2 MEASUREMENT.

Health and Safety Requirements

A. 25% of the lump sum price will be paid when the following items are implemented or mobilized:

Medical surveillance program

Health and safety training

Health and safety plan

Environmental and personnel monitoring

Instrumentation

Spill control

Dust control

Personnel and equipment decontamination facilities

Personnel protective clothing

Communications

Mobilization

B. 50% will be paid in proportional monthly amounts over the period of work.

C. 25% will be paid when the operation is demobilized and removed from the project site.

8.01 S.3 PRICE TO COVER.

Health and Safety Requirements

The lump sum price bid for the health and safety requirements will include all labor, materials, equipment, and insurance necessary to complete the work in accordance with these specifications. The price bid will include, but not be limited to, the following:

A. Providing training, safety personnel, air monitoring and medical examinations as specified.

B. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and all other health and safety activities or costs not paid for under other pay items in this Contract.

C. Providing, installing, operating and maintaining on-site emergency medical and first aid equipment. This includes all furnishings, equipment, supplies and maintenance of all medical equipment, and all other health and safety items and services for which payment is not provided under other pay items in this Contract.

D. Providing, installing, operating, maintaining, and decommissioning all personnel and equipment decontamination facilities, including decontamination pad, decontamination water supply, and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract. Vehicle decontamination pads will be included in the price of this item. Disposal of decontamination fluid will be paid for under Item 8.01 W1 – Removal, Treatment, and Discharge/Disposal of Contaminated Water.

E. Spill Control

1. Payment will account for furnishing, installing, and maintaining all spill control equipment and facilities. Payment will include equipment and personnel to perform emergency measures required to contain any spillage and to remove spilled materials and soils or liquids that become contaminated due to spillage during work within the exclusion zones and handling of excavated soils and liquids from these areas. This collected spill material will be properly disposed of.

2. Payment under this item will not include testing, handling, transportation or disposal of petroleum-contaminated/potentially hazardous soils excavated during construction. The price for this work will be paid for under Items 8.01 C1 – Handling, Transporting and Disposal of Non-Hazardous Contaminated Soil, 8.01 C2 – Sampling and Testing of Contaminated/Potentially Hazardous Soil for Disposal Purposes or 8.01 H – Handling, Transporting and Disposal of Hazardous Soil, as appropriate.

F. Dust Control

Payment will account for furnishing, installing, and maintaining dust control equipment and facilities to be used whenever applicable dust levels are exceeded. Payment will include all necessary labor, equipment, clean water, foam, and all other materials required by the Dust Control Plan. The NYSDOH Community Air Monitoring Plan (CAMP) may be used as guidance.

G. Vapor/Odor Suppression

Payment will account for furnishing, installing and maintaining vapor/odor control equipment and facilities to be used whenever organic vapor monitoring or the presence of odors indicates that vapor suppression is required to protect workers or the public. Payment will include all necessary labor, equipment, clean water, foam and all other materials required by the Vapor/Odor Suppression Plan.

H. Mobilization/Demobilization

1. Mobilization

Payment will include the following, but not be limited to:

a. All work required to furnish, install and maintain all signs, fencing, support zone facilities, parking areas and all temporary utilities;

b. All work required to furnish, install, and maintain an office space with phone and utilities for health and safety personnel;

c. All work required for complete preparation of lay down area for roll-off containers, including sampling, and any required fencing;

d. All direct invoiced cost from bonding companies and government agencies for permits and costs of insurance; and

e. All other items and services required for mobilization and site preparation.

2. Demobilization

Payment will include but not be limited to: All work required to sample the area; remove from the site all equipment, temporary utilities and supporting facilities; performance of necessary decontamination and repairs; disposal of disposable equipment and protective gear and other items and services required for complete demobilization.

Payment will be made under:

Item No.	Description	Pay Unit
8.01 S	HEALTH AND SAFETY	LUMP SUM

ITEM 8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER

8.01 W1.1 WORK TO INCLUDE.

General: This work must consist of the proper removal and disposal of all contaminated groundwater and decontamination water generated during construction operations. The Contractor must be solely responsible for the proper disposal or discharge of all contaminated water generated at the job site. The Contractor will have the option of treating water on-site for discharge to the sewer system or removing contaminated water for off-site disposal. The Contractor must be responsible to choose a method compatible to the construction work and will be compensated on a per day basis regardless of method employed. The Contractor will be compensated for only those days where the system is in full operation.

The Contractor must retain a dewatering/water treatment Specialist (hereinafter the “Specialist”) and laboratory as specified under Item 8.01 W2 – Sampling and Testing of Contaminated Water, to conduct any testing that may be required for disposal of impacted water.

The dewatering/water treatment Specialist is responsible to obtain all permits; perform all water sampling, testing; and provide ancillary services related to dewatering and water treatment. The Specialist must at a minimum provide documentation to OEHS demonstrating the minimum requirements as set forth below:

1. The Specialist must demonstrate that it has, at a minimum, three (3) years’ experience in the design of dewatering plans. The Specialist should demonstrate expertise dealing with issues associated with contaminated water. During that three (3) year period, the Specialist must demonstrate that it provided dewatering and water treatment systems as a routine part of its daily operations.
2. The Specialist must be experienced in work of this nature, size, and complexity and must have previous experience in working with the NYSDEC.
3. The Specialist must furnish a list of at least five (5) projects completed within the last (3) years, identifying the location, nature of services provided, owner, owner’s contact, contact’s telephone number, project duration and value of the projects.
4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its Environmental Consultant must ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated material must have completed a minimum of forty (40) hours of Health and Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program must be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the Specialist will be responsible to provide site-specific training to its employees and other affected personnel.
5. The Contractor must ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations must receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

The Contractor must document all operations associated with the handling, sampling and disposal of contaminated water, and ensure that they are following applicable Federal, State and Local statutes and regulations.

The Contractor must supply all labor, equipment, transport, plant, material, treatment, and other incidentals required to conduct the specified work of this section.

If water will be disposed of into the sewer system, the Contractor must ensure the Specialist treats the water to comply with the New York City Department of Environmental Protection (NYCDEP) Sewer Effluent Limit concentrations prior to discharge. The Contractor is responsible for providing settling or filtering tanks

and any other apparatus required by NYCDEP. Alternatively, the Contractor can provide a plan for transport and disposal at an off-site waste disposal facility

Within forty-five (45) calendar days after award of Contract, the Contractor must submit to OEHS for review and approval, a Water Handling Plan (WHP). The WHP must be approved by OEHS prior to the Contractor's commencement of work. The minimum requirements for the WHP are specified herein Item 8.01W 1.2, for each type of disposal (disposal into the sewer or off-site disposal). The Contractor must maintain a complete, up to date copy of the WHP on the job site at all times.

8.01 W1.2 CONSTRUCTION DETAILS.

For each disposal method the Contractor proposes to utilize (disposal to sewer or off-site disposal), the WHP must include the information required in paragraphs A and B below, as appropriate.

A. On-site treatment and discharge into New York City sewers.

1. Regulations: The Contractor must comply with all applicable regulations. This includes but may not be limited to:

   Title 15-New NYCDEP Sewer Use Regulations.

2. Permits: The Contractor is solely responsible to obtain all necessary and appropriate Federal, State and Local permits and approvals. The Contractor will be responsible for performing all and any system pilot tests required for permit approval. This includes but may not be limited to:

   a. Industrial waste approval for the New York City sewer system.

   b. Groundwater discharge permit for the New York City sewer system (NYCDEP Division of Sewer Regulation and Control), if discharge to sewer exceeds 10,000 gallons per day.

   c. The Contractor must comply with NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Runoff from Construction Activity ~~(~~SPDES General Permit~~)~~ GP-0-20-001 or its successor.

   d. Long Island well permit for Brooklyn and Queens sites, if well points are used for dewatering.

   e. Wastewater quality control application, NYCDEP.

3. The WHP for this portion of the work must include the following at a minimum:

   a. Identification and design of Contractor's proposed treatment to assure that the water meets the NYCDEP sewer use guidelines prior to discharge to the sewer, including identification of all materials, procedures, settling or filtering tanks, filters and other appurtenances proposed for treatment and disposal of contaminated water.

   b. The name, address and telephone number of the contact for the Contractor's proposed chemical laboratory, as well as the laboratory's certifications under Federal, State or non-governmental bodies.

   c. The name, address and telephone number of the contact for the Contractor's proposed Environmental Consultant.

   d. Copies of all submitted permit applications and approved permits the Contractor have received.

4. Materials

The Contractor must supply all settling or filtering tanks, pumps, filters, treatment devices and other appurtenances for treatment, temporary storage and disposal of contaminated water. All equipment must be suitable for the work described herein.

5. Execution

a. The Contractor is solely responsible for disposal of all water, in accordance with all Federal, State and Local regulations.

b. The Contractor is solely responsible for any treatment required to assure that water discharged into the sewer is in compliance with all permits and Federal, State and Local statutes and regulations.

c. The Contractor is solely responsible for the quality of the water disposed of into the sewers.

d. The Contractor is responsible for sampling and testing of water for the NYCDEP Sewer Effluent Limit concentrations. The quality of the data is the Contractor's responsibility. Any sampling and testing must be conducted and paid in accordance with Item 8.01 W2 – Sampling and Testing of Contaminated Water.

e. The Contractor will be responsible to maintain the discharge rate to the sewer such that all permit requirements are met, the capacity of the sewer is not exceeded and no surcharging occurs downstream due to the Contractor's actions. Dewatering by means of well points or deep wells will not be allowed in the Boroughs of Brooklyn or Queens where the rate of pumping exceeds forty-five (45) gallons per minute unless the appropriate permit has been secured from the NYSDEC.

f. Disposal of Treatment Media

(1) The Contractor will be responsible for disposal or recycling of treatment media in accordance with all Federal, State and Local regulations.

(2) The Contractor must provide the Engineer with all relevant documentation concerning the disposal of treatment media, including manifests, bills of lading, certificates of recycling or destruction and other applicable documentation.

(3) Disposal of treatment media will not be considered a separate pay item; instead it will be considered as incidental work thereto and included in the unit price bid.

B. <u>Off-Site Disposal</u>

1. Regulations: The Contractor must conform to all applicable Federal, State and Local regulations pertaining to the transportation, storage and disposal of any hazardous and/or non-hazardous materials as listed in Attachment 2.

2. The following must be submitted to the Engineer prior to initiating any off-site disposal:

a. (1) Name and waste transporter permit number

(2) Address

(3) Name of responsible contact for the waste transporter

(4) Any and all necessary permit authorizations for each type of waste transported

(5) Previous experience in performing the type of work specified herein

b. General information for each proposed treatment/disposal facility and at least one backup treatment/disposal facility

(1) Facility name and USEPA identification number

(2) Facility location

(3) Name of responsible contact for the facility

(4) Telephone number for contact

(5) Unit of measure utilized at facility for costing purposes

c. A listing of all permits, licenses, letters of approval and other authorizations to operate, which are currently held and valid for the proposed facility as they pertain to receipt and management of the wastes derived from this Contract.

d. A listing of all permits, licenses, letters of approval and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued. Provide dates of application(s) submitted. Planned submittals must also be noted.

e. The Contractor must specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste and provide dates of construction and beginning of use, if applicable. Drawings may be provided. The Contractor must identify the capacity available in the units and the capacity reserved for the subject waste.

f. The Contractor must provide the date of the proposed facility's last compliance inspection.

g. A list of all active (unresolved) compliance orders, agreements, enforcement notices or notices of violations issued to the proposed facility must be submitted. The source and nature of the cause of violation must be stated, if known. If groundwater contamination is noted, details of the facility's groundwater monitoring program must be provided.

h. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

3. Materials

All vessels for temporary storage and transport to an off-site disposal facility must be as required in DOT regulations.

4. Execution

a. General

(1) The Contractor must organize and maintain the material shipment records/manifests required by Federal, State and Local laws. The Contractor must include all bills of lading, certificates of destruction, recycling or treatment and other applicable documents.

(2) The Contractor must coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule must be compatible with the availability of equipment and personnel for material handling at the job site.

(3) The Contractor must inspect all vehicles leaving the project site to ensure that contaminated liquids are not spilling and are contained for transport.

(4) The Contractor must obtain letters of commitment from the waste haulers and the treatment, disposal or recovery facility to haul and accept shipment. The letter must indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed as necessary.

(5) The Contractor must verify the volume of each shipment of water from the site.

(6) The Contractor is responsible for sampling and testing of water for off-site disposal. The quality of the data is the Contractor's responsibility. Any sampling and testing

must be conducted and paid in accordance with Item 8.01 W2 – Sampling and Testing of Contaminated Water.

(7) The Contractor is responsible for any additional analyses required by the TSD facility, and for the acceptance of the water at an approved TSD facility.

b. Hauling

(1) The Contractor must not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.

(2) The Contractor must coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities must also be measured and recorded upon arrival at the TSD facility(ies). If any deviation between the two records occurs, the matter is to be reported immediately to the Engineer and must be resolved by the Contractor to the satisfaction of the Engineer.

(3) The Contractor will be responsible for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site. This cleanup must be accomplished at the Contractor's expense.

(4) The Contractor will be responsible for inspecting the access routes for road conditions, overhead clearance and weight restrictions.

(5) The Contractor must only use the transporter(s) identified in the WHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from NYSDEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the Engineer at no additional cost to the City.

(6) The Contractor must develop, document, and implement a policy for accident prevention.

(7) The Contractor must not combine waste materials from other projects with material from this project.

(8) The Contractor must obtain for the City a hazardous waste generator identification number and will sign the manifest as the generator, if necessary.

(9) No material must be transported until approved by the Engineer.

c. Disposal Facilities

(1) The Contractor must use only the TSD facility(ies) identified in the WHP for the performance of the work. Substitutions or additions must not be permitted without prior written approval from OEHS, and, if approved, must be at no extra cost to the City.

(2) The Contractor will be responsible for acceptance of the material at an approved TSD facility, for ensuring that the facility is properly permitted to accept the stated material, and that the facility provides the stated storage and/or disposal services.

(3) The City reserves the right to contact and visit the disposal facility and regulatory agencies to verify the agreement to accept the stated material and to verify any other information provided. This does not in any way relieve the Contractor of the Contractor's responsibilities under this Contract.

(4) In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The Contractor is responsible for making the necessary arrangements to utilize the facility(ies), and the alternate facility(ies) must be approved in writing by the Engineer in the same manner and with the same requirements as for the original facility(ies). This must be done with no extra cost or delay to the City.

d. Equipment and Vehicle Decontamination

(1) The Contractor must design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting the exclusion zone. The cost for this work will be paid under Item 8.01 S – Health and Safety.

8.01 W1.3 METHOD OF MEASUREMENT.

The quantity for on-site treatment and discharge or off-site disposal will be on a per day basis.

8.01 W1.4 PRICE TO COVER.

A. The per day price bid for Item 8.01 W1 will include the cost of furnishing all labor, materials, equipment, plan, and insurance for handling, transportation, disposal, documentation, permits, hauling, mobilization and demobilization, and any other incidentals thereto to complete the work.

B. The Contractor will not be paid for water that is within the NYCDEP Sewer Discharge Limits.

Payment will be made under:

Item No.	Description	Pay Unit
8.01 W1	REMOVAL, TREATMENT AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	DAY

ITEM 8.01 W2 Sampling And Testing Of Contaminated Water

8.01 W2.1 WORK TO INCLUDE.

A. Description

The work will consist of sampling and testing of potentially contaminated groundwater, surface runoff within the excavated area and all contaminated water generated during the decontamination process.

B. Sampling and Testing

1. The Contractor is responsible, at a minimum, for sampling and testing of contaminated water for the NYCDEP Sewer Effluent Limit concentrations as listed in Attachment 1, and in accordance with the Engineer-approved FSP and the Investigation HASP, as specified in 8.01 C2. The quality of the data is the Contractor's responsibility. Any additional testing required by the Federal, State and/or disposal facilities must be included in the bid price of this Item.
2. All sampling and testing must be conducted by a person trained in sampling protocols using accepted standard practices and/or the NYSDEC sampling guidelines and protocols.
3. All sample containers must be marked with legible sample labels which must indicate the project name, sample location and/or container, the sample number, the date and time of sampling, preservatives utilized, how the sample was chilled to 4 degrees Celsius, and other information that may be useful in determining the character of the sample.
4. Chain-of-custody must be tracked from laboratory issuance of sample containers through receipt of the samples.
5. The Contractor must maintain a bound sample log book. The Contractor must provide the Engineer access to it at all times and must turn it over to the Engineer in good condition at the completion of the work. The following information, as a minimum, must be recorded to the log:
    a. Sample identification number
    b. Sample location
    c. Field observation
    d. Sample type
    e. Analyses
    f. Date/time of collection
    g. Collector's name
    h. Sample procedures and equipment used
    i. Date sent to laboratory/name of laboratory
6. Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the site, and must be properly disposed of after use.
7. Samples must be submitted to the Contractor's laboratory within the holding times for the parameters analyzed.
8. All analyses must be done by a laboratory that has received approval from the NYSDOH's ELAP for the methods to be done. The Contractor must specify the laboratory in the WHP.
9. Analytical results for water discharged to the sewer and for off-site disposal must be submitted to the Engineer no later than five (5) days after sample collection.

10. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described above, if the situation warrants. The substitute sampling parameters will be of equal or lesser monetary value than those described above, as determined by industry laboratory pricing standards.

8.01 W2.2 METHOD OF MEASUREMENT.

Quantities for samples will be measured as the number of sets of samples that are tested for the NYCDEP Sewer Effluent Limit concentrations. A set will be defined as one (1) representative sample analyzed for the full range of NYCDEP parameters as specified in Attachment 1.

8.01 W2.3 PRICE TO COVER.

The unit price bid per set for Item 8.01 W2 will include the cost of furnishing all labor, materials, equipment, plan, and insurance for handling, transport, sampling, testing, documentation, permits, other incidentals necessary to complete the work of sampling and testing of contaminated water. Any additional costs incurred by the Contractor for sampling and testing of contaminated water will be included in the bid price of this Item.

Payment will be made under:

Item No.	Description	Pay Unit
8.01 W2	SAMPLING AND TESTING OF CONTAMINATED WATER	SETS

SECTION 9.28 –Expanded Work Allowance

9.28.1 PURPOSE.

An Allowance has been established for the items set forth in sub-Section 9.28.3 below ("Expanded Work Allowance" or "EWA"). Payment for the items set forth in sub-section 9.28.3 ("Expanded Work Items") may be made through the EWA, as directed by the Engineer. "Extra Work", "overrun", and "Allowance" are defined by the Standard Construction Contract (*see* Articles 2.1.16, 26.1, and 2.1.4, respectively) and nothing in this Section alters, or will be deemed to alter the interpretation or application of, the Standard Construction Contract, including but not limited to Articles 25, 26, 28, and 78 of the Standard Construction Contract.

9.28.2 PROCESS.

(a) If the Engineer determines that use of the EWA is appropriate, in their sole discretion, the Engineer will prepare a written scope document for the Expanded Work Items for the Contractor's execution ("EWA Scope Memo"). The EWA Scope Memo will set forth the maximum amount payable from the EWA prior to the execution of a final cost memorandum ("Maximum Amount"), in accordance with this Section. The Maximum Amount may be increased from time to time by the Engineer, in their sole discretion, except that the Maximum Amount may not exceed 80% of the Engineer's estimated total cost for such Work (the "Estimated Cost") unless and until a final cost is determined and a final cost memorandum ("Final Cost Memo") executed in accordance with this Section.

(b) Neither the Maximum Amount nor the Estimated Cost will be deemed to be the final cost of the Expanded Work Items. The final cost for the Expanded Work Items will be determined in accordance with Article 26 of the Standard Construction Contract. The Contractor must submit its detailed price proposal for the Expanded Work Items, calculated in accordance with the Contract, within the time period set forth in the EWA Scope Memo or within 90 Days after the executed EWA Scope Memo is issued to the Contractor, whichever is sooner.

(c) Once the EWA Scope Memo is executed and the Contractor is directed to proceed with the Work, DDC will make progress payments, as provided in the Contract, up to the Maximum Amount or until the submission period has expired, whichever occurs sooner.

(d) DDC will not make any progress payments for the performance of the Expanded Work Items beyond the submission period set forth in sub-Section C, above, unless and until a final cost has been determined and a Final Cost Memo executed in accordance with this Section. No amounts above the Maximum Amount set by the Engineer will be payable from the EWA, unless and until a final cost has been determined and a Final Cost Memo executed in accordance with this Section. In all events, the Contractor shall promptly and diligently comply with the Engineer's direction and perform all Work required by the Contract and the EWA Scope Memo.

(e) Upon receipt of the Contractor's cost detailed proposal, DDC will evaluate the proposal and initiate negotiations, as necessary, to determine the final cost of the Expanded Work Items in accordance with Article 26 of the Standard Construction Contract. The Contractor is responsible to furnish time and material records in accordance with Article 28 of the Standard Construction Contract until a Final Cost Memo is executed. If the parties cannot agree on a unit price or fixed price, the Contractor will be paid on the basis of time and material records in accordance with Article 26 the Standard Construction Contract.

(f) A Final Cost Memo will be prepared by the Engineer to be executed by the parties. The total net sum of the amounts added and/or credited under the EWA Scope Memo and payment of the finalized Final Cost Memo constitutes full accord and satisfaction for the costs resulting from the Expanded Work Items. In the event the EWA is insufficient to pay the full amount of the Final Cost Memo, the parties agree to execute change order documents for the remaining funds, subject to registration in accordance with the New York City Charter.

9.28.3 PRICE TO COVER.

Expanded Work Items are those items set forth below. The EWA may be used, in the Engineer's discretion, for the following Expanded Work Items:

(a) Non-material changes in the Work necessary to complete Contract Work due to site conditions that differ from those included in the Contract Documents and that could not have been anticipated by the Contractor.

(b) Non-material changes in the Work directed by the Commissioner that result in a net change in the cost to the Contractor for the Work to be performed under this Contract, including but not limited to the following:

(i) Overruns of unit price items and quantity increases in portions of work within a lump sum item.

(ii) NYCDOT traffic stipulations or permit requirements that significantly differ from those included in the Contract Documents and that could not have been anticipated by the Contractor.

(iii) Changes to the sizes of materials or changes to specifications of materials.

(iv) Materials/structures not included in the Contract Documents that are necessary to complete Contract Work and that could not have been anticipated the Contractor.

9.28.4 BASIS OF PAYMENT.

(a) The fixed sum must be considered the price bid for this item. The fixed sum is not to be altered in any manner by the bidder. Should the amount shown be altered, the new figures will be disregarded, and the original price will be used to determine the total amount bid for the contract.

(b) The payment(s) made under this item will be equal to the Final Cost Memo prepared by the Engineer and executed by the parties in accordance with 9.28.2(f) above as proof of work performed for this item as approved by the Engineer.

(c) The total estimated cost of this item is the "fixed sum" amount shown for this item in the Bid Schedule and shall not be varied in the bid. The "fixed sum" amount is included in the bid solely to ensure that sufficient monies will be available to pay the Contractor for this work, which may be more or less than the fixed sum amount.

(d) The price will cover the cost of all labor, materials, equipment, insurance and incidentals necessary to complete the work under this section in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
9.28	EXPANDED WORK ALLOWANCE	F.S.

The Section below supersedes and replaces Section 9.30 of NYC DOT Standard Specifications dated May 16, 2022

SECTION 9.30 - Stormwater Pollution Prevention

9.30.1. INTENT.

The intent of this section is to address Erosion and Sediment Control (ESC) and pollution prevention during construction and maintenance and guaranty period. The Contractor is advised that within NYC boundaries, in compliance with the Rules of the City of New York Title 15 Chapter 19.1 (15 RCNY Chapter 19.1), DEP is required to review and approve Stormwater Pollution Prevention Plans (SWPPP) that have been prepared to meet the requirements listed in Chapter 19.1. All covered development projects must implement ESC measures in accordance with the NYS Standards and Specifications for Erosion and Sediment Control (also known as The "NYS DEC Blue Book"), dated November 2016 (https://www.dec.ny.gov/chemical/8694.html), as amended.

The objective is to develop and implement a SWPPP that will minimize the pollutants entering the storm sewer systems in compliance with 15 RCNY Chapter 19.1, and the New York State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Runoff from Construction Activity, SPDES General Permit GP-0-20-001 or its successor.

9.30.2. DEFINITIONS.

1. **Designer –** The Design Engineer or Qualified Professional responsible for the design
2. **Qualified Inspector -** A person who is knowledgeable in the principles and practice of erosion sediment control, such as a licensed Professional Engineer, a Certified Professional in Erosion and Sediment Control, or a Registered Landscape Architect.
3. **Qualified Professional -** A person who is knowledgeable in the principles and practice of stormwater management and treatment such as a licensed Professional Engineer or a registered landscape architect or other NYSDEC endorsed individuals.
4. **SWPPP Preparer** - Must be a qualified professional. Creates the SWPPP for review and submittal to the SWPTS (as defined in Section 9.30.3). The SWPPP Preparer must certify that the SWPPP was prepared in accordance with RCNY Title 15 Chapter 19.1.
5. **Trained Contractor-** An employee of the Contractor who has received four hours of NYSDEC endorsed training in the past 3-Years, in the principals and practices of proper erosion and sediment control as required. Such employee must have a certificate of training and wallet card showing their certification number.
6. **Owner** – applicant agency.

9.30.3. SCOPE AND METHODS.

The ESC portion of the SWPPP must include ESC and pollution prevention practices. Practices must be designed in compliance with 15 RCNY Chapter 19.1 and the New York State Standards and NYS DEC Blue Book. Within thirty (30) days after the Contract is registered, the Contractor must submit a completed SWPPP to the NYCDDC Office of Environmental & Hazmat Services (OEHS) for review and acknowledgement. After approval by OEHS, the SWPPP must also be submitted to NYCDEP Stormwater Permitting Unit through the Stormwater Permitting and Tracking System (SWPTS) portal by the SWPPP Preparer for approval.

Contractor and SWPPP Preparer must be registered on SWPTS portal at:
https://deppermits.microsoftcrmportals.com/Account/Login?returnUrl=/my-application/

Projects in Municipal Separate Storm Sewer System (MS4) areas require coverage under SPDES General Permit GP-0-20-001 or its successor and a NYCDEP Stormwater Construction Permit. Project areas serviced by a Combined Sewer System (CSS) will only require SWPPP approval from DEP.

The SWPPP must be prepared considering the topography of the subject area. It must also identify potential sources of pollution at the project site that may reasonably be expected to affect the quality of stormwater discharges. The plan must describe the specifics of Post-Construction Stormwater Management Practices (PCSMPs) that are to be used to reduce the pollutants in stormwater discharges, their sequence of implementation and associated design details. All practices included in the SWPPP must be designed in conformance with NYCDEP Stormwater Manual and with the most current version of the Blue Book.

The SWPPP template is available at https://www1.nyc.gov/site/dep/water/stormwater-permits.page.

For the Qualified Professional, the Contractor must retain the services of an independent licensed/certified professional with practical experience in the principles and practices of erosion and sediment control and stormwater management, to prepare and certify a site specific SWPPP, along with all necessary shop drawings. The SWPPP Preparer must verify that the SWPPP has been developed in a manner that will assure compliance with the NYCDEC water quality standards and with the substantive intent of the SPDES General Permit GP-0-20-001 or its successor and 15 RCNY Chapter 19.1.

Construction work must only commence in MS4 areas upon issuance of NYSDEC permit identification number and NYCDEP Stormwater Construction Permit. In addition, an initial inspection must be conducted by the Qualified Inspector certifying that the appropriate control measures specified in the SWPPP have been adequately implemented to the satisfaction of the Resident Engineer (RE) and the OEHS Project Manager (PM). In areas serviced by CSS, Work must not commence until issuance of NYCDEP Stormwater Construction Permit and completion of initial inspection.

The Contractor will be responsible for maintenance of the PCSMPs during the period of construction and the period of guarantee. The Contractor will be responsible for allowing access to DDC and DEP Inspectors during the guarantee period. The Contractor will be responsible for preparing documentation for Stormwater Maintenance Permit Application which includes the final Operation & Maintenance (O&M) Plan with as-built drawings. The maintenance is outlined in Chapter 5 of the NYC Stormwater Manual; however, the Contractor will also be held to maintaining as directed in the design documents and as per the approved Stormwater Construction Permit. Also, should it be needed, the Contractor will be responsible for preparing the required documents for Lead Agency/landowner to use when renewing the maintenance permit every 5 years as outlined in the NYC Stormwater Manual. At the completion of the guaranty period and upon final approval, the City takes over the responsibility for maintenance.

9.30.4. DEVIATIONS AND AMENDMENTS.

A SWPPP that deviates from the NYCDEP and NYSDEC technical standards must have a section justifying any non-conformance. The justification must include, but not be limited to, the following:

a. Statement of each deviation from State or City requirements;
b. Statement of the reasons for each deviation and reasons for supporting adopted alternatives;
c. Provide information which demonstrates that the deviation or alternative design is equivalent to the Technical Standards; and,
d. Analysis of the water quality impacts.

In instances when the approved SWPPP is included in the Contract Documents, the Contractor is still responsible for reviewing the SWPPP, updating the Construction team contacts, identifying a need for any major or minor amendments and obtaining OEHS and NYCDEP Stormwater Permitting Unit approvals along with updating coverage under SPDES General Permit.

9.30.5. INSPECTION AND MAINTENANCE.

The Trained Contractor must provide regular inspection and maintenance of the ESC measures which were deployed as part of the Contractor's construction process. Site inspection and Maintenance of ESC must be implemented in accordance with Part IV of SPDES General Permit GP-0-20-001 (or most recent version). The Contractor will also be responsible for maintenance of the PCSMPs which are constructed throughout the construction and period of guarantee according to the requirements of Chapter 5 of the NYC Stormwater Manual or the requirements given in the design documents by the Designer. The Qualified Inspector is responsible to inspect the site at least once every 7-days to assure compliance with

the approved SWPPP. The Trained Contractor is also responsible for providing access to NYCDEP or City representatives to inspect the measures for proper maintenance.

9.30.6. CERTIFICATION.

The SWPPP (site logbook) must clearly identify a Trained Contractor for the Contractor and all the Subcontractors that will implement each measure identified in the SWPPP. The Trained Contractors identified in the SWPPP who perform professional services at the site must implement the provisions of the plan and provide certification of the SWPPP in accordance with the provisions of the, NYCDEP Stormwater Construction Permit, the Blue Book, and SPDES General Permit GP-0-20-001 or its successor. The Contractor and all Subcontractors must ensure that updates to construction operations, ESC/PCSMP practices, etc. are communicated/approved by DEP Stormwater Permitting Unit prior to proceeding with implementation. The Lead Agency/landowner is advised that the City must receive yearly certifications that PCSMP's are properly maintained and in support of that certification the Trained Contractor is required to provide a copy of inspections performed.

9.30.7. STABILIZATION.

Stabilization must be implemented in accordance with Part 1.B.1.b of SPDES General Permit GP-0-20-001 or its successor.

9.30.8. CONTRACTOR'S LIABILITY.

The Contractor will be liable for any discharge that either causes or contributes to a violation of water quality standards as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York. Should any stormwater runoff from the site violate the water quality standards, the Contractor will be directed to take immediate steps, at the Contractor's own expense, to rectify the situation and prevent any further sediment from entering the storm sewer system. In the event that pollutants are discharged to the storm sewer system due to the Contractor's negligence, the RE will direct the Contractor to cease any or all construction activities contributing to the release of these pollutants. The Contractor will be held responsible, at the Contractor's own cost, for any and all necessary actions to remedy the damage.

Furthermore, failure of the Contractor and/or their Subcontractor(s) to strictly adhere to any permit requirements will constitute a permit violation that could result in substantial criminal, civil, and administrative penalties.

It is the Contractor's responsibility to pay all associated permit fees which includes the DEP Stormwater Construction Permitting Fees and SPDES permit fees. DEP Stormwater Construction Permits must be renewed every two years by submitting to DEP no less than 30 days prior to the permit expiration date and must be accompanied by a processing fee in the amount of $1,000 dollars in addition to a $2,000 dollar fee per acre of land disturbed or the applicable amount at the time of renewal. NYSDEC SPDES consists of the yearly regulatory fee, the initial authorization fee per acre of land disturbed and per acre of future impervious area. The Contractor is liable for all penalties incurred due to the Contractor's failure to pay these fees on time.

9.30.9. MEASUREMENT.

(A) STORM WATER POLLUTION PREVENTION (Lump Sum)

Payment will be made by lump sum.

Ten percent (10%) of the lump sum price bid will be paid when the SWPPP is "satisfactorily" furnished by the Qualified Professional and accepted by the Department.

Seventy percent (70%) will be paid in proportion to the percentage of construction completion.

Twenty percent (20%) will be paid when the construction and the guaranty period is complete, the Stormwater Maintenance Permit has been granted by NYCDEP, the Notice of Termination (NOT) is filed with NYSDEC, and all SPDES permit fees have been paid. For clarity, the Contractor must include the final twenty percent (20%) in the Contractor's requisition for substantial completion payment; however, this amount will be not payable until completion of the above specified requirements.

(B) STORM WATER POLLUTION PREVENTION (per Month)

The quantity to be measured for payment under this item will be the number of months (to the nearest 1/4-month increment) that the Contractor satisfactorily provides for the Storm Water Pollution Prevention in accordance with these specifications, including winter shut down, holiday embargo, and other work suspension periods for which the Contractor remains responsible for site maintenance. Measurement for this item will not begin until the NYCDEP Stormwater Construction Permit is granted and actual SWPPP work is started at the site.

9.30.10 PRICE TO COVER.

Payment will be made at the lump sum price or monthly price bid for the item , which includes, but is not be limited to, the cost of furnishing all the labor, materials, fees, permits and testing required to provide and construct all ESC devices in accordance with the approved SWPPP; providing a Qualified Professional/Inspector to design, report, inspect and monitor the Work; comply with NYCDEP and NYSDEC permitting requirements and all necessary incidentals to complete the Work in accordance with the specifications and the directions of the Engineer.

For PCSMPs the payment for inspection and permitting administration will be paid from the lump sum price bid for the item 9.30 Stormwater Pollution Prevention. However, the cost of labor, materials, and maintenance associated with PCSMPs will be paid under the relevant pay item for PCSMP construction.

Payment will be made under:

Item No.	Item	Pay Unit
9.30	STORM WATER POLLUTION PREVENTION	L.S.
9.30 B	STORM WATER POLLUTION PREVENTION	MONTH

SECTION HW-900H - ALLOWANCE FOR CITY WORK ACCELERATION

Under this Section, the Contractor will be paid for City work deemed necessary by DDC's Commissioner to accelerate the City work items in the project during critical periods but the use of this item will expire on the original contract substantial completion date. Such accelerated City work includes:

A.100% of the premium portions of overtime pay for working during non-scheduled work hours which must be defined as those hours of work outside the permissible hours stated in the original contract OCMC Traffic Stipulations; or,

B. The premium portion of overtime pay for overtime actually worked beyond the 40-hour work week but within the permissible hours of work stated in the original contract OCMC Traffic Stipulations; or,

C. All other incidental expenditures caused by modifications of project site regulations or administrative requirements ordered by the Commissioner that result in additional costs to perform contract work as specified.

Such accelerated City work must be paid for under this item in accordance with the requirements of Articles 25 and 26 of the Standard Construction Contract.

Payment made under this Fixed Sum item must cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to accelerate the City work as ordered by DDC's Commissioner.

No guarantee is given that this allowance item will in fact be required in this contract. The estimated "fixed sum" amount shown in the Bid Schedule is included in the total bid solely to insure a method of payment for any accelerated work performed by the Contractor, as directed by DDC's Commissioner.

Payment will be made under:

Item No.	Item Pay	Unit
HW-900H	ALLOWANCE FOR CITY WORK ACCELERATION	F.S.

S - PAGES

GENERAL AND SPECIAL PROVISIONS:

(A) GENERAL PROVISIONS
(B) HIGHWAY PROJECT SPECIFIC PROVISIONS
(C) SEWER & WATER MAIN PROJECT SPECIFIC PROVISIONS
(D) GREEN INFRASTRUCTURE PROVISIONS

NOTICE

THE PAGES CONTAINED HEREIN (S-PAGES) ARE GENERAL AND SPECIAL PROVISIONS THAT APPLY TO THE WORK AND ARE PART OF THE CONTRACT DOCUMENTS.

(NO TEXT ON THIS PAGE)

TABLE OF CONTENTS

(A) GENERAL PROVISIONS

ARTICLE	DESCRIPTION	PAGE NO.
A	LINES AND GRADES	S-1
B	SPECIFIC TRAFFIC STIPULATIONS	S-1
C	HOLIDAYS CONSTRUCTION EMBARGO	S-1
D	CONTRACT ITEMS THAT INCLUDE BACKFILL AS PART OF THEIR WORK	S-2
E	ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES	S-2
F	DISPOSAL OF EXCESS EXCAVATED MATERIAL	S-2
G	NO EXTENSIONS OF TIME FOR WINTER SHUT-DOWN	S-2
H	PRIVATE UTILITY HARDWARE ADJUSTMENTS	S-2
I	SURVEY MONUMENTS	S-2
J	RESTORATION OF ADJACENT AREAS	S-2
K	FLAGGERS	S-2
L	FUEL COST	S-3
M	NYCDPR CONSTRUCTION PERMITS AND OTHER REQUIREMENTS	S-3
N	START OF CONTRACT WORK	S-4
O	STANDARD WORKING HOURS	S-4
P	TREE BARRIERS	S-4
Q	UTILITIES	S-4
R	HOUSE CONNECTIONS	S-4
S	STREET LIGHT AND TRAFFIC SIGNAL	S-4
T	SAW CUT	S-5
U	PRE-CONSTRUCTION STAGE	S-5

ARTICLE	DESCRIPTION	PAGE NO.
V	EXISTING SEWERS. WATER AND APPURTENANCE	S-5
W	RECONNECTING EXISTING SEWERS TO NEW MANHOLES	S-5
X	VIBRATION MONITORING	S-5
Y	CITY ASSETS	S-6
Z	"AS-BUILT" DRAWINGS FOR WATER MAINS AND APPURTENANCES 24-INCHES (600-MM.) AND LARGER	S-6
AA	NO ADDITIONAL PAYMENT	S-7
AB	SHEETING AND EXCAVATION AT TRANSIT FACILITIES	S-7
AC	ARCHAEOLOGICAL DISCOVERIES	S-7
AD	USE OF CITY WATER	S-8
AE	PUBLIC DISSEMINATION OF INFORMATION	S-8
AF	PRICES TO INCLUDE	S-9

(B) HIGHWAY PROJECT SPECIFIC PROVISIONS

1	SPECIAL EVENTS	S-10
2	THE CONTRACTOR IS NOTIFIED	S-10
3	INSPECTION FORM (PRISM)	S-10
4	ITEM 6.44	S-11
5	OCMC TRAFFIC STIPULATIONS – ENHANCED MITIGATIONS FOR PEDESTRIAN FLOW	S-11
6	PRICES TO INCLUDE	S-11
7	OCMC TRAFFIC STIPULATIONS	S-12

SKETCHES / DRAWINGS

(NO TEXT)

(C) SEWER & WATER MAIN PROJECT SPECIFIC PROVISIONS

(NO TEXT)

(D) GREEN INFRASTRUCTURE PROVISIONS

(NO TEXT)

(NO TEXT ON THIS PAGE)

(A) GENERAL PROVISIONS

A. LINES AND GRADES. The Contractor must furnish lines and grades in accordance with Section 1.06.27 of the NYCDOT Standard Highway Specifications, except that survey controls established for this project may no longer exist and the Contractor will be required to re-establish the survey control information using official Borough Survey Control Monuments and Bench Marks, where they exist. The Contractor must check with Topographic Section of the Borough President's Office as to the reliability and accuracy of the data to be used for lines and grades.

B. SPECIFIC TRAFFIC STIPULATIONS. Under this contract, the Contractor must perform the work in strict accordance with the requirements of Section 6.70 in the Standard Highway Specifications, specific traffic stipulations as called for on the plans, Office of Construction Mitigation and Coordination (OCMC) Traffic Stipulations attached to the end of these Special Provisions, and the directions of the Engineer. In case of a conflict, the Engineer's decision will be final.
The Contractor must plan and schedule the work in order to accommodate all special events listed in the NYCDOT Special Events Annual Calendars. The calendars are available at the following link:

https://nycdot.sharepoint.com/:f:/s/publicshare/Ei2XN4G99_JFkdrtjD_cJ0QBtSPr2xhVrApcqAs1KSLpeA?e=j276PF

In addition, the cost of compliance with requirements of the OCMC Traffic Stipulations, unless otherwise provided for, will be deemed included in the prices bid for all scheduled items..

C. HOLIDAY CONSTRUCTION EMBARGO. A special Holiday Construction Embargo will be in effect on the Friday of the week preceding Thanksgiving Day week from 6:00 AM to 11:59 PM and again from the Monday of Thanksgiving Day week from 6:00 AM through January 2, at 11:59 PM. Roadway and sidewalk construction activities will be restricted during the embargo period on the streets listed below*.

Any permits issued prior to the date of this notice, for work during this embargo period on the streets listed below* which do not already have the permit stipulation "410" are hereby suspended for the period noted above. All permittees must comply with this embargo unless a special waiver is granted by OCMC. Waiver requests must be filed at least thirteen days before Thanksgiving Day, in the Permit Office by filing a "Request for Roadway/Sidewalk Permits During "Embargo Periods" and submitting supporting documentation. Waiver requests should only be submitted for critical reasons for a specific project. If a waiver is granted, the applicant will be notified so they can apply for the approved permits. Waivers **are not** required for ongoing Building Construction Activity Permits which already include the "410" permit stipulation. Waiver request forms may be obtained at any Permit Office or on the Department of Transportation's website at:
http://www.nyc.gov/html/dot/downloads/pdf/holidayembapp.pdf
Prior to this embargo period all necessary measures must be taken so that all roadways and sidewalks are in proper condition to allow for the expeditious and safe movement of vehicular, bicycle and pedestrian traffic. Tool carts, cable reels, containers, and material stored on roadways must be removed during the embargo period.

The opening of utility access covers is prohibited on any of the streets noted below** between the hours of 6:00 AM and midnight unless the utility or Contractor files for an Emergency Authorization Number as required by Section 2-07 of the Department of Transportation's Highway Rules. The planned opening of utility access covers may occur during the hours of 12:01 AM and 5:59 AM where no authorization number is required.

Temporary restoration of the streets and sidewalks and removal thereof, if required for the Holiday Embargo period, will be paid for under the appropriate scheduled items.

No extension of time due to the shutdown period will be granted to the Contractor for completion of the work.

*** Please note that this embargo only applies to NYCDOT construction permits.**
**** List of street and maps of the affected locations are available by borough on the Department of Transportation's website at: http://www.nyc.gov/html/dot/html/motorist/trafalrt.shtml**

D. CONTRACT ITEMS THAT INCLUDE BACKFILL AS A PART OF THEIR WORK. The following will pertain to all contract items that have backfill as a part of their work: Backfilling will comply with Subsection 4.11.3 of the Standard Specifications and no additional payment will be made for any Highway or Street Lighting work item requiring Contractor to furnish additional fill material to meet these requirements when backfilling.

E. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES. Contractor will plan and/or stage his/her work schedule using all hours/days available. Contractor is advised that all applicable unit prices will include, for the purpose of this contract, all overtime costs, premium time costs, shift differentials required to complete construction within the specified "Time(s) of Completion" stipulated in this contract.

Contractor will be permitted to accelerate this project, to combine stages and/or work sequences. Any such changes will be shown in the construction schedule, to be furnished in accordance with the General Provisions of the Standard Specifications.

F. DISPOSAL OF EXCESS EXCAVATED MATERIAL. All excess excavated material, with the exception of contaminated material, will become the property of the Contractor and will be properly disposed of away from the site, at the Contractor's expense. Contaminated material will be disposed of separately in accordance with contract requirements.

G. NO EXTENSION OF TIME FOR WINTER SHUT-DOWN. Where the Contractor's approved work schedule for installing sidewalk, curb, roadway base and/or pavement falls within the winter period of December 1st through April 1st, the Contractor will NOT be granted an extension of time for completion of this contract due to the winter shut-down period, unless otherwise provided in Schedule A.

H. PRIVATE UTILITY HARDWARE ADJUSTMENTS. will be performed by the owning utility company or its agent, at its expense. The Contractor must notify the utility company 72 hours prior to start of work at each location where its hardware requires adjustment.

I. SURVEY MONUMENTS. When working in the vicinity of survey monument the Contractor will hand excavate per Item 8.02 AB-S, 8.02 A and 8.02 B (as applicable), at City Survey Monuments, for a distance of five (5) feet around each monument, as directed by the Engineer.

J. RESTORATION OF ADJACENT AREAS. The Contractor will be required to remove all form work. In planting strip areas, the Contractor will be required to restore areas damaged as a result of the Contractor's operations, to the satisfaction of the Engineer, with sod. The Contractor will also, as directed by the Engineer, make safe adjacent areas to the Contractor's work, such as: restoring missing or damaged pavement markings that were removed or damaged as a result of the Contractor's operations (as per requirements of Section 6.44 in the Standard Specifications); resetting granite blocks in tree pits; and, applying binder mixture (Item 4.02 CA or as applicable) where badly broken sidewalk or curb may create a dangerous condition just outside his area of operation, where and when directed by the Engineer.

All restoration work must be performed to the satisfaction of the Engineer.

K. FLAGGERS. The Contractor is notified that wherever the Item No. "6.52" and words "flagger", "flagperson" and "flagman" are used in the contract documents and drawings it will mean the Item No. "6.52 CG" and the words "Crossing Guard", respectively.

L. FUEL COST. The Contractor is notified that the fuel cost per gallon used in the formula under Sub-Article 26.2.8 of the Standard Construction Contract for Extra Work will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration ("USEIA"), and available on its website at **http://www.eia.gov/petroleum/gasdiesel/.** The USEIA-published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1st, April 1st, July 1st and September 1st) will be used in the reimbursement formula for all **Extra Work** invoiced that was performed during that calendar quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.

M. NYCDPR CONSTRUCTION PERMITS AND OTHER REQUIREMENTS.

1. At least thirty (30) days prior to the upcoming start of construction at or near the New York City Department of Parks and Recreation (NYCDPR) land , the Contractor is required to issue a notice to NYCDPR about the start of construction activity. At least 30 days in advance of the Order to Work Date, the Contractor must notify the New York City Department of Parks and Recreation (NYCDPR) of the upcoming start of construction by emailing interagency@parks.nyc.gov.

2. Parks Construction Permits are required for all work on Parkland. Construction Permits may also be required for work on sidewalks adjacent to Parks properties or other areas maintained by NYCDPR such as Greenstreets depending on the scope of work. It is the Contractor's responsibility to coordinate with Parks via email at **interagency@parks.nyc.gov** to establish whether Construction Permits are required for the contract scope of work.

3. The Contractor will not be permitted to store, stage, stockpile, barricade, lay down construction materials or equipment, or otherwise impede access to Parkland, Greenstreets, or sidewalks in the right-of-way fronting Park properties unless such permission is granted by NYCDPR via issuance of a Parks Construction Permit.

4. The Contractor must obtain the necessary Parks Construction Permit from NYCDPR prior to the start of work on Parkland or areas under Parks' jurisdiction. The Construction Permit application is found online at https://www.nycgovparks.org/permits/construction.

5. When no Construction Permit is required, the contactor must notify Parks at interagency@parks.nyc.gov at least one week in advance of any construction adjacent to Greenstreets or in the right-of-way fronting Parks properties to allow for coordination as needed.

6. The Contractor is responsible for the protection of any Greenstreets, sidewalks, and other landscape features under NYCDPR jurisdiction that are adjacent to or enclosed by the construction area, including hardscape, landscape, shrubs, and trees. Any areas and features disturbed or damaged during construction activity are the responsibility of the Contractor to restore and repair.

7. Many NYCDPR properties are indicated on the publicly accessible online mapping resource of the New York City Department of Information Technology and Telecommunications (DOITT) at **http://maps.nyc.gov/doitt/nycitymap**/. However, the map is not exhaustive, and Contractors should confirm Parks properties in the vicinity of their work with NYCDPR.

8. The Contractor must take necessary precautions to prevent interference with or damage to utilities or other facilities during construction. The cost of all work connected with maintaining and protecting utilities affected by the work be borne by the Contractor and the cost will be deemed included in the price bid for the various items in the contract.

9. In the event the Contractor damages an existing utility or interrupts utility service, the Contractor will immediately notify its owner and the Engineer and must commence repair/replacement work as instructed by the Engineer.

10. In the event the Contractor causes an interruption in utility service, the Contractor will immediately arrange for service to be restored and may not cease the repair work until service is restored. The Contractor will not continue work until the service is restored, unless otherwise directed by the Engineer. All corrective utility work will be acceptable to the engineer and the subject utility owner.

11. If any utility service or connection of unknown ownership is encountered during construction which appears to enter or serve Parkland, Contractor must contact Parks at **interagency@parks.nyc.gov** to inquire if Parks is the owner of such utility.

N. START OF CONTRACT WORK. The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within 21 to 30 Days of Contract Registration.

O. STANDARD WORKING HOURS: In absence of OCMC Traffic Stipulations, Section 1.06.23 (P) of NYC DOT STANDARD HIGHWAY SPECIFICATIONS regarding standard working hours is to be followed is to be followed. Work performed outside the standard working hours must be pre-approved by NYC DDC.

P. TREE BARRIERS. The Contractor will furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers will be Type B, unless otherwise directed by the Engineer, and will be constructed and installed as shown on the Protective Tree Barrier sketch in Department Of Transportation, Standard Highway Details Of Construction, Drawing No. H-1046A, as directed by the Engineer, and in accordance with Department of Parks and Recreation requirements.

Price of the tree barriers must be included in the in the unit prices bid for all scheduled items.

Q. UTILITIES. All utility locations and invert elevations are not guaranteed, nor is there any guarantee that all existing utilities, whether functional or abandoned within the project area are shown.

R. HOUSE CONNECTIONS. All existing house connections will be maintained and supported during construction. The Contractor will replace any existing house connection damaged as a result of the Contractor's construction operations as ordered by the Engineer at no cost to the City.

S. STREET LIGHT AND TRAFFIC SIGNAL. The Contractor is responsible for any damage to the existing street lighting and traffic signal equipment, including underground conduits and the safety of both pedestrian and vehicular traffic for the duration of the contract.

Should any conduits, cables or foundations need repair due to the Contractor's negligent operations during construction, all work will be performed according to NYCDOT Bureau of Traffic's Standard Drawings and Specifications and City of New York DOT System Engineering Specifications (dated November 2013) at the sole expense of the Contractor.

It is the Contractor's responsibility to secure an approved electrical Contractor to perform all traffic signal work (if any). For list of approved electrical Contractors, contact Hasib Amini or James Celentano, New York City Department of Transportation at (212) 839-3386 / (212) 839-3129.

T. SAW CUT. The Contractor is advised that where the existing roadway pavement is designated to be replaced from curb to curb, then no full depth saw cutting of pavement for sewer

and water main trenches will be required, except at the limits of full width pavement restoration. No separate or additional payment will be made for any saw cutting.

U. PRE-CONSTRUCTION STAGE. The Contractor is advised that the Base Contract Duration (consecutive calendar days "ccds") must also include pre-construction stage from the Notice To Proceed date. During this stage the Contractor is required to submit the necessary shop drawings, obtain all permits and submit the health and safety plan for review and approval. The Engineer's field office will also need to be established during this pre-construction stage period. Failure to comply with the pre-construction stage requirements may result in assessing liquidated damages to the Contractor for everyday beyond the pre-construction stage duration. The liquidated damage will be of equivalent value as identified in the Schedule A for work beyond the construction completion date.

V. EXISTING SEWERS, WATER AND APPURTENANCE. The Contractor is notified that at some locations there may exists sewers, manholes, water mains, etc., which are to remain undisturbed and are in close proximity to the line of the proposed work. The Contractor exercise extreme care, minimize the trench width of the proposed sewers and take all necessary precautions in placing sheeting and during excavation of the trenches to prevent any damage to the existing structures, pavement, curbs, and sidewalks that are to remain while working adjacent to them. The Contractor maybe restricted to use wood sheeting at certain critical locations as directed by the Engineer. Should any damage occur to any portion of the existing structures that are to remain due to the Contractor's operations, the Contractor will make all repairs to the existing structures to the satisfaction of and as directed by the Engineer. The cost of such repair will be borne by the Contractor, at no cost to the City. Additional cost to use wood sheeting specifically to ensure integrity of existing sewer structures will be deemed included in all bid items for work.

W. RECONNECTING EXISTING SEWERS TO NEW MANHOLES. If there are locations on the contract plans, where the Contractor is required to reconnect all existing sewers to the proposed manholes in this contract. The said manholes will be fabricated to provide openings for the existing sewers at the specified invert elevations as shown on the contract drawings. The cost of reconnecting existing sewer pipes to new manholes, including concrete collar with steel reinforcements and/or grouting around the existing sewer pipes at the openings and all work necessary to complete the pipe reconnection, to the satisfaction of the Resident Engineer will be deemed included in the prices bid for all items of work. No additional payment will be made.

[ARTICLE "X" IS ONLY APPLICABLE IF ITEMS FOR VIBRATION MONITORING ITEM NO. 76.31 IS IN THE BID SCHEDULE]

X. VIBRATION MONITORING. In case of structures requiring vibration monitoring, the Contractor, in addition to Continuous Real Time Monitoring for Vibrations as determined in the Construction Report must provide Continuous Real Time Monitoring for Vibrations of existing buildings/structures adjacent to or in the proximity of different types of construction activities being conducted including, but not limited to, installation of sheeting for construction of proposed water and sewer mains, installation of sheeting for excavation of jacking/receiving pits, direct jacking of sewers, piling work or as directed by the Engineer.

Y. CITY ASSETS. The Contractor is advised that any City owned light poles, traffic signals, street name signs, traffic signs and encumbrances including, but not limited to, underground conduit displaced as the result of the installation of the new sewers, water mains, catch basins, catch basin connections and appurtenances will be replaced in kind and as directed by the Engineer. The cost of such work will be deemed included in the prices bid for all items of work under this contract.

[ARTICLE "Z" IS ONLY APPLICABLE FOR WATERMAIN 24-INCHES AND HIGHER]

Z. "AS-BUILT" DRAWINGS FOR WATER MAINS AND APPURTENANCES 24-INCHES (600-MM.) AND LARGER: Upon the completion of the work for each Capital Project and as a condition precedent to obtaining the certificate for Substantial Completion for each Capital Project under Article 44 of the Contract, the Contractor will furnish "As-Built" drawings for water mains and appurtenances 24-inches and larger to the City. The Contractor will prepare and submit the "As-Built" record drawings to the Engineer for approval. Approved "As-Built" drawings will be delivered to the Department of Design and Construction, 30-30 Thomson Avenue, Long Island City, New York, 11101-3045. The following guideline is provided for the preparation of "As-Built" record drawings:

1. The Contractor will prepare the "As-Built" drawings on AutoCAD and will provide to the City two (2) sets of Mylar and AutoCAD files on a CD. The drawings on CD's and the plotted Mylar's will conform to the standard size of 22" x 36" (559-mm. x 914-mm.) using a 1"=30' (1:360) horizontal and 1"=10' (1:120) vertical scale. The Mylar will be 3-mil in thickness.

2. The "As-Built" drawings will include but not be limited to the following guidelines summarized below:

(a) Drawings will consist of the same legend and layout of title boxes shown on the contract drawings.

(b) Each plotted Mylar drawing will contain the signature and stamp of the Contractor's NYS Professional Engineer/Registered Architect.

(c) The drawings will include:

- street name and crossing street(s) or distance from;
- north arrow;
- property lines and widths;
- legal and existing street widths, street alignment and grades;
- "new" curb lines and widths;
- water main center line measured off the "new" curb line;
- horizontal stationing for all valves, hydrants, outlets, blow-offs, house service connections, etc., measured on a horizontal line as established by the Borough Office Bureau of Topographic;
- alignment and appurtenance location stationing, and deflection angles;
- cover and elevations (Datum used will be that of the Borough where work is located);
- location of pipe joints;
- profile of all piping;
- complete details of all outlet piping roundabouts;
- complete details of all blow-off connections to the sewer;
- complete details of all air cocks;
- location of taps and access manholes;
- location of all cathodic protection stations;
- Venturi sensing lines plans and profiles;

- all appropriate notes.

3. The cost of preparing and submitting “As-Built” approved drawings will be deemed included in the prices bid for all scheduled bid items in the contract. No separate or additional payment will be made for this work.

AA. NO ADDITIONAL PAYMENT. The Contractor is advised that any fences, guardrails, boulders, asphalt walkway of the park, fixtures, other encumbrances removed within project limits during construction will be replaced in kind to the satisfaction of the Engineer. The cost of such work will be deemed included in the prices bid for all contract items of work and no additional or separate payment will be made.

AB. SHEETING AND EXCAVATION AT TRANSIT FACILITIES. In case of transit facilities like MTA, LIRR, METRO NORTH etc., the Contractor will exercise extreme caution and take all necessary precautions in placing sheeting and excavation to prevent any damage to the existing underground or overhead structures and its appurtenances during construction work throughout the project area. The Contractor must take full responsibility to protect the said structures and its appurtenances and any damage caused by the Contractor’s operations must be made good by the Contractor to the satisfaction of the Engineer at no additional cost to the City.

The Contractor must submit shop drawings to the Transit facilities showing all the details and methods of construction, such as, sheeting and bracing, including the Contractor’s procedure and sequence of construction, supporting and/or protection of the existing structures and its appurtenances, with necessary design calculations for approval prior to starting of the construction. The design will be made by a New York State Licensed Professional Engineer skilled in this type of construction and as further evidenced by the imprint of Professional Engineer’s seal and signature on all drawings. The cost of this work will be deemed included in the price bid for all items of work under this contract.

AC. ARCHAEOLOGICAL DISCOVERIES. The Contractor is notified that if requested by the Resident Engineer and the City, the Contractor will be required retain the services of an Archaeologist (the "City's Archaeologist") for this project.

The City's Archaeologist will be notified in advance and will be present on site during sub-surface excavations as deemed necessary. The City's Archaeologist will be authorized to halt construction at any time in order to record and/or recover any archaeological resources encountered during excavations, and to stabilize in place any human remains encountered.

For the purpose of evaluating and recording archaeological resources, the City's Archaeologist will be allowed to enter trenches provided all standard safety requirements are met. It is understood that some construction down time may be necessary.

In the event that human remains, and/or other significant archaeological deposits are encountered during construction or archaeological investigations, Landmarks Preservation Commission (LPC) will be notified as directed by the City's Archaeologist and the State Historic Preservation Office (SHPO) requires that the following protocol is implemented:

1. At all times human remains must be treated with the utmost dignity and respect. Should human remains be encountered work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance.

2. Human remains or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.

3. The County coroner and local law enforcement as well as the SHPO and the involved agency will be notified immediately. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archeological. If the remains are archeological in nature, a bio-archaeologist will confirm the identification as human.

4. If human remains are determined to be Native American, the remains will be left in place and protected from further disturbance until a plan for their protection or removal can be generated. The involved agency will consult SHPO and appropriate Native American groups to determine a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance.

5. If human remains are determined to be Euro-American, African-American, etc., the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action.

Should extra work be ordered by the Resident Engineer as a result of any archaeological discoveries, it will be paid for from the Fixed Sum included in, and in accordance with Item HW-908 Allowance for Extra Work Due To Archaeological Discoveries.

AD. USE OF CITY WATER. Please refer to NYCDOT STANDARD HIGHWAY SPECIFICATIONS (May 16, 2022), Sub Section 1.06.23 (A), Rules, Laws, and Requirements, for use of City water.

AE. PUBLIC DISSEMINATION OF INFORMATION. The Contractor agrees to hold confidential, both during and after the completion or termination of this Contract, all of the reports, information, or data, furnished to, or prepared, assembled or used by, the Contractor under this Contract. The Contractor agrees to maintain the confidentiality of such reports, information, or data by using a reasonable degree of care, and using at least the same degree of care that the Contractor uses to preserve the confidentiality of its own confidential information. The Contractor agrees that such reports, information, or data will not be made available to any person or entity without the prior written approval of the Commissioner. The obligation under this Section to hold reports, information or data confidential will not apply where the Contractor is legally required to disclose such reports, information or data by virtue of a subpoena, court order or otherwise (“disclosure demand”), provided that the Contractor complies with the following: (1) the Contractor will provide advance notice to the Commissioner, in writing or by e-mail, that it received a disclosure demand for such reports, information or data and (2) if requested by the Commissioner, the Contractor will not disclose such reports, information or data until the City has exhausted its legal rights, if any, to prevent disclosure of all or a portion of such reports, information, or data. The previous sentence will not apply if the Contractor is prohibited by law from disclosing to the City the disclosure demand for such reports, information or data.

The Contractor will restrict access to confidential information to persons who have a legitimate work-related purpose to access such information. The Contractor agrees that it will

instruct its officers, employees, and agents to maintain the confidentiality of any and all information required to be kept confidential by this Contract.

The Contractor, and its officers, employees, and agents will notify the Commissioner, at any time either during or after completion or termination of this Contract, of any intended statement to the press or any intended issuing of any material for publication in any media of communication (print, news, television, radio, Internet, etc.) regarding the services provided or the data collected pursuant to this Contract at least twenty-four (24) hours prior to any statement to the press or at least five (5) business days prior to the submission of the material for publication, or such shorter periods as are reasonable under the circumstances. The Contractor may not issue any statement or submit any material for publication that includes confidential information as prohibited by this Section.

At the request of the Commissioner, the Contractor will return to the Commissioner any and all confidential information in the possession of the Contractor or its subContractors. If the Contractor or its Subcontractors are legally required to retain any confidential information, the Contractor will notify the Commissioner in writing and set forth the confidential information that it intends to retain and the reasons why it is legally required to retain such information. The Contractor will confer with the Commissioner, in good faith, regarding any issues that arise from the Contractor retaining such confidential information. If the Commissioner does not request such information, or the Law does not require otherwise, such information will be maintained in accordance with the requirements set forth in the Contract Documents.

AF. PRICES TO INCLUDE. No direct payment will be made for costs incurred in complying with the foregoing Special Provisions, unless otherwise provided. Said costs will be deemed to have been included in the prices bid for all the scheduled contract items.

(B)HIGHWAY PROJECT SPECIFIC PROVISIONS

1. **SPECIAL EVENTS.** Where the Contractor is notified of a Special Unscheduled Event, such as a civic parade or other official activity, party, etc., then the Holiday Embargo restrictions under Article C, above, shall apply. Temporary restoration of the streets and sidewalks and subsequent removal, if required, for those Special Unscheduled Event periods will be paid for under the appropriate scheduled items 4.02 CA and 6.02 AAN and the Contractor will be granted an extension of time, for the completion of the work, equal to the duration of the ordered shutdown.

2. **THE CONTRACTOR IS NOTIFIED** that should human remains be encountered during the course of work, the work must be stopped immediately pending the Office of Chief Medical Examiner and the New York Police Department notification and review..

3. **INSPECTION FORM / TECHNICAL INFEASIBILITY FORM (TIF).**

a. Prior to the determination of Substantial Completion for the Project, all locations constructed under this Contract must be substantially completed and accompanied by an approved PRISM inspection form and where applicable, approved technical infeasibility form(s).

b. The approved PRISM inspection form will be the determination made by the Engineer informing the contractor that the pedestrian ramps are accepted or rejected as non-compliant with Contract Specifications and thereby instructing the contractor to reconstruct the rejected pedestrian ramps at no cost to the City.

c. If a rejected pedestrian ramp can be justified as built to the maximum Extent Technically Feasible, as defined by the United States Access Board, then the Contractor must submit a completed Technical Infeasibility Form (TIF) no later than two (2) weeks after construction and submit it to the Engineer for approval. All TIFs submitted to the Engineer must be signed and sealed by a licensed Professional Engineer registered in New York State. No separate payment will be made to the Contractor for services of Professional Engineer and the price to be deemed included into the price of all pedestrian ramp items. All TIFs must be approved by the Engineer otherwise the pedestrian ramp must be re-installed to be ADA compliant at no additional cost to the City.

The PRISM inspection form may be found at the following website:

https://www.nycpedramps.info/sites/default/files/2023-03/TI_23-001_Pedestrian_Ramp_Inspection_Application_PRISM.pdf

The TIF may be found at the following website:

https://www.nycpedramps.info/sites/default/files/2023-01/DOT_Technical-Infeasibility-Form_v2.0.pdf

4.**ITEM 6.44** - The NYC DOT Standard Specifications Section 6.44.3(F) entire text is modified herein as following:

Preformed reflectorized pavement markings from NYSDOT Approved List 727-04 may be used for all pavement marking restorations, at no extra cost.

5. OCMC TRAFFIC STIPULATIONS – ENHANCED MITIGATIONS FOR PEDESTRIAN FLOW

The crosswalk assistance work listed in the referred article is to be performed by crossing guards, not pedestrian managers or flaggers.

6. **PRICES TO INCLUDE**. No direct payment will be made for costs incurred in complying with the foregoing Special Provisions, unless otherwise provided. Said costs will be deemed to have been included in the prices bid for all the scheduled contract items.

7 OCMC TRAFFIC STIPULATIONS
Department of Transportation

PROJECT ID: HED562

Ydanis Rodriguez, Commissioner

OCMC TRAFFIC STIPULATIONS – AMENDMENT #1 October 7, 2024

OCMC FILE NO: BXEC-16-523
CONTRACT NO: HED562
PROJECT: NEW 48" TRUNK WATER MAIN, REPLACEMENT OF DISTRIBUTION WATER MAINS AND REPLACEMENT OF COMBINED SEWERS IN EAST 233RD STREET, BOROUGH OF THE BRONX

STIPULATIONS ORIGINALLY DATED **AUGUST 16, 2016** GRANTING PERMISSION TO **THE NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION (NYC DDC)** AND ITS DULY AUTHORIZED AGENT, TO ENTER UPON AND RESTRICT THE FLOW OF TRAFFIC AT THE LOCATION(S) BELOW FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOTED PROJECT, IS HEREBY AMENDED AS FOLLOWS:

I. MAINTENANCE AND PROTECTION OF TRAFFIC

LOCATION(S)	MAINTENANCE AND PROTECTION OF TRAFFIC
ON ALL SEGMENTS (NOT INTERSECTIONS) LISTED IN BXEC-16-523	1. During trunk water main work, the contractor may occupy one 11'-wide lane up to 50 linear feet after work hours. 2. During sewer work, the contractor may occupy an 8' width of the roadway up to 50 linear feet after work hours. 3. The contractor shall use decking to restore all dedicated turning bays after work hours. 4. The contractor shall work on one segment at a time. 5. Materials must be stored within the block segment in which work is occurring or the next segment over.

II. GENERAL NOTES

A. **THIS IS NOT A PERMIT.** THIS STIPULATION SHEET MUST BE SUBMITTED WITH ALL REQUESTS FOR PERMITS PERTAINING TO THE ABOVE CONTRACT AND PRESENT AT THE WORK SITE ALONG WITH ALL ACTIVE CONSTRUCTION PERMITS WHEN THE APPROVED WORK IS BEING PERFORMED.

B. ALL OTHER STIPULATIONS UNDER ORIGINAL NYC DOT STIPULATION SHEET BXEC-16-523 DATED AUGUST 16, 2016, AND ANY PREVIOUS AMENDMENTS, WHICH HAVE NOT BEEN CHANGED BY THIS AMENDMENT, REMAIN IN EFFECT.

C. THE PERMITTEE MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYC DOT INCLUDING THE HOLIDAY EMBARGO.

D. THE PERMITTEE IS ADVISED THAT OTHER CONTRACTORS MAY BE WORKING IN THE GENERAL AREA DURING THE TERM OF THIS STIPULATION. IN WHICH EVENT, THE CONTRACTOR MAY REQUIRE MODIFICATIONS BY THE OCMC-STREETS.

E. NO DEVIATION OR DEPARTURE FROM THESE STIPULATIONS WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN APPROVAL FROM THE OCMC-STREETS. REQUEST FOR SUCH MODIFICATIONS SHALL BE SUBMITTED TO THE OFFICE OF THE OCMC-STREETS, NEW YORK CITY DEPARTMENT OF TRANSPORTATION, A MINIMUM OF TWENTY (20) DAYS IN ADVANCE FOR CONSIDERATION.

F. THE OCMC-STREETS RESERVES THE RIGHT TO VOID OR MODIFY THESE STIPULATIONS SHOULD CONSTRUCTION FAIL TO COMMENCE WITHIN TWO (2) YEARS OF THE SIGNED DATE OF THESE STIPULATIONS.

ALEX LUBMAN
PROJECT MANAGER – THE BRONX
OCMC-STREETS

GARY SMALLS
DIRECTOR
OCMC-STREETS

NYC Department of Transportation
Bureau of Permit Management and Construction Control
55 Water Street - 7th Floor, New York, NY 10041
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NEW YORK CITY Department of Transportation

POLLY TROTTENBERG, Commissioner

OCMC TRAFFIC STIPULATIONS 11/15/2019

OCMC FILE NO: BXEC-16-523
CONTRACT NO: HED-562
PROJECT: NEW 48" TRUNK WATER MAIN
LOCATION(S): EAST 233RD STREET BETWEEN BRONXWOOD AND BAYCHESTER AVENUE, ETC

PERMISSION IS HEREBY GRANTED TO THE **NYCDDC** AND ITS DULY AUTHORIZED AGENT, TO ENTER UPON AND RESTRICT THE FLOW OF TRAFFIC AT THE LOCATION(S) BELOW FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOTED PROJECT, SUBJECT TO THE FOLLOWING STIPULATIONS:

I. SPECIAL STIPULATIONS

A. **EMBARGOES** – A CONSTRUCTION EMBARGO WILL APPLY TO THOSE LOCATIONS BELOW WHICH FALL WITHIN THE **HOLIDAY EMBARGO** OR ANY OTHER SPECIAL EVENT EMBARGOES PUBLISHED BY THE BUREAU OF PERMIT MANAGEMENT AND CONSTRUCTION CONTROL.

B. **BIKE LANES** – IF WORK IS IN OR AFFECTING A BIKE LANE, THE PERMITTEE MUST POST ADVANCE WARNING SIGNS 350 FEET AND 200 FEET PRIOR TO THE WORK ZONE STATING **"CONSTRUCTION IN BIKE LANE AHEAD PROCEED WITH CAUTION"**, AND ALSO POST A SIGN AT THE WORK ZONE STATING **"CONSTRUCTION IN BIKE LANE PROCEED WITH CAUTION"**. SUCH SIGNS SHALL BE ORANGE, 3' X 3', DIAMOND-SHAPED WITH 4" BLACK LETTERING. SIGNS SHALL BE POSTED IN ACCORDANCE WITH THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

C. **BIKE SHARE STATIONS:** THE PERMITTEE SHALL NOT REMOVE, RELOCATE, DAMAGE OR DISRUPT THE OPERATION OF EXISTING BIKE SHARE STATIONS WITHOUT FIRST CONTACTING NYC BIKE SHARE AT 855-245-3311 FOR THEIR REQUIREMENTS PRIOR TO COMMENCING WORK.

D. **CITYBENCH:** THE PERMITTEE SHALL NOT REMOVE, RELOCATE, DAMAGE OR DISRUPT AN EXISTING CITYBENCH WITHOUT FIRST CONTACTING NYC DOT AT 212-839-6569, OR VIA EMAIL AT CITYBENCH@DOT.NYC.GOV PRIOR TO COMMENCING WORK.

E. **PROTECTION OF NYC DEP GREEN INFRASTRUCTURE:** THE PERMITTEE SHALL TAKE PRECAUTION OF NYC DEP GREEN INFRASTRUCTURE IN THE RIGHT-OF-WAY. THE PERMITTEE MUST PROTECT NYC DEP GREEN INFRASTRUCTURE DOWNSTREAM OF THE WORK OR WITHIN FIVE (5) FEET OF THE WORK AREA. THE PERMITTEE MUST EMAIL NYC DEP AT SUSTAINABILITY@DEP.NYC.GOV FOR PROTECTION REQUIREMENTS PRIOR TO COMMENCING WORK. THE PERMITTEE IS RESPONSIBLE FOR RESTORATION OF DAMAGED NYC DEP INFRASTRUCTURE AS DIRECTED BY NYC DEP.

F. **BUS STOPS** – THE PERMITTEE SHALL PROVIDE WRITTEN NOTICE TO NYC DOT OCMC AND NEW YORK CITY TRANSIT (NYCT) A MINIMUM OF FIVE (5) WEEKS IN ADVANCE FOR LANE/STREET CLOSURES THAT AFFECT BUS ROUTES/BUS STOPS.

G. **STREET LIGHTS / TRAFFIC SIGNALS:** THE PERMITTEE SHALL NOT REMOVE OR RELOCATE EXISTING STREET LIGHTS OR TRAFFIC SIGNALS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT STREET LIGHTING / TRAFFIC SIGNALS UNIT.

H. **TRAFFIC CAMERAS, DETECTION/COMMUNICATION EQUIPMENT:** IF AT ANY TIME DURING THE APPROVED WORK, THE PERMITTEE ENCOUNTERS TRAFFIC SURVEILLANCE CAMERAS, DETECTION EQUIPMENT OR ANY TYPE OF COMMUNICATION EQUIPMENT (WIRELESS OR HARD-WIRED) ON ANY NYC DOT FACILITY, THAT IS NOT INCLUDED ON THE DESIGN/BUILD DRAWINGS, THE PERMITTEE SHALL IMMEDIATELY NOTIFY NYC DOT TRAFFIC MANAGEMENT BY PHONE AT 718-433-3390 OR 718-433-3340 AND VIA EMAIL AT TMC@DOT.NYC.GOV AND AWAIT DIRECTION PRIOR TO CONTINUING WORK.

I. **METERS** – THE PERMITTEE SHALL NOT REMOVE OR RELOCATE PARKING METERS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT PARKING METER DIVISION AT 718 – 894 – 8651.

J. **TEST PITS** – THE BELOW TRAFFIC STIPULATIONS DO NOT APPLY TO TEST PIT WORK RELATED TO THIS CONTRACT. WORK HOURS AND OTHER REQUIREMENTS FOR TEST PIT OPERATIONS MAY DIFFER FROM THE STIPULATIONS IDENTIFIED BELOW. THE PERMITTEE SHALL BE REQUIRED TO OBTAIN SEPARATE PERMITS RELATED TO TEST PITS.

K. **TEMPORARY PARKING REGULATIONS/PAVEMENT MARKINGS** – THE PERMITTEE IS REQUIRED TO INSTALL, MAINTAIN AND REMOVE ALL NECESSARY TEMPORARY PARKING AND REGULATORY SIGNS AND PAVEMENT MARKINGS, AND RESTORE THEIR ORIGINAL CONDITION PER NYC DOT STANDARDS, PRIOR TO EXPIRATION OF THEIR PERMITS. THE PERMITTEE OR AGENCY PERFORMING PUBLIC OUTREACH SHALL POST AND MAINTAIN ADVISORY SIGNS A MINIMUM OF 48 HOURS PRIOR TO CHANGING EXISTING PARKING REGULATION SIGNS TO APPROVED TEMPORARY CONSTRUCTION PARKING REGULATION SIGNS. THE ADVISORY SIGNS SHOULD BE POSTED ON ALL POLES AND DRIVE RAILS ON THE SEGMENT AFFECTED, INDICATING THE DATE OF THE CHANGE, THE NEW REGULATIONS AND A TELEPHONE NUMBER TO OBTAIN MORE INFORMATION.

L. **ACCESS TO ABUTTING PROPERTIES** – THE PERMITTEE SHALL COORDINATE ALL ACTIVITIES WITH ABUTTING PROPERTY OWNERS TO ENSURE ACCESS IS PROVIDED TO/FROM ENTRANCES/DRIVEWAYS AT ALL TIMES.

M. **AUTHORIZED PARKING** – PRIOR TO PERFORMING WORK WHICH IMPACTS AUTHORIZED PARKING, THE PERMITTEE SHALL SUBMIT IN WRITING, AND COPY OCMC-STREETS, A REQUEST TO OCCUPY SPACE CURRENTLY USED BY AUTHORIZED VEHICLES. APPROVAL MUST BE RECEIVED FROM AUTHORIZED PARKING PRIOR TO OCCUPYING THESE AREAS.

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N. **NOTIFICATION** – THE PERMITTEE MUST AT LEAST TWO (2) WORKING DAYS BEFORE THE START OF CONSTRUCTION NOTIFY THE NYC FIRE DEPARTMENT, NYC POLICE DEPARTMENT, NYCEMS, LOCAL COMMUNITY BOARD, BOROUGH PRESIDENT'S OFFICE-CHIEF ENGINEER, NYCDOT OCMC OFFICE, AND ALL ABUTTING PROPERTY OWNERS.

O. **CONSTRUCTION INFORMATIONAL SIGNS** – THIS PROJECT REQUIRES A CONSTRUCTION PROJECT INFORMATIONAL SIGN (CPIS) IN ACCORDANCE WITH NYCDOT HIGHWAY RULE SECTION 2-02 (4) AND (5). CRITERIA AND A PROTOTYPE FOR THIS SIGN MAY BE FOUND ON THE NYCDOT WEBSITE AT:

HTTP://WWW.NYC.GOV/HTML/DOT/DOWNLOADS/PDF/DOT_CPIS_DIRECTIONS.PDF

P. **ENHANCED MITIGATIONS**

- **ENHANCED MITIGATIONS FOR PEDESTRIAN FLOW**, INCLUDING METAL FENCING, SHALL BE PROVIDED TO ENSURE PEDESTRIANS STAY WITHIN THEIR DESIGNATED PATH/ROUTE. PEDESTRIAN MANAGERS SHALL BE PROVIDED TO ASSIST WITH PEDESTRIANS AT THE DESIGNATED CROSSWALK AREAS.
- **"NO STANDING ANYTIME-TEMPORARY CONSTRUCTION" SIGNS** AND TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED AND MAINTAINED AS WARRANTED BY THE MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) REQUIRED TO FACILITATE TRAFFIC MOVEMENTS THROUGH THE WORK ZONE. ALL TEMPORARY SIGNS AND PAVEMENT MARKINGS SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.
- **COMMUNITY OUTREACH** SHALL BE PROVIDED FOR THE DURATION OF THE PROJECT.

II. MAINTENANCE AND PROTECTION OF TRAFFIC

A. EAST 233RD STREET BETWEEN BUSSING AVENUE AND BRONXWOOD AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. If concrete curing is required after work hours, the contractor shall maintain three 11 foot lanes for traffic.
6. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

B. BRONXWOOD AVENUE BETWEEN EAST 234TH STREET AND EAST 233RD STREET

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. If concrete curing is required after work hours, the contractor shall maintain two 11 foot lanes for traffic.

C. BRONXWOOD AVENUE BETWEEN EAST 233RD STREET AND EAST 232ND STREET

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. If concrete curing is required after work hours, the contractor shall maintain two 11 foot lanes for traffic.

D. INTERSECTION OF EAST 233RD STREET AND BRONXWOOD AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. During working hours the contractor shall maintain two 11 foot lanes for traffic on Bronxwood Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
3. After working hours, the contractor shall open full width of roadway to traffic.

E. EAST 233RD STREET BETWEEN BRONXWOOD AVENUE AND DIGNEY AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. If concrete curing is required after work hours, the contractor shall maintain three 11 foot lanes for traffic.

6. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

F. INTERSECTION OF EAST 233RD STREET AND DIGNEY AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain one 11 foot lane for traffic on Digney Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
4. After working hours, the contractor shall open full width of roadway to traffic.

G. EAST 233RD STREET BETWEEN DIGNEY AVENUE AND EDENWALD AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

H. INTERSECTION OF EAST 233RD STREET AND EDENWALD AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic on Edenwald Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
4. After working hours, the contractor shall open full width of roadway to traffic.

I. EDENWALD AVENUE BETWEEN EAST 233RD STREET AND BOYD AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

J. EAST 233RD STREET BETWEEN EDENWALD AVENUE AND GUNTHER AVENUE/PAULDING AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. Do not block buses from loading or unloading or coordinate with MTA Bus Operations for the temporary relocation of bus stops, if necessary.
6. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

K. INTERSECTION OF EAST 233RD STREET AND GUNTHER AVENUE/PAULDING AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. During working hours the contractor shall maintain two 11 foot lanes for traffic on Paulding Avenue and two 11 foot lane on Gunther Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
3. After working hours, the contractor shall open full width of roadway to traffic.

L. PAULDING AVENUE BETWEEN EAST 233RD STREET AND EAST 232ND STREET

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.

2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

M. EAST 233RD STREET BETWEEN GUNTHER AVENUE/PAULDING AVENUE AND WICKHAM AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. Do not block buses from loading or unloading or coordinate with MTA Bus Operations for the temporary relocation of bus stops, if necessary.
6. The contractor must coordinate with home owners and businesses that may experience accessibility limitations during construction activities.

N. INTERSECTION OF EAST 233RD STREET AND WICKHAM AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic on Wickham Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
4. After working hours, the contractor shall open full width of roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

O. WICKHAM AVENUE BETWEEN EAST 233RD STREET AND EDENWALD AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

P. EAST 233RD STREET BETWEEN WICKHAM AVENUE AND BRUNER AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

Q. INTERSECTION OF EAST 233RD STREET AND BRUNER AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic on Bruner Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
4. After working hours, the contractor shall open full width of roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

R. BRUNER AVENUE BETWEEN EAST 233RD STREET AND EDENWALD AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.

2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain one 11 foot lane for two-way traffic with flaggers at each end of the work zone.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

S. EAST 233RD STREET BETWEEN BRUNER AVENUE AND LACONIA AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

T. INTERSECTION OF EAST 233RD STREET AND LACONIA AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic on Laconia Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
4. After working hours, the contractor shall open full width of roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.
6. Do not block buses from loading or unloading or coordinate with MTA Bus Operations for the temporary relocation of bus stops, if necessary.

U. LACONIA AVENUE BETWEEN EAST 233RD STREET AND EAST 232ND STREET

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.
6. Do not block buses from loading or unloading or coordinate with MTA Bus Operations for the temporary relocation of bus stops, if necessary.

V. EAST 233RD STREET BETWEEN LACONIA AVENUE AND ELY AVENUE/STRANG AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

W. INTERSECTION OF EAST 233RD STREET AND ELY AVENUE/STRANG AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. During working hours the contractor shall maintain two 11 foot lanes for traffic on Ely Avenue and on Strang Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
3. After working hours, the contractor shall open full width of roadway to traffic.

X. ELY AVENUE BETWEEN EAST 233RD STREET AND EDENWALD AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.

2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain one 11 foot lane for two-way traffic with flaggers at each end of the work zone.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

Y. STRANG AVENUE BETWEEN EAST 233RD STREET AND GRACE AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

Z. ELY AVENUE BETWEEN EAST 233RD STREET AND EAST 232ND STREET

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain one 11 foot lane for two-way traffic with flaggers at each end of the work zone.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

AA. EAST 233RD STREET BETWEEN ELY AVENUE/STRANG AVENUE AND GRACE AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners and businesses that may experience accessibility limitations during construction activities.

BB. INTERSECTION OF EAST 233RD STREET AND GRACE AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. During working hours the contractor shall maintain two 11 foot lanes for traffic on Grace Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
3. After working hours, the contractor shall open full width of roadway to traffic.

CC. GRACE AVENUE BETWEEN EAST 233RD STREET AND EDENWALD AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

DD. GRACE AVENUE BETWEEN EAST 233RD STREET AND GRENADA PLACE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners that may experience accessibility limitations during construction activities.

EE. EAST 233RD STREET BETWEEN GRACE AVENUE AND EDSON AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners and businesses that may experience accessibility limitations during construction activities.

FF. INTERSECTION OF EAST 233RD STREET AND EDSON AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic on Edson Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
4. After working hours, the contractor shall open full width of roadway to traffic.

GG. EAST 233RD STREET BETWEEN EDSON AVENUE AND BAYCHESTER AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with home owners and businesses that may experience accessibility limitations during construction activities.

HH. INTERSECTION OF EAST 233RD STREET AND BAYCHESTER AVENUE AND GRENADA PLACE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. During working hours the contractor shall maintain two 11 foot lanes for traffic on Grenada Place. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street and on Baychester Avenue.
3. After working hours, the contractor shall open full width of roadway to traffic.
4. If concrete curing is required after work hours, the contractor shall maintain three 11 foot lanes for traffic on Baychester Avenue, three lanes on East 233rd Street and two lanes on Grenada Place.

II. BAYCHESTER AVENUE BETWEEN EAST 233RD STREET AND STRANG PLACE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. Do not block buses from loading or unloading or coordinate with MTA Bus Operations for the temporary relocation of bus stops, if necessary.
6. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

JJ. BAYCHESTER AVENUE BETWEEN EAST 233RD STREET AND SCHIEFFELIN AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. If concrete curing is required after work hours, the contractor shall maintain three 11 foot lanes for traffic.

KK. GRENADA PLACE BETWEEN EAST 233RD STREET AND EDISON AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.

2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain two 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. The contractor must coordinate with businesses that may experience accessibility limitations during construction activities.

LL. EAST 233RD STREET BETWEEN EDSON AVENUE AND BAYCHESTER AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.
5. Do not block buses from loading or unloading or coordinate with MTA Bus Operations for the temporary relocation of bus stops, if necessary.
6. The contractor must coordinate with businesses and businesses that may experience accessibility limitations during construction activities.

MM. INTERSECTION OF EAST 233RD STREET AND DE REIMER AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain one 11 foot lanes for traffic on Reimer Avenue. In addition, the contractor shall maintain three 11 foot lanes for traffic on East 233rd Street.
4. After working hours, the contractor shall open full width of roadway to traffic.

NN. DE REIMER AVENUE AVENUE BETWEEN EAST 233RD STREET AND STRANG AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain one 11 foot lane for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.

OO. EAST 233RD STREET BETWEEN DE REIMER AVENUE AND WILDER AVENUE

1. Work hours shall be as follows: 9AM to 4PM Monday to Friday and Saturdays 8AM to 4PM.
2. The contractor shall maintain a minimum of 5 foot wide sidewalk opening for pedestrians on both sides of the road segment.
3. During working hours the contractor shall maintain three 11 foot lanes for traffic.
4. After working hours, the contractor shall open the full width of the roadway to traffic.

III. GENERAL NOTES

A. **THIS IS NOT A PERMIT.** THIS STIPULATION SHEET MUST BE SUBMITTED WITH ALL REQUESTS FOR PERMITS PERTAINING TO THE ABOVE CONTRACT AND PRESENT AT THE WORK SITE ALONG WITH ALL ACTIVE CONSTRUCTION PERMITS WHEN THE APPROVED WORK IS BEING PERFORMED.

B. THE PERMITTEE MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.

C. THE PERMITTEE SHALL COMPLY WITH ALL REQUIREMENTS OF THE NYCDOT SPECIAL EVENTS UNIT AS IDENTIFIED BELOW:

1. STREET FAIRS / FESTIVALS

- ALL EXCAVATIONS MUST BE PLATED WITH SKID RESISTANT PLATES.
- PLATES MUST BE RECESSED AND FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE PERMITTEE IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

2. RUNNING / WALKING / BIKING EVENTS

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.

- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.THE PERMITTEE IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

3. PARADES

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.
- FORMATION AND DISPERSAL AREA PLATES MUST BE RECESSED AND FLUSH WITH PAVEMENT (PLATES MUST BE SKID RESISTANT).
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE PERMITTEE IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

4. MAYORAL EVENTS

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE PERMITTEE IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

D. ALL RELOCATION WORK BY THE UTILITIES SUCH AS; CON EDISON, TELEPHONE, GAS AND CABLE COMPANIES SHALL PRECEDE THE PERMITTEE'S START OF WORK ON ALL AFFECTED ROADWAYS IN THE IMPACTED CONTRACT AREA.

E. THE PERMITTEE IS ADVISED THAT OTHER CONTRACTORS MAY BE WORKING IN THE GENERAL AREA DURING THE TERM OF THIS STIPULATION. IN WHICH EVENT, THE PERMITTEE MAY REQUIRE MODIFICATIONS BY THE OCMC-STREETS.

F. THE PERMITTEE IS NOT AUTHORIZED TO ENTER, OCCUPY OR USE ANY PUBLICLY-OWNED OR PRIVATELY OWNED, NON-PAVED, LANDSCAPE OR NON-LANDSCAPED LOCATION WITHOUT SPECIFIC WRITTEN PERMISSION. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A LIMITED-ACCESS ARTERIAL HIGHWAY, **WRITTEN** APPROVAL FROM THE NYCDOT OCMC-HIGHWAYS IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR PUBLIC PARK, **WRITTEN** APPROVAL FROM THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION OR NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF ANY OTHER JURISDICTION SUCH AS PRIVATE PROPERTY, STATE, FEDERAL ETC., IT IS THE PERMITTEE'S RESPONSIBILITY TO DETERMINE THE PROPERTY OWNER AND OBTAIN THE WRITTEN APPROVAL.

G. THE PERMITTEE SHALL ADHERE TO THE NYCDOT BUREAU OF BRIDGES' SPECIAL PROVISIONS FOR LANDSCAPE PROTECTION, MAINTENANCE AND RESTORATION, ITEMS 1.18.15 THROUGH 1.18.19, WHENEVER AND WHEREVER ANY OF THE PERMITTEE'S ACTIVITIES OCCUR WITHIN A LIMITED ACCESS ARTERIAL HIGHWAY RIGHT - OF - WAY.

H. NO DEVIATION OR DEPARTURE FROM THESE STIPULATIONS WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN APPROVAL FROM THE OCMC-STREETS. REQUEST FOR SUCH MODIFICATIONS SHALL BE SUBMITTED TO THE OFFICE OF THE OCMC-STREETS, NEW YORK CITY DEPARTMENT OF TRANSPORTATION, A MINIMUM OF TWENTY (20) DAYS IN ADVANCE FOR CONSIDERATION.

I. FOR ANY CONSTRUCTION ACTIVITY RESULTING IN THE FULL CLOSURE OF A ROADWAY FOR MORE THAN 180 CONSECUTIVE CALENDAR DAYS, THE PERMITTEE MUST PRODUCE AND SUBMIT A COMMUNITY REASSESSMENT, IMPACT AND AMELIORATION (CRIA) STATEMENT TO NYCDOT PLANNING AND OBTAIN THEIR APPROVAL BEFORE APPLYING FOR PERMITS, IN COMPLIANCE WITH THE PROVISIONS OF **LOCAL LAW 24 STREET CLOSURE LAW.**

J. FOR THIS PROJECT THE PERMITTEE SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY ADVANCE WARNING AND DETOUR SIGNS, TEMPORARY CONTROL DEVICES, BARRICADES, LIGHTS AND FLASHING ARROW BOARDS IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," THE TYPICAL SCHEMES INCLUDED IN THIS SPECIFICATION; AND AS ORDERED BY THE ENGINEER-IN-CHARGE AND THE OCMC-STREETS.

K. THE PERMITTEE SHALL BE RESPONSIBLE FOR IDENTIFYING HIS CONSTRUCTION SIGNAGE. THE IDENTIFICATION SHALL INCLUDE THE PERMITTEE'S NAME, SPONSORING AGENCY NAME AND THE CONTRACT NUMBER. THE IDENTIFICATION SHALL BE PLACED ON THE BACK OF THE SIGN. THE LETTERING SHALL BE THREE (3) INCHES HIGH.

L. THE OCMC-STREETS RESERVES THE RIGHT TO VOID OR MODIFY THESE STIPULATIONS SHOULD CONSTRUCTION FAIL TO COMMENCE WITHIN TWO (2) YEARS OF THE SIGNED DATE OF THESE STIPULATIONS.

GARY SMALLS
DIRECTOR
OCMC-STREETS

MILAGROS RIVERA
PROJECT MANAGER
OCMC-STREETS

(C) SEWER & WATER MAIN PROJECT SPECIFIC PROVISIONS

(NO TEXT)

(D) GREEN INFRASTRUCTURE PROVISIONS

(NO TEXT)

(NO TEXT ON THIS PAGE)

SW - PAGES

SEWER AND WATER MAIN REVISIONS TO SPECIFICATIONS

NOTICE

The Standard Sewer And Water Main Specifications of the Department of Environmental Protection, Sewer Design Standards of the Department of Environmental Protection, Water Main Standard Drawings of the Department of Environmental Protection, Specifications For Trunk Main Work of the Department of Environmental Protection and the Standard Highway Specifications of the Department of Transportation of The City of New York, must be included as part of the contract documents. These said specifications and standard drawings are hereby revised under the following section headings:

A. NOTICE TO BIDDERS
B. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

(NO TEXT ON THIS PAGE)

A. NOTICE TO BIDDERS

1. The Contractor is hereby notified that a new scope of lead water service line replacement is added to the contract and all LSLR work must be in compliance with the new section SECTION 64.14 LEAD SERVICE LINE REPLACEMENT which is included herein SW Pages under Section B in subsection (10).

   Prior to the start of any water main work, the Contractor must perform lead service line investigation/survey and LSLR identification report of all water service connections encountered within the project limits and report to the Engineer. Information is also available in the DEP website: nyc.gov/leadpipe.

   The Contractor is advised that the cost of Lead Service Line Replacement (LSLR) work, as per the specifications and as ordered by the Engineer, including investigation/survey, identification report, all materials, equipment and labor necessary to complete the work will be deemed included and paid under the bid items 64.14A, 64.14AL, 64.14AM, 64.14B, 64.14BL, 64.14BM, 64.14V, 4.02 AG,4.13 AAS, 4.13BAS, 4.2, and 6.27 A. No separate payment will be made.

2. The Contractor is notified that a Tree Inventory must be developed and submitted for review of DDC and Parks Bronx forestry as part of the document package associated with a tree work permit application. The Contractor must hire an ISI certified consulting arborist who will inventory all Parks-jurisdiction trees within the project limits (Parks-jurisdiction trees include all trees on NYC Parks properties and within city rights-of-way). The Tree Inventory must be as described in DDC general requirement Section 4.16 Tree Inventory which also includes a Parks Tree Inventory Valuation Report (TIVR). The cost for the consulting arborist performing this work will be deemed included in the price bid item 4.21 TREE CONSULTANT.

3. Should any traffic signals components, including but not limited to conduits, require repair or modifications, this will require the addition of APS (Audio Pedestrian Signals) at all four corners of the affected intersection. All traffic signal work, including APS, must be performed in accordance with NYCDOT Traffic Signal Standard Drawings and Specifications. If the repairs or modifications are due to the Contractor's actions or negligence, the Contractor will be responsible for all costs associated with the repairs, modifications, and for addition of APS, at the Contractor's sole cost. The costs required for special care to avoid damage or impact to the traffic signals components and conduits are deemed included in the prices bid for all work, and will not be paid separately.

4. The Contractor is notified that Victaulic Style 77 Coupling is no longer acceptable for use in any steel water main work. All reference to Victaulic Style 77 Coupling and within the Standard Water Main Specifications of the Department of Environmental Protection (dated August 1, 2009), the Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), the Specifications For Trunk Main Work (dated March 2012), and the contract drawings, must be replaced with Bolted Split-Sleeve Restrained Coupling.

5. The Contractor is notified that NYCDDC has initiated the application/permit process for the STORM WATER POLLUTION PREVENTION PLAN (SWPPP) from DEP. The Contractor will be required to complete the process in order to acquire the permit prior to the start of the project. No separate or additional payment will be made for this work, the cost will be deemed included in the price bid item 9.30.

6. The Contractor is notified that as part of this contract a "DEHUMIDIFIER" System design has been prepared by the firm of COWI Consulting Inc. The Contractor's attention is directed to the Dehumidifier Design drawings consisting of four (4) sheets (DHM1 thru DHM4) that are included as part of the contract drawings. A quantity estimating report is also provided on Dehumidifier Design drawings. The Contractor is advised that the dehumidifier system installation of the Shaft 3A Chamber, as directed by the Engineer, including all materials, equipment, incidentals and labor necessary to complete this work will be deemed included in the Lump Sum amount of bid under item number 60.28DHM3A FURNISHING, DELIVERING AND INSTALLING DEHUMIDIFIER SYSTEM ETC. COMPLETE FOR SHAFT 3A.

7. The Contractor is notified that as part of this contract a “Cathodic Protection (CP) System Survey and Engineering Study of Soil and Stray Currents and Cathodic Protection System Design” has been prepared by the firm of CorrTech, Inc.. The Contractor’s attention is directed to the Cathodic Protection Design drawings consisting of eight (8) sheets that are included as part of the Contract Drawings. The Cathodic Protection (CP) System Survey and Engineering Study of Soil and Stray Currents and Cathodic Protection System Design report that consists of Twenty (20) pages that is attached to the end of this SW page.

8. The Contractor is notified that after the completion of the installation of new insulated flange joints inside the shaft chamber, DDC Cathodic Protection consultant will perform tests on all insulated joints to confirm all insulated joints are effective and submit their findings and test results in writing to the Engineer and DEP Shaft Maintenance Unit. In the instance of any of the installed insulated joints are not effective, the Contractor must replace and/or repair the insulated joint to the satisfaction of the Engineer and DEP at no additional cost to the City.

9. The Contractor is notified as part of this contract a structural investigation and evaluation must be performed by utilizing the services of a “Structural Engineer”, Licensed Professional Engineer, currently registered in the State of New York to perform a thorough structural integrity assessment and inspection of all the accessible structural elements including, but not limited to roof slabs, columns, structural beams, girders, and chamber walls, etc. of Shaft 3A Chamber for Project ID. HED562. Non-Destructive Testing (NDT) must be conducted to determine the existing conditions and structural integrity of all the structural elements of the chamber. The Structural Engineer must determine the extent of deterioration, conditions and provide remediation/rehabilitation recommendations of structural elements. The Structural Engineer must prepare and submit the investigation/evaluation and remediation report to the NYC Department of Environmental Protection and NYC Department of Design and Construction. The information and the report prepared by the Structural Engineer pertinent to this project must be used strictly for work related to Project HED562 as the documents/drawings may contain information that is privileged, confidential or otherwise protected from disclosure. The cost for all labor, materials, and equipment, etc., complete, required for the aforementioned work will be deemed included in the various bid prices of the contract. No separate payment will be made for these work.

10. The Contractor is advised that the cost of the proposed work of the Shaft 3A chamber as per the contract drawing, specifications and as ordered by the Engineer, including all materials, equipment, and labor necessary to complete this work will be paid under appropriate bid items.

11. The Contractor must verify the exact dimensions of the Shaft 3A chamber and submit steel pipe geometry drawings to be approved by NYC DEP and NYC DDC prior to the start of construction.

12. Prior to start of work, the Contractor must submit detailed drawings showing the means and methods for the protecting all piping and equipment within the chamber, including from falling debris. The protection system design must be submitted to the Engineer and NYCDEP Shaft Maintenance for review and approval and must not impede access to the equipment within the shaft, including valve and instrumentations. The plan and drawings must be prepared and sealed by a Professional Engineer in the State of New York.

13. The Contractor is notified that as shown on the contract drawings the Contractor must remove the existing 36-inch trunk water mains, valves, related piping and appurtenances within the existing Shaft 3A Chamber as per NYC DEP specifications and as ordered by the Engineer. The Contractor must exercise extreme caution and take all necessary precautions as not to cause any damage to the existing risers, riser caps, and riser outlets, instrumentations, and shaft chamber structure. The cost for all labor, materials and equipment, etc., complete, required for the aforementioned work will be deemed included in the various bid prices of the contract.

14. Any damage to existing city-owned structures caused by the Contractor's construction operations must be repaired or replaced as directed by the Engineer. The cost of such repair or replacement will be borne solely at the Contractor's own expense.

15. The existing shaft caps are made of manganese bronze. The contractor must pay attention to the materials to be used in the shaft, especially to epoxies and other products that could cause stress corrosion to the shaft caps and emission form products that may be harmful to the equipment in the shaft and chamber structures. All materials to used must be submitted to and approved by the NYCDEP.

16. The Contractor must support and protect the existing telecommunication cables, telemetry, electrical lines within the shaft chamber to the satisfaction of the Engineer at no additional cost to the city. Any damage due to the Contractor's operation must be replaced or repaired by the Contractor at their own expense.

17. The Contractor is notified that there are shutdown restrictions for this critical Shaft in addition to standard trunk main shutdown restrictions. Only one riser and one outlet leg to be out of service at a time. Shutdown requests should be addressed to the DEP BWSO-Distribution Engineer and Shaft Maintenance in writing or e-mail by the DDC Engineer well in advance of the request date to permit time to meet, discuss, coordinate, and allow BWSO adequate time to inspect the trunk main appurtenances affected by the shutdown. Trunk main shutdown should not be planned for summer months and will be dependent upon other constructions and / or maintenance activities occurring the distribution gradient. No shutdown of Trunk Water Main will be permitted from May 15 to September 15.

18. The Contractor must apply new waterproofing on the existing Shaft 3A Chamber and caulking chamber where exposed or excavated in accordance with the contract drawings and "NYC DEP standard sewer and water main specifications", section 25.05 "waterproofing" as modified in these SW-pages and as ordered by the Engineer. The cost for all labor, materials and equipment, etc., complete, required for the aforementioned work will be deemed included in the various bid prices of the contract.

19. The Contractor must provide on-site security (24 Hours/7 days/week) anytime the shaft is open: hatch open, roof slab removed, etc. The security guard must be stationed to oversee these openings and dedicated to protecting the shaft chamber. Prior to start of work, the Contractor must coordinate with the Engineer and NYCDEP to obtain security clearance for all personnel working on the shaft site.
    The Contractor must exercise extreme caution when excavating to expose the existing chamber roof or to remove nearby trees. All excavation must be completed by hand within one foot of existing shaft chamber and other utilities.

    The Contractor must provide a temporary cover or decking at any opening whenever work is not in progress to protect personnel and to prevent foreign material and /or debris from entering the shaft chamber. The contractor must submit for review decking design prepared by a Professional Engineer, registered in the State of New York at no additional cost to the City.

    The Contractor must prevent any blockage to the nearby catch basins. If these catch basins are required to be replaced due to the Contractor's operation, the Contractor will replace the catch basins including all necessary labor and material to complete the work at no additional cost to the City.

    Prior to start of work, the Contractor must submit a Health and Safety Plan to the Engineer and NYCDEP for approval. The Contractor must abide by NYCDEP’s Environmental health and safety policies and procedures for all work in the shaft chamber.

    The cost of the aforementioned work including all materials and labor necessary to complete this work will be deemed included in the price bid for all items of work. No separate payment will be made.

20. The Contractor is notified that a site visit is available to the existing Shaft 3A Chamber at the intersection of East 233rd Street and Bronxwood Avenue, Borough of the Bronx prior to bid date. The Contractor can assign a maximum of two (2) persons for the site visit up to thirty (30) minutes in the Shaft Chamber to review and inspect the existing condition and assess the scope of work. No photographs, no sampling, no testing nor any damage to the existing facilities will be allowed; the representatives must have appropriate Personal Protective Equipment. Please contact Mr. Djidda Djibrine P.E. of the Department of Design and Construction at 718-391-2027 to submit security clearance information and set up an appointment at least two (2) days prior to the scheduled visit.

21. The Contractor must locate the valve box casting on the removable slabs in accordance to the location of actuator for the 36" rubber seated butterfly valve and antenna approved by the Engineer and DEP Shaft Maintenance.

22. Within the Shaft 3A chamber, all 36" rubber seated butterfly valves and 36" metal seated butterfly valves must be installed with the actuator on top and must be positioned with the valve shaft and disk vertical.

    For 36" rubber seated butterfly valves, an extended input shaft of necessary length and diameter must be provided between the 2-inch square operating nut and the bevel gear box (valve box). The shaft must be ASTM A276 Type 316 stainless steel and must be provided with two stainless steel universal joints.

23. Ductile iron pipe must comply with DEP BWSO "Specification for Ductile Iron Pipe with Push- On Joints and Ductile Iron Fittings with Mechanical Joint," latest revision. Ductile iron and air release valves and pipes including Victaulic fittings will be included in the Lump Sum amount of bid under item number 60.28ARV3A - FURNISHING, DELIVERING AND INSTALLING BLOW OFF AND AIR RELEASE VALVES AND PIPES, ETC., COMPLETE FOR SHAFT 3A.

24. The Contractor is notified that there is an allowance for asbestos abatement work as part of this contract. The Contractor must remove and safely dispose off Asbestos Containing Materials (ACM) as needed to perform the other work of this contract when discovered during construction or as order by the Engineer. The allowance has been established for General (Page ASB-1 of the Asbestos Abatement specification) and Plumbing (Page ASB-17 of the Asbestos Abatement specification) Asbestos Abatement Work to replace ACM (Asbestos.Containing Materials) with non-ACM when so ordered and authorized by the Engineer, and must be paid under item 67.11AA48 "INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING 48-INCH DIAMETER STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE".

25. The Contractor must perform chlorine disinfection of the newly installed water mains within the guidelines of AWWA-C651 latest revision and as per applicable portions of New York City Department of Environmental Protection (NYCDEP) Specifications For Trunk Main Work. This publication includes Special Provisions For Trunk Main Work; and, Specification For Furnishing, Delivering And Laying Steel Pipe And Appurtenances and/or as ordered by the Engineer. All costs must be deemed included in various bid items. No separate or additional payment will be made for this work.

26. The Contractor is notified that the Contractor must acquire the following material, fabrication, installation and delivery of flow meters specification for water main work "Standard Specifications For Uni-Directional Ductile Iron Venturi Flow Meters", for this contract from the Department of Environmental Protection, Bureau of Water and Sewer Operations, Office of the Chief of Water Main Failure Analysis, 59-17 Junction Boulevard, 3rd Floor-Low Rise, Flushing, NY 11373.

27. The Contractor must furnish and install two pressure sensing lines made of 1-inch Schedule 40s, a-312 type 316 stainless steel pipe inside an 8-inch ductile iron carrier pipe from each Venturi meter to the instrumentation hook-up location in the shaft distribution chamber as shown schematically on the contract drawings, per manufacturer's requirements, and as approved and directed by the Engineer. The pressure sensing lines must be installed as per manufacturer's recommendations and must maintain a negative slope from the Venturi meter to the shaft distribution chamber without any high points or air traps. The pressure sensing lines must be braced as required to maintain proper pitch. The piping for the pressure sensing lines must be designed and hydrostatically tested for a pressure of 300-psi. for 10-minutes with no drop in pressure or leakage permitted. The pressure sensing piping is to be installed in one straight continuous run (without joints) from the Venturi meter chamber to the distribution chamber through the ductile iron pipe unless deemed by the Engineer to be impractical.

    Where a change in direction is required and approved by the Engineer, a manhole may be installed as approved by the Engineer to facilitate installation of the pressure sensing lines. Such manhole must be installed as per the Standard Drawing 46006-X for a Blowoff Manhole. The exposed stainless steel piping in these manholes must be covered with thermal insulation to prevent freezing of the water in the pipe. The insulation, of proper material and thickness, must be of a rigid-type, and consist of sections that can be locked together. The insulation material must be suitable for submersion and freezing in water and must be as approved by the Engineer.

    Inside chambers and manholes all piping must be supported in an approved manner. Material for the supports shall be stainless steel. Where necessary, pressure lines must be insulated from dissimilar metals that are prone to create galvanic corrosion. All fasteners and washers must be stainless steel.

    The ductile iron carrier piping must be as per Standard Water Main Specifications and must be installed with restrained joints and watertight and must be pressure tested as per the specifications. Where the Venturi sensing lines enter and exit the carrier pipe in chambers or manholes, the carrier pipe must be sealed to prevent water from flowing in the carrier pipe. The Contractor must furnish and install pipe-to-wall penetration seals and steel sleeves with anchors and water stops at each pipe opening in the chamber and manhole walls and propose a method of sealing the ends of the carrier pipe. Such seals shall be Link Seal as manufactured by Thunder line Corp or approved equal.

    All necessary valves, fittings, adaptors, supports, seals, gaskets, insulators, vents, drains, braces and any other piping components required for the proper installation of the pressure lines must be furnished and installed as approved.

    All costs to furnish, deliver and install the pressure sensing lines together with necessary valves, fittings, adaptors, supports, seals, gaskets, insulators, vents, drains, braces and any other piping components must be deemed included in the contract items bid for items labeled "DELIVERING AND INSTALLING FLOW METER TUBE (12-INCH TO 72-INCH DIAMETER) AND APPURTENANCES, COMPLETE". No separate or additional payment will be made for this work.

    Payment for the cost for other work required and necessary (e.g; ductile iron carrier pipe, concrete, reinforcing and structural steel, castings, penetration seals, etc.) will be made under the appropriate scheduled bid items.

28. The Contractor must submit a geometry drawing with sections indicating elevations, slope, and stationing to the Engineer for review and approval. The Contractor must excavate test pits and take all necessary field measurements to prepare the geometry indicating horizontal and vertical alignment, slope and appurtenance locations that conform to the contract specifications, requirements of the contract drawings, manufacturer's requirements and to field conditions. Alignment and appurtenance location must be indicated by stationing, elevations (datum: mean sea level at Sandy Hook) and deflection angles. Legal and existing street widths, street alignment, grades and all topographical and subsurface information from property line to property line identified and located must be shown on the geometry drawing. In addition, the relationship of the carrier pipe to significant field features (e.g., curbs, cross street centerline, subsurface structures, buildings lines, etc.) must be indicated by stationing and/or dimensioning. All reference points must be clearly documented so that

they may be reestablished at any time.

The geometry must be submitted on 22" x 36" sheets with a vertical scale of 1"=5' and a horizontal scale of 1"=30'. Each sheet must be stamped by a N.Y.S. Professional Engineer or a Licensed Land Surveyor and submitted for approval to the Engineer. Payment for preparation of the geometry (including field measurements and test pits within the contract specified trench limits), shall be deemed included in the various contract items. No separate or additional payment will be made for the geometry work stated in this section.

The Contractor is notified that additional test pits located outside the trench limits, if ordered by the Engineer, will be paid for under the item labeled, "ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS)."

29. The Contractor is notified that as part of this contract a “traffic signal” design has been prepared by the firm of COWI Consulting Inc. The Contractor’s attention is directed to the traffic signal Design drawings consisting of three (3) sheets (TF1 thru TF3) that are included as part of the contract drawings.

    The contractor is advised that all traffic signal work must meet the standards. All traffic signal work must be performed by a licensed, bonded and insured electrical contractor in compliance with NYCDOT specifications. Any field personnel working on signals must have appropriate training and approved in a work zone safety certificate program and also received equivalent or greater than the program outlined by the International Municipal Signal Association (IMSA).

    The contractor will be responsible for the existing traffic signal equipment and the safety of traffic for the duration of this project. All temporary vehicular signal heads must be clearly visible to motorists and pedestrian signals clearly visible to pedestrians in the crosswalks with no obstructions. All signals must remain operational during construction. In order to receive the timing data base, the Contractor must contact Nady Ibrahim, Deputy Director of signal timing at 212 839-3371. The Contractor must notify Wayne Archibald, Supervisor of the Bronx Electrical Inspection, at least 48 hours prior to any traffic signal or street lighting work and 7 AM on the date of work at 646 772-9175 and/or warchibald@dot.nyc.gov.

    The cost for all labor, materials, and equipment, etc., complete, required for the aforementioned work must be paid under the appropriate bid items.

30. The Contractor is notified that a Construction Report and Post-Construction Report are required under this contract in order to ascertain the effects of performing the trunk water main and dehumidifier installation work of Shaft 3A Chamber. The cost of this work will be deemed included in the price bid for Item No.76.11CR - CONSTRUCTION REPORT and Item No. 76.21 MR - MONITORING AND POST CONSTRUCTION REPORT.

31. The Contractor is notified that the Flowserve Limitorque HBC series Manual Actuator must be used for both Metal Seated Butterfly Valves and Rubber Seated Butterfly Valves. For Metal Seated Butterfly Valve, the Contractor must submit calculations of selection of Limitorque HBC actuator to the Engineer for review and approval. The aforementioned calculations will be deemed included in 61.21BVM36 FURNISHING, DELIVERING AND INSTALLING 36-INCH METAL SEATED BUTTERFLY VALVE.

32. The Contractor is advised that all 36-inch Rubber Seated Butterfly Valves must meet the requirements of **AWWA** C-504 Class 1508 with Ductile Iron body and the maximum shut off design pressure must be 150 psig. Valve body must be hydrostatically tested at 300 psig before assembly and coating application.

Valve shaft seal must be the stuffing box type with self-adjusting split V Teflon packing. The design of the valve and stuffing box assembly must be such that the packing can be adjusted or replaced while the valve is under pressure, without disturbing any part of the valve or actuator except the packing gland follower. The shaft seals may also be o-ring type contained in a removable corrosion resistance holder, replaceable without removing the valve shaft.

Valve shaft key / pins connecting the disc and the shaft must be same specification as the valve shaft.

Actuators for 36-inch Rubber Seated Butterfly Valves must be the worm gear type, sealed, gasketed, greased, lubricated and be suitable for submersion of water to a pressure of 10 psig for at least 24 hours. Actuator must be manual (handwheel) and square nut drive operated and must have an AWWA input shaft stop. Actuator must be designed to hold the valve disc in any intermediate position between fully closed and fully open position. Actuators must be Flowserve Limitorque manual operator.

For fasteners of flange connection, stainless steel bolts and studs must comply with the Standard Specification for Alloy-Stainless Steel Bolting Materials for High Temperature Services, ASTM A193/193M, Grade 88M Class 1. Stainless Steel washers and nuts must comply with the requirements of the Standard Specification for Carbon and Alloy Steel Nuts for Bolts for High Temperature Services, ASTM A194/194M Grade BM except as otherwise specified. All bolt heads must be semi-finished, hexagonal in shape and in accordance with the requirements of the ASME standards. All nut must be semi-finished hexagonal in shape and in accordance with the requirement of the ASME standards. Threads must be in accordance with the requirements of the ASME Standard Unified Inch Screw Threads ASME 81.1, Coarse-Thread.

For insulated flange joint, every bolt / stud must have one full length Mylar insulating sleeve with a wall thickness of at least 1/32-inch; two 1/8-inch thick Phenolic insulating washers with outside diameter 1/32-inch larger than the stainless steel washers; two 1/8-inch thick stainless steel washers, Type 304.

B. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS

(1) **Refer** to **Subsection 10.15 - Notice To Utility Companies, Etc., To Remove Structures Occupying Place Of Sewers, Water Mains Or Appurtenances**, Page 19:
Add the following to **Subsection 10.15**:

The concerned utility companies are listed in the utility packages herein Volume 3 of 3.

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(2) **Refer** to **Subsection 10.21 - Contractor To Notify City Departments**, Page 21:
Add the following to **Subsection 10.21**:

(1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor must notify Mr. Peter Gordon, P.E. Linear Capital Program Management Division at the Department of Environmental Protection, 59-17 Junction Boulevard, 3rd Floor Low Rise, Corona, NY, 11368 at (718) 595-4347, at least thirty (30) days prior to the start of construction.

(2) NEW YORK CITY FIRE DEPARTMENT

The Contractor must notify the Bureau of Plant Operations - Engineering Unit at least thirty (30) days prior to the start of construction by contacting Mr. Ed Durkin at (718) 281-3933.

(3) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor will notify Hasib Amini / Akmal Mikhail – Traffic Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (212) 839-3386 / (212) 839-3368, at least seventy-two (72) hours prior to the start of construction.

(4) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor must notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. Daniel Grulich at (718) 760-6927.

(5) N.Y.C. TRANSIT AUTHORITY

(a) The contractor is advised that bus routes as well as bus stops, within the scope of this project may be affected during construction operations. The Contractor will notify the Transit Authority at least two (2) weeks prior to the start of construction, in order to make the necessary arrangements.

Arrangements will be made through:

Hillary Cardoza Cato
Director, MTA-NYCT & MTA Bus, Bus Service Planning 2
Broadway, A17.03
2 Broadway, 17th Floor, New York,
N.Y. 10004
Hillary.cardoza-cato@nyct.com
646-252-5643 O 347-539-1367 M

(3) Refer to **Subsection 10.24 – Damaged Water Service Pipes To Be Repaired By A Licensed Plumber**, Page 22:
Add the following to **Subsection 10.24**:

If the damaged or cut water service pipe is lead, galvanized steel, or galvanized iron, the service pipe must not be partially replaced, but fully replaced from the main to the house control valve. If the service pipe was damaged, cut, or otherwise interrupted due to the Contractor's actions or means & methods (including selection of shoring systems), the water service pipe will be replaced at the Contractor's own cost.

(4) Refer to **Subsection 10.30 - Contractor To Provide For Traffic**, Page 24:

(1) Traffic Stipulations:

The Contractor will refer to the **OCMC TRAFFIC STIPULATIONS** in the **S-Pages under Section B** included in this Contract and as directed by the Engineer.

(5) Refer to **Section 22.05 - ALUMINIUM GRATING ,** Page 136:
Delete this **Section 22.05** in its entirety:
Substitute the following new **Section 22.05**

22.05.1 DESCRIPTION
This session describes aluminum gratings.

22.05.2 MATERIALS
Bolts, and nuts shall be made of stainless steel conforming to ASME A193, Grade B8, Class 1 or 2 for bolts and ASTM A194, Grade 8F for nuts.

Structural aluminum shapes shall be installed as shown on the Contract Drawings and shall conform to ASTM B308 requirements, alloy 6061-T6.

*All aluminum grating and treads, stairs and platforms, and railings shall be finished in Architectural Class 1 Anodic Coating (AA-M12C22A31), natural anodize. All aluminum grating and stair treads shall be furnished with a non-slip serrated surface.

22.05.3 ALUMINUM GRATINGS
All gratings shall be made in accordance with the standards of the National Association of Architectural Metal Manufacturers (NAAM).
They shall be able to support 300 lbs. per square foot over the gross projected area with the maximum deflection specified for the loading conditions given in Federal Specifications RR-G-661C.
All gratings shall be aluminum pressure locked gratings with minimum 1-3/4" x 3/16" bearing bars (of 6063-T6 alloy). They shall be of the following types and manufacturers, or equal:
Type F – Borden Metal Products Co.
Type BB – Irving Grating – H.G. Industries

The ends of all gratings and all openings in grating shall be fully banded with a minimum of a 1-3/4" x 3/16" bar and the supporting seats shall be as shown on the Contract Drawings.

22.05.4 ALUMINUM RAILINGS
Aluminum pipe railings and wall rails for all stairs, platforms, and walkways shall be provided where shown and in accordance with details on the Contract Drawings and as specified herein.
Railings shall be constructed of 1-1/2" nominal diameter standard weights Schedule 40 aluminum pipe, alloy 6063-T6, as manufactured by Alcoa or equal. All joints in pipe railings shall be mitered, welded and ground smooth. Bends shall be neatly made to the correct radius required without deforming the pipe. Expansion joints shall be provided in railings where required. The centerline of the top rail shall be located 3'6" above the grating or mounting slab elevation. Posts shall be supported in 2-1/2"

diameter stainless steel pipe sleeves set in the concrete. Aluminum escutcheon plates shall be provided. The posts shall be securely leaded and caulked into the sleeves. Post spacing shall not exceed 6'.

Posts on aluminum structures shall have welded aluminum fittings welded or bolted to channel or wide flange beam and welds ground smooth. A 6" high round steel rod, properly sized for snug fit inside aluminum pipe post shall be plug welded to flange. After erection and adjustment, all aluminum posts will be fastened to rod fitting by two 3/6" countersunk, stainless steel screws, one 2" above channel and one 4" above channel, drilled and tapped into vertical steel inner rod support.

Wall rails shall be fastened to walls with wall brackets equal to Julius Blum & Co., Inc. #361, J. G. Braun Co. #4494, or equal, in aluminum. All terminations of wall rails shall be turned 90° toward the wall and be held 1/2" from the wall.

Aluminum escutcheon plates shall be equal to Julius Blum & Co. Inc. #711, J. G. Baum Co. #11010, or equal, in aluminum.

Railing chains shall be installed complete with swivel snap on one end and eye bolt on other and welded to railing post or eye bolt welded to a steel plate with straps for anchoring in concrete. Chains shall be constructed of the same alloy as railings with 1/4-inch minimum thickness.

22.05.5 ALUMINUM STAIRS AND PLATFORMS

All metal stairs and platforms shall be of aluminum construction with aluminum treads, gratings and rails, as shown on the Contract Drawings and specified herein.

Use welding for joining pieces together unless otherwise shown or specified. Fabricate units so that bolts and other fastenings do not appear on finish surfaces. Make joint true and tight, and make connections between parts light-proof tight. Provide continuous welds, ground smooth where exposed. Construct stair units to conform to sizes and arrangements as shown. Construct entire assembly to support a minimum live load of 300 pounds per square foot. Provide aluminum framing, hangers, columns, struts, clips, brackets, bearing plates and other components as required for the support of stair and platforms. Erect stair work to line, plumb, square, and true with runs registering level with floor and platform levels.

Provide aluminum brackets and bearing surfaces as detailed and as required to anchor and contain the stairs on the supporting structure.

Stair framing strings shall be fabricated of structural aluminum channels as shown. Provide closures for exposed ends of strings.

Construct platforms of structural aluminum channel headers and miscellaneous aluminum framing members as shown. Bolt headers to strings. Bolt framing members to strings and headers. All nuts, bolts and washers for fastening of aluminum shall be stainless steel. Aluminum surfaces in contact with steel or masonry shall be properly isolated.

Aluminum stair treads shall be of the same pattern and alloys as the aluminum grating heretofore specified and shall have a 1-1/4-inch wide abrasive nosing. Aluminum bars shall have a standard mill finish.

Stair railings and handrails shall be coordinated with railing fabricator for location of posts supports.

22.05.6 FABRICATION

Welding shall conform to the applicable requirements of the American Welding Society and to the applicable recommendations of the Aluminum Company of American publications, "Welding and Brazing Aluminum." Welding shall be done in a manner that will prevent permanent buckling and all welds exposed in the finished work shall be ground smooth. All finished and/or machined faces shall be true to line and level. Aluminum shall be standard, well finished, structural or bar aluminum. Sections shall be well formed to shape and size with sharp lines and angles; curved work shall be

sprung evenly to curves. Holes for bolts and screws shall be drilled. Fastenings shall be concealed where practicable. Joints exposed to the weather shall be formed to exclude water. Work shall be fabricated and installed in a manner that will provide for expansion and contraction, prevent the shearing of bolts, screws and other fastenings, insure rigidity, and provide close fitting of sections.

22.05.7 WORKMANSHIP

Grating shall be accurately fabricated, free from warps, twists or other defects which affect the appearance and serviceability of the grating. The top of the main or bearing bars, crimp or lacing bars, and cross bars shall be in the same plane.

Grating shall be installed with each section readily removable and replaceable. Adjacent units shall be neatly fitted together. The clearance at the ends and between sections of grating shall be a maximum of one-quarter (1/4) inch. Gratings shall be set with a full and uniform end bearing on the supports to preclude rocking movement. Wedges or similar shimming devices shall not be used. Edges or gratings shall be neatly banded with bearing bars.

22.05.8 FASTENING DEVICES

Approved aluminum fastening devices shall be installed to hold the grating rigidly to support with means for easy removal. Fastening devices shall bot protrude above the walking surface of the grating. Fasteners shall be installed in accordance with the manufacturer's directions.

22.05.9 SEPARATE PAYMENT

IN WATER MAIN STRUCTURES- Separate payment shall be made for furnishing and installing the anchored steel frame for the aluminum grating under the price bid for item No. 65.61SS- FURNISHING, DELIVERING AND PLACING STRUCTURAL, REINFORCING AND MISCELLANEOUS STEEL.

(6) Refer to **Section 25.05 - WATERPROOFING ,** Page 160:
Delete this **Section 25.05** in its entirety:
Substitute the following new **Section 25.05 - WATERPROOFING**

25.05.1 DESCRIPTION

Waterproofing for water main chambers shall consist of four (4) layers of asphalt-saturated organic felts on all exterior surfaces of the water main chambers including that of the roof slab, as shown on the contract drawings, and as ordered by the Engineer.

25.05.2 MATERIAL

Asphalt-saturated organic felts shall comply with ASTM D226. Asphalt shall comply with ASTM D312. All asphalt-saturated organic felt supplies shall have the same width. Concrete Priming coat for waterproofing shall conform to the requirements of ASTM D41.

25.05.3 PREPARATION

Prepared surface shall be clean and dry immediately prior to the application of the concrete priming oil. Surfaces shall be reasonably smooth and free from projections and holes. The joints around and between the precast concrete roof slabs and access shaft covers shall be made watertight by filling them as shown on the contract drawings. All surfaces receiving the waterproofing shall be primed with a uniform brush coat of a concrete priming oil, applying one gallon for each 100 square feet.

All surfaces shall then be covered with four (4) full thickness of 15-lb type roofing felt, each set in a uniform coat of hot asphalt. Asphalt shall not be heated more than four hundred (400) degrees Fahrenheit. Lap each layer of felt twenty-seven and one-half (27-1/2). Mop asphalt solidly between each 17-1/2 in lap so that in no place shall felt touch felt. All the surfaces shall finally be coated with hot asphalt and each coat of asphalt shall be applied at a rate of 30 pounds per 100 square feet.

25.05.4 PAYMENT

Payment for furnishing and installing the waterproofing of water main chambers shall be deemed included in the prices bid for all items of work. No separate additional payment will be made for waterproofing of water main chambers.

(7) Add the following new **Section 60.28DHM**

SECTION 60.28DHM FURNISHING, DELIVERING AND INSTALLING DEHUMIDIFIER SYSTEM ETC.

PART 1 GENERAL
60.28DHM1.01 SUBMITTALS

A. Shop Drawings to include following:

1. Catalog sheets, specifications and installation instructions.
2. Electrical and Mechanical equipment layout.
3. Equipment fabrication details.
4. Method of mouthing equipment and hardware.
5. Technician qualifications.

60.28DHM1.02 CODE AND STANDARDS

A. All work must be performed in compliance with local city and state code and must be approved by EOR.

B. Local Code to include but not limited following:
   1. NFPA National Fire Protection Association
   2. NEMA – National Electric Manufacturer Association (NEMA)
   3. NEC – National Electric Code.
   4. City, State and National Plumbing code.
   5. ABMA: American Bearing Manufacturer's Association (formerly AFBMA).
   6. ASHRAE: American Society of Heating, Refrigeration, and Air Conditioning Engineers, Inc.
   7. AMCA: Air Movement and Control Association.
      Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA).

C. All equipment being used in this project must be certified by an independent testing agency such as UL (Underwriters Laboratories, Inc.) and must be approved by EOR.

60.28DHM1.03 DELIVERY, STORAGE, AND HANDLING

A. Deliver equipment as factory-assembled units to the extent allowable by shipping limitations, with protective crating and coverings.
B. Disassemble and reassemble units as required for movement to the final locations in accordance with manufacturer's printed instructions.
C. Lift and support units at the manufacturer's designated lifting or supporting points.

60.28DHM1.04 MAINTENANCE

A. Maintenance Service: A fully equipped authorized service organization capable of guaranteeing response within 8 hours to service calls must be available 24 hours a day, 7 days a week to service the completed Work.

B. Extra Materials: Furnish with each unit, one spare set of air filters in addition to the installed operating set. Suitably box and label spare filters as to their usage.

PART 2 PRODUCTS

60.28DHM2.01 DEHUMIDIFIERS

A. Type: Refrigeration system. Furnish equipment totally piped and wired, including all controls. Upon placement in their permanent location, only remote equipment piping and electrical power connections must be required to make the unit(s) operable.

B. Unit Casing and Frame: Fabricate from heavy gage corrosion resistant steel, properly reinforced for maximum strength and rigidity with an all welded tubular steel or structural steel angle and channel iron framework. Factory finish all exposed surfaces of unit cabinet and frame with a minimum three coat corrosion resistant baked enamel finish, color as selected by the Director from the manufacturer's standard color charts.

C. The Dehumidifier should be as manufactured by "Therma-Stor, LLC", QUEST 506 4036600 or Approved equal and comply with as follow:

Moisture Removal Capacity:	506 PINTS/DAY AT 80F, 60% RH
Efficiency:	8.1 PINTS/KWH
Power:	11 AMPS, 220-240V
Features:	LOW VOLTAGE TERMINAL BLOCK FOR EXTERNAL CONTROLS, INTEGRATED HANDLES, DUCTABLE INTAKE KIT.
Supply Voltage:	220 Volt
Weight:	280 LBS
Dimensions:	44.7"L x 28.9"W x 33.8"H

D. Dehumidifier to be controlled by a remote humidistat, Honeywell, Quest DEH3000R humidity controller or approved equal.

60.28DHM2.02 CENTRIFUGAL IN-LINE FANS

A. Housing: Rigid galvanized steel structural members and galvanized steel panels.
1. Inlet Cones: Deep spun or die formed type.
2. Inlet and Discharge Duct Collars: Angle flanges, with drilled or punched holes at uniform intervals, extending beyond the housing to provide continuous duct connections
3. Support Angles: Heavy gage steel, shipped loose, for installing vibration isolation or bolting unit to solid foundation.
4. Removable Access Panels: Galvanized steel with neoprene gaskets, minimum of 2 required.

B. Centrifugal Fan Wheel: Statically and dynamically balanced backward inclined type constructed of aluminum, spark resistant, non overloading, and matched with deeply spun venturis.

C. Direct Drive Motor: Directly connected, totally enclosed fan cooled, continuous duty, permanently lubricated, multi-speed type with thermal overload protection.
1. Wired to external junction box.

E. Disconnect Switch: Unit mounted, UL approved for the use, non-fused safety type, NEMA 1 enclosure, factory wired from motor to external junction box.

H. Fan Guards: Galvanized steel welded wire or expanded metal, with galvanized steel frame.

I. Acceptable fans:

1. Greenheck Fan Co., PO Box 410, Schofield, WI 54476, (715) 359-6171, www.greenheck.com
a. Direct Drive Fans: Model SQ.

2. Penn Barry Ventilation, 1401 North Plane Road, Richardson, TX 75081, (972) 234-3202, www.pennbarry.com.
a. Direct Drive Fans: Model Centrex Inliner SX.
b. Belt Drive Fans: Model Centrex Inliner SX.

2. C.Loren Cook Co., P.O. Box 4047, Springfield, MO 65808, (417) 869-6474, www.lorencook.com.
a. Direct Drive Fans: Model SQI-D.
b. Belt Drive Fans: Model SQI-B.

60.28DHM2.03 PROPELLER FANS

A. General Design: Quiet operating, electric motor driven, direct drive fan, with balanced impeller. Permanently lubricated bearings. Fan blades of the air foil type, fabricated from aluminum or steel.
1.Nominal Rating: 1/4 HP, 3000 CFM at 1/8 inch SP, 750 RPM Max., 18 inch dia.

B. Components:
1. Panels: Fabricated of 16 gage sheet metal, complete with deep throated orifice type discharge opening.
2. Shutters: Self-opening type, with frame and blades of aluminum and bearings of nylon. Blades coupled together with rods at each end. Blades edges equipped with resilient sealing gaskets.
3. Fan Guards: Fabricated from heavy gage polished steel wire on 1/2 inch spacing.

4. Factory Finish:
a. Finish all surfaces which are not constructed of corrosion-resistant material (such as polyester reinforced fiberglass) with a factory applied corrosion-resistant finish such as poly amid epoxy, Kynar, Aluma -Glas, or other finishes suitable for the Project Conditions.

5. Component Manufacturer: Fans, guards and shutters the product of one manufacturer.
6. Fasteners and Mounting Accessories: Coated with minimum 15 mils thick factory applied PVC or constructed of corrosion-resistant metal (such as stainless steel) suitable for the Project Conditions.

C. Motors:
1. Classification:
a. Classification According to Application: Comply with NEMA standards for special purpose motors.

b. Classification According to Environmental Protection and Methods of Cooling: Comply with NEMA requirements for a totally-enclosed fan cooled machine with sealed windings, suitable for the Project Conditions:
1) Corrosion-resistant construction.
2) Epoxy finish.
3) Stainless steel shaft.
4) Plastic or bronze integral motor cooling fan.

5) Stainless steel nameplate.
6) Corrosion-resistant hardware.

2. Motor (Nameplate) Voltage:
1) Motors up to 1/4 HP: NEMA standard motor voltage 115V, single phase, 60 Hz.

3. Horsepower Capacity:
a. Each motor must not be overloaded by the apparatus it operates under every condition of operation.
b. The horsepower capacity must be the continuous rating based on the nameplate horsepower rating. (The motor may not be overloaded up to the horsepower obtained by multiplying the rated horsepower by the service factor shown on the nameplate).
c. Where a minimum horsepower capacity is listed, furnish a motor larger than the minimum, if required in a particular case.
d. Pay additional cost due to necessary increase in feeder sizes, circuit breaker sizes, etc., provided under the contract drawings.

60.28DHM2.04 Exhaust Riser (Vent Stack)

A. Pipe Size: 12”
B. Type: 304 Stainless Steel, Schedule 40
C. Stainless Steel Cap with tamper proof steel screw.
D. Mounting Hardware: Stainless Steel
E. Refer to contract drawings for detail.
F. Or approved equal

60.28DHM2.05 COPPER AND BRASS PIPE, TUBING AND FITTINGS

A. Copper Tube, Types K: ASTM B 88.
B. Drainage Tube, Type DWV: ASTM B 306.
C. Wrot Copper Drainage Tube Fittings, Solder Joint: ASME B16.29.
D. Cast Copper Alloy Drainage Fittings, Solder Joint: ASME B16.23.

60.28DHM2.06 DIELECTRIC CONNECTORS

A. Dielectric Fitting: Bronze ball valve with end connections and pressure rating to match associated piping.
1. Nipples with inert non-corrosive thermoplastic linings are not acceptable.

60.28DHM2.07 PIPE HANGERS AND SUPPORTS

A. Pipe Hangers: Height adjustable standard duty clevis type, with cross bolt and nut. Hot dipped galvanized.

B. Hanger Rods: Mild, low carbon steel, fully threaded or threaded at each end, with two nuts at each end for positioning rod and hanger, and locking each in place. Hot dipped galvanized.

60.28DHM2.08 ANCHORS AND ATTACHMENTS

A. Sleeve Anchors (Group II, Type 3, Class 3): Molly's Div./USM Corp. Parasleeve Series, Ramset's Dynabolt Series, or Red Head/Phillips AN, HN, or FS Series. Hot dipped galvanized.

B. Wedge Anchors (Zinc Plated, Group II, Type 4, Class 1): Hilti's Kwik Bolt Series, Molly's Div./USM Corp. Parabolt PB Series, Ramset's Trubolt T Series, or Red Head/Phillips WS Series. Hot dipped galvanized.

C. Self-Drilling Anchors (Group III, Type 1): Ramset's RD Series, or Red Head/Phillips S Series. Hot dipped galvanized.

D. Beam Clamps: Forged steel beam clamp, with weldless eye nut (right hand thread), steel tie rod, nuts, and washers, Grinnell's Fig No. 292 (size for load, beam flange width, and rod size required). Hot dipped galvanized.

60.28DHM2.09 FASTENERS

A. Bolts, Nuts, Washers, Lags, and Screws: Medium carbon steel; size and type to suit application; hot dipped galvanized. Except where shown otherwise on the Drawings, furnish type, size, and grade required for proper installation of the Work.

60.28DHM2.10 DUCTWORK MATERIALS

A. Sheet Metal:

1. Stainless Steel: AISI Types 302, 304 and 316, as specified.

B. Duct Hangers:
   1. Strap Hangers: Stainless Steel.
   2. Rod Type Hangers: Stainless Steel, fully threaded or threaded each end, with 2 removable Stainless-Steel nuts each end for positioning and locking rod in place

C. Miscellaneous Fasteners and Upper Hanger Attachments:
   1. Sheet Metal Screws, Machine Bolts and Nuts: Stainless Steel.
   2. Concrete Inserts: Stainless Steel, continuously slotted or individual inserts conforming with MSS SP-58, Types 18 & 19, Class A-B.
   3. C Clamps: Fee & Mason Co.'s 255L with locking nut, and 255S with retaining strap.
   4. Metal Deck Ceiling Bolts: B-Line Systems, Inc.'s Fig. B3019.
   5. Welding Studs: Erico Fastening Systems, capacitor discharge, low carbon steel, copper flashed.
   6. Structural (carbon) Steel Shapes and Steel Plates: ASTM A36, shop primed.
   7. Stainless Steel Shapes and Plates: ASTM A276 and ASTM A666.
   8. Machine Bolt Expansion Anchors:
      a. Non-caulking single unit type: FS FF-S-325, Group II, Type 2, Class 2, Style 1.
      b. Non-caulking double unit type: FS FF-S-325, Group II, Type 2, Class 2, Style 2.
      c. Self-drilling type: FS FF-S-325, Group III, Types 1 and 2.
      d. All bolts, anchors, nuts and washers should be stainless.

D. 1. Ductwork Fabrication: Fabricate all ductwork from stainless steel. Use minimum No. 16 gage for exhaust duct as shown on contract drawings.

60.28DHM2.11 DUCTWORK ACCESSORIES

A. Control Dampers (Stainless Steel):

1. Types:
   a. Low Leakage Damper: 3.7 cfm/sq ft maximum leakage rate at 1500 fpm and 1 inch wg for 48 inch wide damper (based on AMCA 500).
2. Frame: 16 gage stainless steel hat channel with corner braces, and welded joints.
   a. Frame Size:
   1) Dampers 13 inches high and under: 3-1/2 inch x 3/8 inch top and bottom frames.
3. Blades:
   a. Low Leakage Damper: Single skin, 16 gage stainless steel with longitudinal reinforcing grooves, and PVC coated polyester blade edge seals mechanically locked into blade edge.
   b. Blade Action:
   1) Fully Open/Fully Closed Dampers: Parallel blade.
   c. Single blade dampers are acceptable for ducts up to 14 inches high.
4. Axles: 1/2-inch plated stainless steel hex positively locked to blade, and connected to frame through extruded hole with molded synthetic sleeve bearings.
5. Jamb Seals: Flexible metal compression type.
6. Damper Operation:
   a. Low Leakage Dampers: Electric motor operated. Weld actuator mounting bracket to frame.
7. Linkage:
   a. Single Section Dampers: In-frame fixed type with removable 1/2 inch dia control shaft extending 6 inches from damper frame, and outboard support bearing.
   b. Multiple Section Dampers: On-blade fixed type with factory installed jackshaft.
8. Finish: All materials are stainless steel. No finish is required.

B. Damper Actuators:

1. Acceptable Manufacturers: Honeywell Inc., Johnson Controls, Inc., Belimo, and Seimens.
2. Electric/Electronic Type:
   a. Positive positioning, spring return, and sized in accordance with actuator manufacturer's printed recommendations for each damper size.
   b. Actuators for outdoor dampers must fail closed upon loss of electric power.
   c. Actuator Response: Linear in response to sensed load.
   d. Voltage: 120 VAC or 24 VAC.

e. Actuator Timing:
1. Open Damper: 90 seconds.
2. Spring Return: 30 seconds.
3. Spring Close: 30 seconds.

C. Auxiliary End Switches: Required on electric/electronic actuators for the following applications:

1. 100 percent Outside Air Systems: Outside air damper switch delays start of unit until damper is open. Set switch to start unit when damper is 50 percent open.

2. In-line Exhaust Fan Systems (Over 500 cfm): Exhaust damper switch delays start of fan until damper is open.

D. Flexible Connection - Fabrick

1. Static Pressures under 6 inches WG: Woven Fiberglass fabric with Hypalon coating; similar to Duro Dyne Corp.'s Durolon.

E. Gasket Material:

1. Flanged Joints in Ducts: 1/8 inch thick reinforced inert plastic of the self-conforming type, of same width as flange.
a. Exception: Where flanged connections in cooking equipment exhaust ductwork is allowed by NFPA 96, make up joints with Fibrefrax Grade 110 Paper by Carborundum Co.

F. Sealant:

1. Acceptable Manufacturers: Duro Dyne Corp.; Foster Products Div., H.B. Fuller Co.; Hardcast Inc.; United Sheet Metal Div., United McGill Corp.

2. U.L. Listed adhesives (liquid or mastic), scrim, tapes, or combinations thereof, as required for pressure class; suitable for system operating temperatures; compatible with media conveyed within, insulation (if any), and ambient conditions.

60.28DHM2.12 IDENTIFICATION MATERIALS

A. Paint: Interior Acrylic Latex, Semigloss Enamel.
a. Solids by Weight: 49.0 percent.
b. Solids by Volume: 35.0 percent.
c. Solvent: Water.
d. Vehicle: Vinyl acrylic resin.
e. Weight per Gallon: 10.0 lbs.
f. Wet Film Thickness: 3.8 mils.
g. Dry Film Thickness: 1.2 mils.
h. Manufacturers: Benjamin Moore, ICI Dulux, Sherwin-Williams.

60.28DHM2.13 CONCRETE:

A. Concrete strength 4,000 PSI Rated.
B. Comply with ASTM C33.
C. Water: must be free and clean or acid, alkalis, salts, other substance that may be deleterious to concrete or steel
D. Admixture is concrete must be approved by engineer.

E. Non shrink grout.
F. Transporting of mixed concrete must comply with ASTM C94/C94M.
G. Refer to contract drawings for detail.
H. Or Approved Equal.

60.28DHM2.14 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

A. Date of Manufacture: No insulated conductor more than one year old when delivered to the site will be acceptable.

B. Acceptable Companies: American Insulated Wire Corp., BICC General Cable Industries Inc., Cerro Wire & Cable Co. Inc., Pirelli Cable Corp., Rome Cable Corp., Southwire Co or approved equal.

C. Conductors: Annealed uncoated copper or annealed coated copper in conformance with the applicable standards for the type of insulation to be applied on the conductor. Conductor sizes No. 8 and larger must be stranded.

D. Types:
1. Electric Light and Power Wiring:

a. USE-2: Dual rated heat and moisture resistant “EPR” insulation rated 600 V with jacket or dual purpose insulation/protective covering conforming to UL requirements for type USE service entrance cables.

E. TAG: Precision engrave letters and numbers with uniform margins, character size minimum 3/16 inches high.
1. Phenolic: Two color laminated engraver’s stock, 1/16 inch minimum thickness, machine engraved to expose inner core color (white).
2. Aluminum: Standard aluminum alloy plate stock, minimum .032 inches thick, engraved areas enamel filled or background enameled with natural aluminum engraved characters.

F. Splices:
1. Spring Type:
a. Rated 105° C, 600V; Buchanan/Ideal Industries Inc.’s B-Cap, Electrical Products Div./3M’s Scotchlok Type Y, R, G, B, O/B+, R/Y+, B/G+, or Ideal Industries Inc.’s Wing Nuts or Wire Nuts or approved equal.

b. Rated 150° C, 600V; Ideal Industries Inc.’s High Temperature Wire-Nut Model 73B, 59B or approved equal.

2. Indent Type with Insulating Jacket:
a. Rated 105° C, 600V; Buchanan/Ideal Industries Inc.’s Crimp Connectors, Ideal Industries Inc.’s Crimp Connectors, Penn-Union Corp.’s Penn-Crimps, Thomas & Betts Corp.’s STA-KON or approved equal.

3. Indent Type (Uninsulated): Anderson/Hubbell’s Versa-Crimp, VERSAtile, Blackburn/T&B Corp.’s Color-Coded Compression Connectors, Electrical Products Div./3M’s Scotchlok 10000, 11000 Series, Framatome Connectors/Burndy’s Hydent, Penn-Union Corp.’s BCU, BBCU Series, Thomas & Betts Corp.’s Compression Connectors or approved equal.

4. Connector Blocks: NSI Industries Inc.'s Polaris System or approved equal.

5. Resin Splice Kits: Electrical Products Div./3M's Scotchcast Brand Kit Nos. 82A Series, 82-B1 or 90-B1, Scotchcast Brand Resin Pressure Splicing Method or approved equal.

6. Heat Shrinkable Splices: Electrical Products Div./3M's ITCSN, Raychem Corp.'s Thermofit Type WCS, Thomas & Betts Corp.'s SHRINK-KON Insulators or approved equal.

7. Cold Shrink Splices: Electrical Products Div./3M's 8420 Series or approved equal.

G. Gutter Taps: Anderson/Hubbell's GP/GT with GTC Series Covers, Blackburn/T&B Corp.'s H-Tap Type CF with Type C Covers, Framatome Connectors/Burndy's Polytap KPU-AC, H-Crimpit Type YH with CF-FR Series Covers, ILSCO's GTA Series with GTC Series Covers, Ideal Industries Inc.'s Power-Connect GP, GT Series with GIC covers, NSI Industries Inc.'s Polaris System, OZ/Gedney Co.'s PMX or PT with PMXC, PTC Covers, Penn-Union Corp.'s CDT Series, Thomas & Betts Corp.'s Color-Keyed H Tap CHT with HTC Covers or approved equal.

H. Terminals: Nylon insulated pressure terminal connectors by Amp-Tyco/Electronics, Electrical Products Div./3M, Framatome Connectors/Burndy, Ideal Industries Inc., Panduit Corp., Penn-Union Corp., Thomas & Betts Corp., Wiremold Co or approved equal.

I. Lugs:

1. Single Cable (Compression Type Lugs): Copper, one or 2 hole style (to suit conditions), long barrel; Anderson/Hubbell's VERSAtile VHCL, Blackburn/T&B Corp.'s Color-Coded CTL, LCN, Framatome Connectors/Burndy's Hylug YA, Electrical Products Div./3M Scotchlok 31036 or 31145 Series, Ideal Industries Inc.'s CCB or CCBL, NSI Industries Inc.'s L, LN Series, Penn-Union Corp.'s BBLU Series, Thomas & Betts Corp.'s 54930BE or 54850BE Series or approved equal.

2. Single Cable (Mechanical Type Lugs): Copper, one or 2 hole style (to suit conditions); Blackburn/T&B Corp.'s Color-Keyed Locktite Series, Framatome Connectors/Burndy's Qiklug Series, NSI Industries Inc.'s Type TL, Penn-Union Corp.'s VI-TITE Terminal Lug Series, Thomas & Betts Corp.'s Locktite Series or approved equal.

3. Multiple Cable (Mechanical Type Lugs): Copper, configuration to suit conditions; Framatome Connectors/Burndy's Qiklug Series, NSI Industries Inc.'s Type TL, Penn-Union Corp.'s VI-TITE Terminal Lug Series, Thomas & Betts Corp.'s Color-Keyed Locktite Series or approved equal.

J. Tags:

1. Precision engrave letters and numbers with uniform margins, character size minimum 3/16 inches high.

2. Phenolic: Two color laminated engraver's stock, 1/16 inch minimum thickness, machine engraved to expose inner core color (white).

3. Aluminum: Standard aluminum alloy plate stock, minimum .032 inches thick, engraved areas enamel filled or background enameled with natural aluminum engraved characters.

60.28DHM2.15 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

A. Ground Clamps (Cable to Pipe): Blackburn/T&B Corp.'s GUV, Framatome Connectors /Burndy Corp.'s GAR, GD, GP, GK, OZ/Gedney Co.'s ABG, CG or approved equal.

B. Ground Clamps (Cable to Rod): Blackburn/T&B Corp.'s GG, GGH, JAB, JABH, GUV, Dossert Corp.'s GN, GPC, Framatome Connectors/Burndy Corp.'s GP, GX, GRC, OZ /Gedney Co.'s ABG or approved equal.

C. Ground Lugs: Copper, one or 2 hole style (to suit conditions), long barrel; Anderson/ Hubbell's VERSAtile VHCL, Blackburn/T&B Corp.'s Color-Coded CTL, LCN, Framatome Connectors/Burndy's Hylug YA, Electrical Products Div./3M Scotchlok 31036 or 31145 Series, Ideal Industries Inc.'s CCB or CCBL, or Thomas & Betts Corp.'s 54930BE ,54850BE Series or approved equal.

D. Exothermic Type Weld: Erico Inc.'s Cadweld Process, Furseweld/T&B Corp.'s Exothermic Welding System or approved equal.

E. Compression Connectors: Burndy Corp.'s Hyground System or approved equal.

E. Rod Electrodes: Copper clad (minimum .010 jacket) ground rods minimum 3/4 inches diameter by 10'-0" long.

F. Plate Electrodes: Copper plates minimum 0.06 inches thick by 2'-0" square feet of surface area.

G. Grounding Electrode Conductors and Bonding Conductors: Copper conductors, bare or insulated with THW, THW-2, XHHW, XHHW-2, THWN, THWN-2 or THHN insulation.

H. Hardware: Silicon-bronze bolts, nuts, flat and lock washers etc. as manufactured by Dossert Corp., Framatome Connectors/Burndy Corp., OZ/Gedney Co or approved equal.

60.28DHM2.16 RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

A. Rigid Ferrous Metal Conduit: Steel, hot dipped galvanized on the outside and inside, UL categorized as Rigid Ferrous Metal Conduit (identified on UL Listing Mark as Rigid Metal Conduit - Steel or Rigid Steel Conduit), by Allied Tube & Conduit Corp., LTV Copperweld, Wheatland Tube Co or approved equal.

B. Flexible Metal Conduit: Galvanized steel strip shaped into interlocking convolutions, UL categorized as Flexible Metal Conduit (identified on UL Listing Mark as Flexible Steel Conduit or Flexible Steel Conduit Type RW), by AFC Cable Systems Inc., Anamet Electrical Inc., Electri-Flex Co., International Metal Hose Co or approved equal.

C. Liquid-tight Flexible Metal Conduit: UL categorized as liquid-tight flexible metal conduit (identified on UL Listing Mark as Liquid-Tight Flexible Metal Conduit, also specifically marked with temperature and environment application data), by AFC Cable Systems Inc., Anamet Electrical Inc., Electri-Flex Co., Universal Metal Hose Co or approved equal.

60.28DHM2.17 RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

I. SWITCHES

A. Local Switches, Single Pole:
1. 15A, 120/277 V ac; Bryant's 4801, Crouse-Hinds/AH's 1891, General Electric's GE5931-1G, Hubbell's 1201/1101, Leviton's 1201/1101, Pass & Seymour's 15AC1, Woodhead's 1891 or approved equal.
2. 20A, 120/277 V ac; Bryant's 4901, Crouse-Hinds/AH's 1991, General Electric's GE 5951-1G, Hubbell's 1121/1221, Leviton's 1121/1221, Pass & Seymour's 20AC1, Woodhead's 1991 or approved equal.
3. 30A, 120/277 V ac; Bryant's 3001, Crouse-Hinds/AH's 3991, General Electric's GE 5991-1G, Hubbell's 3031, Leviton's 3031, Pass & Seymour's 30AC1 or approved equal.

B. Local Switches, Double Pole:
1. 15A, 120/277 V ac; Bryant's 4802, Crouse-Hinds/AH's 1892, General Electric's GE5932-1G; Hubbell's 1202/1102, Leviton's 1202/1102, Pass & Seymour's 15AC2, Woodhead's 1892 or approved equal.
2. 20A, 120/277 V ac; Bryant's 4902, Crouse-Hinds/AH's 1992, General Electric's GE5952-1G, Hubbell's 1222/1122, Leviton's 1222/1122, Pass & Seymour's 20AC2, Woodhead's 1992 or approved equal.
3. 30A, 120/277 V ac; Bryant's 3002, Crouse-Hinds/AH's 3992, General Electric's GE5992-1G, Leviton's 3032, Pass & Seymour's 30AC2 or approved equal.

C. Local Switches, Three-Way:
1. 15A, 120/277 V ac; Bryant's 4803, Crouse-Hinds/AH 1893, General Electric's GE5933-1, Hubbell's 1203/1103, Leviton's 1203/1103, Pass & Seymour's 15AC3, Woodhead's 1893 or approved equal.
2. 20A, 120/277 V ac; Bryant's 4903, Crouse-Hinds/AH's 1993, General Electric's GE5953-1G, Hubbell's 1223/1123, Leviton's 1223-2/1123-2, Pass & Seymour's 20AC3, Woodhead's 1993 or approved equal.
3. 30A, 120/277 V ac; Bryant's 3003, Crouse-Hinds/AH's 3993, General Electric's GE5993-1G, Leviton's 3033, Pass & Seymour's 30AC3 or approved equal.

D. Local Switches, Four-Way:
1. 15A, 120/277 V ac; Bryant's 4804, Crouse-Hinds/AH's 1894, General Electric's GE5934-1G, Hubbell's 1204/1104, Leviton's 1204-2/1104-2, Pass & Seymour's 15AC4, Woodhead's 1894 or approved equal.
2. 20A, 120/277 V ac; Bryant's 4904, Crouse-Hinds/AH's 1994, General Electric's GE5954-1G, Hubbell's 1224/1124, Leviton's 1224-2/1124-2, Pass & Seymour's 20AC4, Woodhead's 1994 or approved equal.
3. 30A, 120/277 V ac; Crouse-Hinds/AH's 3994, General Electric's GE5994-1G or approved equal.

E. Local Switches, Key-Operated:
1. Similar to toggle type local switches except operated by removable key instead of lever. Furnish 2 keys with each switch.

F. Motor rated switch:
1. Heavy-duty horsepower rated switches capable of providing manual ON/OFF control to higher motor loads than standard toggle switches. 600V AC, UL listed, industrial grade with FD cast iron box or approved equal.

60.28DHM2.15.1 FITTINGS AND ACCESSORIES

A. Insulated Bushings:
   1. Threaded, malleable iron/zinc electroplate with 105 degrees C minimum plastic insulated throat; Appleton Electric Co.'s BU50I Series, Cooper/Crouse-Hinds' 1031 Series, OZ/Gedney Co.'s IBC-50 Series, Raco Inc.'s 1132 Series, Steel City/T & B Corp.'s BI-901 Series, Thomas & Betts Corp.'s 1222 Series or approved equal.
   2. Threaded malleable iron with 150 degrees C plastic throat; Appleton Electric Co.'s BU501 Series, Cooper/Crouse-Hinds' H1031 Series, OZ/Gedney Co.'s IBC-50 Series or approved equal.

B. Plastic Bushings for 1/2 and 3/4 Inch Conduit:
   1. 105 degrees C minimum temperature rating; Appleton Electric Co.'s BBU50, BBU75, Blackburn (T & B Corp.'s) 50 BB, 75 BB, Cooper/Crouse-Hinds' 931,932, or OZ/Gedney Co.'s IB-50, IB-75, Raco Inc.'s 1402, 1403, Steel City/T & B Corp.'s BU-501, BU-502, Thomas & Betts Corp.'s 222, 223 or approved equal.
   2. 150 degrees C temperature rating; Appleton Electric Co.'s BBU50H, BBU75H, Cooper/Crouse-Hinds' H-931, H-932, OZ/Gedney Co.'s A-50, A-75 or approved equal.

C. Insulated Grounding Bushings:
   1. Threaded, malleable iron/zinc electroplate with 105 degrees C minimum plastic insulated liner, and ground lug; Appleton Electric Co.'s GIB-50 Series, Cooper/Crouse-Hinds' GLL Series, OZ/Gedney Co.'s IBC-50L Series, Raco Inc.'s 1212 Series, Steel City/T & B Corp.'s BG-801 (1/2 to 2") Series, Thomas & Betts Corp.'s 3870 or approved equal.
   2. Threaded malleable iron/zinc electroplate with 150 degrees C plastic insulated liner, and ground lug; Appleton Electric Co.'s GIB Series, Cooper/Crouse-Hinds' HGLL Series, or OZ/Gedney Co.'s IBC-50L Series, Thomas & Betts Corp.'s 3870 or approved equal.

D. Connectors and Couplings:
   1. Locknuts: UL, steel/zinc electroplate; Appleton Electric Co.'s BL-50 Series, Cooper/Crouse-Hinds' 11 Series, OZ/Gedney Co.'s 1-50S Series, Raco Inc.'s 1002 Series, Steel City/T&B Corp.'s LN-101 Series, Thomas & Betts Corp.'s 141 Series or approved equal.
   2. Grounding Wedge: Thomas & Betts Corp.'s 3650 Series or approved equal.
   3. Couplings For Rigid Metal and IMC Conduit: Standard galvanized threaded couplings as furnished by conduit manufacturer, Allied Tube & Conduit Corp.'s Kwik-Couple or approved equal.
   4. Three Piece Conduit Coupling For Rigid Metal and IMC Conduit: Steel, malleable iron, zinc electroplate; Allied Tube & Conduit Corp.'s Kwik-Couple, Appleton Electric Co.'s EC-50 Series, Cooper/Crouse-Hinds' 190M Series, OZ/Gedney Co.'s 4-50 Series, Raco Inc.'s 1502 Series, Steel City/T & B Corp.s EK-401 Series, Thomas & Betts Corp.'s 675 Series or approved equal.
   5. Electrical Metallic Tubing Couplings and Insulated Connectors: Compression type, steel/zinc electroplate; Appleton Electric Co.'s TW-50CS1, TWC-50CS Series, Cooper/Crouse-Hinds' 1650, 660S Series, Raco Inc.'s 2912, 2922 Series, Steel City/T & B Corp.'s TC-711 Series, Thomas & Betts Corp.'s 5120, 5123 Series or approved equal.
   6. Flexible Metal Conduit Connectors: Arlington Industries Inc.'s Saddle-Grip, OZ/Gedney Co.'s C-8T, 24-34T, ACV-50T Series, Thomas & Betts Corp.'s Nylon Insulated Tite-Bite Series or approved equal.
   7. Liquid-tight Flexible Metal Conduit Connectors: Steel, malleable iron, zinc electroplate, insulated throat; Appleton Electric Co.'s STB Series, Cooper/Crouse-Hinds' LTB Series, OZ/Gedney Co.'s 4Q-50T Series, Raco Inc.'s 3512 Series, Steel

City/T & B Corp.'s LT-701 Series, Thomas & Betts Corp.'s 5332 Series or approved equal.

E. Conduit Bodies (Threaded):
1. Malleable Iron/Zinc Electroplate: Zinc electroplate malleable iron or cast iron alloy bodies with zinc electroplate steel covers; Appleton Electric Co.'s Unilets, Cooper/Crouse-Hinds' Condulets, OZ/Gedney Co.'s Conduit Bodies or approved equal.

F. Expansion Fittings:
1. Malleable Iron, Zinc Electroplate Finish: Appleton Electric Co.'s XJ,OZ/Gedney Co.'s AX (TX for EMT), with external bonding jumper or approved equal.
2. Electrogalvanized Steel: Cooper/Crouse-Hinds' XJG (XJG-EMT for EMT), with internal grounding or approved equal.

G. Deflection Fittings: Appleton Electric Co.'s DF, Cooper/Crouse-Hinds' XD, OZ/Gedney Co.'s Type DX or approved equal.

H. Hazardous Location Fittings:
1. Sealing Fittings: Appleton Electric Co.'s EYS, ESU w/Kwiko sealing compound and fiber filler, Cooper/Crouse-Hinds' EYS, EZS w/Chico A sealing compound and Chico X filler, OZ/Gedney Co.'s EY, EYA with EYC sealing compound and EYF damming fiber or approved equal.
2. Other Type Fittings: As required to suit installation requirements, by Appleton Electric Co., Cooper/Crouse-Hinds, OZ/Gedney Co or approved equal.

I. Sealant for Raceways Exposed to Different Temperatures: Sealing compounds and accessories to suit installation; Appleton Electric Co.'s DUC, or Kwiko Sealing Compound with fiber filler, Cooper/Crouse-Hinds' Chico A Sealing Compound with Chico X fiber, Electrical Products Division 3M Scotch products, OZ Gedney Co.'s DUX or EYC sealing compound with EYF damming fiber, Thomas & Betts Corp.'s Blackburn DX or approved equal.

J. Vertical Conductor Supports: Kellems/Hubbell Inc.'s Conduit Riser Grips, OZ/Gedney Co.'s Type M, Type R or approved equal.

K. Pulling-In-Line For Installation in Spare and Empty Raceways: Polypropylene monofilament utility line; Greenlee Textron Inc.'s Poly Line 430, 431, Ideal Industries Powr-Fish Pull-Line 31-340 Series or approved equal.

60.28DHM2.18 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

2.18.1 ANCHORING DEVICES

A. Sleeve Anchors (FS FF-S-325 Group II, Type 3, Class 3): Molly/Emhart's Parasleeve Series, Phillips' Red Head AN, HN, FS Series, Ramset's Dynabolt Series or approved equal.

B. Wedge Anchors (FS FF-S-325 Group II, Type 4, Class 1): Hilti's Kwik Bolt Series, Molly/Emhart's Parabolt Series, Phillips' Red Head WS, Ramset's Trubolt Series or approved equal.

C. Self-Drilling Anchors (FS FF-S-325 Group III, Type 1): Phillips' Red Head Series S, Ramset's Ram Drill Series or approved equal.

D. Non-Drilling Anchors (FS FF-S-325 Group VIII, Type 1): Hilti's Drop-In Anchor Series, Phillips' Red Head J Series, Ramset's Dynaset Series or approved equal.

E. Stud Anchors (FS FF-S-325 Group VIII, Type 2): Phillips' Red Head JS Series or approved equal.

60.28DHM2.18.2 CAST-IN-PLACE CONCRETE INSERTS

A. Continuous Slotted Type Concrete Insert, Galvanized:
1. Load Rating 1300 lbs./ft.: Kindorf's D-986 or approved equal.
2. Load Rating 2400 lbs./ft.: Kindorf's D-980 or approved equal.
3. Load Rating 3000 lbs./ft.: Hohmann & Barnard Inc.'s Type CS-H or approved equal.
4. Load Rating 4500 lbs./ft.: Hohmann & Barnard Inc.'s Type CS-HD or approved equal.

B. Threaded Type Concrete Insert: Galvanized ferrous castings, internally threaded.

C. Wedge Type Concrete Insert: Galvanized box-type ferrous castings, designed to accept bolts having special wedge shaped heads.

D. Except where shown otherwise on the Drawings, furnish type, size, and grade required for proper installation of the Work, selected from the following: Furnish galvanized fasteners for exterior use, or for items anchored to exterior walls, except where stainless steel is indicated.

1. Standard Bolts and Nuts: ASTM A 307, Grade A, regular hexagon head.
2. Lag Bolts: FS FF-B-561, square head type.
3. Machine Screws: FS FF-S-92, cadmium plated steel.
4. Machine Bolts: FS FF-B-584 heads; FF-N-836 nuts.
5. Wood Screws: FS FF-S-111 flat head carbon steel.
6. Plain Washers: FS FF-W-92, round, general assembly grade carbon steel.
7. Lock Washers: FS FF-W-84, helical spring type carbon steel.
8. Toggle Bolts: Tumble-wing type; FS FF-B-588, type, class and style as required to sustain load.

E. Stainless Steel Fasteners: Type 302 for interior Work; Type 316 for exterior Work; Phillips head screws and bolts for exposed Work unless otherwise specified.

60.28DHM2.18.3 TPR (THE PEEL RIVET) FASTENERS

A. 1/4 inch diameter, threadless fasteners distributed by Subcon Products or approved equal.

60.28DHM2.18.4 POWDER DRIVEN FASTENER SYSTEMS

A. Olin Corp.'s Ramset Fastening Systems, or Phillips Drill Company Inc.'s Red Head Powder Actuated Systems or approved equal.

60.28DHM2.18.5 HANGER RODS

A. Mild low carbon steel, unless otherwise specified; fully threaded or threaded each end, with nuts as required to position and lock rod in place. Unless galvanized or cadmium plated, provide a shop coat of red lead or zinc chromate primer paint.

60.28DHM2.18.6 "C" BEAM CLAMPS

A. With Conduit Hangers:
   1. For 1 Inch Conduit Maximum: B-Line Systems Inc.'s BG-8, BP-8 Series, Caddy/Erico Products Inc.'s BC-8P and BC-8PSM Series, GB Electrical Inc.'s HIT 110-412 Series or approved equal.

   2. For 3 Inch Conduit Maximum: Appleton Electric Co.'s BH-500 Series beam clamp with H50W/B Series hangers, Kindorf's 500 Series beam clamp with 6HO-B Series hanger, OZ/Gedney Co.'s IS-500 Series beam clamp with H-OWB Series hanger or approved equal.

   3. For 4 Inch Conduit Maximum: Kindorf's E-231 beam clamp and E-234 anchor clip and C-149 series lay-in hanger; Unistrut Corp.'s P2676 beam clamp and P-1659A Series anchor clip with J1205 Series lay in hanger or approved equal.

B. For Hanger Rods:
   1. For 1/4 Inch Hanger Rods: B-Line Systems Inc.'s BC, Caddy/Erico Products Inc.'s BC, GB Electrical Inc.'s HIT 110, Kindorf's 500, 510, Unistrut Corp.'s P1648S, P2398S, P2675, P2676 or approved equal.

   2. For 3/8 Inch Hanger Rods: Caddy/Erico Products Inc.'s BC, Kindorf's 231-3/8, 502, Unistrut Corp.'s P1649AS, P2401S, P2675, P2676 or approved equal.

   3. For 1/2 Inch Rods: Appleton Electric Co. BH-500 Series, Kindorf's 500 Series, 231-1/2, OZ/Gedney Co.'s IS-500 Series, Unistrut Corp.'s P1650AS, P2403S, P2676 or approved equal.

   4. For 5/8 Inch Rods: Unistrut Corp.'s P1651AS beam clamp and P1656A Series anchor clip or approved equal.

   5. For 3/4 Inch Rods: Unistrut Corp.'s P1653S beam clamp and P1656A Series anchor clip or approved equal.

60.28DHM2.18.7 CHANNEL SUPPORT SYSTEM

A. Channel Material: 12 gage steel.

B. Finishes:
   1. Phosphate and baked green enamel/epoxy.
   2. Pre-galvanized.
   3. Electro-galvanized.
   4. Hot dipped galvanized.
   5. Polyvinyl chloride (PVC), minimum 15 mils thick.

C. Fittings: Same material and finish as channel.

D. UL Listed Systems:
   1. B-Line Systems Inc.'s B-22 (1-5/8 x 1-5/8 inches), B-12 (1-5/8 x 2-7/16 inches), B-11 (1-5/8 x 3-1/4 inches) or approved equal .
   2. Grinell Corp.'s Allied Power-Strut PS 200 (1-5/8 x 1-5/8 inches), PS 150 (1-5/8 x 2-7/16 inches), PS 100 (1-5/8 x 3-1/4 inches) or approved equal.
   3. Kindorf's B-900 (1-1/2 x 1-1/2 inches), B-901 (1-1/2 x 1-7/8 inches), B-902 (1-1/2 x 3 inches) or approved equal.

   4. Unistrut Corp.'s P-3000 (1-3/8 x 1-5/8 inches), P-5500 (1-5/8 x 2-7/16 inches), P-5000 (1-5/8 x 3-1/4 inches) or approved equal.

5. Versabar Corp.'s VA-1 (1-5/8 x 1-5/8 inches), VA-3 (1-5/8 x 2-1/2 inches) or approved equal.

60.28DHM2.18.8 MISCELLANEOUS FITTINGS

A. Side Beam Brackets: B-Line Systems Inc.'s B102, B103, B371-2, Kindorf's B-915, or Versabar Corp.'s VF-2305, VF-2507 or approved equal.

B. Pipe Straps:
   1. Two Hole Steel Conduit Straps: B-Line Systems Inc.'s B-2100 Series, Kindorf's C-144 Series, Unistrut Corp.'s P-2558 Series or approved equal.
   2. One Hole Malleable Iron Clamps: Kindorf's HS-400 Series, OZ/ Gedney Co.'s 14-G Series, 15-G Series (EMT) or approved equal.

C. Deck Clamps: Caddy/Erico Products Inc.'s DH-4-T1 Series or approved equal.

D. Fixture Stud and Strap: OZ/Gedney Co.'s SL-134, Steel City's FE-431 or approved equal.

E. Supporting Fittings for Pendent Mounted Industrial Type Fluorescent Fixtures on Exposed Conduit System:
   1. Ball Hanger: Appleton Electric Co.'s AL Series, Crouse-Hinds Co.'s AL Series or approved equal.
   2. Flexible Fixture Hanger: Appleton Electric Co.'s UNJ-50, UNJ-75, Crouse-Hinds Co.'s UNJ115 or approved equal.
   3. Flexible (Hook Type) Fixture Hanger: Appleton Electric Co.'s FHHF, Crouse-Hinds Co.'s UNH-1 or approved equal.
   4. Eyelet: Unistrut Corp.'s M2250 or approved equal.
   5. Eyelet with Stud: Kindorf's H262, Unistrut Corp.'s M2350 or approved equal.
   6. Conduit Hook: Appleton Electric Co.'s FHSN, Crouse-Hinds Co.'s UNH-13 or approved equal.

F. Supporting Fasteners (Metal Stud Construction): Metal stud supports, clips and accessories as produced by Caddy/Erico Products Inc or approved equal.

60.28DHM2.19 WIRING DEVICES

2.19.1 SWITCHES

A. Local Switches, Single Pole:
   1. 15A, 120/277 V ac; Bryant's 4801, Crouse-Hinds/AH's 1891, General Electric's GE5931-1G, Hubbell's 1201/1101, Leviton's 1201/1101, Pass & Seymour's 15AC1, Woodhead's 1891 or approved equal.
   2. 20A, 120/277 V ac; Bryant's 4901, Crouse-Hinds/AH's 1991, General Electric's GE 5951-1G, Hubbell's 1121/1221, Leviton's 1121/1221, Pass & Seymour's 20AC1, Woodhead's 1991 or approved equal.
   3. 30A, 120/277 V ac; Bryant's 3001, Crouse-Hinds/AH's 3991, General Electric's GE 5991-1G, Hubbell's 3031, Leviton's 3031, Pass & Seymour's 30AC1 or approved equal.

B. Local Switches, Double Pole:
   1. 15A, 120/277 V ac; Bryant's 4802, Crouse-Hinds/AH's 1892, General Electric's GE5932-1G; Hubbell's 1202/1102, Leviton's 1202/1102, Pass & Seymour's 15AC2, Woodhead's 1892 or approved equal.

2. 20A, 120/277 V ac; Bryant's 4902, Crouse-Hinds/AH's 1992, General Electric's GE5952-1G, Hubbell's 1222/1122, Leviton's 1222/1122, Pass & Seymour's 20AC2, Woodhead's 1992 or approved equal.
3. 30A, 120/277 V ac; Bryant's 3002, Crouse-Hinds/AH's 3992, General Electric's GE5992-1G, Leviton's 3032, Pass & Seymour's 30AC2 or approved equal.

C. Local Switches, Three-Way:
1. 15A, 120/277 V ac; Bryant's 4803, Crouse-Hinds/AH 1893, General Electric's GE5933-1, Hubbell's 1203/1103, Leviton's 1203/1103, Pass & Seymour's 15AC3, Woodhead's 1893 or approved equal.
2. 20A, 120/277 V ac; Bryant's 4903, Crouse-Hinds/AH's 1993, General Electric's GE5953-1G, Hubbell's 1223/1123, Leviton's 1223-2/1123-2, Pass & Seymour's 20AC3, Woodhead's 1993 or approved equal.
3. 30A, 120/277 V ac; Bryant's 3003, Crouse-Hinds/AH's 3993, General Electric's GE5993-1G, Leviton's 3033, Pass & Seymour's 30AC3 or approved equal.

D. Local Switches, Four-Way:
1. 15A, 120/277 V ac; Bryant's 4804, Crouse-Hinds/AH's 1894, General Electric's GE5934-1G, Hubbell's 1204/1104, Leviton's 1204-2/1104-2, Pass & Seymour's 15AC4, Woodhead's 1894 or approved equal.
2. 20A, 120/277 V ac; Bryant's 4904, Crouse-Hinds/AH's 1994, General Electric's GE5954-1G, Hubbell's 1224/1124, Leviton's 1224-2/1124-2, Pass & Seymour's 20AC4, Woodhead's 1994 or approved equal.
3. 30A, 120/277 V ac; Crouse-Hinds/AH's 3994, General Electric's GE5994-1G or approved equal.

E. Local Switches, Key-Operated:
1. Similar to toggle type local switches except operated by removable key instead of lever. Furnish 2 keys with each switch.

F. Motor rated switch:
1. Heavy-duty horsepower rated switches capable of providing manual ON/OFF control to higher motor loads than standard toggle switches. 600V AC, UL listed, industrial grade with FD cast iron box or approved equal.

60.28DHM2.19.2 RECEPTACLES

A. Specification Grade Receptacles:
1. Single receptacle, NEMA 5-15R (15A, 125 V, 2P, 3W); Bryant's 5251, Crouse-Hinds/AH's 5251, General Electric's 5251-1, Hubbell's 5251, Leviton's 5251, Pass & Seymour's 5251 or approved equal.

2. Duplex receptacle, NEMA 5-15R (15A, 125 V, 2P, 3W); Bryant's 5252/5242 , Crouse-Hinds/AH's 5252/5242, General Electric's GEN5252-1, Hubbell's 5252/5242, Leviton's 5252/5242, Pass & Seymour's 5252/5242 or approved equal.

3. Single receptacle, NEMA 5-20R (20A, 125 V, 2P, 3W); Bryant's 5361/5351, Crouse-Hinds/AH's 5361/5351, General Electric's GE4103-1, Hubbell's 5361/5351, Leviton's 5361/5351, Pass & Seymour's 5351 or approved equal.

4. Duplex receptacle, NEMA 5-20R (20A, 125 V, 2P, 3W); Bryant's 5362, Crouse-Hinds/AH's 5352/5342, General Electric's GE5352-1, Hubbell's 5352, Leviton's 5352, Pass & Seymour's 5352 or approved equal.

B. Safety Grounding Receptacles:
   1. Duplex receptacle, NEMA 5-15R (15A, 125 V, 2P, 3W); Bryant's SG-62, 8200S, Crouse-Hinds/AH's 6352, General Electric's GE4058-1, Hubbell's SG-62, Leviton's 5262-SG ,Pass & Seymour's SG-62 or approved equal.

C. Electric Clock Receptacles:
   1. Single receptacle, NEMA 5-15R (15A, 125 V, 2P, 3W), brass or stainless steel face plate to match hardware; Bryant's 2828-G, 2828-GS, Crouse-Hinds/AH's 5708, General Electric's GE4224-5, Hubbell's 5233, 5235, Leviton's 5261-CH, Pass & Seymour's S3733, S3733-SS or approved equal.

D. Ground Fault Interrupter Receptacles:
   1. Duplex receptacle rated 15A (NEMA 5-15R), circuit-ampacity 20A; Bryant's GFR52FT, Crouse-Hinds/AH's GF5242, General Electric's GF5242, Hubbell's GF5252, Leviton's 6599, Pass & Seymour's 1591S, Daniel Woodheads 5252GF or approved equal.

   2. Duplex receptacle rated 20A (NEMA 5-20R), circuit ampacity 20A; Bryant's GFR53FT, Crouse-Hind/AH's GF5342, General Electric's GF5342, Hubbell's GF 5352, Leviton's 6899, Pass & Seymour's 2091S, Daniel Woodheads 5352GF or approved equal.

E. Isolated Ground Receptacles:
   1. Single receptacle, NEMA 5-15R (15A, 125 V, 2P, 3W); Bryant's 5261-IG, Crouse-Hinds/AH's IG5261, General Electric's GE-8210-IG, Hubbell's IG4710 &, Leviton's 5261-IG, Pass & Seymour's IG5261 or approved equal.

   2. Duplex receptacle, NEMA 5-15R (15A, 125 V, 2P, 3W); Bryant's 5262-IG, Crouse-Hinds/AH's IG-5262, General Electric's GE-8200-IG, Hubbell's IG-5262, Leviton's 5262-IG, Pass & Seymour's IG-6200 or approved equal.

   3. Single receptacle, NEMA 5-20R (20A, 125 V, 2P, 3W); Bryant's, Crouse-Hinds/AH's, General Electric's GE8310-IG2, Hubbell's, Leviton's, Pass & Seymour's or approved equal.

   4. Duplex receptacle, NEMA 5-20R (20A, 125 V, 2P, 3W); Bryant's, Crouse-Hinds/AH's, General Electric's GE8300-IG, Hubbell's, Leviton's, Pass & Seymour's or approved equal.

F. Corrosion Resistant Receptacles:
   1. Duplex receptacle, NEMA 5-15R (15A, 125 V, 2P, 3W): Bryant's 5262-CR, Crouse-Hinds/AH's 5262CR, General Electric's GE5262-C, Hubbell's 5262-ILH ,Pass & Seymour's CR6200 or approved equal.

G. Special Purpose Receptacles: Furnish matching nylon, polycarbonate or armored plug with each receptacle. Furnish matching wall plate with each receptacle (.040" brass, Type 302 stainless steel, weatherproof, threaded box type, as required):
   1. Type A: NEMA 14-20R (3P, 4W, 20A, 125/250 V, W/G); Crouse-Hinds/AH's 5759, General Electric's 1420, Hubbell's 8410 or approved equal.

   2. Type B: NEMA 14-30R (3P, 4W, 30A, 125/250 V, W/G); Bryant's 9430FR, Crouse-Hinds/AH's 5744N, General Electric's GE4191-3, Hubbell's 9430A, Leviton's 278, Pass & Seymour's 3864 or approved equal.

   3. Type C: NEMA 14-50R (3P, 4W, 50A, 125/250 V, W/G); Bryant's 9450FR, Crouse-Hinds/AH's 5754N, General Electric's GE4181-3, Hubbell's 9450A, Leviton's 279, Pass & Seymour's 3894 or approved equal.

4. Type D: NEMA 14-60R (3P, 4W, 60A 125/250 V, W/G); Bryant's 9460FR, Crouse-Hinds/AH's 9460N, General Electric's GE4171-3, Hubbell's 9460A, Pass & Seymour's 3871 or approved equal.

5. Type E: NEMA 10-20R (3P, 3W, 20A, 125/250 V); Bryant's 9326, Crouse-Hinds/AH's 9140, General Electric's GE4124-1, Hubbell's 6810, Pass & Seymour's 6810 or approved equal.

6. Type F: NEMA 10-30R (3P, 3W, 30A, 125/250 V); Bryant's 9303, Crouse-Hinds/AH's 9344N, General Electric's GE4132-3, Hubbell's 9350, Leviton's 5207, Pass & Seymour's 3860 or approved equal.

7. Type G: NEMA 10-50R (3P, 3W, 50A, 125/250 V); Bryant's 9306, Crouse-Hinds/AH's 7985N, General Electric's GE4152-3, Hubbell's 7962, Leviton's 5206GR, Pass & Seymour's 3890 or approved equal.

8. Type H: NEMA L5-15R (2P, 3W, 15A, 125 V, W/G); Bryant's 4710, Crouse-Hinds/AH's 4710, General Electric's GL0510, Hubbell's 4710, Pass & Seymour's 4710 or approved equal.

9. Type I: NEMA L5-20R (2P, 3W, 20A 125 V, W/G); Bryant's 70520FR, Crouse-Hinds/AH's 6200, General Electric's GL0520, Hubbell's 2310A, Pass & Seymour's L520-R or approved equal.

10. Type J: NEMA L5-30R (2P, 3W, 30A, 125 V, W/G); Bryant's 70530FR, Crouse-Hinds/AH's 6330, General Electric's GL0530, Hubbell's 2610A, Leviton's 70530-FR, Pass & Seymour's L530-R or approved equal.

11. Type K: NEMA L6-15R (2P, 3W, 15A, 250 V, W/G); Bryant's 70615FR, Crouse-Hinds/AH's 6560, General Electric's GL0610, Hubbell's 4560, Leviton's 70615FR, Pass & Seymour's 4560 or approved equal.

12. Type L: NEMA L6-20R (2P, 3W, 20A, 250 V, W/G); Bryant's 70620FR, Crouse-Hinds/AH's 6210, General Electric's GL0620, Hubbell's 2320A, Leviton's 70620-FR, or Pass & Seymour's L620-R, Slater's L620R or approved equal.

13. Type M: NEMA L6-30R (2P, 3W, 30A, 250 V, W/G); Bryant's 70630FR, Crouse-Hinds/AH's 6340, General Electric's GL0630, Hubbell's 2620, Pass & Seymour's L630-R or approved equal.

14. Other Types: As produced by Bryant, Crouse-Hinds/AH, General Electric, Hubbell, Pass & Seymour or approved equal. NEMA configuration and ratings to suit requirements or approved equal.

60.28DHM2.19.3 WALL PLATES

A. Stainless Steel Wall Plates: Type 302 stainless steel with satin finish; Bryant's 93__Series, Crouse-Hinds/AH's 93_Series, General Electric's 93 Series, Hubbell's 93___Series, Leviton's 910-40 Series, Pass & Seymour's 93 Series or approved equal.

B. Weatherproof Covers: Crouse-Hinds WLRS, WLRD, Hubbell's 52, 74 Series, Pass & Seymour's 45 Series or approved equal.

C. Covers for Threaded Type Boxes: Stamped sheet steel, gasketed device covers as produced by Crouse-Hinds Co., OZ/Gedney Co or approved equal.

60.28DHM2.19.4 NAMEPLATES

A. Phenolic Type: Standard phenolic nameplates with 3/16 inch minimum size lettering engraved thereon.

B. Embossed Aluminum: Standard stamped or embossed aluminum tags, 3/16 inch minimum size lettering, as produced by Seton Name Plate Corp., Tech Products Inc or approved equal.

60.28DHM2.20 CIRCUIT BREAKERS

A. Similar to existing circuit breakers.

B. Compatible with existing panelboard.

C. Number of poles and ampere trip rating as indicated on drawings.

D. Complete with accessories required for installation.

60.28DHM2.21 IDENTIFICATION FOR ELECTRICAL SYSTEMS

I. RACEWAY AND CABLE LABELS

A. Comply with ANSI A13.1, Table 3, for minimum size of letters for legend and for minimum length of color field for each raceway and cable size.

Color: Black letters on orange field.

1. Legend: Indicates voltage

B. Pre-tensioned, Wraparound Plastic Sleeves: Flexible, preprinted, color-coded, acrylic band sized to suit the diameter of the line it identifies and arranged to stay in place by pretensioned gripping action when placed in position.

C. Colored Adhesive Tape: Self-adhesive vinyl tape not less than 3 mils thick by 1 to 2 inches wide.

D. Underground-Line Warning Tape: Permanent, bright-colored, continuous-printed, vinyl tape.

1. Not less than 6 inches wide by 4 mils thick.
2. Compounded for permanent direct-burial service.
3. Embedded continuous metallic strip or core.
4. Printed legend indicating type of underground line.

E. Tape Markers: Vinyl or vinyl-cloth, self-adhesive, wraparound type with preprinted numbers and letters.

F. Aluminum, Wraparound Marker Bands: Bands cut from 0.014-inch thick aluminum sheet, with stamped or embossed legend, and fitted with slots or ears for permanently securing around wire or cable jacket or around groups of conductors.

G. Plasticized Card-Stock Tags: Vinyl cloth with preprinted and field-printed legends. Orange background, unless otherwise indicated, with eyelet for fastener.

H. Aluminum-Faced, Card-Stock Tags: Weather-resistant, 18-point minimum card stock faced on both sides with embossable aluminum sheet, 0.002 inch thick, laminated with moisture-resistant acrylic adhesive, punched for fasteners, and preprinted with legends to suit each application.

II. NAMEPLATES AND SIGNS

A. Safety Signs: Comply with 29 CFR, Chapter XVII, Part 1910.145.

B. Engraved Plastic Nameplates and Signs: Engraving stock, melamine plastic laminate, minimum 1/16 inch thick for signs up to 20 sq. in. and 1/8 inch thick for larger sizes.

1. Engraved legend with black letters on white face.
2. Punched or drilled for mechanical fasteners.

C. Baked-Enamel Signs for Interior Use: Preprinted aluminum signs, punched or drilled for fasteners, with colors, legend, and size required for the application. 1/4-inch grommets in corners for mounting.

D. Exterior, Metal-Backed, Butyrate Signs: Weather-resistant, nonfading, preprinted, cellulose-acetate butyrate signs with 0.0396-inch galvanized-steel backing; and with colors, legend, and size required for the application. 1/4-inch grommets in corners for mounting.

E. Fasteners for Nameplates and Signs: Self-tapping, stainless-steel screws or No. 10/32, stainless-steel machine screws with nuts and flat and lock washers.

III. MISCELLANEOUS IDENTIFICATION PRODUCTS

A. Cable Ties: Fungus-inert, self-extinguishing, one-piece, self-locking, Type 6/6 nylon cable ties.

1. Minimum Width: 3/16 inch.
2. Tensile Strength: 50 lb minimum.
3. Temperature Range: Minus 40 to plus 185 deg F.
4. Color: According to color-coding.

PART 3 EXECUTION

60.28DHM3.01 GENERAL

A. Use corrosion-resistant fasteners and mounting accessories to install the Work of this Section.

B. Instruction of State Personnel: The manufacturer's representative must instruct authorized State Personnel in the operation and maintenance of the air conditioning equipment and all accessories. Provide a minimum of 2 hours for instruction purposes, exclusive of all pre-start-up, start-up and service call time.

60.28DHM3.02 DEHUMIDIFIERS INSTALLATION

A. Unless otherwise shown or specified. install the Work of this Section in accordance with the manufacturer's printed installation instructions.

B. Provide all piping and electrical connections to units through knock-out openings in bottom of units.

60.28DHM3.03 FANS INSTALLATION AND EXAMINATION

A. Install fans in accordance with manufacturer's printed installation instructions.

B. Suspended Fans: Suspend fans from building construction with vibration isolation devices.

C. Support fans independent from ductwork.

D. Install units with clearances for service and maintenance.
1. Provide clearance for complete wheel, motor and shaft removal.

E. Examine areas and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of fans. Do not proceed with installation until unsatisfactory conditions have been corrected.

60.28DHM3.04 FIELD QUALITY CONTROL

A. Preliminary Requirements: Provide the services of a Company Field Advisor for the following:
1. Inspect air conditioning system installations prior to start-up.
2. Supervise initial start-up of equipment.
3. Instruction of State Personnel.
4. Service.

B. Dehumidification System Pre-Start-Up and Start-Up:
1. Upon completion of dehumidifier installations, the Company Field Advisor must visit the site, inspect the installations and notify the Director's Representative of any Work which must be done or modified prior to start-up.

2. Upon completion of required Work, or modifications to installed Work and miscellaneous testing, all as required by the particular air conditioning system or apparatus, the Company Field Advisor must supervise the conditioner start-up.

3. Start-up the system and conduct a preliminary test, for the purpose of checking the general operation of the air conditioner, proving mechanical and electrical controls and making necessary adjustments.

4. Provide pre-start-up check list, start-up list and operating instructions for air conditioner, framed under rigid plastic and place where directed in the Computer Room.

B. Fans Pre-Start-Up and Start-Up:

1. Inspect exposed finish. Remove burrs, dirt, and construction debris, and repair damaged finishes including chips, scratches, and abrasions.

2. Pre-start Up:
a. Remove shipping blocking, and bracing.
b. Verify lubrication for grease bearings and other moving parts.
c. Set dampers in connected ductwork in proper position.

3. Start Up:
a. Energize motor, verify proper operation of drive system, and fan wheel.

60.28DHM3.05 PIPING INSTALLATION

A. Install piping at approximate locations indicated, and at maximum height.

B. Install piping clear of door swings, and above sash heads.

C. Make allowances for expansion and contraction.

D. Allow for a minimum of one-inch free air space around pipe or pipe covering, unless otherwise specified.

E. Install horizontal piping with a constant pitch, and without sags or humps.
1. Water Piping: Pitch 1/4 inch per 10 feet upward in direction of flow, unless otherwise noted. If it is not possible to maintain constant pitch, establish a new low point and continue. At the low point, provide a 1/2-inch drip leg and gate valve with a hose bibb end. Provide an air vent at the high point.

2. Drainage Piping: Pitch 1/4 inch per foot downward, in direction of flow, unless otherwise noted.

3. Vent Piping: Pitch 1/4 inch per foot upward, unless otherwise noted.

F. Install vertical piping plumb.

G. Use fittings for offsets and direction changes, except for Type K soft annealed copper temper water tube.

H. Cut pipe and tubing ends square; ream before joining.

I. Threading: Use American Standard Taper Pipe Thread Dies.
1. Thread brass pipe with special brass threading dies.

J. Drainage Above Ground:
1. DWV copper tubing, with cast brass or wrot copper drainage pattern fittings, and joints made with Type 3 solder.

2. Copper Tube, Types K and joints made with brazing.

60.28DHM3.06 HANGERS AND SUPPORTS INSTALLATION

A. Do not hang or support one pipe from another or from ductwork.
1. Do not bend threaded rod.

B. Space hangers or supports for horizontal piping on maximum center distances as listed in the following hanger schedules, except as otherwise specified, or noted on the Drawings.

1. For Copper Pipe and Copper Tubing:

PIPE OR TUBING SIZE (Inches)	MAXIMUM SPACING (Feet)
1-1/2 and under	6
2 and over	10

2. For Directional Changes: Install a hanger or support close to the point of change of direction of all pipe runs in either a horizontal or vertical plane.

3. For Concentrated Loads: Install additional hangers or supports, spaced as required and directed, at locations where concentrated loads such as in-line pumps, valves, fittings or accessories occur, to support the concentrated loads.
4. For Branch Piping Runs and Runouts Over 5 feet In Length: Install a minimum of one hanger, and additional hangers if required by the hanger spacing schedules.

D. Size hanger rods in accordance with the following:

PIPE OR TUBING SIZE (Inches)	SINGLE ROD HANGER SIZE (Inches)		DOUBLE ROD HANGER SIZE (Inches)	
	PIPE	TUBING	PIPE	TUBING
1/2 to 2	3/8	1/4	3/8	1/4

D. Vertical Piping:
1. Support vertical risers of piping systems, by means of heavy-duty hangers installed close to base of pipe risers, and by riser clamps with extension arms at intermediate floors, with the distance between clamps not to exceed 25 feet, unless otherwise specified. Support pipe risers in vertical shafts equivalent to the aforementioned. Install riser clamps above floor slabs, with the extension arms resting on floor slabs. Provide adequate clearances for risers that are subject to appreciable expansion and contraction, caused by operating temperature ranges.

60.28DHM3.07 UPPER HANGER ATTACHMENTS

A. General:
1. Secure upper hanger attachments to overhead structural steel, steel bar joists, or other suitable structural members.

2. Do not attach hangers to steel decks that are not to receive concrete fill.

3. Do not attach hangers to precast concrete plank decks less than 2-3/4 inches thick.

4. Do not use flat bars or bent rods as upper hanger attachments.

B. Attachment to Steel Frame Construction: Provide intermediate structural steel members where required by pipe support spacing. Select steel members for use as intermediate supports based on a minimum safety factor of five.
1. Do not use drive-on beam clamps.
2. Do not support piping over 4 inches in size from steel bar joists. Secure upper hanger attachments to steel bar joists at panel points of joists.
3. Do not drill holes in main structural steel members.
4. Beam clamps, with tie rods as specified, may be used as upper hanger attachments for the support of piping, subject to clamp manufacturer’s recommended limits.

C. Attachment to Existing Cast-In-Place Concrete:
   1. For piping up to a maximum of 4 inches in size, secure hangers to overhead construction with self-drilling type expansion shields and machine bolts.
   2. Secure hangers to wall or floor construction with single unit expansion shields or self-drilling type expansion shields and machine bolts.

60.28DHM3.08 DUCTWORK INSTALLATION - GENERAL

A. Install ductwork to allow maximum headroom. Properly seam, brace, stiffen, support and render ducts mechanically airtight. Adjust ducts to suit job conditions. Dimensions may be changed as approved, if cross sectional area is maintained.

B. Pitch horizontal ducts connected to hoods downward toward hood not less than 1 inch in 10 feet.

C. Provide necessary transformation pieces, and flexible fabric connections for ductwork connected to air handling equipment or air inlet and outlet devices.

60.28DHM3.09 SEALING SEAMS, JOINTS, AND PENETRATIONS

A. Seal ductwork in accordance with the SMACNA Manual except for the following:
   1. Ductwork Specified to be Insulated: Conform with Seal Class A for all pressure classes.

B. Duct Sealants: Water based, non-fibrated: Foster 32-19, Childers CP-146, Duro Dyne SAS.

60.28DHM3.10 DUCTWORK UPPER HANGER ATTACHMENTS

A. General:
   1. Secure upper hanger attachments to structural steel or steel bar joists wherever possible.
   2. Do not use drive-on beam clamps, flat bars or bent rods, as upper hanger attachments.
   3. Do not attach hangers to steel decks which are not to receive concrete fill.
   4. Do not attach hangers to precast concrete planks less than 2-3/4 inches thick.
   5. Avoid damage to reinforcing members in concrete construction.
   6. Metallic fasteners installed with electrically operated or powder driven tools may be used as upper hanger attachments, in accordance with the SMACNA Manual, with the following exceptions:
      a. Do not use powder driven drive pins or expansion nails.
      b. Do not attach powder driven or welded studs to structural steel less than 3/16 inch thick.
      c. Do not support a load, in excess of 250 lbs from any single welded or powder driven stud.
      d. Do not use powder driven fasteners in precast concrete.

B. Attachment to Steel Frame Construction: Provide intermediate structural steel members where required by ductwork support spacing. Select steel members for use as intermediate supports based on a minimum safety factor of 5.
   1. Secure upper hanger attachments to steel bar joists at panel points of joists.
   2. Do not drill holes in main structural steel members.

C. Attachment to Existing Cast-In Place Concrete:
   1. Secure hangers to overhead construction with self-drilling type expansion anchors and machine bolts.
   2. Secure hanger attachments required to be supported from wall or floor construction with single unit expansion anchors or self-drilling type expansion anchors and machine bolts.

60.28DHM3.11 DUCT RISER SUPPORTS, UNDER 2 INCHES W.G.

A. Support vertical round ducts by means of double-ended split steel pipe riser clamps bearing on floor slabs or adjacent structural members, at every other floor through which the riser passes.

B. Unless otherwise specified or shown on the drawings, support vertical rectangular ducts by means of two steel angles, secured to duct and resting on floor slab or adjacent structural steel member, at every other floor through which the duct passes. Size supports as follows:

MAX. SIDE DIMENSION (inches)	SUPPORT ANGLE (inches)	SECURE TO DUCT WITH	MIN BEARING AT EACH END (inches)
36	1 x 1 x 1/8	Screws	2

60.28DHM3.12 FLEXIBLE FABRIC CONNECTORS (INSTALLATION)

A. Make ductwork connections to air handling equipment with flexible fabric connectors. Install connectors with sufficient slack to prevent vibration transmission.

B. Free Fabric Length: Install fabric connectors a minimum of three inches in length for ducts having a maximum diameter of 18 inches, or maximum side dimension of 30 inches, and a minimum of five inches in length for duct diameters over 18 inches or side dimensions over 30 inches.

C. Secure fabric connectors to fans, casings and ducts as follows:
   1. Rectangular Connectors: Secure with 1 inch x 1/8 inch thick flat galvanized steel bars, with screws or bolts on maximum 8 inch centers, or with approved sheet metal slip joints. Tightly crimp fabric into sheet metal joint and secure complete joint with sheet metal screws on maximum 6 inch centers.

D. Fabric connectors may be factory pre-fabricated pre-assembled units, with minimum No. 24 USS gage metal edges, secured to fabric with double lock seams.

E. Do not paint fabric connectors.

60.28DHM3.13 IDENTIFICATION

A. Protection: Cover and protect surfaces to be painted, adjacent surfaces not to be painted, and removed furnishings and equipment from existing paint removals, airborne sanding particles, cleaning fluids and paint spills using suitable drop cloths, barriers and other protective devices.

1. Schedule and coordinate surface preparations so as not to interfere with work of other trades or allow airborne sanding dust particle to fall on freshly painted surfaces. Do not perform the Work of this Section until testing, insulation and finish painting Work have been completed.

2. Provide adequate natural or mechanical ventilation to allow surfaces to be prepared and painted in accordance with product manufacturer's instructions and applicable regulations.

3. Provide and maintain "Wet Paint" signs, temporary barriers and other protective devices necessary to protect prepared and freshly painted surfaces from damages until Work has been accepted.

B. Clean and prepare surfaces to be painted in accordance with specifications, paint manufacturer's approved product data sheets and printed label instructions. In the event of conflicting instructions or directions, the more stringent requirements must apply.

1. Cleaners: Use only approved products manufactured or recommended by finish paint manufacturer. Unless otherwise recommended by cleaner manufacturer, thoroughly rinse with clean water to remove surface contaminants and cleaner residue.

C. Duct Identification:

1. Identify exposed ductwork, bare or insulated, directly connected to air handling apparatus, in the following spaces or rooms, by means of painted stenciled legends:
   a. Dehumidifier.
   b. Exhaust.

2. Locate stenciled legends to be readily visible from any point of observation. Stencil identification along center line of duct, close to equipment. Where view is unobstructed from two directions, apply two sets of stenciling (both sides), visible from each direction.

3. Letter Size: 1-1/2 inches in height.

4. Samples of Ductwork Identification:
   a. Exhaust.

5. Colors: Paint stenciled letters black. Where the background color is dark, paint background white before stenciling.

D. Equipment Identification:

1. Identify mechanical equipment, bare or insulated, installed in the following spaces or rooms, by means of painted stenciled legends:
   a. Dehumidifier.
   b. Exhaust Fan.
   c. Propeller Fan.

2. Paint stenciled legends black, a minimum of 1-1/2 inches in height, located to be readily visible from a reasonable point of view. Place identification along center line of equipment, if possible.

3. Samples of Equipment Identification:
   a. Dehumidifier DH-1.
   b. Exhaust Fan EF-1
c. Propeller Fan PF-1 (2).

E. Application of Paint:

1. Stencil Painting: Apply with a brush or aerosol type spray can.

F. Cleaning:

1. Clean adjacent surfaces of paint spatters resulting from the Work of this Section.

60.28DHM3.14 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (INSTALLATION)

A. Install conductors in raceways after the raceway system is completed.

B. No grease, oil, or lubricant other than wire-pulling compounds specified may be used to facilitate the installation of conductors.

C. Do not change, group or combine circuits other than as indicated on the drawings without written permission from the Engineer.

D. Color Coding for 120/208 Volt Electric Light and Power Wiring:
   1. Color Code:
      a. 2 wire circuit - black, white.
      b. 3 wire circuit - black, red, white.
      c. 4 wire circuit - black, red, blue, white.

E. Install equipment grounding conductor:
   1. Where specified in other Sections or indicated on the drawings.
   2. In conjunction with circuits recommended by equipment manufacturers to have equipment grounding conductor.

F. For Electric Light and Power Branch Circuits: Install conductors of size shown on drawings. Where size is not indicated, the minimum size allowed is No. 12 AWG.not change, group or combine circuits other than as indicated on the drawings without written permission from the Engineer.

G. Identification Tags: Use tags to identify feeders and designated circuits. Install tags so that they are easily read without moving adjacent feeders or requiring removal of arc proofing tapes. Attach tags with non-ferrous wire or brass chain.
   1. Interior Feeders: Identify each feeder in pullboxes and gutters. Identify by feeder number and size.
   2. Exterior Feeders: Identify each feeder in manholes and in interior pullboxes and gutters. Identify by feeder number and size, and also indicate panel designation from which feeder originates.

3. Street and Grounds Lighting Circuits: Identify each circuit in manholes and lighting standard bases. Identify by circuit number and size, and also indicate building number and panel designation from which circuit originates.

H. Identification Plaque: Where a building or structure is supplied by more than one service, or has any combination of feeders, branch circuits, or services passing through it, install a permanent plaque or directory at each service, feeder and branch circuit disconnect location denoting all other services, feeders, or branch circuits supplying that building or structure or passing through that building or structure and the area served by each.

I. Electric Light and Power Circuits:
1. FEP, THHN, THW, THW-2, THWN, THWN-2, XHH, XHHW, or XHHW-2: Wiring in dry or damp locations (except where special type insulation is required).

2. THWN, THWN-2, XHHW, XHHW-2, USE, or USE-2: Wiring in wet locations (except where type USE or USE-2 insulated conductors are specifically required, or special type insulation is required).

3. THHN, THW-2, THWN-2, XHHW, or XHHW-2: Wiring for electric discharge lighting circuits (fluorescent, HID), except where fixture listing requires wiring rated higher than 90° C.

4. THWN Marked “Gasoline and Oil Resistant”: Wiring to gasoline and fuel oil pumps.

5. USE, or USE-2: Underground/ below grade wiring.

6. USE, or USE-2 Marked “Sunlight Resistant”:

7. Service entrance wiring to the service equipment.

8. Wiring exposed to the weather and unprotected (except where special type insulation is required).

9. Emergency Feeder Circuits: Use electrical circuit protective system.

10. Class 1 Circuits: Use Class 1 wiring specified in Part 2 (except where special type insulation is required).

11. Class 2 Circuits: Use Class 2 wiring specified in Part 2 (except where special type insulation is required).

12. Class 3 Circuits: Use Class 3 wiring specified in Part 2 (except where special type insulation is required).

60.28DHM3.15 RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS (INSTALLATION)

A. Number of Raceways: Do not change number of raceways to less than the number indicated on the drawings.
1. Each raceway must enclose one 3 phase circuit group (i.e., Ph A, B, C, N) unless otherwise indicated on the drawings.

B. Number of Raceways: Do not change number of raceways to less than the number indicated on the drawings.

C. Raceways for Future Use (Spare Raceways and Empty Raceways): Draw fish tape through raceways in the presence of the Resident Engineer to show that the raceway is clear of obstructions.
1. Leave a pulling-in line in each spare and empty raceway.

D. Conduit Installed Concealed:
1. Install conduit concealed unless otherwise indicated on the drawings.
2. New Construction:
a. Run conduit in the ceilings, walls, and partitions.
b. Conduit may not be installed in concrete floor slab (concrete slabs that are both ceilings and floors must be treated as floor slabs).
c. Install conduit in concrete slabs, under slabs on grade, or under slabs above finished ceilings where indicated on the drawings. Concrete slabs that are both ceilings and floors must be treated as floor slabs.

1) Conduit in Slab: Run 1/2 and 3/4 inch conduit in the slab where placement of reinforcement and slab thickness is sufficient to allow 1-1/2 inches of concrete cover over conduit, otherwise run conduit under slab. Run conduit one inch and larger in the slab in the specific location(s) where it is indicated on the drawing to be run in the slab, otherwise run conduit under slab.
a) Run conduit under reinforcement where reinforcement is in upper portion or middle of slab.
b) Run conduit over reinforcement where reinforcement is in lower portion of slab.
c) Run conduit between reinforcement where reinforcement is in upper and lower portions of slab.
d) Separate parallel conduits minimum of 2 inches so that each conduit will be enveloped in concrete.
e) Pass conduit over steel beams, if any, parallel with the reinforcement.
f) Tie down conduit to avoid movement during placement of concrete.
g) Demonstrate to the Director's Representative that conduit has been placed to allow minimum of 1-1/2 inches of concrete cover.

2) Conduit Under Slab on Grade:
a) Run conduit under vapor barrier, if any.
b) Install equipment grounding conductor in each conduit. Bond at boxes and equipment to which conduit is connected.

3) Conduit Under Slab, Above Finished Ceiling:
a) Attach conduit to bottom of slab or structure supporting the slab.
b) Firestop through-penetrations of the slab.

3. If any portions of the conduit system cannot be installed concealed due to conditions encountered in the building, report such conditions and await approval in writing before proceeding.

D. Conduits Penetrating Concrete Floor Slabs (Concrete slabs that are both ceilings and floors must be treated as floor slabs):
   1. Provide a minimum of 2 inches between conduits that vertically penetrate elevated concrete slabs.
   2. Provide firestopping and spray on fireproofing at locations where conduits penetrate surface of floor slab and slab is part of fire rating required for construction.

E. Conduit Installed Exposed:
   1. Install conduit exposed where indicated on the drawings.
   2. Install conduit tight to the surface of the building construction unless otherwise indicated or directed.
   3. Install vertical runs perpendicular to the floor.
   4. Install runs on the ceiling perpendicular or parallel to the walls.
   5. Install horizontal runs parallel to the floor.
   6. Do not run conduits near heating pipes.
   7. Installation of conduit directly on the floor will not be permitted.

F. Conduit Size: Not smaller than 3/4 inch electrical trade size. Where type FEP, THHN, THWN, THWN-2, XHH, XHHW, or XHHW-2 conductors are specified for use, the minimum allowable conduit size for new Work must be based on Type THW conductors.

G. Conduit Bends: For 3/4 inch conduits, bends may be made with manual benders. For all conduit sizes larger than 3/4 inch, manufactured or field fabricated offsets or bends may be used. Make field fabricated offsets or bends with an approved hydraulic bender.

60.28DHM3.15.1 RACEWAY INSTALLATION - SPECIAL AREAS

A. Raceways Exposed to Different Temperatures: Where portions of an interior raceway system are exposed to widely different temperatures, seal interior and exterior of raceway to prevent circulation of air from a warmer to a colder section through the raceway installation.
   1. Heated Areas to Unheated Areas: After conductors are installed, seal interior of the raceway at the nearest conduit body, outlet or junction box in the heated area adjoining the unheated area.

B. Conduit in Waterproofed Floors: Install conduit runs in waterproof floors to avoid penetrating the waterproofing. Avoid penetration of waterproofing with conduit risers so far as practicable.

   1. Where it is necessary to puncture the waterproofing for a conduit riser, install a standard weight steel pipe sleeve extending one inch above the finished floor level. Flash the steel pipe sleeve to the waterproofing with 16 ounce copper. Construct the flashing with a copper tube extending the full height of the sleeve, soldered to a copper base extending 6 inches in all directions from the sleeve.

   2. The flashing will be integrated into the waterproofing by the Construction Contractor. Provide solid cast brass floor plates with chromium finish where pipe sleeves are exposed in rooms.

C. Conduit in Hazardous Areas: Install Work in hazardous areas in accordance with the NFPA 70. The hazardous areas and the degree of hazard for each area are indicated on the drawings.
   1. Install sealing fittings in concealed conduit runs in a recessed box with blank face plate to match other face plates in the area.

60.28DHM3.15.2 RACEWAY SCHEDULE

A. Rigid Ferrous Metal Conduit: Install in all locations unless otherwise specified or indicated on the drawings.

B. Liquid-tight Flexible Metal Conduit: Install equipment grounding conductor in liquid-tight flexible metal conduit and bond at each box or equipment to which conduit is connected:
   1. Use 1 to 3 feet of liquid-tight flexible metal conduit (UL listed and marked suitable for the installation's temperature and environmental conditions) for final conduit connection to:
      a. Motors with weather-protected or totally enclosed housings.
      b. Equipment subject to vibration (damp and wet locations).
      c. Equipment requiring flexible connection for adjustment or alignment (damp and wet locations).

C. Plastic Coated Rigid Metal Conduit:
   1. Underground and below grade.

D. Wireways: May be used indoors in dry locations for exposed raceway between grouped, wall mounted equipment.

60.28DHM3.15.3 FITTINGS AND ACCESSORIES SCHEDULE

A. General:
   1. Use fittings and accessories that have a temperature rating equal to, or higher than the temperature rating of the conductors to be installed within the raceway.
   2. Use zinc electroplate or hot dipped galvanized steel/malleable iron or cast iron alloy fittings and accessories in conjunction with ferrous raceways in dry and damp locations unless otherwise specified or indicated on the drawings.
   3. Use insulated grounding bushings or grounding wedges on ends of conduit for terminating and bonding equipment grounding conductors, when required, if cabinet or boxes are not equipped with grounding/bonding screws or lugs.
   4. Use caps or plugs to seal ends of conduits until wiring is installed to exclude foreign material.
   5. Use insulated grounding bushings on the ends of conduits that are not directly connected to the enclosure, such as stub-ups under equipment, etc., and bond between bushings and enclosure with equipment grounding conductor.
   6. Use expansion fittings where raceways cross expansion joints (exposed, concealed, buried).
   7. Use deflection fittings where raceways cross expansion joints that move in more than one plane.
   8. Use 2 locknuts and an insulated bushing on end of each conduit entering sheet metal cabinet or box in dry or damp locations.
      a. Plastic bushing may be used on 1/2 and 3/4 inch conduit in lieu of insulated bushing.
      b. Terminate conduit ends within cabinet/box at the same level.

B. For Rigid and Intermediate Metal Conduit: Use threaded fittings and accessories. Use 3 piece conduit coupling where neither piece of conduit can be rotated.

C. For Electrical Metallic Tubing: Use compression type connectors and couplings.

D. For Flexible Metal Conduit: Use flexible metal conduit connectors.

E. For Liquid-tight Flexible Metal Conduit: Use liquid-tight connectors.

F. For Rigid Nonmetallic PVC Conduit: Use conduit manufacturer's standard fittings and accessories.

G. For Multioutlet Assembly: Use manufacturer's standard fittings and accessories.

For Wireways: Use wireway manufacturer's standard fittings and accessories.

60.28DHM3.16 IDENTIFICATION FOR ELECTRICAL SYSTEMS (INSTALLATION)

A. Identification Materials and Devices: Install at locations for most convenient viewing without interference with operation and maintenance of equipment.

B. Lettering, Colors, and Graphics: Coordinate names, abbreviations, colors, and other designations with corresponding designations in the Contract Documents or with those required by codes and standards. Use consistent designations throughout Project.

C. Sequence of Work: If identification is applied to surfaces that require finish, install identification after completing finish work.

D. Self-Adhesive Identification Products: Clean surfaces before applying.

E. Circuits with More Than 600 V: Identify raceway and cable with "DANGER--HIGH VOLTAGE" in black letters 2 inches high, stenciled with paint at 10-foot intervals over a continuous, painted orange background. Identify the following:

1. Entire floor area directly above conduits running beneath and within 12 inches of a basement or ground floor that is in contact with earth or is framed above unexcavated space.
2. Wall surfaces directly external to conduits concealed within wall.
3. All accessible surfaces of concrete envelope around conduits in vertical shafts, exposed in the building, or concealed above suspended ceilings.
4. Entire surface of exposed conduits.

F. Color Banding Raceways and Exposed Cables: Band exposed and accessible raceways of the systems listed below:

1. Bands: Pre-tensioned, wraparound plastic sleeves; colored adhesive tape; or a combination of both. Make each color band 2 inches wide, completely encircling conduit, and place adjacent bands of two-color markings in contact, side by side.
2. Band Locations: At changes in direction, at penetrations of walls and floors, at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.
3. Apply the following colors to the systems listed below:
   a. Fire Alarm System: Red.
   b. Fire-Suppression Supervisory and Control System: Red and yellow.
   c. Combined Fire Alarm and Security System: Red and blue.
   d. Security System: Blue and yellow.

e. Mechanical and Electrical Supervisory System: Green and blue.

f. Telecommunication System: Green and yellow.

G. Caution Labels for Indoor Boxes and Enclosures for Power and Lighting: Install pressure-sensitive, self-adhesive labels identifying system voltage with black letters on orange background. Install on exterior of door or cover.

H. Circuit Identification Labels on Boxes: Install labels externally.

1. Exposed Boxes: Pressure-sensitive, self-adhesive plastic label on cover.

2. Concealed Boxes: Plasticized card-stock tags.

3. Labeling Legend: Permanent, waterproof listing of panel and circuit number or equivalent.

I. Paths of Underground Electrical Lines: During trench backfilling, for exterior underground power, control, signal, and communication lines, install continuous underground plastic line marker located directly above line at 6 to 8 inches below finished grade. Where width of multiple lines installed in a common trench or concrete envelope does not exceed 16 inches overall, use a single line marker. Install line marker for underground wiring, both direct-buried cables and cables in raceway.

J. Secondary Service, Feeder, and Branch-Circuit Conductors: Color-code throughout the secondary electrical system.

1. Color-code 208/120-V system as follows:

a. Phase A: Black.

b. Phase B: Red.

c. Phase C: Blue.

d. Neutral: White.

e. Ground: Green.

2. Color-code 480/277-V system as follows:

a. Phase A: Yellow.

b. Phase B: Brown.

c. Phase C: Orange.

d. Neutral: White with a colored stripe or gray.

e. Ground: Green.

3. Factory apply color the entire length of conductors, except the following field-applied, color-coding methods may be used instead of factory-coded wire for sizes larger than No. 10 AWG:

a. Colored, pressure-sensitive plastic tape in half-lapped turns for a distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Use 1-inch wide tape in colors specified. Adjust tape bands to avoid obscuring cable identification markings.

b. Colored cable ties applied in groups of three ties of specified color to each wire at each terminal or splice point starting 3 inches from the terminal and spaced 3 inches apart. Apply with a special tool or pliers, tighten to a snug fit, and cut off excess length.

K. Power-Circuit Identification: Metal tags or aluminum, wraparound marker bands for cables, feeders, and power circuits in vaults, pull and junction boxes, manholes, and switchboard rooms.

1. Legend: 1/4-inch steel letter and number stamping or embossing with legend corresponding to indicated circuit designations.
2. Tag Fasteners: Nylon cable ties.
3. Band Fasteners: Integral ears.

L. Apply identification to conductors as follows:

1. Conductors to Be Extended in the Future: Indicate source and circuit numbers.
2. Multiple Power or Lighting Circuits in the Same Enclosure: Identify each conductor with source, voltage, circuit number, and phase. Use color-coding to identify circuits' voltage and phase.
3. Multiple Control and Communication Circuits in the Same Enclosure: Identify each conductor by its system and circuit designation. Use a consistent system of tags, color-coding, or cable marking tape.

M. Apply warning, caution, and instruction signs as follows:

1. Warnings, Cautions, and Instructions: Install to ensure safe operation and maintenance of electrical systems and of items to which they connect. Install engraved plastic-laminated instruction signs with approved legend where instructions are needed for system or equipment operation. Install metal-backed butyrate signs for outdoor items.
2. Emergency Operation: Install engraved laminated signs with white legend on red background with minimum 3/8-inch high lettering for emergency instructions on power transfer, load shedding, and other emergency operations.

N. Equipment Identification Labels: Engraved plastic laminate. Install on each unit of equipment, including central or master unit of each system. This includes power, lighting, communication, signal, and alarm systems, unless units are specified with their own self-explanatory identification. Unless otherwise indicated, provide a single line of text with 1/2-inch high lettering on 1-1/2-inch high label; where two lines of text are required, use labels 2 inches high. Use white lettering on black field. Apply labels for each unit of the following categories of equipment using mechanical fasteners:

1. Panelboards, electrical cabinets, and enclosures.
2. Access doors and panels for concealed electrical items.
3. Electrical switchgear and switchboards.
4. Emergency system boxes and enclosures.
5. Disconnect switches.
6. Enclosed circuit breakers.
7. Motor starters.
8. Push-button stations.
9. Power transfer equipment.
10. Contactors.
11. Remote-controlled switches.
12. Dimmers.
13. Control devices.

14. Transformers.
15. Telephone switching equipment.
16. Fire alarm master station or control panel.

Security-monitoring master station or control panel.

60.28DHM3.17 WIRING DEVICES (INSTALLATION)

A. Install wiring devices in outlet boxes.

B. Local Switches:
   1. Install local switches rated 15A, 120/277 V ac for switches unless otherwise shown on the drawings or specified.
   2. Install switches indicated Sa, Sb, Sc, etc, for control of outlets, with corresponding letters on the same circuit.
   3. Where more than one switch occurs at same location in a 120 volt system, arrange switches in gangs and cover with one face plate.
   4. Install switches in a 277 volt system in separate single boxes if voltage between exposed live metal parts of adjacent switches exceeds 300 volts.
   5. Install single and double pole switches so that switch handle is up when switch is in the "On" position.

C. Receptacles:
   1. Install Specification Grade receptacles, NEMA 5-15R, 15A, 125 V, 2P, 3W, for duplex receptacles and single receptacles unless otherwise shown on the drawings or specified.
   2. Install receptacles with ground pole in the down position.

D. Wall Plates:
   1. Install wall plates on all wiring devices in dry locations, with finish to match hardware in each area.
   2. Install hospital wall plates on Type HG receptacles.
   3. Install blank wall plates on outlet boxes which are for future equipment except telephone outlets.
   4. Install 5/8 inch bushed wall plates on telephone outlets.
   5. Fasten wall plates with vandal resistant screws in patients' area. Deliver 10 screw keys to the facility.
   5. Fasten wall plates with vandal resistant screws in offices and public access areas. For all other locations pop rivet wall plates to the wiring devices. Deliver 10 screw keys to the facility.

E. Weatherproof Covers: Install weatherproof covers on wiring devices in damp and wet locations.

F. Nameplates: Provide phenolic or embossed aluminum nameplate for each special purpose receptacle indicating phase, ampere and voltage rating of the circuit. Attach nameplate with rivets or tamperproof fasteners to wall plate or to wall above receptacle. Wall plates may be engraved with required data in lieu of separate nameplates.

G. Mats: Where flush plates are required over outlet boxes that cannot be set deep enough for the plates to fit closely over the finished wall surfaces, provide oak mats to fill the space between the finished wall surface and the plate.

H. Receptacles On Emergency Circuits: Install red colored receptacles. Engrave faceplates "EMERGENCY" in 3/16 inch high lettering and fill engraving with contrasting color filler material.

60.28DHM3.18 CIRCUIT BREAKERS (INSTALLATION)

A. Install new circuit breakers in existing panelboards where indicated.

B. Add new circuits equally across phases to prevent overloading any phase in the panelboard. After new and existing circuits are energized, take current reading on panelboard feeder during a heavy usage time period. If phases are substantially unbalanced, rearrange both new and existing circuits in panelboard to equally distribute load between all phases, and provide new typewritten directory indicating equipment controlled by each circuit breaker.

60.28DHM3.19 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS (INSTALLATION)

A. Connections:
   1. Make grounding and bonding connections, except buried connections, with silicon-bronze hardware and ground clamps, ground lugs or compression connectors, to suit job conditions.
   2. For buried connections use exothermic type weld or compression connectors.

60.28DHM3.20 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS (INSTALLATION)

A. Where specific fasteners are not specified or indicated for securing items to in-place construction, provide appropriate type, size, and number of fasteners for a secure, rigid installation.

B. Install anchoring devices and other fasteners in accordance with manufacturer's printed instructions.

C. Make attachments to structural steel wherever possible.

60.28DHM3.20.1 FASTENER SCHEDULE

A. Material:
   1. Use cadmium or zinc coated anchors and fasteners in dry locations.
   2. Use hot dipped galvanized or stainless steel anchors and fasteners in damp and wet locations.
   3. For corrosive atmospheres or other extreme environmental conditions, use fasteners made of materials suitable for the conditions.

B. Types and Use: Unless otherwise specified or indicated use:
   1. Cast-in-place concrete inserts in fresh concrete construction for direct pull-out loads such as shelf angles or fabricated metal items and supports attached to concrete slab ceilings.
   2. Anchoring devices to fasten items to solid masonry and concrete when the anchor is not subjected to pull out loads, or vibration in shear loads.
   3. Toggle bolts to fasten items to hollow masonry and stud partitions.
   4. TPR fasteners to fasten items to plywood backed gypsum board ceilings.
   5. Metallic fasteners installed with electrically operated or powder driven tools for approved applications, except:
      a. Do not use powder driven drive pins or expansion nails.
      b. Do not attach powder driven or welded studs to structural steel less than 3/16 inch thick.
      c. Do not support a load, in excess of 250 lbs from any single welded or powder driven stud.
      d. Do not use powder driven fasteners in precast concrete.

60.28DHM3.20.2 ATTACHMENT SCHEDULE

A. General: Make attachments to structural steel or steel bar joists wherever possible. Provide intermediate structural steel members where required by support spacing. Select steel members for use as intermediate supports based on a minimum safety factor of 5.
   1. Make attachments to steel bar joists at panel points of joists.
   2. Do not drill holes in main structural steel members.
   3. Use "C" beam clamps for attachment to steel beams.

B. Where it is not possible to make attachments to structural steel or steel bar joists, use the following methods of attachment to suit type of construction unless otherwise specified or indicated on the drawings:
   1. Attachment to Steel Roof Decking (No Concrete Fill):
      a. Decking With Hanger Tabs: Use deck clamps.
      b. Decking Without Hanger Tabs:
         1) Before Roofing Has Been Applied: Use 3/8 inch threaded steel rod welded to a 4 x 4 x 1/4 inch steel plate and installed through 1/2 inch hole in roof deck.
         2) After Roofing Has Been Applied: Use welding studs, or self-drilling/tapping fasteners. Exercise extreme care when installing fasteners to avoid damage to roofing.
   2. Attachment to Concrete Filled Steel Decks (Total thickness, 2-1/2 inches or more):
      a. Before Fill Has Been Placed:
         1) Use thru-bolts and fish plates.
         2) Use welded studs. Do not support a load in excess of 250 pounds from a single welded stud.
      b. After Fill Has Been Placed: Use welded studs. Do not support a load in excess of 250 lbs from a single welded stud.
   3. Attachment to Cast-In-Place Concrete:
      a. Fresh Concrete: Use cast-in-place concrete inserts.
   4. Attachment to Cored Precast Concrete Decks:
      a. New Construction: Use thru-bolts and fish plates before Construction Work Contractor has placed concrete fill over decks.
   5. Attachment to Hollow Block or Tile Filled Concrete Deck:
      a. New Construction: Use cast-in-place concrete inserts by having Construction Work Contractor omitting blocks and pouring solid blocks with insert where required.
   6. Attachment to Waffle Type Concrete Decks:
      a. New Construction:
         1) Use cast-in-place concrete inserts in fresh concrete.
         2) If concrete fill has been applied over deck, thru-bolts and fish plates may be used where additional concrete or roofing is to be placed over the deck.
   7. Attachment to Precast Concrete Planks: Use anchoring devices, except do not make attachments to precast concrete planks less than 2-3/4 inches thick.
   8. Attachment to Precast Concrete Tee Construction:
      a. New Construction:
         1) Use tee hanger inserts between adjacent flanges.
         2) Use thru-bolts and fish plates, except at roof deck without concrete fill.
      b. Existing Construction:
         1) Use anchoring devices installed in webs of tees. Install anchoring devices as high as possible in the webs.
      c. Do not use powder driven fasteners.
      d. Exercise extreme care in drilling holes to avoid damage to reinforcement.

9. Attachment to Wood Construction: Use side beam brackets fastened to the sides of wood members to make attachments for hangers.

    a. Under 15 lbs Load: Attach side beam brackets to wood members with 2 No. 18 x 1-1/2 inch long wood screws, or 2 No. 16 x 1-1/2 inch long drive screws.
    b. Over 15 lbs Load: Attach side beam brackets to wood members with bolts and nuts or lag bolts. Do not use lag bolts in wooden members having a nominal thickness (beam face) under 2 inches in size. Install bolts and nuts or lag bolts in the side of wood members at the mid-point or slightly above. Install plain washers under all nuts.

LOAD	LAG BOLT SIZE	BOLT DIA.
15 lbs to 30 lbs	3/8 x 1-3/4 inches	3/8 inch
31 lbs to 50 lbs	1/2 x 2 inches	1/2 inch
Over 50 lbs to load limit of structure.	Use bolt & nut	5/8 inch

    c. Bottom chord of wood trusses may be utilized as structural support, but method of attachment must be specifically approved.
    d. Do not make attachments to the diagonal or vertical members of wood trusses.
    e. Do not make attachments to the nailing strips on top of steel beams.

10. Attachment to Metal Stud Construction: Use supporting fasteners manufactured specifically for the attachment of raceways and boxes to metal stud construction.
    a. Support and attach outlet boxes so that they cannot torque/twist. Either:
        1) Use bar hanger assembly, or:
        2) In addition to attachment to the stud, also provide far side box support.

60.28DHM3.20.3 CONDUIT SUPPORT SCHEDULE

A. Provide number of supports as required by New York City Electrical Code.

B. Use pipe straps and specified method of attachment where conduit is installed proximate to surface of wood or masonry construction.
    1. Use hangers secured to surface with specified method of attachment where conduit is suspended from the surface.

C. Use "C" beam clamps and hangers where conduit is supported from steel beams.

D. Use deck clamps and hangers where conduit is supported from steel decking having hanger tabs.
    1. Where conduit is supported from steel decking which does not have hanger tabs, use clamps and hangers secured to decking, utilizing specified method of attachment.

E. Use channel support system supported from structural steel for multiple parallel conduit runs.

F. Where conduits are installed above ceiling, do not rest conduit directly on runner bars, T-Bars, etc.
    1. Conduit Sizes 2-1/2 Inches and Smaller: Support conduit from ceiling supports or from construction above ceiling.
    2. Conduit Sizes Over 2-1/2 Inches: Support conduit from beams, joists, or trusses above ceiling.

60.28DHM3.20.4 LIGHTING FIXTURE SUPPORT SCHEDULE

A. General: Do not support fixtures from ceilings or ceiling supports unless it is specified or indicated on the drawings to do so.
   1. Support fixtures with hanger rods attached to beams, joists, or trusses. Hanger rod diameter, largest standard size that will fit in mounting holes of fixture.
      a. Where approved, channel supports may span and rest upon the lower chord of trusses and be utilized for the support of lighting fixtures.
      b. Where approved, channel supports may span and be attached to the underside of beams, joists, or trusses and be utilized for the support of lighting fixtures.
   2. Use 2 nuts and 2 washers on lower end of each hanger rod to hold and adjust fixture (one nut and washer above top of fixture housing, one nut and washer below top of fixture housing).
      a. Where specified that an adequately supported outlet box is to support a fixture or be utilized as one point of support, support the box so that it may be adjusted to bring the face of the outlet box even with surface of ceiling.

B. Specific Installations Where Fixtures May Be Supported From New Ceilings Being Installed By Construction Work Contractor:
   1. Support surface mounted fluorescent fixtures and incandescent fixtures directly from plywood backed gypsum board ceilings.
   2. Support surface mounted fluorescent fixtures and incandescent fixtures directly from framing or furring members of fire rated suspended ceilings (double gypsum board).
   3. Support recessed mounted fluorescent fixtures and incandescent fixtures directly from furring members of furred gypsum board ceilings.
   4. Support recessed mounted fluorescent fixtures and incandescent fixtures directly from the suspension system of suspended acoustical ceilings. Exception: Support each fixture weighing more than 50 pounds (including lamps) independent of the suspended ceiling grid.
   5. Deliver documents which state actual fixture weights and indicate fixture locations to the Construction Work Contractor (thru the Construction Manager).

C. Number of Supports For Ceiling Mounted Lighting Fixtures: Provide at least the following number of supports. Provide additional supports when recommended by fixture manufacturer, or shown on the drawings.
   1. Commercial and Industrial Fluorescent Fixtures:
      a. Support individual fluorescent fixtures less than 2 feet wide at 2 points.
      b. Support continuous row fluorescent fixtures less than 2 feet wide at points equal to the number of fixtures plus one. Uniformly distribute the points of support over the row of fixtures.
      c. Support individual fluorescent fixtures 2 feet or wider at 4 corners.
      d. Support continuous row fluorescent fixtures 2 feet or wider at points equal to twice the number of fixtures plus 2. Uniformly distribute the points of support over the row of fixtures.
      e. An adequately supported outlet box may be utilized as one point of support for fixtures weighing less than 50 pounds.
   2. Vandal Resistant, and Minimum Security Fluorescent Fixtures:
      a. Support individual fluorescent fixtures less than 2 feet wide at 4 corners.
      b. Support continuous row fluorescent fixtures less than 2 feet wide at points equal to twice the number of fixtures. Uniformly distribute the points of support.
      c. Support individual fluorescent fixtures 2 feet or wider at each corner and one support midway along each side of longest axis (6 supports total).
      d. Support continuous row fluorescent fixtures 2 feet or wider at points equal to 4 times the number of fixtures. Uniformly distribute the points of support.

e. An adequately supported outlet box may be utilized as one point of support for fixtures weighing less than 50 pounds.

3. Medium Security Fluorescent Fixtures: Support each fixture at minimum of 6 points (each corner and midway along each side of longest axis). Outlet box must not be counted as a point of support.
4. Maximum Security Fluorescent Fixtures: Support each fixture at minimum of 8 points (each corner, and 2 supports spaced equally along each side of longest axis). Outlet box must not be counted as a point of support.
5. Mercury Vapor, Metal Halide, and High Pressure Sodium Fixtures:
   a. Commercial Style: Support fixture at 2 points.
   b. Industrial Style: Support individual fixtures at one point.
   c. Vandal Resistant Style: Support fixture at 4 points.
   d. An adequately supported outlet box may be utilized as one point of support for fixtures weighing less than 50 pounds.
6. Commercial and Industrial Incandescent Fixtures: Support fixture from adequately supported outlet box, to suit fixture design (fixture weight less than 50 pounds).
7. Vandal Resistant Incandescent Fixtures: Support fixture from adequately supported outlet box to suit fixture design, plus 2 fasteners through back of fixture into suitable construction behind fixture.

D. Number of Supports For Wall Mounted Lighting Fixtures: Provide at least the following number of supports. Provide additional supports when recommended by fixture manufacturer, or shown on the drawings.
1. Commercial and Industrial Fluorescent Fixtures:
   a. Support individual fluorescent fixtures 2 feet long or less at 2 points.
   b. Support individual fluorescent fixtures over 2 feet long at 3 points.
   c. Support continuous row fluorescent fixtures at points equal to twice the number of fixtures. Uniformly distribute the points of support.
   d. An adequately supported outlet box may be utilized as one point of support for fixtures weighing less than 50 pounds.
2. Vandal Resistant, and Minimum Security Fluorescent Fixtures:
   a. Support individual fluorescent fixtures 2 feet long or less at 4 points (each corner).
   b. Support individual fluorescent fixtures over 2 feet long at 6 points (each corner and midway along each side of longest axis).
   c. Support continuous row fluorescent fixtures at points equal to 6 times the number of fixtures. Uniformly distribute the points of support.
   d. An adequately supported outlet box may be utilized as one point of support for fixtures weighing less than 50 pounds.
3. Medium Security, and Maximum Security Fluorescent Fixtures:
   a. Support each fluorescent fixture 2 feet long or less at minimum of 4 points (each corner).
   b. Support each fluorescent fixture over 2 feet long, to 3 feet long at a minimum of 6 points (each corner and midway along each side of longest axis).
   c. Support each fluorescent fixture over 3 feet long, to 8 foot long at minimum of 8 points (each corner, and 2 supports spaced equally along each side of longest axis).
   d. Outlet box must not be counted as a point of support.
4. Mercury Vapor, Metal Halide, and High Pressure Sodium Fixtures:
   a. Commercial and Industrial Style: Support fixture at 2 points (Support arm mounted style at 4 points).
   b. Vandal Resistant Style: Support fixture at 4 points.
   c. An adequately supported outlet box may be used as one point of support for fixtures weighing less than 50 pounds.
5. Commercial and Industrial Incandescent Fixtures: Support fixture from adequately supported outlet box, to suit fixture design (fixture weight less than 50 pounds).
6. Vandal Resistant Incandescent Fixtures: Support fixture from adequately supported

outlet box to suit fixture design, plus 2 fasteners through back of fixture into suitable construction behind fixture.

60.28DHM3.20.5 CHANNEL SUPPORT SYSTEM SCHEDULE

A. Use channel support system where specified or indicated on the drawings.

B. Channel supports may be used, as approved, to accommodate mounting of equipment.

C. Material and Finish:
   1. Dry Locations: Use 12 gage steel channel support system having any one of the specified finishes.
   2. Damp Locations: Use 12 gage steel channel support system having any one of the specified finishes except green epoxy/enamel.
   2. Wet Locations: Use 12 gage steel channel support system having hot dipped galvanized, or PVC finish.

PART 4 MEASURAMENT AND PAYMENT

60.28DHM4.01 MEASURAMENT

A. For all DEHUMIDIFIERS furnished and installed under this contract complete in accordance with the plans, specifications and directions of the Engineer, the Contractor must receive the LUMP SUM price bid.

60.28DHM4.02 PAYMENT

A. The price bid must be a **LUMP SUM** for **DEHUMIDIFIERS** paid under Item 60.28DHM3A and must include the cost of all work, labor and materials including fans, controls, ductwork, ductwork accessories, piping, electrical, hangers and supports and all other incidental expenses necessary to complete the work in accordance with the plans and specifications, to the satisfaction of the Engineer.

END OF SECTION

(8) Add the following new SECTION 60.81
SECTION 60.81: FURNISHING, DELIVERING AND INSTALLING FLOW METER TUBES

60.81.1 DESCRIPTION
This specification describes furnishing, delivering and installing of flow meter tubes and appurtenances, complete with instrumentation.

The Contractor shall furnish, deliver and install all appurtenances and instrumentation required and necessary to complete the installation of the flow meter tubes.

60.81.2 MATERIALS
Flow meter tubes and instrumentation shall be in compliance with **Standard Specifications For Uni-Directional Ductile Iron Flow Meters.**

60.81.3 CONSTRUCTION METHODS
All construction methods together with submittals, testing and packaging required to install the flow meter tubes with appurtenances and instrumentation, complete, shall be done in accordance with **Standard Specifications For Uni-Directional Ductile Iron Flow Meters; and with Specifications For Trunk Main Work, Section 1 - Special Provisions For Trunk Main Work, Subsection (6) - Additional Provisions For Adjustment In Payment, Paragraph (E) - Furnishing, Delivering And Installing Flow Meters, paragraphs (c) and (d).**

60.81.4 MEASUREMENT
The quantity of flow meter tubes (12-inch to 72-inch diameter) measured for payment shall be the number of flow meter tubes (12-inch to 72-inch diameter) of each size actually furnished, delivered and installed by the Contractor as shown, specified or ordered.

60.81.5 PRICE TO COVER

The contract price for "FURNISHING, DELIVERING AND INSTALLING FLOW METER TUBE (12-INCH TO 72-INCH DIAMETER)" shall be the unit price bid per each size of flow meter tube (12-inch to 72-inch diameter) furnished, delivered and installed and shall cover the cost of all labor, equipment, materials, plant, samples, tests and insurance required and necessary to furnish, deliver and install flow meter tubes (12-inch to 72-inch diameter) in the manner specified herein.

Included in the contract price bid shall be the cost for furnishing, delivering and install all appurtenances and instrumentation required and necessary to complete the installation of the flow meter tubes. No separate or additional payment will be made for this work.

60.81.6 SEPARATE PAYMENT
(A) Payment for bolted split sleeves shall be made under their respective bid items.

(B) Payment for the chamber concrete, reinforcing steel, structural steel, miscellaneous steel, manhole steps, brick masonry and pipe-to-wall penetration seals; piping and castings shall be made under their respective bid items.

(C) Steel sleeves and anchor/water stop plates shall be paid for under the bid items for "FURNISHING, DELIVERING AND INSTALLING PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE", as contained in the Bid Schedule.
(D) Payment for the furnishing, delivering and installing of 27-inch cast iron manhole heads and covers shall be made under the Item No. 63.11VC – FURNISHING AND DELIVERING VARIOUS CASTINGS.

60.81.7 NO SEPARATE PAYMENT

There will be no separate or additional payment for furnishing and installing waterproofing for chambers, including waterstops. The costs of this work shall be deemed included in the prices bid for all items of the contract.

Payment for Furnishing, Delivering and Installing Flow Meter Tubes (12-Inch To 72-Inch Diameter) will be made under the Item Number as calculated below:

The Item Numbers for Furnishing, Delivering and Installing Flow Meter Tubes (12-Inch To 72-Inch Diameter) have nine characters. (The decimal point is considered a character, the third character.)

(1) The first five characters shall define Furnishing, Delivering and Installing Flow Meter Tubes (12-Inch To 72-Inch Diameter):

60.81

(2) The sixth and seventh characters shall define Flow Meter Tubes (12-Inch To 72-Inch Diameter):

FM - Flow Meter Tubes (12-Inch To 72-Inch Diameter)

(3) The eighth and ninth characters shall define the Size (Diameter) of the Flow Meter Tubes. (The eighth and ninth characters representing the unit of inches for the Size (Diameter) of the Flow Meter Tubes.) See examples below:

24 - 24-Inch
66 - 66-Inch

(4) The Item Numbers together with Description and Pay Unit as provided in the Bid Schedule are provided below:

Item No.	Description	Pay Unit
60.81FM72	FURNISHING, DELIVERING AND INSTALLING 72-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM66	FURNISHING, DELIVERING AND INSTALLING 66-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM60	FURNISHING, DELIVERING AND INSTALLING 60-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM54	FURNISHING, DELIVERING AND INSTALLING 54-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM48	FURNISHING, DELIVERING AND INSTALLING 48-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM42	FURNISHING, DELIVERING AND INSTALLING 42-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM36	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM30	FURNISHING, DELIVERING AND INSTALLING 30-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM24	FURNISHING, DELIVERING AND INSTALLING 24-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM20	FURNISHING, DELIVERING AND INSTALLING 20-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM16	FURNISHING, DELIVERING AND INSTALLING 16-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM14	FURNISHING, DELIVERING AND INSTALLING 14-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH
60.81FM12	FURNISHING, DELIVERING AND INSTALLING 12-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	EACH

(9) Add the following new SECTION 61.21M
SECTION 61.21M :FURNISHING, DELIVERING AND INSTALLING METAL SEATED BUTTERFLY VALVE

61.21M.1 DESCRIPTION

This specification describes furnishing, delivering and installing of metal seated butterfly valves for the City of New York water supply system. These valves shall be manually operated only. All metal seated butterfly valves shall meet the requirements of this specification.

61.21M.2 MATERIALS

Metal seated butterfly valves (30-inch to 72-inch) with manual actuators shall be Type MAK as manufactured by the Adams Valves Inc.
Actuator shall be Flowserve Limitorque HBC-6 manual operator.

61.21M.3 CONSTRUCTION METHODS

(A) GENERAL CONSTRUCTION PROVISIONS – The requirements of DIVISION IV – GENERAL CONSTRUCTION PROVISIONS shall apply to the work to be done hereunder.

(B) The metal seated butterfly valves shall be installed at the locations and in accordance with the general layout of piping shown on the contract drawings. Such location and layout may, however, be varied, as required, by actual conditions during the progress of the work, in accordance with the directions of the Engineer. The Contractor may be required to submit installation drawings of all metal seated butterfly valves for approval.

61.21M.4 REFERENCES

(A) American National Standards Institute (ANSI) Specifications:
1. B16.34 – Valves-Flanged, Threaded, and Welded End.
2. B16.47- Large Diameter Steel Flanges.
3. B16.10 – Face-to-face and End-to-End Dimensions of valves.
4. B1614- Ferrous Pipe Plugs, bushings, locknut with pipe Threads.
5. B31.1-power piping.
6. ASME -PCC-1-2005-Guidelines for Pressure Boundary Bolted Flange Joint Assembly.
7. ASME -Boiler and Pressure Vessel Code, Section II, Part A, Ferrous Material Specifications, 2000 Addenda.

(B) API Standards:
1. 598-Valve Inspection and Test
2. 609- Butterfly Valves, Double Flanged, Lug-and Wafer Type.

(C) American Society for Testing and Materials (ASTM) Specifications:
1. A276- Stainless Steel Bars and shapes.
2. A351/A351M Castings, Sustenitis-Ferritic (duplex), for Pressure Containing Parts.
3. A380-Practice for Cleaning and descaling Stainless Steel Parts, Equipment and Systems.
4. D3359-Standard Test Methods for Measuring Adhesion by Type Test.
5. D5162 Standard Practice for Discontinuity (Holiday) Testing of Non-conductive Protective coating on Metallic Substrates.
6. E446-Reference Radiographs for Steel Casting up to 2-in in Thickness.
7. E186-Reference Radiographs for Heavy-walled 2 to 4-114-in. Steel Castings.
8. E94-Recommended Practice Guide for Radiographs Testing.
9. E165-Recommended Practice for Liquid Penetrant Inspection Method.
10. Practice for Fabrication and Control of Steel Reference Blocks Used on Ultrasonic inspection.

(D) American Water Works Association (ANSI/AWWA) Specifications:
1. C207, Steel Flanges for Water work services, 4-in through 144-in.
2. C504, Power Actuating devices for Valves and Sluice gate

(E) Miscellaneous
1. SSPC-SP-10, 63T, Steel Structures Painting Council Surface Preparation Specification No.1.
2. MSS-SP-6 Standard Finishes for Contact Faces of Pipe Flanges and Connecting-End Flanges of Valves and Fittings.
3. MSS-SP-25 Standard Marking System for Valves, Fittings, Flanges and Unions.
4. MSS-SP-55 quality Standard for Steel Castings for Valves.
5. NSF-61, Drinking Water System for Steel Castings for Valves.
6. UL, Underwriter Laboratories.

61.21M.5 QUALITY ASSURANCE

(A) Manufacturer's qualifications: this metal seated butterfly valves and actuator shall be provided by qualified manufacturers experienced in the fabrication and manufacture of the equipment specified herein.

(B) Manufacturers shall have a minimum of 5 years of experience in the production of substantially similar valves and actuator and shall show evidence of satisfactory service of this equipment in at least 5 installations.

(C) Manufacturer's trained staff shall conduct and supervise shop testing, installation, field testing, functional testing and physical checkout.

61.21M.6 SPARE PARTS

(A) the contractor shall furnish the following spare parts. Spare parts shall include minimum supplies required as supplemented herein.

(B) Valves:
1. One (1) set of bearings.
2. One (1) set of bearing seals o-rings.
3. One (1) set of packing.

(C) Spare parts shall be new and of the same model number and manufacturer as the part it is intended to replace.

61.21M.7 EQUIPMENT IDENTIFICATION

(A) Each valve shall be provided with a Type 316 stainless steel nameplate fastened securely to the valve boss with Type 316 stainless steel screws. The nameplate shall have engraved letters and numerals not less than 3/16 inch high and shall include the following information:
1. Valve size.
2. Pressure and temperature ratings.
3. Hydrostatic test pressure in psig.
4. Year of manufacture.
5. Name of manufacturer and address
6. Net weight of valve and operator.
7. Foundry identification and the letters "NYCDEP".

(B) Actuator nameplate shall contain the following information:
1. Name of manufacturer and address
2. Unit size
3. Order number
4. Serial number
5. Equipment tag number
6. Year of manufacturer

61.21M.8 PAINTING

(A) Carbon steel and iron surface to be coated shall be sand blasted in accordance with the requirements of the steel structures painting council surface preparation specification No. 10, near-white blast cleaning and SSPC -SP10. Anchor profile shall be per paint manufacturer's recommendations

(B) The completed coatings shall be given an electrical flaw (holiday) detection, which shall be witnessed by the Engineer. All damaged or unsatisfactory area shall be repaired and retested as approved by the Engineer.

(C) The following individual components of each actuator shall be coated and cured prior to assembly:
- Housings.
- Housing covers.
- Housing for spur gear and /or bevel gear attachment.
- Mounting bracket.
- And other external mating parts.

61.21M.9 DELIVERY, STORAGE AND HANDLING

(A) Valve shall be complete in all respects when shipped. The manufacturer shall use care in preparing them for shipment so that no damage, due to the manufacturer's negligence, will occur in handling or transit.
(B) All part shall be drained of water. The disc shall be placed just off a closed position and be held in place with wooden wedges.
(C) Valves shall be bolted to skids and placed in wooden boxes in such a manner as to preclude damage in subsequent handling. Wooden boxes shall have ventilation grills and moisture controlled pads. Contractor shall submit drawings and shipping procedures for approval.
(D) Provide full-face protectors of waterproof material fastened to each side of the valve body to protect joints and the valve interior. Protectors shall be of waterproof plywood or weather resistant press board, of at least the outside diameter of the flange and shall be fastened to each flange to protect both it and the valve interior. Flange protector shall remain intact at all time.
(E) Valves shall be protected from dust, freezing water, sunlight or other ultraviolet rays. The valves shall be stored in a clean and dry location.
(F) Valve and appurtenance shall be handled carefully. Valve which are dropped, dented, cracked or otherwise damaged will not be accepted.

61.21M.10 WARRANTY

Equipment supplied under this specification shall come with 2 years non-prorated warranty for parts and labor and 10-year guarantee of spare part availability.

61.21M.11 MANUFACTURERS

(A) Torque limiter (slip coupling) shall be as manufactured by Aunspach Controls Co. St. Louis, MO, or approved equal.
(B) Valve disc position indicator transmitter shall be Kinax Transmitter as manufactured by Gossen Metrawatt Camile Bauer Co., North Brampton, Ontario, Canada, or approved equal.
(C) Thread Lubricant shall be Type G-N Metal Assembly Paste as manufactured by the Dow Corning Corp, Midland, MI, or approved equal.
(D) Gear boxes shall be as manufactured by Hub City Inc, Aberdeen, SD, or approved equal.
(E) Coatings shall be Series 141 Epoxoline as manufactured by TNEMEC Company, Inc, Kansas City, MO, or approved equal.
(F) Each metal seated butterfly valve shall be operated a minimum of three cycles of the full opening and full closing. Two full cycles of operation shall be by using the square nut drive from the sidewalk level and one full cycle by using the handwheel atop the floorstand in the chamber. The following shall be checked and recorded:
1. the indicator readings (revolutions) by square nut.
2. the valve position indicator reading (revolutions) by handwheel.
3. Any valve operation or installation defects revealed from the tests shall be investigated and rectified in a manner approved by the Engineer.

61.21M.12 METAL SEATED BUTTERFLY VALVES

(A) General: valves shall be triple offset, double flanged, metal to metal seated, butterfly valves. Valves shall be quarter turn, counter clockwise handwheel operation to close, non-rubbing, non-jamming with zero allowable leakage, torque seated and designed in such a manner that the disc cannot be rotated through the seat, even with the actuator removed. Valves shall be designed for shutoff and flow in both directions. Valves shall not be used for throttling. Valve design shall incorporate “inclined conical “geometry creating the torque seating operation. The actuator shall make 195 turns from fully open to fully close of the metal seated butterfly valve.

(B) Provide valves capable of bi-directional zero leakage shutoff designed in accordance with ASME B16.34 and B31.3

(C) Provide certification that all components and coatings in contact with the liquid in the valves are NSF61 approved.

(D) Provide all valve component capable of the maximum output torque of the operating mechanism required to operate the valve against the maximum differential pressure in accordance with the specified class.

(E) Standard: valve shall be designed in conformance with API Standard 609, Category B, Class 150.

(F) Valve body: Valve bodies shall be single piece, cast Type 316L cast stainless steel per ASTM A351. Welded sectional valve bodies are not permitted.

(G) Valve bodies shall be able to withstand all induced pipe loads without distortion affecting the movement of the disc.

(H) Valve discs: valve discs shall be single piece, Type 316L cast stainless steel per ASTM A351. Attach the disc to the shaft by means of parallel keys only. Pins are not acceptable for torque transmission.

(I) Valve Shafts:
1. Valve shafts shall be single piece, Type 630 age-hardened stainless steel forging per ASTM A564/564M, Condition H 1150. Shaft diameter shall provide adequate strength to operate the valve at the design pressure.
2. Provide a reduced shaft diameter at the actuator connection to put the weakest point outside the valve and above the packing.
3. Provide the shaft with a surface roughness at the packing area of 0.8µm or smoother.

(J) All wetted components of valve including body (seating surfaces), disc, shaft, disc to shaft connection hardware (pins, keys, screws, etc.), packing, stem seals, gaskets, laminates, and any internal fasteners shall be corrosion resistant and suitable to use in a potable water system in accordance with requirements of the ANSI/NSF Standard 61.

(K) Seal rings: the seal ring shall be secured in the valve body conforming to following requirements:
1. The seal ring shall be round, perfectly concentric on the outsides and inside diameters. The seal ring seating surface shall be machined on the inside diameter and shall be secured by means of a retainer to ensure no movement. To prevent leakage behind the seal ring, a static graphite gasket shall be provided.
2. Material: Type 316 Stainless steel.
3. Provide the seal ring secured by means of a retainer to insure no movement of flexing.
4. Locate the seal in the body and fully protected from the flow stream. Retainer bolting on internal rotating parts is not acceptable. Provide a mechanical locking mechanism for the retainer bolts.
5. Valves without a mechanical locking device are not acceptable.
6. To prevent leakage behind the seal ring, provide a static graphoil gasket. Dynamic gaskets are not acceptable.

(L) Packing and packing gland:
1. A minimum of five (5) packing rings shall be provided.
2. Packing glands shall be type 316 cast stainless steel per ASTM A351.
3. Packing glands shall have a minimum of four (4) retaining bolts (studs) for adjustment and compression of the packing.
4. Packing material shall be graphite.

(M) Bearings:
1. Shaft bearing shall be hard faced stainless steel per AISI 316 and designed to minimize the required torque load and wear.
2. Each bearing shall be press-fit and be provided with reinforced graphite bearing protectors to prevent ingress of particulate or contaminants into the bearings.
3. A thrust bearing shall be provided to absorb thrust in both directions and provide blowout protection.

61.21M.13 SHOP TESTS

(A) Shop test valve in accordance with SME B16.34 and API 598.
1. Test valves for seat leakage from both sides of the disc.
2. Provide written test certificates and test results.
3. Provide the following visual inspections:
   a. Verification of the primary dimensions.
   b. Verification of the absence if defeats in castings in accordance with MSS-SP-55.
   c. Verification of the nameplate and marking in accordance with MSS-SP-25.

(B) Shop tests shall be witnessed by the Engineer. All equipment shall be tested in accordance with the approved procedures and as follows:
1. Inform the City of testing schedule at least 30 days in advance.
2. Submit a shop test procedure and test data sheets at least 30 days prior to testing for approval by the Engineer.
3. No tests shall be conducted until the Contractor has received approval from the Engineer.

(C) Valve shop tests
1. Prior to assembly, each valve body shall be subjected to a hydrostatic test. The test pressure shall be 300 psig and shall be maintained for a period of fifteen minutes, unless otherwise ordered by the Engineer. All hydrostatic testing shall be performed in the presence of the Engineer.
2. All equipment including blind flanges, gaskets, studs, nuts, piping, pumps, valves, test gauges and other appurtenances required to perform these tests shall be provided by the Contractor. Clean potable water shall be used throughout. Test heads shall be stainless steel or coated as approved, and drilled and tapped for vent and water connections.
3. Each valve shall be subjected to hydrostatic leakage test in both direction s at 250 psig. Two such tests shall also be made, one with hydrostatic pressure on one side of the disc and the second with the hydrostatic pressure on the other side of the disc. During the tests, the valve shall be drip tight. Duration of each test shall not be less than five minutes.
4. Each fully assembly valve shall be subjected to operational tests:
   a. In manual mode, operate each valve one full cycle. Verify proper hand wheel operation. Record number of turns required, and verify the number of turns is correct.
   b. Certificate of calibration for all control and measuring instrument used during the motor testing shall be provided to the Engineer for review and approval prior to testing.
   c. When testing is completed prepare valves for shipment. The external surface of the valves shall be free of grease or oil. The machined surfaces shall be protected with anticorrosive preparation.

61.21M14 FIELD HYDROSTATIC TEST:

After installation, the run of pipe furnished under these specifications, shall be subjected to a hydrostatic test pressure of 150 PSI. The Pressure shall be raised to 150 PSI and it shall also be so maintained for a period not less than one hour. All visible leaks shall be repaired and the run of pipe made watertight. If, during the test, leakage may occur into the distribution system, he run of pipe shall be disinfected before the test. NYC DEP shaft maintenance will provide shut down of valves during this operation.

61.21M.15 MEASUREMENT

The quantity of metal seated butterfly valves (30-inch thru 72-inch) with manual actuators measured for payment shall be the number of butterfly valves (30-inch thru 72- inch) with manual actuators (including by-pass arrangements and outlets) of each size actually furnished, delivered and installed by the Contractor as shown, specified or ordered.

61.21M.16 PRICE TO COVER

(A) The contract price for “FURNISHING, DELIVERING AND INSTALLING METAL SEATED BUTTERFLY VALVE” shall be the unit price bid per each size of butterfly valve (30-inch thru 72-inch) shall cover the cost of all labor, equipment, materials, plant, samples, tests and insurance required and necessary to furnish, deliver and install butterfly valves (30- inch thru 72-inch) in the manner specified herein.

(B) Payment for the chamber concrete, reinforcing steel, structural steel, miscellaneous steel, manhole steps, brick masonry and pipe-to-wall penetration seals; and for piping and other type valves shall be made under their respective bid items.

There will be no direct payment for furnishing and installing waterproofing for chambers, including waterstops. Payment will be deemed included in the prices bid for all items of work.

Payment for Furnishing, Delivering and Installing Metal Seated Butterfly Valves will be made under the Item Number as calculated below:

The item Number for Furnishing, delivering and installing Metal Seated Butterfly Valves have ten characters (the decimal point is consider a character, the third character)

(1) The first five characters shall define Furnishing, Delivering And Installing Butterfly Valves (30- Inch Thru 72-Inch):

61.21

(2) The sixth and seventh characters shall define Butterfly Valves (30-Inch Thru 72-Inch)

(3) The eighth characters shall define Butterfly Valves are Metal seated.

(4) The ninth and tenth characters shall define the Size (Diameter) of the Metal seated Butterfly Valves, (The ninth and tenth characters representing the unit of inches for the Size (Diameter) of the Butterfly Valves), See examples below:

30 - 30-inch
48 - 48-Inch

(5) The Item Numbers together with Description and Pay Unit as provided in the Bid Schedule are provided below:

Item No.	Description	Pay Unit
61.21BVM36	FURNISHING, DELIVERING AND INSTALLING 36-INCH METAL SEATED BUTTERFLY VALVE	Each

(10)Add the following new **SECTION 64.14**

Section 64.14 LEAD SERVICE LINE REPLACEMENT

64.14.1. INTENT

(A) Description

This section describes the work to be performed when a lead house service line must be replaced.

Replacing a lead service line includes replacing the entire service line between the corporation stop at the water main and the meter inside the building. Partial replacements or repairs of lead service lines are not allowed, per the Rules of the City of New York ("RCNY") Title 15, Chapter 20, Section 20-03(s). See Section 64.14.1 (D), below.

A partial lead service line (i.e., a lead service line that was previously extended or repaired) will be treated as a lead service line for the purposes of this Section.

All Work must conform to the requirements of RCNY Title 15, Chapter 20. If a conflict exists between these specifications and Title 15, Chapter 20 of the RCNY, Title 15 Chapter 20 of the RCNY will take precedence.

(B) Responsibility

Replacing a lead house service line will be:

1. The responsibility of the Contractor, and performed at the Contractor's sole expense, when:
   a. The Contractor has damaged the lead service line.
   b. The lead service line is cut or damaged due to the Contractor's means and methods.
2. The responsibility of the property owner, and performed by a contractor retained by the property owner at the property owner's sole expense when:
   a. Upon careful excavation, the service line is found to be already damaged or leaking.
3. The responsibility of the City, and performed by the Contractor at the City's expense, as paid for under bid items **64.14A, 64.14AL, 64.14AM, 64.14B, 64.14BL, 64.14BM,** and / or **64.14V** when:
   a. The service line is in good condition and must be relocated or modified in order to construct a City owned utility, structure, or Green Infrastructure asset.

The final determination of responsibility for each service line to be replaced will be made by the Commissioner, in consultation with NYCDEP.

If a service line is required to be replaced at the Contractor's sole expense, the requirements of this Section must be followed.

(C) Outreach and property owner coordination

If a service line is required to be replaced at the Contractor's sole expense, the Contractor is responsible for all outreach and property owner coordination.

If a service line is required to be replaced at the property owner's sole expense, the Engineer, in consultation with NYCDEP, will provide the DEP 3-day water notice to the property owner.

If a service line is required to be replaced at the City's sole expense, the outreach will be as follows:

1. The Engineer will perform the initial outreach to the property owner and distribute the water filters provided in accordance with **Section 64.14.3.(O)**.
2. The Engineer, in consultation with NYCDEP, will obtain a written consent agreement from the property owner to:
   a. Have their service line replaced at the City's expense;
   b. Allow the Contractor access to perform the service line replacement; and
   c. Accept the restoration provided by the City under **Section 64.14.3.(N)**.

The Contractor must not commence any service line restoration until and unless a written consent is obtained from the property owner by the Engineer.

(D) Partial replacement of lead service lines

Lead service lines will be partially replaced in the following conditions:

1. The service line is required to be replaced at the City's sole expense, but the property owner does not provide the required agreement per **Section 64.14.1.(C).2** above;
2. Removal of encumbrances would prevent access to the building (i.e., require the removal of stoops) or cause a building code violation; or
3. The Engineer deems the extent of encumbrances to be excessive.

Where a lead service line is to be partially replaced, the Contractor will install a new curb valve and appurtenances per Section **64.14.3.(D)** below and replace the service line between the main and the curb valve. The replaced service line will be paid for under the appropriate items from **Sections 64.11** and **64.12**. The cost of installing the new curb valve and appurtenances must be included in the prices bid for the appropriate items from **Sections 64.11** and **64.12**.

For the purpose of providing water filter cartridges per **Section 64.14.2.(G)** below, a partial replacement, will be considered "fully replaced" upon completion of the partial replacement inclusive of the installation of the curb valve.

64.14.2. MATERIALS

(A) All service pipe, insulation, and jacketing must be in accordance with **Section 25.01,** modified as follows: Only new materials must be used for installation of service pipes. New service pipes of two (2) inches in diameter or less must be Type K copper tubing. Lead service pipes larger than two (2) inches in diameter are not anticipated in this Contract. Materials for service pipes and fittings must be in accordance with Section PC605, Chapter 6 of the New York City Plumbing Code, latest version.

(B) Backfill must be in accordance with **Section 40.06**.

(C) Sawcutting must be in accordance with of **Section 71.11**.

(D) Temporary restoration of streets, sidewalks, and curbs must be in accordance with **Section 71.31**.

(E) Permanent restoration of streets, sidewalks, and curbs must be in accordance with **Section 71.41**.

(F) Permanent restoration of pavements on private property must be in accordance with **Section 71.41**.

(G) Water filters: The water filter must include a water pitcher and an adequate supply of matching filter cartridges. The water pitcher must be a 7 cup standard PUR pitcher filter system as manufactured by KAZ, Inc. Filter cartridges must be supplied at no separate cost to cover the duration from distribution of the pitcher to the property owner for six months after the service line is fully replaced. Filters must be certified by the Water Quality Association (WQA) to remove 99% of lead in the water.

64.14.3. METHODS

(A) Service Line Details

1. Service lines less than one (1") inch will be replaced with one (1") inch service lines. Service lines one (1") inch and greater will be replaced with the same size service line.
2. Each new water service pipe must be laid in a straight line at right angle to the street main and extending from the tap to the main building control valve. Where surface or subsurface conditions make it impracticable to install a service pipe in accordance with the above conditions, it may be otherwise laid in an alternate location, provided the Contractor submits

a plan showing the proposed alternative location of the water service pipe, and obtains the prior written approval of the Engineer as well as any and all applicable permits.

3. Unless otherwise authorized by the Engineer in writing, each copper tubing service must have at least three (3) feet of copper tubing formed in a gooseneck connection to the tap and laid to the right hand, facing the tap. Each copper pipe with threaded joints must have, at the tap or wet connection, an offset swing joint consisting of four (4) elbows and three (3) pieces of pipe, each piece of pipe not less than two (2) feet in length, laid to the right side facing the connection. Connections to the City main by ductile iron or cast iron must be made directly; no offset swing joint is permitted.
4. Where buildings are constructed on pile foundations or other unyielding supports, the copper tubing service must have two (2) goosenecks, and the copper pipe with threaded joints must have two (2) offset swing joints, one at the tap or the wet connection, laid to the right side facing the main, and one immediately outside the building, laid to the right side facing the building, with a sleeve to carry the service through the foundation wall.
5. All water service pipes must be installed and maintained at a depth of at least three and one-half (3½) feet and no more than six (6) feet below ground unless written permission to vary this requirement is obtained from the Engineer. Where a water service pipe has less than three and one-half (3½) feet of cover, due to subsurface conditions, it must be insulated and protected and possibly plated, as required, in a manner approved by the Engineer. No water service pipes will be allowed at a depth of 30” or less.
6. A water service pipe must not be laid within six (6) inches of any other subsurface structure, conduit or pipe, nor directly below and parallel with any subsurface structure, conduit or pipe.
7. All surfaces to be insulated must be cleaned of all scale, rust, oil, and foreign matter and must be dry and free of frost prior to and during application of insulation. All testing of piping to be insulated must be completed prior to the application of any insulation materials. All insulation and accessory materials must be stored in an area that is dry and protected from weather before and during insulation application. Insulation must be applied based on the approved manufacturer's requirements and as approved by the Engineer.
8. If a house ground connection is attached to the existing service line, it must be reconnected to the new service line at no additional cost.

(B) Installation

1. Water service pipe laid in a sewer or construction trench must be protected from settlement by supports or by securely benching the service in the side earth wall where applicable, while maintaining minimum distance requirements from sewer pipe.
2. After a tap has been inserted or service pipe installed, the backfill around and one (1) foot over the main and service must be Select Granular Fill and carefully tamped under and around the main and service line. The remainder of the backfill must be Approved Excavated Suitable Fill and must be satisfactorily compacted either by tamping or flushing, or both. Where trenchless technology (tunneling) has been permitted the backfill of the tunnel portion must be well compacted with Select Granular Fill. Tunneling is the preferred method and should be used where practical to avoid disturbing encumbrances.
3. If removal of encumbrances is necessary, the removal will be paid for under item 6.27A, DEMOLITION OF STRUCTURES. Prior written approval of the Engineer is required.

(C) Disconnect and Reconnecting Service Connections

The Contractor must disconnect existing lead service lines and reconnect new copper pipe at the City water main for all water service lines which are required to be replaced.

1. In all instances, where lead water service lines are to be replaced, the Contractor must excavate at the water main, disconnect the supply at the existing tap, and continue with replacement of the lead service line.
2. New taps may be required to be installed prior to the installation of the water service line. The Engineer must determine if an existing tap must be replaced. The Contractor must expose the existing tap and provide the Engineer the opportunity to inspect the tap and make such determination. Any and all costs associated with the installation of new taps, including but not limited to coordination and accommodation efforts, is deemed included in the unit items herein and no additional payment will be made to the Contractor.

(D) Curb Valves

1. All new water service lines must have new curb valves installed with iron extension boxes, unless directed by the Engineer.
2. Curb valves must be full port ball valves or non-rising stem gate valves designed for a minimum of 150 psi of working pressure.
3. All curb valves must be set in the sidewalk area and located 18” (eighteen) inches inside the face of the curb. Any variance from this requirement must be submitted in writing to, and approved in writing by, the Engineer.
4. Curb valves must be provided with a tar coated iron extension box with a cover which must be installed flush with the sidewalk within ¼ inches. Curb valves 2 inches and smaller may be full port ball valves equipped with a quarter turn shutoff.

(E) Building Control Valves

1. Where possible, existing building control valves must remain. If directed by the Engineer or if a building control valve is not present, a new building control valve must be installed. Removal and disposal of deteriorated valves or valves that contain lead will be incidental to installation of new building control valves. Building control valves must be made of material similar to the water service pipes and must be gate type except that valves between ¾” and 2” may be full port ball valves. Lead content of valves must not exceed 0.25%.
2. Building control valves must be placed on the water service pipe within 2’ of the building wall and located where they will be accessible at all times. Valves must be designed for a 150 psi minimum working pressure. For combined service pipes 2 inches or smaller, the building control valve may be an OS&Y valve or UL/FM-approved full-port ball valve approved by the New York City Department of Buildings.

(F) Building Penetration

1. Where required, existing sleeves must be removed and new sleeves must be installed and grouted to properly seal the building penetration. Additional building penetrations should be avoided when possible. The sleeves to be used must be ductile iron. The cost for sleeves will be deemed included in the costs of all scheduled items.
2. If the existing service is cast into the wall without a removable sleeve, the Contractor must drill accordingly to allow for the installation of a sleeve. If the sleeve is non-removable, in good condition, and can be properly sealed, the Contractor must reuse the existing penetration, subject to the Engineer’s approval. Core holes must be centered over the existing service pipe. The Contractor must take all necessary precautions to prevent coring water from collecting inside the building and to prevent damage to property in the building.

(G) Test of Service Pipe

Each new water service line must be subjected to a water test under the street main pressure by the Licensed Master Plumber in the presence of the Engineer. All pipes and appurtenances must remain uncovered for the duration of the test and must show no sign of leakage.

(H) Flushing of Service Lines

The Contractor must perform flushing in accordance with AWWA C810, Section 4.4.1. The cost for all flushing will be deemed included in the costs of all scheduled items.

(I) Water Main Shutdowns

The work under this item must be performed in strict accordance with RCNY, Title 15, Chapter 20, and as directed by the Engineer. If it is necessary to shut off the water main while repairing, replacing, or installing a service pipe, the Licensed Master Plumber must immediately notify the Engineer. No separate payment will be made for water main shutdowns that are needed by the Contractor; payment will be deemed included in the individual bid items.

(J) Dewatering

The work under this item requires installation, maintenance, operation, deconstruction, and removal of dewatering equipment to adequately lower the groundwater table to a point below the trench subgrade. Dewatering will be required at all ordered locations where groundwater is present in the trench, or as directed by the Engineer. The work must be performed in strict accordance with the Standard Water Main Specifications, NYCDOT Standard Highway Specifications, and as directed by the Engineer. There will be no separate payment for the installation, maintenance, operation, deconstruction, or removal of any dewatering equipment; payment will be deemed included in the individual bid items.

(K) Extended Work Hours

The Contractor must schedule corporation stop (tap) and wet connection inspections only during regular business hours, unless approved by the Engineer. All work performed during extended work hours and any work done on holidays or on weekends, must be performed in strict accordance with the NYCDOT permits, and as directed by the Engineer. Work performed during extended hours will not be paid for separately; payment will be deemed included in bid items.

(L) Time is of the Essence

Construction of building service lines must be completed promptly and without delay in order to minimize the impact on property owners. All service lines should be disconnected and reconnected (brought back on-line) on the same day of installation and no later than 6 pm. However, in no event will building service lines be disconnected for a duration greater than 24 hours. This may require the service line replacement to be done in a two-step process (main to curb valve, curb valve to meter) in order to minimize the impact on property owners, at no separate cost. If service line replacement is done as a two-step process, the overall time must not exceed six months.

(M) Final Cleanup

All pipes and valves removed during the Work will become the property of the Contractor. Lead pipes must be disposed of by the Contractor in full compliance with federal, state, and local environmental rules, policies, and regulations, and as approved by the Engineer. Project site must be left in a neat and clean condition. All tools, equipment, materials, debris, scrap, trash, etc. must be removed at the end of the work day and upon completion of the Work.

(N) Restoration

1. Restoration in roadways, curbs, and sidewalks

   Restoration of roadways, curbs, and sidewalks will be in kind to match existing, and will be paid for under the appropriate bid item, as described in **Section 71.41**.

2. Restoration on private property

   All excavations within the building line, except asphalt and concrete pavements, must be backfilled with the excavated material and levelled smoothly to the adjacent ground, and these costs must be included in the prices bid for replacement of service lines. The Contractor will not be responsible for removal or replacement of encumbrances on service line replacements paid for by the City.
   Encumbrances are the property owner's property that interfere with the lead water service line replacement and may include:
   a. Stoops, retaining walls, railings, decks, porches, fountains, statuary, or other structures other than sidewalks, driveways, or pavements;
   b. Shrubs, trees, or landscaping other than turf; and
   c. Walls, panels or finishes inside the building.

   Restoration on private property will be limited to installing new asphalt and concrete pavements, subject to approval by the property owner. If the property owner does not agree to the restoration below, no additional restoration will be provided. The following are the only items available for restoration on private property:
   a. Item 4.02 AG, ASPHALTIC CONCRETE WEARING COURSE, 3" THICK, S.Y.
   b. Item 4.13 AAS, 4" CONCRETE SIDEWALK, S.F.
   c. Item 4.13 BAS, 7" CONCRETE SIDEWALK, S.F.
   d. Item 4.20 SEEDING, S.Y.

(O) Water Filters and Test Kits

For every lead service line encountered, the Contractor must:
1. Submit a Lead Test request through NYC 311. NYCDEP will directly supply lead test kits to the property owner.
2. Provide a water filter meeting the requirements of **64.14.2.(G)** to the Engineer, who will distribute to the property owner immediately following lead service line replacement. The Contractor will not be paid separately for water filters; the costs of these items must be included with the prices bid for all items.

64.14.4. MEASUREMENT

(A) The quantities of REPLACEMENT OF SERVICE LINE UP TO 1 IN, UP TO 40 FT and REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, UP TO 40 FT to be measured for payment will be the actual number of service lines replaced.

(B) The quantities of ADDITIONAL LENGTH OF SERVICE LINE UP TO 1 IN BEYOND

40 FT and ADDITIONAL LENGTH OF SERVICE LINE 1 -1/4 TO 2 IN BEYOND 40 FT to be measured for payment will be the additional length, measured in linear feet, of service line beyond 40 feet measuring as the distance of a straight line from the centerlines of the water main to the meter or building main control valve, whichever is encountered first. Any quantity beyond the straight-line distance will require prior written approval by Engineer.

(C) The quantities of REPLACEMENT OF SERVICE LINE UP TO 1 IN BETWEEN BUILDING CONTROL VALVE AND METER and REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, BETWEEN BUILDING CONTROL VALVE AND METER to be measured for payment will be the actual length of service lines replaced between the building control valve and meter.

(D) The quantities of INSTALL NEW BUILDING CONTROL VALVE 2 IN AND UNDER to be measured for payment will be the actual number of building control valves replaced.

64.14.5. PRICE TO COVER

(A) The price bid for REPLACEMENT OF SERVICE LINE UP TO 1 IN, UP TO 40 FT, ADDITIONAL LENGTH OF SERVICE LINE UP TO 1 IN BEYOND 40 FT,

REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, UP TO 40 FT, and ADDITIONAL LENGTH OF SERVICE LINE 1 -1/4 TO 2 IN BEYOND 40 FT must be a unit price bid per each service line replaced, and must include the cost of all labor, materials, plant, equipment, and insurance required to complete the Work as specified, including but not limited to: obtaining permits, scheduling appointments, performing site visits, providing notification, mobilization, sawcutting, excavation work disconnection and reconnection of service at main, sheeting, removal and disposal of existing service lines (inclusive of any salvage value), curb valves and curb valve boxes, removal or destruction of existing tap, installation of new taps, installation of gooseneck and offset swing joint, installation of new curb valve, coring and installing seal for building penetration, excavation of all materials of whatever nature encountered, restoration of private property, permanent restoration of street, curb and sidewalks including pigmented concrete as required, cleaning up, hauling away of all materials, removal of all debris and water incidental to connecting the water service line to the building control valve, inspection and testing, flushing, and buried insulation of water service lines due to insufficient depth, and demobilization together with all other items necessary to complete the Work.

(B) The price bid for REPLACEMENT OF SERVICE LINE UP TO 1 IN BETWEEN BUILDING CONTROL VALVE AND METER and REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, BETWEEN BUILDING CONTROL VALVE AND METER must be a unit price bid per linear foot, and must include the cost of all labor, materials, plant, equipment, and insurance required to complete the Work as specified, including but not limited to the meter setter, couplings, and other fittings; cleaning up; hauling away of all materials; together with all other items necessary to complete the Work.

(C) The price bid for INSTALL NEW BUILDING CONTROL VALVE 2 IN AND UNDER must be a unit price bid per each valve replaced, and must include the cost of all labor, materials, plant, equipment, and insurance required to complete the Work as specified, including valve supports; connections to service and building lines; earth excavation of all materials of whatever nature encountered; backfilling; cleaning up; hauling away of all materials; together with all other items necessary to complete the Work.

(D) When payment is made under this **Section 64.14** for replacement of a service line, no separate payment will be made under **Sections 64.11** and **64.12**.

(E) No direct payment will be made to the Contractor for insulating service lines where required. All costs associated with furnishing, delivering, and installing insulation and appurtenances will be deemed included in the prices bid for the items below.

Payment will be made under:

Item No.	Description	Pay Unit
64.14A	REPLACEMENT OF SERVICE LINE UP TO 1 IN, UP TO 40 FT	EACH
64.14AL	ADDITIONAL LENGTH OF SERVICE LINE UP TO 1 IN BEYOND 40 FT	LF
64.14AM	REPLACEMENT OF SERVICE LINE UP TO 1 IN BETWEEN BUILDING CONTROL VALVE AND METER	LF
64.14B	REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, UP TO 40 FT	EACH
64.14BL	ADDITIONAL LENGTH OF SERVICE LINE 1 -1/4 TO 2 IN BEYOND 40 FT	LF
64.14BM	REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, BETWEEN BUILDING CONTROL VALVE AND METER	LF
64.14V	INSTALL NEW BUILDING CONTROL VALVE 2 IN AND UNDER	EACH

(11)Refer to Subsection 71.41.4 - Specific Pavement Restoration Provisions, Page 530:
Add the following to Subsection 71.41.4:

(E) Specific Pavement Restoration Provisions:

(1) In E. 233rd Street from approximately twenty five (25) feet west of west curb line of Bronxwood Avenue to a point approximately twenty five (25) feet east of the east curb line of Bronxwood Avenue, The restoration must be as follows:

(a) The **entire width of roadway** and six (6) inches of existing roadway subgrade shall be removed from curb to curb or edge to edge and the permanent restoration over the **entire width of roadway** shall consist of a top course of three (3) inches of asphaltic concrete wearing course on a base course of 6" to 9" of high-early strength concrete as encountered and directed by the Engineer. New curbs and sidewalks shall be constructed where and as directed by the Engineer. The above area is approximate; the actual final area of restoration shall be determined by the Engineer.

(2) For All other locations Within the Project Scope:

(a) The permanent restoration over the **trench width and cutbacks only** must consist of a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a minimum of one and one-half (1-1/2) inches of binder mixture on a base course of a minimum of six (6) inches of concrete, to match the existing pavement as directed by the Engineer.

(b) Finally an overlay of two (2) inches of asphaltic concrete wearing course shall be installed over the entire width of the roadway from **curb to curb** or **edge to edge** of existing roadway.

(3) The Following Requirements Apply:

(a) Before the top course is installed, an additional width of asphalt beyond the edge of new base course must be saw-cut and removed from all edges of trenches to a depth to accommodate the specified top course and the entire area restored. This additional removal must be in accordance with paragraph (b) below.

(b) Pavement excavation along with saw cutting of pavements for sewer and water main trenches must be in accordance with **Section 71.21 - Pavement Excavation** of the Standard Sewer And Water Main Specifications.

(c) At locations requiring the installation of a concrete base course, a reflective cracking membrane must be installed over joints prior to restoration, the cost of which shall be deemed included in the prices bid for all pavement restoration items. Additionally, appropriate pavement keys as described below shall be used. Additionally, appropriate pavement keys as described below must be used.

(d) Pavement keys **Type B-1** must be used to insure a desired four (4) inch curb reveal (two and one-half (2-1/2) inch absolute minimum). Pavement key **Type A** must be used in all intersections. Both keys are to be per Bureau of Highways Operations Specifications and Standard Details of Construction.

(e) Unless otherwise specified, the cost for Proctor analyses, in-place soil density tests, tack coating, eradication of temporary roadway markings, stripping or milling of pavement keys and adjustment of city-owned castings for all roadway work will be deemed included in the prices bid for all pavement restoration items.

(f) Payment for placement of temporary pavement marking will be made under Item No. 6.49 - TEMPORARY PAVEMENT MARKINGS (4" WIDE).

(g) Payment for removal of existing pavement markings will be made under Item No. 6.53 - REMOVE EXISTING LANE MARKINGS (4" WIDE).

(h) Payment for placement of permanent pavement marking with thermoplastic reflectorized pavement markings (crosswalk and lane dividers) will be made under Item No. 6.44 - THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE).

(i) Payment for pavement restoration will be made under the following items:

ITEM NO.	ITEM	PAYMENT DESCRIPTION
4.02 AF-R	Asphaltic Concrete Wearing Course, 2" Thick	(For asphaltic concrete wearing course top course overlay from curb to curb or edge to edge.)
4.02 AG	Asphaltic Concrete Wearing Course, 3" Thick	(For restoration on private property where lead service replacement is required)
4.02 CA	Binder Mixture	(For binder mixture base course over trenches and cutbacks; binder mixture top filler course under asphaltic concrete wearing course when no overlay is required; binder mixture top course when overlay is required; binder mixture in Type A and B Keys; and binder mixture to fill in roadway depressions and to provide a leveling course prior to overlay where ordered.) reconstruction and trench restoration.)
4.04 H	Concrete Base For Pavement, Variable Thickness For Trench Restoration (High Early Strength	(For concrete base course over trenches and cutbacks.)
4.05AX	High Early Strength Reinforced Concrete Pavement (Bus Stop)	(For reinforced concrete pavement at bus stops)

(12)Refer to following new SECTION

NYC DDC HED 562
CP System Survey and Engineering Study of Stray Currents
Cathodic Protection System Design

CORRTECH
CORROSION UNDERSTOOD

Prepared For:
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CorrTech, Inc. Report No. 8915-FOR-01-2
NYC DDC Task Order 002
FMS No. GEDRC002

October 2019
May 2024
June 2024

STATEMENT OF LIMITATION

The conclusions presented in this document are based on the services described and not on tasks or procedures beyond the scope of the described procedures or the time and budgetary constraints imposed by the contract limitations.

CorrTech, Inc. has performed this assessment in a professional manner using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent consultants, and in accordance with the procedures established within CorrTech's quality assurance, quality control protocol.

CorrTech, Inc. shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld or not fully disclosed at the time the evaluation was performed.

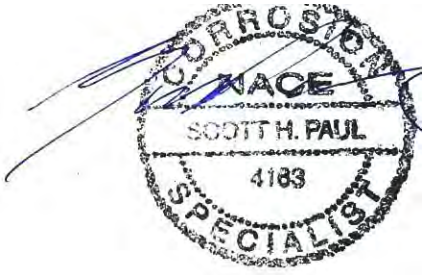

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Table of Contents

INTRODUCTION 4
CONCLUSIONS 4
RECOMMENDATIONS 5
DISCUSSION 6
DESIGN PARAMETERS 8

APPENDIX I

- Stray Current Test Results
  Figure 1 through Figure 3
- Cathodic Protection Design Worksheets
- Material List - Engineers Estimate

APPENDIX II

- Cathodic Protection Design Drawings
  HED-562 CP-1 through HED-562 CP-5
  HED-562 CPD-1 through HED-562 CPD-3

Note : Cathodic Protection Drawing have been included in Contract drawing.

INTRODUCTION

On December 17, 2015, CorrTech Inc. entered into agreement with the NYC Department of Design and Construction (DDC) with the expectation of providing cathodic protection design, construction support, field testing, final system testing, and as-built documentation for the HED 562 project. The HED 562 project is designated by DDC as contract GEDRC002, registration number 20121401831. The HED 562 trunk water main project consists of trunk main installation, distribution water main installation and combined sewers in East 233RD ST., from Bronxwood Ave. to Baychester Ave., Borough of Bronx. It is estimated that approximately 3,216 linear feet of 48-in and 215 linear feet of 36-in steel trunk main and associated fittings are to be installed abiding by “Specifications for Trunk Main Work, part III- Lining and coating of steel pipes and appurtenances in the shop and in the field” of New York City Department of Environmental Protection (NYCDEP).

Pre-design field testing was performed during the month of April 2019 to measure soil resistivity and monitor stray current in the approximate area in which the new steel water main is to be installed. Data collected has been used to design the sacrificial cathodic protection system. In addition to the field testing, a cursory review of area utilities was completed.

CorrTech, Inc. provides corrosion engineering expertise in accordance with specifications section 5.04A. Furnishing, installing, and testing corrosion control and/or cathodic protection System was done in accordance with NYCDEP “Specifications for Trunk Main Work”.

Initial design was completed and submitted in October 2019. Later, the construction manager modified construction specifications, such as re-alignment of watermain and tie-in specifications in the intersection of Bronxwood Avenue and 233rd Street. This revised design is to accommodate these changes of construction specifications.

For designing purposes, CorrTech divides the water main into five (5) segments, separated with the butterfly valves on 233rd street and Baychester Avenue (Details see APPENDIX II: Cathodic Protection Design Drawings).

Additional isolating flange kit assemblies (enclosures) and locations are required to effectively isolate and electrically separate the new trunk water main from all other piping to ensure that the cathodic protection system is effective and stray current minimized. These have been included in the plan set (see Cathodic Protection Design Drawings in Appendix II for details). There are a total of two (2) locations where these were not originally indicated on the alignment drawing and must be installed. There are summarized:

Two Insulating enclosures on Design Sheet: HED562-CP-2

Without these insulating enclosures installed, the new sacrificial anode cathodic protection system will not function as designed, not able to protect the new pipe and result in premature anode consumption.

CONCLUSIONS

Based on the field-testing protocol and test results obtained during the cathodic protection system design phase, the following conclusions are presented:

1. The drawing does not indicate connection details on Bronxwood Ave for the two 36-in pipe connections. CorrTech recommends the installation of insulating pipe flanges in the shaft chamber vault.

2. The measured soil resistivity measured along the construction route was found to range from 30,000 to 5,000 ohm-cm with an average of 14,500 ohm-cm for the 6 soil resistivity measurements obtained. The soil resistivity study indicates that the area soils are classified as mildly corrosive to metallic structures. Steel piping installed in this area will require corrosion control measures that will include an external dielectric coating system and sacrificial anode cathodic protection that will provide adequate corrosion control for an excess of 50 years.

3. Stray current effects measured along the construction route are considered to be minimal. The magnitude of variations observed indicates existence of dynamic stray DC voltage effects near the MTA rail line crossing. A dielectric coating, galvanic anodes, and isolation of the piping from other underground utilities or metallic structures will mitigate the effects of stray current.

RECOMMENDATIONS

While the soil in the area is considered mildly corrosive, a minimum life expectancy of 50 years must be considered. In order to protect against corrosion caused by electrochemical influences, the newly installed coating steel should be installed with an external coating system, electrical isolation, and sacrificial anode type cathodic protection system. The following are required for the system to function as designed:

1. Flange isolation assemblies are required where the new steel pipe connects to existing piping. Insulating flanges must also be installed at all butterfly valve chambers and at any/all ductile iron or cast-iron main connections. These have been indicated on the design drawings. The drawing does not indicate connection details on Bronxwood Ave for the two 36-in pipe connections. CorrTech recommends the installation of insulating pipe flanges, either directly buried or in a vault.

2. The new steel piping must have a high-quality dielectric coating, such as the YG3 tape wrap coating system, for any and all steel pipe surfaces that are in contact with the surrounding soil and host pipe grout environment. The dielectric coating system should be applied to all piping associated with the air cock hydrants and blow-off assemblies.

3. Sacrificial magnesium anodes, permanent reference electrodes, pipe test wires, steel counter electrodes and flush-to-grade test stations at the locations indicated on the design drawings must be installed adjacent to the direct-buried piping, as per design drawings. All test stations must be installed on the inside of nearby curbs in order to protect the enclosures from vehicular traffic and to make them easier to access for future testing.

4. FRP shields must be installed around the pipe at any/all points of contact with reinforced concrete piles or similar structures. Electrical isolation between the new steel piping and other structures is of critical importance.

5. Final testing shall be performed by CorrTech personnel in concert with the REI team. Testing must verify that the installed cathodic protection system meets the criteria set forth by NACE International Standard Practice SP0169, which requires control of external corrosion on underground or submerged metallic piping systems at all locations.

6. Based on the cathodic protection design worksheets and pipe network, the following table summarizes the direct-buried pipe segments for HED 562:

CORRTECH CORROSION UNDERSTOOD

PIPE BREAKDOWN — **CorrTech Job No: 8915**

Client: NYC DDC
Project: HED 562
Job Number: 8915
Date: 10/9/19
REVISED: 7/11/24

Segment No.	Drawing	Location	Water Main		Gnd beds	Anodes	CuSO4 Ref. Cells	Rebar	IJ/GB
			Length (ft)	Diameter(in)					
SEGMENT 1	HED562-CP-2	From west most insulated flange to butterfly valve chamber at intersection E 233rd street & Bronxwood Ave	180	48	1	10	3	3	1
SEGMENT 2	HED562-CP-2	From shaft chamber wall to butterfly valve chamber at intersection of E233rd st and Bronxwood Ave	97	36.72	1	4	2	2	0
SEGMENT 3	HED562-CP-2	From shaft chamber wall to butterfly valve chamber at intersection of E233rd st and Bronxwood Ave	118	36.72	1	6	2	2	0
SEGMENT 4	HED562-CP-2,3,4,5	From butterfly valve chamber at intersection of E233rd st and Bronxwood Ave to butterfly valve chamber at Baychester Ave	2974	48.96	9	135	12	12	0
SEGMENT 5	HED562-CP-5	From butterfly valve chamber at Baychester Ave to end bulk head	62	48.96	1	3	2	2	0
		TOTALS	**3431**		**13**	**158**	**21**	**21**	**1**

DISCUSSION

The coated steel water main piping associated with project HED 562 consists of 48 and 36-inch piping. Testing was completed along East 233RD St. from Bronxwood to Grenada Ave., following the layout of the piping system.

The purpose of the pre-construction testing and subsequent evaluation is to quantify the levels of stray traction DC currents and to evaluate the area soil resistivity along the proposed construction route. Stray current testing was performed in and around the area where the new pipe will be installed.

Two (2) reference cell-to-reference cell potential profile obtained in the area indicates that potential variations associated with stray currents from the MTA operation are considered minimal. The potential measurements obtained indicated variations of approximately 0.035-volts or less (as monitored over a 30-minute period). The proposed area of construction for the new

steel water main being installed as part of HED 562 would not be subjected to adverse effects from stray traction DC currents. Mitigation techniques employed in this design include a dielectric coating of the pipe, the use of galvanic anodes for corrosion protection, and proper isolation of the piping segments subjected to any future stray current.

Soil resistivity measurements were obtained at six (6) locations using a Collins Rod and calibrated Wheatstone Bridge. Depths obtained ranged from 3-feet to 4-feet. The data obtained is shown in Appendix I of this report. Soil resistivity ranged from a low of 5k ohm-cm to a high of 30k ohm-cm. Low resistivity areas were measured at locations that are likely subject to accumulation of road salt, among other contaminants. Average soil resistivity values were calculated from the measurements obtained along the pipe route.

Values of soil resistivity have been used for years as an indicator of the corrosivity of soil. Soil resistivity is the reciprocal of conductivity, the lower the resistivity, the easier current flows through the soil. Of the measurable soil characteristics, resistivity is generally accepted as the primary indicator of soil corrosivity. Resistivity is a property of the bulk volume of soil and electrolytes.

Although no universal standard has been accepted, (by an organization such as the American Society for Testing and Materials or the National Association of Corrosion Engineers), it is generally agreed that the classification shown below, or other similar classifications, reflect soil corrosivity.

Resistivity (Ohm-cm)	Classification
< 1,000	Extremely Corrosive
1,000 to 3,000	Highly Corrosive
3,000 to 5,000	Corrosive
5,000 to 10,000	Moderately Corrosive
10,000 to 25,000	Mildly Corrosive
> 25,000	Progressively Less Corrosive

The above table provides qualitative insight to the expected corrosion exposure of a metallic structure in a soil of known resistivity. Accordingly, deterioration can generally be expected to be rapid and relatively severe in soils below 1,000 ohm-cm. This does not mean, however, that severe corrosion will not occur in soils of higher resistivity. In fact, depending on chemical and electrical conditions, severe corrosion can occur in soils above 25,000 ohm-cm. The table only indicates that the latter occurrence is generally not observed.

The review of the plans for the new steel water main indicates that there are multiple ties to existing structures. The installation of insulating flanges is required for any/all tie-ins to the existing water supply network, as well as any butterfly valve connections and at any/all ductile iron or cast-iron distribution tie-in points. The installation of electrical isolation flange assemblies produces a more concise, manageable cathodic protection system.

The cathodic protection design created by CorrTech, Inc. assumes that the piping will be electrically isolated and provided with a high-quality dielectric coating system, (such as the YG III Tape Wrap coating system) and installed on all steel piping in contact with the soil environment. The piping associated with air cock hydrants and blow-offs should be coated with this coating system as well as electrically isolated from the steel trunk water main. There will be a total of 6

distinct segments associated with the HED 562 project installation relative to cathodic protection. Refer to Appendix II for the associated Ground Bed Design Worksheets.

DESIGN PARAMETERS

The following cathodic protection design criteria have been applied to facilitate the final design calculations:

- Percent of bare pipe 2.00%.
- Required current density 1.0 mA/ft² for direct buried piping.
- Pipe coating quality 25,000 ohm-ft^2
- 50-year design life for the cathodic protection anodes
- Groundbed resistance increased by “crowding effect” of closely installed anodes
- Anode consumption rate of 17-pounds per ampere-year
- 50% anode consumption utilization factor
- Anode current discharge density has been included to calculate CP system life.

The magnesium anodes will be divided into groups and these groups will be distributed along the isolated piping segments. Installing the anodes in individual groups enables current distribution to the 36-in piping in each segment and provides multiple ground beds as backup in the event of damage to one groundbed. This design considers that each groundbed would include a maximum of 15, 17-pound magnesium anodes. This is the maximum number of anodes per test station per NYC DEP BWSO/ME-QA requirements.

The cathodic protection design has been prepared in accordance with NACE SP0169 (formerly RP0169), “Control of External Corrosion on Underground or Submerged Metallic Piping Systems”. This standard practice presents procedures and practices for achieving effective control of external corrosion on buried or submerged metallic piping systems.

These recommendations are also applicable to many other buried or submerged metallic structures. They are intended for use by corrosion control personnel concerned with the corrosion of buried or submerged piping systems, including oil, gas, water, and similar structures. This standard describes the use of electrically insulating coatings, electrical isolation, and cathodic protection as external corrosion control methods. The standard contains specific provisions for the application of cathodic protection to existing bare, existing coated and to new piping systems. Also included are procedures for control of interference currents on pipelines.

Sacrificial anode cathodic protection provides protection with no external power source or rectifier. Sacrificial anodes are designed to corrode, thereby protecting the steel structure being installed. Energy for the sacrificial anode system is provided by the difference in the electrochemical level between the anode and the structure being protected. Typically, magnesium anodes are utilized to protect steel structures. The magnesium anode will corrode preferentially when connected to steel as part of a cathodic protection system. This is due to the fact that it sits at a higher electrochemical level.

A sacrificial anode installation is also a DC circuit with positive current supplied by the anodes

and a return negative current supplied from the structure. The driving voltage of the sacrificial anode circuits is approximately 0.9 volt, the difference between magnesium and steel.

Ohm's Law (E=IR) is valid for DC circuits, where E is the driving voltage, or rectifier output, of the circuit, I is the resulting current magnitude and R is the resistance of the circuit. Proper system design seeks to minimize the resistance of the circuit through the use of an anode ground bed design. Sacrificial anode systems do not provide as much energy output as the impressed current design and therefore do not function properly in some applications where cathodic protection is required. Sacrificial systems require that the structure is first coated with a tightly adhered coating system and is also electrically isolated from all other metallic structures and system components. It is important to understand that pipe coating alone is not sufficient to provide complete corrosion control. Coatings must be supplemented with cathodic protection.

NACE requirements specify that the cathodic protection of buried steel structures must be evidenced by two criteria. Firstly, adequate steel polarization is needed to ensure that the electrochemical processes have been established in order to arrest corrosion of the steel surface. Secondly, the cathodic protection design should be constructed and implemented in order to allow for field-testing protocol. Protection levels with respect to polarization criteria can then be verified. All testing is performed in order to demonstrate that adequate cathodic polarization exists on the protected structure. Polarization criteria must take into account any significant drop in the field measurements conducted. This is important both to satisfy the regulations as well as to ensure the preservation of pipe integrity. The primary focus of testing protocol and system design is to ensure that corrosion of any exposed steel has been mitigated.

Sacrificial anode design utilizes a number of electrical parameters as input to the CorrTech, Inc. design calculation worksheet. The calculation worksheets for the total pipe section is included in this report as Appendix II.

In addition to the soil resistivity data, pipe geometry and anode dimensions and weight, the above design criteria are inputs to the design. The anode-to-remote earth resistance calculation is based on Dwight's Equation for a single horizontal anode.

$$R = \left(\frac{0.00521\rho}{L}\right)\left(\ln\left(\frac{4L^2 + 4L\sqrt{s^2 + L^2}}{dS}\right) + \frac{S}{L} - \frac{\sqrt{S^2 + L^2}}{L} - 1\right)$$

Where
R = resistance in ohms
L = anode length in feet
S = twice the depth of anode in feet
d = anode diameter in feet
ρ = resistivity in ohm-cm
ln is the natural logarithm function

This calculation provides the resistance for one (1) anode set in the measured average soil resistivity. The resistance to ground of the pipe is also calculated in the worksheet. Both the theoretical current requirement based on 1.0 mA/ft² applied to the 2.00% of bare steel pipe and

the circuit resistance of the pipe and anodes are calculated in the worksheet. The number of anodes to be installed is a variable input in the worksheet that determines total anode circuit resistance based on parallel resistance theory. The check in the design calculation worksheet indicates that the theoretical current required by the 1mA/sqft parameter, compared to the current expected from the overall circuit resistance (as determined by soil resistivity, anode size/quantity, and piping length), is between -25% and 25% and is therefore in agreement.

Under certain circumstances, anodes will be installed close to each other as a cluster of anodes due to limitation of available space, current discharged from each anode will compete for the same current path, this mutual interference is called “crowding effect” and will increase resistance from the calculated one with Dwight’s Equation.

An empirical Sunde formula has been developed and successfully used to count the “crowding effect” for horizontally installed distributed anode system.

$$R_{gb,h} = \frac{R_{a,h}}{N} \times F$$

where:

$R_{gb,h}$ = resistance of N horizontal anodes
$R_{a,h}$ = resistance of a single anode
N = number of anodes
F = crowding factor

This crowding factor can be calculated with the following formula,

$$F = 1 + \frac{\rho}{\pi S R_{a,h}} \ln 0.656N$$

where:

F = multiple anode crowding factor
ρ = soil resistivity
S = center-to-center distance between anodes
$R_{a,h}$ = resistance of a single horizontal anode
N = number of anodes connected in parallel

The Sunde formula has been adapted to this design calculation, a mutual interference factor “$\frac{2L}{S} ln(0.656N)$” was included for the horizontal installed anode systems. The mutual interference “crowding effect” will be dissipated along with increasing the separated distance between each anode. Experiments showed if regular size (such as 17 lb magnesium anode) anodes are installed over 20 feet apart, “crowding effect” is negligible. For this project and groundbed

installation, CorrTech has indicated that a minimum of 5-ft between horizontal anode is to be maintained. The calculations verify this in the check. These calculations are based on and calculate resistance to remote earth. In a closely coupled system such as the DDC pipe project, the calculations presented by CorrTech provide a conservative approach.

The final total anode current output value is used to calculate the life of the anode system based on the magnesium anode consumption rate and 50% utilization. Magnesium anode consumption rate is influenced by its current discharge density. If current discharge density is smaller than 20 mA/ft^2, a safety factor of 50% is applied for this design calculation. The life expectancy of anodes on these cathodically protected piping segments is in excess of 50 years.

APPENDIX I

Stray Current Test Results
Figure 1 through Figure 3
Cathodic Protection Design Worksheet, Segments 1 through 2
Material List- Engineers Estimate

CorrTech, Inc

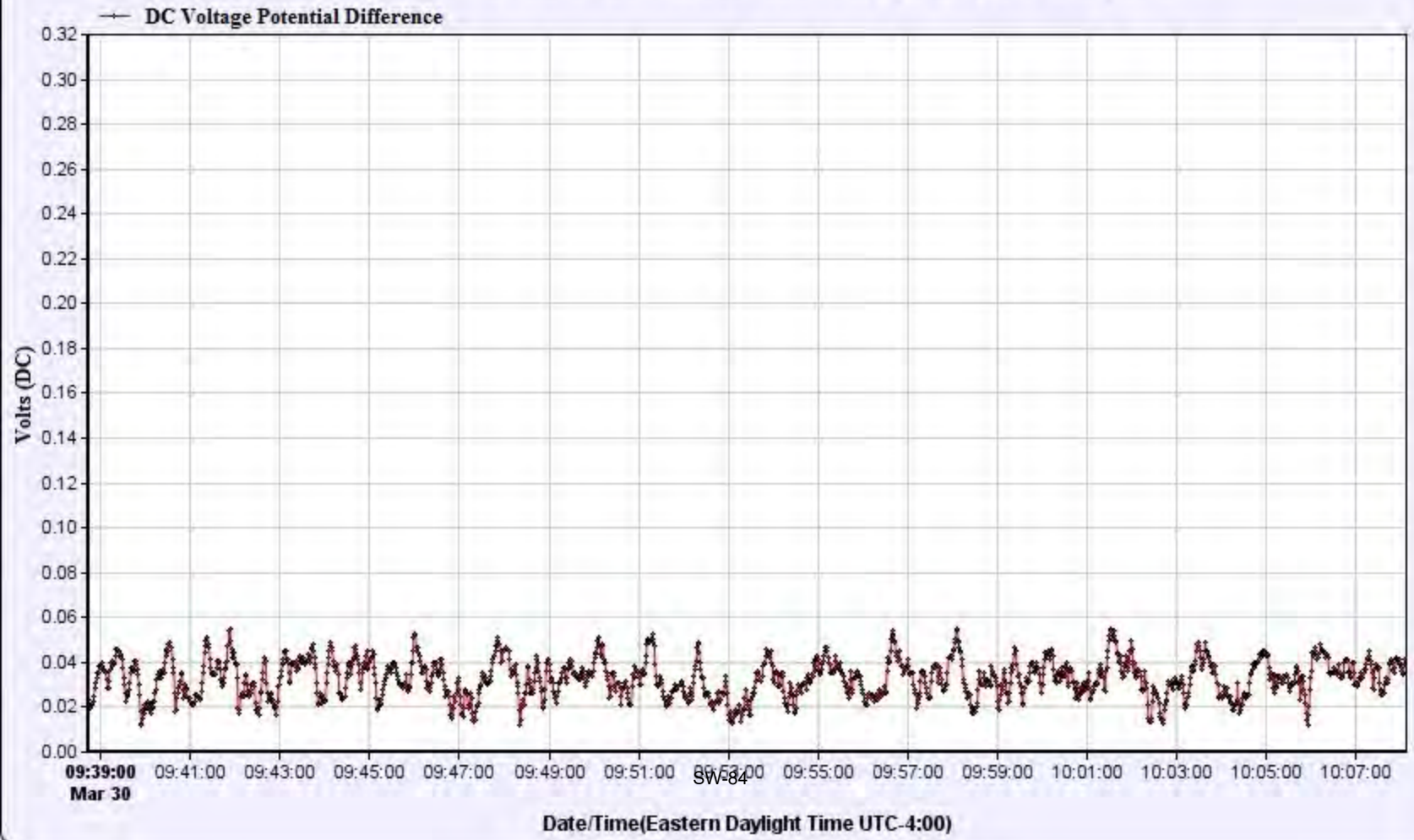
Soil Resistivity

Client: NYC DDC Job Number: 8915

Project: HED 562 - Task Order 002 - Bronx, NY Date: 5/1/2020

Location	Resistivity (ohm-cm)	Description	Soil Type
1	7,000	Bronxwood Ave and 233rd St (NW Corner)	Soil
2	5,000	233rd St btw Bussing Ave & Bronxwood Ave (North Side of St)	Soil
3	30,000	233rd & Gunther Ave (North East Corner)	Grass
4	12,000	233rd & Laconia (South West Corner)	Grass
5	10,000	233rd & Edison Ave (South West Corner)	Grass
6	23,000	In Soil at High Rock Playground (Next to 233rd)	Soil
AVG.	**14,500**	**(ohm-cm)**	

NYC DDC - Task Order 002 - HED 562 - Stray Current Graph 1



NYC DDC - Task Order 002 - HED 562 - Stray Current Graph 2

CorrTech Inc., Groundbed Design Worksheet - NYC DEP Water Trunk Main Cathodic Protection

Client: NYC DDC Project: HED 562

From west most insulated flange to butterfly valve chamber at intersection E 233rd street & Bronxwood

Date: 10/9/19 Rev. 5/6/24

Description: WaterMain Diameter (in) 48 Length (ft) 180

Segment: 1 Drawing: HED562-CP-2

Structure Calculations		ENTER	SURFACE AREA
Length of pipe	ft	180	2,307 ft2
Diameter	ft	4.08	(thickness 0.5")
Length of pipe	ft		0 ft2
Diameter	ft		
			2,307 ft2

Circuit Calculations		
Soil Resistivity (ohm-cm)	15,400	ohm-cm
Coating Quality (% bare)	2.00%	
Pipe Surface requiring protection	46.14	FT2
Pipe electrically isloated (yes/no)	yes	
Coating quality OHM-FT2	25000	OHM-FT2
Pipe to Earth Resistance	10.84	OHM
Theoretical Current Required (ma/ft2)	1	mA/ft2
Theoretical Current Requirements	0.0461	AMPS

Anode Parameters			**Individual anode resistance**
Anode Type	Magnesium anode, prepackaged	20.11	square of S2+L2 factor
Anode Weight (lbs)	17	38.06	resistivity x .0052 factor
Anode Ingot Diameter (feet)	0.292 **see notes below**	1.51	log value
Anode Ingot Length (feet)	2.104 **see notes below**	**91.76**	**Horizontal anode resistance**
2 time anode depth (feet)	20	**116.11**	**Vertical anode resistance**

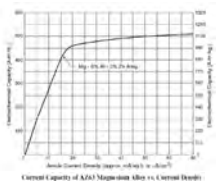
Circuit Resistance Current Requirements						
Anode Resistance to Earth	plug in Resistance value	91.76	OHMS			
Driving Potential (v)		0.9	VOLTS			
Individual anode output		0.010	AMPS	**Check**	**Between-25% and 25%**	
Number of anodes to be installed		8	1.0 gndbeds	12.56%	Yes	
Anode No. per gndbed		8				
Total circuit resistance		22.31	OHMS			
Current output of system		0.0403	AMPS			

Crowding correlation factor included (14 anode cluster):		**see notes below**		
Resistance per groundbed	11.47	OHMS		
Mimum distance between anodes	12.00	FEET		
Groundbed resistance counting crowding effect	14.25	OHMS		
Resistance of all gndbeds	14.25	OHMS		
Total CP circuit resistance	25.08	OHMS	**Check**	**Between -25% and 25%**
Current output of system	0.04	AMPS	22.24%	Yes

Anode current density calcuations		
Anode area	2.06	FT2
Anode current density (mA/Ft2)	2.18	mA/FT2

Life of anode system calcuations			
Consumption Rate (lb/A-yr)	17.00		
Anode life based on anodes to be installed	**111.49**	**YEARS**	considers 50% anode efficiency
Anode life by factoring in anode discharge current density	**89**	**YEARS**	**see notes below**

Design conforms to the following standards:
National Association of Corrosion Engineers (NACE)
Standard Recommended Practice SP 0169 latest revision



IJ/GB	1
IJ	1
BFV	1
CLOSURE	0
CASING	0

NOTES on anode dimensions: **Bare anode dimensions were considered due to the fact that the life of the anode is more dependent on the actual anode size than the packaging backfill.**

The backfill may leech into surrounding earth as time progresses, which will cause depletion not related to the anode performance or cathodic protection mechanisms.

Other than erosion / leeching effects described above, the anode backfill is NOT consumable and will remain stable throughout the operational life of the anode.

Dwight's formula, utilized above, does not consider the inherent resistivity of the backfill.

For this reason, bare anode dimensions, when factored into the calculations, offer more conservative estimates as to the number of anodes required.

Anodes clustered together will have mutual interference to each other, current from each anode will compete for same current path. Emperical Sunde formula was developed to count this "crowding effect" for vertical distributed anode system. However, the total CP system resistance should be lower than the calculated one (sum of resistance of anodes and water main to remote earth) due to factors such as proxmity between anodes and water main.

Magnesium anode consumption rate (17 lb/A-yr) is based on optimal current discharge condition (discharge current density> 20 mA/Ft2). A safety factor (80%) was used to calculate system life due to low anode current density.

CorrTech Inc., Groundbed Design Worksheet - NYC DDC Water Trunk Main Cathodic Protection

Client: NYC DDC Project: HED 562

From shaft chamber wall to butterfly valve chamber at intersection of E233rd st and Bronxwood Ave

Date: 10/9/19 Rev. 5/6/24

Description: WaterMain Diameter (in) 36 Length (ft) 97

Segment: 2 Drawing: HED562-CP-2

Structure Calculations		ENTER		SURFACE AREA
Length of pipe	ft	97	932	ft2
Diameter	ft	3.06		(thickness 0.375")
			932	ft2

Circuit Calculations		
Soil Resistivity (ohm-cm)	15,400	ohm-cm
Coating Quality (% bare)	2.00%	
Pipe Surface requiring protection	18.64	FT2
Pipe electrically isloated (yes/no)	yes	
Coating quality OHM-FT2	25000	OHM-FT2
Pipe to Earth Resistance	26.82	OHM
Theoretical Current Required (ma/ft2)	1	mA/ft2
Theoretical Current Requirements	0.0186	AMPS

Anode Parameters			**Individual anode resistance**
Anode Type	Magnesium anode, prepackaged	20.11	square of S2+L2 factor
Anode Weight (lbs)	17	38.06	resistivity x .0052 factor
Anode Ingot Diameter (feet)	0.292 **see notes below**	1.51	log value
Anode Ingot Length (feet)	2.104 **see notes below**	**91.76**	**Horizontal anode resistance**
2 time anode depth (feet)	20	**116.11**	**Vertical anode resistance**

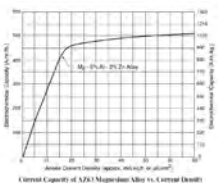
Circuit Resistance Current Requirements						
Anode Resistance to Earth	plug in Resistance value	91.76	OHMS			
Driving Potential (v)		0.9	VOLTS			
Individual anode output		0.010	AMPS		**Check**	**Between-25% and 25%**
Number of anodes to be installed		3	1.0	gndbeds	15.90%	YES
Anode No. per gndbed		4				
Total circuit resistance		57.41	OHMS			
Current output of system		0.0157	AMPS			

Crowding correlation factor included (14 anode cluster):		**see notes below**		
Resistance per groundbed	22.94	OHMS		
Mimum distance between anodes	12.00	FEET		
Groundbed resistance counting crowding effect	26.17	OHMS		
Resistance of all gndbeds	26.17	OHMS		
Total CP circuit resistance	53.00	OHMS	**Check**	**Between -25% and 25%**
Current output of system	0.02	AMPS	8.90%	YES

Anode current density calcuations		
Anode area	2.06	FT2
Anode current density (mA/Ft2)	2.75	mA/FT2

Life of anode system calcuations			
Consumption Rate (lb/A-yr)	17.00		
Anode life based on anodes to be installed	**88.33**	**YEARS**	considers 50% anode efficiency
Anode life by factoring in anode discharge current density	**71**	**YEARS**	**see notes below**

Design conforms to the following standards:
National Association of Corrosion Engineers (NACE)
Standard Recommended Practice SP 0169 latest revision



IJ/GB	0
IJ	1
BFV	1
CLOSURE	0
CASING	0

NOTES on anode dimensions:

Bare anode dimensions were considered due to the fact that the life of the anode is more dependent on the actual anode size than the packaging backfill.

The backfill may leech into surrounding earth as time progresses, which will cause depletion not related to the anode performance or cathodic protection mechanisms.

Other than erosion / leeching effects described above, the anode backfill is NOT consumable and will remain stable throughout the operational life of the anode.

Dwight's formula, utilized above, does not consider the inherent resistivity of the backfill.

For this reason, bare anode dimensions, when factored into the calculations, offer more conservative estimates as to the number of anodes required.

Anodes clustered together will have mutual interference to each other, current from each anode will compete for same current path. Emperical Sunde formula was developed to count this "crowding effect" for vertical distributed anode system. However, the total CP system resistance should be lower than the calculated one (sum of resistance of anodes and water main to remote earth) due to factors such as proxmity between anodes and water main.

Magnesium anode consumption rate (17 lb/A-yr) is based on optimal current discharge condition (discharge current density> 20 mA/Ft2). A safety factor (80%) was used to calculate system life due to low anode current density.

CorrTech Inc., Groundbed Design Worksheet - NYC DDC Water Trunk Main Cathodic Protection

Client: NYC DDC Project: HED 562

From shaft chamber wall to butterfly valve chamber at intersection of E233rd st and Bronxwood Ave

Date: 10/9/19 Rev. 5/6/24

Description: WaterMain Diameter (in) 36 Length (ft) 118

Segment: 3 Drawing: HED562-CP-2

Structure Calculations		ENTER	SURFACE AREA
Length of pipe	ft	118	1,134 ft2
Diameter	ft	3.06	(thickness 0.375")
			1,134 ft2

Circuit Calculations		
Soil Resistivity (ohm-cm)	15,400	ohm-cm
Coating Quality (% bare)	2.00%	
Pipe Surface requiring protection	22.68	FT2
Pipe electrically isloated (yes/no)	yes	
Coating quality OHM-FT2	25000	OHM-FT2
Pipe to Earth Resistance	22.05	OHM
Theoretical Current Required (ma/ft2)	1	mA/ft2
Theoretical Current Requirements	0.0227	AMPS

Anode Parameters			**Individual anode resistance**
Anode Type	Magnesium anode, prepackaged	20.11	square of S2+L2 factor
Anode Weight (lbs)	17	38.06	resistivity x .0052 factor
Anode Ingot Diameter (feet)	0.292 **see notes below**	1.51	log value
Anode Ingot Length (feet)	2.104 **see notes below**	**91.76**	**Horizontal anode resistance**
2 time anode depth (feet)	20	**116.11**	**Vertical anode resistance**

Circuit Resistance Current Requirements

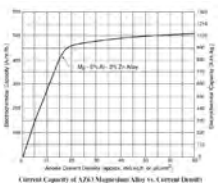
Anode Resistance to Earth	plug in Resistance value	91.76	OHMS			
Driving Potential (v)		0.9	VOLTS			
Individual anode output		0.010	AMPS		**Check**	**Between-25% and 25%**
Number of anodes to be installed		5	1.0	gndbeds	1.76%	YES
Anode No. per gndbed		6				
Total circuit resistance		40.40	OHMS			
Current output of system		0.0223	AMPS			

Crowding correlation factor included (14 anode cluster):	**see notes below**			
Resistance per groundbed	15.29	OHMS		
Mimum distance between anodes	12.00	FEET		
Groundbed resistance counting crowding effect	18.36	OHMS		
Resistance of all gndbeds	18.36	OHMS		
Total CP circuit resistance	40.41	OHMS	**Check**	**Between -25% and 25%**
Current output of system	0.02	AMPS	1.77%	YES

Anode current density calcuations		
Anode area	2.06	FT2
Anode current density (mA/Ft2)	2.16	mA/FT2

Life of anode system calcuations			
Consumption Rate (lb/A-yr)	17.00		
Anode life based on anodes to be installed	**112.24**	**YEARS**	considers 50% anode efficiency
Anode life by factoring in anode discharge current density	**90**	**YEARS**	**see notes below**

Design conforms to the following standards:
National Association of Corrosion Engineers (NACE)
Standard Recommended Practice SP 0169 latest revision



IJ/GB	0
IJ	1
BFV	1
CLOSURE	0
CASING	0

NOTES on anode dimensions:

Bare anode dimensions were considered due to the fact that the life of the anode is more dependent on the actual anode size than the packaging backfill.

The backfill may leech into surrounding earth as time progresses, which will cause depletion not related to the anode performance or cathodic protection mechanisms.

Other than erosion / leeching effects described above, the anode backfill is NOT consumable and will remain stable throughout the operational life of the anode.

Dwight's formula, utilized above, does not consider the inherent resistivity of the backfill.

For this reason, bare anode dimensions, when factored into the calculations, offer more conservative estimates as to the number of anodes required.

Anodes clustered together will have mutual interference to each other, current from each anode will compete for same current path. Emperical Sunde formula was developed to count this "crowding effect" for vertical distributed anode system. However, the total CP system resistance should be lower than the calculated one (sum of resistance of anodes and water main to remote earth) due to factors such as proxmity between anodes and water main.

Magnesium anode consumption rate (17 lb/A-yr) is based on optimal current discharge condition (discharge current density> 20 mA/Ft2). A safety factor (80%) was used to calculate system life due to low anode current density.

CorrTech Inc., Groundbed Design Worksheet - NYC DDC Water Trunk Main Cathodic Protection

Client: NYC DDC Project: HED 562

Date: 10/9/19 Rev. 5/6/24

Description: WaterMain Diameter (in) 48 Length (ft) 2974 From butterfly valve chamber at intersection of E233rd st and Bronxwood Ave to butterfly valve chamber at

Segment: 4 Drawing: HED562-CP-2,3,4,5

Structure Calculations		ENTER	SURFACE AREA
Length of pipe	ft	2974	38,120 ft2
Diameter	ft	4.08	(thickness 0.5")
			38,120 ft2

Circuit Calculations		
Soil Resistivity (ohm-cm)	15,400	ohm-cm
Coating Quality (% bare)	2.00%	
Pipe Surface requiring protection	762.40	FT2
Pipe electrically isloated (yes/no)	yes	
Coating quality OHM-FT2	25000	OHM-FT2
Pipe to Earth Resistance	0.66	OHM
Theoretical Current Required (ma/ft2)	1	mA/ft2
Theoretical Current Requirements	0.7624	AMPS

Anode Parameters			**Individual anode resistance**
Anode Type	Magnesium anode, prepackaged	20.11	square of S2+L2 factor
Anode Weight (lbs)	17	38.06	resistivity x .0052 factor
Anode Ingot Diameter (feet)	0.292 **see notes below**	1.51	log value
Anode Ingot Length (feet)	2.104 **see notes below**	**91.76**	**Horizontal anode resistance**
2 time anode depth (feet)	20	**116.11**	**Vertical anode resistance**

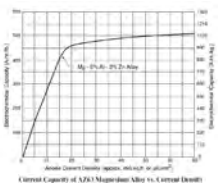
Circuit Resistance Current Requirements						
Anode Resistance to Earth	plug in Resistance value	91.76	OHMS			
Driving Potential (v)		0.9	VOLTS			
Individual anode output		0.010	AMPS		**Check**	**Between-25% and 25%**
Number of anodes to be installed		135	9.0	gndbeds	11.61%	YES
Anode No. per gndbed		15				
Total circuit resistance		1.34	OHMS			
Current output of system		0.6739	AMPS			

Crowding correlation factor included (14 anode cluster):	**see notes below**			
Resistance per groundbed	6.12	OHMS		
Mimum distance between anodes	12.00	FEET		
Groundbed resistance counting crowding effect	8.16	OHMS		
Resistance of all gndbeds	0.91	OHMS		
Total CP circuit resistance	1.56	OHMS	**Check**	**Between -25% and 25%**
Current output of system	0.58	AMPS	24.45%	YES

Anode current density calcuations		
Anode area	2.06	FT2
Anode current density (mA/Ft2)	2.07	mA/FT2

Life of anode system calcuations			
Consumption Rate (lb/A-yr)	17.00		
Anode life based on anodes to be installed	**117.20**	**YEARS**	considers 50% anode efficiency
Anode life by factoring in anode discharge current density	**94**	**YEARS**	**see notes below**

Design conforms to the following standards:
National Association of Corrosion Engineers (NACE)
Standard Recommended Practice SP 0169 latest revision



IJ/GB	0
IJ	3
BFV	1
CLOSURE	0
CASING	0

NOTES on anode dimensions:

Bare anode dimensions were considered due to the fact that the life of the anode is more dependent on the actual anode size than the packaging backfill.

The backfill may leech into surrounding earth as time progresses, which will cause depletion not related to the anode performance or cathodic protection mechanisms.

Other than erosion / leeching effects described above, the anode backfill is NOT consumable and will remain stable throughout the operational life of the anode.

Dwight's formula, utilized above, does not consider the inherent resistivity of the backfill.

For this reason, bare anode dimensions, when factored into the calculations, offer more conservative estimates as to the number of anodes required.

Anodes clustered together will have mutual interference to each other, current from each anode will compete for same current path. Emperical Sunde formula was developed to count this "crowding effect" for vertical distributed anode system. However, the total CP system resistance should be lower than the calculated one (sum of resistance of anodes and water main to remote earth) due to factors such as proxmity between anodes and water main.

Magnesium anode consumption rate (17 lb/A-yr) is based on optimal current discharge condition (discharge current density> 20 mA/Ft2). A safety factor (80%) was used to calculate system life due to low anode current density.

CorrTech Inc., Groundbed Design Worksheet - NYC DDC Water Trunk Main Cathodic Protection

Client: NYC DDC Project: HED 562

From butterfly valve chamber at Baychester Ave to end bulk head

Date: 10/9/19 Rev. 5/6/24

Description: WaterMain Diameter (in) 48 Length (ft) 62

Segment: 5 Drawing: HED562-CP-5

Structure Calculations		ENTER	SURFACE AREA
Length of pipe	ft	62	795 ft2
Diameter	ft	4.08	(thickness 0.5")
			795 ft2

Circuit Calculations		
Soil Resistivity (ohm-cm)	15,400	ohm-cm
Coating Quality (% bare)	2.00%	
Pipe Surface requiring protection	15.89	FT2
Pipe electrically isloated (yes/no)	yes	
Coating quality OHM-FT2	25000	OHM-FT2
Pipe to Earth Resistance	31.46	OHM
Theoretical Current Required (ma/ft2)	1	mA/ft2
Theoretical Current Requirements	0.0159	AMPS

Anode Parameters			**Individual anode resistance**
Anode Type	Magnesium anode, prepackaged	20.11	square of S2+L2 factor
Anode Weight (lbs)	17	38.06	resistivity x .0052 factor
Anode Ingot Diameter (feet)	0.292 **see notes below**	1.51	log value
Anode Ingot Length (feet)	2.104 **see notes below**	**91.76**	**Horizontal anode resistance**
2 time anode depth (feet)	20	**116.11**	**Vertical anode resistance**

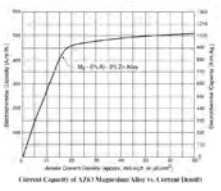
Circuit Resistance Current Requirements						
Anode Resistance to Earth	plug in Resistance value	91.76	OHMS			
Driving Potential (v)		0.9	VOLTS			
Individual anode output		0.010	AMPS		**Check**	**Between-25% and 25%**
Number of anodes to be installed		3	1.0	gndbeds	8.73%	YES
Anode No. per gndbed		3				
Total circuit resistance		62.04	OHMS			
Current output of system		0.0145	AMPS			

Crowding correlation factor included (14 anode cluster):		**see notes below**		
Resistance per groundbed	30.59	OHMS		
Mimum distance between anodes	12.00	FEET		
Groundbed resistance counting crowding effect	33.61	OHMS		
Resistance of all gndbeds	33.61	OHMS		
Total CP circuit resistance	65.07	OHMS	**Check**	**Between -25% and 25%**
Current output of system	0.01	AMPS	12.98%	YES

Anode current density calcuations		
Anode area	2.06	FT2
Anode current density (mA/Ft2)	2.24	mA/FT2

Life of anode system calcuations			
Consumption Rate (lb/A-yr)	17.00		
Anode life based on anodes to be installed	**108.45**	**YEARS**	considers 50% anode efficiency
Anode life by factoring in anode discharge current density	**87**	**YEARS**	**see notes below**

Design conforms to the following standards:
National Association of Corrosion Engineers (NACE)
Standard Recommended Practice SP 0169 latest revision



IJ/GB	0
IJ	1
BFV	0
CLOSURE	0
CASING	0

NOTES on anode dimensions:

Bare anode dimensions were considered due to the fact that the life of the anode is more dependent on the actual anode size than the packaging backfill.

The backfill may leech into surrounding earth as time progresses, which will cause depletion not related to the anode performance or cathodic protection mechanisms.

Other than erosion / leeching effects described above, the anode backfill is NOT consumable and will remain stable throughout the operational life of the anode.

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Magnesium anode consumption rate (17 lb/A-yr) is based on optimal current discharge condition (discharge current density> 20 mA/Ft2). A safety factor (80%) was used to calculate system life due to low anode current density.

C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

Refer to the Specifications for Trunk Main Work, Division 2, Article 69.A.
Replace Article 69.A with the following:
"Cement must meet the requirements of AWWA C205, or as otherwise specified by the Engineer."

END OF SECTION

This Section consists of Ninety-One (91) pages.

ASB - PAGES

SPECIFICATIONS FOR ABATEMENT OF ASBESTOS CONTAINING MATERIALS

NOTICE

THE PAGES CONTAINED IN THIS SECTION ARE ISSUED FOR THE PURPOSE OF SPECIFYING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS.

ABATEMENT OF ASBESTOS-CONTAINING MATERIALS ASSOCIATED WITH

NEW 48" TRUNK WATER MAIN AND APPURTENANCES

IN E.233RD STREET Etc

BOROUGH OF THE BRONX

(NO TEXT ON THIS PAGE)

SECTION 67.11 - INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING STEEL PIPE WATER MAIN TO BE REMOVED

67.11.1 GENERAL

67.11.1.1 DESCRIPTION

(A) The contract documents are as defined in the "Standard Construction Contract". The General Conditions shall apply to all work of this section.

(B) Work specified herein shall be the removal and disposal of water main pipe of the specified diameter covered with Coal Tar Wrap Asbestos-Containing Materials (ACM) and asbestos-contaminated materials from designated areas of the water main replacement on this project.

(C) The phasing and scheduling of work for this project shall be coordinated with and approved by the Engineer. The Engineer will make the final determination on all issues under this contract covered by this specification in coordination with NYC Department of Design and Construction's Bureau of Environmental and Geotechnical Services (BEGS).

67.11.1.2 SCOPE OF WORK

(A) The Contractor is to provide all labor, materials, equipment, services, testing, appurtenances, permits and agreements necessary to perform the work required for the abatement of ACM and removal of pipe covered with asbestos-containing Coal Tar Wrap as required by these contract documents. All work shall be performed in accordance with this specification, EPA regulations, OSHA regulations, New York City Local Law 70, Title 15, Chapter 1 RCNY, New York State Industrial Code 56, NIOSH recommendations, and any other applicable federal, state or local government regulations. Whenever there is a conflict or overlap of the above references the most stringent provisions are applicable.

(B) The intent of this section is to ensure that the Contractor is responsible for the following:

(1) Abatement of all ACM.

(2) Cleaning and decontamination of the entire affected area.

(3) Removal of various sections of pipe in varying lengths, as necessary, that may be required to access ACM in each excavated area. The Contractor shall dispose of all debris associated with such removal activities as ACM waste.

(4) Removal and disposal of all ACM found within these areas such as soil within excavated area, section of pipes, and coal tar wrap, etc.

(5) Provide all scaffolding, platform installation, equipment, tools, transportation and any other equipment required and/or necessary to complete all work described in the contract documents.

(6) The Contractor shall be responsible for and shall include in the Contractor's bid any and all fees or changes imposed by Local, State or Federal Law, Rule or Regulation applicable to the work specified herein, including fees or charges which may be imposed subsequent to the date of the Bid Opening.

(C) The Contractor shall perform the following work as described below and indicated on the drawings. The drawings are only a diagrammatic representation of the work areas and do not constitute the actual quantities of material and or size of the pipe. Contractor is responsible for the confirmation of the actual total quantities of the work to be performed prior to bidding.

WORK AREA EXCAVATION:

Remove and dispose of asbestos-containing coal tar pipe wrap within work area. Asbestos-containing coal tar wrap shall be removed utilizing the approved NYCDEP procedure outlined below. Variance for utilizing this procedure within the work area shall be applied for by the Contractor and approved by the New York City Department of Environmental Protection (NYCDEP) prior to the start of abatement activities. In areas where coal tar wrap and pipe with coating of same are to be removed, the Contractor shall be responsible to remove all coal tar wrap material within the soil below the area where the pipe has to be removed. Repeating this procedure at several locations will not be cause for additional compensation to the Contractor. All piping and associated materials as well as impacted soil shall be disposed of as contaminated waste.

(D) The Contractor's attention is directed to the fact that patents cover certain methods of asbestos abatement indicated in the specifications. To date, patents have been issued with regard to negative pressure enclosures or negative or reduced pressure and glove-bag.

(E) The Contractor shall be solely responsible for and shall hold the City of New York Department of Design and Construction and the City harmless from any and all damages, losses and expenses resulting from any infringement by Contractor of any patent including, but not limited to, the patents described above, used by Contractor during performance of this agreement.

(F) Prior to starting, the Contractor must notify the Commissioner of the City of New York Department of Design and Construction if the Contractor anticipates any difficulty in performing the work as directed and required by these specifications. The Contractor shall be required to attend an on-site job meeting with the Engineer prior to start of work to examine conditions of the site for removal and plan the sequence for removal operations.

(G) The Contractor is responsible for amending the Asbestos Inspection Report (ACP-7) and resubmitting it to the NYCDEP Asbestos Control Program prior to abatement work as per Title 15, Chapter 1 of RCNY for any changes in quantities and/or starting date.

(H) If more than one (1) year has elapsed since the original ACP-7 was submitted to the Department of Environmental Protection, the Contractor is responsible for preparing and submitting a new ACP-7 to the Department of Environmental Protection as well as providing all other notifications to various regulatory agencies as required.

(I) In addition, the Contractor is also responsible for preparing, amending and submitting any Asbestos Variance Applications (ACP-9) that may be required for the completion of the contract or incidental work.

(J) The Contractor is also responsible for preparing and submitting all filings, notifications, etc. required by all City, State and Federal regulatory agencies having jurisdiction.

(K) For coordination with other contractors, see the General Conditions governing all contracts.

(L) Related Asbestos Removal Work Under Other Contracts:

(1) Each contractor shall be responsible for the removal of incidental asbestos not identified in this section and found prior to or during the work.

(2) Incidental asbestos is defined as ACM that is discovered during the course of their work that must
be abated to enable contractors to perform the work of their contract.

(M) Work Hours:

(1) The Contractor shall establish the Contractor's work schedule in a way that avoids interference or conflict with the normal activities of the area. Work in the evenings shall be done at no additional cost to the City.

(2) All work shall be done during regular working hours unless the Contractor requests authorization to work in other than regular working hours and such authorization is granted by the Commissioner. (Regular working hours are those during which any given facility in which work is to be done is customarily open and functioning). If such work schedule is authorized by the Commissioner the work shall be done at no additional cost to the City.

(3) The order of phases and start dates associated with each will be determined by the Engineer.

(4) Waste transfer must be approved by the Engineer.

(N) Stages Of Asbestos Removal Work:

The Abatement Contractor or Subcontractor will be required to perform the work and it is the intent of this specification to remove all asbestos-containing and asbestos contaminated materials from the work area. The Contractor is responsible for verifying all quantities of materials listed here and bid accordingly.

(O) Certain equipment in the work area may need to remain operational during removal. Therefore, the removal of ACM from this equipment shall be performed as the last removal activities within the work area. The Contractor shall coordinate the scheduling for the removal of ACM on functioning equipment with the Engineer.

67.11.1.3 SPECIAL EXPERIENCE REQUIREMENTS FOR ASBESTOS ABATEMENT

(A) General: The special experience requirements set forth in Paragraph (B) below apply to the contractor who will be performing the Asbestos Abatement work under this contract. If the bidder intends to perform such work itself, it must demonstrate compliance with the special experience requirements. If the bidder intends to subcontract this work, the proposed subcontractor must demonstrate compliance with the special experience requirements. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

(1) Evaluation: Compliance with the special experience requirements for Asbestos Abatement must be submitted for evaluation a minimum of thirty (30) days prior to commencement of that phase of work which may require removal coal tar wrap asbestos-containing materials. The Contractor is advised that the Contractor will not be permitted to commence excavation work at the site for that phase of construction which may require possible removal of coal tar wrap asbestos-containing materials, should the Contractor's Asbestos Abatement contractor fail to comply with the special experience requirements. Compliance with the experience requirements set forth herein will be determined solely by the City.

(2) Compliance By The Asbestos Abatement Contractor As An Entity: Compliance with the special experience requirements must be demonstrated by the Asbestos Abatement contractor. The Asbestos Abatement contractor itself must have been in existence as the same entity for the three (3) year period prior to the bid opening. During such period, the bidding entity itself must have achieved compliance with the special experience requirements. The Asbestos Abatement contractor entity may not use or rely on the experience or credentials of any other entity regardless of any relationship such other entity may have to the Asbestos Abatement contractor.

(B) Requirements: The Asbestos Abatement contractor must demonstrate compliance with the special experience requirements set forth in subparagraphs (1) through (5) below. The Asbestos Abatement contractor must submit documentation demonstrating compliance with all listed requirements. Such documentation shall include without limitation, all required licenses, certificates, and documentation.

(1) The Asbestos Abatement contractor must, whether an individual, corporation, partnership, joint venture or other legal entity, demonstrate for the three (3) year period prior to the bid opening, that it has been licensed by the New York State Department of Labor, as an "Asbestos Contractor".

(2) The Asbestos Abatement contractor must, for the three (3) year period prior to the bid opening, have been in the business of providing asbestos abatement services as a routine part of its daily operations.

(3) The Asbestos Abatement contractor proposing to do asbestos abatement work must be thoroughly experienced in such work and must provide evidence of having successfully performed and completed in a timely fashion at least five (5) asbestos abatement projects of similar size and complexity. The aggregate cost of these projects must be at least $1,000,000 in each of the three (3) years.

(4) For each project submitted to meet the experience requirements set forth above, the Asbestos Abatement contractor must submit the following information for the project: name and location of the project; name title and telephone number of the owner or the owner's representative who is familiar with the Asbestos Abatement contractor's work; brief description of the work completed as a prime or sub-contractor; amount of contract or subcontract; and, the date of completion.

(5) The Asbestos Abatement contractor must demonstrate that it has the financial resources, supervisory personnel and equipment necessary to carry out the work and to comply with the required performance schedule, taking into consideration other business commitments. The Asbestos Abatement contractor must submit such documentation as may be required by the Department of Design and Construction to demonstrate that it has the requisite capacity to perform the required services of this contract.

(C) Throughout the specifications, reference is made to codes and standards which establish qualities and types of workmanship and materials, methods for testing and reporting on the pertinent characteristics thereof to provide materials or workmanship that meet or exceed the specifically named codes or standards where required by these specifications.

(D) Site Investigation: The Contractor shall inspect all the specifications and related drawings, and will investigate and confirm the site conditions affecting the work, including, but not limited to:

(1) Physical considerations and conditions of both the material and structure. These considerations include any obstacles or obstructions encountered in accessing or removing the material.

(2) Handling, storage, transportation and disposal of the material.

(3) Availability of qualified and skilled labor.

(4) Availability of utilities.

(5) Exact quantities of all materials to be disturbed and/or removed.

67.11.1.4 WORK BY OTHERS

The City reserves the right during the term of this contract to have work performed on asbestos abatement projects by other contractors as the situation warrants.

67.11.1.5 DEFINITIONS

(A) General Explanation: Certain terms used in this specification are defined below. Definitions and explanations of this specification are not necessarily complete or exclusive, but are general for the work to the extent they are not stated more explicitly in another element of the contract documents.

(B) Definitions In General Use:

(1) Approve: Where used in conjunction with Engineer's response to submittals, requests, applications, inquiries, reports and claims by Contractor, the meaning of term "approved" will be held to limitations of Engineer's responsibilities and duties as specified in contract documents. In no case will "approval" by Engineer be interpreted as a release of Contractor from responsibilities to fulfill requirements of contract documents.

(2) Directed, Requested, Etc.: Where not otherwise explained, terms such as "directed," "requested," "authorized," "selected," "approved," "required," "accepted," and "permitted" mean "directed by Engineer," "requested by Engineer," and similar phrases. However, no such implied meaning will be interpreted to extend Engineer's responsibility into Contractor's responsibility for construction supervision.

(3) Furnish: Except as otherwise defined in greater detail, term "furnish" is used to mean supply and deliver to project site, ready for unloading, unpacking, assembly, installation, etc., as applicable in each instance.

(4) Indicated: The term "indicated" is a cross-reference to graphic representations, notes or schedules on drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in contract documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used in lieu of "indicated," it is for purpose of helping reader locate cross-reference, and no limitation of location is intended except as specifically noted.

(5) Install: Except as otherwise defined in greater detail, term "install" is used to describe operations at project site including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations, as applicable in each instance.

(6) Installer: The term "installer" is defined as the entity (person or firm) engaged by Contractor, or its subcontractor or sub-subcontractor for performance of a particular unit of work at project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (installers) be expert in operations they are engaged to perform.

(7) Provide: Except as otherwise defined in greater detail, term “provide” means furnish and install, complete and ready for intended use, as applicable in each instance.

(8) Testing Laboratory: The term “Testing Laboratory” is defined as an entity engaged by the City to perform specific inspections or tests of the work, either at project site or elsewhere; and to report and (if required) interpret results of those inspections or tests.

(C) Definitions Relative To Asbestos Abatement:

(1) Abatement: Procedures physically taken to control fiber release from ACM. This includes removal, encapsulation, enclosure, and repair.

(2) Aggressive Sampling: Method of sampling in which the individual collecting the air sample creates activity by the use of mechanical equipment during the sampling period to stir up settled dust and simulate activity in that area of the building.

(3) AIHA: American Industrial Hygiene Association.

(4) Airlock: System for permitting entrance and exit while restricting air movement between a contaminated area and an uncontaminated area. It consists of two (2) curtained doorways separated by a distance of at least three (3) feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

(5) Air Sampling: Process of measuring the fiber content of a known volume of air collected during a specific period. The procedure utilized for asbestos follows the NIOSH Standard Analytical Method 7400, or the provisional transmission electron microscopy methods developed by the US EPA which is utilized for lower detection levels and specific fiber identification.

(6) Amended Water: Water to which a surfactant has been added.

(7) ANSI: American National Standards Institute.

(8) Area Air Sampling: Any form of air sampling or monitoring where the sampling device is placed at some stationary location.

(9) Asbestos: Any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cumingtonite-grunerite), crocidolite (riebeckite), tremolite, anthophyllite and actinolite.

(10) Asbestos-Containing Material (ACM): Asbestos or any material containing more than one percent (1%) asbestos.

(11) Asbestos-Containing Waste Material: ACM or asbestos-contaminated objects requiring disposal.

(12) Asbestos Handler: Individual who disturbs, removes, repairs, or encloses friable asbestos material. This individual shall have completed approved training course(s) and be in possession of certification issued by NYCDEP and NYSDOL.

(13) Asbestos Handler Supervisor: Individual who supervises the handlers during an asbestos project and ensures that proper asbestos abatement procedures as well as individual safety procedures are being adhered to. This individual shall have completed approved training course(s) and be in possession of certification issued by NYCDEP and NYSDOL.

(14) Asbestos Handling Certificate: Certificate(s) issued to individuals who have met the criteria established by NYCDEP and/or NYSDOL.

(15) Asbestos Inspection Report: A report on the condition of a building or structure in relation to the presence and condition of asbestos therein.

(16) Asbestos Investigator: An individual certified by NYCDEP as having successfully demonstrated the ability to identify the presence of and evaluate the condition of asbestos in a building or structure.

(17) Asbestos Project: Any form of work performed in connection with the alteration, innovation, modification, or demolition of a building or structure which will disturb (e.g. remove, enclose, encapsulate) more than three (3) linear feet or more than three (3) square feet of friable ACM.

(18) ASTM: The American Society for Testing and Materials International.

(19) Authorized Visitor: Authorized visitor shall mean the Commissioner and the Commissioner's representative, and any representative of a regulatory or other agency having jurisdiction over the project.

(20) Certified Industrial Hygienist (CIH): Individual with a minimum of five (5) years experience as an industrial hygienist and who has successfully completed both levels of the examination administered by the American Board of Industrial Hygiene and who is currently certified by that board.

(21) Certified Safety Professional (CSP): Individual having a bachelor's degree from an accredited college or university and a minimum of four (4) years experience as a safety professional and who has successfully completed both levels of the examination administered by the Board of Certified Safety Professionals and who is currently certified by that board.

(22) City: Shall mean the City of New York.

(23) Clean Room: An uncontaminated area or room that is part of worker decontamination enclosure system with provisions for storage of workers' street clothes and protective equipment.

(24) Clearance Air Monitoring: Employment of aggressive sampling techniques with a volume of air collected to determine the airborne concentration of residual fibers and shall be performed as the final abatement activity.

(25) Commissioner: Shall mean the head of the Agency that has entered into this contract or a duly authorized representative.

(26) Competent Person: Shall mean the designated person as defined in OSHA 29CFR 1926.1101.

(27) Curtained Doorway: Device that consists of at least three (3) overlapping sheets of polyethylene over an existing or temporarily framed doorway. One sheet shall be secured at the top and left side, the second sheet at the top and right side, and the third sheet at the top and left side. All sheets shall have weights attached to the bottom to ensure that the sheets hang straight and maintain a seal over the doorway when not in use.

(28) Decontamination Enclosure System: Series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers, materials, waste containers, and equipment.

(29) Encapsulant (Sealant) or Encapsulating Agent: Liquid material which can be applied to ACM and which temporarily controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant). This may also be used to seal surfaces from which ACM has been removed.

(30) Encapsulation: Coating or spraying of ACM with a sealant.

(31) Enclosure: Construction of airtight walls and/or ceilings between ACM and the facility environment, or around surfaces coated with ACM, or any other appropriate procedure as determined by the NYCDEP which prevents the release of asbestos fibers.

(32) ELAP: Environmental Laboratory Approval Program administered by the New York State Department of Health.

(33) EPA or USEPA: United States Environmental Protection Agency.

(34) Equipment Room: Contaminated area or room that is part of the worker decontamination enclosure system with provisions for the storage of contaminated clothing and equipment.

(35) Fixed Object: Utility or associated piping within the work area that cannot be removed from the work area.(36)Friable Asbestos Material: Asbestos or any ACM that can be crumbled, pulverized, or reduced to powder when dry, by hand or other mechanical pressure.

(37) Glove-Bag Technique: Method for removing friable ACM from heating, ventilation, and air conditioning (HVAC) ducts, short piping runs, valves, joints, elbows, and other nonplanar surfaces in a noncontained work area. The glove-bag assembly is a manufactured device consisting of a glove-bag (constructed of at least 6-mil transparent polyethylene), two inward-projecting long sleeve gloves, one inward-projecting water wand sleeve, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The glove-bag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and contains all asbestos fibers released during the removal process.

(38) HEPA-Filter: High efficiency particulate air filter capable of trapping and retaining 99.97-percent of particles (asbestos fibers) greater than 0.3-micrometers mass median aerodynamic equivalent diameter.

(39) Holding Area: Chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area.

(40) Homogeneous Work Area: Portion of the work area that contains one type of ACM and/or where one type of abatement is used.

(41) Industrial Hygiene: Science and art devoted to the recognition, evaluation, and control of those environmental factors or stresses, arising in or from the workplace, which may cause sickness, impaired health and well being, or significant discomfort and inefficiency among worker or among the citizens of the community.

(42) Industrial Hygienist: Individual having a college or university degree or degrees in Engineering, Chemistry, Physics or Medicine, or related Biological Sciences who, by virtue of special studies and training, has acquired competence in industrial hygiene. Such special studies and training must have been sufficient in all of the above cognate sciences to provide the abilities:

(a) To recognize the environmental factors and to understand their effect on people and their well-being; and,

(b) To evaluate, on the basis of experience and with the aid of quantitative measurement techniques, the magnitude of these stresses in terms of ability to impair people's health and well-being; and,

(c) To prescribe methods to eliminate, control, or reduce such stresses when necessary to alleviate their efforts.

(43) Large Asbestos Project: Asbestos project involving the disturbances (e.g. removal, enclosure, encapsulation) of 260-linear feet or more of friable ACM or 160-square feet or more of friable ACM.

(44) Major Violation: Any action, on the job performance or lack of performance that may place any individual at risk other than the worker who commits the violation. A major violation is equivalent to two (2) violation points.

(45) Minor Asbestos Project: Project involving the disturbance (e.g. removal, enclosure, encapsulation, repair) of more than three (3) linear feet, but not more than twenty-five (25) linear feet of friable ACM or more than three (3) square feet, but not more than ten (10) square feet of friable ACM.

(46) Minor Violation: Any action, on the job performance or lack of performance that may place the worker at risk. A minor violation is equivalent to one (1) violation point.

(47) Movable Object: Any equipment or utility in the work area that can be removed from the work area.

(48) Negative Air Pressure Equipment: Portable local exhaust system equipped with HEPA filtration. The system shall be capable of creating a negative pressure differential between the outside and inside of the work area.

(49) NESHAPS: National Emission Standards for Hazardous Air Pollutants.

(50)NIOSH: National Institute for Occupational Safety and Health.

(51)NYCDEP: New York City Department of Environmental Protection.

(52)NYSDOL: New York State Department of Labor.

(53) Occupied Area: Area of the work site where abatement is not taking place and where personnel or occupants normally function or where workers are not required to use personal protective equipment.

(54) OSHA: Occupational Safety and Health Administration.

(55) Person: Individual, partnership, company, corporation, association, firm, organization, governmental agency, administration, or the NYCDEP, or any other group of individuals, or any officer or employee thereof.

(56) Personal Air Monitoring: Method used to determine employees' exposure to airborne fibers. The sample is collected outside the respirator in the worker's breathing zone.

(57) Personal Protective Equipment (PPE): Appropriate protective clothing, gloves, eye protection, footwear, and head gear.

(58) Physician: Person licensed or otherwise authorized under Article 131 Section 65.22 of the New York State Education Law.

(59) Plasticize: Cover floors and walls with polyethylene sheeting as herein specified or by using spray plastics as acceptable to the NYCDEP.

(60) Professional Engineer (PE): Individual Who has a Professional Engineer License in the State of New York.

(61) Qualitative Fit Test: Individual test subject's responding (either voluntarily or involuntarily) to a chemical challenge outside the respirator face-piece. Three of the most popular methods include: (1) irritant smoke test; (2) odorous vapor test; and (3) taste test.

(62) Quantitative Fit Test: Exposing the respiratory wearer to a test atmosphere containing an easily detectable, nontoxic aerosol, vapor or gas as the test agent. Instrumentation, which samples the test atmosphere and the air inside the face-piece of the respirator, is used to measure quantitatively the leakage into the respirator. There are a number of test atmospheres, test agents, and exercises to perform during the test.

(63) Registered Architect (RA): Individual who has a Registered Architect Licensed in the State of New York Examination administered by the State of New York Department of Education, Division of Professional Licensing.

(64) Removal: Stripping of any asbestos-containing materials from surfaces or components of a structure or taking out structural components in accordance with 40 CFR 61 Subparts A and M.

(65) Shower Room: Room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold running water controllable at the tap and arranged for complete showering during decontamination.

(66) Small Asbestos Project: Asbestos project involving the disturbance (e.g. removal, enclosure, encapsulation) of more than 25-linear feet and less than 260-linear feet of friable ACM or more than 10-square feet and less than 160-square feet of friable ACM.

(67) Staging Area: Work area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.

(68) Structural Member: Load-supporting member of a facility, such as beams and load-supporting walls, or any nonload-supporting member, such as ceiling and nonload-supporting walls.

(69) Surfactant: Chemical wetting agent added to water to improve penetration.

(70) Visible Emissions: Emissions containing particulate material that are visually detectable without the aid of instruments.

(71) Washroom: Room between the work area and the holding area in the equipment decontamination enclosure system where equipment and waste containers are wet cleaned and/or HEPA-vacuumed prior to disposal.

(72) Wet Cleaning: Removal of asbestos fibers from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with amended water.

(73) Work Area: Designated excavation, spaces, or areas within a trench or structure where asbestos abatement activities take(s) place.

(74) Worker Decontamination Enclosure System: Portion of a decontamination enclosure system designed for controlled passage of workers and authorized visitors, consisting of a clean room, a shower room, and an equipment room separated from each other and from the work area by airlocks and curtained doorways.

(75) Work Site: Area where abatement activity is being performed. May be composed of one or more work areas.

67.11.1.6 STANDARD OPERATING PROCEDURES

(A) Develop and implement a written standard procedure for abatement work to ensure maximum protection and safeguard from asbestos exposure of the workers, visitors, employees, public, and environment.

(B) TELEPHONE PAGING DEVICE:

The Contractor or the Contractor's authorized representative shall, at all times during the normal workday or during periods of overtime work under this contract, carry a digital telephone paging device ("Beeper") and/or cellular telephones which can be activated by a telephone number in the 212 or 646 or 718 or 917 area code. The Contractor shall supply the Department of Design and Construction with the activation number for the device and the Contractor is liable to respond back to the calls from DDC within the next one (1) hour period after the Contractor receives calls from DDC.

The cost to the Contractor for this device and all charges accruing thereto is deemed included in the price(s) bid for item(s) labeled, "INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE".

(C) The standard operating procedure shall ensure:

(1) Tight security from unauthorized entry into the workspace.

(2) Restriction of Contractor's personnel to the immediate work area and access/egress routes.

(3) Donning of proper protective clothing and respiratory protection prior to entering the work area.

(4) Safe work practices in the workplace, including provisions for inter-room communications, exclusion of eating, drinking, smoking, or in any way breaking the respiratory protection.

(5) Proper exit practices from the workspace to the outside through the showering and decontamination facilities.

(6) Removing asbestos in ways that minimize release of fibers.

(7) Packing, labeling, loading, transporting, and disposing of contaminated material in a way that minimize exposure and contamination.

(8) Emergency evacuation procedures, for medical or safety situations, to minimize the potential exposure to airborne asbestos fibers for emergency personnel, and building environment.

(9) Safety from accidents in the workspace, especially from electrical shocks, fall hazards associated with scaffolding, slippery surfaces, and entanglements in loose hoses and equipment.

(10) Provisions for effective supervision, air monitoring and personnel monitoring for exposure during the work.

(11) Engineering systems that minimize exposure to fibers within the workspace.

(D) Provide an Asbestos Handler Supervisor to provide continuous supervision of all work, and to be responsible for the following:

(1) Ensure that individuals are using proper personal protective equipment and are trained in its use.

(2) Maintain entry log records and ensure that they are recorded in accordance with the provisions of Title 15, Chapter 1 of RCNY.

(3) Surveillance of the work areas at a minimum of once per work shift or as required by Title 15, Chapter 1 of RCNY, to ensure that the workers personal protective equipment is not torn or ripped and that respiratory protection is worn at all times.

(4) Ensure that sufficient personal protective equipment is stored in the clean room.

(5) Take precautions to prevent heat stress. Precautions include, but are not limited to, selecting lightweight protective clothing, reducing the work rate, and providing adequate fluid breaks.

(E) ENGINEERING CONTROLS:

(1) The 8-hour time weighted average airborne concentration of fibers to which any passerby may be exposed shall not exceed 0.01-fibers per cubic centimeter of air when fibers have a physical dimension longer than 5-micrometers as determined by the method prescribed in these specifications.

(2) All large asbestos projects shall utilize negative pressure ventilation equipment.

(3) The negative pressure ventilation equipment shall operate continuously, 24-hours a day, from the establishment of isolation barriers through successful clearance air monitoring. If such equipment shuts off, adjacent areas shall be monitored for asbestos fibers.

(4) On loss of negative pressure or electric power to the negative pressure ventilating units, abatement shall stop immediately and shall not resume until power is restored and negative pressure ventilation equipment is operating again.

(5) Negative pressure ventilation equipment shall be exhausted to the outside of the tent enclosure away from passer-by and/or sidewalks.

(a) At no time shall the negative pressure ventilation unit exhaust with 40-feet of a receptor or adversely affect the intake ports, louvers, or entrances for the adjacent buildings.

(b) Heavy duty ducting of equivalent, or larger, shape and dimension as that of the negative pressure ventilation exhaust port shall be used to exhaust to the structure.

(c) All ducting shall be sealed and braced or supported to maintain airtight joints.

(6) Where ducting to the outside is not possible, a second negative pressure ventilation unit compatible with the primary unit's capacity shall be connected in series. The area receiving the exhaust shall have sufficient, nonrecycling exhaust capacity to the outside of the structure.

(7) In the event that there is a failure of the containment system or a breach in the Isolation Barriers, all abatement work will cease and the Contractor will immediately correct the condition. Abatement work will not resume until the work area has been smoke tested by the third-party laboratory and approved by the Project Monitor.

(F) LOCKDOWN ENCAPSULATION PROCEDURES:

The following procedures shall be followed to seal in nonvisible residue while conducting lockdown encapsulation on all surfaces from which ACM is removed:

(a) Only encapsulants rated as acceptable or marginally acceptable on the basis of Battelle Columbus Laboratory test procedures and rating requirements developed under the 1978 USEPA Contract shall be used for lockdown encapsulation.

(b) The encapsulant solvent or vehicle shall not contain a volatile hydrocarbon unless reviewed and approved by DEP.

(c) Latex paint with solids content greater than 15-percent shall be considered a lockdown sealant for coating all nonmetallic surfaces.

(d) Encapsulants shall be applied using airless spray equipment. Spraying is to occur at the lowest pressure range possible to minimize fiber release from encapsulant impact at the surface. It shall be applied with a consistent horizontal or vertical motion.

67.11.1.7 NOTIFICATIONS, PERMITS, WARNING SIGNS, LABELS, AND POSTERS

(A) Erect bilingual (English-Spanish) warning signs around the excavation and at every point of potential entry from the street level which can be viewed by the public without obstruction, in accordance with OSHA 29 CFR 1926.1101 (K) (Sign Specifications) and Title 15, Chapter 1 of RCNY. The warning signs shall be a bright color so that they will be easily noticeable. The size of the sign and the size of the lettering shall be no less than OSHA requirements.

(B) Provide the required labels for all polyethylene bags and all drums utilized to transport contaminated material to the landfill in accordance with OSHA 29 CFR 1926.1101 (K)(2) and by 49 CFR Parts 171 and 172 of the Department of Transportation regulations.

(C) Provide any other signs, labels, warnings, and posted instructions that are necessary to protect, inform and warn people of the hazard from asbestos exposure. Post in a prominent and convenient place for the workers a copy of the latest applicable regulations from OSHA, EPA, NIOSH, State of New York and New York City and any additional items mandated for posting by the aforementioned regulations.

(D) Furnish all permits, variances and notices required to perform the work.

67.11.1.8 EMERGENCY PRECAUTIONS

(A) Establish emergency exit(s) from the work area. The clean side of all emergency exits shall be equipped with two full sets of protective clothing and respirators at all times.

(B) Notify local medical emergency personnel, both ambulance crews and hospital emergency room staff prior to commencement of abatement operations as to the possibility of having to handle contaminated or injured workmen, and shall be advised on safe decontamination.

(C) Prepare to administer first aid to injured personnel after decontamination. Seriously injured personnel shall be treated immediately or evacuated immediately for decontamination. When an injury occurs, precautions shall be taken to reduce airborne fiber concentrations (i.e. misting of the air with water) until the injured person has been removed from the work area.

(D) Notify, before actual removal of the asbestos material, the local police and fire departments to the danger of entering the excavated area where removal is taking place. Contractor shall make every effort to help these agencies form plans of action should their personnel need to enter the contaminated area.

67.11.1.9 SUBMITTALS

(A) Pre-Construction Submittals:

Attend a pre-construction meeting scheduled by the City of New York Department of Design and Construction. This meeting shall also be attended by a designated representative of the City of New York third party air monitoring firm and the Engineer. At this meeting, the Contractor shall present three (3) copies of the following items, bound and indexed. The detailed plan of action must be submitted at least five (5) days prior to the pre-construction meeting.

(a) Contractor's scope of work, work plan and schedule.

(b) Notifications to Government Agencies.

(c) Copies of permits, clearance and licenses if required.

(d) Schedules: The Contractor shall provide to the Engineer a copy of the following schedules for approval. Once approved, schedules shall be maintained and updated as received. The Contractor shall post a copy of all schedules at the site:

(1) A construction schedule stating critical dates of the project including, but not limited to, mobilization, work area preparation, demolition, gross removal, fine cleaning, ecapsulation, inspections, clearance monitoring, and phase of refinishing and final inspections. The schedule shall be updated biweekly, at a minimum.

(2) A schedule of staffing stating number of workers per shift per activity, name and number of supervisor(s) per shift, shifts per day, and total days to be worked.

(3) Submit all changes in schedule or staffing to the Engineer prior to implementation.

(4) A schedule of equipment to be used including numbers and types of all major equipment such as HEPA Air Filtration Units, HEPA-vacuums, airless sprayers, Water Atomizing Devices and Type "C" compressors.

(e) A written plan and shop drawings for preparation of work site and decontamination chamber.

(f) Description of protective clothing and approved respirator to be used, make, model, NIOSH approval numbers.

(g) Delineation of responsibility of work site supervision, including competent person, with names, resumes, and home telephone numbers.

(h) Explanation of decontamination sequence and isolation techniques.

(i) Description of specific equipment to be utilized, including make and model number of air filtration devices, vacuums, sprayers, etc.

(j) Description of any prepared methods, procedures, techniques, or equipment other than those specified in the contract documents.

(k) Explanation of the handling of contaminated wastes including EPA and NYCDEP identification numbers of Waste Hauler.

(l) Description of the final clean-up procedures to be used.

(m) Name and qualifications of Contractor's testing laboratory including AIHA accreditation, and proof of NIOSH PAT and NIST/NVLAP Bulk Quality Assurance Proficiency of OSHA samples for approval by the City of New York Department of Design and Construction.

(n) Written description of emergency procedures to be followed in case of injury or fire. This section must include evacuation procedures, source of medical assistance (name and telephone number) and procedures to be used for access by medical personnel (examples: first aid squad and physician). NOTE: Necessary Emergency Procedures Shall Take Priority Over All Other Requirements Of These Specifications.

(o) Material Safety Data Sheets (MSDS) for encapsulants, sealants, firestopping foam, cleaners/disinfectants, spray adhesive and any and all potentially hazardous materials that may be employed on the project. No work involving the aforementioned will be allowed to proceed until MSDS are reviewed.

(p) Worker Training And Medical Surveillance: Contractor shall submit a list of the persons who will be employed by The Contractor and the Contractor’s Subcontractors in the removal work. Present evidence that workers have received proper training required by the regulations and the medical examinations required by OSHA 29 CFR 1926.1101.

(q) Logs: Specimen copies of daily progress log, visitor's log, and disposal log.

(1) The Contractor shall provide a permanently bound log book of minimum 8-1/2” x 11” size at the entrance to the Worker and Waste Decontamination enclosure system as hereinafter specified. Log book shall contain on title page the project name, name, address and phone number of Environmental Control Representative; name, address and phone number of Abatement Contractor; name, address and phone number of Contractor and City’s air testing entity; and, emergency numbers including, but not limited to local Fire/Rescue Department. Log book shall contain a list of personnel approved by the laboratory for entry into the work area.

(2) All entries into the log shall be made in nonwashable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted. Any significant events occurring during the abatement project shall be entered into the log. Upon completion of the job, the Contractor shall submit the logbook containing a day-to-day record of personnel log entries countersigned by the Project Monitor everyday.

(r) Worker's Acknowledgments: Submit statements signed by each employee that the employee has received training in the proper handling of ACM understands the health implications and risks involved; and understands the use and limitations of the respiratory equipment to be used.

(B) Submit copies of the following items to the Project Monitor during the work:

(1) Security and safety logs showing names of person entering workspace, date and time of entry and exit, record of any accident, emergency evacuation, and any other safety and/or health incident.

(2) Progress logs showing the number of workers, supervisors, hours of work and tasks completed shall be submitted daily to the Engineer.

(3) Contractor's current work progress shall be submitted for review by the Engineer at weekly progress meetings.

(4) All Contractors' air monitoring and inspection results.

(C) Project Closeout Submittals:

Upon completion of the project and as a condition of acceptance, the Contractor shall present two (2) copies of the following items, bound and indexed:

(1) Lien Waivers from Contractor, Subcontractors and Suppliers,

(2) Daily OSHA air monitoring results,

(3) All Waste Manifests (Asbestos and Construction Debris), seals and disposal logs,

(4) Field Sign-In/Sign-Out Logs for every shift,

(5) A Letter of Compliance stating that all the work on this project was performed in accordance with the specifications and all applicable Federal, State and Local regulations,

(6) All Warranties as stated in the specifications,

(7) Fully executed disposal certificates and transportation manifest.

67.11.1.10 QUALITY ASSURANCE

(A) All work required for the completion of this project or called for in this specification must be executed in a workmanlike manner by using the appropriate methods established by regulatory requirements and/or industrial standards. All workmanship or work methods are subject to review and acceptance by the Engineer. Throughout the specification, reference is made to codes and standards which establish qualities, levels or types of workmanship which will be considered acceptable. It is the Abatement Contractor's responsibility to comply with these codes and standards during the execution of this work.

(B) All materials and equipment required or consumed during the work of this contract must meet the minimum acceptable criteria established by codes and standards referenced elsewhere in this specification. Materials and equipment must be submitted for prior approval as part of the Contractor's "Shop Drawings".

(C) It is the Abatement Contractor's responsibility, when so required by the specification or upon written request from the Commissioner or the Commissioner's representative to furnish all required proof that workmanship, materials and/or equipment meet or exceed the codes and standards referenced. Such proof shall be in the form requested, typically a certified report or test conducted by a testing entity approved for that purpose by DDC.

(D) The Contractor shall furnish proof that employees working under the Contractor's supervision have had instruction on the dangers of asbestos exposure, on respirator use, decontamination, and OSHA regulations. This proof shall be in the form of a notarized affidavit to the effect that the above requirements have been satisfied.

(E) The Contractor will have at all times in the Contractor's possession and in view at the job site the OSHA regulations 29 CFR 1910.1001, and 1926.1101 Asbestos, and Environmental Protection Agency 40 CFR, Part 61, subpart B: National Emission Standard for asbestos, asbestos stripping, work practices and disposal of asbestos waste. The Contractor shall also have one copy of NYC Title 15, Chapter 1 of RCNY and NYS DOL ICR 56 at the job site at all times.

(F) Familiarity With Pertinent Codes And Standards: In procuring all items used in this work, it is the Contractor's responsibility to verify the detailed requirements of the specifically named codes and standards and to verify that the items procured for use in this work meet or exceed the specified requirements, and are suitable for their intended use.

(G) Rejection Of Noncomplying Items: The Commissioner reserves the right to reject items incorporated into the work that fail to meet the specified minimum requirements. The Commissioner further reserves the right, and without prejudice to other recourse that maybe taken, to accept noncomplying items subject to an adjustment in the contract amount as approved by the City.

(H) Applicable Regulations, Codes And Standards: Applicable standards listed in these specifications include, but are not necessarily limited to, standards promulgated by the following agencies and organizations:

(1) United States Environmental Protection Agency (EPA or USEPA)
Region II
Asbestos NESHAPS Contact
Air And Waste Management Division
(Air Compliance Branch) - USEPA
290 Broadway, 21st Floor
New York, New York 10007-1866
212-637-3660

(2) Occupational Safety and Health Administration (OSHA)
Region II - Regional Office
201 Varick Street, Room 908
New York, New York 10014
212-337-2378

(3) National Electrical Code (NEC)
See NFPA

(4) National Fire Protection Association (NFPA)
1 Batterymarch Park
Quincy, Massachusetts 02169-7471
617-770-3000

(5) National Institute for Occupational Safety and Health (NIOSH)
Robert A. Taft Laboratory
4676 Columbia Parkway
Mailstop R12 Cincinnati, Ohio 45226
513-841-4428

(6) Department of Health and Mental Hygiene (DOHMH)
Environmental Investigation
125 Worth Street
New York, New York 10013
212-442-3372

(7) American National Standards Institute (ANSI)
(Successor to USASI and ASA)
25 West 43rd Street (between 5th and 6th Avenue), 4th Floor
New York, New York 10036
212-642-4900

(8) American Society for Testing and Materials (ASTM)
100 Bar Harbor Drive
West Conshohocken, Pennsylvania 19428-2959
610-832-9500

(9) New York City Department of Environmental Protection (NYCDEP)
Bureau of Environmental Compliance
Asbestos Control Program
59-17 Junction Boulevard, 8th Floor
Corona, New York 11368
718-595-3682

(10) New York City Department of Sanitation
125 Worth Street, Room 714
New York, New York 10013
212-566-1066

(11) New York State Department of Labor (NYSDOL)
Division Of Safety And Health
Engineering Services Unit
State Office Building Campus
Albany, New York 12240-0010

(I) Post all applicable regulations in a conspicuous place at the job site. Assure that the regulations are not altered, defaced or covered by other materials. One copy of each regulation must also be kept at the Contractor's office.

67.11.1.11 CITY/CONTRACTOR RESPONSIBILITIES

(A) The City will not enter the portions of the excavation, in which work is being performed during the entire asbestos removal operation, including completion of clean up.

(B) The Contractor shall provide a plan for 24-hours job security both for prevention of theft and for barring entry of curious but unprotected personnel into work areas.

(C) The Contractor shall provide own means of power if needed and the City will not be held responsible for the downtime due to faulty Contractor’s equipment.

(D) The Contractor shall provide, at Contractor's own expense, all electrical, water, and waste connections, tie-ins, extensions, and construction materials, supplies, etc. At the end of each shift, the Contractor shall disconnect all hoses within the work zone and place in equipment room of the worker decontamination unit. The Contractor shall ensure positive shutoff of all water to work area during nonworking hours.

(E) All temporary facilities required to be installed, shall be subject to the approval of the Commissioner. Prior to starting the work at any site; specify clearly the temporary locations of facilities preferably with sketches and submit the same to the Engineer for approval.

(F) The Contractor shall provide water needed to conduct the required asbestos abatement. All temporary plumbing or adaptations to supply the needs of the work area shall be installed and removed by the Contractor and the cost thereof included in the unit price bid for abatement work. Shower water for the decontamination unit shall be provided hot. Heating of water, if necessary, shall be provided by the Contractor.

(G) Any additional electrical equipment (i.e. transformers, etc.), which is necessary shall be at the Contractor's expense.

(H) The Contractor shall provide fire protection in accordance with all State and Local fire codes.

(I) Any parts of the service lines, within the excavated work area, disturbed or damaged by the installation and/or removal of the temporary service lines, shall be restored to their original condition by the Contractor to the satisfaction of the respective utility company.

(J) Contractor shall supply hot shower water necessary for use in the decontamination unit.

67.11.1.12 USE OF THE AREA

(A) The Contractor shall confine Contractor's apparatus, the storage of materials, and supplies, and the operation of the Contractor's workmen to limits established by law, ordinances, and the directions of the Engineer. All flammable or combustible materials shall be properly stored to obviate fire and in areas approved by the Engineer.

(B) The Contractor shall assure of a clear path out of the excavated area, that appropriate safety barriers are established to prevent access, and that work areas are kept neat, clean, and safe.

(C) All surrounding work, fixtures, soil lines, drains, water lines, gas pipes, electrical conduit, wires, utilities, etc. which are to remain in place shall be carefully protected and, if disturbed or damaged, shall be repaired or replaced as directed by the City in accordance with the terms of this contract.

(D) Attention is specifically drawn to the fact that other contractors, performing the work of other contracts, may be (or are) brought upon any of the work sites of this contract. Therefore, the Contractor shall not have exclusive rights to any site of work and shall fully cooperate and coordinate Contractor's work with the work of other contractors who may be on (or are on) any site of the work of this contract. Regulated area exempted.

(E) Temporary toilet facilities must be provided by the Contractor on the site. Coordinate location of such facilities with the Engineer.

67.11.1.13 PROTECTION AND DAMAGE

(A) The Contractor is responsible to cover and protect all equipment that cannot be removed from work areas.

(B) No materials or debris shall be thrown within the excavated area.

(C) Debris shall be removed from the work site daily. Work area shall be left neat and clean after each work shift, so that work may proceed the next regular workday without interruption. Limited bag storage may take place within the work area when approved by the Engineer.

67.11.1.14 RESPIRATORY PROTECTION REQUIREMENTS

(A) Respiratory protection shall be worn by all individuals who may be exposed to asbestos fibers from the initiation of the asbestos project until all areas have successfully passed clearance air monitoring in accordance with regulations and these specifications.

(B) The Contractor shall develop and implement a written respiratory protection program with required site-specific procedures and elements. The program shall be administered by a properly trained individual. The written respiratory protection program shall include the requirements set forth in OSHA Standard 29 CFR 1910.134, at a minimum.

(C) The Contractor shall provide workers with individually issued and marked respiratory equipment. Respiratory equipment shall be suitable for the asbestos exposure level(s) in the work area(s), as specified in OSHA Standards 26 CFR 1910.134 and 29 CFR 1926.1101, NIOSH Standard 42 CFR 84, or as more stringently specified otherwise, herein.

(D) Where respirators with disposable filter parts are employed, the Contractor will provide sufficient filter parts for replacement as necessary or as required by the applicable regulation.

(E) All respiratory protection shall be NIOSH approved. All respiratory protection shall be provided by the Contractor, and used by workers in conjunction with the written respiratory protection program.

(F) Contractor shall provide respirators selected by an Industrial Hygienist that meet the following requirements:

AIRBORNE CONCENTRATION OF ASBESTOS OR CONDITIONS OF USE	REQUIRED RESPIRATOR
Not in excess of 1-fibers per cubic centimeter (f/cc), ten (10) times Permissible Exposure Level (PEL)	Half-mask air purifying respirator, other than a disposable respirator, equipped with high efficiency filters.
Not in excess of 5-f/cc, 50 times PEL	Full face-piece air-purifying respirator equipped with high efficiency filters.
Not in excess of 100-f/cc, 1,000 times PEL	Powered air purifying respirator equipped with high efficiency filters or any supplied air respirator operated in continuous flow mode.
Not in excess of 100-f/cc, 1,000 times PEL	Full face-piece supplied air respirator operate in pressure demand mode.
Greater than 1,000-f/cc, 10,000 times PEL, or unknown concentration	Full face-piece supplied air respirator operate in pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus.

(G) Selection of high efficiency filters:

(1) All high efficiency filters shall have a nominal efficiency rating of 100 (99.97-percent effective) when tested against 0.3-micrometer monodisperse diethyl-hexyl phthalate (DOP) particles.

(2) Choose N-, R-, or P- series filters based upon the presence or absence of oil particles.

(a) N- series filters shall only be used for non-oil solid and water based aerosols or fumes.

(b) R- and P -series filters shall be used when oil aerosols or fumes (i.e., lubricants, cutting fluids, glycerin, etc.) are present. The R- series filters are oil resistant and the P- series filters are oil proof.

(c) Follow filter manufacture recommendations.

(3) If a vapor hazard exists, use an organic vapor cartridge in combination with the high efficiency filter.

(H) Historical airborne fiber level data may serve as the basis for selection of the level of respiratory protection to be used for an abatement task. Historical data provided by the Contractor shall be based on personal air monitoring performed during work operations closely resembling the processes, type of material, control methods, work practices, and environmental conditions present at the site. Documentation of aforementioned results may be requested by the City and/or Testing Laboratory for review. This will not relieve the Contractor from providing personal air monitoring to determine the time-weighted average (TWA) for the work under contract. The TWA shall be determined in accordance with 29 CFR 1926.1101.

(I) At no time during actual removal operations shall half-mask air purifying respirators be allowed unless a full 8-hour TWA and excursion limit have been conducted, and reviewed by the Project Monitor. Use of single use dust respirators is prohibited for the above respiratory protection.

(J) Workers shall be provided with personally issued and individually marked respirators. Respirators shall not be marked with any equipment that will alter the fit of the respirator in any way. Only waterproof identification markers shall be used.

(K) The Contractor shall ensure that the workers are qualitatively or quantitatively fit tested by an Industrial Hygienist initially and every 12-months thereafter with the type of respirator the Contractor will be using.

(L) Whenever the respirator design permits, workers shall perform the positive and negative air pressure fit test each time a respirator is worn. Powered air-purifying respirators shall be tested for adequate flow as specified by the manufacturer.

(M) No facial hairs (beards) shall be permitted to be worn when wearing respiratory protection that requires a mask-to-face seal.

(N) If a worker wears glasses, a spectacle kit to fit their respirator shall be provided by the Contractor at the Contractor's expense.

(O) Respiratory protection maintenance and decontamination procedures shall meet the following requirements:

(1) Respirators shall be inspected and decontaminated on a daily basis in accordance with OSHA 29 CFR 1910.134 (b); and,

(2) High efficiency filters for negative pressure respirators shall be changed after each shower; and,

(3) Respiratory protection shall be the last piece of worker protection equipment to be removed. Workers must wear respirators in the shower when going through decontamination procedures as stated in Subsection 67.11.3.3; and,

(4) Airline respirators with high efficiency filtered disconnect shall be disconnected in the equipment room and worn into the shower. Powered air-purifying respirator face pieces shall be worn into the shower. Filtered/power pack assemblies shall be decontaminated in accordance with manufacturers recommendations; and,

(5) Respirators shall be stored in a dry place and in such a manner that the face-piece and exhalation valves are not distorted; and,

(6) Organic solvents shall not be used for washing of respirators.

(P) Authorized visitors shall be provided with suitable respirators and instruction on the proper use of respirators whenever entering the work area. Qualitative fit test shall be done to ensure proper fit of respirator.

67.11.1.15 PROTECTIVE CLOTHING

(A) Provide worker protection as required by the most stringent OSHA and/or EPA standards applicable to the work. Provide to all workers, foremen, superintendents, authorized visitors and inspectors, protective disposable clothing consisting of full-body coveralls, head covers, gloves and 18-inch high boot type covers or reusable footwear.

(B) In addition to personal protective equipment for workers, the Contractor shall make available at each worksite at least four (4) additional uniforms and required respiratory equipment each day for personnel who are authorized to inspect the work site. The Contractor shall also provide, for the duration of the work at any site involving a decontamination unit for worksite access, a lockable storage locker for use by the Engineer. In addition to respiratory masks for workers, the Contractor must have on hand at the beginning of each workday, at least four (4) masks each with two (2) sets of fresh filters, for use by personnel who are authorized to inspect the worksite. The Contractor shall check for proper fit of the respirators of all City personnel authorized to enter the work area.

(C) Asbestos handlers involved in tent procedures shall wear two (2) disposable suits, including gloves, hood and footwear, and appropriate respiratory equipment. All street clothes shall be removed and stored in a clean room within the work site. The double layer personal protective equipment shall be used for installation of the tent and throughout the procedure, if a decontamination unit (with shower and clean room) is contiguous to the work area, only one (1) layer of disposable personal protective equipment shall be required; in this case, prior to exiting the tent the worker shall HEPA vacuum and wet clean the disposable suit.

The outer disposable suit (if two (2) suits are worn) shall be removed and remain in the tent upon exiting. Following the tent disposal and work site clean up the workers shall immediately proceed to a shower at the work site. The inner disposal unit and respirator shall be removed in the shower after appropriate wetting. The disposal clothing shall be disposed of as asbestos-containing waste material. The workers shall then fully and vigorously shower with supplied liquid bath soap, shampoo, and clean dry towels.

(D) Coveralls: Provide disposable full-body coveralls and disposable head covers. Require that they be worn by all workers in the work area. Provide a sufficient number for all required changes for all workers in the work area.

(E) Boots: Provide work boots with non-skid soles, and where required by OSHA, foot protection, for all workers. Provide boots at no cost to workers. Paint uppers of all boots yellow with waterproof enamel. Do not allow boots to be removed from the work area for any reason after being contaminated with ACM and/or dust.

(F) Hard Hats: Provide hard hats as required by OSHA for all workers, and provide a minimum of four (4) spares for Inspectors, visitors, etc. Label all hats with same warning label as used on disposal bags. Require hard hats to be worn at all times that work is in progress that may cause potential head injury. Provide hard hats of the type with polyethylene strap suspension. Require hats to remain in the work area throughout the work. Thoroughly clean and decontaminate and bag hard hats prior to removing them from the work area at the end of the work.

(G) Goggles: Provide eye protection (goggles) as required by OSHA for all workers involved in any activity that may potentially cause eye injury. Require them to be worn at all times during these activities. Thoroughly clean and decontaminate goggles before removing them from the work area.

(H) Gloves: Provide work gloves to all workers, of the type dictated by the work and OSHA Standards. Do not remove gloves from the work area. Dispose of as asbestos-contaminated waste at the end of the work. Gloves shall be worn at all times, except during work area preparation activities that do not disturb ACM.

(I) Reusable footwear, hard hats and eye protection devices shall be left in the contaminated Equipment Room until the end of the asbestos abatement work.

(J) Disposable protective clothing shall be discarded and disposed of as asbestos waste every time the wearer exits from the workspace to the outside through the decontamination facility.

(K) Respirators, disposable coveralls, head covers and foot covers shall be provided by the Contractor for the Project Monitor, Engineer and any other authorized representative who may inspect the work area. Provide two (2) respirators and six (6) respirator filter changes per day.

67.11.1.16 AIR MONITORING - CONTRACTOR

(A) The Contractor shall employ a qualified Industrial Hygiene Laboratory to analyze air samples in accordance with OSHA Regulations, 1926.1101 (Asbestos Standards for Construction) and New York City regulations. All costs for this work shall be deemed included in the price(s) bid for item(s) labeled, “INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE”.

(B) The Industrial Hygiene Laboratory shall be a current proficient participant in the American Industrial Hygiene Association (AIHA) PAT Program. The laboratory identification number shall be submitted and approved by the City. The laboratory shall be accredited by the AIHA and New York State Department of Health Environmental Laboratory Approval Program (ELAP).

(C) The Industrial Hygiene Laboratory shall also be a current proficient participant in the NIST/NVLAP Quality Assurance Program for the identification of bulk samples. Laboratory identification number shall be submitted to and approved by the City.

(D) The Contractor shall require a competent person (as defined in OSHA 1926.1101) to perform the following functions and to be on-site continuously for the duration of the project:

(1) Monitor the set up of the work area enclosure and ensure its integrity.

(2) Control entry and exit into the work enclosure.

(3) Ensure that employees are adequately trained in the use of engineering controls, proper work practices, proper personal protective equipment and in decontamination procedures.

(4) Insure that employees use proper engineering controls, proper work practices, proper personal protective equipment and proper decontamination procedures.

(5) The competent person (as defined in OSHA1926.1101) shall check for rips and tears in work suits, and ensure that they are mended immediately or replaced.

(E) Air monitoring responsibilities, shall be performed by a representative of the testing laboratory retained by the Contractor.

(F) Contractor shall submit to the City all credentials of the designated (as defined in OSHA 1926.1101) and Industrial Hygiene Laboratory representative for approval.

(G) Air monitoring and inspection shall be conducted by the Contractor's competent person (as defined in OSHA 1926.1101).

(H) Continuous (daily or per shift) monitoring and inspection will include work area samples, personnel samples from the breathing zone of a worker to accurately determine the employees' 8-hour TWA (unless Type C respirators are used) and decontamination unit clean room samples.

(I) Work area samples and employee personnel samples shall be taken using pumps whose flow rates can be determined to an accuracy of ±5-percent, at a minimum of two (2) liters per minute. This must be demonstrated at the job site.

(J) Sampling and analysis methods shall be per NIOSH 7400A.

(K) Test Reports:

(1) Promptly process and distribute one (1) copy of the test results, to the Commissioner.

(2) Prompt reports are necessary so that if required, modifications to work methods and/or practices may be implemented as soon as possible.

(3) Contractor shall by facsimile notify the Commissioner within 24-hours of the results of each test, followed by written notification within three (3) days.

(L) The Contractor's competent person shall conduct inspections and provide written reports daily. Inspections will include checking the standard operating procedures, engineering control systems, respiratory protection and decontamination systems, packaging and disposal of asbestos waste, and any other aspects of the project which may affect the health and safety of the people and environment.

(M) All costs for required air monitoring by the Contractor's competent person shall be borne by the Contractor.

(N) The City reserves the right to conduct air and surface dust sampling in conjunction with and separate from the Testing Laboratory for the purposes of Quality Assurance.

(O) All samples shall be accompanied by a Chain of Custody Record that shall be submitted to the Project Monitor upon completion of analysis.

67.11.1.17 TESTING LABORATORY

(A) The City, at its own expense, will employ the services of an Independent Testing Laboratory. The Testing Laboratory will perform air sampling activities at the site and perform periodic observations of the work site.

(B) The Laboratory will perform analysis of air samples utilizing phase contrast microscopy (PCM) and/or transmission electron microscopy (TEM). This laboratory shall meet the standards stated herein.

(C) Observations will include, but not be limited to, checking the standard operating procedures, engineering control systems, respiratory protection, decontamination systems, packaging and disposal of asbestos waste, and any other aspects of the project that may affect the health and safety of the environment, Contractor, and/or facility occupants.

(D) The Testing Laboratory shall have access to all areas of the asbestos removal project at all times and shall continuously inspect and monitor the performance of the Contractor to verify that said performance complies with this specification. The Testing Laboratory shall be on site throughout the entire abatement operation.

(E) The City will be responsible for costs incurred with the required laboratory work. Any subsequent additional testing required due to limits exceeded during initial testing shall be paid for by the Contractor.

(F) At a minimum, air sampling shall be conducted in accordance with the following schedule:

ABATEMENT ACTIVITY	PRE-ABATEMENT	DURING ABATMENT	POST ABATMENT
Equal to or greater than 10,000- square feet or 10,000-linear feet of ACM	PCM	PCM	TEM
Less than 10,000-square feet or 10,000-linear feet of ACM	PCM	PCM	PCM
Exceptions to the above:			
Boiler Rooms	PCM	PCM	PCM
Tent and Glovebag Procedures	PCM	PCM	PCM
Demolitions	PCM	PCM	PCM

Note: TEM is acceptable wherever PCM is required.

(G) Prior to commencement of abatement activities, the Testing Laboratory will collect a minimum number of area samples inside each homogeneous work area.

ABATEMENT POST-ABATEMENT

(1) Samples will be taken during normal activities and circumstances at the work site.

(2) Samplers shall be located within the proposed work area and at all proposed isolation barrier locations.

(3) Samples shall be analyzed using PCM.

(4) The number of samples to be collected will be determined by the size of the project.

(H) Area air sampling during abatement shall be conducted as specified in the following documents except as restricted or modified herein:

(1) Measuring Airborne Asbestos Following An Abatement Action, US EPA document 600/4-85-049 (Nov., 1985);
(2) Guidance For Controlling Asbestos-Containing Materials In Buildings; US EPA Publication 560/5-85-024 (June, 1984);
(3) Methodology For The Measurement Of Airborne Asbestos By Electron Microscopy, US EPA Contract No. 68-02-3266;
(4) Mandatory And Nonmandatory Electron Microscopy Methods, set forth in 40 CFR Part 763, Subpart E, Appendix A;

(5) NIOSH 7400 method using "A" counting rules.

(I) In accordance with the above criteria, area samples (see NYCDEP Asbestos Control Program Regulations) shall conform to the following schedule:

AREA SAMPLES FOR ANALYSIS BY	MINIMUM VOLUME	FLOW RATE
PCM, 25-mm cassettes	560-liters	5 to 15-liters/minute
TEM, 25-mm cassettes	560-liters	1 to 10-liters/minute
TEM, 37-mm cassettes	1,250-liters	1 to 10-liters/minute

(1) All costs resulting from additional air tests and observations shall be borne by the Contractor. These costs may include, but are not limited to, labor, analysis fees, materials, and expenses.

(2) After the area has been found to be in compliance, the Contractor may remove Isolation Barriers, tents if any and perform final cleaning as specified.

(J) Clearance And Excavation Re-entry Criteria:

(1) The clearance criteria shall be applied to each excavated work area independently.

(2) For PCM analysis, the clearance air monitoring shall be considered satisfactory when all of the samples regardless of the size of the project are less than or equal to 0.01-f/cc or the background concentrations, whichever is greater.

(3) For TEM analysis, the clearance air monitoring shall be considered satisfactory when the requirements stated in 40 CFR Part 763, Subpart E, Appendix A, Section IV are met.

(4) As soon as the air monitoring tests are completed, the Testing Laboratory will send the results of such tests to the City and notify the Contractor.

(5) The Contractor shall cooperate fully with all aspects of air monitoring operations.

67.11.1.18 TAMPERING WITH TEST EQUIPMENT

All parties to this contract are hereby notified that any tampering with testing equipment will be considered an attempt at falsifying reports and records to federal and state agencies and each offense will be prosecuted under applicable state and federal criminal codes to the fullest extent possible.

67.11.2 PRODUCTS

67.11.2.1 MATERIALS

(A) Wetting Agents: Surfactant shall consist of resin materials in a water base, that have been tested to ensure materials are nontoxic and nonhazardous. Surfactants shall be installed according to the manufacturer's written instructions.

(B) Encapsulants (Sealants, Lockdown Encapsulants): Encapsulants shall consist of pigmented (nontransparent) liquid material which can be applied to asbestos containing materials or bare surfaces exposed after an abatement which temporarily controls the possible release of asbestos fibers from the material or surface either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant). The encapsulant shall be installed according to the manufacturer's written instructions. Sealing materials to be applied to structural members and decking assemblies scheduled to receive spray-applied fireproofing shall be approved by UL for use with the specified material.

(C) Fire Retardant Polyethylene Sheeting: Minimum uniform thickness of 6-mil. Provide largest size possible to minimize seams.

(D) Fire Retardant Reinforced Polyethylene Sheeting: For covering floor of decontamination units, provide translucent, nylon reinforced or woven polyethylene laminated, fire retardant polyethylene sheeting. Provide largest size possible to minimize seams, minimum uniform thickness 6-mil.

(E) Drums: Asbestos-transporting drums, sealable and clearly marked with warning labels as required by OSHA and EPA.

(F) Polyethylene Disposal Bags: Asbestos disposal bags, minimum of 6-mil thick. Bags shall be clearly marked with warning labels as required by OSHA and EPA.

(G) Signs: Asbestos warning signs for posting at perimeter of work area, as required by OSHA and EPA.

(H) Waste Container Bag Liners And Flexible Trailer Trays: One piece leak-resistant flexible tray with absorbent pad.

(I) Tape: Provide tape which is of high quality with an adhesive that is formulated to aggressively stick to sheet polyethylene.

(J) Spray Adhesive: Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.

(K) Flexible Duct: Spiral reinforced flex duct for air filtration devices.

(L) Protective Clothing: Workers shall be provided with sufficient sets of properly fitting, full-body, disposable coveralls, head covers, gloves, and 18-inch high boot-type foot covers. Protective clothing shall conform to OSHA Standard 29 CFR 1926.1101.

67.11.2.2 TOOLS AND EQUIPMENT

(A) Air Filtration Device (AFD): AFDs shall be equipped with High Efficiency Particulate Air (HEPA) filtration systems and shall be approved by and listed with Underwriter's Laboratory.

(B) Transportation Equipment: Transportation Equipment, as required, shall be suitable for loading, temporary storage, transit and unloading of contaminated waste without exposure to persons or property. Any temporary storage containers positioned outside the excavated work area for temporary storage shall be metal, closed and locked.

(C) Vacuum Equipment: All vacuum equipment utilized in the work area shall utilize HEPA filtration systems.

(D) Vacuum Attachments: Soft Brush Attachment, Asbestos Scraper Tool, Drill Dust Control Kit.

(E) Electric Sprayer: An electric airless sprayer suitable for application of encapsulating material and shall be approved by and listed with Underwriters Laboratory.

(F) Water Sprayer: The water sprayer shall be an airless or other low-pressure sprayer for amended water application.

(G) Water Atomizer: Powered air-misting device equipped with a ground fault interrupter and equipped to operate continuously.

(H) Brushes: All brushes shall have nylon bristles. Wire brushes are excluded from use due to their potential to shred asbestos fibers into small, fine fibers. Wire brushes may be used for cleaning pipe joints within glove-bags upon written approval of the Engineer.

(I) Hand Power Tools: Shall be equipped with HEPA-filtered local exhaust ventilation if used to drill, cut into or otherwise disturb ACM.

(J) Other Tools And Equipment: The Contractor shall provide other suitable tools for the stripping, removal, encapsulation, and disposal activities including but not limited to: hand-held scrapers, sponges, rounded-edge shovels, brooms, and carts.

(K) Fans And Leaf Blower: Provide Leaf Blower (one leaf blower per floor) and one 20-inch diameter fans for each 10,000-cubic feet of work area volume to be used for aggressive sampling technique for clearance air testing.

(L) Fire Extinguishers: Provide type “A” fire extinguishers in spaces where there is minimal danger of electrical or grease-oil-flammable liquid fires. In other areas, provide type “ABC” dry chemical extinguishers of NFPA recommended types for the exposure in each case. All fire extinguishers shall comply with the applicable recommendations of NFPA Standard 10, “Standard For Portable Extinguishers.” Provide a minimum of four (4) fire extinguishers in each work area; one in the equipment room of the decontamination unit, one outside the work area in the clean room or directly outside same, and two fire extinguishers where they are most effective for their intended purpose. Do not exceed seventy-five (75) feet between fire extinguishers within the work area.

(M) First Aid Kits: The Contractor shall maintain adequately stocked first aid kits in the clean rooms of the decontamination units and within work areas. The first aid kit shall be approved by a licensed physician for the work to be performed under this contract.

(N) Water Service:

Water Heater: Provide UL rated 40-gallon electric water heaters to supply hot water for Personal Decontamination Enclosure System Shower. Wiring of the water heater shall comply with NEMA, NECA, and UL standards.

(O) Telephone Paging Device:

The Contractor or the Contractor’s authorized representative shall, at all times during the normal workday or during periods of overtime work under this contract, carry a digital telephone paging device (Beeper). The device shall be activated by a telephone number in the 718, 212, 646, 917, 800, or 888 area codes. The Contractor shall supply the City with the activation number for the device and respond to calls from the City within one (1) hour. The cost to Contractor for this device and all charges accruing thereto is deemed included in the price(s) bid for item(s) labeled, “INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE”.

67.11.2.3 CLEANING

(A) Throughout the construction period, the Contractor shall maintain the work area as described in this section.

(1) The Contractor shall prevent excavated areas other than the work area from becoming contaminated with asbestos-containing dust or debris. Should areas outside the work area become contaminated with asbestos-containing dust or debris as a consequence of the Contractor's work practices, the Contractor shall be responsible for cleaning these areas in accordance with the procedures appended in Title 15, Chapter 1 of RCNY and NYSDOL ICR56. All costs incurred in cleaning or otherwise decontaminating nonwork areas and the contents thereof shall be borne by the Contractor at no additional cost to the City.

(2) The Contractor shall provide to all personnel and laborers the required equipment and materials needed to maintain the specified standard of cleanliness.

(B) General:

(1) Wastewater from asbestos removal operations, including shower water, may be discharged into the public sewer system only after approved filtration is on operation to remove asbestos fibers.

(2) Asbestos wastes shall be double bagged in six (6) mil (0.006") polyethylene bags approved for ACM disposal and shall be properly labeled and handled before disposal.

(3) The Contractor shall use corrugated cartons or drums for disposal of asbestos-containing waste having sharp edged components (e.g. nails, screws, metal lathe and tin sheeting) that may tear polyethylene bags and sheeting. The waste within the drums or cartons must be double bagged.

(4) The Contractor shall transport all bags of waste to disposal site in thirty (30) gallon capacity metal or fiber drums with tight lids, or in locked steel dumpster.

(5) Dumping of debris, waste or bagged waste will not be permitted.

(6) Cleanup of visible accumulations of loose ACM shall occur whenever there is a sufficient amount to fill a single asbestos bag.

(7) ACM shall be collected utilizing rubber dust pans and rubber squeegees.

(8) HEPA vacuums shall not be used on wet materials unless specifically designed for that purpose.

(9) Metal shovels shall not be used within the work area.

(10) Accumulations of dust shall be cleaned off all surfaces of the work area daily.

(11) Mastic solvent when used will be applied in moderation (e.g. by airless sprayer).

(12) The Contractor shall retain all items in the storage area in an orderly arrangement allowing maximum access, not impeding traffic, and providing the required protection of all materials.

(13) The Contractor shall not allow accumulation of scrap, debris, waste material, and other items not required for use in this work. Asbestos contaminated waste must not be kept on the work site overnight.

(14) At least twice a week (more if necessary), the Contractor shall completely remove all scrap, debris and waste material from the job site.

(15) The Contractor shall provide adequate storage space for all items awaiting removal from the job site, observing all requirements for fire protection and concerns for the environment.

(16) All respiratory protection equipment shall be selected from the latest NIOSH Certified Equipment list.

(17) Daily and more often, if necessary, the Contractor shall inspect the work areas and adjoining spaces, and pick up all scrap, debris, and waste material. All such items shall be removed to the place designated for their storage.

(18) Weekly, and more often, if necessary, the Contractor shall inspect all arrangements of materials stored on the site; re-stack and tidy them or otherwise service them to meet the requirements of these specifications.

(19) The Contractor shall maintain the site in a neat and orderly condition at all times.

67.11.3 EXECUTION

67.11.3.1 WORKER DECONTAMINATION FACILITY

(A) Large Asbestos Projects (Small Project Option):

Provide a worker decontamination facility in accordance with, Title 15, Chapter 1, OSHA Standard 29 CFR 1926.1101, 12NYCRR Part 56 and as specified herein. Worker decontamination shall be in accordance of the NYCDEP approved procedure for removing asbestos containing coal tar wrap.

(a) Structure:

(1) Use modular systems or build using wood or metal frame studs, joists, and rafters placed at a maximum of 16-inches on-center.

(2) When worker decontamination unit is located outdoors, in areas with public access, or in correctional facilities, framework shall be lined with minimum 3/8" thickness plywood sheathing. Sheathing shall be caulked or taped airtight at all joints and seams.

(3) Interior shall be covered with two (2) layers of opaque 6-mil polyethylene sheeting, with a minimum overlap of 12-inches at seams. Seal seams airtight using tape and adhesive. The interior floor shall be covered with two (2) layers of reinforced fire-retardant polyethylene sheeting with a minimum overlap on the walls of twelve (12) inches.

(4) Entrances to the decontamination unit shall be secured with lockable hinged doors. Doors shall be open at all times when abatement operations are in progress. Doors shall be louvered to allow for air movement through the decontamination units into work area.

(b) Curtained Doorways: A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms.

(c) Air Locks: Air locks shall consist of two curtained doorways placed a minimum of three (3) feet apart.

(d) Decontamination Enclosure System shall be placed adjacent to the work area and shall consist of three (3) totally enclosed chambers, separated from work area and each other by airlocks, as follows:

(1) Equipment Room: The equipment room shall have a curtain doorway to separate it from the work area, and share a common airlock with the shower room. The equipment room shall be large enough to accommodate at least one (1) worker (allowing them enough room to remove their protective clothing and footwear), and a 6-mil disposal bag for collection of discarded clothing and equipment. The equipment room shall be utilized for the storage of equipment and tools after decontamination using a HEPA-vacuum and/or wet cleaning. A one-day supply of replacement filters, in sealed containers, for HEPA- vacuums and negative air machines, extra tools, containers of surfactant, and other materials and equipment required for the project shall be stored here. A walk-off pan filled with water shall be placed in the work area just outside the equipment room for persons to clean foot coverings when leaving the work area. Contaminated footwear and reusable work clothing shall be stored in this room.

(2) Shower Room: The shower room shall have two (2) airlocks (one that separates it from the equipment room and one that separates it from the clean room). The shower room shall contain at least one (1) shower, with hot and cold water adjustable at the tap, per eight (8) workers. Careful attention shall be given to the shower to ensure against leaking of any kind. Contractor shall supply towels, shampoo and liquid soap in the shower room at all times. Shower water shall be drained collected, and filtered through a system with at least a 5-micron particle size collection capacity. A system containing a series of several filters with progressively smaller pore sizes shall be used to avoid rapid clogging of the filters by large particles. Filtered water shall be discharged in accordance with applicable codes. Contaminated filters shall be disposed of as asbestos waste.

(3) Clean Room: The clean room shall share a common airlock with the shower room and shall have a curtained doorway to separate it from outside noncontaminated areas. Lockers, for storage of workers' street clothing, and shelves, for storing respirators, shall be provided in this area. Clean disposable clothing, replacement filters for respirators, and clean dry towels shall be provided in the clean room. The clean room shall not be used for the storage of tool, equipment or other materials.

(B) Small Asbestos Projects:

Provide a worker decontamination facility in accordance with, Title 15, Chapter 1, OSHA Standard 29 CFR 1926.1101, 12NYCRR Part 56 and as specified herein. Unless approved by NYCDEP and the City, worker decontamination facilities shall be attached to the work areas.

(a) Structure:

(1) Use modular systems or build using wood or metal frame studs, joists, and rafters placed at a maximum of 16-inches on-center.

(2) When worker decontamination unit is located outdoors, in areas with public access, or in correctional facilities, framework shall be lined with minimum 3/8” thickness plywood sheathing. Sheathing shall be caulked or taped airtight at all joints and seams.

(3) Interior shall be covered with two (2) layers of opaque 6-mil polyethylene sheeting, with a minimum overlap of 12-inches at seams. Seal seams airtight using tape and adhesive. The interior floor shall be covered with two (2) layers of reinforced fire-retardant polyethylene sheeting with a minimum overlap on the walls of twelve (12) inches.

(4) Entrances to the decontamination unit shall be secured with lockable hinged doors. Doors shall be open at all times when abatement operations are in progress. Doors shall be louvered to allow for air movement through the decontamination units into work area.

(b) Curtained Doorways: A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms.

(c) Air Locks: Air locks shall consist of two (2) curtained doorways placed a minimum of three (3) feet apart.

(d) Decontamination Enclosure System shall be placed adjacent to the work area and shall consist of three (3) totally enclosed chambers, separated from work area and each other by airlocks, as follows:

(1) Shower Room: The shower room shall have two (2) airlocks (one that separates it from the work area and one that separates it from the clean room). The shower room shall contain at least one (1) shower, with hot and cold water adjustable at the tap, per eight (8) workers. Careful attention shall be given to the shower to ensure against leaking of any kind. The Contractor shall supply towels, shampoo and soap in the shower room at all times. Shower water shall be drained collected, and filtered through a system with at least a 5-micron particle size collection capacity. A system containing a series of several filters with progressively smaller pore sizes shall be used to avoid rapid clogging of the filters by large particles. Filtered water shall be discharged in accordance with applicable codes. Contaminated filters shall be disposed of as asbestos waste.

(2) Clean Room: The clean room shall share a common airlock with the shower room and shall have a curtained doorway to separate it from outside noncontaminated areas. Lockers, for storage of workers' street clothing, and shelves, for storing respirators, shall be provided in this area. Clean disposable clothing, replacement filters for respirators, and clean dry towels shall be provided in the clean room. The clean room shall not be used for the storage of tools, equipment or other materials.

(C) Decontamination Enclosure System Utilities: Lighting, heat, and electricity shall be provided as necessary by the Contractor, and as specified herein.

67.11.3.2 WASTE DECONTAMINATION FACILITY

(A) Large Asbestos Project (Small Project Option):

Provide a worker decontamination facility in accordance with, Title 15, Chapter 1, OSHA Standard 29 CFR 1926.1101, 12NYCRR Part 56 and as specified herein. Unless approved by NYCDEP and the City, worker decontamination facilities shall be attached to the work areas.

(a) Structure:

(1) Use modular systems or build using wood or metal frame studs, joists, and rafters placed at a maximum of 16-inches on-center.

(2) When worker decontamination unit is located outdoors, in areas with public access, or in correctional facilities, framework shall be lined with minimum 3/8" thickness plywood sheathing. Sheathing shall be caulked or taped airtight at all joints and seams.

(3) Interior walls shall be covered with two (2) layers of opaque 6-mil polyethylene sheeting, with a minimum overlap of 12-inches at seams. Seal seams airtight using tape and adhesive. The interior floor shall be covered with two (2) layers of reinforced fire- retardant polyethylene sheeting with a minimum overlap on the walls of twelve (12) inches.

(4) Entrances to the decontamination unit shall be secured with lockable hinged doors. Doors shall be open at all times when abatement operations are in progress. Doors shall be louvered to allow for air movement through the decontamination units into the work area.

(b) Curtained Doorways: A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms.

(c) Air Locks: Air locks shall consist of two (2) curtained doorways placed a minimum of three (3) feet apart.

(d) Decontamination Enclosure System shall be placed adjacent to the work area and shall consist of three (3) totally enclosed chambers, separated from the work area and each other by airlocks, as follows:

(1) Washroom: An equipment washroom shall have two (2) air locks (one separating the unit from the work area and one common air lock that separates it from the holding area. The washroom shall have facilities for washing material containers and equipment. Gross removal of dust and debris from contaminated material containers and equipment shall be accomplished in the work area, prior to moving to the washroom.

(2) Holding Area: A holding area shall share a common air lock with the equipment washroom and shall have a curtained doorway to outside areas. A hinged, lockable door shall be placed at the holding area entrance to prevent unauthorized access into the work area.

(B) Decontamination Enclosure System Utilities: Lighting, heat, and electricity shall be provided as necessary by the Contractor, and as specified herein.

67.11.3.3 PERSONNEL ENTRANCE AND DECONTAMINATION PROCEDURES FOR REMOVAL OPERATIONS UTILIZING REMOTE DECONTAMINATION FACILITIES

(A) All individuals who enter the work area shall sign the entry log, located in the clean room, upon each entry and exit. The log shall be permanently bound and shall fully identify the facility, agents, contractor(s), the project, each work area, and worker respiratory protection employed. The job supervisor shall be responsible for the maintenance of the log during the abatement activity.

(B) Each worker shall remove street clothes in the clean room; wear two (2) disposable suits, including gloves, hoods and non-skid footwear; and put on a clean respirator (with new filters) before entering the work area.

(C) Each worker shall, before leaving the work area or tent, clean the outside of the respirators and outer layer of protective clothing by wet cleaning and/or HEPA-vacuuming. The outer disposable suit shall be removed in the airlock prior to proceeding to the Worker Decontamination Unit. The inner disposable suit and respirator shall be wet wiped and HEPA-vacuumed thoroughly before removing and prior to aggressive shower.

(D) Following showering and drying off, each worker or authorized visitor shall proceed directly to the clean room, dress in street clothes, and exit the decontamination enclosure system immediately.

67.11.4 PREPARATION OF WORK AREA AND REMOVAL PROCEDURES

67.11.4.1 REMOVAL OF ASBESTOS-CONTAINING MATERIAL

(A) Contractor shall be responsible for the proper removal of ACM from the work area using standard industry techniques. The Testing Laboratory representative shall observe the work.

General Requirements:

(a) Removal of ACM shall be performed using wet methods. Dry removal of ACM is prohibited.

(b) Spray ACM with amended water with sufficient frequency and quantity to enhance penetration. Sufficient time shall be allowed for amended water to penetrate the material to the substrate prior to removal. All ACM shall be thoroughly wetted while work is being conducted.

(c) Accumulation of standing water on the floor of the work area is prohibited.

(d) Apply removal encapsulants, when used, in accordance with the manufacturer's recommendations and guidelines.

(e) Containerize ACM immediately upon detachment from the substrate.

(f) Pre-Removal Inspections:

(1) Prior to removal of any ACM, the Contractor shall notify the Testing Laboratory and request a pre-removal inspection. Posting of warning signs, building of decontamination enclosure systems, and all other preparatory steps have been taken prior to notification of the Testing Laboratory.

(2) Contractor shall correct any deficiencies observed by Testing Laboratory at no additional cost to City.

(3) Following the Testing Laboratory's approval of the work area preparations, removal of ACM may commence.

(B) Removal of Coal Tar Wrap shall be as follows:

Work shall be performed as outlined in the coal tar wrap removal procedures (see Appendix) approved by the New York City Department of Environmental Protection (NYCDEP).

67.11.4.2 MAINTENANCE OF CONTAINED WORK AREA AND DECONTAMINATION ENCLOSURE SYSTEMS

(A) Ensure that barriers are installed in a manner appropriate to the expected weather conditions during the project and for its duration. Repair damaged barriers and remedy defects immediately upon their discovery. Visually inspect barriers at the beginning and end of each work period.

(B) Visually inspect nonwork areas and the decontamination enclosure system for water leakage. Perform the visual inspection a minimum of two (2) times for each 8-hour work shift.

67.11.5 ASBESTOS WASTE MANAGEMENT

67.11.5.1 ACM WASTE REQUIREMENTS

(A) The Contractor and all subcontractors are specifically alerted to the illegal practice of combining asbestos-containing waste (ACW) from one project with the ACW of other projects without using the services of a permitted waste transfer station as defined by 6 NYCRR Part 360 and 364. As part of the shop drawing submittals, the Contractor must submit for approval the proposed method of transportation and disposal that will be utilized to manage the ACW of this contract. If a permitted transfer station is to be used, the cost shall be included in the bid price. The Contractor must submit a waste manifest consistent with whatever approved method is utilized as part of the invoicing and payment procedures.

(B) The Contractor shall maintain compliance with the strictest set of regulations of Title 15, Chapter 1 of RCNY, NYC LL 70/85, NYS DOL ICR 56, USEPA, Asbestos Regulation 40 CFR Section 61.152, 29 CFR 1926.1101, 29 CFR 1910.1200 (F) of OSHA's Hazard Communication Standards, and other applicable standards.

NOTE: Any penalties incurred for failure to comply with any of the above regulations and/or fines imposed due to negligence of the Contractor will be the sole responsibility of the Contractor.

When presenting ACW for storage at the generation site, the Contractor shall:

(1) Wet down ACW in a manner sufficient to prevent all visible emissions of dust into the air.

(2) Seal material in a leak tight container while wet.

(3) Keep ACW separate from any other waste.

(C) When presenting ACW for storage away from the site of generation, the Contractor shall:

(1) Ensure that ACW has been properly packaged as per requirements above.

(2) Examine the containers of ACW to ensure that there are no breaks in the containers and that no visible dust is being released into the air.

(3) If examination reveals damage to a container of ACW the Contractor or person accepting the waste shall immediately wet down the ACW and repackage it into a clean leak tight container. The subsequent repackaging shall be the financial responsibility of the Contractor and occur at no extra cost to the City.

(4) Keep ACW separate from any other waste.

(D) When storing ACW - The Contractor shall:

(1) Ensure that the ACW has been sufficiently wetted down in tight containers.

(2) Rewet and repackage any damaged containers.

(3) Maintain at storage site an adequate supply of spare leak tight containers.

(4) Maintain at storage site an adequate supply of amended water.

(5) Keep ACW separate from any other waste.

(6) Keep ACW in a secured, enclosed, and locked container.

(7) If the Contractor has intention of sorting a quantity of ACW greater than or equal to 50-cubic yards, the Contractor shall:

Submit a written request and receive written approval from the City.

(E) When presenting for transport, the Contractor shall:

(1) Ensure that ACW has been sufficiently wetted down.

(2) Examine the integrity of the container's airtight seal.

(3) Rewet and repackage any damaged containers.

(4) Keep ACW separate from all other waste.

(5) Ensure that a person transporting asbestos waste holds a valid permit issued pursuant to law.

(6) Frequency of waste removal:

Properly packaged and labeled asbestos waste shall be removed from the site on a daily basis. Under no circumstance shall asbestos waste be stored on site without written approval from the City. The Waste Hauler and landfill shall be as indicated on the notifications to regulatory agencies.

(F) Waste Load-Out Through Equipment Decontamination Enclosure (Full Decontamination Facility):
Place asbestos waste in disposal bags. Large items not able to fit into disposal bags shall be wrapped in one (1) layer of 6-mil thick polyethylene sheeting. Clean outer covering of asbestos waste package by wet cleaning and/or HEPA-vacuuming in a designated part of the work area. Move wrapped asbestos waste to the equipment washroom, wet clean each bag or object and place it inside a second disposal bag, or a second layer of 6-mil polyethylene sheeting, as the item's physical characteristics demand. Air volume shall be minimized, and the bags or sheeting shall be sealed airtight with tape.

(1) The clean containerized items shall be moved to the equipment decontamination enclosure holding area pending load-out to storage or disposal facilities.

(2) Workers who have entered the equipment decontamination enclosure system from the uncontaminated nonwork area shall perform load-out of containers from the decontamination enclosure holding area. Dress workers moving asbestos waste to storage or disposal facilities in clean overalls of a color different than from that of coveralls used in the work area. Ensure that workers do not enter from uncontaminated areas into the equipment washroom or the work area. Ensure that contaminated workers do not exit the work area through the equipment decontamination enclosure system.

(3) Thoroughly clean the equipment decontamination enclosure system immediately upon completion of the waste load-out activities, and at the completion of each work shift.

(4) Labeled ACM waste containers or bags shall not be used for non-ACM debris or trash. Any materials placed in labeled containers or bags, including those turned “inside-out”, shall be handled and disposed of as ACM waste.

(G) All asbestos materials, wastes, shower water, polyethylene, disposable equipment and supplies shall be disposed of as contaminated waste, in accordance with the EPA regulation (40 CFR, Section 61.150) and those requirements of the New York Department of Environmental Conservation and New York City Department of Sanitation.

(H) All asbestos materials shall be prepared for transportation in accordance with this specification and all applicable Federal, State, County and City Regulations. The Contractor shall submit the following documentation:

(1) Where applicable, an EPA Generator's identification number which has been obtained from the EPA for all asbestos waste generated from the project.

(2) Applicable State Waste Hauler license and registration numbers.

(3) Federal Hazardous Materials Waste Hauler number.

(4) Designated landfill EPA Permit numbers.

(I) Prior to loading asbestos waste the enclosed cargo areas (dumpster) shall be prepared as follows:

(1) Clean via HEPA-vacuum and wet wipe techniques the enclosed cargo areas of all visible debris prior to preparing with polyethylene.

(2) Line the cargo area with two (2) layers of 6-mil polyethylene sheeting to prevent contamination from damaged or leaking containers. Floor sheeting shall be installed first and extend up the walls a minimum of 24-inches. Wall sheeting shall be overlapped and taped securely into place.

(J) Asbestos-containing waste shall be placed on level surfaces in the cargo area of the dumpster and shall be packed tightly to prevent any shifting or tipping of the waste during transportation.

(K) Asbestos-containing waste shall not be thrown into or dropped from the dumpster. All material shall be handled carefully to prevent rupture of the containers.

(L) All personnel engaged in handling and loading of contaminated waste outside of the work area shall wear protective clothing. The disposable clothing shall include head, body and foot protection and color of clothing shall be different from abatement personnel in the work area. Minimum respiratory protection shall be half face, dual cartridge, air purifying respirators with HEPA-filters.

(M) The Contractor shall immediately clean debris or residue observed on containers or surfaces outside of the work area. Cleaning shall be via HEPA equipped wet/dry vacuums only.

(N) All asbestos-containing waste shall be transported from the abatement site to the landfill by a registered Waste Hauler. When transporting ACW:

(1) Ensure that the ACW has been sufficiently wetted down in a leak tight container.

(2) Rewet and repackage any damaged containers.

(3) Maintain at storage site an adequate supply of spare leak tight containers.

(4) Maintain at storage site an adequate supply of amended water.

(5) Keep ACW separate from any other waste.

(O) Keep ACW in a secured, enclosed, and locked container.

(P) Waste transport documents shall conform to the requirements of the U.S. Department of Transportation, Hazardous Materials Transportation Regulation, 49 CFR Part 173 and EPA 40 CFR 61.150 (d)(1)(2). Shipping documents shall be clearly marked with the required designation "RQ Asbestos". The Contractor shall provide a copy of this document to the City.

(Q) A uniform hazardous waste manifest shall be prepared by the Contractor and signed by the Contractor each time the Contractor ships a dumpster load of Asbestos-Containing Waste Material. The uniform hazardous waste manifest shall include the site of waste generation, the names and addresses of the Transporter, the Contractor, and the landfill operator with information on the type and number of asbestos-waste containers, time and date. The Contractor shall provide the Engineer, Testing Laboratory or authorized designated representative with signed copies of the waste manifest before each departure.

(R) The Contractor or the Contractor's registered hazardous Waste Hauler shall transport asbestos-containing waste material from the abatement site directly to the specified disposal site. The Contractor or Waste Hauler shall not accept material from any other site when transporting asbestos-containing waste material from the abatement site. The authorized DDC representative or Engineer reserves the right to travel with Contractor's Waste Hauler to the waste disposal site. No intermediate storage of waste material (i.e. Contractors warehouse) shall be permitted.

(S) Final or progress application for payments will not be processed unless all hazardous waste manifests generated to date have been received and reviewed by the Engineer.

(T) All asbestos materials, wastes, shower water, polyethylene disposable equipment and supplies shall be disposed of as contaminated waste, in accordance with the EPA regulation (40 CFR, Section 61.150) and those requirements of the New York State Department of Environmental Conservation and the New York Department of Sanitation.

(U) The Contractor shall transport all sealed drums to a landfill disposal site approved by the Department of Environmental Conservation and the EPA. Transportation shall be performed by a New York State registered Waste Hauler, where required. When presenting the ACW for disposal the Contractor or subcontractor shall:

(1) Ensure that waste container is properly labeled according to the National Emission Standard for Hazardous Air Pollutants (NESHAP); Asbestos Revision, 40 CFR, Part 61, Subpart M. The labels shall include the name of the waste generator and the location where the waste was generated.

(2) Comply with all applicable orders issued pursuant to asbestos disposal.

(3) Ensure that ACW has been sufficiently wetted down.

(4) Rewet and repackage any damaged containers.

(5) Keep ACW separate from all other wastes.

(V) The Contractor shall notify the waste disposal site, at least 24-hours prior to transportation of contaminated waste to be delivered. The Contractor shall determine if a larger notification period is required.

(W) At the site, the Contractor or Waste Hauler trucks shall approach the dump location as close as possible for unloading asbestos waste. Containers shall be carefully placed in the ground. Do not throw containers from truck.

(X) The Contractor or Waste Hauler shall inspect containers as they are unloaded at the disposal site. Material in damaged containers shall be repacked in empty containers, as necessary.

(Y) The Contractor or Waste Hauler shall not remove asbestos-containing waste material from drums unless required to do so by the disposal site City. Used drums shall be disposed of as asbestos-contaminated waste.

(Z) All personnel engaged in unloading of the containers at the waste site shall wear protective clothing. The disposable clothing shall include head, body and foot protection. Minimum respiratory protection shall be half face, dual cartridge, air purifying respirators with HEPA-filters. Workers shall remove their protective clothing at the disposal site, place it in labeled disposal bags and leave them with the deposited waste shipment.

(AA) For the compaction operation, the Contractor shall ensure that disposal sites personnel have been provided with personal protective equipment by the disposal operator. If the disposal site City has not provided this protective equipment, the Contractor shall supply protective clothing and respiratory protection for the duration of this operation (PAPR respirators are mandatory).

(BB) If containers are broken or damaged, the Contractor or Waste Hauler shall, using personnel who are properly trained and wearing proper protective equipment, shall repackage the waste in properly labeled containers. The Contractor shall then clean the entire truck and its contents using HEPA-vacuums and wet cleaning techniques until no visible residue is observed.

(CC) Following the removal of all containerized waste, the Contractor shall decontaminate the truck cargo area using HEPA-vacuums and/or wet cleaning techniques until no residue is observed. All 6-mil polyethylene sheeting shall be removed and discarded as asbestos-containing waste material along with contaminated cleaning material and protective clothing, in containers at the disposal site.

(DD) The transporter(s) of all asbestos waste shall not back-haul any items on returning from landfill/disposal site.

(EE) All asbestos waste shall be disposed of in an approved Asbestos Landfill site only.

(1) NO PERSON UNDER ANY CIRCUMSTANCES SHALL ABANDON A.C.W. The same shall be disposed of only by certified persons in approved landfills.

(2) A manifest form will be signed by the Landfill documenting receipt and acceptance of the asbestos-containing waste. This manifest will be furnished to the City of New York.

(3) It is the responsibility of the Asbestos Contractor to determine current waste handling, transportation and disposal regulations for the work site and for each waste disposal landfill. The Asbestos Contractor must comply fully with these regulations and all appropriate U.S. Department of Transportation, EPA and other Federal, State and Local entities' regulations and all other current legal requirements.

(4) The Asbestos Contractor shall obtain an agreement from the transporter(s) that the practice of "Back-Hauling" will not be engaged in, with respect to any and all waste loads taken from this site during the work.

(5) The Asbestos Contractor will document actual disposal of the waste at the designated landfill by having completed a Disposal Certificate and will provide a copy of the same to the Department of Design and Construction.

67.11.6 ACCEPTANCE

67.11.6.1 ACCEPTANCE

(A) Upon satisfactory completion of all decontamination procedures, a certificate will be issued by the Engineer with copies to all parties.

(B) A Letter Of Compliance stating that all the work on the project was performed in accordance with the specifications and all applicable Federal, State and Local regulations.

(C) All warranties as stated in the specifications.

67.11.7 MEASUREMENT AND PAYMENT

67.11.7.1 MEASUREMENT

The quantity of "INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE" to be measured for payment shall be the actual number of linear feet of each size steel water main pipe and fittings with asbestos containing coal tar wrap removed in compliance with the requirements of this section. Measurement shall be made in linear feet along the axis of the pipes. The removal lengths of valves, fittings and other pipe connections that are attached to the steel pipe water main and required to be removed as part of the removal operation of the existing steel pipe water main shall be included for purpose of this calculation.

No additional measurement for payment will be made for the removal of any coal tar wrap asbestos containing material from the existing steel pipe which is designated to remain in place, but is required to facilitate the cutting of the existing pipe and joining it to the new pipe to the existing steel pipe. The cost shall be deemed to be included in the unit price bid for this item.

67.11.7.2 PAYMENT

The contract price for "INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE" shall be the unit price bid per each size existing steel pipe water main's incremental cost difference for all labor, material, equipment, insurance, and incidentals required to complete all work under other scheduled contract items, using the methods required under this section to remove and dispose of coal tar wrap asbestos containing materials associated with water main replacement.

This item will be paid only in conjunction with other scheduled contract items for installing the new steel water main pipe (e.g. Payment would be made under the unit price bid for Item No. 60.21SP6T72 - FURNISHING, DELIVERING AND LAYING 72-INCH STRAIGHT STEEL PIPE, 3/4-INCH WALL THICKNESS, for the length of pipe installed plus payment would be made under the unit price bid for Item No. 67.11AA72 - INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING 72-INCH DIAMETER STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE, in order to remove and dispose of the existing asbestos contaminated coal tar wrapped pipe). However, payment will be made under this item only for the initial length of pipe and appurtenances removed at a particular location.

Payment for Incremental Cost For Asbestos Abatement Work Performed On Existing Steel Pipe Water Main To Be Removed, Complete will be made under the Item Number as calculated below:

The Item Numbers for Incremental Cost For Asbestos Abatement Work Performed On Existing Steel Pipe Water Main To Be Removed, Complete have nine characters. (The decimal point is considered a character, the third character.)

(1) The first five characters shall define Incremental Cost For Asbestos Abatement Work Performed On Existing Steel Pipe Water Main To Be Removed, Complete:

(2) The sixth and seventh characters shall define Incremental Cost For Asbestos Abatement Work Performed On Existing Steel Pipe Water Main To Be Removed, Complete:

AA - Incremental Cost For Asbestos Abatement Work Performed On Existing Steel Pipe Water Main To Be Removed, Complete

(3) The eighth and ninth characters shall define the Diameter of the Existing Steel Pipe Water Main. (The eighth and ninth characters representing the unit of inches for the Diameter of the Existing Steel Pipe Water Main.) See examples below:

36 - 36" 48 - 48" 72 - 72"

(4) Examples of Item Numbers together with Description and Pay Unit as provided in the Bid Schedule are provided below:

Payment will be made under:

Item No.	Description	Pay Unit
67.11AA36	INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING 36-INCH DIAMETER STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE	L.F.
67.11AA48	INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING 48-INCH DIAMETER STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE	L.F.
67.11AA72	INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING 72-INCH DIAMETER STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE	L.F.

APPENDIX - NYCDEP ATTACHMENTS

NYC DEP Asbestos Co trot Program VAR#_____

ATIACHMENT TM
REQUIREMENTS FOR MODIF[ED TENT PROCEDURES (FOR GROSS ABATEMENT}
APPLIES TO VARIANCES FROM TITLE 15, CHAPTER I, RULES OF THE CITY OF NEW YORK; SECTIONS 1-Bt(m) ANP 1-91(c) {lS RCNY § 1-Bl(m) AND§ 1-!>l(c)}

1. All tenl enclosures and contiguou spaces within a radius of 10 feet shall be roped off and regulated to allow only certified workers and authorized visitors to enter.

2. 15 RCNY § l-106 shall be complied with except that
   I. all tents shall be lined with 2 layers of plastic sheeting (6•mil thickness at a minimum);
   ii. the amounts of ACM that may be abated in each modified tent shail **NOT EXCEED** (a) 160 square feet and/or (b) 260 hnear feet.
   iii. the total amount of ACM that may be abated at any one time in seve ral modified tents shall **NOT EXCEED** 1,000 combined square feet plus linear feet.

3. AU modified tents shall be fuUyframed (including horizontaUy across the top, if applicable) with 2x3 (minimum) wood or metal studs spaced not more than 36 inch center-to-center vertically around all sides (except at the entry/exit which shall not exceed 36 inch width); and

4. A minimum of one air volume change per 15 minutes through each modified tent shall be maintained.

5. An airlock having at leas1 3 feet length between the two curtained doorways shall be constructed at the entrance to each and every tent if the decontamination unit is not attached to the tents, and

6. If a decontamination unit is not attached to each ten tl,ocated within each airlock there shall be extra clean and uncontaminated disposable protective suits (e.g.Tyveks), and one such clean suit shall be worn by each worker in the airlock, immediately after removal of the outer suit as per 1S RCNY § 1- I06(k), before each worker exits any airlock.

7. Any decontamination unit that is not attached to a tent **(i.e.** that is remote fr.om a tent) shall be constructed in compliance with the requirements of Attachment D and must be located on the same floor as the modified tents.

8. Decontamination units that are attached to tents shall comprise at least a shower room and a clean room, with one curtained doorway seI)arating them, and with a second curtained doorway separating the tent from the shower room.

9. After the ACM removal and bagging [refer 15 RCNY § l-l06(f) and (g)], the bagged waste shall be HEPA-vacuumed then wet cleaned and transferred into the airlo1.k or into the shower room (as per Items 5 and 8 above respectively) for double bagging, and thereafter the double-bagged waste shall be transferred outside the airlock <ir outside the clean room for its final transfer to storage in a holding area and/or to legal means of disposal.

10. If the integrity of the tent is compromised and/or visible emissions are detected outside the tent and/or levels exceed 0.01 flee work shall stop and 15 RCNY § l-45(a) shall be complied with immediately. Post-abatement clearance air samples shall be required in the areas outside the tent

11. A minimum of 3 during area air sampJes and 3 post abatement clearance air samples must be taken in compliance with section l-41 of the NYC DEP Asbestos Regulation for each modified tent.

NOTE: This attachment may be revised at any ti me by the Department.

TRU/JM 04/2005

NYC DEP ASBESTOS CONTROL PROGRAM VAR#_____

ATTACHMENT D
REMOTE WORKER DECONTAMINATION.UNIT

APPLIES TO VARIANCE FROM TITLE 15, CHAPTER 1, RULES OF THE CITY OF NEW YORK SECTIONS 1-SZ(a) AND 1-83(a)"' {15 RCNY § 1-82(a) AND§ l-83(a)*}.

1. The remote worker decontamination unit shall be constructed outside the work area, in accordance with 15 RCNY § 1-82, and attached to individual glovebag work areas (or tents) or common space leading to individual wor areas.

2. The remote worker decontamination unit shall consist of, at least, a shower room, and aclean room separated from each other by an airlock and from the glovebag work area.

3. In addition to the shower heads, the shower room shall be provided with a flexible hose for equipment and waste decontamination.

4. The remote holding area for the asbestos containing waste shall comply with Title 16, Chapter 8, Rules of the City of New York (16RCNY 8 ET SEQ.)

5. Tiie decontamination unit shall be mainiained_in accordance with 15 RCNY § 1-94 (except sub-section b).

6. All asbestos handlers shall wear two disposable suits, including gloves, hood and footwear, and appropriate respiratory equipment, after removing s1reet clothes in the dean room, and must exit from the shower room.

7. Each worker, before leaving the glovebag work area (or tent), shall clean the outside of the respirators and outer protecting clothing by wet cleaning and/or HEPA vacuuming. The outer disposable suit shall be removed in the work area and the workers shall then proceed to the shower room. The inner disposable suit and respirator shall be washed thoroughly before removing and prior to aggr_essive shower.

8. After the ACM removal and bagging {refer 15 RCNY § l-105(c)l5}, the bagged waste shall beHEPA-vacuumedand then transferred to the shower room for wet cleaning and double bagging, prior to storage and disposal

9. Worker and waste decontamination cannot take place at the same time and decontamination system shall be in place for the entire duration of the abatement activities.

10. The following additional conditions must be complied with in order to re-use an attached decontamination enc1osure system(s) as a remote decontamination unit.

    i) Final air clearance must be achieved in the full containment area to which the decontamination enc1osure system(s) is attached.

    ii) The decontamination enclosure system(s) shall be re-plasticized in accordance with 15 RCNY § 1-&2.

•Required for projects disturbing 1,000 or more linear feet.

NOTE: This attachment may be revised at any time by the Department.

TRU/JM 4/2005

ATTACHMENT - ASBESTOS CONTAINING COAL TAR WRAP AND PIPE REMOVAL PROCEDURE

The work procedure to be utilized for the removal of asbestos and the water main pipe shall be as follows:

I. Personal Protective Equipment

Prior to beginning work, all workers performing the removal of the coal tar wrap must equip themselves with the proper personal protective equipment (PPE). The PPE required for the removal of coal tar wrap includes:

(1) Tyvek suit with boot protection ("booties"). (2) Disposable gloves (latex ornitrile).
(3) Eye protection.
(4) Half face respirator with HEPA cartridges.

In addition to the PPE listed above, the tools and materials which will be required for this operation shall include the following:

(1) Amended water solution.
(2) 6-mil plastic sheeting.
(3) 6-mil plastic asbestos disposal bags.
(4) Disposable rags or wipes.
(5) Duct tape.
(6) Hand tools (chipping hammer, chisel, scraper, putty knife). (7) Abrasive pads.
(8) Asbestos barrier tape.

NOTE: No power tools, grinders, sanders, or burning apparatus can be used to remove coal tar wrap.

II. Work Procedure

(A) Removal:

The following work procedure shall be employed when removing coal tar wrap:

(1) Set up the asbestos barrier tape around the perimeter of the excavation.
(2) Place 6-mil plastic sheeting under the steel water main pipe to collect loose debris.
(3) Wet down coal tar wrap with amended water.
(4) Use hand tools to break away the large chunks of coal tar wrap. Place the removed wrap in a plastic asbestos disposal bag.
(5) Remove only the amount of wrap around the circumference of the pipe (two (2) foot wide strip) necessary to cut the pipe for future removal.
(6) Ensure that the intact coal tar wrap on the pipe is not damaged when removing the pipe from the excavation.
(7) For sections of pipe left in the ground, seal all ends of exposed wrap with duct tape. Plastic wrap and duct tape all coated pipes that will be removed from the site.
(8) In the event that some wrapping material did not fall onto the plastic sheeting, collect these pieces and place them on the sheeting.
(9) Once coal tar wrap removal is completed and the exposed ends are sealed, fold the plastic sheeting onto itself and place it in a properly labeled asbestos bag.
(10) Wet wipe all equipment with amended water and rags before removal from work area. Place used rags and old work gloves in asbestos disposal bags.

(11) Ensure that bagged ACM is wet prior to transportation.

(12) Cut the pipe at the abated locations using mechanical, cold cutting methods.

(13) Double wrap large sections of cut pipe with intact ACM with two (2) layers of six (6) mil plastic sheeting, sealed with tape in ten (10) foot sections.

(14) Wrapped sections of pipe with intact ACM shall be properly labeled in accordance with OSHA Regulations 29 CFR 1926 58K(2), and shall be kept wet until disposal in compliance with Title 15, Chapter 1, Rules of the City of New York (15RCNY 1).

(B) Disposal:

The following work procedure shall be employed when disposing coal tar wrap:

(1) Double bag all waste materials. The inside and outside bags must have an asbestos label with the work location identified.

(2) Complete an asbestos waste tracking form and attach it to the bag.

(3) Place double bagged waste in a truck and transport it to an approved New York State asbestos landfill.

(4) All ACM waste bags must be picked up and disposed of on a daily basis at the end of each shift.

EP7 (1.0) - PAGES GAS COST SHARING (EP-7) STANDARD SPECIFICATIONS

NOTICE

THE PAGES CONTAINED IN THIS SECTION REPRESENT THE GAS COST SHARING WORK THAT SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.

(NO TEXT ON THIS PAGE)

TABLE OF CONTENT

I - NOTICE TO ALL BIDDERS; GAS COST SHARING WORK

II - GENERAL PROVISIONS; GAS COST SHARING WORK

1. General
2. Gas Interferences And Accommodations
   2a. Water Main Accommodations
   2b. Sewer Accommodations
3. Quantity Overruns, EP-7 Funded Bid Items
4. Changes And Extra Work
5. Excavation
6. Backfilling And Street Restoration
7. Non-Responsive Bids
8. Minimum Clearances
9. Work By Facility Operator
10. Materials Furnished By Facility Operator
11. Liability And Insurance
12. Width And Depth Of Excavation
13. Depth And Crossing Angles Of Gas Facilities
14. Maintenance Of Traffic For Gas Work
15. Relocated Gas And Temporary Systems Installation
16. Role Of Company Inspector
17. Coordination With Gas Company

III - TECHNICAL SECTION

SECTION 6.01 - Trench Crossings; Support And Protection Of Gas Facilities And Services.
SECTION 6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences.
SECTION 6.02.1 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Upstream Inverts Greater Than Six (6) Feet.
SECTION 6.03 - Removal Of Abandoned Gas Facilities. All Sizes.
SECTION 6.03.1 - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For National Grid Work Only)
SECTION 6.03.1a - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For Con Edison Work Only)
SECTION 6.04 - Adjust Hardware To Grade Using Spacer Rings/Adaptors. (Street Repaving.)
SECTION 6.05 - Adjust Hardware To Grade By Resetting. (Road Reconstruction.)
SECTION 6.06 - Special Care Excavation And Backfilling.
SECTION 6.06A - Special Care Excavation And Backfilling for Transmission Mains
SECTION 6.07 - Test Pits For Gas Facilities.
SECTION 6.08 - "No Text"
SECTION 6.09 - Trench Excavation and Backfill for New Gas Mains and Services (For National Grid Work Only)
SECTION 6.09a - Trench Excavation and Backfill for New Gas Mains and Services (For Con Edison Work Only)

IV - STANDARD SKETCHES; GAS COST SHARING WORK

NO. 1 - Support Requirements For Gas Mains And Services Crossing Excavation Greater Than 4'-0" Wide At Any Angle
NO. 1A - Support Requirements For Gas Mains Over 16" Diameter Up To And Including 48" Diameter Crossing Excavation At Any Angle
NO. 2 - Typical Methods Of Measurement For Gas Crossings
NO. 3 - Utility Crossings During Catch Basin Chute Connection Pipe Installation
NO. 4 - Utility Crossings During Catch Basin Chute Connection Pipe Installation (Extra Depth)
NO. 5 - Gas Main Encroachment On And/Or Parallel To Excavation Of Unsheeted Trench

V - PRELIMINARY GAS WORK TO BE PERFORMED BY FACILITY OPERATOR

VI - LISTING OF APPROXIMATE LOCATIONS OF EP-7 BID ITEMS QUANTITIES

I - NOTICE TO ALL BIDDERS; GAS COST SHARING WORK

All prospective bidders are hereby advised that, pursuant to the "Gas Facility Cost Allocation Act", ("the Act"), the City of New York has entered into an agreement ("the Agreement") with the gas companies (Con Edison or National Grid (formerly KeySpan Energy Delivery)) operating in their respective areas of the City to "share" the cost of facility relocation and/or support and protection of facilities disturbed by proposed water and/or sewer and related City work specified in this contract. Therefore, bid items, specifications and estimated quantities for the incremental costs of support and protection of certain gas facilities have been included in this contract. The low bid for this contract shall be determined by examining each bid for all work to be performed under this contract including any work of support and protection of gas facilities to be performed. The Contractor shall not seek additional compensation from gas companies except as specifically set forth in its contract.

II - GENERAL PROVISIONS; GAS COST SHARING WORK

1. General:

The Contractor shall perform City work with interferences from existing live and abandoned gas facilities. This shall be defined as utility work. Therefore, this contract includes bid items, specifications and estimated quantities designed to fully compensate him/her for the incremental costs of supporting, protecting, providing accommodations and, avoiding disturbing gas facilities located in the streets shown on the contract drawings. In the event that any other provisions of this contract related to gas facilities (or private utilities) conflict with these provisions, these provisions shall supersede and govern all work related to gas facilities owned by the companies operating in the project area. All utility work, as defined in these specifications, including changes and additions thereto shall be paid solely by the City except when specified otherwise in this contract. Contractor hereby agrees that the facility operator shall not be liable to pay him/her for any work performed including extra utility work. Contractor agrees that its bid prices include all compensation for loss of productivity and efficiency, idle time, delays (including any delays occasioned by negotiation of a contract change), change in operations, mobilization, demobilization, remobilization, added cost or expense, lost of profit, other damages or impact costs that may be suffered by or because of utility work, or the presence of gas facilities in the proximity of City work and that it will not seek additional compensation for these items. All disputes shall be resolved as specified in the contract.

Pursuant to the Act, Agreement, and the New York City Administrative Code, the gas company(ies) has been directed by the Commissioner and is required to perform all maintenance, repairs, replacement, shifting, alteration, relocation, and/or removal work that are not part of this contract. By having bid on this contract, the Contractor understands and agrees that the Commissioner has preasserted any right the City has to require, including the issuance of any directives or so called "order outs" under the New York City Administrative Code, any or all gas companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove all gas facilities that are about to be disturbed by the City contract work. The issuance of additional such directives during the performance of the contract work, where necessary in the sole judgment of the Commissioner, shall be initiated by such Commissioner as set forth in the relevant sections of the Act and Agreement. Contractor further agrees to insert such requirements as set forth herein above into any contracts with its approved subcontractors so that its subcontractors also understand and agree to such contract requirements.

2. Gas Interferences And Accommodations:

During the performance of sewer and water main work funded by the New York City Department of Environmental Protection (NYCDEP), as instructed by the Engineer, the use of any applicable contract bid item is allowed in order to resolve and accommodate all gas facilities interferences with such City work, including the removal of contaminated soil in associated trench excavation. This is in addition to the specified EP-7 bid items in the contract. Payment for such accommodation shall be funded by EP-7 bid item “UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS” (F.S. Fixed Sum). The value of such accommodation shall be computed by multiplying the appropriate unit prices bid to the quantity of work performed, as determined by the Engineer, and applying the total amount thus to be paid

to EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS". When EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" does not exist, such additional accommodation work shall be at no cost to the City but shall be a matter of adjustment between gas facility operator and Contractor. Private facilities, other than gas, that become in interference due to gas interferences accommodations shall also be accommodated, if so directed by the Resident Engineer, at no additional cost to the City and, provided that its owner agrees to be responsible for all additional costs to Contractor, otherwise, such facility shall be ordered by the City to be maintained, shifted, relocated or replaced by its owner at his/her expenses.

2a. Water Main Accommodations:

When water main construction is to be performed in this contract, Contractor shall be required, if warranted by field conditions, and at locations designated by the Resident or Borough Engineer, to change the vertical or horizontal alignment of water mains including but not limited to all additional labor, material, work method accommodations, furnishing, delivering and laying offset fittings and pipes, etc., necessary in order to complete water main installation and, avoid gas interferences in the project area, including street intersections. Typical work method accommodations shall include, but not be limited to, pier and plate, installation of filter fabric and select fill, etc. Such work shall be performed as directed by the Engineer and in accordance with contract specifications and latest edition of water mains standards and specifications.

2b.Sewer Accommodations:

When sewer construction is to be performed in this contract, Contractor shall be required, if warranted by field conditions, and at locations designated by the Resident or Borough Engineer, to change the horizontal alignment of sewer facilities (if possible) including but not limited to all additional labor, material, work method accommodations, furnishing, delivering and construction of additional manholes or modification of manholes/catch basins, extending chute connections, house connections, using alternate materials and methods, poured-in-place structures, etc., necessary in order to complete sewer installation and, avoid gas interferences in the project area, including street intersections. The term sewer facility shall include, but not be limited to, all sewer pipe and appurtenances, manholes, catch basins, catch basin chutes, etc. Such work shall be performed as directed by the Engineer and in accordance with contract specifications and latest edition of sewer standards and specifications.

3. Quantity Overruns, EP-7 Funded Bid Items:

No quantity overrun, in excess of one hundred twenty five (125) percent, shall be permitted for EP-7 funded bid items (gas) included in this contract, except when Resident Engineer determines that such overruns are caused by field modifications to planned City work, or approved construction methods, or contract scope changes. The Engineer will notify the gas facility operator in writing of overruns. The Contractor must invoice the gas facility operator for payment of all overruns, which will be paid by the gas facility operator at the contract bid price. Gas facility operator will be entitled to reimbursement by NYCDEP under established cost sharing procedures.

4. Changes And Extra Work:

This section is not applicable to work defined under "Emergency Reconstruction Contracts" or so-called "Where and When Contracts" since these projects, by definition, inherently encounter unanticipated gas facilities and cannot be pre-engineered. In all other cases, any contract changes proposed for City work shall also cover and include all associated changes to support and protection of gas facilities affected by such changes to City work. In all other cases where the Contractor finds that City work cannot be performed as planned and specified and/or, as approved because of a need to support, protect and/or alleviate interferences from gas facilities that were not listed and/or shown, or incorrectly shown in contract plans and specifications, he shall immediately notify the Resident Engineer and the facility operators' representative of his findings. Resident Engineer shall promptly examine such claims and determine whether or not such work is covered by contract bid items and /or specifications (contract bid items and specifications shall include city contract items as well as EP-7 items). The Resident Engineer shall also

examine the claim to determine if the application of EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" is appropriate to resolve the claim. If upon examination, the Engineer determines that such field conditions were unanticipated (not shown and/or listed, or incorrectly shown in contract documents) and are not covered by bid items and contract specifications, he shall then direct the Contractor and the affected facility operator to negotiate the cost of supporting and protecting, and/or alleviating the impact on City work caused by such unanticipated gas facilities with each other with the understanding that the performance of City work shall continue during negotiations. If a cost agreement is reached, the Contractor and facility operator shall adjust such costs between themselves at no additional costs to the City contract. If the Contractor and affected facility operator do not reach an agreement concerning the price to be paid for the extra work within five (5) business days of the Engineer's directive to engage into such negotiations and, after considering: public safety and inconvenience, requirements of laws and regulations applicable to private utilities, integrity of all utility systems, including but not limited to sewer and water, gas, electric, telephone and, cable TV facilities, sound engineering practices, cost (long and short term) to all affected parties, and potential City work delays, then the Resident Engineer, depending on nature and severity of interferences with City work, shall either, direct the facility operator to relocate or replace its facilities at its own discretion and cost, reimbursable by NYCDEP under established gas cost sharing procedures or, direct the Contractor to perform the utility work on actual time, material and equipment costs basis pursuant to relevant contract requirements and amendments. Contract bid prices for any applicable items of work involved shall be applied, or converted to an allowance for time and material charges. Changes shall be for affected portions of utility work and, shall be processed with EP-7 funds.

5. Excavation:

All excavators shall notify the NYC/LI One Call Center at 1-800-272-4480 at least two (2) working days, not including the day of the call, but not more than ten (10) working days in advance of the start of any excavation work. The gas company(ies) will mark out its facilities within the project limits and provide Construction Inspector(s) during all excavation work in close proximity (within twelve (12) inches) to gas facilities. The Contractor shall exercise extreme caution when excavating in the vicinity of any gas facilities. Hand excavation shall be performed within twelve (12) inches of gas facilities. The Contractor prior to excavating underneath these facilities shall adequately support all gas facilities. Standard support details for gas facilities have been included in the specifications. Any damage to gas facilities shall be reported immediately to the gas company(ies). The Contractor shall be responsible for all cost associated with repairs made necessary by damages caused by his operations.

6. Backfilling And Street Restoration:

Backfilling operations and street restorations shall be in accordance with contract requirements.

7. Non-Responsive Bids:

Every gas (EP-7) bid item has a suggested "Not less than" value per unit indicated on contract bid sheet. Bids resulting in cost of less than suggested for EP-7 items are hereby prohibited and if submitted shall be considered NON-RESPONSIVE.

8. Minimum Clearances:

Clearance requirements for City work shall govern and supersede any clearance requirement of gas facility operator. Therefore, a minimum of twelve (12) inches clearance between private utilities and City water mains, sewers or related structures to be installed in this contract shall be maintained. When this clearance is not attainable, the Resident Engineer may allow a minimum of four (4) inches clearance. With less than twelve (12) inches clearance a neoprene/polyethylene shield (to be provided by facility operator) shall be installed as part of all work item specifications. However, if Resident Engineer determines that City work cannot be performed within allowable clearance and no reasonable City accommodation (no-cost change to City work) is possible, the City shall direct the facility operator to remove, relocate, shift, or alter their facility(ies) pursuant to the New York City Administrative Code.

9. Work By Facility Operator:

The facility operator may find it necessary to perform the following types of work during performance of City work: accommodating a contractor's request for gas facilities modifications (in order to facilitate City contractor's proposed construction method) or, remedial and emergency work on gas facilities proper with their own resources and materials if an approved method of construction for City work causes unanticipated disturbances to gas facilities or, replacing defective gas facilities when they are exposed by the Contractor and their actual conditions are observable by the facility operator. Also included in the above category of defective gas facilities are: the presence of environmental contaminants attributable to the gas facility in or around gas facilities. If such work is deemed required by the facility operator or if facility operator is directed by the City to address such deficiencies at any time during the course of construction, the Contractor shall modify the construction schedule at no cost to the City and allow the facility operator five (5) business days to perform such work without interferences. Additional costs to the facility operator (in cases of accommodations) or, Contractor (in cases of defective gas facilities) due to such gas work, if any, shall be the responsibility of the parties involved and not of the City. Such costs shall be a matter of adjustment between the Contractor and the facility operator.

10. Materials Furnished By Facility Operator:

It shall be the Contractor's responsibility to inspect material to be installed by him immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional costs to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

11. Liability And Insurance:

Notwithstanding the provisions of this contract, the existing division of liabilities to third parties shall remain the same as between the City and the company. Therefore, it is specifically agreed by the City, company and Contractor (by bidding on this contract) that for the purpose of any liabilities to third parties, that the City contractor performing work directly and physically relating to gas company facilities in this project, shall be deemed an agent of the company and not an agent of the City, the New York City Municipal Water Finance Authority, or the New York City Water Board. Contractor shall include the company as an additional insured on all insurance policies maintained to comply with the City's insurance requirements.

12. Width And Depth Of Excavation:

Contractor shall not be authorized to deliberately change trench or excavation widths and/or depth specified without Engineer's approval. Enlargement of any side of excavation up to eighteen (18) inches beyond pay limits (or inside face of sheeting) requested by the Contractor for the installation of certain types of sheeting may be granted. However, such enlargements or those greater than allowable shall not be approved when, in the sole judgment of the City, field conditions allow the water mains and sewer work to be performed within the limits specified and, the sole purpose of such enlargement request is to impact adjacent utilities (public or private) whose support and protection are part of this contract. Any approval shall be given at no additional cost to the City contract, including EP-7 funding, and all costs associated with unauthorized enlargements shall be the sole responsibility of the Contractor.

13. Depth And Crossing Angles Of Gas Facilities:

Where gas facilities are shown (or specified as) crossing proposed alignment of sewers, water mains, catch basins and chute connections or any other proposed excavations at specific angles (as measured off plans or sketches or specified in contract), it shall be understood that actual field measurements may deviate (plus or minus) forty-five (45) degrees from those shown or specified. The cover, or depth from street surface to top of facilities, shall be as shown or specified in contract documents, no deviation is to be assumed. Where gas facilities are not shown on contract documents, but their support and protection are otherwise included in this contract then, all references to facilities crossing at "various angles and depth" in the gas sections shall mean that such facilities are crossing sewer, water, catch basin and, catch basin chute, and other excavations at a ninety (90) degree angle to the proposed sheeting line or side of

excavation (for unsheeted trenches) with an allowable deviation of forty-five (45) degrees in any direction, except for catch basin chute excavation where the allowable deviation shall be sixty (60) degrees. Where the cover is not noted or specified, the bottom face of such facilities shall be assumed to be crossing catch basin chutes at a depth of three (3) foot eight (8) inches or less from the street surface. Paragraph No. 2 above shall apply in cases of distribution water main construction. Appropriate bid items and specifications are provided for cases where angle and depth are greater than stated above. This section also applies to work defined in "Emergency Reconstruction Contracts" or so-called "Where and When Contracts". These contracts are not pre-engineered and consequently have no drawings, sketches or determined locations and so, gas facilities encountered will be crossing existing and proposed sewer, water, catch basin/catch basin chutes and all appurtenances at various angles and depths.

14. Maintenance Of Traffic For Gas Work:

All work pertaining to gas bid items and specifications shall be performed within the contract maintenance of traffic plan as specified in the contract document. The bid price for the Maintenance and Protection of Traffic shall cover all work pertaining to gas items. The City shall make compensation for additional maintenance and protection of traffic items in connection with gas item of work only when such additional work is deemed reasonable and necessary by the Resident Engineer and is approved by him prior to its performance.

15. Relocated Gas And Temporary Systems Installation:

In cases where the Contractor is allowed to select the location for temporary construction such as, installation of dewatering headers, wells, well points, etc., he shall not disturb any gas facilities shown on sketches provided in this section. The only exception shall be, if the affected gas company agrees to such relocation and provided that the cost of such relocation is a matter of adjustment between the company and Contractor, and at no cost to the City.

16. Role Of Company Inspector:

In any case in which the City elects to perform some or all support and protection work with its own employees, personnel or contractors, the facility operator shall provide onsite inspectors to approve and certify such support and protection work (exclusive of City accommodations) performed by the City's own employees, personnel, and contractors. Facility operator's inspectors are not authorized to direct City contractor during the performance of contract work. They shall act through the City Resident Engineer and provide him/her required approvals and certifications, prior to preparing partial payments of EP-7 items, in a format and frequency to be prescribed by the appropriate City Head of Construction.

17. Coordination With Gas Company:

The Contractor shall be required to notify the gas company(ies), in writing, at least two (2) weeks prior to the start of final paving in order to allow companies to complete any unfinished gas work located within the area to be paved. Every effort shall be made to maintain gas service with minimum inconvenience to the public.

III - TECHNICAL SECTION

SECTION 6.01 - Trench Crossings; Support And Protection Of Gas Facilities And Services.

1. Description:

Under this section, the Contractor shall provide all labor, materials, equipment, and incidentals required to support and/or protect the integrity of gas mains, services and appurtenances of any sizes, configurations, and operating pressures crossing trench excavations above subgrade for planned construction of sewers

and water mains facilities. A gas service shall be defined as a gas pipe of three (3) inches in diameter or less branching from the main to a customer pick up point or property valve box. A gas main may be any size pipe that is part of a distribution or transmission network other than services described above. Crossings shall be defined as gas facilities spanning the width of excavation (one side to the other side). These crossings may be at various angles and depth as shown on “Gas Cost Sharing Work Standard Sketches Nos. 1 and 1A”, and as specified in “General Provisions; Gas Cost Sharing Work Paragraph No. 13” and, at the locations shown or listed in contract documents. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with contract specifications, plans, and at the directions of the Resident Engineer in consultation with the authorized representatives of the facility operator.

2. Method Of Construction:

A. Protection: In general, the gas facilities shall be protected as required by New York State Industrial Code 753. In particular, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the gas facilities (marked out by facility operators) and to ascertain the clearances and cover of the facilities with respect to the proposed excavation. Upon exposing the affected facilities sufficiently, at the discretion of the Resident Engineer, to ascertain the foregoing, Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, outside a zone of protection whose limit shall be defined as a perimeter located twelve (12) inches from the outside face of each gas facility crossings (See “Gas Cost Sharing Work Standard Sketch No. 2”). If the facilities are in direct interference with City work, meaning that “Minimum Clearances” described in “General Provisions; Gas Cost Sharing Work Paragraph No. 8” cannot be maintained, and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07, and “General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8”.

B. Support: Gas mains or services crossing excavations equal or less than four (4) feet wide are generally self supporting, unless field conditions as determined by the Resident Engineer require otherwise. The support requirements for gas mains and services crossing excavations greater than four (4) feet wide shall be as shown on the attached “Gas Cost Sharing Work Standard Sketch No. 1” and Contractor shall use sheeting methods that permit the maintenance of gas facilities in their existing locations and configurations. Alternate methods equivalent to those shown on the sketch or accommodations by the facility operator proposed by the Contractor in order to facilitate the execution of the specified work shall be allowable, provided that prior approval is obtained by the Contractor from the Engineer and the facility operator. The support and protection of gas facilities crossings shown on plans, drawings, listings or otherwise identified in this contract shall not be circumvented with the issuance of so called "order outs".

3. Method Of Measurement:

The Contractor shall be paid for supporting and/or protecting gas facilities crossing trench excavations under the appropriate bid items covered by this section. The Contractor shall be directly responsible to the facility operator for the total cost of using any alternate method requiring the use of resources owned by the facility operator. Regardless of the method used, the City shall pay the bid price for the appropriate support and/or protect item of work. The average rate charged by the facility operator for alternate support and protection work such as, disconnecting and reconnecting gas services is listed in attached “Schedule GCS-A”.

4. Payment Restrictions:

These items shall not be paid for: gas services crossing unsheeted water main trench excavation; abandoned gas main/services identified by facility operator; gas mains/services crossing trench excavations for fire hydrant branch connections pipes, catch basins and/or chutes (sewer drain pipe), house sewer and/or water services; gas facilities encroaching any face of excavation for sewer and/or water construction, all of which are covered under other contract sections. Also this item shall not be paid for new gas mains and services crossing water trenches when trenching for such new facilities has been

performed by the Contractor in common with trench excavation for City work (overlapping trench limits). The cost of supporting and protecting such gas facilities crossings shall be deemed included in the cost of trench excavation for the new gas facilities. This payment restriction shall apply even if such common trench gas excavation is not part of the contract. The prices bid for items covered by this section represent full compensation to Contractor to completely perform the work described. No other bid items shall be combined with these items in order to pay for gas main and/or services crossing excavations specified herein.

5. Method Of Payment:

Each (Ea.) gas facility crossing trench excavation as described in these specifications shall be counted for payment.

6. Price To Cover:

The cost of timber/steel supports installed for gas facilities shall be included in the bid price. The bid price for each crossing shall also cover all additional supervision, labor, material (except those provided by the facility operator), equipment and insurance necessary to completely maintain the gas facilities without disruption of service to the customers and in accordance with contract plans, specifications and facility operator standards. The price shall also include: changes of method of operations; sheeting modifications where necessary to accommodate the gas facilities crossings; installation and removal of water pipe under gas facilities (so called "snaking"); extra care during excavation (including hand excavation under existing single and multiple gas facilities); extra backfilling and compaction around, over and under gas facilities; installation and removal of sheeting around gas facilities; associated maintenance and protection of traffic; barricades; and traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals for the extra excavation associated with the installation of catch basin sewer drain pipes (chute) under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents and also, for the support and protection of these facilities during associated excavation and backfill operations. The gas company operating in the area, (facility operator), owns these facilities.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation is required when catch basin sewer drain pipes are installed at an upstream invert depth lower than four (4) feet (up to a maximum of six (6) feet) from the proposed pavement grade because the bottom faces of interfering gas mains and appurtenances are located at a depth greater than three (3) foot eight (8) inches from proposed pavement surface (See “Gas Cost Sharing Work Standard Sketch No. 4”).

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered starting from catch basin structure proper and that prevents the installation of the chute connection at an upstream cover less than or equal to three (3) feet or any other minimum cover required to avoid City facilities (e.g. water, sewer, etc.) as directed by the Resident Engineer.

4. Payment Restrictions:

This item shall not apply and related bid item shall not be paid in cases where:

A. Upstream invert chute is more than six (6) feet deep because of gas facilities.

B. Chute cannot be installed above existing gas facilities because of interferences with other private facilities that are not otherwise covered under this contract, regardless of upstream invert depth.

The above cases shall be at no cost to the City, but shall be a matter of adjustment between the Contractor and the facility operator(s).

5. Price To Cover:

The bid price shall cover the additional cost of all additional supervision, labor, materials, equipment and insurance, to complete the installation of catch basins and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities; backfilling and all other items necessary to perform all work incidental thereto including: installation and removal of drain pipe under gas facilities ("snaking"); widening of trenches to facilitate the above work; subsequent additional backfill and pavement restoration; modifying precast catch basin window to accommodate connection; changing sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work. The price shall not include removal of ledge rock and/or excavation of boulders in open cut.

SECTION 6.02.1 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Upstream Inverts Greater Than Six (6) Feet.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance and incidentals for the extra excavation of catch basin chutes where the upstream invert is greater than six (6) feet under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents or as determined by field conditions and also, for the support and protection of these facilities during the associated excavation, sheeting and backfilling operations.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation and sheeting is required when the catch basin chute installed at an upstream invert depth lower than six (6) feet from the proposed pavement grade because the bottom faces of the interfering gas mains and appurtenances are located at a greater depth than three foot eight inches from the proposed pavement surface only.

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered during such excavation when initiated from catch basin structure and that prevents the installation of the chute at an upstream cover less than or equal to three (3) feet or any other cover required to avoid City facilities as directed by the Resident Engineer.

4. Payment Restriction:

This item shall not apply and related bid item shall not be paid in cases where:
Upstream invert chute is less than or equal to six (6) feet deep because of gas facilities. Section 6.02 shall be paid.

5. Price To Cover:

The bid price shall cover the additional cost of all supervision, labor, materials, equipment and insurance to complete the installation of catch basin and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities incidental thereto; widening of trenches to facilitate the above work; subsequent additional backfilling and pavement restoration; modifying pre-cast basin window to accommodate connection; the installation of catch basin with deeper sumps as specified; additional sheeting and changes in sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.03 - Removal Of Abandoned Gas Facilities. All Sizes.

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services, or appurtenances thereof, located within the street shown on the contract plans, owned by gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work.

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any resulting from this choice shall be a matter of adjustment between the Contractor and facility operator only, and at no cost to the City.

3. Restrictions:

The facility operator shall be solely responsible for its contaminated gas facilities, surrounding contaminated soil and their disposal and abatement procedures, unless contract bid items are applicable and provided for such work. In such cases, the quantity removed shall be charged to EP-7 bid item "UTL- GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" at the City bid prices.

4. Method Of Measurement:

Abandoned gas pipeline removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment, and insurance necessary to complete this work in accordance with the contract plans and specifications, including

excavation by hand around and under other City and facility operator owned properties and, where necessary, support and protection of such properties. The price shall also cover breaking, cutting, and/or burning of abandoned gas pipes and their disposal from the site; sealing open ends remaining in the excavation with concrete or caps (caps to be provided by the facility operator) and backfilling of the area where the pipeline has been removed with clean backfill. The price shall also include any required dump charges. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and restoration associated with abandoned gas facilities removal, all of which are covered under Section 6.06.

SECTION 6.03.1 - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For National Grid Work Only)

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services or appurtenances thereof, located within the street shown on the contract plans, owned by the gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work. These gas facilities may be coated with Coal Tar Wrap and so, may require special handling and disposal methods as specified in National Grid Standard Operating Procedure 12-2, Coal Tar Wrap Handling and 12NYCRR56.

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on the facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, the Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, the facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any, resulting from this choice shall be a matter of adjustment between the Contractor and the facility operator only, and at no cost to the City contract. Should such investigation result in the determination that the abandoned gas facilities do not contain Coal Tar Wrap then the removal of said facilities shall be covered under separate item (See Section 6.03).

3. Requirements:

The City Contractor shall excavate abandoned gas facility sufficiently, either in its entirety, or at locations determined by Contractor to allow the removal of Coal Tar Wrap (if present on the abandoned gas facility) and to facilitate the safe extraction of manageable lengths of abandoned pipe without damage to adjacent facilities, utilities or City structures either parallel to or crossing above or below abandoned gas facility. The Contractor is to allow access to the designated cutting points within the Contractor's trench by authorized National Grid personnel who will remove the Coal Tar Wrap as per National Grid procedures. This work by National Grid personnel shall be performed in a timely fashion and shall not unduly impede the Contractor's progress and/or productivity. Upon completion of the coating removal, the Contractor shall be allowed to cut, burn or grind the gas facility and remove the section of abandoned pipe. The Contractor at a site designated by the Contractor shall stockpile the removed pipe. The facility operator will be responsible to provide trucking and disposal services with its own personnel and shall remove the stockpiled pipes during off hours or during such time as agreed to by the Contractor. Since the pipe

removed will remain the property of the facility operator and is to be disposed of by the facility operator, the facility operator shall be responsible for any required notifications, filings, dump charges and incidentals associated with the disposal of abandoned gas facilities found to contain Coal Tar Wrap.

4. Method Of Measurement:

Abandoned gas pipeline removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment and insurance necessary to complete this work in accordance with the contract plans and specifications, including excavation by hand around and under other City and facility operator owned properties and, where necessary, the support and protection of such properties. The cost shall also include hand excavation in the area(s) of proposed abandoned pipe cut(s), cutting and/or burning of abandoned gas pipes and stockpile of removed sections of abandoned pipe and associated maintenance and protection of traffic, blocking and temporary fencing if required. The unit price shall also cover sealing open ends remaining in the excavation with concrete or end caps (end caps to be provided by the facility operator) and backfilling of the area where the abandoned pipeline has been removed with clean backfill material. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and/or restoration (temporary and permanent) associated with abandoned pipe removal ("lost trench"), all of which are covered under separate Section 6.06. The price shall also include allowance for any loss of productivity by the Contractor due to required facility operator work to remove pipe coating and prepare pipe for cutting as well as any change in Contractor's excavation method, additional trucking and/or stockpiling costs.

SECTION 6.03.1a - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For Con Edison Work Only)

1. Description:

Under this section the Contractor shall provide all labor, material, equipment, insurance and, incidentals required to prepare abandoned gas mains, services and appurtenances thereof located within the street shown on contract plans, owned by the gas company operating in the project area (facility operator), for removal due to interference with proposed City work. These abandoned gas facilities were, at one time, used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural, manufactured or a combination of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distribution or furnishing of gas in enclosed containers. Such preparation for removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work. These gas facilities may be coated with Coal Tar Wrap which may contain asbestos or PCB's and so, may require special handling and disposal methods as specified in Con Edison - ASBESTOS MANAGEMENT MANUAL, CHAPTER 6 - ASBESTOS WORK PROCEDURES, SECTION 06.04 - COAL TAR WRAP REMOVAL. For under 25' (feet) in length and an approved NYC-DEP variance for over 25' (feet).

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas Facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on the facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities. However, the facility

operator may prefer to make this test during performance of City work in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any, resulting from this choice shall be a matter of adjustment between the Contractor and the facility operator only, and at no cost the City contract. Should such investigation result in the determination that the abandoned gas facilities do not contain Coal Tar Warp then the removal of said facilities shall be covered under separate item (See Section 6.03).

3. Requirements:

The Contractor shall excavate abandoned gas facility sufficiently, either in it's entirety, or at locations determined by Contractor to allow the removal of Coal Tar Wrap (if present on the abandoned gas facility) and to facilitate the safe extraction of manageable lengths of abandoned pipe without damage to adjacent facilities, utilities or city structures either parallel to or crossing above or below abandoned gas facility. The Contractor is to allow access to the designated cutting points within the Contractors trench by authorized Con Edison personnel who will remove the Coal Tar Wrap as per Con Edison and/or NYC-DEP approved procedures. This access shall conform to all applicable codes, rules & regulations. This work by Con Edison personnel shall be performed in a timely fashion and shall not unduly impede the Contractors progress and/or productivity. Upon completion of the coating removal, the Contractor shall be allowed to cut, burn or grind the gas facility and remove the section of abandoned pipe. Contractor shall designate a specific site to stockpile those removed pipes. The facility operator will be responsible to provide trucking and disposal services with its own personnel and shall remove the stockpiled pipes during off hours or during such time as agreed to by the Contractor. Since the pipe removed will remain the property of the facility operator and is to be disposed of by the facility operator, the facility operator shall be responsible for any required notifications, filings, dump charges and incidentals associated with the disposal of abandoned gas facilities found to contain Coal Tar Wrap.

4. Method Of Measurement:

Abandoned gas facility removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment and insurance necessary to complete this work in accordance with the plans and specifications, including, but not limited to, excavation by hand around and under other City and facility operator owned properties and, where necessary, the support and protection of such properties. The cost shall also include hand excavation in the area(s) of proposed abandoned pipe cut(s), cutting and/or burning of abandoned gas pipes and stockpile of removed sections of abandoned pipe and associated maintenance of traffic, blocking and temporary fencing if required. The unit price shall also cover sealing open ends remaining in the excavation with concrete or end caps (end caps to be supplied by facility operator) and backfilling of the area where the abandoned pipeline has been removed with clean backfill material. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and/or restoration (temporary and permanent) associated with abandoned pipe removal ("lost trench"), all of which are covered under separate Section 6.06. The price shall also include allowance for any loss of productivity by the Contractor due to required facility operator work to remove pipe coating and prepare pipe for cutting as well as any change in Contractor excavation method, additional trucking and/or stockpiling costs.

SECTION 6.04 - Adjust Hardware To Grade Using Spacer Rings/Adaptors. (Street Repaving.)

1. Description:

Under this section, the Contractor shall provide all labor, supervision, materials, equipment, insurance and incidentals required to adjust to final grade gas street surface hardware located within the contract area

boundaries shown on the plans. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in concurrence with authorized representative of the facility operator.

2. Materials:

The facility operator shall furnish and deliver all prefabricated hardware parts required. These include adaptors for the grade adjustment proper and new street hardware if existing ones are found to be defective, all in accordance with the facility operator standards and City rules and regulations. The Contractor shall notify the facility operator of the installation schedule at least three (3) business days before materials are required on the site. Should the facility operator fail to deliver the necessary material according to any schedule mutually agreed upon by the Contractor and facility operator, the City shall not be responsible for any delays attributable thereto, nor for the failure of delivery of such materials. On project where material storage is not permitted on site, the facility operator shall deliver the required material to the Contractor's yard and it shall be the Contractor's responsibility to transport the material to the work site when needed for installation. It shall also be the Contractor's responsibility to inspect the materials to be installed by him immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional expense to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

3. Method Of Measurement:

The Contractor shall be paid for each six (6) inch round box and/or nine (9) inch square box adjusted to grade regardless of adjustment height requirements.

4. Price To Cover:

The unit price bid for this item shall include all additional labor, supervision, insurance, equipment and, material (except those to be provided by the facility operator), required to adjust each box to grade as required in the contract plans and specifications. The bid price shall also include the removal of existing frames and covers from existing facilities to be salvaged and returned to the facility operator and, all material transportation from the Contractor's material storage yard to the work site. In addition the bid price shall include "chipping" around existing box using appropriate means and methods where grinding is required.

SECTION 6.05 - Adjust Hardware To Grade By Resetting. (Road Reconstruction.)

1. Description:

Under this item, the Contractor shall provide all labor, supervision, materials, equipment, insurance and incidentals required to adjust to the proposed grade gas street surface hardware located within the contract area boundaries shown on the plans. The gas company operating in the area, (facility operator), owns these facilities. The work shall consist of either building up or lowering or resetting the casting by removing the existing frame and cover building up or decreasing the existing installation, replacing the frame and/or cover if damaged or worn out, as determined by the Resident Engineer, with a new frame and/or cover furnished by the owner, and setting the frame and cover to new elevation. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer.

2. Materials:

The facility operator shall furnish and deliver all new hardware parts required. The Contractor shall furnish materials such as mortar, bricks and concrete in compliance with contract requirements. At locations where high-early strength concrete is required under this contract to be placed adjacent to gas facilities, then the requirement for concrete shall be high-early strength complying with the current New York State Department of Transportation, Standard Specifications for Class F concrete. Existing castings may be replaced as required and deemed necessary by the Engineer and by City rules and regulations. The

Contractor shall install the new castings of various sizes furnished by the facility operator. The Contractor shall notify the facility operator of the installation schedule at least three (3) business days before materials are required on the site and, shall provide off-loading services to the facility operator. Should the facility operator fail to deliver the necessary material according to any schedule mutually agreed upon by the Contractor and facility operator, the City shall not be responsible for any delays attributable thereto, nor for the failure of delivery of such materials. Such delays shall be a matter of adjustment between the Contractor and the facility operator. On project where material storage is not permitted on site, the facility operator shall deliver the required material to the Contractor's yard and it shall be the Contractor's responsibility to transport the material to the work site when needed for installation. It shall also be the Contractor's responsibility to inspect the materials to be installed by him, immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional expense to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

3. Methods Of Construction:

The Contractor shall remove and reinstall existing castings or install new castings to the proposed grade. Setting and resetting the castings shall be done with mortar and brick according to the standards of the facility operator. Work shall be performed in a workmanlike manner. Castings that are deemed unacceptable for resetting shall remain the property of the facility operator and he shall be responsible for their removal and proper disposal from site. No traffic shall be allowed on adjusted street hardware until permitted by the Engineer.

4. Method Of Measurement:

The Contractor shall be paid for each gas hardware adjusted to grade regardless of size or adjustment height requirements (up or down).

5. Price To Cover:

The unit price bid for this item shall include all additional labor, supervision, insurance, equipment and, material (except those to be provided by the facility operator), required to adjust each gas hardware to grade as required in the contract plans and specifications. The bid price shall also include the removal of existing frames and covers from existing facilities; building up the existing installations with bricks and mortar, or lowering the existing installation by removing bricks and mortar; replacing damaged frames and/or covers with new frames and/or covers furnished by the facility operator; setting the frames and covers to the new elevations; protect existing installations; repair minor structural damages to existing installations prior to resetting frames; unloading of furnished castings at the Contractor's yard and transporting castings from the Contractor's yard to the job site as required; completing the work in accordance with the contract plans, specifications and, at the directions of the Engineer. In addition the bid price shall include "chipping" around existing gas facilities using appropriate means and methods where grinding is required.

SECTION 6.06 - Special Care Excavation And Backfilling.

1. Description:

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to support and protect the integrity of live gas facilities including mains, services, related structures and appurtenances during excavations. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in consultation with authorized representatives of the facility operator.

2. Applicability Of Section:

This section shall apply to live gas facilities of various sizes located within two (2) feet of any face of unsheeted excavation, (unsheeted excavation refers to any excavation performed for city work and includes excavations performed that are to be subsequently sheeted using approved methods) and paralleling or,

encroaching any face of excavation. Also, for crossings greater than forty-five (45) degrees and/or located at a cover depth greater than five (5) feet from existing street surface. Parallel facilities are not exposed at any time during excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). Encroaching facilities are partially exposed inside the limit of excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). This section shall also apply to gas facilities crossing catch basins excavation, and catch basins sewer connections (chutes) trench excavation only when extra depth (covered in other section), is not required for chutes installations because of such utilities interferences (See "Gas Cost Sharing Work Standard Sketch No. 3"). This section shall also apply to gas services (if shown or otherwise listed in contract documents) crossing unsheeted excavations for water mains, gas facilities crossing fire hydrant branch connections, house sewer and/or water service connections excavations. This section shall also apply for so called "loss trench", as described further, and for additional excavation (pavement and/or soil), backfilling, compaction, roadway base and pavement restoration due to abandoned gas facilities, only if removed by Contractor. If operating status of gas facilities cannot be determined prior to excavation then such facilities shall be considered live and this section shall fully apply. The excavation around fully exposed live gas facilities along and within limits of excavation (not crossings) shall be covered by this section also (not shown on "Gas Cost Sharing Work Standard Sketch No. 5"), however the support requirement, if any is required, of such facilities is beyond the scope of these specifications and therefore shall be the responsibility of facility operator to determine and prescribe, at no cost to the City contract, but shall be a matter of adjustment between the Contractor and facility operator.

3. Payment Restriction:

No special care excavation shall be paid for abandoned gas facilities paralleling and/or encroaching excavation and therefore are not in direct interference with City work. Except as allowed in this section, the bid item specified under this section shall not be used in combination with items covered under other sections for work done due to a particular gas facility. This item shall not be paid for new gas facilities when trenching for such new facilities has been performed by the Contractor of record in common with trench excavation for City Work (overlapping trench limits). The cost of excavating with care as defined in this section shall be deemed included in the cost of trench excavation for the new gas facilities. This restriction shall apply even if such gas common trench excavation is not part of the contract. If facilities are in direct interference with City work, meaning that "Minimum Clearances" described in "General Provisions; Gas Cost Sharing Work Paragraph No. 8" cannot be maintained and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07 and "General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8".

4. Method Of Construction:

All excavation in the vicinity of gas facilities shall be as required by NYS Industrial Code 753. Where these facilities are paralleling and located two (2) feet or less from the limits of the proposed excavation, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) to ascertain the clearances of these facilities with respect to the proposed excavation. Once the location of these facilities with respect to the proposed excavation is verified to the satisfaction of the Resident Engineer, the Contractor shall then proceed with a combination of hand and machine excavation as required preserving the integrity of the facilities. The installation of timber supports or underpinning, when soil foundation cannot fully support partially exposed pipes, may be required to prevent pipe movement as directed by the Resident Engineer.

5. Method Of Payment:

The unit price for this work item shall be based on cubic yard (CY) of average excavation with care and, is to be considered as an incremental cost for performing City work with gas facilities interferences.

6. Method Of Measurement:

A. For Paralleling Facilities: Volume calculated as: Depth as measured from existing street surface to the bottom of unsheeted trench excavation allowable by OSHA regulations, multiplied by, the width measured as one (1) foot from the face of excavation toward the center of excavation, multiplied by

the length of parallel facility, divided by twenty-seven (27) cubic feet per cubic yard (See “Gas Cost Sharing Work Standard Sketch No. 5”). The gas facility is no longer considered to be in interference once sheeting has been installed, therefore no further compensation for paralleling facilities as described above will be made.

B. For Encroaching Facilities: Volume calculated as: Depth of trench as allowable by OSHA, maximum up to five (5) feet multiplied by, the width of partially exposed pipe plus one (1) foot, multiplied by the length of facility encroachment, divided by twenty-seven (27) cubic feet per cubic yard (See “Gas Cost Sharing Work Standard Sketch No. 5”).

C. Fully Exposed Gas Facilities: (Not shown on “Gas Cost Sharing Work Standard Sketch No. 5”) along and inside trench and/or crossing trench at an angle greater than forty-five (45) degrees and/or a cover depth greater than five (5) feet from the existing street surface. The volume shall be measured as the depth of trench excavation multiplied by the distance measured along the sheeting line between two (2) points of intersections of the gas facilities and the sides of trench excavation, multiplied by the width of trench excavation.

D. For Additional Excavation And Restoration Due To So Called "Loss Trench", When The Integrity Of Pavement And Soil Above And Around Existing Live Gas Facilities Cannot Be Maintained Due To Its Lack Of Cohesiveness: Volume shall be calculated as: Depth of unsheeted trench excavation multiplied by width measured as distance of facility from closest edge of unsheeted excavation plus, width of facility proper plus, one (1) foot or a maximum width of three (3) feet multiplied by length of facility fully exposed divided by, twenty-seven (27) cubic feet per cubic yard (not shown on “Gas Cost Sharing Work Standard Sketch No. 5”).

E. For Facilities Crossing Excavation For Catch Basins, Or Chutes Installations (When NYCDEP Funded) Or Fire Hydrant Branch Connections, Or Unsheeted Water Main Trench, Or House Sewer And/Or Water Services: Volume calculated as: Depth as measured from existing street surface to the bottom of the trench excavation multiplied by, the width taken as the outside diameter of pipe or the width of structure plus one (1) foot on either side (two (2) feet), multiplied by, the length of exposed facility crossing the trench, divided by twenty-seven (27) cubic feet per cubic yard (not shown on “Gas Cost Sharing Work Standard Sketch No. 5”).

Overlapping volume dimensions measured as described above may occur when multiple facilities are paralleling excavations, encroaching excavations or crossing catch basins and catch basin chute installations. In such cases, all such facilities shall be counted as one limited by the extreme pipes, faces (See “Gas Cost Sharing Work Standard Sketch No. 2”). The volume shall then be calculated as described above.

7. Price To Cover:

The bid price shall also cover all additional supervision, labor, material, equipment and insurance necessary to excavate while protecting and maintaining (excluding supports for fully exposed live gas) gas facilities without disruption of service to the public and in accordance with contract specifications. The price shall also include, changes of sheeting method and excavation width configuration where necessary to accommodate gas facilities in their existing locations; difficulties during the installation of catch basins, chute connections, hydrant branch, and house sewer and water connections under or over gas facilities; loss of productivity due to slower rate of excavation (special care) during excavation, including the use of such methods as: hand excavation around existing single and multiple facilities, extra excavation and backfilling due to lost trench because of existing and adjacent gas facilities, compaction, removal of sheeting from the facilities, extra roadway base restoration and temporary pavement, associated maintenance and protection of traffic, barricades, and traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.06A - Special Care Excavation and Backfilling for Transmission Mains. (Transmission Main is described as any gas main with a MAOP greater than 124 psig)

1.Description:

Under this section, the contractor shall provide all labor, materials (except for sand to be utilized for backfill of a one-foot envelope around the facility to be furnished by the facility operator), equipment, and incidentals required to support and protect the integrity of Gas Transmission Main during excavations. This facility is owned by the gas company operating in the area, hereafter referred to as facility operator. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in consultation with authorized representatives of the facility operator.

2.Applicability of Section:

This section shall apply to Transmission Main of various sizes located within any excavation sheeted or unsheeted (excavation refers to any excavation performed for city work and includes excavations performed that are to be subsequently unsheeted/sheeted using approved shoring methods and paralleling, encroaching, and crossing any excavation. Parallel facilities are not exposed at any time during excavation (within 2' of edge of excavation)). Encroaching facilities are partially/fully exposed inside the limit of excavation. This section shall also apply to gas facility crossing catch basins excavation and catch basins sewer connections (chutes), water mains, fire hydrant branch connections, sanitary sewer, storm sewer, combination sewer, house sewer and/or water service connections excavations. The excavation around fully exposed live gas facilities along and within limits of excavation shall be covered by this section also, however the support requirement, if any is required, of such facilities is beyond the scope of these specifications and therefore shall be the responsibility of facility operator to determine and prescribe, at no cost to the City contract, but shall be a matter of adjustment between the contractor and facility operator.

3.Payment Restriction:

The bid item specified under this section shall not be used in combination with items covered under other sections for work done due to a particular gas facility. This item shall not be paid for new gas facilities when trenching for such new facilities has been performed by the contractor of record in common with trench excavation for City Work (overlapping trench limits). The cost of excavating with care as defined in this section shall be deemed included in the cost of trench excavation for the new gas facilities. This restriction shall apply even if such gas common trench excavation is not part of the contract. If facilities are in direct interference with City work, meaning that "minimum clearances" described in the General Provisions for Gas Cost Sharing (Para. No.8) cannot be maintained, the excavation shall be abandoned and the contractor shall be compensated as per the provisions specified in Paragraphs Nos. 5 and 6 of this item (6.06A).

4.Method of Construction:

All excavations in the vicinity of gas facilities shall be as required by NYS Industrial Code 753. No saw cutting of pavement or masonry for gas mains having less than 2 feet of cover to break asphalt/concrete as determined by the facility operator. The contractor shall use power excavation for the removal of pavement or masonry but only to the depth of such pavement or masonry **(breaking of pavement or masonry shall be done by means of hand held pneumatic breaking equipment).** Upon removal of pavement or masonry the contractor shall use hand excavation methods only **(pick and shovel; no power tools)** to ascertain the clearances of these facilities with respect to the proposed excavation. Once the location of these facilities with respect to the proposed excavation is verified to the satisfaction of the Resident Engineer and the facility operator the contractor shall then proceed with hand only within the zone of protection described as 2 feet from the face of the facility in all directions of the facility as required to

preserve the integrity of the facility. Once outside of the zone of protection as described above the contractor may use a combination of hand and machine to complete the excavation.

5.Method of Payment:

The unit price for this work item shall be based on cubic yard (CY) of average excavation with special care and, is to be considered as an incremental cost for performing City work with gas facilities interferences.

6.Method of Measurement:

A.For Paralleling Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility,multiplied by, the width measured as two (2) feet from the face of excavation toward the center of excavation, multiplied by the length of parallel facility, divided by twenty-seven (27) cubic feet per cubic yard Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face of facility, beyond 2 feet from the face of facility the contractor can use a combination of hand and machine.

B.For Encroaching Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multipliedby, the width measured as two (2) feet plus the exposed facility toward the center of excavation,multiplied by the length of the encroached facility, divided by twenty-seven (27) cubic feet per cubic yard.Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face offacility, beyond 2 feet from the face of facility the contractor can use a combination of hand and machine.

C.Fully Exposed Gas Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multipliedby, the width measured as two (2) feet from the face of the facility on either side plus the facility, multipliedby the length of the facility, divided by 27 cubic feet per cubic yard. Only hand excavation shall be utilizedwithin the zone of protection identified as 2 feet from face of facility in all directions, beyond 2 feet fromthe face of facility in all directions the contractor can use a combination of hand and machine.

D.For Additional Excavation And Restoration Due To So Called "Loss Trench", When The IntegrityOf Pavement And Soil Above And Around Existing Live Gas Facilities Cannot Be maintained DueTo Its Lack of Cohesiveness:

Volume shall be calculated as: Depth of unsheeted trench excavation multiplied by width measured asdistance of facility from closest edge of unsheeted excavation plus, width of facility proper plus, one (1) footor a maximum width of three (3) feet multiplied by length of facility fully exposed divided by, twenty-seven(27)cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").

E.For Facilities Crossing Excavation For Catch Basins, Or Chutes Installations (When NYCDEPFunded) Or Fire Hydrant Branch Connections, Or Unsheeted Water Main Trench, Or House SewerAnd/Or Water Services:

Volume calculated as: Depth as defined above multiplied by, the width taken as the outside diameter ofpipe or the width of structure plus one (1) foot on either side (two (2) feet), multiplied by, the length ofexposed facility crossing the trench, divided by twenty-seven (27) cubic feet per cubic yard (not shown on"Gas Cost Sharing Work Standard Sketch No. 5").

7.Price to Cover:

The bid price shall also cover all additional supervision, labor, material, equipment and insurance necessary to excavate while protecting and maintaining (excluding supports for fully exposed live gas) gas facilities

without disruption of service to the public and in accordance with contract specifications. The price shall also include, changes of sheeting method and excavation width configuration where necessary to accommodate gas facilities in their existing locations; difficulties during the installation of catch basins, chute connections, hydrant branch, and house sewer, sanitary sewer, storm sewer, combination sewer and water connections under or over gas facilities; loss of productivity due to slower rate of excavation (special care) during excavation, compaction, removal of sheeting from the facilities, extra roadway base restoration and temporary pavement, associated maintenance of traffic, barricades, and traffic plates that may be required to temporarily close and/or complete the work. Breaking shall be done by means of hand held pneumatic breaking equipment. Inspection of exposed mains shall be performed by facility operator in a timely fashion and shall not unduly impede contractor's progress or productivity.

SECTION 6.07 - Test Pits For Gas Facilities.

1. Description:

Under this section, the Contractor shall furnish all labor, materials, insurance, equipment and appliances necessary to excavate, sheet and, maintain test pits at locations approved by the Resident Engineer in consultation with the facility operator. Test pits shall be dug in order to ascertain exact locations, cover and invert elevations, clearances, alignment and operating status (live or dead) of existing gas facilities. The Contractor shall inspect jointly with the Resident Engineer and facility operator, gas facilities and other structures uncovered, take all relevant measurements and elevations as directed by the Resident Engineer. Tests to determine operating status of gas facilities shall be performed by facility operator. The pits shall be covered with steel plates during daytime nonworking hours, and uncovered, as required, until the inspection work is completed. Testing of gas facilities may require a maximum of four (4) hours. Then, the pits shall be backfilled with clean fill, and resurfaced with temporary pavement. All traffic shall be maintained and all safety measures as stipulated shall be complied with.

2. Methods Of Construction:

A. Excavation: Existing pavement to be removed shall be neatly cut along lines of removal with a saw or other approved equipment which leaves a neat straight joint line along the juncture with subsequently replaced pavement. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. Use of hand operated pneumatic and electric jackhammers will be permitted only for breaking pavement and removal of masonry, concrete and boulders, or as otherwise directed by the Resident Engineer. The Contractor shall properly dispose of all materials excavated from test pits away from site. Test pits shall be excavated at locations shown on the contract drawings or as directed by the Resident Engineer. Additional test pits may be required and shall be excavated where required, as ordered by the Resident Engineer. All test pits shall be excavated to a depth and size necessary to locate the existing facilities. Sheeting shall be used when depth of excavation exceeds five (5) feet. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Codes requirements and as specified in contract, whichever is more stringent. Care shall be taken that no existing gas facilities or other structures are broken or damaged. All broken or damaged facilities shall be reported immediately to facility operator who shall decide whether such facilities shall be repaired or replaced by company forces or by City contractor and in conformance with “General Provisions; Gas Cost Sharing Work Paragraph No. 9”. Contractor shall excavate all material encountered, including large masses of concrete, cemented masonry and boulders, as directed by the Resident Engineer. Any type of excavation protection used, shall satisfy the following:

   (a) Industrial Code Rule 753.
   (b) Prevent injury to workers and the public, and avoid damage to existing water, sewer, and gas pipes or other structures, and to pavements and their foundations, through caving or sliding of the banks of the excavation.

   Should it become necessary, as determined by the Resident Engineer, to enlarge any test pit in any dimension after sheeting has been placed, the Contractor shall remove portions of the sheeting, as necessary, enlarge the test pits as directed, and replace the sheeting without additional compensation for this work other than for the additional volume of material excavated.

B. Maintenance Of Test Pits: Excavated test pits shall be maintained free of debris and kept dry by the Contractor in order to permit the inspection and measurements and to determine the locations of facilities. In order to accomplish this, Contractor shall, upon completion of excavation and placement of sheeting (if depth greater than five (5) feet), furnish and install adequate steel plates and posting over the excavated pits and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during nonworking hours. The Contractor shall then, at no additional cost, relocate such barricades, barrels, cones and other warning devices and remove steel plates, as and when directed by the Resident Engineer to facilitate the inspection of

exposed facilities. When work is being performed and the pits are not covered with steel plates, the Contractor shall provide complete and safe access to the test pits as may be required, and he shall provide construction barricades and maintain traffic at all times as shown or as directed by the Resident Engineer. Upon completion of test pit inspection by the Resident Engineer, the pit shall be backfilled by the Contractor as specified in contract, except that backfill material shall conform to contract specifications for such purpose.

C. Pavement And Sidewalk Restoration: After backfilling is completed, the Contractor shall construct a temporary pavement consisting of a minimum of four (4) inches thick asphaltic concrete mixture in roadway areas or a two (2) inches thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent pavement and sidewalk replacement is constructed as specified in contract.

3. Measurements:

The quantity to be measured for payment shall be the number of cubic yards of material removed from within the limits of the pit dimensions as directed by the Resident Engineer. The volume occupied by existing pipes or other structures remaining within the maximum payment lines will not be deducted from the total volume measured except, where the cross sectional area of these facilities exceeds four (4) square feet. As determined by the Resident Engineer, the quantity measured for payment may be proportionate to a fair and reasonable estimate of gas responsibility in the total volume excavated.

4. Price To Cover:

The contract price bid per cubic yard for test pits shall cover all additional costs of labor, material, insurance, equipment, appliances and incidentals required to excavate test pits, including removal and disposal of excavated materials, sheeting, steel plating, backfill, compaction and temporary pavement and sidewalk restoration all in accordance with the specifications and as directed by the Resident Engineer. The price shall also include the cost of providing safe access to the excavation by facility operator for the performance of certain test to determine operating status of gas facilities prior to City work. The price shall also include support and protection of all gas facilities crossing excavation, paralleling and/or encroaching any face of excavation.

SECTION 6.08 - “NO TEXT”

SECTION 6.09 - Trench Excavation and Backfill for New Gas Mains and Services (For National Grid Work Only)

1. Description:

Under this section, the contractor shall furnish all labor, materials, equipment, insurance, permits and incidentals required to break/remove roadway and sidewalk pavement, excavate, backfill and restore gas trenches. The trench to be excavated shall be determined by the size of the gas facility to be installed. The work shall be performed in accordance with applicable specifications, and/or at the direction of the Resident Engineer in consultation with the facility operator.

2. Materials:

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer.

3. Method of Construction:

Excavation – The Contractor shall saw cut and/or break and remove existing roadway which may include

but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. Prior to starting the trenching operation, the contractor shall excavate the appropriate gas main tie-in pits at the extremities of the gas main sections to be replaced. Test pits shall be excavated to determine exact location of all tie-in pits and at appropriate intervals along proposed trench excavation to verify lane and clearances as shown on the contract plans. The tie-in pits shall be adequately protected by the contractor using wood fencing or steel traffic plates until such time when the facility operator has completed the tie-in work. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant, and as directed by the facility operator. The trench shall be adjusted so as to provide for a nominal cover on the new gas facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator in consultation with the Resident Engineer. The width of the trench shall be as directed by the facility operator in consultation of the Resident Engineer. The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of clean sand and in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new gas facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new gas facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator in consultation with the Resident Engineer. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new gas facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator in consultation with the Resident Engineer. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator in consultation with the Resident Engineer. Care shall be taken that no existing gas facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new gas facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

Maintenance of Trench Excavation - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator in consultation with the Resident Engineer, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. National Grid forces will perform all live gas main connections, dead gas main cut-outs, and/or service work associated with disconnecting and reconnecting from old to new gas main The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator in consultation with the Resident Engineer to facilitate the installation of the new gas facilities. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator in consultation with the Resident Engineer. The contractor has the responsibility to maintain and set to grade all National Grid hardware during backfill and pavement restoration. Upon completion of installation of the new gas facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

Pavement and Sidewalk Restoration - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6”) thick asphaltic concrete mixture in roadway areas or a two inches (2”) thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract. Permanent pavement restoration shall be as required by the appropriate contract specifications and as

directed by the Resident Engineer.

4. Method of Measurement:

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated, including roadway pavement, base and/or sidewalk concrete removed within the limits of the trench as directed by the Resident Engineer in consultation with the facility operator. The volume occupied by existing pipes or other structures will be deducted from the total volume measured as shown on contract drawing(s) Title: EP-7 SECT. 6.09 GAS SPECIALTY CONTRACTOR WORK, or as encountered based on existing field conditions.

5. Price to Cover:

The unit price bid per cubic yard for excavation shall include the cost of all supervision, labor, material, equipment, insurance and incidentals necessary to complete excavation trenches, including backfill, compaction testing and restoration of trenches and tie-ins pits as specified or shown on the contract, plans. The bid price shall also include the cost of coordinating the sewer and water main work to be performed by the contractor with the gas installation work to be performed by others. The price shall also include, associated maintenance of traffic, and traffic plates and openings and closings of plates as may be required in order to provide access to the facility operator during the new gas facility installation, and installing, removing and maintaining tight sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand, furnish, place and compact, in compliance with DOT requirements, clean sand backfill following installation of the gas facility. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be deemed included in this item, as required and as directed by the Resident Engineer.

SECTION 6.09a Trench Excavation and Backfill for New Gas Mains and Services (For Con Edison Work Only)

1. Description:

Under this section, the contractor shall furnish all labor, materials, equipment, insurance, permits and incidentals required to break/remove roadway and sidewalk pavement, excavate, backfill and restore gas trenches. The trench to be excavated shall be determined by the size of the gas facility to be installed. The work shall be performed in accordance with applicable specifications, and/or at the direction of the Resident Engineer in consultation with the facility operator.

2. Materials:

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer. Clean sand backfill material shall be used and shall conform to Con Edison specification EO-1181-rev.6, General Specification for Backfilling of Trench and Small Openings.

3. Method of Construction:

Excavation – The Contractor shall saw cut and/or break and remove existing roadway which may include but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. Prior to starting the trenching operation, the contractor shall excavate the appropriate gas main tie-in pits at the extremities of the gas main sections to be replaced. Test pits shall be excavated to determine exact location of all tie-in pits and at appropriate intervals along proposed trench excavation to verify lane and clearances as shown on the contract plans. The tie-in pits shall be adequately protected by the contractor using wood fencing or steel traffic plates until such time when the facility operator has completed the tie-in work. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant, and as directed by the facility operator. The trench shall be adjusted so as to provide for a nominal

cover on the new gas facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator in consultation with the Resident Engineer. The width of the trench shall be as directed by the facility operator in consultation of the Resident Engineer. The width and depth of the trench shall conform to Con Edison Gas Operations drawing 309495 rev. 4, Trench Excavation for Gas Mains Up to 350 PSIG, or as directed by the facility operator in consultation of the Resident Engineer. The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of clean sand and in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new gas facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new gas facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator in consultation with the Resident Engineer. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new gas facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator in consultation with the Resident Engineer. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator in consultation with the Resident Engineer. Care shall be taken that no existing gas facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new gas facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

Maintenance of Trench Excavation - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator in consultation with the Resident Engineer, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. Con Edison forces will perform all live gas main connections, dead gas main cut-outs, and/or service work associated with disconnecting and reconnecting from old to new gas main The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator in consultation with the Resident Engineer to facilitate the installation of the new gas facilities. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator in consultation with the Resident Engineer. The contractor has the responsibility to maintain and set to grade all Con Edison hardware during backfill and pavement restoration. Upon completion of installation of the new gas facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

Pavement and Sidewalk Restoration - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6”) thick asphaltic concrete mixture in roadway areas or a two inches (2”) thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract. Permanent pavement restoration shall be as required by the appropriate contract specifications and as directed by the Resident Engineer.

4. Method of Measurement:

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated, including roadway pavement, base and/or sidewalk concrete removed within the limits of the trench as directed by the Resident Engineer in consultation with the facility operator. The volume occupied

by existing pipes or other structures will be deducted from the total volume measured as shown on contract drawing(s) Title: EP-7 SECT. 6.09 GAS SPECIALTY CONTRACTOR WORK, or as encountered based on existing field conditions.

5. Price to Cover:

The unit price bid per cubic yard for excavation shall include the cost of all supervision, labor, material, equipment, insurance and incidentals necessary to complete excavation trenches, including backfill, compaction testing and restoration of trenches and tie-ins pits as specified or shown on the contract, plans. The bid price shall also include the cost of coordinating the sewer and water main work to be performed by the contractor with the gas installation work to be performed by others. The price shall also include, associated maintenance of traffic, and traffic plates and openings and closings of plates as may be required in order to provide access to the facility operator during the new gas facility installation, and installing, removing and maintaining tight sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand, furnish, place and compact, in compliance with DOT requirements, clean sand backfill following installation of the gas facility. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be deemed included in this item, as required and as directed by the Resident Engineer.

GAS COST SHARING STANDARD SPECIFICATIONS
SCHEDULE GCS-A

Average rate charged by utility companies to Disconnect and Reconnect Gas Services:

1. National Grid - $586.90 per Service/and Visit
2. Con Edison - $524.00 per Service/and Visit

IV - STANDARD SKETCHES; GAS COST SHARING WORK

Hereinafter attached are the following Standard Sketches for Gas Cost Sharing Work:

Sketch No. 1 - Support Requirements For Gas Mains And Services Crossing Excavation Greater Than 4' - 0" Wide At Any Angle

Sketch No. 1A - Support Requirements For Gas Mains Over 16" Diameter Up To And Including 48" Diameter Crossing Excavation At Any Angle

Sketch No. 2 - Typical Methods Of Measurement For Gas Crossings

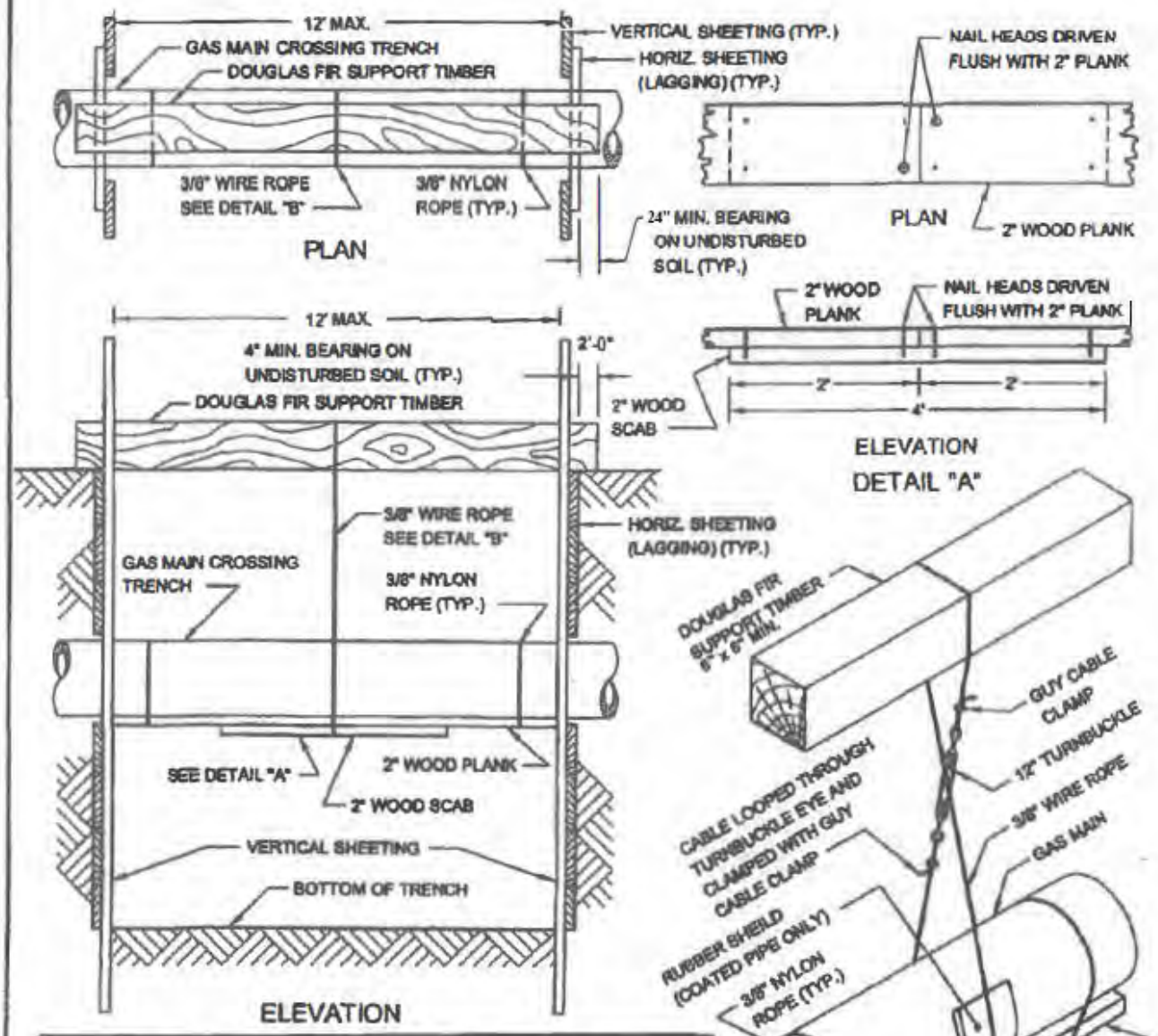
Sketch No. 3 - Utility Crossings During Catch Basin Chute Connection Pipe Installation

Sketch No. 4 - Utility Crossings During Catch Basin Chute Connection Pipe Installation (Extra Depth)

Sketch No. 5 - Gas Main Encroachment On And/Or Parallel To Excavation Of Unsheeted Trench

GAS COST SHARING WORK (SKETCH NO. 1)

SUPPORT REQUIREMENTS FOR GAS MAINS SUSPENDED IN EXCAVATIONS UP TO 12'-0" WIDE AT ANY ANGLE



CABLE SUPPORT SPACING

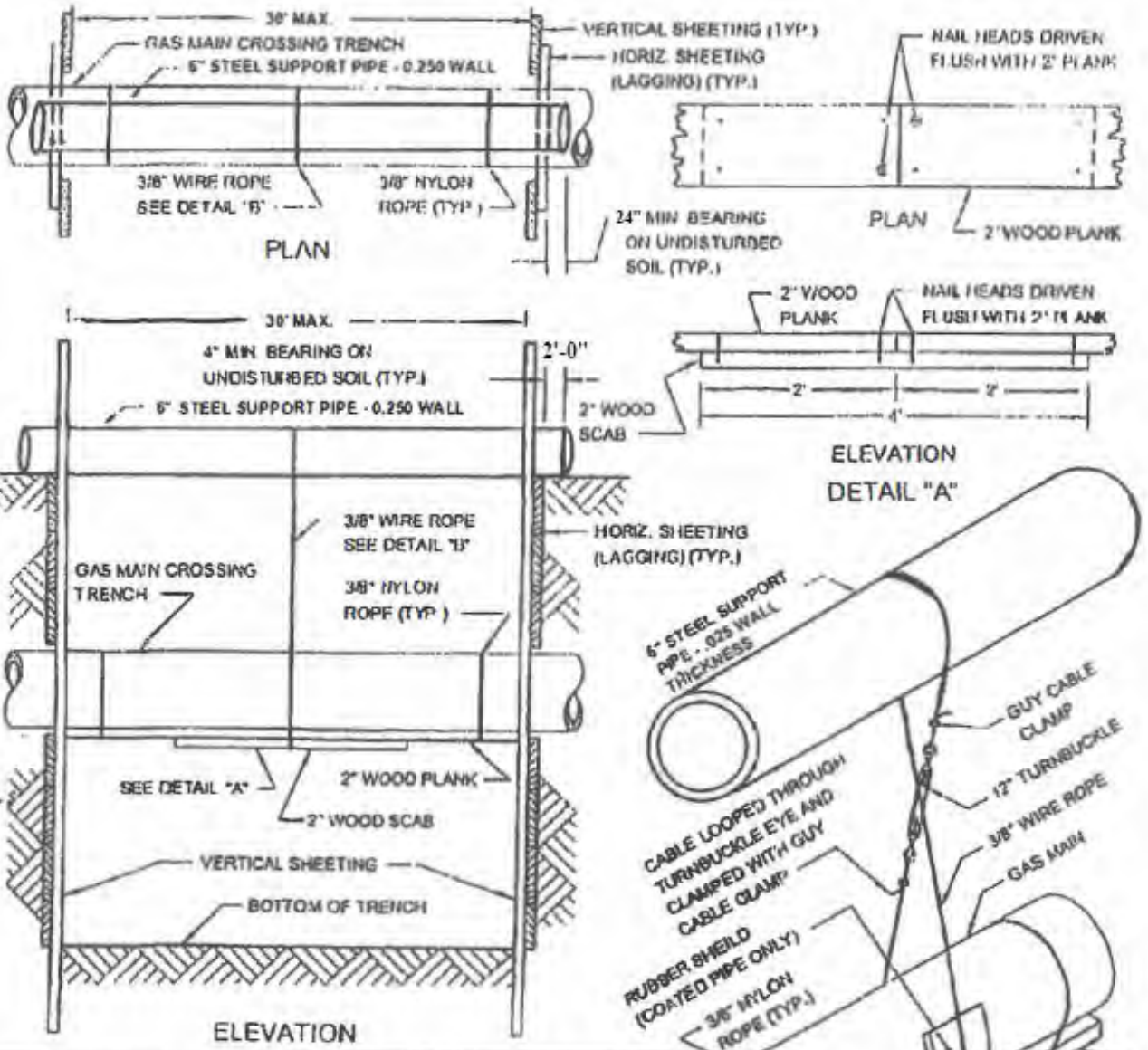
PIPE SIZE	CAST IRON	STEEL	PLASTIC
UP TO 2"	-	10'-0"	3'-0"
3" TO 4"	4'-0"	15'-0"	6'-0"
6" TO 10"	4'-0"	15'-0"	6'-0"
12" OR LARGER	6'-0"	15'-0"	6'-0"

NOTE: SUPPORTS FOR GAS TRANSMISSION FACILITIES SHALL BE REVIEWED WITH GAS ENGINEERING PRIOR TO INSTALLATION.

REVISED DEC. 2019 - LTYP

GAS COST SHARING WORK (SKETCH NO. 1A)

SUPPORT REQUIREMENTS FOR GAS MAINS SUSPENDED IN EXCAVATIONS BETWEEN 12'-0" AND 30'-0" WIDE AT ANY ANGLE

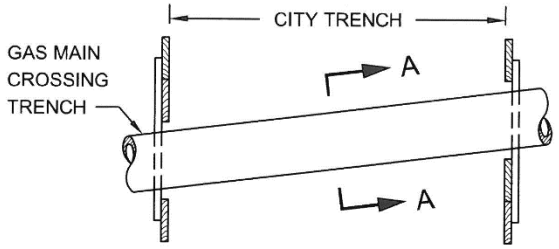


CABLE SUPPORT SPACING			
PIPE SIZE	CAST IRON	STEEL	PLASTIC
UP TO 2"	-	10'-0"	3'-0"
3" TO 4"	4'-0"	15'-0"	6'-0"
6" TO 10"	4'-0"	15'-0"	6'-0"
12" OR LARGER	6'-0"	15'-0"	6'-0"

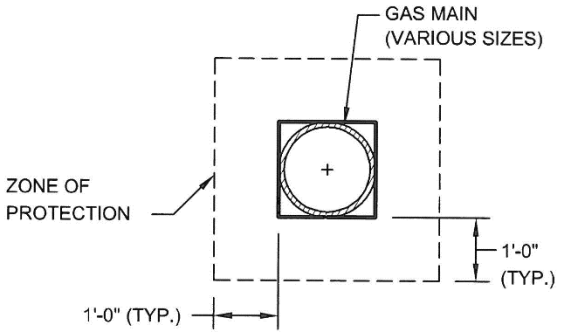
NOTE: SUPPORTS FOR GAS TRANSMISSION FACILITIES SHALL BE REVIEWED WITH GAS ENGINEERING PRIOR TO INSTALLATION.

GAS COST SHARING WORK (SKETCH NO. 2)

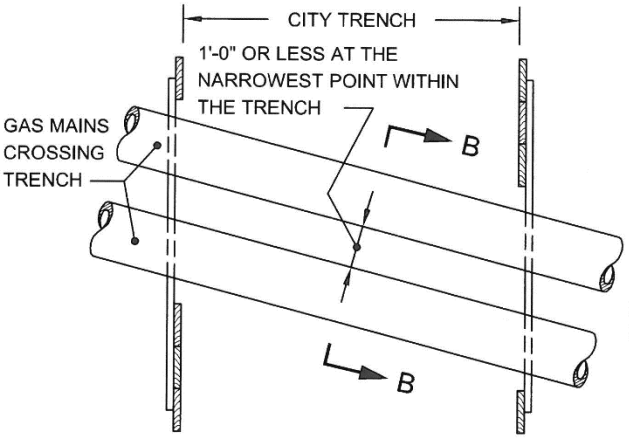
TYPICAL METHODS OF MEASUREMENT FOR GAS CROSSINGS



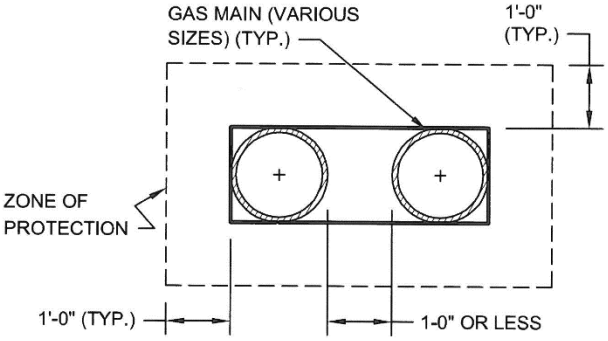
SINGLE FACILITY CROSSING



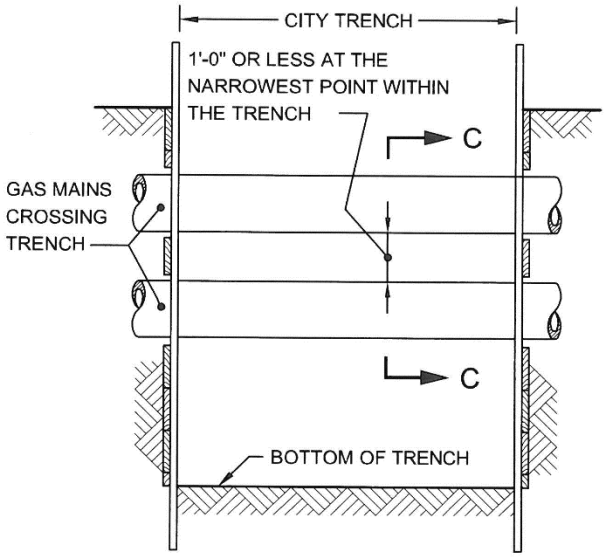
SECTION A-A



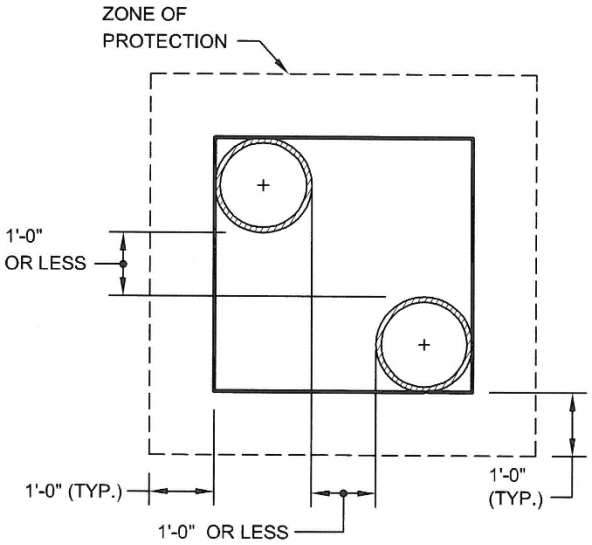
MULTIPLE FACILITIES
(GAS MAINS AT SAME ELEVATION)



SECTION B-B



MULTIPLE FACILITIES
(ONE CROSSING AT DIFFERENT ELEVATIONS)



SECTION C-C

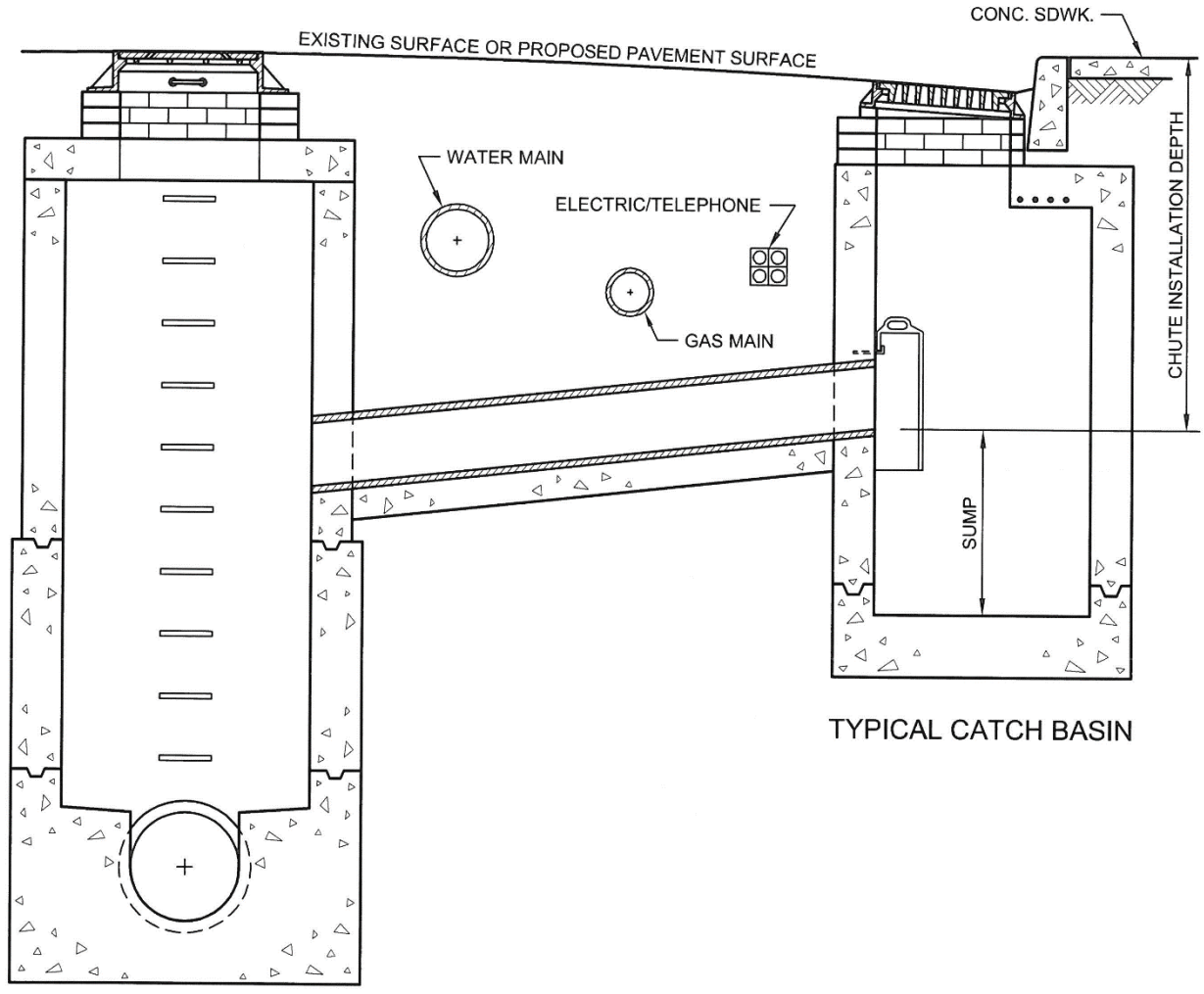
NOTE:

GAS MAINS MAY OR MAY NOT BE PARALLEL
TO EACH OTHER.

REVISED SEPT. 2004 - L. ADRIEN
REVISED SEPT. 2004 - J. WONG/W. PATALANO/P. MOY

GAS COST SHARING WORK (SKETCH NO. 3)

UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION



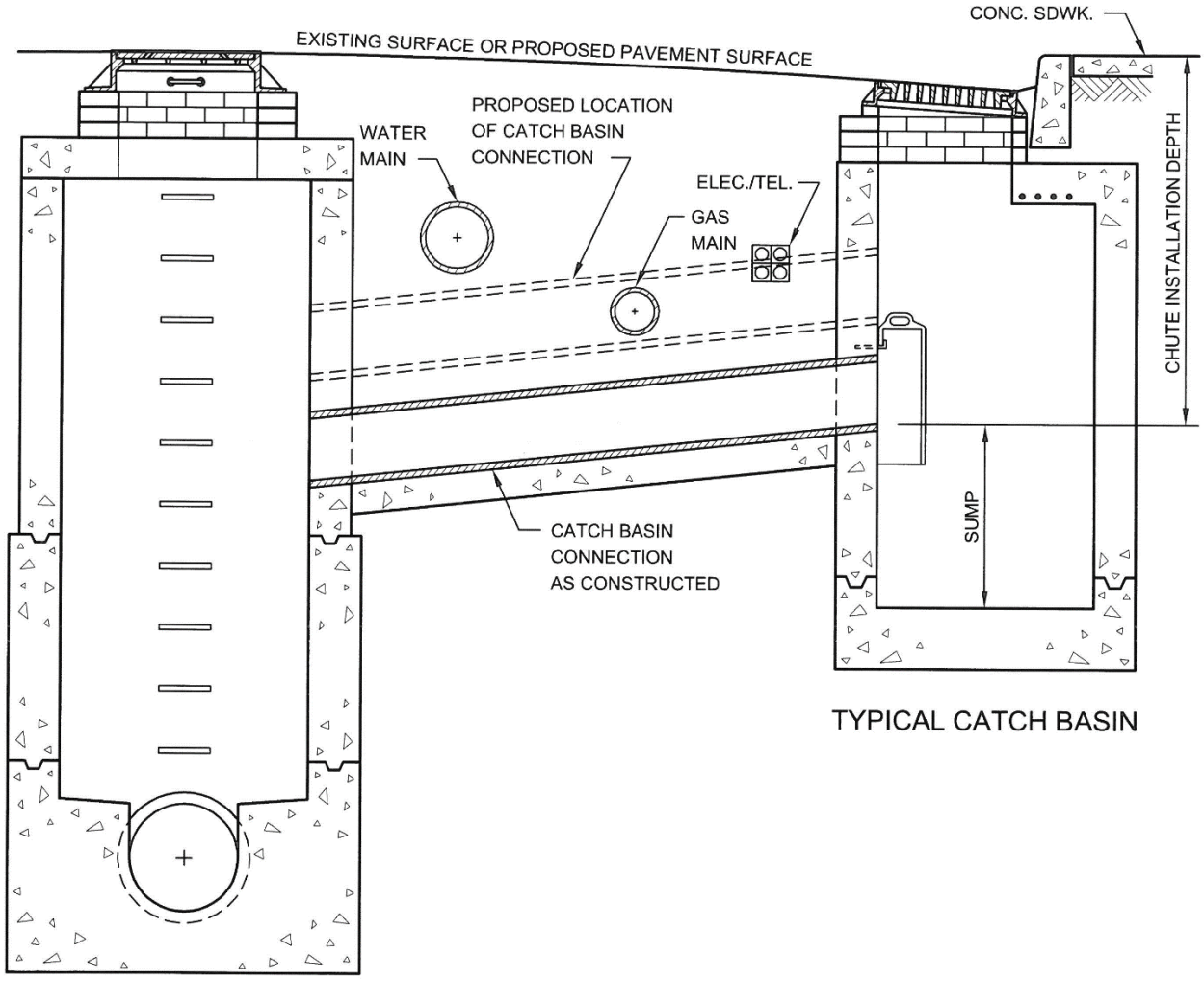
TYPICAL CATCH BASIN

TYPICAL SEWER MANHOLE

REVISED OCT. 2004 - L. ADRIEN
REVISED OCT. 1998 - J. WONG/W. PATALANO/P. MOY

GAS COST SHARING WORK (SKETCH NO. 4)

UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION (EXTRA DEPTH)



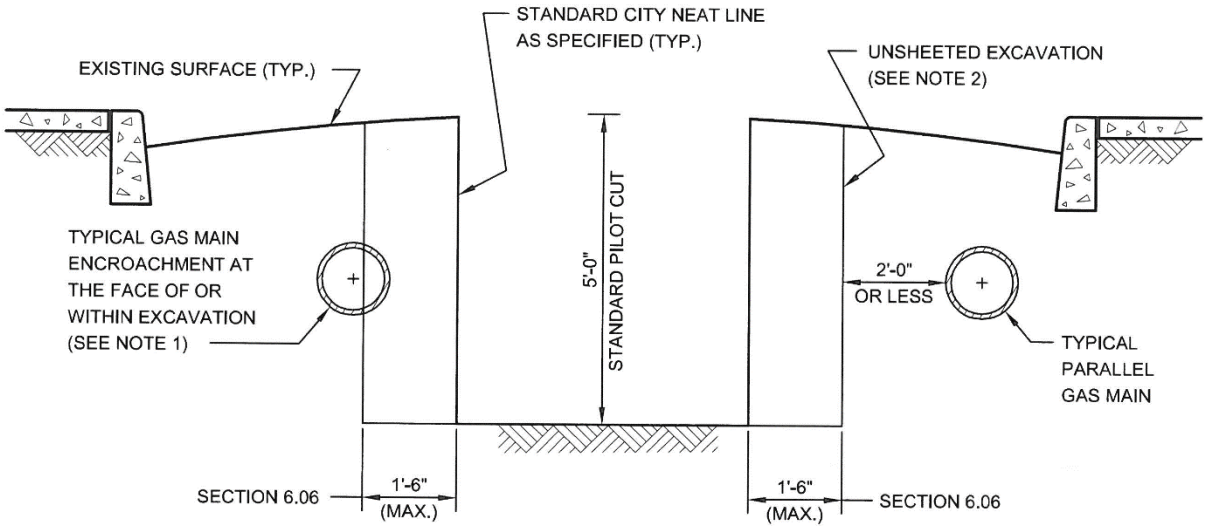
TYPICAL CATCH BASIN

TYPICAL SEWER MANHOLE

REVISED OCT. 2004 - I. ADRIEN
REVISED OCT. 1998 - J. WONG/W. PATALANO/P. MOY

GAS COST SHARING WORK (SKETCH NO. 5)

GAS MAIN ENCROACHMENT ON AND/OR PARALLEL TO EXCAVATION OF UNSHEETED TRENCH



NOTES:

(1) GAS MAIN LOCATED AS SHOWN MAY HAVE TO BE REMOVED BY THE FACILITY OPERATOR PRIOR TO THE START OF CITY EXCAVATION, OTHERWISE, THE CONTRACTOR WILL BE PAID UNDER SECTION 6.06 FOR THE SAID WORK. IF GAS MAIN IS ABANDONED THEN SECTION 6.03 SHALL APPLY.

(2) EIGHTEEN (18) INCHES FROM STANDARD NEAT LINE IS THE MAXIMUM ALLOWABLE WIDTH OF AREA THAT MAY BE DISTURBED OR EXCAVATED DURING INSTALLATION OF CERTAIN TYPES OF SHEETING SYSTEMS THAT MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS OF THE DEPARTMENT OF DESIGN AND CONSTRUCTION OF THE CITY OF NEW YORK.

REVISED OCT. 2004 - I. ADRIEN
REVISED OCT. 1998 - J. WONG/W. PATALANO/P. MOY

V - PRELIMINARY GAS WORK TO BE PERFORMED BY FACILITY OPERATOR.

APPLICABLE TO ALL GAS DRAWINGS:

- ALL RELOCATION WORK SHOWN IN THIS SECTION IS TO BE PERFORMED BY FACILITY OPERATOR.
- ALL SUPPORT AND PROTECTION WORK TO BE PERFORMED BY CITY CONTRACTOR
- IF ADDITIONAL INFORMATION IS NEEDED REGARDING THE FACILITY OPERATOR'S RELOCATION WORK, THE CONTRACTOR IS ADVISED TO CONTACT THE GAS COMPANY REPRESENTATIVE:

Dennis Brady
Consolidated Edison Company
4 Irving Pl., 12th Floor SEC
New York, NY 10003
917-608-3435
BradyD@coned.com

(NO TEXT IN THIS AREA, TURN PAGE)

PROJECT NO. HED562 6.09 Trench Excavation/Backfill Computations (CY) Calculation						
Item*	Sketch Sheet	Gas Lines	Trench Dimension (ft)			Volume (CY)
			L	W	D	
1	1,2	16" LP PE GAS MAIN ON E. 233 ST BET. BUSSING AVE AND DIGNEY AVE	185	3	4	82.22
2	2,3	16" LP PE GAS MAIN ON BRONXWOOD AVE BET. BUSSING AVE AND E. 233 ST	100	3	4	44.44
3	2,3	12" LP PE GAS MAIN ON BRONXWOOD AVE BET. BUSSING AVE AND E. 233 ST	55	2.67	4	21.76
4	3	16" LP PE GAS MAIN ON BRONXWOOD AVE BET. BUSSING AVE AND E. 233 ST	70	3	4	31.11
5	4	12" LP PE GAS MAIN ON BRONXWOOD AVE BET. E. 233 ST AND E. 232 ST	85	2.67	4	33.62
6	4,5	12" LP PE GAS MAIN ON BRONXWOOD AVE BET. E. 233 ST AND E. 232 ST	80	2.67	4	31.64
7	5	12" LP PE GAS MAIN ON BRONXWOOD AVE BET. E. 233 ST AND E. 232 ST	95	2.67	4	37.58
8	6	8" LP PE GAS MAIN ON E. 233 ST BET. ELY AVE AND STRANG AVE	60	2.67	4	23.73
9	2,4	RELOCATION OF 36" TRANSMISSION MAIN IN THE INT. OF E 233 ST AND BRONXWOOD AVE	180	7	7	326.67
			(A) GAS TRENCH VOLUME			**632.78**
			(B) MAIN TIE-IN PITS (12 X 27.7 CY)			**332.40**
			(C) SERVICE TIE-IN PITS (3 X 1.4 CY)			**4.20**
			(A) + (B) + (C)			**969.38**
			ADD 15% CONTINGENCIES			**145.41**
			TOTAL 6.09 ROUNDED OFF			**1115.00**

**See EP-7 Sketches, item numbers included in parentheses on call-outs*

PUBLIC IMPROVEMENT ENGINEERING - MANHATTAN/BRONX 6/10/2024
RETIRE TABLE
PROJECT NO. HED562

SKETCH	SIZE (in)	KIND	LENGTH	DATE	ITEM	LOCATION
1	12	CI	36	1925	67.2d	E 233 ST BTW BUSSING AVE AND BRONXWOOD AVE
2	16	ST (C)	144	2019	-	E 233 ST BTW BUSSING AVE AND BRONXWOOD AVE
2	12	PE	45	2019	67.2d	BRONXWOOD AVE BTW BUSSING AVE AND E 233 ST
2,3	12	PE	95	2017	67.2d	BRONXWOOD AVE BTW BUSSING AVE AND E 233 ST
2,4	36	ST (C)	180	2019	-	BRONXWOOD AVE BTW BUSSING AVE AND E 232 ST
4	6	PE	21	2018	67.2b	E 233 ST AND BRONXWOOD AVE INT
4,5	12	PE	72	2018	67.2d	E 233 ST AND BRONXWOOD AVE INT
5	16	PE	30	2021	-	E 233 ST AND BRONXWOOD AVE INT
5	12	PE	85	2018	67.2d	BRONXWOOD AVE BTW E 233 ST AND E 232 ST
6	8	PE	62	2022	67.2c	E 233 ST BTW ELY AVE AND STRANG AVE
7	12	CI	55	1927	67.2d	E 233 ST BTW EDSON AVE AND BAYCHESTER AVE
8	12	CI	155	1927	67.2d	BAYCHESTER AVE BTW E 233 ST AND SCHIEFFELIN AVE
8	8	CI	28	1928	67.2c	BAYCHESTER AVE BTW E 233 ST AND SCHIEFFELIN AVE

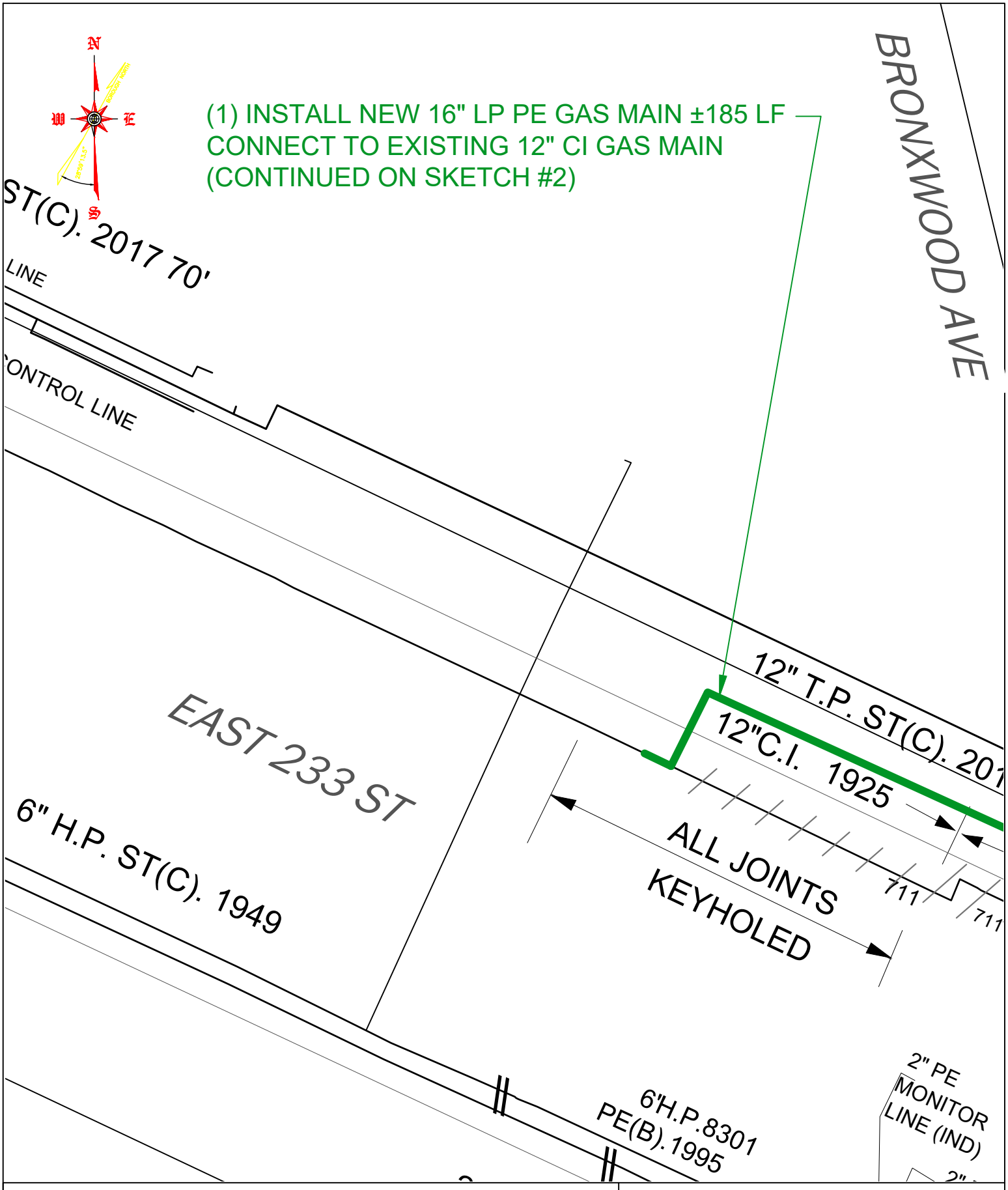
PUBLIC IMPROVEMENT ENGINEERING - MANHATTAN/BRONX
RETIRE TABLE
PROJECT NO. HED562

6/10/2024

SKETCH NO.	SIZE (in)	KIND	REIMB. LENGTH	INSTALL DATE	BASE LIFE 70 OR 90 YEARS	AGE TO CURRENT DATE	REMAINING LIFE		PERCENT TO TOTAL LENGTH	REMAINING LIFE % (WEIGHTED)	LOCATION
							YEARS	PERCENT			
1	12	CI	36	1925	90	99	-9	-10.00	3.57	-0.36	E 233 ST BTW BUSSING AVE AND BRONXWOOD AVE
2	16	ST (C)	144	2019	70	5	65	92.86	14.29	13.27	E 233 ST BTW BUSSING AVE AND BRONXWOOD AVE
2	12	PE	45	2019	90	5	85	94.44	4.46	4.22	BRONXWOOD AVE BTW BUSSING AVE AND E 233 ST
2,3	12	PE	95	2017	90	7	83	92.22	9.42	8.69	BRONXWOOD AVE BTW BUSSING AVE AND E 233 ST
2,4	36	ST (C)	180	2019	70	5	65	92.86	17.86	16.58	BRONXWOOD AVE BTW BUSSING AVE AND E 232 ST
4	6	PE	21	2018	90	6	84	93.33	2.08	1.94	E 233 ST AND BRONXWOOD AVE INT
4,5	12	PE	72	2018	90	6	84	93.33	7.14	6.67	E 233 ST AND BRONXWOOD AVE INT
5	16	PE	30	2021	90	3	87	96.67	2.98	2.88	E 233 ST AND BRONXWOOD AVE INT
5	12	PE	85	2018	90	6	84	93.33	8.43	7.87	BRONXWOOD AVE BTW E 233 ST AND E 232 ST
6	8	PE	62	2022	90	2	88	97.78	6.15	6.01	E 233 ST BTW ELY AVE AND STRANG AVE
7	12	CI	55	1927	90	97	-7	-7.78	5.46	-0.42	E 233 ST BTW EDSON AVE AND BAYCHESTER AVE
8	12	CI	155	1927	90	97	-7	-7.78	15.38	-1.20	BAYCHESTER AVE BTW E 233 ST AND SCHIEFFELIN AVE
8	8	CI	28	1928	90	96	-6	-6.67	2.78	-0.19	BAYCHESTER AVE BTW E 233 ST AND SCHIEFFELIN AVE
TOTALS			**1008**						**100.00**	**65.96**	

GAS FACILITY COST ALLOCATION AGREEMENT
PROJECT NO. HED562
CAPITAL GAS MAIN INSTALLATION

SKETCH NO.	ON STREET	FROM	TO	ITEM	SIZE	TYPE	LENGTH	REIMB LENGTH	REMARKS
1,2	EAST 233 ST	BUSSING AVE	DIGNEY AVE	80m	16	LP PE	185	185	See Gas Capital Plan
2,3	BRONXWOOD AVE	BUSSING AVE	EAST 233 ST	80m	16	LP PE	100	100	See Gas Capital Plan
2,3	BRONXWOOD AVE	BUSSING AVE	EAST 233 ST	82k	12	LP PE	55	55	See Gas Capital Plan
2,4	BRONXWOOD AVE	BUSSING AVE	EAST 232 ST		36	TRANS. STL	180	180	See Gas Capital Plan
3	BRONXWOOD AVE	BUSSING AVE	EAST 233 ST	80m	16	LP PE	70	70	See Gas Capital Plan
4	BRONXWOOD AVE	EAST 233 ST	EAST 232 ST	82k	12	LP PE	85	85	See Gas Capital Plan
4,5	BRONXWOOD AVE	EAST 233 ST	EAST 232 ST	82k	12	LP PE	80	80	See Gas Capital Plan
5	BRONXWOOD AVE	EAST 233 ST	EAST 232 ST	82k	12	LP PE	95	95	See Gas Capital Plan
6	EAST 233 ST	ELY AVE	STRANG AVE	82i	8	LP PE	60	60	See Gas Capital Plan



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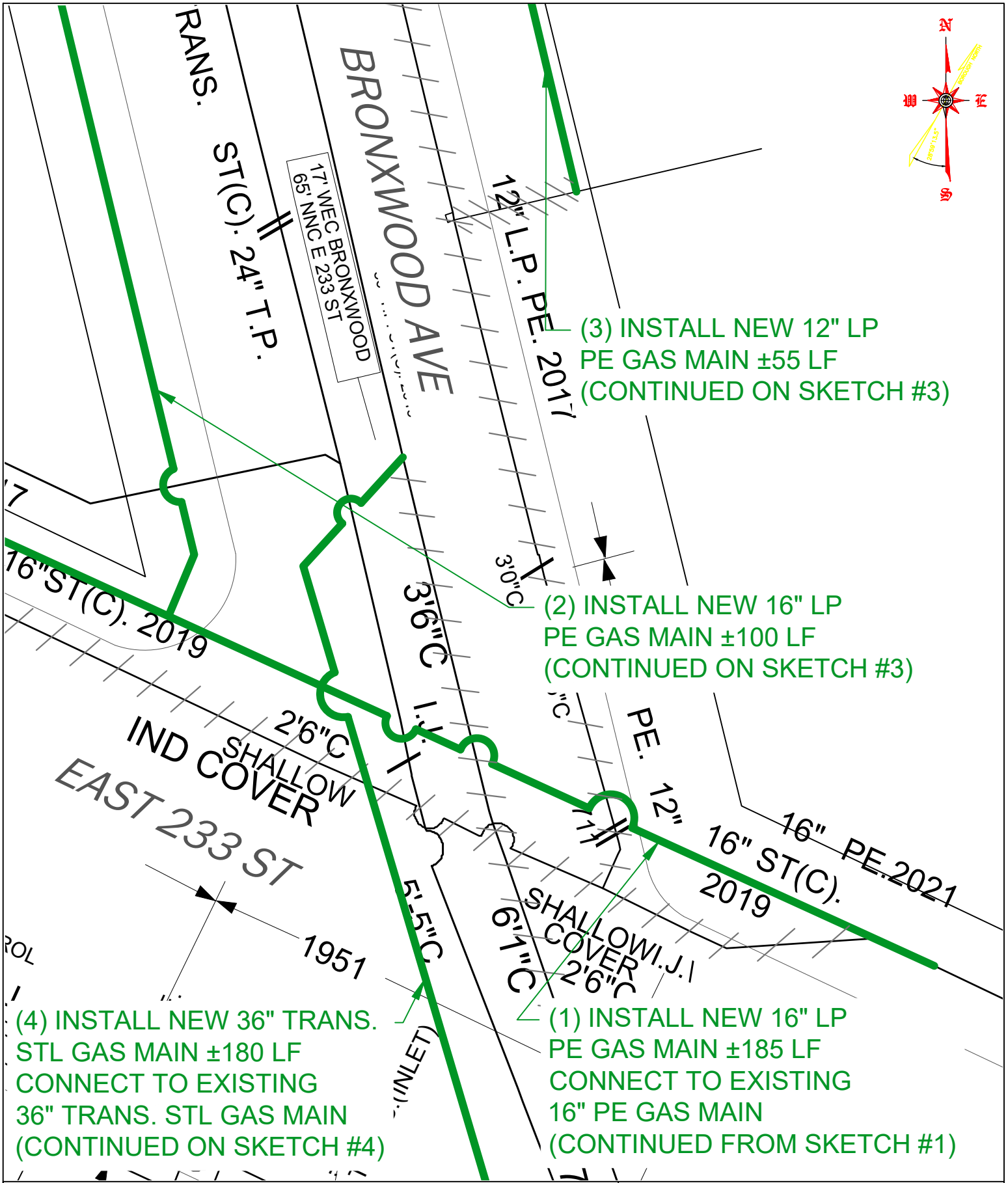
OF NEW YORK, INC.
4 IRVING PLACE
NEW YORK, NY 10003

HED562 / EP-7
EAST 233 STREET TRUNK
WATER MAIN INSTALLATION

BOROUGH OF THE BRONX

JUNE 2024	SCALE: N.T.S.	1 OF 8



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HED562 / EP-7
EAST 233 STREET TRUNK
WATER MAIN INSTALLATION

BOROUGH OF THE BRONX

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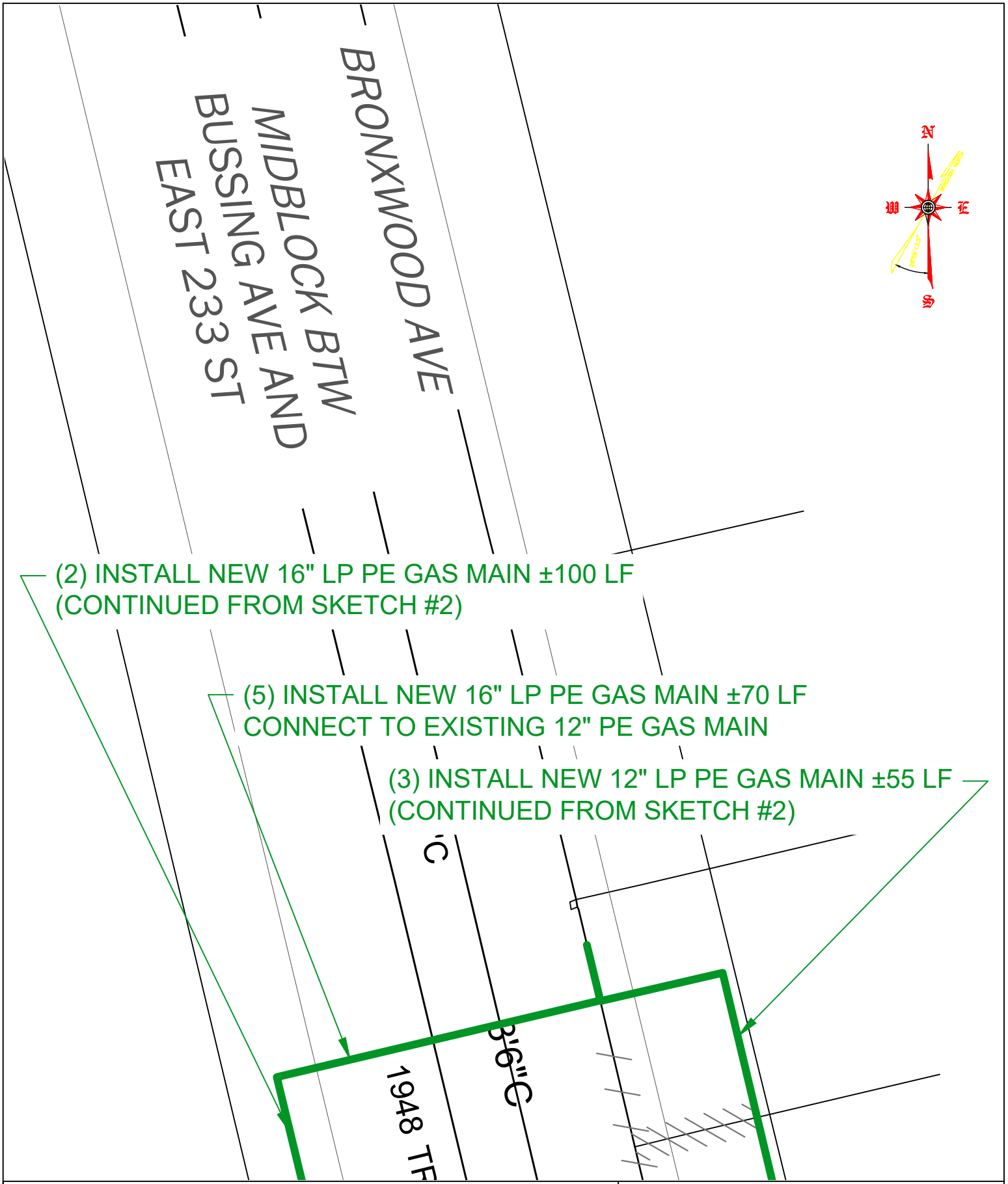

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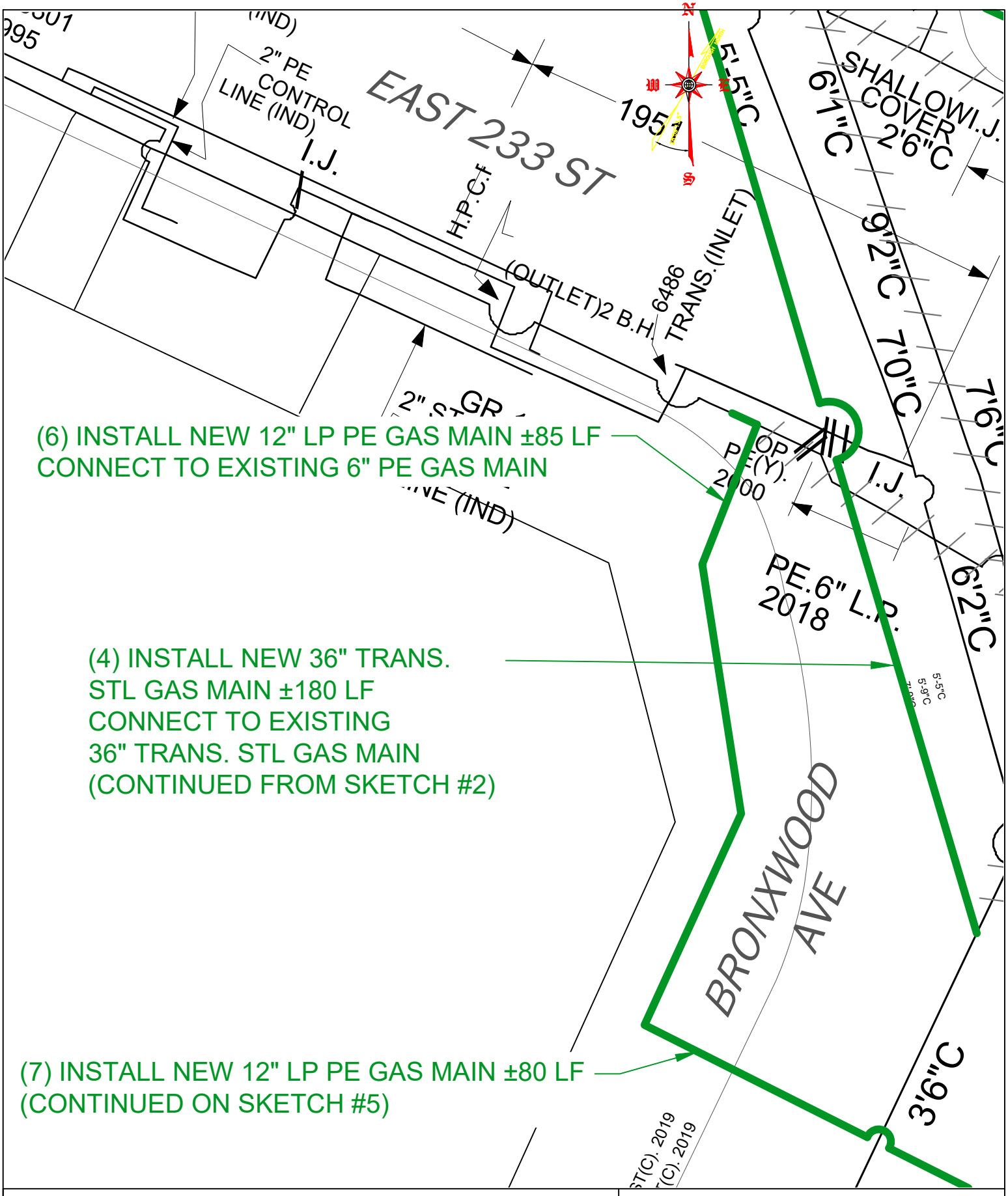
EAST 233 STREET TRUNK
WATER MAIN INSTALLATION

BOROUGH OF THE BRONX

JUNE 2024	SCALE: N.T.S.	3 OF 8



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NEW YORK, NY 10003

HED562 / EP-7
EAST 233 STREET TRUNK
WATER MAIN INSTALLATION

BOROUGH OF THE BRONX

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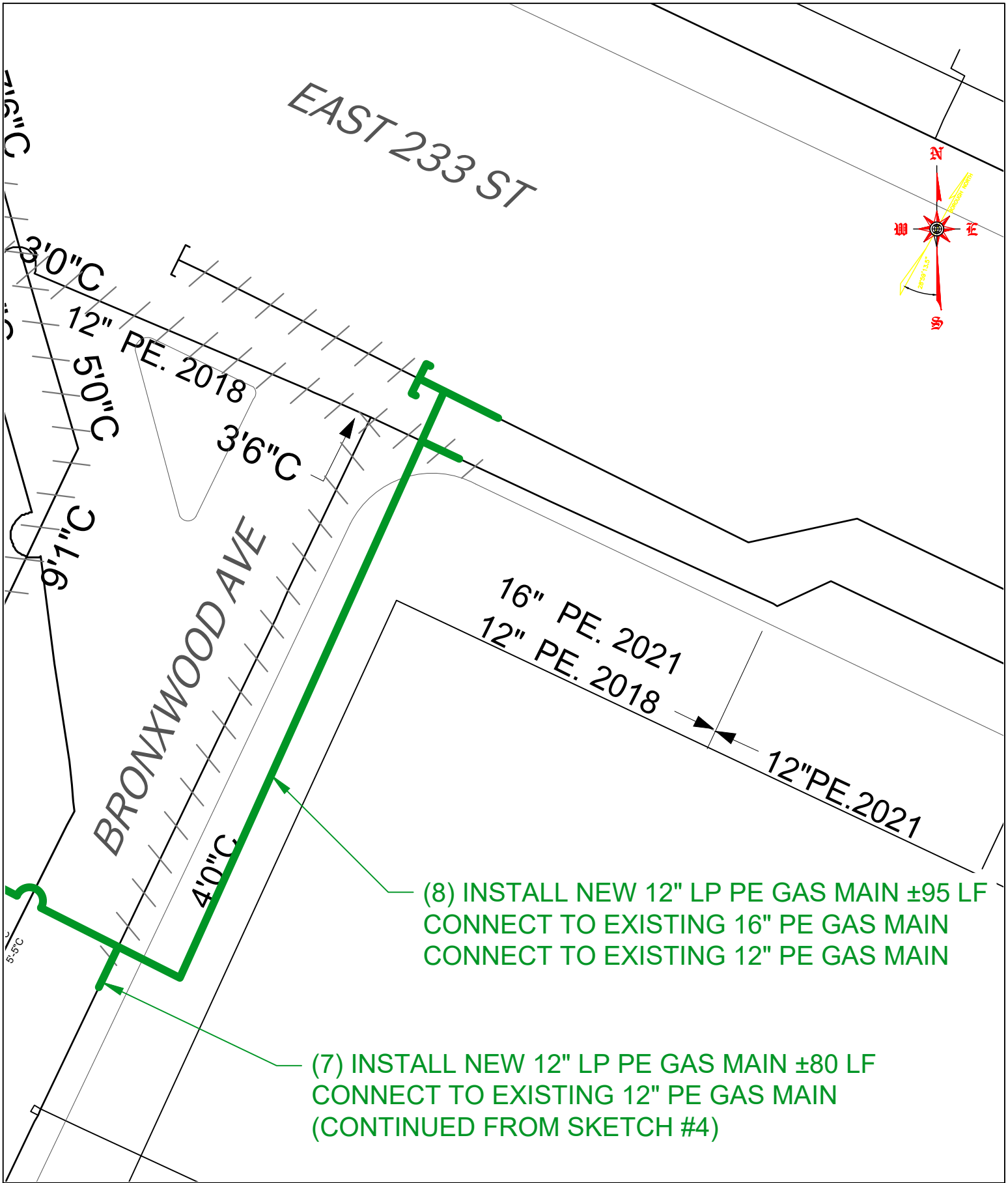

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4 IRVING PLACE
NEW YORK, NY 10003

HED562 / EP-7
EAST 233 STREET TRUNK
WATER MAIN INSTALLATION

BOROUGH OF THE BRONX

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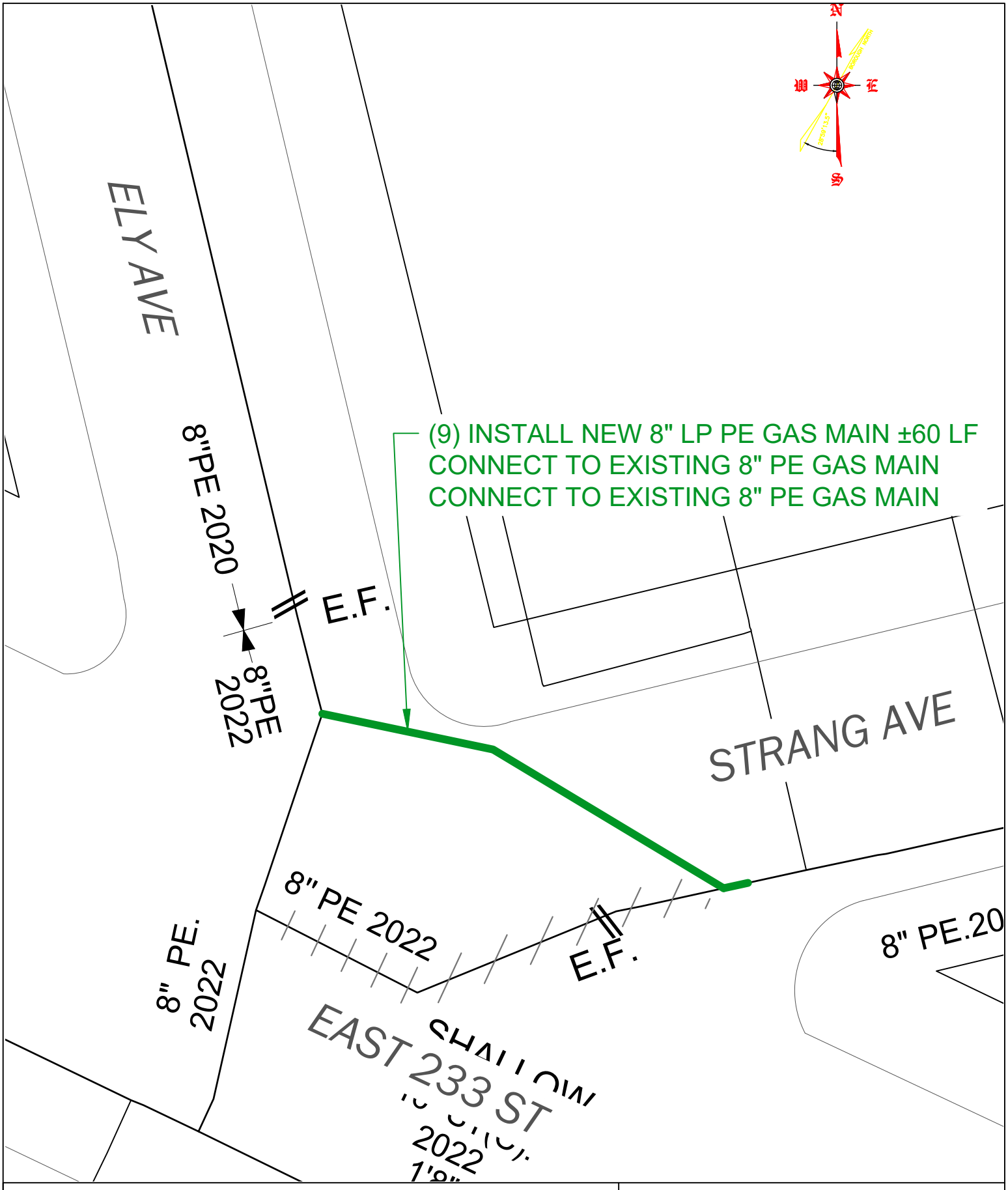

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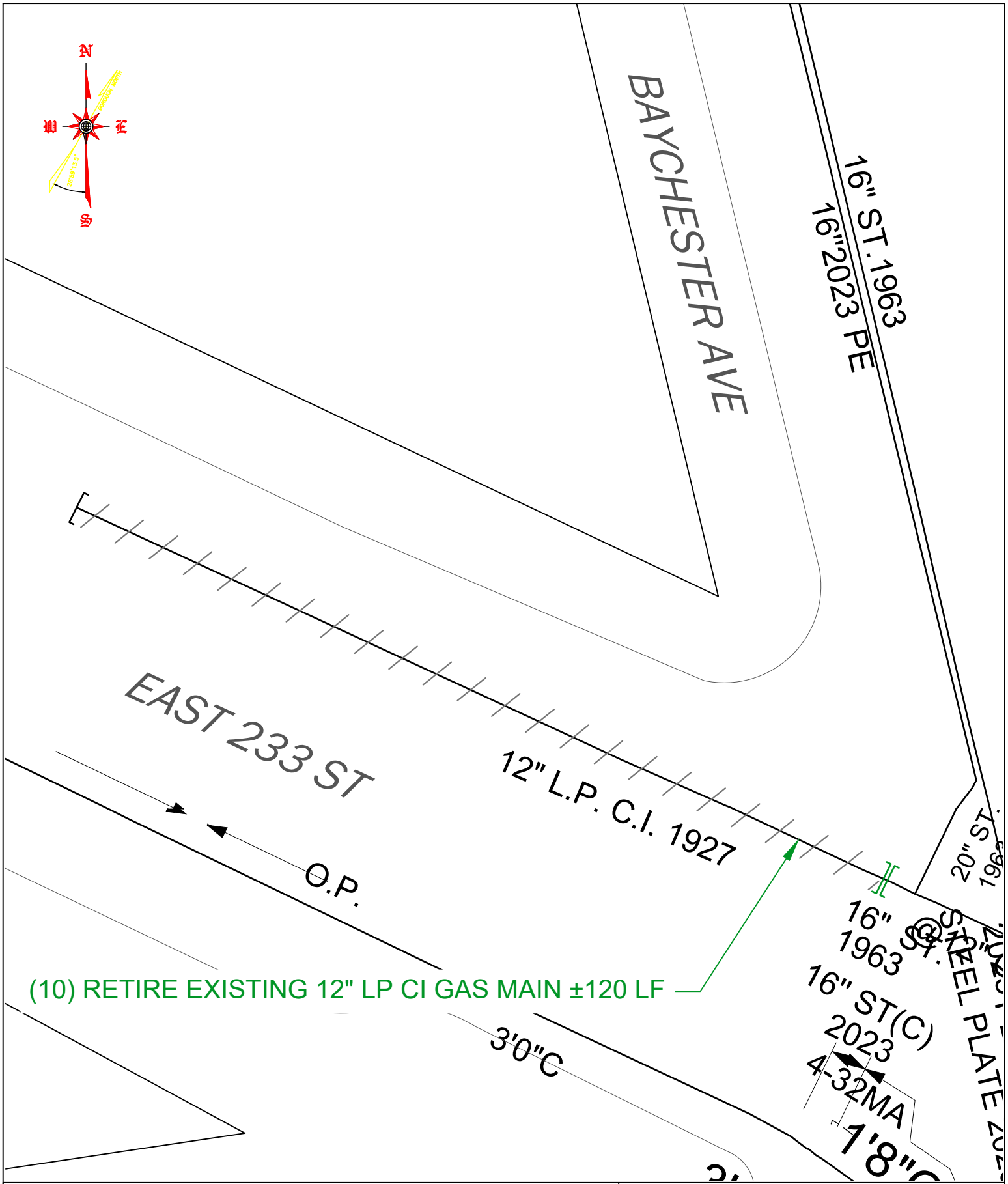
NEW YORK, NY 10003

HED562 / EP-7
EAST 233 STREET TRUNK
WATER MAIN INSTALLATION

BOROUGH OF THE BRONX

JUNE 2024	SCALE: N.T.S.	6 OF 8



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OF NEW YORK, INC.
4 IRVING PLACE
NEW YORK, NY 10003

conEdison

HED562 / EP-7
EAST 233 STREET TRUNK
WATER MAIN INSTALLATION

BOROUGH OF THE BRONX

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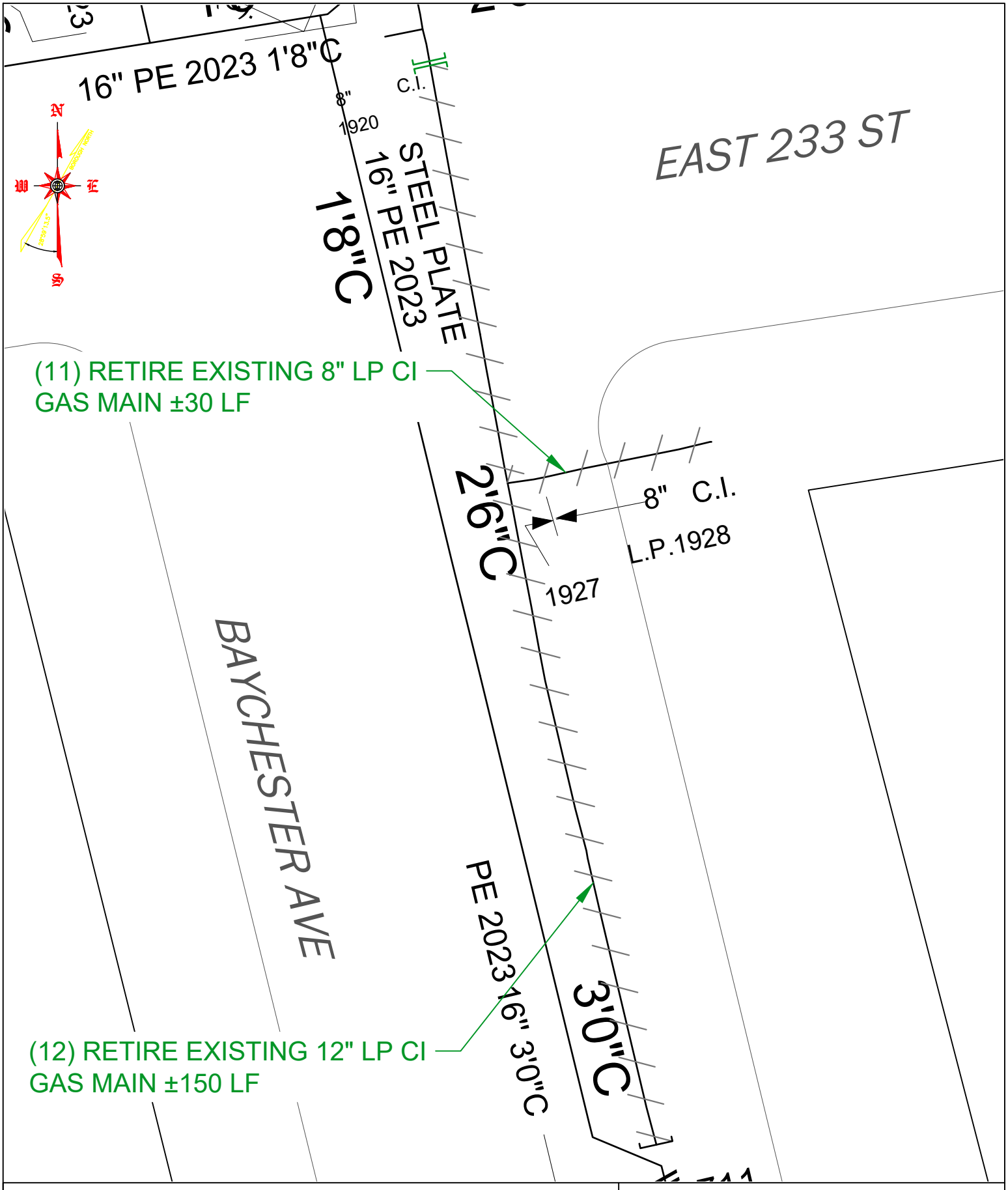

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OF NEW YORK, INC.
4 IRVING PLACE
NEW YORK, NY 10003

HED562 / EP-7
EAST 233 STREET TRUNK
WATER MAIN INSTALLATION

BOROUGH OF THE BRONX

JUNE 2024	SCALE: N.T.S.	8 OF 8

VI - LISTING OF APPROXIMATE LOCATIONS OF EP-7 BID ITEMS QUANTITIES.

(NO TEXT IN THIS AREA, TURN PAGE)

SCOPE OF WORK
SUPPORT AND PROTECTION
FOR CONTRACT NUMBER HED-562

The City of New York Department of Design and Construction is planning to install sewers and/or water mains and all appurtenances in various locations in The City of New York along with all work incidental thereto.

6.01.1 (ConEd) Support & Protect Gas Main Crossing Sewer Up To 24" In Diameter (Ea.)

22 Various locations and as encountered and directed by a Con Edison Representative

6.01.2 (ConEd) Support & Protect Gas Main Crossing Sewer 30" In Diameter (Ea.)

9 Various locations and as encountered and directed by a Con Edison Representative

6.01.8 (ConEd) Support & Protect Gas Services Crossing Trenches and/or Excavations (Ea.)

19 Various locations and as encountered and directed by a Con Edison Representative

6.01.9 (ConEd) Support & Protect Gas Main Crossing Water Main Up To 20" In Diameter (Ea.)

72 Various locations and as encountered and directed by a Con Edison Representative

6.01.12 (ConEd) Support & Protect Gas Main Crossing Water Main 48" Thru 54" In Diameter (Ea.)

30 Various locations and as encountered and directed by a Con Edison Representative

6.02 (ConEd) Extra Excavation For the Installation of Catch Basin Sewer Drain Pipes with gas interferences (Ea.)

30 Various locations and as encountered and directed by a Con Edison Representative

6.03 (ConEd) Removal Of Abandoned Gas Facilities. All Sizes (L.F.)

4500 Various locations and as encountered and directed by a Con Edison Representative

6.03.1a (ConEd) Removal Of Abandoned Gas facilities with Possible Coal Tar Wrap. All sizes. (L.F.) (For ConEd work only)

1950 Various Locations and as encountered and directed by a Con Edison Representative

6.04 (ConEd) Adjust Hardware to Grade Using Spacer Rings/Adaptors (Street repaving) (Ea.)

18 Various locations and as encountered and directed by a Con Edison Representative

6.05 (ConEd) Adjust Hardware to Grade by Resetting (Road Reconstruction) (Ea.)

12 Various locations and as encountered and directed by a Con Edison Representative

SCOPE OF WORK
SUPPORT AND PROTECTION
FOR CONTRACT NUMBER HED-562

The City of New York Department of Design and Construction is planning to install sewers and/or water mains and all appurtenances in various locations in The City of New York along with all work incidental thereto.

6.06 (ConEd) Special Care Excavation & Backfilling (C.Y.)

1585 Various locations and as encountered and directed by a Con Edison Representative

6.07 (ConEd) Test Pits For Gas Facilities (C.Y.)

379 Various locations and as encountered and directed by a Con Edison Representative

6.08A (ConEd) Pier and / or Plate Method of Protection for Ductile Iron Water Main with less than 24" cover (Ea.)

4 Various locations and as encountered and directed by a Con Edison Representative

6.09A (ConEd) Trench Excavation And Backfill For New Gas Mains & Services. Gas installed by others. (C.Y.) (For Con Edison work only)

1115 Various locations and as encountered and directed by a Con Edison Representative

END OF EP-7 PAGES

THE EP-7 PAGES CONSIST OF Fifty-two (52) PAGES, INCLUDING THIS PAGE.

HAZ - PAGES

SUPPLEMENTAL DOCUMENTATION FOR USE WITH SPECIFICATIONS FOR HANDLING, TRANSPORTATION AND DISPOSAL OF NONHAZARDOUS AND POTENTIALLY HAZARDOUS CONTAMINATED MATERIALS

NOTICE

THE PAGES CONTAINED IN THIS SECTION ARE ISSUED FOR THE PURPOSE OF SPECIFYING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS.

- Final -

Phase I Corridor Assessment and

Phase II Subsurface Corridor Investigation Report

For

New 48" Trunk Water Main In East 233rd Street between Bronxwood Avenue and Baychester Avenue and Other Locations Bronx, New York

DDC PROJECT NO. HED562

TASK ID NO. 2022OEHS0693-01

WORK ORDER NO. OEHS-20201409798-WOL-204

CONTRACT REGISTRATION NO. 20201409798

Prepared for:

NYC DDC Department of Design and Construction

Office of Environmental and Hazmat Services
30-30 Thomson Avenue, Third Floor
Long Island City, New York 11101

Prepared by:

LiRo Engineers, Inc.
703 Lorimer Street
Brooklyn, New York 11211

PROJECT NO. 19-294-0265

November 7, 2022

TABLE OF CONTENTS

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1
1.1 Background Information 1
1.2 Scope of Work 1

2.0 CORRIDOR INFORMATION 4
2.1 Corridor Location, Description, and Use 4
2.2 Description of Surrounding Properties 4
2.3 Corridor and Regional Topographic Setting 4
2.4 Corridor and Regional Geology 4
2.5 Corridor and Regional Hydrogeology 5

3.0 PHASE I CA EVALUATION 6
3.1 Corridor Reconnaissance 6
3.2 Historical Sanborn Map Review 6
3.3 Regulatory Agency Database Report Review 7
3.4 Findings and Recommendations of the Phase I CA 7

4.0 PHASE II SCI CORRIDOR EVALUATION 10
4.1 Soil Quality Investigation 10
4.2 Groundwater Quality Investigation 12
4.3 Laboratory Analyses 12
4.4 Data Evaluation 12

5.0 PHASE II SCI FINDINGS 13
5.1 Field Screening 13
5.2 Soil and Groundwater Laboratory Analytical Results 13
5.2.1 Volatile Organic Compounds (VOCs) in Soil 13
5.2.2 Polycyclic Aromatic Hydrocarbons (PAHs) in Soil 13
5.2.3 PCBs in Soil 13
5.2.4 Toxicity Characteristic Leaching Procedure (TCLP) Resource Conservation and Recovery Act (RCRA) Metals in Soil 13
5.2.5 Waste Characterization of Soil 14
5.2.6 Analysis of NYCDEP Parameters in Groundwater 14

6.0 PHASE II SCI CONCLUSIONS AND RECOMMENDATIONS 15

7.0 STATEMENT OF LIMITATIONS 17

TABLE OF CONTENTS (continued)

Figures	**1**	Topographic Corridor Location Map
	2	Corridor Area Map
	3	Risk Sites on Corridor Area Map
	4A-4B	Boring Location Sketch
Tables	**1**	NYC DDC Specific Risk Criteria
	2	Summary Assessment Results (High and Moderate Risk Sites)
	3	Summary of Environmental Boring Data
	4	Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Soil
	5	Summary of Polycyclic Aromatic Hydrocarbons (PAHs) Detected in Soil
	6	Summary of Polychlorinated Biphenyls (PCBs) Detected in Soil
	7	Summary of Waste Characterization in Soil
Appendices	**A**	Site Reconnaissance Photographs
	B	Sanborn Fire Insurance Maps
	C	Regulatory Agency Database Report
	D	Geologic Boring Logs
	E	Laboratory Analytical Results
	F	Qualifications of Environmental Professionals
	G	Statement of Limitations

EXECUTIVE SUMMARY

On behalf of the New York City (NYC) Department of Design and Construction (DDC), LiRo Engineers, Inc. (LiRo) conducted a combined Phase I Corridor Assessment (CA) and Phase II Subsurface Corridor Investigation (SCI) of the HED562 Corridor to reasonably determine the existence of any potential source of subsurface contamination that may adversely impact proposed construction activities. The Corridor is located within the Wakefield and Edenwald sections of the Borough of the Bronx, New York. The proposed construction activities for the Corridor consist of excavation for the installation of a new water main. The approximately 1.14-mile (6,035-foot) long Corridor is comprised of the following street segments:

Street Segments	Length (feet)
E. 233rd St. approximately 200 feet west of Bronxwood Ave. to approximately 150 feet east of De Reimer Ave.	3,520
Bronxwood Ave. from E. 232nd St. to E. 234th St.	750
Edenwald Ave. between E. 233rd St. and Boyd Ave.	200
Paulding Ave. from E. 233rd St. to approximately 100 feet south of E. 233rd St.	100
Laconia Ave. between E. 233rd St. and E. 232nd St.	210
Ely Ave. between E. 233rd St. and E. 232nd St.	200
Strang Ave. from E. 233rd St. to Grace Ave.	205
Baychester Ave. from Strang Ave. to approximately 250 feet south of E. 233rd St.	850

Currently, the Corridor is developed with paved roadways and existing infrastructure systems, and exhibits evidence of underground utilities, such as manholes, pavement scars, utility mark-outs, and valve covers throughout the roadways and sidewalk areas. Overhead utility lines are present throughout the Corridor. Property usage along the Corridor consists primarily of residences, commercial, and public operations. The proposed construction activities for the Corridor consist of excavation for the installation of a new water main. Based on the review of available information provided by the DDC, the proposed depth of excavation ranges between 8 and 15 feet below grade (ftbg), and mostly at 10 ftbg. Figure 1 shows the location of the Corridor on a topographic map.

The Phase I CA portion of this report was conducted to reasonably determine the potential for environmental concerns and possible contamination posed by properties along the Corridor or within the immediately surrounding area. The CA process involved conducting a site reconnaissance on March 29, 2022 to document current property use and conditions, a review of historical Sanborn Fire Insurance Maps to document past property use, and a review of a regulatory agency database report to identify Corridor properties and immediately surrounding sites of potential environmental concern.

Based on the Risk Criteria protocol established by the NYC DDC, LiRo identified 87 sites categorized as initially having a "High" risk with respect to potential impact on the project. The sites were re-classified because they are outside of the Corridor limits or new modifying information indicated a lower risk. Modifying information included sites with spills that had been closed by the New York State Department of Environmental Conservation (NYSDEC), sites identified on one or more databases with no evidence or records of spills or other concerns, and older sites that were redeveloped or located such that they no

longer posed significant risks. After evaluation of additional modifying information, 11 "High" risk sites and 10 "Moderate" risk sites were identified and are summarized below.

"High" Risk Sites:

Risk Site No.	Facility Name	Address	Map ID
1	Residential building and Underground Storage Tank (UST) site.	855 E. 233rd St.	H1
2	Great Dry Cleaners and parking lot, NY Brownfield Site, and NY E Designation site.	840-860 E. 233rd St.	H2
3	Parking lot for residential building and NY E Designation site (former auto repair shop).	4179 Bronxwood Ave.	H3
4	Residential and commercial building including a bar/restaurant (former dry cleaner).	916 E. 233rd St.	H4
5	Dunkin Donuts, Subway, and Super Laundromat and UST site (former gas station).	980 E. 233rd St.	H5
6	Ko Car Wash and UST site (former gas station)	1131-1141 E. 233rd St.	H6
7	Rite Aid Pharmacy (former dry cleaner).	1179-1215 E. 233rd St.	H7
8	Amoco Gas Station, Lotus Market Place, and Flat-Fix Tire Change and UST site.	1220 E. 233rd St.	H8
9	Kennedy Chicken and Burger, Edenwald Smoke House, African Market, Baychester Express Deli, Mail and Print Ship Center, Aloha Krab Restaurant, Kaesar Gourmet Deli, Gleden Fountain Restaurant, and Shine Brite Laundromat and UST site (former gas station).	1217 E. 233rd St.	H9
10	Gas on the Go and Midnight Auto Repair and UST site.	1225 E. 233rd St. and 3900-3912 Baychester Ave.	H10
11	Shell Gas Station with Food Mart and UST site.	828-838 E. 233rd St.	H11

"Moderate" Risk Sites:

Risk Site No.	Facility Name	Address	Map ID
1	True Faith Church USA, The World of God Ministries, Jeskell Realty, LLC, and Interstate Luxury Limousine Services and NY E Designation site.	862-868 E. 233rd St.	M1

"Moderate" Risk Sites (continued):

Risk Site No.	Facility Name	Address	Map ID
2	Rear yard to separate building and NY E Designation site.	4181 Bronxwood Ave. and 870-874 E. 233rd St.	M2
3	Traditional Karate and NY E Designation site.	924 E. 233rd St.	M3
4	Liquor Land and Parking Lot and NY E Designation site.	930-934 E. 233rd St.	M4
5	Residential building and Aboveground Storage Tank (AST) site.	965-971 E232nd St. and 4175 Paulding Ave.	M5
6	Residential building and NY Spills site (Two100-gallon spills, both closed).	4182 Paulding Ave.	M6
7	Residential building and NY E Designation site.	865 E. 232nd St.	M7
8	Residential building and NY E Designation site.	911 E. 232nd St.	M8
9	Con Edison of NY Transfer Station	1950 Strang Ave.	M9
10	Associated Super Market, Margarita's Unisex, Edenwald Pharmacy, Te Amo Stationary, Discount Wine and Liquors, The Barber Factory, Maddarin House I Chinese Food, 1681 Grocery, Inc. (deli), and parking lot and NY E Designation site (former dry cleaner and auto repair shop).	4125-4149 Laconia Ave.	M10

Based on the findings of the Phase I CA, the 11 "High" and 10 "Moderate" risk sites could impact the subsurface (soil and/or groundwater) of the Corridor.

As requested by the NYC DDC, LiRo also conducted a Phase II SCI in conjunction with the Phase I CA. The objective of the Phase II SCI was to assess the presence of any subsurface contamination that may potentially impact proposed construction activities.

The Phase II SCI activities consisted of the following components:

- The advancement of 25 soil borings (SB-01 through SB-25) to terminal depths ranging from 2 to 18 feet below ground surface (ftbg). Sampler refusal on bedrock limited the depth of sampling at numerous locations. Field screening consisted of classification and identification of soils from surface grade to the bottom of each boring. Soil samples were classified in the field using the Unified Soil Classification System (USCS), including photo-ionization detector (PID) readings, and identification of visual and olfactory indicators of contamination (staining, odors). The Corridor borings were hand cleared using a post hole digger, hand auger, and/or air knife. Borings SB-01 through SB-08, SB-10 through SB-13, and SB-15 through SB-23) were cleared to

a depth of at least 6 feet, borings SB-09, SB-14, and SB-25 were cleared to a depth of at least 2 feet, and boring SB-24 was cleared to a depth of at least 4 feet;

- The collection of one grab soil sample from each of the 25 soil borings (SB-01 through SB-25). The grab soil samples were analyzed for United States Environmental Protection Agency (USEPA) Target Compound List (TCL) volatile organic compounds (VOCs);

- The collection of 25 composite soil samples, one from each of the 25 soil borings (SB-01 through SB-25). The composite soil samples were analyzed for the following parameters: (1) Polycyclic Aromatic Hydrocarbons (PAHs) via USEPA Method 8270C; (2) Polychlorinated Biphenyls (PCBs) via USEPA Method 3550B/8082; (3) Total Petroleum Hydrocarbon (TPHC) Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO) via USEPA Method 8015B; (4) Resource Conservation and Recovery Act (RCRA) Characteristics via USEPA SW-846; and, (5) Toxicity Characteristic Leaching Procedure (TCLP) RCRA Metals via USEPA SW-846;

- Since groundwater was not encountered within any of the proposed temporary well point (TWP) locations, no groundwater samples were collected; and,

- The preparation of this report, which includes tables summarizing the laboratory analytical results and figures depicting boring locations, significant site features and, if applicable, contamination occurrence and distribution.

In order to evaluate the subsurface soil quality, laboratory analytical results for the soil samples were compared with the regulatory standards identified in: (1) New York State Department of Environmental Conservation (NYSDEC) Subpart 375-6: Remedial Program Restricted Use Commercial (Track 2) Soil Cleanup Objectives (SCOs), and/or, (2) Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and Title 6 of the New York Codes, Rules and Regulations (NYCRR) Part 371.

Based on the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following findings, conclusions, and recommendations are presented:

Findings

- The subsurface soils encountered during this Phase II SCI consisted predominantly of light to dark brown and gray fine to medium sand with traces of silt, clay, and gravel from grade to 18 ftbg. Man-made materials, which are indicative of urban fill, were encountered in SB-02 and SB-17. Groundwater was encountered within SB-04 at 18 ftbg. Bedrock was encountered within multiple borings along the Corridor at depths ranging from 2 ftbg within SB-09 and SB-14 to 17 ftbg within SB-01.

- Field screening (i.e., PID readings and visual observations) did not identify impacted soils within the Corridor; however, olfactory evidence of petroleum-impacted soil was noted within SB-10 from 6 to 8 ftbg and within SB-11 from grade to 8 ftbg.

- Two VOCs, acetone and methylene chloride, were detected in one or more of the 25 grab samples collected. The acetone and methylene chloride were detected at concentrations below the associated Part 375-6.8 (b) Restricted Use (Track 2) Commercial SCO regulatory standards. Acetone and methylene chloride are common laboratory cross contaminants.

- One or more PAH compounds were detected in five of the 25 composite samples collected. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)-fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and/or pyrene were detected at concentrations below their corresponding Part 375-6.8 (b) Restricted Use (Track 2) Commercial SCOs in SB-14-COMP, SB-15-COMP, SB-18-COMP, SB-19-COMP, and SB-25-COMP. The detected PAHs may be attributed to: (a) residuals from isolated releases in the area of the Corridor; and/or, (b) the presence of urban fill material placed at the Corridor.

- One PCB, Aroclor 1254, was detected in one (SB-25) of the 25 composite samples collected. Total PCBs were detected below the Part 375-6.8 (b) Restricted Use (Track 2) Commercial SCO.

- TCLP RCRA metals were detected in all 25 composite samples collected. Barium, cadmium, chromium, lead, mercury, and/or selenium were detected below their corresponding 6 NYCRR Part 371 and RCRA standards. Based on their consistency, most of the detected concentrations are attributed to background levels. However, some of the detected concentrations may be attributed to contaminants in urban fill material placed throughout the Corridor.

- Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity (pH) were detected within the acceptable RCRA ranges.

- TPHC-DRO were detected at concentrations ranging from approximately 0.844 milligrams per kilograms (mg/kg) in SB-02-COMP to 24.7 mg/kg in SB-19-COMP. TPHC-GRO were detected at concentrations ranging from approximately 0.008 mg/kg in SB-14-COMP to 1.83 mg/kg in SB-11-COMP. There are no regulatory standards for TPHC-DRO and TPHC-GRO. Analytical results will need to be compared to levels acceptable by the chosen receiving facility to determine appropriate waste characterization prior to off-site disposal.

- Since groundwater was not encountered at any of the proposed TWP locations, no groundwater samples were collected.

Conclusions

- Field screening (i.e., PID readings and visual observations) did not identify impacted soils within the Corridor; however, olfactory evidence of petroleum impacted soil was noted within SB-10 from 6 to 8 ftbg and within SB-11 from grade to 8 ftbg;

- Laboratory analytical results did not identify petroleum-impacted soils within the Corridor; however, DRO and GRO concentrations were reported. The presence of elevated concentrations of petroleum components (i.e., DRO/GRO) in subsurface soils may be attributed to: (a) residuals from releases of petroleum products from the "High" and "Moderate" risk sites identified on or in the vicinity of the Corridor; and, (b) contaminants in urban fill material placed on the Corridor;

- The subsurface soil samples collected from the Corridor did not exhibit hazardous waste characteristics; and,

- Since groundwater was not encountered, no groundwater samples were collected.

Recommendations

- The Contract documents should identify provisions and a contingency for managing, handling, transporting and disposing of non-hazardous contaminated soil. All soil shall be managed, transported and disposed of in accordance with NYSDEC Part 360 requirements. The Contractor should submit a Material Handling Plan, to identify the specific protocols and procedures that will be employed to manage potentially contaminated soil, if encountered, during construction, in accordance with applicable regulations;

- Due to the presence of DRO and GRO, to minimize the creation and dispersion of fugitive airborne dust, the Contractor may implement dust control measures to minimize potential airborne contaminants released as a direct result of construction activities. A Community Air Monitoring Plan (CAMP) shall be developed in accordance with NYSDEC DER-10 Regulations. The CAMP requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities;

- Should dewatering become necessary during construction activities within the Corridor, the Contractor will be required to obtain NYCDEP sewer discharge permit. If discharge into storm sewers is required during dewatering, it may be done under the appropriate NYSDEC State Pollutant Discharge Elimination System (SPDES) permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and,

- Before beginning any excavation activity, the Contractor should submit a Corridor-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety and Health Administration (OSHA), the New York State Department of Health (NYSDOH) and any other applicable regulations. The HASP should identify the possible locations and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate concerns (i.e., dust control procedures for DRO/GRO).

1.0 INTRODUCTION

1.1 Background Information

On behalf of the New York City (NYC) Department of Design and Construction (DDC), LiRo Engineers, Inc. (LiRo) conducted a combined Phase I Corridor Assessment (CA) and Phase II Subsurface Corridor Investigation (SCI) of the HED562 Corridor to reasonably determine the existence of any potential source of subsurface contamination that may adversely impact proposed construction activities. The Corridor is located within the Wakefield and Edenwald sections of the Borough of the Bronx, New York. The proposed construction activities for the Corridor consist of excavation for the installation of a new water main. The approximately 1.14-mile (6,035-foot) long Corridor is comprised of the following street segments:

Street Segments	Length (feet)
E. 233rd St. approximately 200 feet west of Bronxwood Ave. to approximately 150 feet east of De Reimer Ave.	3,520
Bronxwood Ave. from E. 232nd St. to E. 234th St.	750
Edenwald Ave. between E. 233rd St. and Boyd Ave.	200
Paulding Ave. from E. 233rd St. to approximately 100 feet south of E. 233rd St.	100
Laconia Ave. between E. 233rd St. and E. 232nd St.	210
Ely Ave. between E. 233rd St. and E. 232nd St.	200
Strang Ave. from E. 233rd St. to Grace Ave.	205
Baychester Ave. from Strang Ave. to approximately 250 feet south of E. 233rd St.	850

Currently, the Corridor is developed with paved roadways and existing infrastructure systems, and exhibits evidence of underground utilities, such as manholes, pavement scars, utility mark-outs, and valve covers throughout the roadways and sidewalk areas. Overhead utility lines are present throughout the Corridor. Property usage along the Corridor consists primarily of residences, commercial, and public operations. The proposed construction activities for the Corridor consist of excavation for the installation of a new water main. Based on the review of available information provided by the DDC, the proposed depth of excavation ranges between 8 and 15 feet below grade (ftbg), and mostly at 10 ftbg. Figure 1 shows the location of the Corridor on a topographic map.

1.2 Scope of Work

At the request of the NYC DDC, the scope of the Phase I CA was limited to:

1. Conducting a site reconnaissance of the Corridor and adjacent properties;

2. Providing photographic documentation of properties within, and adjacent to the Corridor that are categorized as initial "High" or "Moderate" risk sites, or otherwise considered a potential environmental concern;

3. Conducting a review of Sanborn Fire Insurance Maps to document historical property use; and,

4. Conducting a review of government regulatory agency databases for properties along the Corridors and adjoining sites that are listed.

Once the Phase I CA evaluation was completed, the scope of work for the Phase II SCI was determined based on the Phase I CA findings. The Phase II SCI consisted of a field investigation, laboratory analyses, and the preparation of this combined report, which includes tables summarizing the laboratory analytical results and figures depicting boring locations, significant site features and, if applicable, contamination occurrence and distribution.

Drilling activities for the field investigation were performed by Associated Environmental Services, Limited (AES) of Hauppauge, New York. Oversight of drilling activities was performed by LiRo. Laboratory analyses were provided by Chemtech of Mountainside, New Jersey, a NYS Department of Health (NYSDOH) certified laboratory (No. 11376). Field derived Quality Assurance/Quality Control samples (i.e., field blanks, trip blanks, duplicates) were not collected for this project. The field investigation was conducted between August 25 and September 6, 2022 and consisted of the following components:

- The advancement of 25 borings (SB-01 through SB-25) to terminal depths ranging from 2 to 18 feet below ground surface (ftbg). Sampler refusal on bedrock limited the depth of sampling at numerous locations.

- All Corridor borings were hand cleared using a post hole digger, hand auger, and/or air knife. Borings SB-01 through SB-08, SB-10 through SB-13, and SB-15 through SB-23) were cleared to a depth of at least 6 feet; borings SB-09, SB-14, and SB-25 were cleared to a depth of at least 2 feet, and boring SB-24 was cleared to a depth of at least 4 feet. Soil samples were collected using disposable spoons. In addition, a HASP was prepared prior to commencing fieldwork.

- Field screening, classification, and identification of soils was conducted from the ground surface to the bottom of each boring. Soil samples were visually classified in the field using the Unified Soil Classification System (USCS). Field screening consisted of visual and olfactory indicators of impacts as well as screening with a PID.

- The collection of one composite and one grab sample from each of the 25 soil boring locations (SB-01 through SB-25). The composite samples were comprised of soil from the entire boring column. The grab samples were collected from the bottom 6-inch interval in each boring.

- Laboratory analysis of the grab samples for TCL volatile organic compounds (VOCs) by USEPA Method 8260C.

- Laboratory analysis of the composite samples for: (1) Polycyclic Aromatic Hydrocarbons (PAHs) via United States Environmental Protection Agency (USEPA) Method 8270D; (2) Polychlorinated Biphenyls (PCBs) via USEPA Method 3550B/8082; (3) Total Petroleum Hydrocarbon Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO) via USEPA Method 8015B; (4) Resource Conservation and Recovery Act (RCRA) Characteristics via USEPA SW-846; and, (5) Toxicity Characteristic Leaching Procedure (TCLP) RCRA Metals via USEPA SW-846.

- Since groundwater was not encountered within any of the proposed TWP locations, no groundwater samples were collected.

2.0 CORRIDOR INFORMATION

2.1 Corridor Location, Description, and Use

The approximately 1.14-mile (6,035-foot) long Corridor is located in the Wakefield and Edenwald sections of the Borough of the Bronx, New York. Currently, the Corridor is developed with paved roadways and existing infrastructure systems, and exhibits evidence of underground utilities, such as manholes, pavement scars, utility mark-outs, and valve covers throughout the roadways and sidewalk areas. Overhead utility lines are present throughout the Corridor. Adjoining property usage consists primarily of residences and commercial/public operations. Three properties of potential environmental concern were identified during the Corridor reconnaissance:

- High Risk Site No. 2 – Great Dry Cleaners
- High Risk Site No. 8 – Amoco Gas Station
- High Risk Site No. 10 – Gas on the Go

An area map of the Corridor is presented as Figure 2.

2.2 Description of Surrounding Properties

The area surrounding the Corridor consists primarily of residences, commercial, and public operations. Two properties of potential environmental concern were identified during the Corridor reconnaissance.

- High Risk Site No. 11 – Shell Gas Station
- Moderate Risk Site No. 9 – Con Edison of NY Transfer Station

2.3 Corridor and Regional Topographic Setting

LiRo reviewed the United States Geologic Survey (USGS) 7.5-minute Topographic Quadrangle Maps for Mount Vernon, NY (2021) to determine the topography at the Corridor. The Corridor exhibits a topographic elevation change of approximately 90 feet. The elevation of the Corridor varies approximately from 80 feet above mean sea level (msl) by the intersection of E. 233rd St. and Baychester Ave. to 170 feet msl by the intersection of E. 233rd St. and Bronxwood Ave. Under natural conditions, surface runoff at the Corridor would be expected to follow the topography, which slopes to the east toward the Hutchinson River.

2.4 Corridor and Regional Geology

Based on the *Geologic Map of New York State (Lower Hudson Sheet dated 1970)*, the Corridor is located within the Trenton Group and Metamorphic Equivalents, specifically the Manhattan Formation Undivided which consists of pelitic schists and amphibolite. The Trenton Group ranges in depth up to 8,000 feet.

Based on the *Surficial Geologic Map of New York (Lower Hudson Sheet dated 1989)*, the surficial geology in the Corridor area is characterized by till and bedrock. The till thickness varies from 3 to 150 feet.

The Corridor is located within the Manhattan Prong Physiographic Province which is generally characterized by folded bedrock forming local topographic high areas and lower areas that have been filled in with glacial till and more recent alluvium.

The subsurface soils encountered during this Phase II SCI consisted predominantly of light to dark brown and gray fine to medium sand with traces of silt, clay, and gravel from grade to 18 ftbg. Man-made materials, which are indicative of urban fill, were encountered in SB-02 and SB-17. Bedrock was encountered within multiple borings along the Corridor at depths ranging from 2 ftbg within SB-09 and SB-14 to 17 ftbg within SB-01

2.5 Corridor and Regional Hydrogeology

The depth to the water table in the Bronx varies but generally follows topography. Based on the Record of Borings from previous geotechnical work completed along the Corridor, groundwater was measured in two observation wells at depths of approximately 11 and 14 feet below ground surface. During the Phase II SCI, groundwater was encountered within SB-04 at 18 ftbg. The nearest surface water body is the Hutchinson River which is located approximately 4,000 feet east of the Corridor. Based on the topography of the area, groundwater is anticipated to flow towards the east. Groundwater can also be influenced by seasonal fluctuations in precipitation, local variations in geology, tidal variations, underground anthropogenic structures, and/or local dewatering operations.

According to the *National Wetlands Inventory*, the closest national wetland area (the Hutchinson River) is located approximately 4,000 feet east of the Corridor and is identified as E1UBL (Estuarine Subtidal Unconsolidated Bottom). According to the *New York State Department of Conservation (NYSDEC) Wetland Mapper*, the eastern end of the Corridor is located within a NYSDEC Wetland check zone for a Class 1 wetland located approximately 300 feet southeast of the Corridor.

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were accessed from the FEMA website. Two map panels (Panel #3604970038F and Panel #3604970039F, revision 9/5/2007) show that the entire Corridor is located in the Flood Zone X. The flood zone is an area of minimal hazard.

3.0 PHASE I CA EVALUATION

Based on a review of the regulatory environmental database report and historical fire insurance maps, as well as observations from the Corridor reconnaissance, the Corridor was evaluated to determine potential environmental risks due to historical and current usage of the Corridor itself and adjacent properties. Sites identified from the Corridor reconnaissance, historical map review, and environmental database report evaluation are categorized using the DDC Risk Criteria in Table 1 and placed in a Risk Category of "High", "Moderate", or "Low", to allow for consistent evaluation of the potential risk posed by certain establishments.

3.1 Corridor Reconnaissance

The Corridor reconnaissance was performed by Eva Jakubowska of LiRo on March 29, 2022 to visually identify sites of potential environmental concern, based on their current use and/or conditions located within and adjoining the Corridor. Available project information and an environmental database report were used to identify and evaluate individual properties within and adjacent to the Corridor. The sites of potential environmental concern identified during the reconnaissance were correlated with street address, block and lot information, regulatory agency database listings, and Sanborn Map review. Five properties of potential environmental concern were identified adjoining the Corridor or in the surrounding area during the Corridor reconnaissance:

- High Risk Site No. 2 – Great Dry Cleaners.
- High Risk Site No. 8 – Amoco Gas Station.
- High Risk Site No. 10 – Gas on the Go.
- High Risk Site No. 11 – Shell Gas Station.
- Moderate Risk Site No. 9 – Con Edison of NY Transfer Station.

A list of risk sites identified during the Corridor reconnaissance is presented in Table 2. Corridor photographs are presented in Appendix A.

3.2 Historical Sanborn Map Review

Environmental Data Resources, Inc. (EDR) of Shelton, Connecticut provided historical Sanborn Fire Insurance Maps for the Corridor. The purpose of the Sanborn Map review was to identify sites of potential environmental impact within and adjoining to the Corridor based on their historical use. LiRo reviewed copies of Sanborn Fire Insurance Maps for the Corridor for the years 1897, 1908, 1918, 1935, 1950, 1977, 1981, 1983, 1986, 1988, 1991-1993, 1995, 1996, 1998, and 2001-2007. This information was utilized during the Corridor reconnaissance to correlate historical properties of environmental concern with their current street address, block, and lot information. Ten properties of potential environmental concern were identified adjoining the Corridor or in the surrounding area from the Sanborn Map review.

- High Risk Site No. 2 – Dry Cleaning.
- High Risk Site No. 3 –Auto Repair and Storage.
- High Risk Site No. 4 - Dry Cleaner.
- High Risk Site No. 5 – Gas Station.

- High Risk Site No. 6 – Gas Station.
- High Risk Site No. 8 – Gas Station with four gas tanks.
- High Risk Site No. 9 – Gas Station.
- High Risk Site No. 10 – Gas Station with four gas tanks.
- High Risk Site No. 11 – Gas Station.
- Moderate Risk Site No. 9 – Consolidated Edison of NY Transfer Station.

A list of risk sites identified from the historical map review are presented in Table 2. Copies of the Sanborn Fire Insurance Maps are provided as Appendix B.

3.3 Regulatory Agency Database Report Review

An environmental database report was obtained from EDR to review available regulatory environmental databases to identify sites that are known to be contaminated or pose potential environmental risk within a 1/8-mile radius of the Corridor centerline. Databases searched include, but are not limited to: National Priority List (NPL); Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); CERCLIS No Further Remedial Action Planned (NFRAP); Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal facilities (TSD); RCRA Corrective Action Report (CORRACTS); RCRA Generators (GEN); Emergency Response Notification System (ERNS); New York State Inactive Hazardous Waste Sites (State Sites); New York State 1990 Spills (Spills-1990); New York State Solid Waste Landfills (SWL); New York State Regulated Underground Storage Tanks / Aboveground Storage Tanks (REG UST/AST); and, New York State Leaking Underground Storage Tanks (LUST). The environmental regulatory database report is provided as Appendix C. A list of risk sites identified from the review of regulatory environmental database report is presented in Table 2, Summary of Assessment Results (High and Moderate Risk Sites). Figure 3 shows the location of the final "High" and "Moderate" risk sites relative to the Corridor.

3.4 Findings and Recommendations of the Phase I CA

After evaluation of modifying information, such as sites with spills that had been closed by the New York State Department of Environmental Conservation (NYSDEC), sites identified on one or more databases with no evidence or records of spills, or older sites that were redeveloped or restored such that they no longer posed significant risks, LiRo recommends that 10 of the initial 87 "High" risk sites be reclassified as "Moderate" risk sites and 66 of the initial 87 "High" risk sites be reclassified as "Low" risk sites. Therefore, the final evaluation has identified the following 11 "High" risk sites and 10 "Moderate" risk sites that might pose potential impact on the Corridor. Details of the final "High" and "Moderate" risk sites are shown on Table 2. Figure 3 shows the location of the final "High" and "Moderate" risk sites relative to the Corridor.

"High" Risk Sites:

Risk Site No.	Facility Name	Address	Map ID
1	Residential building and UST site.	855 E. 233rd St.	H1
2	Great Dry Cleaners and parking lot, NY Brownfield Site, and NY E Designation site.	840-860 E. 233rd St.	H2
3	Parking lot for residential building and NY E Designation site (former auto repair shop).	4179 Bronxwood Ave.	H3
4	Residential and commercial building including a bar/restaurant (former dry cleaner).	916 E. 233rd St.	H4
5	Dunkin Donuts, Subway, and Super Laundromat and UST site (former gas station).	980 E. 233rd St.	H5
6	Ko Car Wash and UST site (former gas station)	1131-1141 E. 233rd St.	H6
7	Rite Aid Pharmacy (former dry cleaner).	1179-1215 E. 233rd St.	H7
8	Amoco Gas Station, Lotus Market Place, and Flat-Fix Tire Change and UST site.	1220 E. 233rd St.	H8
9	Kennedy Chicken and Burger, Edenwald Smoke House, African Market, Baychester Express Deli, Mail and Print Ship Center, Aloha Krab Restaurant, Kaesar Gourmet Deli, Gleden Fountain Restaurant, and Shine Brite Laundromat and UST site (former gas station)	1217 E. 233rd St.	H9
10	Gas on the Go and Midnight Auto Repair and UST site.	1225 E. 233rd St. and 3900-3912 Baychester Ave.	H10
11	Shell Gas Station with Food Mart and UST site.	828-838 E. 233rd St.	H11

"Moderate" Risk Sites:

Risk Site No.	Facility Name	Address	Map ID
1	True Faith Church USA, The World of God Ministries, Jeskell Realty, LLC, and Interstate Luxury Limousine Services and NY E Designation site.	862-868 E. 233rd St.	M1
2	Rear yard to separate building and NY E Designation site.	4181 Bronxwood Ave. and 870-874 E. 233rd St.	M2
3	Traditional Karate and NY E Designation site.	924 E. 233rd St.	M3

"Moderate" Risk Sites:

Risk Site No.	Facility Name	Address	Map ID
4	Liquor Land and Parking Lot and NY E Designation site.	930-934 E. 233rd St.	M4
5	Residential building and AST site.	965-971 E232nd St. and 4175 Paulding Ave.	M5
6	Residential building and NY Spills site (Two 100-gallon spills, both closed).	4182 Paulding Ave.	M6
7	Residential building and NY E Designation site.	865 E. 232nd St.	M7
8	Residential building and NY E Designation site.	911 E. 232nd St.	M8
9	Con Edison of NY Transfer Station.	1950 Strang Ave.	M9
10	Associated Super Market, Margarita's Unisex, Edenwald Pharmacy, Te Amo Stationary, Discount Wine and Liquors, The Barber Factory, Maddarin House I Chinese Food, 1681 Grocery, Inc. (deli), and parking lot and NY E Designation site (former dry cleaner and auto repair shop).	4125-4149 Laconia Ave.	M10

Based on the findings of the Phase I CA, the 11 "High" risk sites and 10 "Moderate" risk sites could impact the subsurface (soil and/or groundwater) of the Corridor. As requested by the NYC DDC, LiRo also conducted a Phase II SCI and the results are presented in this report.

4.0 PHASE II SCI CORRIDOR EVALUATION

4.1 Soil Quality Investigation

Twenty-five soil borings (SB-01 through SB-25) were advanced to terminal depths ranging from 2 to 18 feet below ground surface (ftbg). Sampler refusal on bedrock limited the depth of sampling at numerous locations. The Corridor borings were hand cleared using a post hole digger, hand auger, and/or air knife. Borings SB-01 through SB-08, SB-10 through SB-13, and SB-15 through SB-23) were cleared to a depth of at least 6 feet, borings SB-09, SB-14, and SB-25 were cleared to a depth of at least 2 feet, and boring SB-24 was cleared to a depth of at least 4 feet. Soil samples were collected using disposable spoons. Soil boring locations are shown on Figure 2. The designations and sampling intervals for the samples that were submitted to the laboratory are included in Table 1. A map depicting each boring location is included as Figures 4A-4B, Boring Location Sketch. Boring logs are provided in Appendix B. The locations of each boring are described below:

- **SB-01** – Advanced on the sidewalk along Bronxwood Avenue, 164 feet south of Bussing Avenue and 4 feet east of the Bronxwood Avenue curb line.
- **SB-02 –** Advanced on the sidewalk along Bronxwood Avenue, 152 feet north of East 233rd Street and 4 feet west of the Bronxwood Avenue curb line.
- **SB-03** – Advanced on the sidewalk along East 233rd Street, 195 feet east of Bussing Avenue and 4 feet south of the East 233rd Street curb line.
- **SB-04 –** Advanced on the sidewalk along East 233rd Street, 91 feet west of Bronxwood Avenue and 15 feet south of the East 233rd Street curb line.
- **SB-05** – Advanced on the sidewalk along Bronxwood Avenue, 78 feet south of East 233rd Street and 2 feet west of the Bronxwood Avenue curb line.
- **SB-06 –** Advanced on the sidewalk along East 233rd Street, 132 feet east of Bronxwood Avenue and 2 feet south of the East 233rd Street curb line.
- **SB-07** – Advanced on the sidewalk along Edenwald Avenue, 21 feet east-northeast of Digney Avenue and 3 feet north-northwest of the Edenwald Avenue curb line.
- **SB-08 –** Advanced on the sidewalk along East 233rd Street, 446 feet west of Paulding Avenue and 9 feet south of the East 233rd Street curb line.
- **SB-09** – Advanced on the sidewalk along East 233rd Street, 223 feet west of Gunther Avenue and 4 feet north of the East 233rd Street curb line.
- **SB-10 –** Advanced on the sidewalk along East 233rd Street, 111 feet west of Paulding Avenue and 9 feet south of the East 233rd Street curb line.

- **SB-11** – Advanced on the sidewalk along Paulding Avenue, 23 feet south of East 233rd Street and 10 feet west of the Paulding Avenue curb line.
- **SB-12 –** Advanced on the sidewalk along East 233rd Street, 37 feet east of Gunther Avenue and 13 feet north of the East 233rd Street curb line.
- **SB-13** – Advanced on the sidewalk along East 233rd Street, 117 feet west of Wickham Avenue and 3 feet south of the East 233rd Street curb line.
- **SB-14 –** Advanced on the sidewalk along East 233rd Street, 128 feet east of Wickham Avenue and 3 feet north of the East 233rd Street curb line.
- **SB-15** – Advanced on the sidewalk along East 233rd Street, 42 feet west of Laconia Avenue and 4 feet south of the East 233rd Street curb line.
- **SB-16 –** Advanced on the sidewalk along Laconia Avenue, 69 feet south of East 233rd Street and 2 feet east of the Laconia Avenue curb line.
- **SB-17** – Advanced on the sidewalk along Strang Avenue, 21 feet northeast of Ely Avenue and 4 feet northwest of the Strang Avenue curb line.
- **SB-18 –** Advanced on the sidewalk along East 233rd Street, 59 feet east of Ely Avenue and 4 feet south of the East 233rd Street curb line.
- **SB-19** – Advanced on the sidewalk along Strang Avenue, 70 feet southwest of Grace Avenue and 4 feet southeast of the Strang Avenue curb line.
- **SB-20 –** Advanced on the sidewalk along East 233rd Street, 81 feet west of Grace Avenue and 5 feet north of the East 233rd Street curb line.
- **SB-21** – Advanced on the sidewalk along East 233rd Street, 12 feet west of Edson Avenue and 7 feet south of the East 233rd Street curb line.
- **SB-22 –** Advanced on the sidewalk along East 233rd Street, 36 feet west of Baychester Avenue and 5 feet north of the East 233rd Street curb line.
- **SB-23** – Advanced on the sidewalk along Baychester Avenue, 31 feet north of East 233rd Street and 5 feet west of the Baychester Avenue curb line.
- **SB-24 –** Advanced on the sidewalk along Baychester Avenue, 175 feet north of East 233rd Street and 5 feet west of the Baychester Avenue curb line.
- **SB-25 –** Advanced on the sidewalk along Baychester Avenue, 90 feet south of Strang Avenue and 7 feet west of the Baychester Avenue curb line.

Soil from each boring was classified and examined for visual evidence (i.e., staining, discoloration) and any olfactory indications (i.e., odors) of contamination. Continuous soil samples were collected from each of the borings. In addition, a PID was used to screen the soil for VOC vapors. All re-useable

sampling equipment was decontaminated using a deionized water and Alconox soap wash and then rinsed with deionized water.

In order to identify representative conditions relative to the presence of PAHs, PCBs, TPHC DRO/GRO, RCRA Characteristics, and TCLP RCRA metals over the entire soil column in each boring, composite soil samples were collected by mixing the soil from the entire column in a stainless steel bowl. Boring composite samples were collected from all 25 soil borings.

In order to identify representative conditions relative to the presence of VOCs, grab soil samples were collected from the bottom 6-inch interval in all 25 soil borings.

4.2 Groundwater Quality Investigation

Since groundwater was not encountered within any of the proposed TWP locations, no groundwater samples were collected.

4.3 Laboratory Analyses

The soil samples were submitted to Chemtech, an NYSDOH approved laboratory (No. 11376). Field derived Quality Assurance/Quality Control (QA/QC) samples (i.e., field blank, trip blank, duplicate) were not collected for this project. Laboratory analytical reports are included in Appendix C.

The grab soil samples were analyzed for USEPA Target Compound List (TCL) volatile organic compounds (VOCs) by Method 8260C. The boring composite soil samples were analyzed for: (1) PAHs via USEPA Method 8270D; (2) PCBs via USEPA Method 3550B/8082; (3) TPHC DRO/GRO via USEPA Method 8015B; (4) RCRA Characteristics via USEPA SW-846; and, (5) TCLP RCRA Metals via USEPA SW-846.

4.4 Data Evaluation

In order to evaluate the subsurface soil quality, the laboratory analytical results of the grab and composite soil samples were compared with the regulatory standards identified in: (1) New York State Department of Environmental Conservation (NYSDEC) Subpart 375-6: Remedial Program Restricted Use Commercial (Track 2) Soil Cleanup Objectives (SCOs); and/or, (2) Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and Title 6 of the New York Codes, Rules and Regulations (NYCRR) Part 371.

5.0 PHASE II SCI FINDINGS

This section discusses the analytical data and findings for the activities discussed in Section 4.0. Boring logs can be found in Appendix D. Complete analytical data reports are included in Appendix E.

5.1 Field Screening

Field screening (i.e., PID readings and visual observations) did not identify impacted soils within the Corridor; however, olfactory evidence of petroleum-impacted soil was noted within SB-10 from 6 to 8 ftbg and within SB-11 from grade to 8 ftbg. Refer to Table 3 for a summary of environmental boring data.

5.2 Soil and Groundwater Laboratory Analytical Results

5.2.1 Volatile Organic Compounds (VOCs) in Soil

Two VOCs, acetone and methylene chloride, were detected in one or more of the 25 grab samples collected. The acetone and methylene chloride were detected at concentrations below the associated Part 375-6.8 (b) Restricted Use (Track 2) Commercial SCO regulatory standards. Acetone and methylene chloride are common laboratory cross contaminants. Refer to Table 4 for a summary of TCL VOC detections.

5.2.2 Polycyclic Aromatic Hydrocarbons (PAHs) in Soil

One or more PAHs were detected in five of the 25 composite samples collected. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and/or pyrene were detected at concentrations below their corresponding Part 375-6.8 (b) Restricted Use (Track 2) Commercial SCOs in SB-14-COMP, SB-15-COMP, SB-18-COMP, SB-19-COMP, and SB-25-COMP. The detected PAHs may be attributed to: (a) residuals from isolated releases in the area of the Corridor; and/or, (b) the presence of urban fill material placed at the Corridor. Refer to Table 5 for a summary of PAH detections.

5.2.3 PCBs in Soil

One PCB, Aroclor 1254, was detected in one (SB-25) of the 25 composite samples collected. Total PCBs were detected below the Part 375-6.8 (b) Restricted Use (Track 2) Commercial SCO. Refer to Table 6 for a summary of the PCB detections.

5.2.4 Toxicity Characteristic Leaching Procedure (TCLP) Resource Conservation and Recovery Act (RCRA) Metals in Soil

TCLP RCRA metals were detected in all 25 composite samples collected. Barium, cadmium, chromium, lead, mercury, and/or selenium were detected below their corresponding 6 NYCRR Part 371 and RCRA standards. Based on their consistency, most of the detected concentrations are attributed to background levels. However, some of the detected concentrations may be attributed to contaminants in urban fill

material placed throughout the Corridor. Refer to Table 7 for a summary of TCLP RCRA metals detections.

5.2.5 Waste Characterization of Soil

Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity (pH) were detected or within the acceptable RCRA ranges. TPHC-DRO were detected at concentrations ranging from approximately 0.844 mg/kg in SB-02-COMP to 24.7 mg/kg in SB-19-COMP. TPHC-GRO were detected at concentrations ranging from approximately 0.008 mg/kg in SB-14-COMP to 1.83 mg/kg in SB-11-COMP. There are no regulatory standards for TPHC-DRO and TPHC-GRO. Analytical results will need to be compared to levels acceptable by the chosen receiving facility to determine appropriate waste characterization prior to off-site disposal. Refer to Table 7 for a summary of TCLP parameters, RCRA Characteristics, and TPHC DRO/GRO results.

5.2.6 Analysis of NYCDEP Parameters in Groundwater

Since groundwater was not encountered within any of the proposed TWP locations, no groundwater samples were collected.

6.0 PHASE II SCI CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the Phase II SCI, which included the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following conclusions are presented:

- Field screening (i.e., PID readings and visual observations) did not identify impacted soils within the Corridor; however, olfactory evidence of petroleum impacted soil was noted within SB-10 from 6 to 8 ftbg and within SB-11 from grade to 8 ftbg;

- Two VOCs, acetone and methylene chloride, were detected in one or more of the 25 grab samples collected. The acetone and methylene chloride were detected at concentrations below the associated Part 375-6.8 (b) Restricted Use (Track 2) Commercial SCO regulatory standards. Acetone and methylene chloride are common laboratory cross contaminants.

- One or more PAHs were detected in five of the 25 composite samples collected. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and/or pyrene were detected at concentrations below their corresponding Part 375-6.8 (b) Restricted Use (Track 2) Commercial SCOs in SB-14-COMP, SB-15-COMP, SB-18-COMP, SB-19-COMP, and SB-25-COMP.. The detected PAHs may be attributed to: (a) residuals from isolated releases in the area of the Corridor; and/or, (b) the presence of urban fill material placed at the Corridor.

- One PCB, Aroclor 1254, was detected in one (SB-25) of the 25 composite samples collected. Total PCBs were detected below the Part 375-6.8 (b) Restricted Use (Track 2) Commercial SCO.

- TCLP RCRA metals were detected in all 25 composite samples collected. Barium, cadmium, chromium, lead, mercury, and/or selenium were detected below their corresponding 6 NYCRR Part 371 and RCRA standards. Based on their consistency, most of the detected concentrations are attributed to background levels. However, some of the detected concentrations may be attributed to contaminants in urban fill material placed throughout the Corridor.

- Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity (pH) were detected or within the acceptable RCRA ranges.

- TPHC-DRO were detected at concentrations ranging from approximately 0.844 mg/kg in SB-02-COMP to 24.7 mg/kg in SB-19-COMP. TPHC-GRO were detected at concentrations ranging from approximately 0.008 mg/kg in SB-14-COMP to 1.83 mg/kg in SB-11-COMP. There are no regulatory standards for TPHC-DRO and TPHC-GRO. Analytical results will need to be compared to levels acceptable by the chosen receiving facility to determine appropriate waste characterization prior to off-site disposal.

- Since groundwater was not encountered in TWP borings, no groundwater samples were collected.

Based on the results of the field investigation and laboratory analytical results, LiRo recommends the following:

- The Contract documents should identify provisions and a contingency for managing, handling, transporting and disposing of non-hazardous contaminated soil. All soil shall be managed, transported and disposed of in accordance with NYSDEC Part 360 requirements. The Contractor should submit a Material Handling Plan, to identify the specific protocols and procedures that will be employed to manage potentially contaminated soil, if encountered, during construction, in accordance with applicable regulations;

- Due to the presence of DRO and GRO, to minimize the creation and dispersion of fugitive airborne dust, the Contractor may implement dust control measures to minimize potential airborne contaminants released as a direct result of construction activities. A CAMP shall be developed in accordance with NYSDEC DER-10 Regulations. The CAMP requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities;

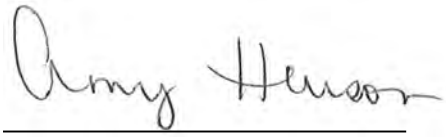
- Should dewatering become necessary during construction activities within the Corridor, the Contractor will be required to obtain NYCDEP sewer discharge permit. If discharge into storm sewers is required during dewatering, it may be done under the appropriate NYSDEC SPDES permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and,

- Before beginning any excavation activity, the Contractor should submit a Corridor-specific HASP that will meet the requirements set forth by the OSHA, the NYSDOH and any other applicable regulations. The HASP should identify the possible locations and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate concerns (i.e., dust control procedures for DRO/GRO).

7.0 STATEMENT OF LIMITATIONS

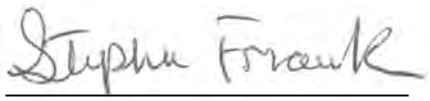
The data presented and the opinions expressed in this report are qualified as stated in the attachment to this section of the report (see Appendix G). Qualifications of the Environmental Professionals associated with this project are included within Appendix F.

Report Prepared By:



Amy Hewson
Senior Environmental Analyst

Report Reviewed By:



Stephen Frank
Senior Geologist

Report Reviewed By:

Robert Kreuzer
Project Manager

FIGURES

FIGURE 1 – TOPOGRAPHIC CORRIDOR LOCATION MAP FIGURE 2 – CORRIDOR AREA MAP

FIGURES 3 – RISK SITES ON CORRIDOR AREA MAP

FIGURES 4A-4B – BORING LOCATION SKETCH

FOR PHASE I CORRIDOR ASSESMENT AND PHASE II SUBSURFACE CORRIDOR INVESTIGATION REPORT PLEASE REFER TO THE SEPARATE FILES:

1. **HED562-HAZMAT 09.16.2024 PART1 OF 3.pdf**
2. **HED562-HAZMAT 09.16.2024 PART2 OF 3.pdf**
3. **HED562-HAZMAT 09.16.2024 PART3 OF 3.pdf**

JB-PAGES JOINT BID – OPEN COMPETITIVE

NOTICE

THE PAGES CONTAINED IN THIS JOINT BID (JB-PAGES) REPRESENT ADDITIONAL CONTRACT REQUIREMENTS THAT APPLY TO JOINT BID CONTRACTS.

SPECIFICATIONS FOR JOINT BID WORK

1. The Contractor shall be responsible for compliance with all the provisions of the following Articles, Appendixes, Specifications, Sketches and Scope of Work, which are hereby made a part of the original Contract Documents:

   A. The "2025 Joint Bid Agreement", in these JB-Pages

   B. The Joint Bid Special Specifications, in these JB-Pages

   C. Private Utilities Participating List, in these JB-Pages

   D. Private Utilities Scopes of Work, in these JB-Pages

   E. Private Utilities Test Pits and Sketches, in these JB-Pages

   F. Private Utilities Drawing List, in these JB-Pages

   G. The Private Utilities reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN" dated August 1, 2005 as amended below

      1. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 450, pages 56, 57, and 58;

         Note: Items under JB 450 are task driven operation items and are not based on crew size. These items are divided into three unique types, each of which provides a description of applicability and typical use. The "Method of Measurement", on page 57, states that "The actual crew performing the operation will not be considered by the facility operator, in consultation with the Resident Engineer, when determining the applicable Unit Item Type, which shall be only as per the task performed."

      2. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article A. Description;

         Delete the last four lines of text in their entirety, beginning with the words: "accordance with Specification under Addendum #1, . . .";

         Substitute the following revised text: "accordance with Specification Section 7.18 – Controlled Low Strength Material (CLSM), in the Standard Highway Specification. All backfill within the maximum excavation limits shown in Sketch No. JB 225 shall be of controlled low strength material (CLSM) in compliance with requirements of Section 7.18, and its cost shall be deemed included in this item."

      3. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article B. Materials;

         Delete the first sentence in its entirety, beginning with the words: "Furnish Controlled Low Strength Material fill or backfill . . .";

Substitute the following revised sentence: “Furnish Controlled Low Strength Material fill or backfill as required and specified in Section 7.18 – Controlled Low Strength Material (CLSM), of the Standard Highway Specification.”

4. Refer to the Private Utility reference document called “JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN”, Specification for JB 226, page 12, Article A. Description;

Delete the last five lines of text in their entirety, beginning with the words: “accordance with Specification under Addendum #1, . . .”;

Substitute the following revised text: “accordance with Specification Section 7.18 – Controlled Low Strength Material (CLSM), in the Standard Highway Specification. All backfill within the maximum excavation limits shown in Sketch No. JB 225 shall be of controlled low strength material (CLSM) backfill in compliance with Section 7.18 in the Standard Highway Specifications, and its cost shall be deemed included in this item.”

5. Refer to the Private Utility reference document called “JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN”, Specification for JB 226, page 12, Article B. Materials;

Delete the first sentence in its entirety, beginning with the words: “Furnish controlled low strength material fill or backfill . . .”;

Substitute the following revised sentence: “Furnish controlled low strength material fill or backfill as required and specified in Section 7.18 – Controlled Low Strength Material (CLSM), of the Standard Highway Specification.”

6. If the Contractor claims or alleges that delays were caused by a utility for failure to supply and/or provide Specialty Contractors in a timely manner, then the Contractor may bring a claim against the Utility. Neither the Contractor nor the Utility shall bring a delay claim against the City either in a Court of Law or the City’s contract dispute resolution board process; and to the extent the Contractor alleges a delay was caused by a Utility, the Contractor will be limited to bringing such legal action in a Court of Law and will not be able to seek arbitration over any delay claims or delay-related claims. If the Contractor and Utility initiate a legal action against each other, this legal action will be outside the jurisdiction of the City’s contract dispute resolution board process and the City shall not be a party in the litigation process.

[NO FURTHER TEXT HERE.]

Requirements for Joint Bid Work

A. Definitions. Additional terms are defined in Standard Construction Contract and the Joint Bid Agreement, below.

1. The City is bidding jointly this project. The City has combined its Public Work, Interference Work, and Utility Work into one bid contract package. All prospective bidders should be alerted to the fact that the City prepared all specifications, drawings, and all other necessary contract documents for the Public Work, Interference Work, and Utility Work.

2. The City has prepared contract documents which include specifications, drawings and all other necessary contract documents for the Public Work, Interference Work, and Utility Work. The bid items, specifications, and estimated quantities have been designed to fully compensate the Contractor for its costs to perform the Public Work, Interference Work, and Utility Work.

3. The Contractor agrees that its bid items and prices for the Public Work, Interference Work, and Utility Work shall include all incremental costs and/ or additional compensation for performing Public Work including: coordination of its work with the Utilities, loss of productivity and efficiency, added cost or expense, loss of profit, other damages or impact costs that may be suffered by the Contractor because of direct or indirect obstructions due to the presence of Utility Facilities, such as conduits, ducts or duct banks containing conductors for live and/or abandoned electric, telephone, cable TV, any type of communication cables, “Non Cost Sharing” gas mains and services, steam mains, and various non-hazardous encasement materials or utility structures located within the Public Work project area.

4. In the bid solicitation documents, the City has provided estimates of quantities for both Specific Public Work Items, Specific Utility Work Items, and Specific Shared Items. Bidders are required to bid a unit price on all Work. For the purposes of identifying the lowest responsive and responsible bidder, a bidder’s unit prices bid must be calculated based on all Work, which includes the combined Specific Public Work Items, the Specific Utility Work Items, and the Specific Shared Items.

5. The City and the Utilities may use any applicable item from the Bid Schedule regardless of whether the item is considered or defined as a City item or Utility item.

6. If the Utility determines that the Contractor is not qualified to perform a specific scope of Utility Work, the Utility has the right to utilize their Specialty Contractors. If the Contractor claims or alleges that delays were caused by a utility for failure to supply and/or provide Specialty Contractors in a timely manner, then the Contractor may bring a claim against the Utility. Neither the Contractor nor the Utility shall bring a delay claim against the City either in a Court of Law or the City’s contract dispute resolution board process; and to the extent the Contractor alleges a delay was caused by a Utility, the Contractor will be limited to bringing such legal action in a Court of Law and will not be able to seek arbitration over any delay claims or delay-related claims. If the Contractor and Utility initiate a legal action against each other, this legal action will be outside the jurisdiction of the City’s contract dispute resolution board process and the City shall not be a party in the litigation process.

7. Overruns and Utility Extra work will be handled in accordance with Item JB 9.28, ALLOWANCE FOR UTILITY EXTRA WORK.

8. Where the Contract contains Value Engineering (VE) language, utility VE proposals are specifically allowed, but must follow the Contract VE requirements.

9. Section JB 900 is not applicable and deemed deleted.

10. Section JB 350 is not applicable and deemed deleted. The Contractor will not be paid separately to modify means and methods around overhead utilities; those costs must be included in the prices bid for all work.

[NO FURTHER TEXT HERE.]

2025 JOINT BID AGREEMENT (PILOT PROGRAM)

THIS AGREEMENT (the **"Agreement"),** to jointly bid public and private work related to certain infrastructure improvement projects included in a pilot program in New York City, dated the **31st day of January, 2025**, is made by and among the City of New York (the **"City"),** acting by and through its Department of Design + Construction **("DDC"),** and the Consolidated Edison Company of New York, Inc., **("Con Ed"),** Verizon New York Inc., **("Verizon"),** Empire City Subway Company, Ltd.. **("ECS"), National Grid ("NG"), Altice ("Altice"), Charter Spectrum ("Charter"), the General Contractor's Association (GCA), and the New York Road Contractor's Association (NYRCA).**

RECITALS

WHEREAS, Sections 1 through 7, inclusive, of Chapter 322 of the Unconsolidated Laws of the State of New York, 2014 Regular Session, as amended, authorizes the City to, among other things, plan its work in New York City, as defined below, with the Utilities, as defined below, bid jointly with the Utilities, and

WHEREAS, the City and the Utilities believe that it is in the best interests of the people of the City and the customers of the Utilities to expedite construction, minimize disturbance to communities and reduce overall costs, and to enter into an agreement to implement the intentions of the Act;

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth in this Agreement, the parties to this Agreement agree as follows:

ARTICLE 1

DEFINITIONS

1.1 **"Bid Schedule"** will mean an inclusive list of construction tasks, listed as bid items, with estimated quantities. Prior to advertisement, the Utilities will pre-engineer and prepare a detailed scope of work that includes estimated items and quantities for their Interference Work, and the DDC will coordinate and consolidate the City's estimate for City work with the Utilities' estimates of Interference Work into a single unit price Bid Schedule. If there is extra work for the City or a Utility, then either the City or Utility may use any available applicable item from the Bid Schedule regardless of whether it is considered or defined as a City item or Utility item.

1.2 **"Business Days"** or **"Days"** shall mean Monday through Friday, excluding holidays.

1.3 **"City Accommodations"** shall mean any changes made to the Public Work at the request and expense of the Utility during Pre-engineering or at any other time and may include, but shall not be limited to, altering the location of City Facilities; changing the type of City Facilities constructed; extending the length or number of City Facilities constructed, including additional paving; and changing or adding materials used for the Public Work project.

1.4 **"City Contractor(s)"** shall mean a construction vendor that is awarded a contract by the City after it has submitted a bid to the City, and the City determined that the bid was responsive to the solicitation documents and that the bidder is a responsible vendor eligible to receive public monies.

1.5 **"City Facility(ies)"** shall mean any facility owned by the City, including, but not limited to, roadways, streets, highways, parkways and other thoroughfares, bridges. sewers, culverts, catch basins, chutes and water mains.

1.6 **"City's RE"** shall mean the City's resident engineer, who will have the overall responsibility for overseeing and managing all issues concerning safety, design, coordination, schedules as well as tracking and verifying quantities of work performed for the purpose of payments for the Joint Bid Project in a manner that is consistent with the terms and conditions contained with this Agreement.

1.7 **"Commissioner"** shall mean the Commissioner of DDC.

1.8 **"Contingent Items"** shall mean the items to be taken and understood to mean all labor, material and equipment necessary to complete extra work. and for which unit prices have been fixed in the City's construction contract.

1.9 **"DDC"** or **"Department"** shall mean the City's Department of Design and Construction, or any other agency or department that is acting as the Department's agent in the development or construction of Public Work projects and Joint Bid Projects.

1.10 **"DOT"** shall mean the City's Department of Transportation.

1.11 "Extra Work" shall have the definition from the City's Standard Construction Contract.

1.12 Extra Utility Work" shall mean Utility Work other than required by the Contract at the time of bid which is authorized by the Commissioner pursuant to Chapter VI of the Standard Construction Contract.

1.13 **"Gas Agreement"** shall mean separate gas cost sharing allocation agreements, dated June 29, 1989, as amended, between the City and Con Ed and dated December 29, 1988, as amended, between the City and NG.

1.14 **"Joint Bid Project(s)"** shall mean a construction project in New York City that the City and Utilities agree, pursuant to this Agreement, will be awarded pursuant to the Procurement Policy Board Rules and this Agreement, and will include both City Facilities and Utility Facilities.

1.15 **"Interference Work"** shall mean such work as is required by the City or a Utility to be performed by the City Contractor during the performance of Public Work, as defined herein, in order to maintain, protect, support, shift, alter, relocate, remove, and/or replace Utility Facilities at the Utilities' expense.

1.16 **"Lay Outs"** shall mean the Utilities' plans, drawings, estimates, and schedules for any proposed Specialty Utility work.

1.17 **"MPS"** shall mean the maintenance and protection of the construction site of a Joint Bid Project.

1.18 **"MPT"** shall mean the maintenance and protection of the traffic on and near a Joint Bid Project.

1.19 **"Other Public Agency"** shall mean any government entity other than the City's DOT or Department of Environmental Protection. Such other government entities include, but are not limited to, the Port Authority of New York and New Jersey and the Transit Authority.

1.20 **"PPB Rules"** shall mean the City's Procurement Policy Board rules, as amended.

1.21 **"Pre-engineer"** or **"Pre-engineering"** shall mean a process undertaken by the Utilities on all Joint Bid Projects whereby the Utilities will determine the location of and mark out current Utility Facilities, and design the location and/or re-location of Utility Facilities in a manner that is to the extent practicable, efficient and cost-effective for both the City and the Utilities to avoid or ameliorate disturbances to the City Facilities and the Utilities Facilities, and in which the City and Utility participate in prior to the bid date of a Joint Bid Project contract, all in accordance with this Agreement.

1.22 **"Project Manager"** shall mean the individual(s) designated by each Utility to the Joint Bid Project as a full-time person with the authority to represent the Utility, render binding decisions on behalf of the Utility, coordinate all Utility Work and facilitate all necessary decisions regarding Utility Facilities.

1.23 **"Public Work"** shall mean the following: (a) construction, reconstruction, installation, alteration, maintenance, repair, grading, re-grading, regulating and improvement of roadways, highways, streets, parkways and other thoroughfares, and bridges and (b) similarly for sewers, culverts, catch basins, chutes and water mains. This also includes all City Accommodations.

1.24 **"REI"** shall mean the resident engineering and inspection services procured by the City in connection with a Joint Bid Project.

1.25 **"Significant Utility Change"** shall apply in the following circumstances: When the character of the JB items of work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or When a major item of work, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed. The term "major item" means any utility item for which the original bid price multiplied by the original contract quantity exceeds $50,000 or 2% of the Utility's total bid price (as shown in the post-bid concurrence letter), whichever is less. Extra Utility Work caused by changes or additions to the Public Work is not considered a Significant Utility Change.

1.26 **"Shared Items"** shall mean the bid items in the City's construction contract in which the total cost will be paid for by the City and the Utilities in accordance with their share as described in Article 5.6 herein.

1.27 **"Specific Public Work Items"** shall mean a detailed set of specifications prepared by the City based on the City's engineering, design and plans that will represent the Public Work portion of the Joint Bid Project and it is these unit price items and quantities related to the Public Work that will be bid upon and evaluated by the City for the Public Work portion of the City's construction contract.

1.28 **"Specific Shared Items"** shall mean a detailed set of specifications prepared by the City based on the City's engineering, design and plans that will represent the Shared Items portion of the Joint Bid Project and it is these unit prices and quantities related to Shared Items that will be bid upon and evaluated by the City for the Shared Items portion of the City's construction contract.

1.29 **"Specialty Contractors"** shall mean any third party contractors hired by a Utility to perform Specialty Utility Work.

1.30 **"Specialty Utility Work"** shall mean work traditionally performed only by the Utility using its own forces or Specialty Contractors that is necessary for the completion of the Joint Bid Project including, but not limited to, the installation and removal of insulation, "live" gas and steam work, pipe ripping, cable-related work and environmental clean-up work.

1.31 **"Specific Utility Work Items"** shall mean a detailed set of specifications prepared by the Utilities based on the Utility's Pre-engineering that will represent the Utility Work portion of the Joint Bid Project for which unit price items and quantities related to Utility Work will be bid upon by City Contractors and evaluated by the City for the Utility Work portion of the City's construction contract.

1.32 **"Utility Capital Work"** shall mean construction of new, relocation or replacement Utility Facilities, the cost of which is not normally expensed by the Utility in accordance with the New York State Public Service Commission's Uniform System of Accounts or generally accepted accounting principles, and which is not Interference Work, as defined herein.

1.33 **"Utility Facility(ies)"** shall mean the property owned by the Utilities, including, but not limited to. pipes, poles, conduits, wires, lines and other facilities, structures or property of the Utilities that may be below ground, at ground-level or above ground, that could disturb or interfere with the Public Work.

1.34 **"Utility"** or **"Utilities"** shall mean the following entities: (a) Con Ed, (b) Verizon, (c) ECS (d) NG, (e)

Altice, and (f) Charter.

1.35 **"Utility Work"** shall mean all Interference Work and Utility Capital Work.

ARTICLE 2

EFFECTIVE DATE AND TERM OF AGREEMENT

2.1 General. This Agreement will apply only to those Joint Bid projects bid during the pilot program and includes Appendices "A", "B" and "C". Appendix "A" sets forth in detail the City's Pre-engineering requirements. Appendix "B" sets forth the City's standard terms and conditions. Appendix "C" sets forth the arbitration procedures for disputes between the Utilities and the City Contractors. Appendices "A", "B" and "C" are attached herein and shall constitute a part of this Agreement, as if fully set forth in this Agreement. If there are any conflicting provisions among this Agreement, Appendices "A", "B" and "C", the following order of precedence will be followed: this Agreement, Appendix "A", then Appendix "B", and then Appendix "C".

2.2 Effective Date. This Agreement shall become effective upon execution by the parties.

2.3 Term. The term of this Agreement will be for the period commencing on the Effective Date or until all of the Joint Bid Projects bid and awarded during the pilot program under the Act pursuant to this Agreement, unless earlier terminated in accordance with the terms and conditions of this Agreement.

2.4 Precatory Clauses. The precatory (Whereas) clauses above are made a part of this Agreement as if fully set forth herein.

ARTICLE 3

SCOPE OF THE AGREEMENT

3.1 General. The City may plan its Public Work with the Utilities, jointly bid such Public Work with Utility Work, and engage City Contractors to perform construction services on a Joint Bid Project. This Agreement will apply to projects identified by the City and mutually agreed to in writing by the Utilities, concurrent to the alignment meeting. Once agreed upon, a Utility must continue to participate in the joint bid for the execution of a Joint Bid Project.

3.2 Utilities Written Notification To The City That The Utilities Want A Joint Bid Project. For each Public Work project identified by the City as a candidate to be a Joint Bid Project, the Utilities agree to send a written notice to the City advising that the identified Public Work project may include the Utility Work and be jointly bid by the City as a Joint Bid Project pursuant to this Agreement. If a Utility chooses not to participate in the Joint Bid for a Project, then that Utility will be required to enter into a Section U agreement with the City Contractor, per separate UI Section contract language.

3.3 Pre-engineering Requirement For The Utilities On All Joint Bid Projects. The Utilities agree to Pre-engineer the Utility Work on each Joint Bid Project, as further described below, and detailed further in Appendix A.

3.4 Information and Items To Be Furnished By The Utilities On All Joint Bid Projects. The Utilities will furnish the City with all pertinent information available to the Utilities with regard to each specific Joint Bid Project, and the City will be entitled to rely on such information. Utilities will likewise be entitled to rely on the design and other documents supplied by the City with regard to each specific Joint Bid Project. To the extent requested by the City, the Utilities will assist the City and the City Contractor in obtaining such permits, and will assist the City in connection with application to and hearings before authorities having jurisdiction over the construction, management and operation of the Joint Bid project. The Utilities will furnish such other items as may be mutually agreed upon by the City and the Utilities. If there is Specialty Utility Work that requires a permit, then the Utilities

will secure at its own expense such permit.

3.5 City's Bid Documents For A Joint Bid Project. Upon completion of the Utilities' Pre- engineering, the City will include the Pre-engineered Utility Work in its contract solicitation documents to be competitively bid upon as a Joint Bid Project, as further described below. Any layouts not part of the bid solicitation will be considered Extra Utility Work and handled as described in Article 6.15.2.

3.6 Plans and Title To Work. All drawings, plans and specifications developed by the City and the Utilities under this Agreement for each Joint Bid Project shall become the property of the City to be used in connection with each Joint Bid Project and any modifications thereto and, at the City's request, shall be delivered to the City, but the Utilities may retain and use copies thereof. Notwithstanding this paragraph 3.6, documents and drawings containing a Utility's critical infrastructure information will remain owned by that Utility.

3.7 Gas Facilities May Not Be Covered Under This Agreement. Gas facilities owned and operated by Con Ed and NG that are disturbed by proposed City water and/or sewer work may be covered under the terms and conditions of the Gas Agreements and, therefore, may not affected by the terms and conditions of this Agreement. The City, Con Ed, and NG agree to coordinate, wherever necessary, their effort under this Agreement and the Gas Agreement. Should a Gas Agreement expire, this Article will no longer apply for the gas facilities covered under that Gas Agreement.

3.8 Responsibility Under This Agreement Of Each Utility. The Utilities agree that each Utility shall be individually liable and responsible for the respective Utility's obligations and covenants under this Agreement.

3.9 Cooperation. The parties and their Specialty Contractors, if any, agree to cooperate with and assist, in every reasonable manner, with each others insurance brokerage representatives and insurers with respect to accident prevention, claims procedure, and the adjustment of all claims arising out of operations within the scope of the Joint Bid Project, including litigation of such claims.

ARTICLE 4

PRE-ENGINEERING PHASE OF A JOINT BID PROJECT

4.1 General. Each Utility is responsible for Pre-engineering their Utility Facilities, both underground and overhead. Each Utility is responsible for coordinating all Pre-engineering and providing the City with a complete and comprehensive set of plans, specifications, estimated quantities and cost estimates with locations to the extent reasonably identifiable for the Utility Work to be performed by the City Contractor. The Pre-engineering plans and specifications will include, among other things, a requirement that the City Contractor will support and protect all Utility Facilities that are disturbed by or that interfere with the Public Work portion of any Joint Bid Project; all interferences caused by the Utilities Facilities, and identification of the type, locations and estimated quantities of various types of interferences to the Public Work caused by the Utilities Facilities. All Pre-engineering will comply with the requirements set forth in Appendix "A", attached hereto.

4.2 Pre-engineering City Accommodations. At the Pre-engineering phase of a Joint Bid Project, and at other times , the City and a Utility may agree on certain City Accommodations.

4.2.1 Payment For City Accommodations. If there are City Accommodations, then the the City and the Utility will agree on the method for determining the amounts to be paid to the City by that Utility. The Utility will only pay the City if the City Accommodations increase the cost of the Public Work as compared to the City's estimate of the Public Work costs without the City Accommodation. If the City Accommodation is agreed to during Pre-engineering, then the amount to be paid, if applicable, will be determined by the City Contractor's bid. If the City Accommodation is agreed to after Pre-engineering is complete. then the amount to be paid will be done in accordance with the extra work provisions of the City's contract documents.

4.2.1.1 Payment By Utility To City Will Be Done By A Defined Date. If the City Accommodations are identified in

Pre-engineering, then the Utilities agree to pay the City within thirty (30) calendar days from the date of award of the Joint Bid Project to the lowest responsive and responsible bidder. If the City Accommodations are identified after award of the Joint Bid Project, then the City will send a written notification to the Utilities stating the amount owed. The Utilities agree to pay the City within thirty (30) calendar days of the date of the City's notification to pay the amount identified in the written notification.

ARTICLE 5

BIDDING AND AWARDING OF A JOINT BID PROJECT

5.1 General. On all Joint Bid Projects, the City will prepare contract documents to include Public Work and Utility Work, and procure and award a contract pursuant to the PPB Rules and this Agreement. The City will create a Bid Schedule for the Public Work portion of the Joint Bid Project and each Utility will create a Bid Schedule for the Utility Work portion of the Joint Bid Project, as further described below.

5.1.1 A Single Bid Schedule. On each Joint Bid Project, the City will notify the Utilities that each Utility's Pre-engineering and Bid Schedule will be due on a specified date. The City will review the Utilities' Bid Schedules for any apparent errors or inconsistencies with the City Bid Schedule. The City reserves the right to notify any Utility of any apparent errors or inconsistencies in its Bid Schedule and to request that the Utility revise and resubmit its Bid Schedule. When finalized, the Utilities' Bid Schedules and the City's Bid Schedule will be merged into a single Bid Schedule to be included in the bid and contract documents for the Joint Bid Project.

5.2 Preparation Of The City's Bid Documents For The Public Work Portion Of A Joint Bid Project. For the Public Work portion of each Joint Bid Project, the City will prepare specifications, drawings and all other necessary contract documents. The other contract documents include, among other things, a City Bid Schedule, general conditions, the City's standard construction contract, as amended, and a set of performance-based technical specifications.

5.2.1 Preparation Of Specific Public Work Items By The City To Be Bid Upon. In addition to everything listed above, the City will prepare the Specific Public Work Items. In the bid solicitation documents, the City will identify the applicable unit prices from the Bid Schedule and provide estimates of quantities for each Specific Public Work Item. Bidders will be required to bid on the Specific Public Work Items.

5.3 Preparation Of The Utilities' Bid Documents For The Utility Work Portion Of A Joint Bid Project. For the Utility Work portion of each Joint Bid Project, each Utility will perform sufficient test pits and site investigations, prepare specifications, drawings, a Bid Schedule and all other necessary contract documents. The other contract documents include, among other things, a Utility Bid Schedule prepared by each Utility, general conditions, and a set of performance-based technical specifications, including an Expanded Work Allowance fixed sum item for Extra Work.

5.3.1 Preparation Of Specific Utility Work Items By The Utilities To Be Bid Upon. In addition to everything listed above, each Utility will prepare its Specific Utility Work Items. In the bid solicitation documents, the Utilities will identify the applicable unit prices from the Bid Schedule and provide estimates of quantities for each Specific Utility Work Item. Utility items that were on the Joint Bid Price List will have a Price Not Less Than (PNL) specified in the Bid Schedule. The PNL will be no lower than the Price List Amount, escalated annually based on the July update of the ENR NYC BCI index. The bidders will bid on the Utilities' Specific Utility Work Items.

5.4 Competitive Bid Procedures To Be Used By The City. The City will prepare a final set of contract solicitation documents to be competitively bid upon that will include a single Bid Schedule described in Article 5.1.1, the City's documents described in Article 5.2 and the Utilities documents described in Article 5.3.

5.5 Bidders Will Submit Unit Prices. The City's contract solicitation documents will require bidders to bid unit prices for all items.

5.6 Shared Items.

5.6.1 General Application Of Shared Items In A Bid And Contract. In general, during the course of any Joint Bid Project there will be certain items performed by City Contractors that will be funded by the City and the Utilities. The Shared Items will be identified and agreed upon during Pre-engineering and may consist of bid items of a general nature, which are items of work applicable to all construction activities, both Public Work and the Utility Work. Examples of Shared Items include, but are not limited to, the following, where not otherwise included as part of another pay item (For clarity, JB items do not include MPT scope per Note 5 of the General Provisions in the "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN"):

5.6.1.1 Maintenance of site;
5.6.1.2 All items for MPT that are paid separately, such as:
- 5.6.1.2(a) Temporary curb;
- 5.6.1.2(b) Temporary pavement markings, and removal;
- 5.6.1.2(c) Temporary concrete barrier, with any associated fences;
- 5.6.1.2(d) Plastic barrels;
- 5.6.1.2(e) Pedestrian channelizers;
- 5.6.1.2(f) Temporary surface applied detectable warning units;
- 5.6.1.2(g) Temporary signs;
- 5.6.1.2(h) Timber barricades with or without lights;
- 5.6.1.2(i) Type III barricades, with or without lights;
- 5.6.1.2(j) Temporary fencing;
- 5.6.1.2(k) Crossing Guards and Pedestrian Managers;
- 5.6.1.2(l) Traffic Enforcement Agents;
- 5.6.1.2(m) Temporary pedestrian bridges;
- 5.6.1.2(n) Variable Message Boards;
- 5.6.1.2(o) Flashing arrow boards, with or without attenuators;
- 5.6.1.2(p) Decking; and
- 5.6.1.2(q) premium time for any MPT work.

5.6.1.3 Engineer's field office;
5.6.1.4 Early Completion Incentives;
5.6.1.5 Stormwater Pollution Prevention (SWPPP) work;
5.6.1.6 Mobilization.

5.6.2 Calculation Of Shared Items In A Bid. The bidder's bid shall reflect the agreed upon breakdown of Shared Items identified during Pre-engineering. In calculating the Shared Items, the costs will be prorated as follows:

5.6.2.1 City Portion. The cost for each Shared Item will be calculated by multiplying the bidder's bid item cost (Unit Price times Quantity Estimate) by the ratio of the sum of all Specific Public Work items to the total estimated value of all contract bid items, less Shared Items.

5.6.2.1(a) Other Public Agency Work. For the purposes of a Joint Bid Project, if the City is funded by an Other Public Agency to perform certain work related to a Joint Bid Project, the Other Public Agency costs will be included in the calculation of the City's Portion described above, as if such work were Public Work items.

5.6.2.2 Utility Portion. The cost for each Shared Item will be calculated by multiplying the bidder's bid item cost (Unit Price times Quantity Estimate) by the ratio of all Specific Utility Work items to the total estimated value of all contract bid items, less Shared Items.

5.6.3 Calculation To Determine The Total Costs For The Parties.

5.6.3.1 For The City. The total cost of the Public Work will be the sum of the Public Work bid items plus the prorated cost of all Shared Items, which will be calculated as described above.

5.6.3.2 For The Utilities. The total cost of the Utility Work will be the sum of the Utility Work bid items plus the prorated cost of all Shared Items, which will be calculated as described above.

5.6.3.2(a) For Each Utility. Each Utility's prorated portion of the Shared Items shall be calculated by dividing the total cost for its Utility Work by the total cost for all Utility Work.

5.6.3.3 Total Cost. The total construction cost will be the sum of Articles 5.6.3.1 and 5.6.3.2.

5.7 The City's Evaluation Of A Bid On A Joint Bid Project. In compliance with the PPB Rules and the Act, the City will evaluate bids for award in the following manner:

5.7.1 Evaluation To Determine That A Bid Is Responsive. The City will evaluate bids and determine if the lowest monetary bid is responsive. The Utilities will provide bid analysis of their utility scope for the City's use in determining responsiveness. The PPB Rules set forth the factors affecting the responsiveness of bids. A responsive bid will, among other things, comply with all material terms and conditions of the City's contract solicitation documents. In addition, the City's construction contract will specify that a bidder's bid prices shall apply to each and every item contained in the Bid Schedule for the entire Joint Bid Project, regardless of whether the City or the Utilities have estimated a quantity for the item or items.

5.7.2 Evaluation To Determine That A Bidder Is Responsible. After the City has determined that a bid is responsive, the City will evaluate the bidder to determine if it is a responsible entity eligible to receive public funds. The PPB Rules set forth the factors affecting a bidder's responsibility. A responsible bidder will, among other things, affirmatively demonstrate to the City its responsibility, including, when necessary, the responsibility of its proposed subcontractors.

5.8 Calculation Of The Lowest Bid For The Joint Bid Project. The lowest bid for the Joint Bid Project will be calculated by combining the extended amounts (Bid unit price times estimated quantity) for the Specific Public Work Items, the Shared Items and the Specific Utility Work Items as set forth in the contract solicitation documents for the City and the Utilities.

5.9 The City's Award Of A Contract. In compliance with the Act, the City, in its sole discretion, will award a contract based on the lowest bid as submitted by a responsive and responsible bidder, as described above.

ARTICLE 6

ADMINISTRATION OF THE CONSTRUCTION PHASE OF A JOINT BID PROJECT

6.1 General. The City's contract documents will require the City Contractor to perform all Public Work and Utility Work. **Time Being Of The Essence** to the City and the Utilities, the City Contractor will be required to prosecute the Joint Bid Project diligently.

6.2 General Management Of A Joint Bid Project. The administration of the City Contractors work will be handled in the following manner:

6.2.1 **Time Is Of The Essence.** The parties agree that **Time is of the Essence** on all Joint Bid Projects. The parties agree to cooperate, provide the appropriate personnel with the authority to act on behalf of their respective organizations, and to work together with all other parties, including the City Contractor, to ensure that the Joint Bid Projects will not be delayed for any reason.

6.2.2 Pre-Construction Phase Of A Joint Bid Project. As described above, the parties have different responsibilities during the pre-construction phase of a Joint Bid Project.

6.2.2.1 City's Responsibilities. The City will be responsible for specifying the Specific Public Work Items, preparing a complete set of contract documents to be bid upon, conducting the procurement in compliance with the PPB Rules and awarding a public improvements contract to a City Contractor.

6.2.2.2 Utilities' Responsibilities. The Utilities are responsible for Pre--engineering all of the Utility Work, providing the City a complete package of Pre-engineered Specific Utility Work Items and preparing a comprehensive and complete Utility Bid Schedule.

6.2.3 Construction Phase Of A Joint Bid Project. The parties will have the following general responsibilities during the construction phase of a Joint Bid Project:

6.2.3.1 City's General Responsibilities During Construction. The City will, among other things, be responsible for coordinating the schedule with the City Contractor to ensure that the work is completed in a timely manner, coordinating all Joint Bid Project coordination and construction meetings; and, receiving payment requisitions from the City Contractor and making such payments to the City Contractor pursuant to the terms and conditions of the City's standard construction contract.

6.2.3.2 Utilities' General Responsibilities During Construction. The Utilities will, among other things, be responsible for insuring that all necessary information and Utility-provided materials (i.e. conduits, sweeps, ropes, protection plates, etc.) needed for the City Contractor to perform the Joint Bid Project will be available and provided to the City and the City Contractor in a timely manner; making decisions in a timely manner that will ensure that the Joint Bid Project work is completed in accordance with the schedule; and, for performing any Utility Specialty Work (whether with Specialty contractors or with the utility's forces), and ensuring that such Utility Specialty Work that cannot be performed by the City Contractor in such a manner as to insure that the Joint Bid Project is completed in a timely manner. All backfill and final paving must be performed by the City Contractor.

6.2.3.3 Acceleration Of Joint Bid Project During Construction. If the City decides to accelerate a Joint Bid Project and requires the City Contractor to work extended hours or weekend hours, then the associated labor and equipment overtime costs will be apportioned according to the percentage of the Shared Costs paid by the Utility. It is anticipated that the City will provide such notification before the acceleration commences, but in instances where the City does not, then the City will advise the Utilities on or before two (2) Business Days after the acceleration has been commenced by the City Contractor.

6.3 Schedules For Joint Bid Projects.

6.3.1 City's Responsibilities. The City will review and approve the City Contractor's baseline schedule and subsequent updates. The schedule must show activities for all required utility layouts and utility Specialty Crews. The City will provide to the Utilities copies of all approved schedules. The Utilities must certify to the City that the baseline schedule and all subsequent updates are accurate for the listed utility work, and that layouts and specialty crews will be available in order to meet the schedule.

6.3.2 Utilities' Responsibilities. The Utilities will support the City's schedule in terms of funding, supplying utility-provided material, and performing Specialty Utility Work, as needed, to progress the Joint Bid Project, including premium time (as described above in Article 6.2.3.3). The Utilities must provide estimated durations of their Specialty Utility Work activities to be incorporated into the City Contractor's progress schedule. The Utilities will provide the City, in a timely manner as determined by the approved construction schedule and before any work is commenced, with copies of their Lay Outs for any proposed Specialty Utility work, so that the impact on the Public Work may be determined and verified. If Lay-outs are not provided in the required timeframe, liquidated damages may be assessed per Section 8.5.

6.4 Project Meetings.

6.4.1 City's Responsibilities. The City will be responsible for conducting project meetings as needed to progress the Joint Bid Project.

6.4.2 Utilities' Responsibilities. Each Utility will assign a Project Manager to attend all such meetings and represent the Utility's interests and responsibilities concerning the Joint Bid Project. The Project Manager shall have the express authority to bind the Utility, render binding decisions, coordinate all Utility Work activity and facilitate all necessary decisions regarding the Utilities Facilities.

6.5 Monthly Utility Coordination Meetings For The City And Utilities Only. The City and the Utilities will meet monthly to discuss all open issues for each Joint Bid Project.

6.5.1 Agenda Of Utility Issues. The RE will collect the Utilities' agendas to create a unified agenda for the meeting, and will send it to the Utilities not later than three (3) business days before the next meeting.

6.5.2 City Agenda. The City may add to the Utilities' agenda and will provide such additional agenda items not later than two (2) Business Days before the next meeting.

6.5.3 City Representatives. The City will be represented at the meeting by at least one of its Infrastructure Deputy Commissioner, Associate Commissioner of Construction, Assistant Commissioner of Construction, or Chief Engineer. In addition, the City, in its sole discretion, may bring any other City employees with knowledge about the Joint Bid Projects that are listed on the agenda.

6.5.4 Utility Representatives. Each Utility will be represented at the meeting by individuals who will be authorized and empowered to act for and on behalf of the Utility on matters within the terms of this Agreement and the Joint Bid Contract. The Utilities will notify the City in writing of its representative, and this appointment will remain in full force and effect until written notice of the substitution is delivered to the City, In addition, the Utility, In its sole discretion, may bring any other Utility employees with knowledge about the Joint Bid Projects that are listed on the agenda.

6.6 Shop Drawing and Vendor Approvals.

6.6.1 City's Responsibilities. The City will review and approve the City Contractors shop drawings and vendor approvals for City Facilities only. Since **Time is of the Essence,** such review shall be timely as not to delay the Joint Bid Project. The City construction contract will specify that the City Contractor shall provide all sketches and drawings (i.e., sheeting design, etc.), required by the Joint Bid Project contract documents for the approval of the City for the installation of the City Facilities and the Utilities facilities.

6.6.2 Utilities' Responsibilities. The Utilities will review and approve the City Contractor's shop drawings and vendor approvals for the Utility Facilities only. Since **Time is of the Essence,** such review shall be timely as not to delay the Joint Bid Project. The Utilities shall provide detailed construction specifications for all Utility Facilities to be constructed by the City Contractor. The Utilities shall provide written certification to the City that the materials furnished by the Utilities installed by the City Contractor for the Utility Facilities meets the requirements of the Utility.

6.7 Safety. Maintenance and Protection of Site and Traffic.

6.7.1 City's Responsibilities. The City will inspect the Joint Bid Project site and direct the City Contractor to implement the City Contractor's safety, MPS and MPT plans. The City or the City Contractor will provide the Utilities a copy of the City Contractor's safety plan on or before the date of the City's Notice To Proceed, but not later than ten (10) Business Days after the Notice To Proceed.

6.7.2 Utilities' Responsibilities. Before any Specialty Contractor starts working, the Utilities will give the City and the City Contractor a copy of the Specialty Contractor's safety plans as approved by the Utility, and will allow the City to monitor compliance with such safety plans. The Utilities agree that the Specialty Contractor's approved safety plan shall, at a minimum, follow the City Contractor's safety plan in place on the specific Joint Bid Project.

6.7.3 City Contractor's Responsibilities. Where Utility Specialty Work is being performed within the City Contractor's work site and under the City Contractor's street opening permits, the City Contractor will accompany the Utility Specialty Crew and will remain responsible for all MPT, Maintenance and Protection of Site, final backfill and restoration, and is eligible for payment under the appropriate crew support item.

6.8 As-Built Drawings.

6.8.1 City's Responsibilities. The City will be responsible for producing as-built drawings of the City Facilities after completion of the Joint Bid Project.

6.8.2 Utilities' Responsibilities. The Utilities will be responsible for keeping records of all Utility Facilities. The Utilities agree to submit to DOT as-built drawings of all newly constructed Utilities facilities that do not conform to City DOT rules, regulations or specifications existing at the time the facilities are constructed. The Utilities must submit copies of all as-built records to the City RE.

6.9 Federal, State and Local Contract Requirements.

6.9.1 City's Responsibilities. The City will require that the City Contractor and its sub-contractors follow all applicable federal, state and local laws and rules, if applicable, including, but not limited to, relevant federal and state labor law and prevailing wage requirements, disadvantaged or locally based business enterprises requirements, and Buy-American requirements.

6.9.2 Utilities' Responsibilities. The Utilities will be responsible for ensuring that the Specialty Contractors are in compliance with all relevant federal, state and local laws and rules, including prevailing wages, if applicable.

6.10 Guarantees and Warrantees.

6.10.1 City's Responsibilities. The City will require that the City Contractors' guarantee and warrantee of the Utility Facilities shall be as stipulated in the Utility specifications.

6.10.2 Utilities' Responsibilities. The Utilities agree that upon release of retainage and/or any other withholdings by the City upon completion of the Joint Bid Project, the Utilities shall release the City from enforcement of any warrantees and/or guarantees of the City Contractor that extend beyond this time frame.

6.11 Responsibility of the Resident Engineers.

6.11.1 City's Responsibilities. The City's RE will have the overall responsibility for overseeing and managing all issues concerning safety, design, coordination, schedules and payments for all Public Work and Utility Work. In addition, the City RE will be responsible for all quantities, changes, disputes and payments for the Public Work only on each Joint Bid Project. The City's RE will have the authority to act on behalf of and make decisions in the field for the City, as further described in the City's standard construction contract. In addition, the City's RE will coordinate all Public Work and facilitate necessary decisions regarding the City Facilities. The City's RE will maintain records of all items and quantities of Public and Utility Work used as the basis for compensation to the City Contractor for such Work, and will hold monthly reconciliation meetings with the Utilities and the City Contractor. As part of the duties, the City's RE will monitor and inspect the quality and quantities of work provided by the City Contractor for the Public and Utility Work. The City’s RE will also maintain a record of all delays, regardless of the cause, and notify each party.

6.11.1.1 City Inspection Reports and Job Diary. The City will provide inspectors that will maintain quantities for the Public Work and Utility Work. The City will maintain time and material records of extra or disputed Public and Utility Work. The City will maintain a record of workers and work accomplished and delays caused by the unavailability of Specialty Utility Work contractors or the failure of the City Contractor to provide the site in an untimely manner to the Utilities' Specialty Contractor. It is understood and agreed by all parties that the City will not confirm or deny the accuracy of any records maintained by the Utilities or City Contractors.

6.11.2 Utilities' Responsibilities. The Utilities' will identify and advise the City who will be classified as a Project Manager for the purposes of each Joint Bid Project and which Utilities that Project manager will be working for. The Project Manager will have the responsibility to maintain records of all items and quantities of the Utility Work used as the basis for compensation to the City Contractor for such Utility Work in conformance with City standard record keeping practices and formats. The Project Manager will have the authority to act on behalf of and make decisions in the field for the Utilities, including determination of pay items to be used. In addition, the Project Manager will coordinate all Utility Work with the City Contractor and the City Work, and will facilitate necessary decisions regarding the Utilities' Facilities. As part of the duties, the Project Manager will monitor and inspect the

quality and quantities of work provided by the City Contractor for the Utility Work.

6.11.2.1 Utility Inspection Reports and Job Diary. The Utilities will provide inspectors that will maintain quantities for the Utility Work alone. The Utilities will provide the City daily copies of all inspection reports by the next business day (i.e. Friday's reports will be given to the City on Monday). The Utilities will not maintain time and material records of extra or disputed City Work. If required by Article 6.15.2.5, the Utilities shall maintain time and material records of extra or disputed Utility Work in conformance with the City's standard record keeping practices and formats for its construction contracts as set forth in Article 6.15.2.5. The Utilities will maintain a record of workers and work accomplished and delays, regardless of cause. If the Utility Inspection daily report has different quantities of Utility Work from the City RE's daily report, the Utility Project Manager must reconcile the quantities within two (2) business days or the City RE's quantity will be used.

6.12 City Contractor Requisitions. Since **Time is of the Essence,** all reviews of City Contractor requisitions by the Utility shall be completed within five (5) Business Days upon receipt of such requisition. If there are any disputes, the Utilities will immediately notify the City, not later than two (2) Business Days after discovering the disputed issue. All requisitions must be project specific and cannot be billed more frequently than monthly.

6.12.1 City's Responsibilities. The City will be responsible for reviewing and approving City Contractor requisitions for the Public and Utility Work.

6.12.2 Utilities' Responsibilities. The Utilities will be responsible for reviewing City Contractor requisitions for the Utility Work only. The Utilities may request copies of City Contractor requisitions for the City or other Utilities, as well as City Contractor's certified payroll records and/or all other supports for City Contractor requisitions, which will be provided by City or City Contractor within five (5) days of such request by a Utility.

6.13 Disputes Over A City Contractor's Payment Requisition And Invoice.

6.13.1 Disputes On Public Work Only. In general, the Bid Schedule will control with regard to the pricing of all items. Notwithstanding, there may be disagreements between the City and the City Contractor over the quantities of Public Work performed by the City Contractor or which unit prices are applicable to the Public Work performed by the City Contractor. If there are any disputes over a City Contractor's payment requisition and invoice for Public Work only, then the City's standard construction contract will govern how the City and the City Contractor will address such disputes.

6.13.2 Disputes On Utility Work Only. In general, the Bid Schedule will control with regard to the pricing of all items. Notwithstanding, there may be disagreements between the Utilities and the City Contractor over the quantities of Utility Work performed by the City Contractor or which unit prices are applicable to the Utility Work performed by the City Contractor. If there are any disputes over a City Contractor's payment requisition and invoice for Utility Work only, then all such disputes will be resolved through the procedures set forth below and in Appendix "C".

6.13.2.1 The Utilities' Responsibilities In Identifying Disputes On Utility Work Payment Requisitions and Invoices. As provided in Article 8 below, the Utilities will review all payment requisitions by the City Contractor for the Utility Work only. If, during the review of a payment requisition, the Utility identifies an issue in the payment requisition for the Utility Work only, the Utility will immediately, but in no case longer than two (2) business days, notify the City and the City Contractor in writing. After sending such a written notice, the Utility agrees to meet with the City Contractor to resolve the issue. If the issue cannot be resolved, then the Utility or the City Contractor shall seek arbitration according to the procedures for resolving Utility and City Contractor disputes, as set forth herein in Appendix "C", which will also be set forth in the City's contract documents for a Joint Bid Project. This arbitration process will be outside the jurisdiction of the City's contract dispute resolution board process. The parties agree that the performance of the Public Work shall continue during all negotiations, discussions, and arbitration proceedings.

6.13.2.2 The Utilities· Responsibilities During An Arbitration Of A Dispute On Utility Work Payment Requisitions and Invoices. During the resolution of a dispute described in Article 6.13.2 above, the parties agree

that the Utility will continue to review and approve payment requisitions submitted by the City Contractor and to pay the City for the Utility Work performed by the City Contractor based on the Utility's final offer for the work performed and the record keeping maintained by the Utility during the arbitration proceeding, as described in Appendix “C". The parties agree that the Utility will not pay the City Contractor directly and that the City will continue to pay the City Contractor for these disputed work items.

6.13.2.3 Resolution Of A Dispute On Utility Work Payment Requisitions And Invoices. Once the arbitrator(s) have made a decision or there has been a negotiated settlement, the Utility shall notify the City within ten (10) calendar days from the date of the arbitrator(s)'s award or a negotiated settlement, and shall advise the City as to the final resolution of the dispute, the amount of the award or settlement, and any necessary payment adjustments that may have to be made to the City Contractor's contract. If the arbitrator's award or the. negotiated settlement alters any payment requisitions that have previously been submitted by the City Contractor and approved for payment by the Utilities and the City, then the City Contractor shall submit a revised invoice and payment requisition to the City for all previously invoiced disputed Utility Work in accordance with the final arbitrator(s)'s award or the negotiated settlement. Pursuant to Article 8 of the Agreement, the City will send a copy of the revised invoice and payment requisition to the Utility for their review and confirmation. Based on the Utility's direction, the City shall apply a credit toward the payment of the City Contractor's revised invoice based on the payments made previously to the City Contractor on the disputed Utility Work during the arbitration proceeding, which may result in either a net debit or a net credit balance due on the City Contractor's revised invoice. The Utilities will be responsible to assist the City in determining any necessary contract payment adjustments that may have to be made as a consequence of the dispute resolution.

6.14 Time Extensions and Liquidated Damages. The City will be responsible for issuing and/or denying City Contractor requests for time extensions. Liquidated damages, if assessed by the City on the Contractor or Utility, shall accrue to the City.

6.14.1 New York City Administrative Code. **Time is of the Essence** in completing the Joint Bid Projects. This Agreement shall in no way be construed to enlarge, limit, diminish or affect in any way any existing City rights or remedies regarding its authority with respect to support, protection and replacement of the Utilities' Facilities pursuant to the New York City Administrative Code.

6.14.2 Claims of Delay. The City's construction contract will specify that to the extent that the City Contractor claims or alleges that delays were caused by a Utility for failure to supply and/or provide Specialty Contractors in a timely manner, then the City Contractor may bring a claim against the Utility, that neither the City Contractor nor the Utility shall bring a delay claim action against the City either in a Court of Law or the City's contract dispute resolution board process; and that to the extent the City Contractor alleges a delay was caused by a utility the City Contractor will be limited to bringing such legal action in a Court of law and shall not be able to seek arbitration over any delay claims or delay-related claims. If the City Contractor and Utility initiate a legal action against each other, this legal action will be outside the jurisdiction of the City's contract dispute resolution board process and the City shall not be a party in the litigation process. The Utilities agree to copy the City on all communications involving the litigation process and to notify the City of the final resolution - settlement or decision.

6.15 Extra Work.

6.15.1 Extra Work For The City. If there are changes, extra work, or omitted work, regarding the Public Work only, then the City's standard construction contract will govern how the City and the City Contractor will address such changes, extra work, or omitted work.

6.15.2 Extra Work For The Utilities.

6.15.2.1 Quantity Overruns For Utility Work Items With City Construction Contract Bid Items. The City Construction Contract will provide that quantity overruns shall be permitted for Utility Work items that were bid upon. The terms of the City’s standard construction contract will apply to overruns of all bid items, except for overruns that qualify as a Significant Utility Change, which will be handled as Extra Work per Article 6.15.2.5

below.

6.15.2.2 Extra Utility Work In General.

(a) Agree To Cooperate. At all times, the Utilities acknowledge and understand the City's desire to complete the Public Work on schedule, and all parties agree to cooperate with and work with each other to resolve any extra Utility Work issues that may arise in the field.

(b) No Admission. Nothing herein shall be construed to be an admission, acknowledgment or statement that the performance of any Utility Work or any extra Utility Work caused any delay to Public Work or resulted in any additional cost or expenses relating thereto.

(c) Arbitration. In recognition of the usefulness of a process of alternative dispute resolution for its efficiency, speed and cost-effectiveness in managing conflict and settling disputes that may arise under, or by virtue of, the provisions of Articles 6.13.2, 6.15.2.3, or 6.15.2.4 of this Agreement, the City Contractor and Utilities shall resolve such disputes in accordance with Appendix "C" herein.

6.15.2.3 If The Utility Determines That There Is No Extra Work Or That The Utility Work Is Covered By The Bid Schedule. If the Utility determines that the alleged extra Utility Work is part of the City's contract documents and denies the City Contractor's claim or request for a change order, then after receiving the Utility's written response, the City Contractor shall either accept the Utility's determination or immediately seek to have the issue resolved through the dispute resolution process, as set forth in Appendix "C". The parties agree to follow the steps described in Articles 6.13.2.1, 6.13.2.2. and 6.13.2.3, and Appendix "C".

6.15.2.4 If The Utility Determines That There Is Extra Work For Which There Are Items In The Bid Schedule. If there is an arbitration over extra Utility Work pursuant to Article 6.15.2.3, while the arbitration is pending, the Utility shall continue to pay the City Contractor through the City based on the Utility's final offer and record keeping, i.e. based on the Bid Schedule.

6.15.2.5 If The Utility Determines That There Is Extra Work For Which There Are No Items In The Bid Schedule. If the Utility determines that there is extra Utility Work for which there are no items in the Bid Schedule or if the extra Utility Work qualifies as a Significant Utility Change, then the Utility and City Contractor shall utilize the Utility Expanded Work Allowance item to negotiate the cost of supporting and protecting, and/or alleviating the impact on the Public and Utility Work caused by the extra Utility Work with each other with the understanding that the performance of Public Work shall continue during all negotiations and discussions. If the item is not in the Bid Schedule but is on the current JB Price List, the Price List will be used as the basis for negotiations, with the anticipated range between 1.0x and 2.0x of the Price List price.

If the parties reach an agreement utilizing the Utility Expanded Work Allowance on cost for the extra Utility Work, then the City Contractor and the Utility shall submit a copy to the City's RE with the agreed upon prices, along with all supporting documentation, and the City Contractor shall be paid by requisitions submitted in accordance with the agreed upon prices.

If the parties do not reach an agreement on cost for the extra Utility Work within seven (7) Business Days from the start of negotiations, then parties wilt resolve the dispute through the dispute resolution process, as set forth in Appendix "C".

During the arbitration process, the Utilities agree that the extra Utility Work will be performed and paid for on a time and material basis up to the amount of the Contractor’s Final Offer per Appendix “C” Article C 3.5 as an interim measure to progress the work during the arbitration period (a maximum of approximately 3 months), as set forth in Article 26 of the City's standard construction contract, except as modified:

a) Instead of the markup rates specified in Sections 26.2.11 and 26.2.12, a combined 27% will be used for overhead and profit;

b) Instead of the markup rate specified in Section 26.5 on Subcontractor work, 10% will be used for overhead and profit;

c) Profit (included in the combined 27% above) will be allowed on Payroll Taxes and for the premium portion of overtime pay, instead of being excluded per Section 26.2.12;

d) Holiday pay for persons at sites included in this contract, who are eligible to receive holiday pay (under

the applicable Prevailing Wage Schedules) will be paid as follows: the City will pay a portion of the holiday pay equal to the total number of non-overtime hours worked during the holiday week divided by the total number of non-overtime hours contained within that holiday week, excluding the holiday work hours; and, the remaining portion of the holiday pay must be made by the Contractor as part of the Contractor's overhead cost. For purposes of payment only, the workweek will be considered to end on Sunday at 12:00 midnight and to begin on the Monday thereafter.

Notwithstanding the prior paragraph with T&M measurement, if the Utility and the City Contractor can agree on an alternative method for interim payment for the Utility Work during arbitration, then that method may be applied by the Utility, with notice to the City.

Upon resolution of the dispute, the Utility shall notify the City within ten (10) calendar days from the date of the arbitrator(s)'s award or a negotiated settlement, and shall advise the City as to the final resolution of the dispute, the amount of the award or settlement, and any necessary payment adjustments that *may* have to be made to the City contractor's contract. If there is an award to the City Contractor deriving from the arbitration proceeding, then the Utility will be responsible to pay such award directly to the City Contractor, notifying the City of such determination, making payment within ten (10) calendar days of such determination, and, if applicable, assisting the City in any necessary contract payment adjustments that may have to be made. If the arbitrator's award or the negotiated settlement alters any payment requisitions that have previously been submitted by the City Contractor and approved for payment by the Utility and the City, then the City Contractor shall submit a revised invoice and payment requisition to the City for all previously Invoiced disputed Utility Work in accordance with the final arbitrator(s)'s award or the negotiated settlement.

Pursuant to Article 8 of the Agreement, the City will send a copy of the revised invoice and payment requisition to the Utility for their review and confirmation. Based on the Utility's direction, the City shall apply a credit toward the payment of the City Contractor's revised invoice based on the payments made previously to the City Contractor on the disputed Utility Work during the arbitration proceeding, which may result in either a net debit or a net credit balance due on the City Contractor's revised invoice. The Utilities will be responsible to assist the City in determining any necessary contract payment adjustments that may have to be made as a consequence of the dispute resolution.

6.15.2.6 Approval of Unanticipated Utility Work The Utilities acknowledge and understand the City's desire to complete all Joint Bid Projects on schedule and, agree to cooperate and work with the City and the City Contractor to resolve any unanticipated Utility Work that may arise during construction. The Utilities further agree that its Pre-engineering will include all anticipated Utility Work. To the extent that Utility Work is not specified in its Pre-engineering document, the method or performing Utility Work will be subject to the approval of the Utility involved, noting that the Utility is not responsible for selecting the Contractor's means and methods. The City Contractor shall immediately notify the City and Utilities of an unplanned Utility Work issue. The Utility shall have no more than five (5) Business Days upon receipt of the City Contractor notice to define the scope of work (including lay-outs) of the unanticipated Utility Work. Failure of the Utility to provide the required information may result in assessment of Liquidated Damages by the City per article 8.5. Notwithstanding the foregoing, the City may reasonably object to a method approved by the Utility if it impacts on a City Facility. If the unanticipated Utility Work qualifies as a Significant Utility Change, it will be Extra Work and resolved per Article 6.15.2.5 above.

6.15.2.7 Changes In The Public Work After Pre-engineering That Results In Utility Work Or Extra Utility Work. During the performance of the Joint Bid Project, conditions may arise in which DDC determines that the Public Work shown on the City's contract plans and documents must be modified. In the event that occurs, the City's RE will notify in writing the Utilities' Project Manager of the determination to order a change.

6.16 Specialty Utility Work Performed By Utilities. The City's contract documents will provide that a Utility may decide to use Specialty Contractors for certain Specialty Utility Work. The City Contractor will remain responsible for the Shared Work, paid for under the Shared Work items including access to facilities outside the immediate work area. The City Contractor shall not impede the Specialty Contractor's site access or work.

6.16.1 General. If unanticipated conditions arise on a Joint Bid project, the City may direct the Utility to perform work itself. Since **Time is of the Essence**, the parties agree to discuss the method that will best preserve the City's schedule for completing the Joint Bid Project If the City directs the Utility to perform the work, then the Utility shall have two (2) Business Days to decide whether it will perform such work itself, provide a Specialty Contractor to perform the work, or authorize the City Contractor using a Utility- approved subcontractor (if the City Contractor

option is used, then the Utility shall receive all bills directly and make all payments directly to the City Contractor) to perform the work. After the Utility has made its decision and notified the City, the Utility shall have an additional two (2) Business Days to mobilize and commence work.

6.16.2 The Site and Insurance. The City will make the Joint Bid Project site available for a reasonable period of time so that the Specialty Work may be completed. The Utilities are responsible for furnishing to the City and the City Contractor a copy all certificates of insurance as evidence of such insurance coverage in which the City and the City Contractor are Named insureds or such other documentation if the Utility does not utilize an insurance company.

6.16.3 Indemnification. Notwithstanding the inclusion of the City as a Named Insured on all insurance policies required by the Utilities' of their Specialty Contractors, the Utilities agree to indemnify and hold harmless the City and the City Contractor for any and all Utility Work performed by Specialty Contractors or the Utilities' own staffs or labor forces.

6.16.4 Failure To Commence The Specialty Utility Work. After notifying the City of what action and when the Specialty Utility Work will commence, if the Utility does not mobilize and commence this Specialty Utility Work within two (2) Business Days after such notification, then the City may take whatever action *it* deems necessary to complete the Public Work, including assessment of Liquidated damages per Article 8.5.

6.17 Disputes.

6.17.1 General. At all times, the Utilities acknowledge and understand the City's desire to complete the Public Work on schedule, and agree to cooperate with and work with the City and the City Contractor. In addition to the daily reconciliation of work performed and monthly meetings between DDC and the Utilities, in which the parties agree to appoint representatives with the authority to act for and on behalf of such party on all matters within the terms of this Agreement and the Joint Bid Project contract documents, there may be occasions where the parties cannot agree on the means and methods of performing some part of the work that has not been contemplated in the contract documents that were put out for bid by the City and awarded to the City Contractor.

6.17.2 Monthly Meetings. If the City RE and the Project Manager cannot agree on an issue described in Article 6.16.1, then the issue will be placed on the agenda for the monthly meeting. At the monthly meeting, the parties shall bring the appropriate field representatives and documentation in support of their position. The parties agree to cooperate and work together on resolving the issue. If an extra meeting is needed, the parties agree to schedule a meeting before the next monthly meeting to consider the sole issue unresolved at the last monthly meeting. The parties agree to bring all the appropriate documentation and representatives to this additional meeting.

6.17.3 Higher Authority. If the representatives at the monthly meeting cannot resolve the issue, the parties agree to elevate the issue to the Commissioner and a representative at the Utility that is equal in authority as the Commissioner. The parties agree that the City will bring the following representatives: the Deputy Commissioner of Infrastructure, the City RE and one (1) other individual, not of counsel; and the Utilities will bring the following representatives: a representative equal to the Deputy Commissioner, the Project Manager and one (1) other individual, not of counsel. At the meeting, the parties will present their positions and supporting documentation to the Commissioner and the Utility representative equal to the Commissioner, and they will render a final decision.

6.17.4 City Contractor's Dispute Of Any Decision Under this Article. After the City and the Utilities agree on any issue described above at any stage of a dispute, the City Contractor may object to the decision and file a *claim* pursuant to the City's standard construction contract and PPB Rules. This is known as the contract dispute resolution board process. The parties agree to jointly defend the claim throughout all stages of the dispute. The parties will be responsible for their own legal fees and costs in defending against this dispute. The parties will be responsible based on a pro rata share of their respective work for any judgments issued during the dispute.

6.18 Lump Sum Conversions.

6.18.1 Lump Sums Based on Bid Prices. The Contractor may request to convert all or a portion of a Utility's Work into a Lump Sum for purposes of tracking and payment. The Lump Sum will not be less than the amount bid for the pre-engineered work.

6.18.2 Lump Sums Based on the Bid Price Not Less Than Amounts. The Contractor has the option to convert all or a portion of a Utility's Work into a Lump Sum for purposes of tracking and payment. The Lump Sum will not be less than the amount of pre-engineered work, calculated as follows:

a. If the item has a Price Not Less than value in the bid schedule, that value will be used for calculating the amount.
b. If the item does not have a Price Not Less than value in the bid schedule, the price must be negotiated between the Contractor and the Utility, but not greater than the bid price.

6.18.3 Common Requirements for all Lump Sum Conversions. The Contractor and the Utility must negotiate in good faith to determine terms for the Lump Sum. Lump Sum Conversions specifically exclude the Utility Expanded Work Allowance.
If a Lump Sum Conversion is utilized, the Contractor and the Utility must notify the City of the agreement, and provide terms for how the lump sum will be paid out of the City contract. These terms must be made available to all of the Utilities. Work must continue under the applicable contract items while any lump sum is negotiated or if cannot be reached. The terms of the Standard Construction Contract for changes and extra work affecting a Lump Sum will apply.
A Lump Sum negotiated with one Utility cannot negatively impact other Utilities not participating in a Lump Sum negotiation, and should not be based on utilizing City accommodations previously denied by the City.

ARTICLE 7

INSURANCE AND LIABILITY

7.1 General. It is understood that all Utility personnel assigned to perform work under this Agreement on a Joint Bid Project by the Utilities are deemed to be employees, subconsultants or subcontractors of the Utilities and not the City.

7.1.1 Third Party Utility Work. The parties recognize that, notwithstanding the provisions of this Agreement, the existing division of liabilities to third parties shall remain the same as between the City and the Utilities. Therefore, it is understood that for purposes of any liability to third parties arising solely from the Utility work, the City Contractor, when performing Utility Work, shall be deemed the independent contractor of the respective Utility for which the Utility Work is being performed at that time, and not a contractor of the City. In addition, it is further understood that when the City Contractor is performing Public Work, then the City Contractor is deemed the independent contractor of the City, and not a contractor of the utilities.
7.1.2 Third Party Interference Work. The City contract documents will provide that *for* the purposes of third party liability, the City Contractor, when solely supporting and protecting Utility Facilities affected by Public Work, shall be deemed an independent contractor of the respective Utility for which the Utility Work is being performed, and not a contractor of the City.

7.2 Insurance Requirements. The City contract documents will provide, among other things, the following:

7.2.1 The Utilities shall be included as additional insured parties on all insurance policies.

7.2.2 The City Contractor shall furnish copies of insurance certificates to the Utilities, as well as to the City.

7.2.3 To the fullest extent permitted by law, the City Contractor must defend, hold harmless, indemnify the Utilities for matters arising from or related to the performance of Utility Work, including without limitation any extra Utility Work, to the same extent that the City is indemnified.

7.2.4 The City Contractor shall be solely responsible for all physical injuries, including death, to all person(s), including, but not limited to, employees of the City Contractor and its' subcontractors, and employees of the City and the Utilities, or damage to property, including, but not limited to, property of the City, the Utilities, or the City Contractor or its' subcontractors while at the Joint Bid Project site.

7.2.5 To the fullest extent permitted by law, the City Contractor must defend, indemnify, and hold harmless the City and the Utilities from loss and liability from all claims on account of such injuries to persons, including death, or damage to property, and from all costs and expenses in suits which may be brought against the City and/or the Utilities on account of any such injuries to persons, including death, or damage to property, including property of the utility, irrespective of the actual cause of the accident and irrespective of whether it shall have been due to negligence of the City Contractor or its' subcontractors or negligence of the City or the Utilities, their respective agents, servants or employees lo the extent permitted by law.

7.3 Specialty Contractors' Insurance Requirements. If there is Specialty Utility Work, then the Utilities shall provide in its contracts with the Specialty Contractors the following:

7.3.1 Must name the City and the City Contractor as a Named insureds on all insurance policies required to be purchased and maintained by the Utilities;

7.3.2 If there is an incremental cost for such additional insurance, such cost shall be the responsibility of the Utilities and not the City or the City Contractor; and

7.3.3 The Specialty Contractors shall indemnify and hold harmless the City and City Contractors from matters arising from or related to the performance of Specialty Utility Work to the same extent that the Utilities are indemnified.

ARTICLE 8

SERVICES FOR WHICH UTILITIES AGREE TO PAY

8.1 General. On Joint Bid Projects, the Utilities agree to pay to the City for certain costs incurred by the City on a Joint Bid Project. Each Utility will be responsible for their respective portions of the following: the City's REI services, Force Accounts, and Shared Items, as described in Article 6. If for whatever reason, the City determines not to retain the services of an REI firm and will use in- house personnel, then the Utilities are responsible for providing their own personnel or retaining the services of an REI-firm for the Utility Work and are responsible for performing all required services and paperwork, as required by the City, for the Utility Work. If the City determines to retain the services of an REI firm for which the Utilities share the costs, then the Utilities shall, at their option, be able to utilize the services of the REI firm for their engineering needs for the Project.

8.2 REI. On Joint Bid Projects, DDC will provide REI services for the term of the Joint Bid Project. The City reserves the right to use City personnel, consultants or some combination thereof for such REI services. The Utilities agree to pay to the City a portion of the costs for the REI Services as described below.

8.2.1 The cost of the REI services will be determined prior to the Notice To Proceed date of the Joint Bid Project and will be calculated based on the fully burdened labor costs (direct + overhead + fee) for the REI.

8.2.2 Each Utility's prorated portion or the REI costs will be calculated by dividing the total cost for its Utility Work by the total construction cost for the Joint Bid Project.

8.3 Force Accounts. On Joint Bid Projects, there may be Force Account costs from railroads and transit agencies. Each Utility’s prorated portion of the Force Account costs will be calculated by dividing the total cost for its Utility Work by the total construction cost for the Joint Bid Project

8.4 Shared Items. On Joint Bid Projects, there are certain Shared Items. The pro-rated Utility portion of the Shared Item will be initially calculated at the time of the bid received by the City. Upon completion of the Joint Bid Project, after final City Contractor costs have been determined, the pro-rated shared cost of each Utility will be re-calculated based upon the actual City Contractor costs of each Utility. Based upon the re-calculation there shall be payments made as needed between the Utilities to adjust for the differences between the amounts determined at the time the Joint Bid Project was awarded and the final amount as re-calculated.

8.5 Liquidated Damages. Where the Utility delays project completion, including by failing to provide lay-outs or Specialty Contractors, the City will assess Liquidated Damages (LDs). LDs assessed on the utility will be the same amount specified in Schedule A for LDs assessed to the City Contractor. The City will note on the time extensions issued to the City Contractor when delays are attributable to the Utility and therefore eligible for LDs. In addition to the requirements above, the requirements of Article 15 of the Standard Construction Contract will apply to the Utility for the purposes of utility LDs. Should the City receive penalties in connection with violations of Administrative Code 24-521, LD's will not be assessed simultaneously.

8.6 Payments to the City. The Utilities agree to make payments to the City in accordance with the terms and conditions of this Agreement. At substantial completion of a Joint Bid Project, as defined in the City Construction Contract, the City and the Utilities shall perform a final reconciliation based on actual costs expended for performing Public and Utility Work. The purpose of this final reconciliation will be to determine all cost adjustments to be made for total amounts that may have been heretofore disbursed based on estimated or projected costs. Upon concluding this cost review, any additional amounts owed or to be reimbursed by any party shall be promptly refunded and not later than thirty (30) calendar days from the date the party is notified of such costs. Final reconciliation and final invoices shall be completed and sent to the utilities within sixty (60) calendar days after substantial completion. Current work shall be invoices by the City and submitted to the utilities within sixty (60) calendar days of payment to the Contractor.

8.7 Utility Payments for Utility Work.

8.7.1 General. On Joint Bid Projects, the Utilities agree to pay to the City, in a timely manner, all costs for their respective portions of the Utility Work. Each Utility shall be responsible only for its portion of the Utility Work. The payments to the City will be in based on items and quantities approved by the responsible Utilities.

8.7.2 Utility Payments. Payment by the Utilities to the City will be by ACH (direct deposit) or check (if approved by the DDC CFO) payable to the City of New York, Department of Design and Construction, Director of Finance, or as further provided below. Payments are due net 30 days from invoice by the City.

8.7.2.1 Refund. If a Utility's obligations are determined to be less than the amount paid to the City, then the City shall return the difference to the Utility within sixty (60) calendar days of DDC's approval of payment for substantial completion; or

8.7.2.2 Additional Payment. If a Utility's obligations are determined to exceed the amount advanced by the Utility to the City, then the Utility shall pay such difference to the City within sixty (60) calendar days of DDC's approval of payment for substantial completion.

8.8 Review Of City Contractor Requisitions For Public Work And Shared Items Only. The City will review all requisitions for the Public Work and Shared Items only. The City shall be responsible for paying only the Public Work items requisitioned by the City Contractor. The parties, as described above, shall share the costs of the Shared items.

8.9 Review Of City Contractor Requisitions For Utility Work Only. The Utilities will review all requisitions for the Utility Work only. The Utility shall be responsible for paying only the Utility Work items requisitioned by the City Contractor. Since **Time is of the Essence,** the parties agree that the Utilities shall perform their review within five (5) calendar days upon receipt of the payment requisition and shall immediately notify the City to issue such payments to the City Contractor for the amounts approved by the Utilities for quantities of Utility Work performed. The Utilities agree to copy the City on all issues that arise with regard to the requisition for the Utility Work. If there are any disputes, the Utility and City Contractor will handle as described above.

8.10 Payment Satisfies Utility Obligations. Payment by the Utilities in compliance with the terms of this Agreement shall fully satisfy all payment obligations of the Utilities to the City and/or the City Contractor in connection with the Project.

ARTICLE 9

NOTICES

9.1 All notices and correspondence to the parties must be delivered by hand or sent by registered or certified mail or by Federal Express, Express Mail, other overnight mail service that provides a receipt to the sender, or by email with read receipt. Receipt of a notice by the party to whom the notice is transmitted will be considered to have occurred upon receipt, if hand-delivered; three (3) Business Days from the date of mailing, if mailed; or the next business day after transmittal by Federal Express, Express Mail or other overnight delivery service that provides a receipt to the sender.

9.2 All notices and correspondence to the **City** and **DDC** must be delivered to the following address and addressee or to such other address or addressee as the **City** or **DDC** may notify the parties of from time to time:

New York City Department of Design + Construction 30-30 Thomson Avenue
Long Island City, NY 11101
Attn.: Infrastructure Deputy Commissioner, with a copy to the Infrastructure Borough Assistant Commissioner for Construction

9.3 All notices and correspondence to **Con Edison** must be delivered to the following address and addressee or to such other address or addressee as **Con Edison** may notify the parties of from time to time:

Consolidated Edison of New York Inc.
Attn: Cherno Cham, General Manager Construction – Public Improvement – 1610 Matthews Avenue, Bronx, NY 10464

9.4 All notices and correspondence to **Verizon and/or ECS** must be delivered to the following address and addressee or to such other address or addressee as **Verizon/ECS** may notify the parties of from time to time:

Verizon New York Inc,
Attn: Director - Network Engineering 230 W. 36th Street, 6th Flr.
New York, NY 10018

9.5 All notices and correspondence to **Charter Communications Operating (CCO)** must be delivered to the following address and addressee or to such other address or addressee as **CCO** may notify the parties of from time to time:

Charter Communications Operating, LLC
109-15 14th Ave. 2nd Floor
College Point, New York 11356
Attn: John Piazza, Construction Manager

9.6 All notices and correspondence to **National Grid** must be delivered to the following address and addressee or to such other address or addressee as **NG** may notify the parties of from time to time:

National Grid, Manager CSC
287 Maspeth Ave, Brooklyn NY 11211

ARTICLE 10

MISCELLANEOUS

10.1 Bid documents. The City will provide to the Utilities a complete set of the bid documents for each Joint Bid Project including, but not limited to, the documents containing the provisions required by this Agreement to be included in the City Construction Contract as soon as they are available to the City, and, in any event, not later than the date that they are made available to potential bidders. The Utilities must utilize the PASSPort system to download the final bid documents. The Utilities will have the right to view the bids submitted for each Joint Bid Project.

10.2 Audit. The Utilities will have the right to request from the City, to inspect and audit, a copy of the City Contractor's records for the purpose of verifying the bases on which awards of City Construction Contracts are made and the Utility Work performed for which the utilities are paying hereunder, and other records relating to this Agreement, but only to the extent that the City has the right to inspect and audit such City Contractor records. The City shall have the right to inspect and audit the Utilities' records for the purpose of verifying the estimated quantities that were provided by the Utility during the pre-engineering phase and all field records produced during the construction of a Joint Bid Project, and any other records relating to the work performed pursuant to this Agreement. The City's right to audit and examination shall include, but not be limited to, audits and examinations by the engineering audit officer of DDC or post-audit by the Comptroller of the City of New York in accordance with all laws, as amended.

10.3 City's Rights Under The Laws. It is understood that nothing in this Agreement, shall be interpreted to imply the City's acceptance of any additional liability or responsibility arising from or related to in any way with the performance of Utility Work or Specialty Work. It is further understood that this Agreement does not, and shall not be construed to, enlarge, limit or diminish or affect in any way any existing City rights regarding support, protection, relocation, and replacement of the Utilities' facilities.

10.4 Counterparts. This Agreement may be executed in one or more counterparts which, when taken together, shall constitute one and the same Agreement.

(NO FURTHER TEXT HERE.]

APPENDIX "A"

PRE-ENGINEERING

A.1.01 General. As set forth in Article 3 of the Joint Bid Agreement (the "Agreement"), and except as provided below in this Section A.1.01, the City and each Utility shall engage in pre-engineering of all Joint Bid Projects ("Project(s)" or "Joint Bid Project(s)") covered by the Agreement, including but not limited to, coordinating the preliminary and final design of all Projects covered by this Agreement to efficiently and cost effectively avoid or ameliorate, to the extent practicable, unnecessary disturbances to Utility facilities and to maximize safety and convenience to the public resulting from construction of the Projects. Each Utility must prepare and submit directly to the City, all of the Utilities' pre-engineering documents including Bid Schedules, and submit to DDC a completely coordinated pre-engineered Utility Work document. Notwithstanding the above, the Utilities, pursuant to Article 3.8 of the Agreement, agree that each Utility shall be individually liable and responsible for the respective Utility's obligation and covenants under the Agreement. The pre-engineering required by this Appendix "A" shall be accomplished within a time schedule that enables the City to comply with its annual plan for capital construction awards. Where a Project must be awarded and performed on an emergency basis leaving no time for pre-engineering or where other similar extenuating circumstances require that a Project go forward without first being pre- engineered, the City may unilaterally declare in writing that the pre--engineering described in this Appendix "A" is not to be applied to a given Project. In such a case, the City and the Utilities shall nonetheless include Utility Work in the City construction contract in accordance with this Agreement to the extent that the need for such work can be defined in the absence of pre-engineering.

A.1.02 Cost of Pre-engineering. All costs and expenses incurred by a party in complying with its pre-engineering responsibilities and obligations under this Appendix "A" shall be the sole responsibility of that party. If a Utility or Utilities requests a design change during the pre-engineering phase of the Agreement, then that Utility or Utilities will be responsible for all of the costs and expenses that may be incurred by an outside consultant for such a design change. If there is more than one Utility that is requesting a design change, the Utilities may agree to share the costs of the outside consultant.

A.1.03 Persons To Whom Notices And Information Are To Be Sent. All information and notices required by this Appendix "A" to be sent to the DDC shall be sent to the designated Program Administration Director for a particular Project. All information and notices required by this Appendix "A" to be sent to the Utilities shall be sent to each Utility's representative as designated by the Utility. This Notice section is in addition to the Notice section described in Article 9 of the Agreement.

A.1.04 Identification of Joint Bid Projects. Pursuant to Article 3.1 of the Agreement, the City may plan its Public Work with the Utilities. The Agreement and this Appendix "A" will apply to Projects identified by the City and mutually agreed to in writing by the Utilities pursuant to Article 3.2 of the Agreement.

A.1.05 Notice to City that the Utility Agrees to Joint Bid. Pursuant to Article 3.2 of the Agreement, each Utility agrees to send a written notice to the City advising that the City's identified Public Work project may include the Utility Work and be jointly bid by the City as a Joint Bid Project.

A.1.06 Start of Pre-engineering. Each Utility shall be deemed notified of the start of pre-engineering for each specific Project, upon receiving a written request from the City, which may be done by e-mail, to provide pre-engineering information. Pursuant to Article 3.4 of the Agreement, except for Bid Schedule information, each Utility will provide the City with the pertinent information available to the Utility(s) with regard to each specific Joint Bid Project, confirmed by a field inspection when specifically requested, concerning the location and type of the Utility's facilities within the physical boundaries of such Joint Bid Project. All such requests shall specifically identify the Joint Bid Project number assigned in the most recent annual capital construction plan, or any new entries thereto, as identified. Each Utility shall provide the requested information, including the results of a field inspection (including test pits) when requested, within 30 calendar days of the request for such information. However, any Utility may request a reasonable time extension if necessary to provide this information, which request the City and lead Utility shall not unreasonably deny. Whenever the request for such information identifies

the specific location within the street in which the City Work will occur, the Utility shall, at the same time that it provides other requested information, indicate where such work will or may cause relocation or replacement of the Utility's facilities.

A.1.07 Pre-Engineering Coordination. The City, through the appropriate City agencies, including their consultants, and each Utility shall timely exchange information, discuss technical aspects of the Project and all City Work and Utility Work involved therein, and shall, among other things, establish a least cost alternative or other alternatives, establish the amount to be paid, or the method for determining the amount to be paid, as applicable, for City Accommodations, if any, establish the separate engineer's estimates for City Work and for each Utility's Work, and discuss the proposed scope of work, time frames and Project limits. The "least cost alternative" is an alternative or variant of the planned City Work, which alternative/variant attains the goals of the planned work at the lowest possible cost to the City and the Utilities. The "Engineer's Estimate" is equal to the sum of the product of (1) the prices for each unit of work, which, prior to solicitation of bids, the City and the Utilities have each submitted in their respective Bid Schedules and (2) the estimated quantity for each respective unit of work, which, prior to solicitation of bids, the City and the Utilities agree represent the reasonably anticipated amount of work under all of the circumstances, plus, as applicable, the price for City Accommodations to the extent that such accommodations are not bid upon by the City Contractor.

A.1.08 Meetings During Design Phases of Project. The City, through its appropriate agencies, and the Utilities shall meet as required to review, comment upon and consider changes to the design of the Project. At least 30 calendar days prior to the first such meeting, the City shall provide the Utilities with a copy of its preliminary design, and, if necessary, make available a copy of the City's survey information. At such time, the City shall also provide the Utilities with a copy of such subsurface information that it may obtain in conjunction with its design work. During such meeting or meetings, the Utilities may present their least-cost alternative or other alternatives for the Project at issue. If the least-cost alternative involves City Accommodations that result in increased cost to the City, then City, after consultation with the Utilities, shall establish the amount to be paid or the method for determining the amount to be paid, as applicable, for the City Accommodations. The affected Utilities shall, within 10 calendar days of receiving the City's determination of the amount to be paid or the method for determining the amount to be paid, as applicable, for City Accommodations, advise the City in writing of its acceptance or rejection of the City Accommodations and the City's determination concerning the amount to be paid or the method for determining the amount to be paid, as applicable, for same. Based on the meetings among the City and the Utilities as specified herein, the City may modify the City's design, including, as applicable to the Project, lanes for facilities, curb alignments, construction methods, the start of construction, changing Project duration, making provisions for Utility access to the site, and specifying the sequencing of work. If subsequent to when the City establishes the final alignment, the City makes changes to the alignment or scope of the Project that have a significant or material impact on the Utilities' pre-engineering, the Utility must immediately notify the City and further meetings concerning pre-engineering shall be held as necessary.

A.1.09 Description of Interference Work and Specifications To Be Provided By The Utilities. Upon written request by the City each Utility shall provide the City a written description in the format required by the City (the “JB Package”) of all anticipated relocation or replacement and support and protection of the Utility's facilities to be performed in conjunction with the Joint Bid Project; the name of the parties to perform such identified work (i.e. City Contractor, Utility employees, Utility contractors, etc.). and other information deemed by the City to be necessary to plan and perform its work. The JB Package must include:

1) details of all test pits,
2) details (layouts) of all point of entry (POE) data for utility structures affected by the Interference Work,
3) Overhead wiring layouts, with all necessary requirements and clearances for executing the City work in the vicinity of overhead wires, and
4) All other details, drawings, sketches, and specifications necessary to execute the Interference Work.

While the use of “as ordered by the Engineer” scope and scope without known locations is necessary from time to time, it’s use must be minimized and cannot be considered a replacement for field investigations and Pre-Engineering. The Utility must plan its Pre-Engineering to ensure that all backfill and final paving are done by the

City Contractor, and that the bid items are structured appropriately. In general, the City will provide a time frame for when the above-requested information must be given to the City. Notwithstanding the City's stated time frame, if a Utility requests additional time or a reasonable time period that is longer than the City's time period, the City's approval will not be unreasonably withheld. The parties understand that the Utilities will use their best efforts to comply with the City's time period since **Time Is Of The Essence** with regard to the Joint Bid Projects.

A.1.10 Review and Acceptance of Company Materials. Following the City's receipt of the information, documents and materials described in Section A.1.09 of this Appendix "A", the City shall review said information, documents and material and discuss suggested modifications thereto with the Utilities involved. The City's review must include minimizing the use of scope without known locations. It is understood and agreed that the method of performing Utility Work shall be subject to the approval of the Utility involved, which approval shall not be unreasonably withheld or delayed. Utility packages that are not coordinated with the other Work or have unreasonable quantities or scopes will be returned to the Utility for revision, with no extension of time allowed.

A.1.11 Completion of Pre-engineering. After review of the Utilities' information documents and materials, the City shall, within 30 calendar days of submission of the information, documents and materials required in this Appendix "A", provide written notification to the Utilities of its agreement to, or modification of such information, documents and materials for the Joint Bid Project. City's approval for Utility pre-engineering accommodations will not be unreasonably withheld or delayed.

A.1.12 Start of Advertising. The Utilities shall be notified of the date a Project is put out to bid by virtue of the bid date for the Project being published by the City in the "City Record" and in the PASSPort procurement system.

A.1.13 Notice of Award. The City shall give notice to the Utilities of its determination of the apparent lowest bidder at the same time that the City notifies the City Contractor. Such notice may take the form of a copy of the City's notice of award given to the City Contractor.

A.1.14 Start of City Construction. The City shall give notice to the Utilities of the date of commencement of construction at the same time that the City orders the City Contractor to begin work. Such notice may take the form of a copy of the City's order to commence work given to the City Contractor.

A.1.15 Start of Utilities' Construction. Whenever a Utility undertakes relocation or replacement and support and protection of its facilities in relation to a Project, and such field work is begun prior to the City's order to its employees, the City Contractor or personnel to commence construction of City Work, the Utility shall give notice to the City that it will undertake field work at least 10 calendar days prior to undertaking such field work**.** Said notice shall, at a minimum, identify the expected duration of such fieldwork, and the name, address and phone number of the persons to contact at the Utility or at the offices of the Utility' s outside contractor who shall coordinate such work with the City. Within a reasonable time after receipt of such notice by the City, the City shall provide the Utility with the name, address and phone number of the person to contact at the City who shall be responsible for Project coordination, which will include ensuring that the Utility's construction does not delay start of the City work. If the Utility's construction will delay the City work, then the Interference Work must be part of the Pre-Engineering and included in the City contract.

[NO FURTHER TEXT HERE.]

APPENDIX "B"

The City of New York City Department of Design and Construction
STANDARD TERMS and CONDITIONS

B.1. Unlawful provisions deemed stricken from Agreement - Severability. If this Agreement contains any unlawful provision not an essential part of the Agreement and which shall not appear to have been a controlling or material inducement to the making thereof, the same shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the Agreement without affecting the binding force of the remainder.

B.2. All legal provisions deemed included. It is the intent and understanding of the parties to this Agreement that each and every provision of law required to be inserted in this Agreement shall and is inserted herein, and if, through mistake or otherwise, any such provision is not inserted, or is not inserted in correct form, then this Agreement shall forthwith upon the application of either party be amended by such insertion so as to comply strictly with the law and without prejudice to the rights of either party hereunder.

B.3. Captions and Headings not binding. Article, Section and Chapter headings are inserted for convenience only and are not to be considered in the construction or interpretation of any provision hereof.

B.4. All prior written or oral agreements excluded. The written agreement contains all the terms and conditions agreed upon by the parties hereto, and no other agreement, oral or otherwise, regarding the subject matter of this agreement shall be deemed to exist or to bind any of the parties hereto, or to vary any of the terms contained herein.

B.5. Construction and Interpretation of Agreement. The language in all parts of this Agreement shall in all cases be construed simply, as a whole, and in accordance with its fair meaning and not strictly for or against any party. The parties hereto acknowledge and agree that this Agreement has been prepared jointly by the parties and has been the subject of arm's length and careful negotiation and that each party has been given the opportunity to independently review this Agreement with legal counsel. Accordingly, in the event of an ambiguity and/or any controversy, dispute or contest over the meaning, interpretation, validity or enforceability of this Agreement, or any of its terms or conditions, there shall be no inference, presumption or conclusion drawn whatsoever against any party.

B.6. Amendments. This Agreement may not be amended except by an instrument in writing signed by all parties. In the event the parties duly execute any amendment to this Agreement, the terms of such amendment shall supersede the terms of this Agreement to the extent of any inconsistency.

B.7, Failure To Exercise Rights. The failure by either party to exercise in any respect any right provided for herein will not be deemed a waiver of any rights hereunder.

B.8. Investigations. The parties to this Agreement agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a State of New York (State) or City of New York (City) governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General or a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit or license that is the subject of the investigation, audit or inquiry.

B.8.1 If any person who has been advised that his or her statement, and any information from such statement, will not be used against him or her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the City, the State, or any political subdivision or public authority thereof, or the Port Authority of New York and New Jersey, or any local development corporation within the City, or any public benefit corporation organized under the laws of the Slate of New York, or;

B.8.2 If any person refuses to testify for a reason other than the assertion of his or her privilege against self

incrimination in an investigation, audit or inquiry conducted by a City or Slate governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is seeking testimony concerning the award of, or performance under, any transaction, agreement, lease permit, contract, or license entered into with the City, the State, or any political subdivision thereof or any local development corporation within the City then;

B.8.3 The Commissioner or agency head whose agency is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon no less than five (5) days written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.

B.8.4 If any non-governmental party to the hearing requests an adjournment, the commissioner or agency head who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license pending the final determination pursuant to this Article 8 without the City incurring any penalty or damages for delay or otherwise.

B.8.5 The penalties which may attach a final determination by the commissioner or agency head may include but shall not exceed:

B.8.6 The disqualification for a period not to exceed five (5) years from the date of an adverse determination for any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the City; and/or

B.8.7 The cancellation or termination of any and all such existing City contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this agreement, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the City incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the City.

B.8.8 The Commissioner or agency head shall consider and address in reaching his or her determination and in assessing an appropriate penalty the factors discussed in this Article 8. He or she may also consider, if relevant and appropriate, the criteria established in this Article 8 In addition to any other information, which may be relevant and appropriate;

B.8.9 The party’s good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.

B.8.10 The relationship of the person who refused to testify to any entity that is a party to the hearing, including, but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the person has within the entity.

B.8.11 The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the City.

B.8.12 The effect a penalty may have on an unaffiliated and unrelated party or entity that has a significant interest in an entity subject to penalties under this Agreement, provided that the party or entity has given actual notice to the commissioner or agency head upon the acquisition of the interest, or at the hearing called for in this Article 8 gives notice and proves that such interest was previously acquired. Under either circumstance the party or entity must present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such

person or entity.

B.8.13 Article 8 Definitions only:

B.8.13.1 The term "license" or "permit" as used in Article 8 only is defined as a license, permit, franchise or concession not granted as a matter of right.

B.8.13.2 The term "person" as used in Article 8 only is defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

B.8.13.3 The term "entity" as used in Article 8 only is defined as any firm, partnership, corporation, association, or person that receives monies, benefits, licenses, leases, or permits from *or* through the City or otherwise transacts business with the City.

B.8.13.4 The term "member" as used in Article 8 only is defined as any person associated with another person or entity as a partner, director. officer, principal or employee.

B.8.14 In addition to, and notwithstanding any other provision of this Agreement, the DDC Commissioner may in his or her sole discretion terminate this Agreement upon not less than three (3) days written notice in the event the Companies fail to promptly report in writing to the New York City Commissioner of Department of Investigation of the City of New York any solicitation of money, goods, requests for future employment or other benefit or thing of value, by or on behalf of any employee of the City or other person, firm corporation or entity for any purpose which may be related to the procurement or obtaining of this Agreement by the consultant, or affecting the performance of this Agreement.

B.9. Termination of Agreement. Any rights, obligations and remedies of either party arising out of or in connection with any event or condition that occurs during the term of this Agreement shall survive any termination of this Agreement by the parties. It is understood that either party may terminate this Agreement with at least thirty (30) calendar days' prior written notice to the other party. If either party terminates this Agreement, then the terms and conditions of this Agreement shall survive for any Joint Bid Project already agreed upon by the parties.
B.10. Choice of law, consent to jurisdiction and venue. This Agreement shall be deemed to be executed in the City of New York, State of New York, regardless of the domicile of the Companies, and shall be governed by and construed in accordance with the laws of the State of New York.

B.10.1 The parties agree that any and all claims asserted by or against the City arising under this Agreement or related thereto shall be heard and determined either in the courts of the United States located in New York City **("Federal Courts")** or in the courts of the State of New York **("New York State Courts")** located in the City and County of New York. To effect this Agreement and intent, the parties agree:

B.10.2 If the City initiates any action against the Vendor or other party to this Agreement in Federal Court or in New York State Court, service of process may be made on the Vendor or other party to this Agreement either in person, wherever such Vendor or other party to this Agreement may be found, or by registered mail addressed to the Vendor or other party to this Agreement at its' address as set forth in this Agreement, or to such other address as the Vendor or other party to this Agreement may provide to the City in writing; and

B.10.3 With respect to any action between the parties in New York State Court, the Vendor or other party to this Agreement hereby expressly waive and relinquish any rights it might otherwise have (1) to move to dismiss on grounds of forum non conveniens; (2) to remove to Federal Court, and (3) to move for a change of venue to a New York State Court outside New York County.

B.10.4 With respect to any action between the parties in Federal Court located in New York City, the Vendor or other party to this Agreement expressly waive and relinquish any right it might otherwise have to move to transfer the action to a United States Court outside the City of New York.

B.10.5 If the Vendor or other party to this Agreement commences any action against the City in a court located other than in the City and State of New York, upon request of the City, the Vendor or other party to this

Agreement shall either consent to a transfer of the action to a court of competent jurisdiction located in the City and State of New York or, if the court where the action is initially brought will not or cannot transfer the action, the Vendor or other party to this Agreement shall consent to dismiss such action without prejudice and may thereafter reinstitute the action in a court of competent jurisdiction in New York City.

B.11. AFFIRMATION. The undersigned parties to this Agreement affirm and declare that said undersigned is not in arrears to the City or New York upon debt, contract or taxes and is not a defaulter, as surety or otherwise, upon obligation to the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York, nor is there any proceeding pending relating to the responsibility or qualification of Licensor to receive public monies or work performed on their property or building.

[NO FURTHER TEXT HERE.]

Appendix "C"

Resolutions of Certain Disputes Arising Between the City Contractor and the Utilities

C .1.0 Applicability. Pursuant to Article 6.1, of the Joint Bidding Agreement by and between the City and the Utilities (the **"Agreement"),** the City's contract documents will require the City Contractor to perform all Public Work and Utility Work. **Time Being Of The Essence** to the City and the Utilities, the City Contractor will be required to prosecute the Joint Bid Project diligently. In recognition of the usefulness of a process of alternative dispute resolution for its efficiency, speed and cost-effectiveness in managing conflict and settling disputes that may arise under, or by virtue of, the provisions of Articles 6.13.1, 6.15.2.3 or 6.15.2.4 of the Agreement, the City and Utilities have agreed to the procedures set forth in this **Appendix "C"**. Accordingly, this **Appendix "C"** shall apply to disputes between the City Contractor and the Utilities that arise under, or by virtue of, the provisions of Article 6 of the Agreement, which are set forth in pertinent part, below:

C1.1 - The Utilities' Responsibilities. If the Utility identifies an issue in the payment requisition for the Utility Work only., the Utility will immediately notify the City and the City Contractor by a written notice. After sending such written notice, the Utility agrees to meet with the City Contractor to resolve the issue. If the issue cannot be resolved, then the Utility or the City Contractor shall seek to resolve the issue through the arbitration process as set forth herein in Appendix “C”.

C1.2 - If The Utility Determines That There Is No Extra Or Disputed Work. If the Utility determines that the alleged extra Utility Work or the disputed Utility Work is part of the City's contract documents and denies the City Contractor's claim or request for a change order, then after receiving the Utility's written response, the City Contractor shall either accept the Utility's determination or immediately seek to have the issue resolved through the arbitration process as set forth in Appendix "C".

C1.3 - If The Utility Determines That There Is Extra Work. If the Utility determines that there is extra Utility Work, the extra Utility Work will be paid for based on the Bid Schedule. If all or a portion of the agreed upon extra Utility Work items are not in the Bid Schedule, then the Utility and the City Contractor shall negotiate the cost of supporting and protecting, and/or alleviating the impact on the Public Work caused by the extra or disputed Utility Work with each other with the understanding that the performance of Public Work shall continue during all negotiations and discussions. If the parties reach an agreement on cost for the extra or disputed Utility Work, then the City Contractor and the Utility shall submit a copy to the City's RE the agreed upon prices along with supporting documentation. If the parties do not reach an agreement on cost for the extra or disputed Utility Work, then the parties will immediately arbitrate the issue as set forth in Appendix "C".

C.2.0 Joint Bid Projects. Pursuant to the Agreement, the City agrees to include in the contract documents for the Joint Bid Project a clause that provides that disputes that arise under the Agreement, as described above, shall be resolved in accordance with the provisions of this **Appendix "C"**. The City will provide a contract term that provides that **Appendix "C"** shall NOT apply to any disputes between the City and the City Contractors, or any

disputes between the City and the Utilities. The City will further provide a contract term that provides that if the City Contractor or the Utilities seek arbitration pursuant to this **Appendix "C"**, the City Contractor and Utilities understand and acknowledge that this arbitration process will be outside the jurisdiction of the City's contract dispute resolution board process. Since the arbitration of Utility interference disputes, as described in Article C.1.0 above, is a matter solely between the Utilities and the City Contractor, and since the parties agree to reduce or eliminate any costs to the City relating to any arbitration pursuant to this **Appendix "C"**, the parties hereby agree that:

C.2.1 The City shall not be a party in the arbitration process;

C.2.2 Neither the City Contractor nor the Utilities shall call as a witness in the arbitration process any City employee, agent or consultant, including the City Resident Engineer, his staff or City inspection personnel and

C.2.3 The City shall not be responsible for any costs, fees or monetary awards or price adjustments associated in any way with the arbitration process described in this **Appendix "C"**.

C.2.4 Notwithstanding Articles C.2.1 and C.2.2, the City's obligation to furnish information to the parties shall be limited to those requests as set forth under the New York State Freedom of Information Law, as amended.

C.3.0 Pre-Arbitration Procedures.

C.3.1 Should a dispute arise between any Utility and the City Contractor pursuant to Article 6.13.1, 6.15.2.3 or 6.15.2.4 of the Agreement or otherwise relating to the prices of the utility work, the disputing party shall notify the City and the other party in writing within two (2) Business Days of the dispute that a dispute exists, and briefly describe; (i) the nature of the dispute; and (ii) the proposed resolution and rationale supporting its proposal.

C.3.2 After notifying the City of the dispute, the disputing parties shall have fifteen (15) Business Days to meet. discuss the issues, exchange documents and/or exchange offers with due diligence and in good faith in order to reach an agreement and resolve the dispute.

C.3.3 If the disputing parties reach an agreement, they shall immediately notify the City in writing that the dispute has been resolved and describe the terms of the resolution.

C.3.4 If the disputing parties have not reached an agreement within fifteen (15) Business Days of the date the City was first notified of the dispute, the City may within five (5) days thereafter, in its sole discretion, direct the parties to arbitrate the dispute as set forth below. The disputing parties agree that the City's decision to direct the parties to arbitrate shall be final and binding on all parties.

C.3.5 Upon receipt of the City's notice to proceed to arbitration, the City Contractor and Utility shall, within five (5) Business Days, simultaneously submit to each other a written Final Offer, which shall consist of: (i) a description (e.g., units and quantities) of all reasonable and necessary disputed work or extra work which the City Contractor contends are not covered by application of the Bid Schedule; and (ii) a detailed breakdown of their proposed prices (e.g., unit prices and quantities) for such work.

C.3.6 Once Final Offers have been exchanged by the parties, they may not be modified or withdrawn by either party except by mutual agreement or final settlement of the dispute. If Final Offers are not provided in the five (5) days required, the City may assess liquidated damages against the Contractor or Utility per Section 8.5.

C.3.7 Upon exchange of Final Offers, the City Contractor shall have three
(3) Business Days, to either accept the Utility's Final Offer or submit the dispute to the American Arbitration Association ("AAA") to be resolved in accordance with the Construction Industry Arbitration Rules ('Rules") in effect on the date the arbitration is initiated, expect as such Rules are modified herein.

C.3.8 Each of the steps described above shall be a condition precedent to the obligations of the parties in

succeeding steps. Since **Time is of the Essence,** should either party fail to comply with any of the pre- arbitration procedures described above, that party shall be deemed to be in default. If, upon receipt of written notice of default by the other party, the defaulting party has not cured the default within three (3) Business Days, the other party may proceed to arbitration solely on the issue of whether the defaulting party was in default of these pre-arbitration procedures. If, after hearing evidence, the arbitrator(s) determine that the defaulting party was in default of these pre arbitration procedures, then the arbitrator(s) shall enter a final decision in favor of the other party in accordance with the Final Offer submitted by the other party or, if no Final Offer has been submitted prior to the default, according to the last written proposal submitted by the other party.

C.4.0 General Provisions.

C.4.1 The Utility agrees to pay for any disputed Utility Work while the arbitration proceeding is pending based on the Utility's Final Offer as further described in Article 6.13, and agrees to pay for any extra Utility Work while the arbitration proceeding is pending on a time and materials basis or alternate method mutually agreed to by the parties, whichever is applicable, based on the Utility's record keeping, as further described in Article 6.15 of the Agreement.

C.4.2 All determinations by the parties required by this **Appendix "C"** shall be clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination.

C.4.3 The Utility agrees to copy the City on all communications involving the arbitration process and to notify the City of the final determination.

C.4.4 The Utility agrees to pay the City Contractor directly for any final settlement for extra Utility Work that may be agreed to by the Utilities and the City Contractor or any final award for extra Utility Work issued by the arbitrator(s), less credits for any payments previously made by the Utility to the City Contractor, as further described in Article 6.15.2.5 of the Agreement.

C.4.5 All of the Agreement's defined terms shall apply here, as if they were re-stated herein.

C.4.6 Since **Time Is Of The Essence** on all Joint Bid Projects, whenever there is a dispute pursuant to this **Appendix "C"**, the terms of the City's Construction Contract shall remain in full force and effect, and the City Contractor shall continue performing all of the City Work and the Utility Work as directed by the City.

C.4.7 The timeframes set forth herein have been established to ensure that the Joint Bid Project does not stop for any disputes between the City Contractor and the Utility.

C.4.8 All of the timeframes are measured in Business Days, which include Monday, Tuesday, Wednesday, Thursday and Friday, but exclude holidays.

C.4.9 For all disputes that arise under **Appendix "C",** the City's role shall be limited to receiving copies of all written communications, and, if applicable, exercise the powers described further in Article C.3.4.

C.4.10 The City Contractor and all subcontractors hired by it agree to waive any rights they may have, if any, under law or equity, contract or otherwise to compel the City to assert any right the City may have, including the issuance of any directives or so-called “order outs” under the New York City Administrative Code, to require any or all of the Utilities to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove Utility facilities in connection with work to be performed under this contract. However, nothing in this Agreement shall preclude the City from exercising its rights under the law, including the right to issue such a directive to a Utility.

C.4.11 Each Utility, at its option, shall be named as an additional insured on all insurance policies required to be maintained by the City Contractor in connection with the Joint Bid Project. In the event that a Utility opts to be so named as an additional insured, the actual incremental cost, if any, to the City Contractor of providing such insurance coverage shall be borne by that Utility. The City Contractor shall provide a written statement from its

insurance provider documenting the actual incremental cost of this added coverage to the Utility. Under no circumstances shall the cost of insurance coverage on behalf of the Utility be borne by the City. Nothing in this paragraph shall be interpreted to imply the City's acceptance of any additional responsibility or liability for any matter related to the performance of Utility Work. In particular, with regard to any Utility Work performed in accordance with or through this **Appendix "C"**, then the Utility and the City Contractor bear joint and full responsibility to ensure that any Utility Work performed by the City Contractor is in compliance with all applicable government and Utility regulations.

C.5.0 The Arbitration Procedures.

C.5.1 Once an arbitrator(s) has been appointed by the AAA, the arbitration shall be scheduled as promptly as possible given the arbitrator(s) and the parties' schedules.

C.5.2 No later than fourteen (14) calendar days prior to the first day of arbitration, the Utility and City Contractor shall submit to the arbitrator(s), and to each other, a summary of each party's respective position, all documentary, photographic or physical evidence on which the party intends to rely, and such other information as is deemed appropriate, along with a copy of each party's "Final Offer" as described above.

C.5.3 The arbitration shall be conducted and concluded in two (2) days.

C.5.4 On the morning of the first (1st) day of the arbitration, City Contractor and/or representatives shall have 3 ½ hours to make a presentation of its claim to the arbitrator(s). During its presentation, City Contractor shall not be permitted to produce any evidence that has not already been provided to the Utility and the arbitrator(s) pursuant to Paragraph C.5.2, above. City Contractor shall be permitted to produce any analysis or description of its claim that has been prepared for the purpose of its presentation.

C.5.5 After the City Contractor's presentation, Utility and/or its representatives shall have 2 hours to ask City Contractor questions about its claim and its presentation. Thereafter the arbitrator(s) shall have 2 hours to ask City Contractor questions about its claim and its presentation.

C.5.6 On the morning of the second (2nd) day of the arbitration, Utility and/or its representatives shall have 3 ½ hours to make a presentation of its claim to the arbitrator(s). During its presentation, the Utilities shall not be permitted to produce any evidence that has not already been provided to the City Contractor and the arbitrator(s) pursuant to Paragraph C.5.2, above. The Utility shall be permitted to produce any analysis or description of its claim that has been prepared for the purpose of its presentation.

C.5.7 After the Utility's presentation, City Contractor and/or its representatives shall have 2 hours to ask Utility questions about its claim and its presentation. Thereafter the arbitrator(s) shall have 2 hours to ask Utility questions about its claim and its presentation.

C.5.8 Subject to the above maximum time limitations set forth above, the arbitrator(s) may conduct the arbitration in such manner, as the arbitrator(s) deems reasonable.

C.5.9 The arbitrator(s) shall then have one (1) week to select in writing, as the arbitrators' award, that party's Final Offer which appears to be more reasonable, based on the presentations at the arbitration hearings.

C.5.10 The arbitrator(s) shall have no discretion to grant an award other than one (1) of the two (2) Final Offers submitted by the parties.

C.5.11 The arbitration award shall be final and binding upon the parties to the arbitration and judgment upon the award may be entered in a court having jurisdiction.

C.5.12 Any award for work that has already been performed shall be paid on the 7th day after receipt of the arbitrator's decision, or on the 30th day after completion of the work, whichever is later. Payment for work not yet completed at the time of the arbitrator's decision shall be paid within thirty (30) calendar days of completion of work. Interest shall accrue from the date payment is due at the rate of nine (9%) percent per annum. Either party may cause judgment to be entered in accordance with the arbitrator(s) decision in a court in the State of New

York, County of New York.

C.5.13 The arbitrator's fees and any other costs of the arbitration initially shall be shared equally by Utility and City Contractor. The non--prevailing party shall then pay all arbitrator's fees and costs of the arbitration and shall reimburse the prevailing party for its share of such fees and costs theretofore paid.

C.5.14 The parties may, at any time, settle any matter submitted to arbitration.

C.5.15 Since **Time is of the Essence**, should any party, at any time after the dispute has been submitted for arbitration, materially fail to comply with: (i) the Rules, (ii) any of these arbitration procedures, or (iii) any procedural decisions by the arbitrator(s), then the arbitrator(s) shall enter an order directing the party to cure its non-compliance within five (5) Business Days. If the party shall fail to comply with the arbitrator(s)' order within the five (5) Business Days, upon receipt of evidence that the non-complying party has failed to comply with the arbitrator(s)' order, the arbitrator(s) shall enter a final decision in favor of the other party in accordance with the other party's Final Offer.

[NO FURTHER TEXT HERE.]

Section JB 9.28 – UTILITY EXPANDED WORK ALLOWANCE

JB 9.28.1 PURPOSE

An Allowance has been established for the items set forth in sub-Section JB 9.28.3 below ("Utility Expanded Work Allowance" or "UEWA") for the purpose of overruns and extra work on Joint Bid utility work that is the responsibility of a Private Utility ("PU") participating in the Joint Bid contract. Payment for the items set forth in sub-section JB 9.28.3 ("Expanded Work Items") may be made through the UEWA, as directed by the Engineer. "Extra Work", "overrun", and "Allowance" are defined by the Standard Construction Contract (*see* Articles 2.1.16, 26.1, and 2.1.4, respectively) and nothing in this Section alters, or will be deemed to alter the interpretation or application of, the Standard Construction Contract, including but not limited to Articles 25, 26, 28, and 78 of the Standard Construction Contract. Other terms, including Extra Utility Work and Significant Utility Change, are as defined in the 2025 JB Agreement, in the JB-Pages of this contract.

JB 9.28.2 PROCESS

(a) If the Engineer determines that use of the UEWA is appropriate, in their sole discretion, the Engineer will direct the PU to prepare a written scope document for the Expanded Work Items for the Contractor's execution ("UEWA Scope Memo"). The UEWA Scope Memo will set forth the maximum amount payable from the UEWA prior to the execution of a final cost memorandum ("Maximum Amount"), in accordance with this Section. The Maximum Amount may be increased from time to time by the PU, in their sole discretion, except that the Maximum Amount may not exceed 80% of the PU's estimated total cost for such Work (the "Estimated Cost") unless and until a final cost is determined and a final cost memorandum ("Final Cost Memo") executed in accordance with this Section.

(b) Neither the Maximum Amount nor the Estimated Cost will be deemed to be the final cost of the Expanded Work Items. The final cost for the Expanded Work Items will be determined in accordance with Article 26 of the Standard Construction Contract. The Contractor must submit its detailed price proposal for the Expanded Work Items, calculated in accordance with the Contract, within the time period set forth in the UEWA Scope Memo or within 90 Days after the executed UEWA Scope Memo is issued to the Contractor, whichever is sooner.

(c) Once the UEWA Scope Memo is executed and the Contractor is directed to proceed with the Work, DDC will make progress payments, as provided in the Contract, up to the Maximum Amount or until the submission period has expired, whichever occurs sooner.

(d) DDC will not make any progress payments for the performance of the Expanded Work Items beyond the submission period set forth in sub-Section C, above, unless and until a final cost has been determined and a Final Cost Memo executed in accordance with this Section. No amounts above the Maximum Amount set by the Engineer will be payable from the UEWA, unless and until a final cost has been determined and a Final Cost Memo executed in accordance with this Section. In all events, the Contractor shall promptly and diligently comply with the Engineer's direction and perform all Work required by the Contract and the UEWA Scope Memo.

(e) Upon receipt of the Contractor's cost detailed proposal, the PU will evaluate the proposal and initiate negotiations, as necessary, to determine the final cost of the Expanded Work Items in accordance with Article 26 of the Standard Construction Contract. The Contractor is responsible to furnish time and material records in accordance with Article 28 of the Standard Construction Contract until a Final Cost Memo is executed. If the parties cannot agree on a unit price or fixed price, the Contractor will be

paid on the basis of time and material records in accordance with Article 26 the Standard Construction Contract.

(f) A Final Cost Memo will be prepared by the Engineer to be executed by the parties. The total net sum of the amounts added and/or credited under the UEWA Scope Memo and payment of the finalized Final Cost Memo constitutes full accord and satisfaction for the costs resulting from the Expanded Work Items. In the event the UEWA is insufficient to pay the full amount of the Final Cost Memo, the parties agree to execute change order documents for the remaining funds, subject to registration in accordance with the New York City Charter.

JB 9.28.3 PRICE TO COVER

Expanded Work Items are those items set forth below. The UEWA may be used, in the Engineer's discretion, for the following Expanded Work Items that are the responsibility of the PU:

(a) Non-material changes in the Work necessary to complete Contract Work due to site conditions that differ from those included in the Contract Documents and that could not have been anticipated by the Contractor.
(b) Non-material changes in the Work directed by the Commissioner or the Private Utility that result in a net change in the cost to the Contractor for the Work to be performed under this Contract, including but not limited to the following:
    (i) Significant Utility Changes, overruns of unit price items and quantity increases in portions of work within a lump sum item.
    (ii) NYCDOT traffic stipulations or permit requirements that significantly differ from those included in the Contract Documents and that could not have been anticipated by the Contractor.
    (iii) Changes to the sizes of materials or changes to specifications of materials.
    (iv) Materials/structures not included in the Contract Documents that are necessary to complete Contract Work and that could not have been anticipated the Contractor.

JB 9.28.4 BASIS OF PAYMENT

(a) The fixed sum must be considered the price bid for this item. The fixed sum is not to be altered in any manner by the bidder. Should the amount shown be altered, the new figures will be disregarded, and the original price will be used to determine the total amount bid for the contract.

(b) The payment(s) made under this item will be equal to the Final Cost Memo prepared by the Engineer and executed by the parties in accordance with JB 9.28.2(f) above as proof of work performed for this item as approved by the Engineer.

(c) The total estimated cost of this item is the "fixed sum" amount shown for this item in the Bid Schedule and shall not be varied in the bid. The "fixed sum" amount is included in the bid solely to ensure that sufficient monies will be available to pay the Contractor for this work, which may be more or less than the fixed sum amount.

(d) The price will cover the cost of all labor, materials, equipment, insurance and incidentals necessary to complete the work under this section in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

JB 9.28.5 DIRECT PAYMENT

(a) In the scenario that the UEWA fixed sum amount is expended, the PU may pay the Contractor directly for payments under this item. Direct payments must conform to the following requirements:

(i) Payments must be made in a timely manner, in accordance with the City's prompt payment rules, including those in Section 4-06 of the Payment Procurement Board Rules (PPB Rules). If payments are not made in a timely manner, the requirements of Section 4-06 (d) will apply.

(ii) In order to facilitate the shared cost reconciliation between the City and the Utilities, the Contractor must provide details of all payments from the Utilities. These details must include the items, quantities, and amounts that are covered by the payment.

(iii) Determination of quantities and items for separate payment will be made by the Engineer, using the same methods and procedures used for Utility items paid directly by the City.

Payment will be made under:

Item No.	Item	Pay Unit
JB 9.28	UTILITY EXPANDED WORK ALLOWANCE	F.S.

Consolidated Edison Company of New York, Inc.

Guideline

For

Safe Entry into Sub-Surface Structures (Electrical Enclosed Space),

Moving Energized Underground Cables

Removal of Conduit from Cables, and

Sub-Surface Structure Break Out, Rebuild & Breaking Out a Point of Entry (POE's) Into Sub-Surface Structures

Performed by

Municipal Contractors

Table of Contents

1.0 Definitions 4
1.1 Competent Person 4
1.2 Attendant 4
1.3 Electrical Enclosed Space 4
1.4 CET Specification 4
1.5 JB Specification 4
1.6 Public Improvement Representative 4
1.7 Municipal Contractor 4
1.8 Electrically Competent Qualified Municipal Contractor 4
2.0 References 5
2.1 OSHA Section 1910.269 5
2.2 Training 5
3.0 Safe Entry into Sub-Surface Structures, (Electrical Enclosed Space) 6
3.1 Purpose 7
3.2 Application 7
3.3 Guideline 7
3.4 Inspection/Testing 7
3.5 Job Briefing 8
3.6 Attendants 8
3.7 Hazardous Atmosphere 8
3.8 Personal Protective Equipment 8
3.9 Con Edison Personal Protective Equipment Guideline 8
3.10 Access 9
4.0 Removal of Conduit from Cables, Moving Energized Underground Cables & Working in Open Trenches / Excavations that Contain a D-Fault. 9
4.1 Purpose 10
4.2 Application 10
4.3 Guideline 10
4.4 Job Briefing 10
4.5 Removal of Conduit from Cables 10
4.6 Visual Inspection 14
4.7 Cable Moving Operations 14
4.8 Working in Open Trenches/Excavations that Contain an Energized a D-Fault 16
4.9 Personal Protective Equipment 16
5.0 Sub-Surface Structure Break Out/Rebuild or Breaking Out a Point of Entry (POE's) in an Electrical Enclosed Space 16
5.1 Activities Prior to Sub-Surface Structure Break Out, Rebuild or Creating POE's. 17
5.2 Structure or POE Break Out Operations 17

APPENDIX – A – Breaking Out Conduit Checklist, On-the-Job Training (OJT) & Video 19
Appendix B – PI Check Point Tasks..... 28

1.0 Definitions

1.1 Competent Person – As a general rule, a Competent Person is an individual who, by way of training and/or experience, is knowledgeable of OSHA and other applicable standards, can identify workplace hazards relating to the specific operation and is designated by the employer with the authority to take all appropriate actions necessary to comply with all applicable standards and take prompt corrective measures to eliminate the hazards. Some OSHA standards add additional specific requirements that must be met by the Competent Person.

1.2 Attendant – An authorized individual who is stationed outside a sub-surface structure or an Electrical Enclosed Space to monitor the authorized entrants and to perform duties assigned including aiding individual(s) inside the sub-surface structure or Electrical Enclosed Space.

1.3 Electrical Enclosed Space – OSHA defines an Electrical Enclosed Space as a working space, such as a manhole, vault, tunnel, service box, or shaft, used for the operation and maintenance of electric power generation, transmission, and distribution lines and equipment. An Electrical Enclosed Space has a limited means of egress or entry and is designed for periodic entry under normal operating conditions. Under normal conditions, an Electrical Enclosed Space does not contain a hazardous atmosphere but may contain a hazardous atmosphere under abnormal conditions.

1.4 CET Specification – CET Specification defining private utility work within Municipal Construction Contracts.

1.5 JB Specification – Joint Bid specification defining private utility work within a NYC DDC Capital contract.

1.6 Public Improvement Representative – Con Edison employee, (Inspector, Construction Representative, Chief Construction Inspector, Project Specialist, or Manager) assigned to the Public Improvement section.

1.7 Municipal Contractor – Construction municipal contractor performing work for Municipal, State or other Public Agencies or Authorities.

1.8 Electrically Competent Qualified Municipal Contractor – is a Municipal Contractor employee designated and documented by the Municipal Contractor employer, in writing, as the electrically competent and qualified person who, by way of training and/or experience has the skills and techniques necessary to distinguish exposed live parts from other parts of electrical equipment, can identify non-insulated conductors from insulated conductors and/or cables and has the knowledge of the precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools that are required for working on or near exposed energized electrical equipment. The Electrically Competent Qualified Municipal Contractor (ECQMC) employee can identify varying workplace electrical hazards relating to the specific operation and has the authority to take appropriate actions, as required. To meet the task specific qualifications of this guideline, the ECQMC employee must be familiar with this document, be able to demonstrate adherence, conduct job briefings and be present during critical tasks and/or operations to ensure that all crew members understand hazards associated with the job, work

procedures involved, special precautions, energy source controls and personal protective equipment requirements. The ECQMC should be onsite during the performance of all tasks in which ECQMC employees may be exposed to electrical hazards either noted in applicable sections of this guideline and/or listed in Appendix B – PI Check Point Tasks.

2.0 References

2.1 OSHA Section 1910.269 – Electric Power Generation, Transmission & Distribution & 1926 Subpart V –Electric Power Transmission and Distribution

2.2 Training

The OSHA Office of Training and Education (OTE) develops, directs, oversees, manages and ensures implementation of OSHA's national training and education policies and programs in support of OSHA's strategic goals with the objective of reducing occupational hazards through direct intervention, promoting a safety and health culture through compliance assistance, cooperative programs and strong leadership and maximizing OSHA effectiveness and efficiency by strengthening capabilities and infrastructure.

All Municipal Contractor employees shall be trained in and familiar with the safety-related work practices, safety procedures, and other safety requirements in section 1910.269(a)(2) and 1926 Subpart V that pertains to the Municipal Contractor employees' respective job assignments. Municipal Contractor employees shall also be trained in and familiar with any other safety practices, including emergency procedures, such as manhole rescue, that are not specifically addressed by this referenced section but that is related to their work and is necessary for their safety.

Con Edison manhole inspection and underground awareness training can be scheduled through the Con Edison TLC upon request of the municipal contractor. OSHA 10 certification cards and CPR / First Aid training are prerequisites.

2.2.1 Electrically Competent Qualified municipal contractors shall also be trained and competent in:

a- The skills and techniques necessary to distinguish exposed live parts from other parts of electrical equipment

b- The skills and techniques necessary to determine exposed live parts from other parts, (determination of non-insulated conductors from insulated conductors / cables).

c- The knowledge of the precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools that are required for working on or near exposed energized parts of electrical equipment. Generally, the Municipal Contractor will not be required to work on or near exposed/non-insulated energized parts of electrical equipment or cables. In the event special conditions exist requiring working near exposed/non insulated energized parts of electrical equipment or

cables, the Municipal Contractor shall cease working and immediately contact the authorized Con Edison Inspector so that a further assessment of the condition can be evaluated, and appropriate guidance provided.

d- The Electrically Competent Qualified Municipal Contractor employee shall determine, through regular supervision and through inspections conducted on at least an annual basis that each Municipal Contractor employee is complying with the safety-related work practices outlined in this guidance document. Prior to entry into structures outlined in this procedure, the ECQMC employee shall ensure that any employee entering is trained and qualified.

2.2.2 A Municipal Contractor employee shall receive additional training (or retraining) by the Electrically Competent Municipal Contractor under any of the following conditions:

a- If the Electrically Competent Qualified Municipal Contractor employee indicates that the Municipal Contractor employee is not complying with safety-related work practices

b- If new technology, new types of equipment, or changes in procedures necessitate the use of safety-related work practices that are different from those which the Municipal Contractor employee would normally use

c- If the Municipal Contractor employee must employ other safety-related work practices that are not normally used or that require modification from those stated in this guidance document

Note: OSHA requires retraining before commencing with a task that has not been performed within one year.

The required training shall be of the classroom and/or on-the-job type. The training shall establish Municipal Contractor proficiency in the work practices required and shall introduce the procedures necessary for compliance. The Electrically Competent Qualified Municipal Contractor shall certify that each Municipal Contractor employee has received the training required and retains records of this training to be supplied upon request by Con Edison.

3.0 Safe Entry into Sub-Surface Structures, (Electrical Enclosed Space)

All subsurface electric cable systems and related components shall be considered to be energized until they have been verified as being de-energized by qualified Con Edison electrical personnel. Prior to the state of conduit removal operations, the identity and content of the facility (conduit and cable contained therein) shall be

verified utilizing applicable Con Edison maps & plates. In case of any safety concern, the option of de-energizing shall be discussed with the PI Representative. Caution shall always be employed whenever conduits are opened to expose the interior, even if the Con Edison maps and plates indicate no live facilities.

3.1 Purpose

To establish a guideline that shall be employed for safe entry into Con Edison sub-surface structures by Municipal Contractors.

3.2 Application

Municipal Contractor personnel

3.3 Guideline

This guideline provides the requirements for practices that shall be employed for safe entry into Con Edison sub-surface structures. Municipal Contractor personnel requiring entry into Con Edison sub-surface structures shall adhere to this guideline.

3.4 Inspection/Testing

Prior to entry into a Con Edison sub-surface structure, properly trained and qualified Con Edison electrical personnel must conduct an inspection. The inspection will determine if the condition of the electrical facilities contained therein is sufficient to allow need based unrestricted access. The Con Edison electrical personnel will communicate to both PI Representative and to the ECQMC personnel any safety precautions to be taken and that the subsurface structure is safe for entry and document such findings. Any condition deemed to be un-safe through this formal inspection process would preclude granting access.

An inspection must take place daily prior to Municipal Contractor entry. Once the cover is placed on the electric subsurface structure another inspection must occur prior to Municipal Contractor entry unless the ECQMC has met the requirements outlined in Section 4.7.a. Inspections include but are not limited to:

1) Testing for stray voltage by a qualified Con Edison employee or an ECQMC employee who has completed applicable Con Edison training courses.

2) Completion of atmospheric testing.

3) Determination that it is safe to enter the space.

4) A visual inspection for any abnormalities previously defined.

5) Communication of inspection results and hazards to the Con Edison inspectors and the municipal contractor supervisor.

6) A copy of the underground inspection form can be reviewed in the field with the PI Representative in consultation with the qualified Con Edison electrical personnel upon request by the ECQMC.

3.5 Job Briefing

The Electrically Competent Qualified Municipal Contractor in charge shall conduct a job briefing with the municipal contractor's employees involved before they start the job. The briefing shall cover: the hazards associated with the job; work procedures involved; special precautions; and personal protective equipment requirements. The Electrically Competent Qualified Municipal Contractor shall instruct that all cables are to be treated as energized. Additional briefings shall be held if significant changes, which might affect the safety of the municipal contractor's employees, occur during performance of the work. The Electrically Competent Qualified Municipal Contractor shall document completion of the job briefing. A copy of the documented job briefing shall be available upon request by Con Edison.

3.6 Attendants

While work is performed in a Con Edison sub-surface structure, a Municipal Contractor Attendant shall be available in the immediate vicinity to render emergency assistance. Sub-surface structure Attendants shall comply with applicable OSHA requirements.

3.7 Hazardous Atmosphere

Municipal Contractor personnel shall perform a documented hazardous atmosphere test before entry into any Con Edison sub-surface structure and perform continuous air monitoring in compliance with applicable OSHA requirements. Any atmospheric reading deemed to be un-safe would prohibit access to the structure. The Municipal Contractor shall immediately notify the authorized Con Edison Inspector.

3.8 Personal Protective Equipment

Municipal Contractor personnel requiring entry into Con Edison sub-surface structures shall refer to and comply with applicable OSHA requirements regarding the use of Personal Protective Equipment when performing this work. Con Edison also requires that Municipal Contractor personnel assigned to work inside Con Edison sub-surface structures shall always wear Flame Resistant (FR) Clothing with a rating of 8 cal/cm^2 or HR2, wear a retrieval harness, and that a retrieval device be on location. In addition, an atmospheric tester must be in use continuously anytime a structure is occupied. See section 3.9 for Matrix on Con Edison's Personal Protective Equipment Guideline.

3.9 Con Edison Personal Protective Equipment Guideline

	Task	Class 0 Gloves	FR Clothing	FR Hood	Blast Goggles	Face Shield	Safety Glasses
1	Pavement breaking	N	N				Y
2	Breaking out concrete encased duct	Y	Y			Y	Y
3	Moving energized primary cables that are located outside a structure while in proximity to joints	Y	Y	Y	Y		

4	Moving primary cables outside a structure (no joints involved)	Y	Y				Y
5	Moving energized secondary cables	Y	Y				Y
6	Hand excavate to locate precast ducts	N	N				Y
7	Hand excavate to locate direct buried cables	Y	Y				Y
8	Removing cable from conduit	Y	Y				Y
9	Breaking structure for POE from outside/inside	Y	Y			Y	Y
10	Breaking sub-structure walls	Y	Y				Y
11	Pulling rope within structure with energized cable	Y	Y				Y
12	Pulling rope in enclosed spaces	Y	Y				Y
13	Building a bench or platform within a subsurface structure to support or protect cables.	Y	Y				Y
14	Breaking out unknown precast electric duct	Y	Y				Y
15	Using digging bar over electric facility	Y	N				Y
16	Using digging bar over direct buried cables	Y	Y				Y
17	Using Pneumatic clay digger in vicinity of electric facility	Y	Y				Y
18	Installing forms for field-constructed sub- surface structures from inside the designed footprint when connected cables are present	Y	Y				Y
19	Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present	N	N				Y
20	Installing forms for field-constructed subsurface structure prior to first energization of new cables	N	N				Y
21	Saw cutting operation	Y	N				Y
22	Hand excavate to locate cable fault	Y	Y				Y
23	Hand excavating to find service dead leg	Y	Y				Y
24	Removing underground silo	Y	Y				Y
25	Regrade	Y	N				Y
26	Build/remove shunt box w/ energized cable inside	Y	Y				Y

3.10 Access

Municipal Contractor personnel shall not climb into or out of Con Edison sub-surface structures by stepping on cables or hangers.

4.0 Removal of Conduit from Cables, Moving Energized Underground Cables & Working in Open Trenches / Excavations that Contain a D-Fault.

4.1 Purpose

Establish a guideline that shall be employed by Electrically Competent Qualified Municipal Contractor personnel, meeting OSHA & Con Edison training requirements, when removing conduit from cables and moving Con Edison energized underground cables located outside or inside structures and working in open trenches / excavations that contain a cable with a D-Fault condition.

4.2 Application

Municipal Contractor personnel

4.3 Guideline

This guideline details the requirements for practices that shall be employed when moving Con Edison energized underground cables located inside or outside of Con Edison structures. Only Electrically Competent Qualified Municipal Contractor personnel who have been trained and meet necessary OSHA & Con Edison requirements for moving energized underground cables in accordance with the following directions shall perform movement of energized cables on the Con Edison system.

4.4 Job Briefing

The Electrically Competent Qualified Municipal Contractor in charge shall conduct a documented job briefing with the Municipal Contractor's employees involved before the start of the job. The briefing shall cover: the hazards associated with the job; work procedures involved; special precautions; and personal protective equipment requirements. The Electrically Competent Qualified Municipal Contractor shall instruct that all cables are to be treated as energized. Additional briefings shall be held if significant changes, which might affect the safety of the Municipal Contractor's employees, occur during the course of the work. The Electrically Competent Qualified Municipal Contractor shall document completion of the job briefing. A copy of the documented job briefing shall be available upon request by Con Edison.

4.5 Removal of Conduit from Cables

All subsurface electric cable systems and related components shall be considered energized. Caution shall always be employed whenever conduits are opened to expose the interior cable. Refer to Appendix A for additional requirements and resources.

4.5.1. Pre-cast Concrete Conduit

a- The conduit shall be fractured by striking the top end corner of the conduit with a 3 lb. hammer equipped with a non-conductive handle. When fracturing the conduit, all impact/chipping action shall be performed in such a manner to be directed across the top of the conduit away from any cable that may be inside of the conduit.

b- A small piece of the concrete conduit shall be chipped away so that a visual examination of the interior of the conduit can be made to verify the presence of cable. All impact/chipping actions shall be performed in such a manner to be directed across the top of the duct, away from the cable.

c- If cable is present, concrete-chipping operations shall continue until enough material has been removed to permit insertion of a non-conductive protective shield barrier between the conduit and cable or as directed by the authorized Con Edison Inspector based on existing field conditions. Material such as exterior grade plywood or lumber (min. thickness ¾") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g., Norplex Micarta NEMA Grade G-3 or G-10) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operations. The remainder of the conduit shall be fractured using the 3 lb. hammer equipped with a non-conductive handle. Care shall be taken to avoid any impact upon the cable, either by direct or indirect hammer blows.

d- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 4.7, below.

4.5.2 Concrete Encased Conduit

a- The concrete encased conduit (including but not limited to pre-cast, fiber, tile, clay), shall be fractured by striking the top end corner of the conduit with a 3 lb. hammer equipped with a non-conductive handle. When fracturing the conduit, all impact/chipping action shall be performed in such a manner to be directed across the top of the conduit away from any cable that may be inside of the conduit.

b- For concrete encased conduit, it may be necessary to employ a handheld cold chisel (in conjunction with the 3 lb. hammer) to remove concrete encasement. If a chisel is utilized, all impact/chipping actions shall be performed in such a manner to be directed across the top of the duct, away from the cable.

c- If the concrete encasement is so dense as to render the use of a hammer and handheld chisel non-effective, an 8-pound sledgehammer may be employed. If neither of these devices proves effective, the use of a pneumatic chipping hammer will be permitted. The weight/size of the pneumatic chipping hammer shall not exceed 20 lbs. When utilizing a pneumatic chipping hammer, the device shall be securely positioned and be under close operator control at all times. The tool bit used for these operations shall be chisel shaped with a minimum width of two (2") inches. All impact/chipping actions shall be performed in such a manner to be directed across the top of the duct, away from the cable.

e- A small piece of the concrete conduit shall be chipped away to permit verification of the presence of cable inside the conduit.

f- If cable is present, concrete-chipping operations shall continue until enough material has been removed to permit insertion of a non-conductive protective shield barrier between the conduit and cable or as directed by the authorized Con Edison Inspector based on existing field conditions. Material such as exterior grade plywood or lumber (min. thickness ¾") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g., Norplex Micarta NEMA Grade G-3 or G-10) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operation.

g- After installation of the shield material has been completed, continue removal of remaining conduit and encasement, using handheld and power tools.

h- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 4.7, below.

4.5.3 Wood Conduit

a- Wooden conduit shall be split using a handheld cold chisel and a 3 lb. hammer equipped with a non-conductive handle. All impact/chipping action shall be performed in such a manner to be directed across the top of the conduit away from the cable.

b- The chisel shall use to create a small window in the conduit that will permit a visual inspection of the conduit interior for the presence of cable.

c- If cable is present, wood conduit material shall continue to be removed until enough material has been removed to permit insertion of a non-conductive protective shield barrier between the conduit and cable or as directed by the authorized Con Edison Inspector based on existing field conditions. Material such as exterior grade plywood or lumber (min. thickness ¾") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g., Norplex Micarta NEMA Grade G-3 or G-10) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operation.

d- After installation of the shield material has been completed, continue removal of remaining conduit

e- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 4.7, below.

4.5.4 HDPE Conduit

a- HDPE conduit shall be split using hand tools or a handheld pneumatic rotary cutting tool. All splitting/cutting actions shall be performed in such a manner to be directed across the top of the duct, away from the cable.

b- Pneumatic Rotary Cutting Tool – A pneumatic rotary cutting tool, with a depth guide, shall be used to score an access area in the surface of the conduit. Prior to application of the cutting tool to the surface of the conduit, the depth collar on the pneumatic rotary cutting tool shall be set so that the cutting bit will penetrate approximately ¾ of the wall thickness of the conduit. After the conduit has been cut to the maximum depth allowable (such that the bit does not fully penetrate the thickness of the conduit), a 3 lb. hammer shall be used to knock out the access area (window) outlined by the cutting tool. This will permit visual inspection of the conduit interior for the presence of cable.

c- If inspection of the interior of the conduit reveals that cable is present, a non-conductive protective shield barrier shall be inserted into the conduit between the conduit and cable. This shield material shall provide protection for the cable during the remaining conduit removal operations. Material such as exterior grade plywood or lumber (min. thickness ¾") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g., Norplex Micarta NEMA Grade G-3 or G-10) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operations.

d- If inspection of the conduit interior does not reveal the presence of cable, the remaining conduit may be removed using the tool choices mentioned in 4.5.4.a.

4.5.5 Metal Conduit

a. When removing metal conduit, the Municipal Contractor shall first excavate and expose a collar connecting two sections of conduit. Once the collar is accessible, split and/or cut the collar off with a cutting tool that has a depth guide to inspect the conduit interior for the presence of cable. If a metal conduit collar is NOT easily accessible or found within 20 to 40 feet of open excavation, proceed to section 4.5.5.b. Note: If the work to be performed is in response to a suspected natural gas leak or in the presence of natural gas, only the use of non-powered hand tools is allowed. If work is required in the presence of a natural gas leak, further guidance will be provided by the PI Representative in consultation with Con Edison's Gas Engineering Department

b. If a collar connecting two sections of conduit cannot be found, metal conduit will be split using hand tools and/or a handheld rotary cutting tool. All splitting actions will be directed across the top of the conduit, away from the cable. Note: If the work to be performed is in response to a suspected natural gas leak or in the presence of natural gas, only the use of non-powered hand tools is allowed. Further guidance will be provided by Gas Engineering.

c. Score the outline of an access area onto the surface of the conduit. Do not fully penetrate the conduit with the tool while making this outline.

d. Use this outline as a guide for further splitting and cutting operations that will eventually create a viewing window into the conduit.

e. If inspection of the conduit interior reveals the presence of cable, insert a non-conductive protective barrier between the cable and conduit wall. The barrier will provide physical protection for the cable during remaining conduit removal operations. Materials including, but not limited to, exterior grade plywood, lumber, and Norplex Micarta are acceptable. After the installation of the non-conductive protective barrier, the removal of the remaining conduit may proceed using the tool choices mentioned in section 4.5.5.b.

f. If inspection of the conduit interior does not reveal the presence of cable, the remaining conduit may be removed using the tool choices mentioned in section 4.5.5.b.

4.6 Visual Inspection

a- A visual inspection of cables located outside Con Edison structures that will be moved, shall be performed by Electrically Competent Qualified Municipal Contractor personnel or the authorized Con Edison Inspector.

b- After the conduits have been broken out (removed from the cables), the exposed cable(s) shall be inspected by the Electrically Competent Qualified Municipal Contractor personnel.

c- The cables shall be visually inspected by the Electrically Competent Qualified Municipal Contractor personnel and determined to be free from any of the defects that would prevent relocation. Cable(s) shall be free of cracks, tears, and evidence of oil stains, swelling, or melting of the insulation. Cables shall not have any exposed conductor.

4.7 Cable Moving Operations

a- Municipal Contractor personal shall not move any cables or splices within an electrical manhole. Moving cables within an electrical manhole and splices regardless of location may only be performed by qualified Con Edison electrical personnel unless the Municipal Contractor personnel has completed applicable Con Edison training courses and has provided written proof of said training to the PI Representative. Whenever cables located in open excavations are moved, the Municipal Contractor shall protect the cables by ensuring the cable jacketing is not subjected to sharp edges or over bending as it exits the existing structure or the footprint of the existing structure if said structure has been demolished or is in the process of being demolished and/or rebuilt.

b- Prior to moving any cables outside of a subsurface structure, the cables located within the associated connecting subsurface structures shall be inspected in accordance with Section 3.4 of this guideline.

c- Municipal Contractor personnel meeting the training requirements and experienced in moving Con Edison cables only shall move cables.

d- Cables shall not be moved until plastic “fair-leaders” are positioned at the duct edges to prevent chaffing damage.

e- Synthetic web slings having a minimum width of two (2) inches shall support cables that have been removed from conduit. Slings shall be used in a basket hitch configuration.

f- Conduit which house cables shall be supported using slings, cable, or rope. Conduits shall be supported in such manner as to maintain alignment with one another.

g- Maximum distance between support points shall be four (4) feet.

h- To prevent inadvertent over bending of the cables, the maximum vertical or horizontal offset between supports shall be one foot (1’) for cable that is supported outside of conduit. For cable that is being moved while still installed in conduit, the conduit shall not be offset more than one foot per four-foot section of conduit.

i- Each set of cables (cables from one duct/conduit) shall be moved individually. Cables from multiple ducts/conduits shall not be moved as a bundle.

j- Relocation of cables shall always be performed in a careful manner with the movement of cable under complete control. There shall be no sudden movements of the cable or the conduit that contains cable.

k- An observer shall be positioned to determine proper slack in structures and to ensure that joints remain properly supported on rack arms and specified offsets are maintained. This observation shall be performed from outside of the structure while the cable is being moved.

l- Allowable horizontal and vertical offsets shall be determined based on applicable CET or JB item sketches and/or as directed by the authorized Con Edison Inspector.

m- Cables shall not be permitted to fall freely from temporary supports.

n- All cables supported by slings shall be visually inspected by the ECQMC personnel at the beginning and end of each work shift to ensure that no cracks, leaks, or other defects have developed.

o- Cables shall be repositioned with care when being moved into their final position for the installation of split conduit.

4.8 Working in Open Trenches/Excavations that Contain an Energized a D-Fault

4.8.1 A D-Fault is defined as an abnormal condition found on an energized primary cable or splice that is presumed to be an indication of an impending fault. If the ECQMC personnel notices an abnormal condition on cable in a trench or excavation work must stop and the PI Representative shall be notified immediately to provide further guidance. If the PI Representative in consultation with qualified Con Edison electrical personnel deem the cable condition a D-Fault, the ECQMC personnel shall follow the directions noted below to continue work.

4.8.2 At distances greater than 20 feet from the energized D-Fault, no additional personal Protective Equipment (PPE) other than that referenced in Section 3.9 is required.

4.8.3 At distances greater than 10 feet but less than 20 feet from the D-Fault, a hard-hat mounted face shield is required in addition to PPE referenced in Section 3.9 above.

4.8.4 At distances greater than eight feet but less than 10 feet from the energized D-Fault, a hard-hat mounted full-face shield and a FR Hood in required in addition to PPE referenced in Section 3.9 above.

4.8.5 At distances less than eight feet from the D-Fault, no work shall be performed.

4.8.6 Movement of D-Faulted cable is strictly prohibited.

4.9 Personal Protective Equipment

Municipal Contractor personnel moving Con Edison energized cables shall refer to and comply with applicable OSHA requirements regarding the use of Personal Protective Equipment when performing this work. See Section 3.9 for Matrix on Con Edison's Personal Protective Equipment Guideline.

5.0 Sub-Surface Structure Break Out/Rebuild or Breaking Out a Point of Entry (POE's) in an Electrical Enclosed Space

The ECQMC must be present onsite with the municipal contractor crew to conduct the documented job briefing on each day any breakout operations are to be performed. This includes structure entry for POE, structure break out and/or rebuilds. The ECQMC shall address hazards, live cables, necessary PPE with other municipal contractor employees & request assistance from the PI Representative to arrange any required inspections with qualified Con Edison electrical personnel for any cable movement or adjustments. The ECQMC should refer to section 3.0 through 3.10 & section 4.7 of this procedure for all activities required prior to sub-surface structure entry and cable moving operations respectively. A copy of the documented job briefing shall be available upon request by Con Edison.

5.1 Activities Prior to Sub-Surface Structure Break Out, Rebuild or Creating POE's

5.1.1 Prior to the start of breakout operations, the location of all conduit and cable passing through the section of the wall and beneath the structure floor that is going to be broken out shall be visually identified inside and outside the structure.

5.1.2 When there is a potential for contact between the existing cables that have been visually identified and the tool being used to break the structure, the ECQMC shall discuss with the Public Improvement Representative if there is a possibility that Electric Operations can de-energize the cables that are in the potential zone of contact prior to breaking out the structure.

5.1.3 When the cables cannot be de-energized by Electric Operations then they must be protected by using acceptable non-conductive materials as noted in Section 5.2.

5.1.4 After cables have been protected, they shall be moved by qualified Con Edison electrical personnel or an ECQMC who has met the requirement of Section 4.7 above.

5.1.5 All primary cables shall be moved by or under the direct supervision of qualified Con Edison electrical personnel.

5.2 Structure or POE Break Out Operations

5.2.1 Using caution, expose the exterior sections for the structure that is required to be broken out typically done in 2' – deep vertical sections) by carefully excavating on the outside of the structure. If conduit has been identified to be passing under the structure, take necessary precautions noted below.

5.2.2 Visually identify all conduits and cables passing through the structure and beneath the structure floor as well.

5.2.3 When there is a potential for contact between the existing cables that have been visually identified and the tool being used to break out the structure walls, roof floor and/or POE, protect the cables using fire rated (FR) wood, phenolic board, cable shields or other acceptable non-conductive materials., Cables on the walls in the POE area shall also be protected from falling debris using FR wood even if there is no potential for contact with said cables and the tool being utilized to break the structure.

5.2.4 Once all conduits and cables have been identified and protected on both the inside and the outside of the structure walls and beneath

the structure floor; and the structural integrity of the proposed break out area has been confirmed using hand tools, use the appropriate tool (up to and including a 90-pound jackhammer) to break out the section of structure wall, roof or floor that was previously prepared for break out

5.2.5 If a jackhammer is being used for the structure wall, roof, floor or POE breakout operation, where feasible, support the tool from underneath to prevent slippage.

5.2.6 Where possible, the use of a 90 lb. jackhammer shall be avoided within 8" of a live conduit. If the ECQMC's competent person determines that the breakout can only be made using a jackhammer within 8" of live conduit, a physical barrier must be placed between the jackhammer and all facilities that could possibly come in contact with the jackhammer. The Municipal Contractor may then begin utilizing the 90 lb. jackhammer using a 3" bit or wider.

5.2.7 After the top sections of roof or wall has been broken out, continue to excavate down to expose the next section of that wall to be broken out and repeat the process starting with section 5.2.1

5.2.8 For all additional walls in the structure that need to be broken out, resume operation starting with section 5.1 of this procedure.

APPENDIX – A – Breaking Out Conduit Checklist, On-the-Job Training (OJT) & Video

Breaking-Out Conduit Pre-Job Checklist

Contractor	
Location	
Date and Time	

A new Breaking-Out Conduit Pre-Job Checklist must be completed by the Foreperson each time individuals enter or change roles, and each time a Job Briefing is administered.

Roles Review	*Name(s) of Individuals who will remain continuously on-site throughout this task's progress*	*Training in Compliance and Qualified for task?*	*Lead Person's Initials*	
			Con Edison	*Contractor*
Foreperson		Yes / No		
Individual Completing On-site Peer Check		Yes / No		
Laborer(s) performing break-out		Yes / No		
Con Edison On-Site Representative		Yes / No		

Layout and Activity Review	
Layout #	
Duct(s) in Trench/Manhole	
Duct Type (CD, CED, HDPE, Metal)	
Are there Primary / Secondary electric lines? - What is energized? At what voltages?	
Are duct banks clear of all debris?	
Is there line of sight and all edges and corners?	
Will cable be moved? If so, to where and how will it be supported?	
How will bodies and tools be positioned?	

Personal Protective Equipment	
☐ Safety Boots	☐ 0 kV Gloves (Test Date on gloves: _____)
☐ Hard Hat	☐ Leather Gauntlets
☐ Safety Glasses	☐ Is a Harness Required? (EO-10130)
☐ Face Shield	☐ FR Hood and Goggles (if Primary in structure)
☐ Flame Retardant Coveralls	

Tools - *All tools to be laid out in work area prior to start of activity*	
☐ Claw Hammer	☐ Chipping Gun, must be less than 20 lbs. - Recommended 2"-4" piston stroke and < 1,500 BPM
☐ Chisel with at least 2" wide flat bit	
☐ 3 lbs. Hammer	☐ Micarta or similarly approved half-moon material
☐ 8 lbs. Sledgehammer	☐ Pneumatic Rotary Cutting Tool and Blade (HDPE pipe)

DOJT –OJT0070
PROCEDURE FOR REMOVING CONDUIT FROM UNDERGROUND DISTRIBUTION CABLE

1

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PROCEDURE FOR REMOVING CONDUIT FROM UNDERGROUND DISTRIBUTION CABLE

- Underground electric cables are protected by conduit pipes which are buried under the roadway in the ground. The conduit protects the high voltage cables placed inside them from damage from shovels, digging bars and other work activities when excavating in the area to install new equipment. Even when using these manual devices to unearth existing ducts, extreme care must be taken not to pierce, cut, or break open the duct unless the safeguards listed in the following pages are used for your safety and the protection of the cables on the inside.
- A mechanical machine such as a backhoe should never be used to excavate around electric or gas facilities. The likelihood of the facility being damaged increases significantly when such practices are used.

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GETTING PREPARED TO LOCATE DUCTS

- Before removing asphalt and concrete roadbase make sure a code 753 has been called in with the 811 center and spray marks are in place on the ground showing the path of the electric and gas lines.
- Check the spray painted mark outs against the Con Edison plates and prints. (Layout diagram, Conduit plate, Composite Feeder Plate, Low Tension mains & service and Gas Mains & Service Plate). Ask your Con Edison Representative to review these prints and the markouts with you.
- Remove concrete and asphalt within your new work zone with machine. Load out debris.
- Use a backhoe only to dig up areas where you have verified that there are no electric or gas facilities.

3

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DIGGING IN AREAS WHERE YOU HAVE ELECTRIC, GAS FACILITIES, OR HAVE DISCREPANCIES BETWEEN THE MARKOUTS AND PRINTS

- Dig only using shovels and blunt edge digging bars to find electric and gas facilities. Never strike a blunt edged digging bar straight down into the soil. Precast, HDPE, Cast Iron & plastic gas mains/services can lie a few inches under the surface and the bar can still penetrate through them if you are not careful.
- When using a digging bar on hard, compacted soil, use a sideways striking motion toward the sides of the excavation, never straight down.
- Continuously remove soil from area, keep area clean of debris, locate ducts edge to edge to keep line of sight.
- Use air lance to blow out tight areas between facilities to visualize work zone.

4

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PRE-JOB CHECKLIST

Adobe Acrobat Document

- A new Breaking-Out Conduit Pre-Job Checklist must be completed by the Foreperson each time individuals enter or change roles, and each time a Job Briefing is administered.
- All tools to be laid out in work area prior to start of activity

5

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PREPARE AREA FOR DUCT BREAK OUT

- Additional guidance for routine entry into electrical enclosed space is provided in GEHSI-S17.01 – Electrical Enclosed Space Entry.
- Once you have dug down and located duct banks make sure you clear all debris (soil, rocks) from the trench to visually have a line of site of all edges and corners.
- Determine if you need to remove the duct/s from the electrical conduit to move them to make room for the installation of additional new facilities. (WINGBACK).
- If necessary to conduct a removal: Address the PPE Requirements, work procedures and tools to be used on the following pages with the workers. Stress the importance of following procedures to avoid a high hazard injury such as shock or burns. Document in your safety briefing.

6

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PPE REQUIREMENTS DURING DUCT BREAKOUT IN A TRENCH OR ENCLOSED SPACE

NOTE: ONLY COTTON WORK CLOTHS UNDERNEATH FR SUITS

You must wear an FR coverall during all duct break out procedures. Remove jewelry (chains, watches, rings, earrings)

FR Coverall

You must wear Class 0 kV gloves, leather gauntlet leather protectors, helmet, safety glasses and face shield

Class 0 kV Gloves, Gauntlets, Safety Glasses, Face Shield, Helmet.

7

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PPE REQUIREMENTS DURING DUCT BREAKOUT IN AN ELECTRICAL ENCLOSED SPACE

NOTE: ONLY COTTON WORK CLOTHS UNDERNEATH FR SUITS

You must wear an FR coverall and rescue harness during all duct break out procedures inside the EES. Remove jewelry (chains, watches, rings, earrings)

FR Coverall & Rescue Harness

You must wear Class 0 kV gloves, leather gauntlet leather protectors, helmet, safety glasses and face shield

Class 0 kV Gloves, Gauntlets, Safety Glasses, Face Shield, Helmet.

8

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EQUIPMENT / TOOLS NEEDED FOR BREAKING OUT DUCTS

Precast Concrete Conduit

Only use small hammer to strike duct edges.

Insert Micarta to protect cable, keep striking away from center.

Slide Micarta along as you break off desired length of duct

Concrete Encased Duct

When breaking out concrete encased ducts the only tools to be used are: hammer, 3 lb. hammer With wood/plastic handle, chisel with 1.5" head, 8 lb. Sledgehammer by striking duct edges.

If concrete is not breaking with these tools, a 20 lb. chipping gun with a 1.5" head can be used.

Make a window in the Duct, slide in a Micarta board and continue breaking out the remaining duct.

See sequence on next page:

9

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CONCRETE ENCASED DUCT BREAKOUT SEQUENCE

Use a 3 lb. hammer striking edges.

Advance to hammer & chisel with 1.5" head

If this is still not working, go to #2

1

Use 8 lb. sledgehammer striking Edges, not center.

If this is still not working, go to #3

2

Use a **lightweight Chipping gun** with a 2 to 4" piston stroke with a **1.5" head** breaking toward edges, never straight down.

NEVER USE A JACKHAMMER, A RIVET BUSTER CHIPPING GUN, OR A BIT IN THE CHIPPING GUN LESS THAN A 1.5" HEAD. If this is still not working, go to #4

3

Visualize work zone when breaking away Material. Keep work zone clean. Remember That electrical ducts are usually stacked in Multiple rows and levels.

4

10

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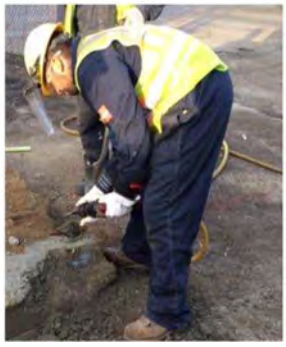
BREAKING OUT INTERIORS OF CONCRETE/CLAY DUCTS



Find edges & visualize all ducts. Remember that There could be several across and underneath. Keep area clean, so you can tell configuration.

5

Break out window on each top duct found. Strike Away From the center.

6

Insert Micarta "half moon" protective insert in windows on ducts, Continue breaking top rows of ducts in a horizontal direction sliding Protective Micara down the run while breaking the top & sides.

7

11

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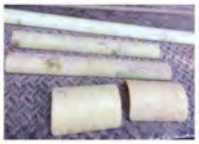
HDPE (PLASTIC) CONDUIT & STEEL DUCTS

Tools Needed



PPE Needed

3 pd. Hammer, 2" chisel, Rotary Cutting Tool & Blade, Micarta protective "half moon"

FR Coverall, Class 0 kV Gloves, leather gauntlets, safety glasses, face shield and helmet

12

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MAKING A WINDOW IN HDPE

Visualize top of duct bank, remove excess concrete chips & dirt.

Have line of site for sections to be removed

1

Use a rotary cutting tool to score a window In the HDPE pipe top.

Do procedure slowly and carefully.

Only score 90% of the way through the conduit.

2

Use hammer & chisel to cut away remaining plastic.

Strike away from center toward sides.
Never strike straight down.

3

Insert Micarta "half moon" protection board.

Slide horizontally into conduit. Continue to cut open the top of conduit to desired length, Moving the Micarta as you go.

Do each duct individually,

Do not lose your line of sight.

4

13

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MAKING A WINDOW IN METAL CONDUIT

Visualize top of duct bank, remove excess concrete chips & dirt.

Have line of site for sections to be removed

1

If you find a coupling connecting two Sections of metal duct, slide collar over, or cut off.

There may be a large enough section underneath to insert Micarta protection board for conduit removal.

2

Use a rotary cutting tool to score a window In the steel conduit pipe top.

Do procedure slowly and carefully.
Only score through 90% of steel conduit.

Use chisel and hammer to break away the rest striking away from center toward the corners

3

Insert Micarta "half moon" protection board. Slide horizontally into conduit. Continue to cut open top of conduit to desired length, moving Micarta as you go.

Do each duct individually,
Do not lose your line of sight.

4

14

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NEVER USE THESE TO FIND ELECTRICAL OR GAS FACILITIES

Never use a pickaxe

Never use a backhoe Bucket, or ramhoe attachment by electric of gas facilities

Never use a sharp digging Bar.
Use blunt edge bar in a sideways motion – never straight down

Never use a jackhammer to break out ducts, or use in the vicinity of a gas main or service.

15

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QR Code for Video

Breakout Conduit

players.brightcove.net

Breakout Conduit (Spanish subtitles)

players.brightcove.net

16

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Breaking Out Conduit Video -
https://players.brightcove.net/6012566853001/default_default/index.html?videoId=6283610511001

Appendix B – PI Check Point Tasks

Public Improvement (PI) - Check Point Tasks

A PI Check Point Task is defined as a construction activity involving Con Edison facilities that warrant a briefing or discussion with the PI Representative and the Municipal Contractor. This briefing should be documented by the Municipal Contractor in accordance with the applicable sections of the PI Guideline (CONST-029) and OSHA.

Work Category	Task
Demolish Manhole (MH)	Inspect MH
	Build False Roof
	Remove Forms
	Demolish Walls
	Demolish MH Floor
Build MH	Install Forms
	Remove Forms
Wingback	Inspect Site
	Break Out Conduits / Duct Systems
Excavation	Reivew Mark-Outs
	Excavate
Backfill	Backfill Facilities
Roadway Restoration	Mill, Pave and/or Reconstruct Roadway
Electric Pipe Install	Install Conduit or Duct Systems
Structure POE's	Inspect MH or Service Box (SB)
	Move Cable(s)
MH or Service Box (SB) Regrade	Inspect MH or SB

MODIFIED SPECIFICATIONS

The specifications listed below supersede the specifications found in the "Joint-BIDDING SPECIFICATIONS AND SKETCHES FOR MANHATTAN (ISSUED: AUGUST 1st , 2005)".

Verizon:

Specification	Superseded Specifications
JB-225	JB-225.1A, JB-225.1B, JB-225.2A, JB-225.28, & JB-225.3A
JB-300	JB-300.1, & JB-300.2
JB-306	JB-306
JB-351T	JB-351T
JB-401	JB-401
JB-402T	JB-402.1, JB-402T.1A, JB-402T.2, JB-402T.2A, JB-402T.R1A, JB-402T.R2A, JB-402T.V1, JB-402T.V1A, JB-402T.V2, JB-402T.V2A, JB-402T.J1, JB-402T.J1A, JB-402T.J2, & JB-402T.J2A
JB-402T.3	JB 402T.3
JB-403T	JB-403T
JB-404	JB-404
JB-405	JB-405.1, & JB-405.2
JB-450	JB-450
JB-603T	JB-603T.1, JB-603T.2, JB-603T.3, JB-603T.4, JB-603T.5, JB-603T.6, JB- 603T.7, JB-603T.8, & JB-603T.9
JB-636E	JB-636E EA, JB-636 EB, JB-636 EC, JB-636-ED, JB 636 EE, JB 636 EG, JB-636 EH, & JB 636 El
JB-636 M	JB-636 MA, JB- 636 MB, JB-636 MC, JB-636 MD, JB 636 ME, JB-636 MH, JB-636 MI, & JB-636 SMC
JB-638NT	JB-638NT
JB-638RT	JB-638RT
JB-798	JB-798
JB-799	JB-799
JB-800	JB-800
JB-801	JB-801
	JB-802A, & JB-802B
JB-803	JB-803

Con Edison

Specification	Superseded Specifications
JB-610	JB-610.36
JB-611	JB-611.36
	JB-615.8, JB-615.9, & JB-615.16
JB-616	JB-616.1, JB-616.7, JB-616.8, JB-616.9, & JB-616.16
JB-850	JB-850

JB 225 – INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES

A. Description

Under this section, the Contractor shall provide all incremental labor, materials, equipment, insurance and incidentals required to support and/or protect the integrity of utility facilities required during the excavation, installation and removal of catch basins within maximum excavation limits shown on sketch JB 225. This shall include but not be limited to the following types of utility facilities:

1. Conduits
2. Cables
3. Concrete encased conduit duct banks
4. Steel pipes
5. Steam facilities
6. Oil-o-static facilities, and
7. Non-Cost sharing gas facilities

encroaching the catch basin excavation and sheeting lines as described further in this section and attached sketch JB 225.

B. Materials

Furnish slurry fill or backfill as required. All materials used to support and protect utility facilities shall be as indicated on standard Sketches JB 100A, JB 100B, JB 100C, JB 100C-1, JB 100D, JB 100E and JB 100F, contained elsewhere in these specifications, shall be supplied by the Contractor and approved by the facility operator(s).

C. Methods of Construction

The Contractor shall use sheeting methods that permit maintenance, support and protection of all utility facilities covered by this section. It is the intent of this item to support, maintain and protect any and all combinations and configurations of utility facilities located within limits indicated on sketch JB 225. For the construction of Type III catch basins, the spillway shall be constructed in a separate stage where the excavation limits may be waived after the basin structure has been installed and backfilled. Excavation for the spillway shall not exceed 3' beyond the exterior finished surface of the proposed spillway. Excavation method for spillway construction shall be done by hand. Utility facilities located within the catch basin footprint, are not covered by this section and shall be removed or adjusted by the Contractor under other JB items or by facility operator at their own expense. This section shall then cover the adjusted facilities.

Utility facilities located beyond the established maximum payment limits are not affected by work specified and shall not be disturbed during any type of catch basin installation and/or removal. Contractor shall be solely and totally responsible for support, maintain and protect, any disturbances and/or any damages to such facilities at his expense. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick

and shovel and/or hand held power tools) directly below the pavement base to expose the facilities and to ascertain the spatial relationships and/or dimensions of these utilities with respect to the proposed excavation. Upon exposing the affected utilities as determined solely by the facility operator(s), the Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, within a zone of protection whose limit shall be defined as a perimeter located one foot from the outside face of each utility interference.

D. Method of Measurement

The quantity to be measured for payment shall be each basin where utility facilities are located within the limits indicated on sketch JB 225. Utility facilities located within the catch basin footprint shall be removed or adjusted by the contractor under other JB items. This section shall then cover the adjusted facilities. Payment will be made only one time at locations where a new catch basin is to be installed at the same location as a preexisting catch basin as specified on contract drawings. For the purpose of this item, "same location" shall mean within 10ft of the preexisting basin location.

JB 225.1A – Installation and removal of catch basins with utility interferences (EA)

JB 225.1B – Installation and removal of catch basin with utility interference at an additional depth of up to 3 feet (EA)

JB 225.2A – Installation of catch basins with utility interferences (EA)

JB 225.2B – Installation of catch basins with utility interferences at an additional depth of up to 3 feet (EA)

JB 225.3A – Removal of catch basins with utility interferences. This item shall be applied only in situations where the catch basin is being removed and not replaced. This item requires complete removal of the catch basin including the floor. (EA)

E. Price to Cover

For JB items 225.1A & 225.2A – The price shall cover the cost of all labor, material, equipment, insurance and incidentals necessary to completely support and protect and maintain the integrity of the utilities without disruption of service to the customers and in accordance with other types of utility items. The price shall also include the cost of: supports, slings and beams installed for utility support; changes of sheeting method and configuration where necessary to accommodate the utility; a combination of hand and machine excavation within the payment limits specified; the disposal of excess backfill material; the placing of backfill material adjacent to catch basins within the maximum payment limits shown on sketch JB 225; backfilling and compacting around over, under and in between utility facilities; installation and removal of sheeting around facilities; support and protection of utility facilities encountered during construction of the spillway. The price shall also cover any additional excavations including hand and hand and machine excavations under and in between single and multiple facilities; and/or in between utility facilities and other existing structures. The unit price shall be deemed to cover all incremental cost for all labor, material, equipment, and incidentals necessary to excavate, install and/or remove specified catch basins while completely supporting, protecting, maintaining and/or adjusting the catch basin to accommodate the integrity of the encroaching utility facilities without disruption of service to the customers in accordance with the contract documents. All cost to support maintain, protect, and accommodate the integrity of utility facilities shall be deemed included in the price for this item. The price shall also cover all additional restricted excavating, sheeting, backfilling, and

compaction around, over, under, and between utility facilities and all other existing structures and/or newly installed and/or removed catch basin.

For JB items 225.1B and .2B – The price to cover shall include all work as described in price to cover for JB 225.1A and .2A plus installation of the catch basin at an additional depth of up to three feet. Payment for all work herein specified shall be made on a one-time basis only; no payment for work herein specified shall be made for the same area more than one time. Payment will be made only one time if the Contractor elects to install new basins next to existing basins to accommodate their operations. No payment will be made for the removal of the existing basins if performed at a later sequence.

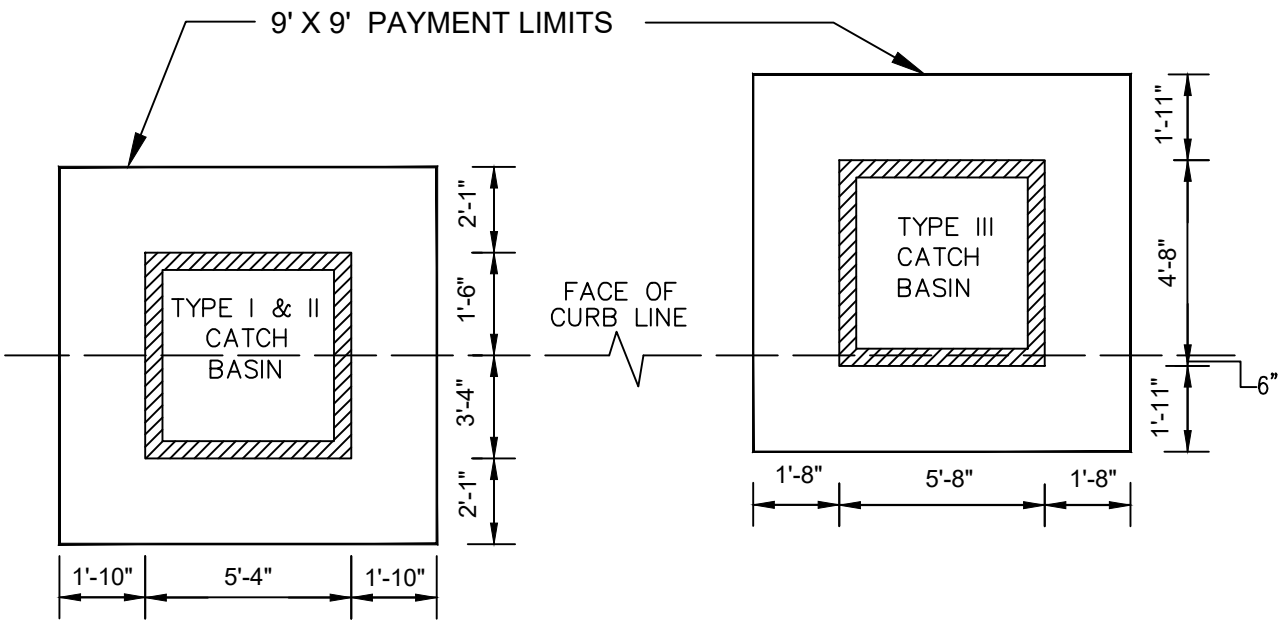
For JB items 225.1A, .1B, .2A, and .2B - if tight sheeting is not utilized for the installation of the catch basin this JB pay item shall be reduced by 60%.

For JB item 225.3A – The price to cover shall include all work as described in price to cover for JB 225.1A and .2A plus the modification of means and methods for the removal of catch basins using hand tools including but not limited to chipping guns and jack hammers when work is performed in the presence of utility facilities within the excavation limits as outlined in sketch JB 225.

Payment for all work herein specified shall be made on a one-time basis only; no payment for work herein specified shall be made for the same area more than one time. Payment will be made only one time if the Contractor elects to install new basins next to existing basins to accommodate their operations. No payment will be made for the removal of the existing basins if performed at a later sequence.

F. References

1. Sketches JB 225, JB 100A, JB 100B, JB 100C, JB 100C-1, JB 100D, JB 100E and JB 100F
2. NYS Industrial Code Rule 753



CATCH BASIN ORIENTATION TO CURB LINE WITH PAYMENT LIMITS CONCENTRIC TO BASINS
N.T.S.

JB 225 PAY LIMITS

CATCH BASIN TYPE	DIMENSION TO UTILITY FACILITY PARALLEL FROM FACE OF CURB INTO STREET	DIMENSION TO UTILITY FACILITY PARALLEL FROM FACE OF CURB INTO SIDEWALK	DIMENSION TO UTILITY FACILITY PERPENDICULAR TO CURB FROM FACE OF CATCH BASIN
TYPE I & II TYPE III	3'–6" TO 5'–5" 0'–8" TO 2'–5"	1'–8" TO 3'–7" 4'–10" TO 6'–7"	0'–2" TO 1'–10" 0'–2" TO 1'–8"

NOTES:

FOR EXCAVATIONS GREATER THAN 9'X9', THE CONTRACTOR SHALL SUPPORT ALL UTILITIES AS SPECIFIED UNDER THE VARIOUS ITEMS WITH NO ADDITIONAL COMPENSATION FROM THE IMPACTED UTILITIES. PAYMENT UNDER THIS ITEM SHALL INCLUDE MODIFICATION OF SHEETING METHODS TO SUPPORT UTILITY FACILITIES PARTIALLY WITHIN THE PAYMENT LIMITS SPECIFIED.

ACCOMODATION OF UTILITY FACILITIES DURING CATCH BASIN INSTALLATIONS

LAST REVISION	SKETCH NO.
2/27/2016	JB 225

JB 300 - SPECIAL CARE EXCAVATION AND BACKFILLING

A. Description

Under this section, the Contractor shall provide all incremental labor, materials, equipment, insurance and incidentals required for trench excavation when protecting and maintaining and accommodating the integrity of utility facilities, including but not limited to:

1. Conduits
2. Cables
3. Structures
4. Concrete encased conduit ductbanks
5. Steel pipes
6. Steam facilities
7. Non-cost sharing gas facilities

of various sizes and configurations, encroaching (partially exposed) or paralleling (not exposed) within 6 inches of the approved city trench lines for all phases of contract excavation as shown on contract drawings and/or as encountered during construction, except excavations to the ultimate depth for curbs, sidewalks and roadway/base/sub-base removal which are covered under other JB items. This item shall also apply to facilities that cross excavations for water service installation and extensions or excavations for water tap searches. The items specified under this section shall not be measured for payment in conjunction with any other types of utility items. All work shall be performed in accordance with contract plans, specifications, sketches JB 300A and JB 300B and at the direction of the facility operator(s).

B. Materials – N/A

C. Method of Construction

The Contractor shall maintain and protect and accommodate the integrity of all utility facilities encroaching/paralleling within excavations as schematically shown on sketches JB 300A and JB 300B. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (i.e. pick and shovel or hand held power tools) directly below the pavement base to expose the facilities and ascertain the spatial relationships and/or dimensions of these utilities with respect to the proposed excavation. Upon exposing the affected utilities sufficiently as determined solely by the facility operator(s), the Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, within a zone of protection whose limit shall be defined as a perimeter located one foot from the outside face of each utility encroaching.

D. Method of Measurement

The unit price for this work item shall be based on the volume (C.Y.) of special care excavation calculated as follows:

- For paralleling facilities (not exposed) within six inches of city trench line: The area for payment shall be measured horizontally from the face of the excavation plus one foot towards the center

of trench and vertically from bottom of the roadway to the bottom of the trench, multiplied by the length of the paralleling utility facility as indicated in sketches JB 300A and JB 300B.

- For encroaching facilities: The area for payment shall be measured horizontally as the width of the encroaching facility plus one foot towards the center of the trench and vertically from the bottom of the roadway to the bottom of the trench, multiplied by the length of the encroaching utility facility as indicated in sketches JB 300A and JB 300B.
- For facilities crossing water service excavations: Depth as defined above multiplied by the width taken as the outside diameter width of structure plus one foot on either side, multiplied by the length of the exposed facility inside the trench.

The volume calculation shall in all cases include, the volume occupied by the utility proper within the payment area described above. Overlapping volume dimensions measured as described above may occur when multiple utilities are encroaching trench excavations. In such cases, all such utilities shall be counted as one utility limited by the maximum encroachment of pipes, conduit(s), and conduit banks faces. The volume shall then be calculated as described above and shown on sketches JB 100E, JB 300A and JB 300B. Utilities identified as abandoned by the facility operator prior to be beginning of excavation, are not included for payment under this item.

JB 300.1 – Special care excavation and backfilling for utility facilities in city trenches less than 5' in depth

JB 300.2 – Special care excavation and backfilling for utility facilities in city trenches 5' or greater in depth

E. Price to Cover

The price shall cover the cost of all labor, material, equipment, insurance and incidentals necessary to completely protect and maintain and accommodate the integrity of the facilities without disruption of service to the customers and in accordance with contract documents. The price shall also include the cost of modifications to typical work methods, including water tap search excavations and the use of such methods as hand excavation around existing single and multiple facilities; backfilling and compaction around, over and under the utilities including the use of special methods, installation and removal of sheeting from around the facilities, and traffic plates that may be required to temporarily close and/or complete the work.

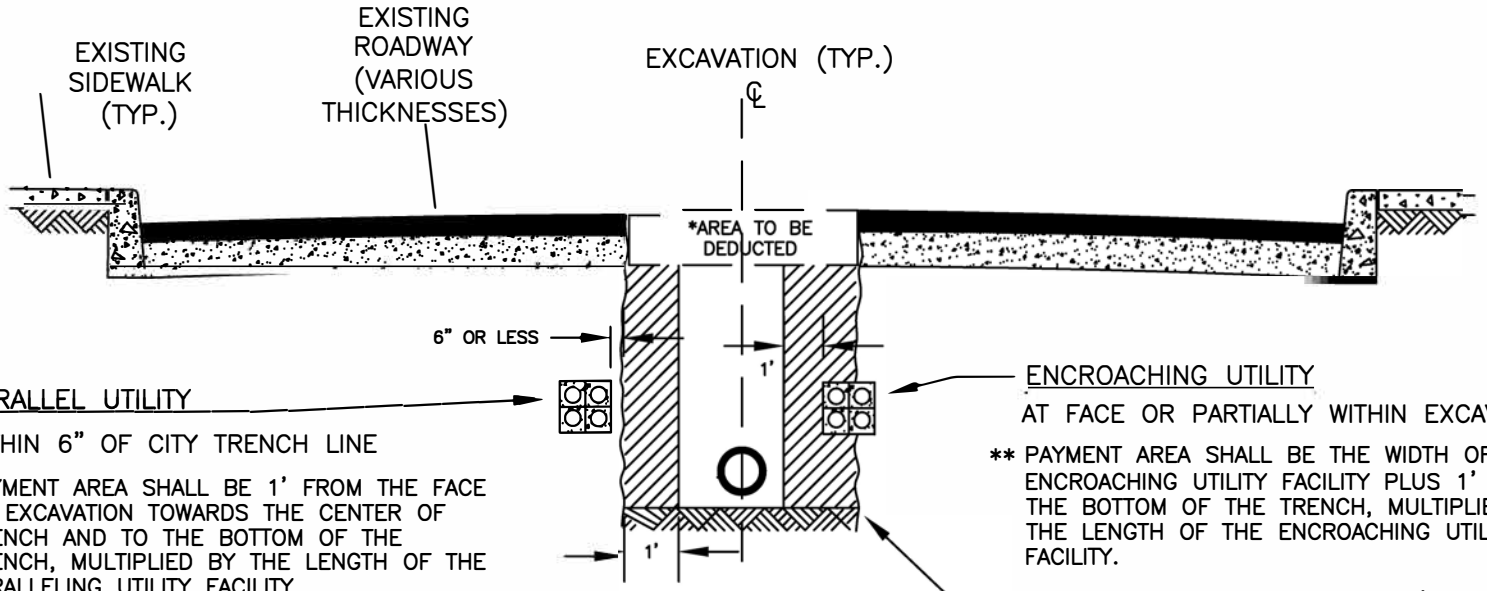
For item JB 300.1 – Depth shall be measured from the bottom of the existing roadway to the bottom of the trench up to a total trench depth of less than 5' measured from top of roadway.

For item JB 300.2 – Depth shall be measured from the bottom of the existing roadway to the bottom of the trench.

If the lowest utility facility is located at a depth less than 5' in a trench greater than 5' deep, then only item 300.1 shall apply. Only one payment for either 300.1 or 300.2 shall apply per trench wall.

F. References

1. Sketches JB 100E, 300A, JB 300B
2. NYS Industrial Code Rule 753



PROFILE

N.T.S.

NOTES:

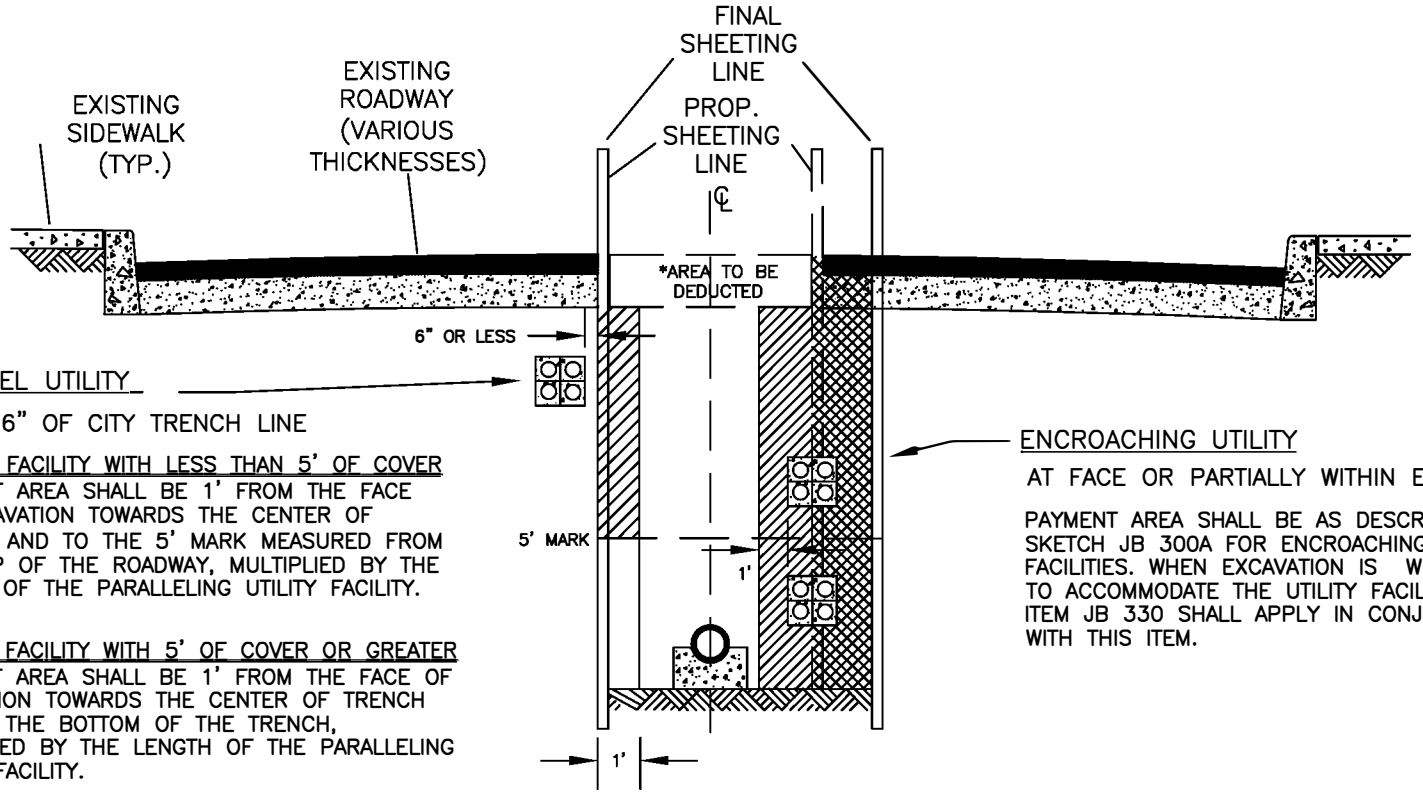
* VOLUME OF ROADWAY SHALL BE DEDUCTED FROM PAYMENT AREA

** ONLY ONE PAYMENT SHALL APPLY PER TRENCH WALL

PAYMENT AREA

UTILITY PARALLELING/ ENCROACHING IN CITY FACILITY TRENCH LESS THAN 5' IN DEPTH

SKETCH NO.	LAST REVISION
JB 300 A	6/30/2015



PROFILE

N.T.S.

UTILITY PARALLELING/ ENCROACHING IN CITY FACILITY TRENCH 5' AND GREATER IN DEPTH

LAST REVISION 10/05/2021

SKETCH NO. JB 300 B

ITEM 300 PAYMENT AREA

ITEM 330 PAYMENT AREA

NOTES:

* VOLUME OF ROADWAY SHALL BE DEDUCTED FROM PAYMENT AREA

** ONLY ONE PAYMENT SHALL APPLY PER TRENCH WALL

JB 306 - SPECIAL CARE EXCAVATION AND BACKFILLING WITHIN A CITY TRENCH

A. Description

Under this section, the Contractor shall provide all incremental labor, materials, equipment, insurance and incidentals required for trench excavation when protecting and maintaining and accommodating the integrity of utility facilities, including but not limited to:

1. Conduits;
2. Cables;
3. Structures;
4. Conductors;
5. Concrete Encased Conduit Duct banks;
6. Steel Pipes; Steam facilities and
7. Non Cost Sharing Gas

of various sizes and configurations within the city trench. This item shall apply to excavations intended to search and locate utility facilities marked under NYS Industrial Code Rule 753 and not found. The contract items specified under this section shall not be measured for payment in conjunction with any other types of utility items. All work shall be performed in accordance with contract plans, specifications, and at the direction of the facility operator(s).

B. Materials – N/A

C. Method of Construction

The Contractor shall maintain, protect and accommodate the integrity of all utility facilities within excavations. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (i.e. pick and shovel or hand held power tools) directly below the pavement base to expose the facilities and ascertain the spatial relationships and/or dimensions of these utilities with respect to the proposed excavation. Upon exposing the affected utilities sufficiently as determined solely by the facility operator(s), the Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, within a zone of protection whose limit shall be defined as a perimeter located 12 inches from the outside face of each utility encroaching.

D. Method of Measurement

The unit price for this work item shall be based on the volume (C.Y.) of special care excavation calculated as follows:

- For locating utility facilities as directed by the facility operator which may or may not have marks in the street under NYS Industrial Code 753. The facility operator may at his sole discretion can direct the contractor to continue to excavate under this item to locate facilities outside the zone of protection of the marks as defined by industrial code 753 or if the utility representative has reason to believe an unmarked facility is present.

The volume calculation shall in all cases include, the volume occupied by the utility proper within the payment area described above. Overlapping volume dimensions measured as described above may occur when multiple utilities are encroaching trench excavations. In such cases, all such utilities shall be counted as one utility limited by the maximum encroachment of pipes, conduit(s), and conduit banks faces. The volume shall then be calculated as described above and shown on Sketch JB 300 A. Utilities identified as abandoned by the facility operator prior to be beginning of excavation, are not included for payment under this item.

E. Price to Cover

The price shall cover the cost of all incremental labor, material, equipment, insurance and incidentals necessary to completely protect and maintain and accommodate the integrity of the facilities without disruption of service to the customers and in accordance with contract documents. The price shall also include the cost of: modifications to typical work methods, loss of productivity due to slower rate of excavation including the use of such methods as hand excavation around existing single and multiple facilities; backfilling and compaction around, over and under the utilities including the use of special methods.

For item JB 0306 – Depth shall be measured from the bottom of the existing roadway to the bottom of the trench or the top of the utility facility (whichever is less). This item cannot be paid in conjunction with JB 100-116 for the same utility within the same excavation.

F. References

1. NYS Industrial Code Rule 753

JB 351T - UTILITY POLE SUPPORTS

A. Description

This section describes the temporary supports for utility poles at locations directed by the facility operator(s) in consultation with the Resident Engineer, in order to maintain such poles in their existing upright position without disturbing attached wires and equipment. The Contractor shall provide all labor, material, equipment, insurance, and incidentals required to construct, install and maintain an effective support system that will meet the stated objective.

B. Materials

All materials required to construct and maintain an effective support system shall be supplied by the contractor and approved by the facility operator.

C. Method of Construction

Where directed by the utility representative, the Contractor shall furnish, install and remove utility pole supports and maintain utility poles as shown on Sketch JB 351. Alternate methods proposed by the Contractor will be permitted if approved by the facility operator.

D. Method of Measurement

The quantity of utility pole supports to be measured for payment shall be the number of utility poles supported. The Contractor will be paid only once for each utility pole supported and maintained no matter how many different construction operations have an impact on the pole.

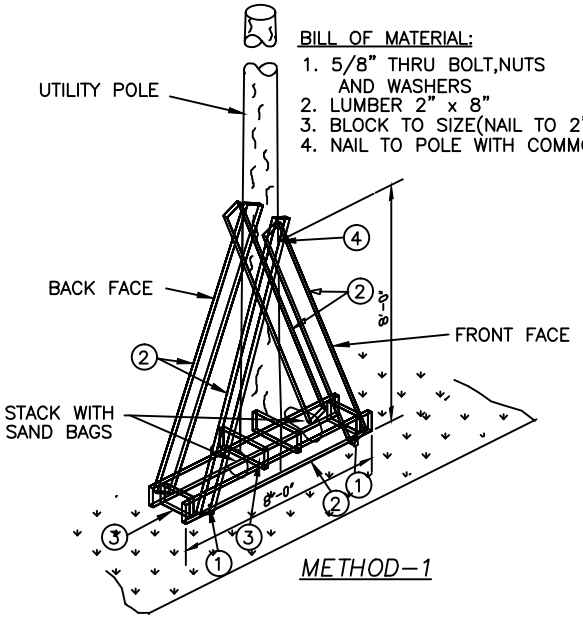
E. Price to Cover

The price shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to furnish, install, maintain and remove utility pole supports to completely support, maintain, protect, and accommodate the integrity of utility poles without disruption of service to customers. The price bid shall also include all additional impact cost associated with working around utility pole supports, poles and appurtenances.

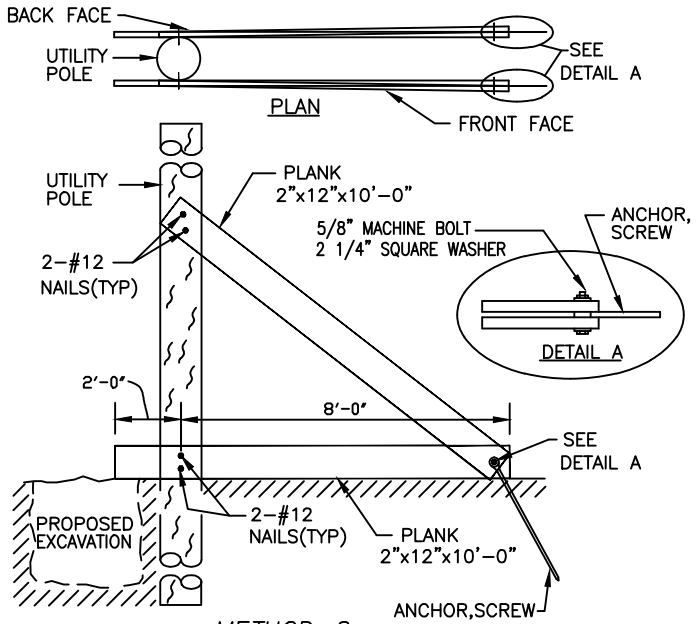
F. References

1. Sketch JB 351T

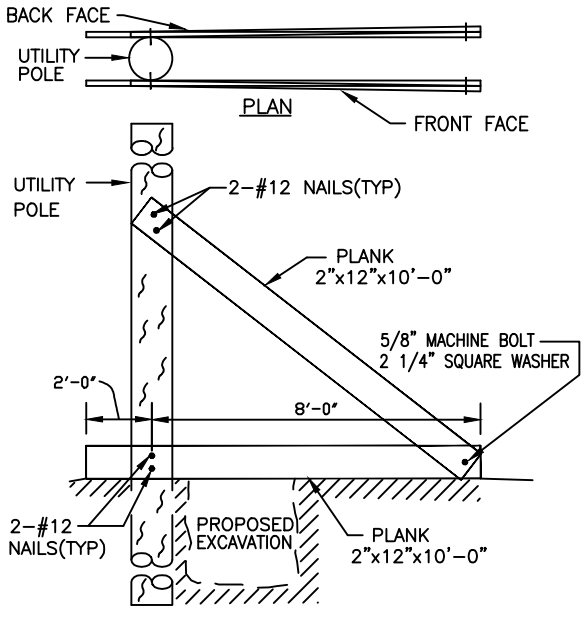
METHODS OF SHORING UTILITY POLES



METHOD–1



METHOD–2
(FRONT FACE SHOWN,BACK FACE OPPOSITE HAND)



METHOD–3
(FRONT FACE SHOWN,BACK FACE OPPOSITE HAND)

NOTES:

1. THESE METHODS OF SHORING ARE GENERAL GUIDES. FIELD CONDITIONS WILL DICTATE WHICH METHOD WILL BE USED.VARIATIONS OF THESE METHODS WHICH ACCOMPLISH THE SAME PURPOSE MAY ALSO BE UTILIZED WHEN APPROVED BY OVERHEAD CONSTRUCTION DEPARTMENT.
2. ANY INFORMATION NOT SHOWN WILL BE DETERMINED IN THE FIELD TO SUIT THE FIELD CONDITIONS WHEN APPROVED BY THE OVERHEAD CONSTRUCTION DEPARTMENT.

SUGGESTED
METHODS OF SHORING
UTILITY POLES

LAST REVISION	SKETCH NO.
03/07/2018	JB 351T

JB 401 - TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to excavate by hand to locate and expose subsurface utilities encountered during construction in preparation for horizontal and vertical movement (covered by other Sections), and to support and maintain and protect the integrity of utility facilities including but not limited to:

1. Conduits;
2. Conductor(s) and/or cable(s);
3. Concrete Encased Conduit Bank(s);
4. Steel Pipe(s)

The trench to be excavated shall be determined by the size of the utility and the extent of adjustment required to avoid interferences as detailed on Sketch JB 402 A during all phases of contract work. The work shall be performed in accordance with the specifications, and at the directions of the facility operator in consultation with the Resident Engineer.

B. Materials

All materials used to support and maintain and protect shall be similar to those indicated on Sketches JB 100 A and 100 A-1 and shall be supplied by Contractor and be approved by the facility operator in consultation with the Resident Engineer.

C. Methods of Construction

The Contractor shall cut, break and remove various thickness of surface and base pavement, excavate by hand to expose, support and protect all utility facilities within the trench and then furnish and tamp backfill after work has been completed by the parties indicated under other Sections. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility. Upon exposing the affected utilities sufficiently to determine relationships and/or clearances at the sole discretion of the facility operator in consultation with the Resident Engineer, the Contractor shall be permitted to proceed with a combination of hand and machine excavation sufficiently to wingback all interferences of cable and conduit. The trench shall be adjusted so as to provide a nominal cover of 24" over the highest conduit. The width of the trench shall be as directed by the facility operator in consultation with the Resident Engineer. The bottom of the trench shall be graded smooth and tamped to minimize initial settlement and to avoid "point" support of conduits. All stones projecting into the trench bottom shall be removed, and the voids backfilled before conduits are placed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench.

D. Method of Measurement

The Contractor shall be paid per cubic yard (C.Y.) of trench actually excavated to the limits directed as detailed in Sketch JB 402 A and to the satisfaction of the facility operator in consultation with the Resident Engineer. When two or more utility facilities requiring horizontal or vertical adjustment with different owners are in the same trench, the facility operators shall jointly determine the percentage of ownership of the trench.

E. Price to Cover

The price for excavation shall include the cost of all labor, materials, equipment, insurance, and incidentals necessary to completely expose, support and protect and maintain the integrity of the facilities without disruption of service to the customers and in accordance with the Contract Documents, associated maintenance of traffic, and traffic plates and sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand to expose existing structures, furnish, place and tamp backfill after required vertical and/or horizontal adjustments have been completed under other Sections. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be paid under other items. This item shall include cutbacks required for permanent restoration of trenches paid for under other items. The removal of abandoned pipes, conduits structures are covered under other items. The price shall also include the cost of locating and supporting and protecting all utilities encountered including slings and beams installed for utility support when required. The price shall include maintaining the sheeting for the duration of the relocation and work required by the facility operator including but not limited to pipe-ripping covered under JB 402T.

F. References

1. NYS Industrial Code Rule 753
2. Sketch JB 100 A and A-1
3. Sketch JB 402 A

JB 402T - HORIZONTAL AND VERTICAL ADJUSTMENT OF TELECOMMUNICATIONS FACILITIES

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to adjust and support and protect and maintain and accommodate the integrity of telecommunication facilities including but not limited to:

1. Conduit(s);
2. Cables and Air Pipe
3. Concrete Encased/Capped Conduit Banks

The work shall be performed in accordance with specifications and at the direction of the facility operator in consultation with the Resident Engineer.

B. Materials

All materials used to adjust and support and protect and maintain and accommodate the integrity of utility facilities shall be similar to those indicated on the standard Sketches JB 100 A & 100 A-1 and shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer.

Materials used for replacing conduit(s) removed under this item shall be supplied by and installed by the Contractor and shall include but not be limited to the following:

1. Bends
2. Split and Solid Conduit(s) PVC and Steel
3. Couplings and Adapters PVC, Tile and Steel
4. Straps or plastic ties

PVC conduit and fittings shall be as supplied by American Pipe and Plastics, Type “C” or approved equal.
Steel Pipe and fittings shall conform to ASTM A53 Schedule 40
Tile to PVC adaptors shall be as supplied American U-Tel or approved equal.

C. Methods of Construction

Lengths of “wing-back” shall be determined by the facility operator in consultation with the Resident Engineer. All work performed prior to that approval shall be at the contractor’s risk.

Methods of construction shall include but not be limited to the following:

1 Removal and Support

a. Break with hand held power tools, remove and dispose of plain or reinforced concrete encasement.

b. Break with hand held power tools, remove and dispose of conduit(s) enclosures and conduit that contain conductor(s) and/or cable(s) except steel/Iron conduits, inner ducts and 1 ¼" to 1 ½" PVC "quad ducts. Breaking – "ringing and ripping" - of steel/iron conduits belonging to ECS shall be performed by ECS forces only. Contractor shall make safe the work area to accommodate the ECS forces.

c. Support and protect exposed conduits, cables, innerduct and airpipe as shown in Sketch JB 100A-1 and approved by the facility operator in consultation with the Resident Engineer.

d. ECS tenants cables may require inspection, testing and encapsulation before they can be shifted. Contractor shall make safe the work area to accommodate these forces. Contractor shall be notified by the facility operator of the ECS tenant requirements before the conduits are broken-out.

2 Adjust or Move Conductor(s) and/or cable(s) and support

a. Cable shall be relocated horizontally and/or vertically as directed by the facility operator in consultation with the Resident Engineer

b. Support and protect conductors and/or cables as shown on Sketch # JB 100 A-1 and/or as directed by the facility operator.

3. Replacement, Encasement, Protection and Support

a. Replace vacant and loaded conduit(s) with solid and/or split conduit(s) and adapters.

1) Vacant Conduit - Repairs to conduits shall not be permitted. All damaged or impaired lengths of conduit(s) shall be removed and replaced with new conduit(s). The number of vacant conduits replaced shall be confirmed by the facility operator.

2) Loaded Conduit - Replacement of conduits that are removed from around existing cable(s) or innerduct shall be accomplished with split plastic (PVC) or split steel conduits as directed by the facility operator. Where split and solid plastic or steel conduit is used, the conduit(s) shall be spaced 1½ inches from each other. All split PVC shall be secured with plastic straps spaced at a maximum distance of eighteen (18") inches. Plastic conduit shall be joined with plastic couplings.

3) Adapting - Joining plastic conduit to existing conduits of other diameters or material shall be done using single or multiple adapters, (supplied by contractor).

b. If due to subsurface conditions, the cover is less than 20" from finished grade, the duct shall be protected with steel plates furnished by the contractor and measured for payment under Item JB 403T.

c. Support and protect cable(s) and/or conductor(s) and conduit(s).

d. Verify vacant conduits and provide pull ropes.

e. Encase all exposed conduit with concrete (f'c = 1200 to 1500 psi maximum) with slump commensurate to completely fill voids around conduits. Concrete encasement shall extend to two (2") inches beyond the limits of the duct bank vertically and horizontally.

D. Method of Measurement

The quantity to be measured for breaking out conduits, removing concrete, moving, protecting and supporting conductors and replacing conduits with split and solid conduit, shall be paid for by the linear foot (L.F.) of each conduit replaced. A linear foot of conduit shall be defined as one (1) single conduit measured along its longitudinal axis that has been broken out or moved from its original location either horizontally and/or vertically and measured in its final location. Quad PVC ducts produced as one unit shall be consider one duct for each quad unit. All conduits removed under this section and not restored shall be paid at 60% of the appropriate item in this section.

Multiple tile duct bank with concrete protection cover is not considered concrete encasement.

Each type of utility adjustment shall be paid for separately, the types of utility adjustments are defined as follows:

JB-402T.1 Existing Concrete Encased Non-Steel/Iron Conduits Placed in Final Position without Concrete Encasement. (L.F.)

JB-402T.1A Existing Concrete Encased Non-Steel/Iron Conduits Placed in Final Position with Concrete Encasement. (L.F.)

JB-402T.2 Existing Non-Concrete Encased Non-Steel/Iron Conduits Placed in Final Position without Concrete Encasement. (L.F.)

JB-402T.2A Existing Non-Concrete Encased Non-Steel/Iron Conduits Placed in Final Position with Concrete Encasement. (L.F.)

JB-402T.R1A Existing Concrete Encased Steel/Iron Conduits Placed in Final Position with Concrete Encasement. (L.F.)

JB-402T.R2A Existing Non-Concrete Encased Steel/Iron Conduits Placed in Final Position with Concrete Encasement. (L.F.)

JB-402T.V1 Existing Vacant Concrete Encased Conduits Placed in Final Position without Concrete Encasement. (L.F.)

JB-402T.V1A Existing Vacant Concrete Encased Conduits Placed in Final Position with Concrete Encasement. (L.F.)

JB-402T.V2 Existing Vacant Non-Concrete Encased Conduits Placed in Final Position without Concrete Encasement. (L.F.)

JB-402T.V2A Existing Vacant Non-Concrete Encased Conduits Placed in Final Position with Concrete Encasement. (L.F.)

JB-402T.J1 Existing Concrete Encased Conduits Placed in Final Position without Concrete Encasement. (L.F.) in Which Only Conduit Joints are Broken Out and Conduits Remain Intact.

JB-402T.J1A Existing Concrete Encased Conduits Placed in Final Position with Concrete Encasement. (L.F.) in Which Only Conduit Joints are Broken Out and Conduits Remain Intact.

JB-402T.J2 Existing Non-Concrete Encased Conduits Placed in Final Position without Concrete Encasement. (L.F.) in Which Only Conduit Joints are Broken Out and Conduits Remain Intact.

JB-402T.J2A Existing Non-Concrete Encased Conduits Placed in Final Position with Concrete Encasement. (L.F.) in Which Only Conduit Joints are Broken Out and Conduits Remain Intact.

E. Price to Cover

The unit price bid per linear foot (L.F.) of conduit shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to shift, adjust, support, protect, maintain and accommodate the integrity of utilities without disruption of service to the facility operator's customers and in accordance with contract documents. The price bid shall also include the cost of: breaking out, removal and disposal of plain or reinforced concrete encasements, conduits (except iron/steel), support of cables/conduits, replacement with field split, split and solid conduits, adapters, clamps, straps and couplings; verify vacant conduits and provide pull ropes; furnish and install concrete encasement, supports, slings and beams for utility support; changes of sheeting method and/or configuration when required and where necessary to accommodate the utilities during all phases of contract work; and removal of sheeting around the utilities, and all else necessary and required to complete the work.
The unit price shall include potential delays and extended performance due to time allowance for the pipe-ripping operations.
The unit price shall include providing access to the facility operator pipe-ripping crews and tenants to verify and test cables before, during and after the pipe ripping operation completed by the facility operator or specialized contractor hired by the facility operator and after conduit removal by the Contractor. The unit price shall include, but not limited to, opening and closing of fences; removal and replacement of temporary timber curb and opening and closing of traffic plates. Access to adjacent manholes impacted by the run is included in this item. JB 450 shall not be used in conjunction with JB-402T as JB-402T covers access to the work site at all times for work required under this item.

F. References

1. Sketches JB 100A and 100A-1
2. JB 403T
3. American Pipe and Plastics, P.O. Box 577, Binghamton, N.Y. 13902
4. American U-Tel, 9760 Smith Rd., Willoughby, Ohio 44094

JB 402T.3 - ACM REMOVAL AND DISPOSAL OF VERIZON/ECS CONDUITS WITH ASBESTOS CONTAINING MATERIAL TRANSITE PIPES (ACM-TP) UP TO AND INCLUDING 4" DIAMETER

A. Description

Under this item the contractor shall provide all labor, equipment, transportation, insurance and incidentals to remove and dispose of asbestos containing material - transite pipe (ACM-TP).

The contractor shall strictly adhere to all environmental requirements and work practices and notifications specified under construction details.

The transite conduits (ACM-TP) to be removed contain active cables and these cables will remain active during the transite conduits removal.

All removal and disposal of ACM-TP shall be done by pre-qualified contractors (or sub-contractors) as specified under method of construction.

B. Materials

The contractor shall supply separate dumpsters to be used exclusively for the removal and disposal of the ACM-TP and all other materials such as bagging, dumpster linings, respirators and filters, enclosures and all other incidental material required for the removal and disposal of the Verizon/ECS ACM-TP in accordance with laws, rules and regulations of Federal, State or local agencies.

C. Method of Construction

a. Work Scope

Removal of concrete encased conduits shall be accomplished by hand held chipping hammers. The removal should be in a pre-identified operation in order to minimize the potential release of airborne asbestos fibers from the ACM-TP.

b. Notification And Variance

Verizon/ECS is required by the New York City Department of Environmental Protection (NYCDEP) to obtain a site specific variance.

The contractor shall prepare the variance application letter and the NYCDEP Form ACP-9 and will submit them to the NYCDEP not sooner than four (4) weeks prior to the start of the ACM-TP removal.

The contractor is responsible for preparing the NYCDEP Form ACP-7 together with NYCDEP Form ACP-9 as the applicant and providing these forms to Verizon/ECS for review and signature prior to submittal to the NYCDEP seven

(7) weeks prior to the commencement of the project (Notice to begin construction).

The contractor shall prepare the New York State Department of Labor (NYSDOL) notification Form DOSH-483 prior to submittal to the NYSDOL at lease four (4) weeks prior to the commencement of the project.

The contractor shall prepare the United States Environmental Protection agency (USEPA) Notification of Demolition and Renovation form for submittal four (4) weeks prior to the commencement of the project.

c. Vendor Prequalification

All subcontracted environmental parties which shall include but not be limited to asbestos abatement contractor, project monitoring firm, air sampling and analytical contractor can be selected from Verizon's currently approved vendor lists. Should the contractor elect to use his own list, that information shall be provided to Verizon/ECS for review/ approval at least four (4) weeks prior to date the ACP-7 form is submitted to Verizon.

d. Waste Transport and Disposal

The ACM-TP that is removed will be disposed of as ACM waste at an asbestos landfill. This landfill site shall be selected from one of Verizon's list of approved disposal sites. The contractor will identify and obtain approval from Verizon for the transporter. The contractor can select one of the Verizon's currently approved transporters, or alternatively select a transporter of its own. Should the contractor elect to use latter, that information shall be provided to Verizon/ECS for review/approval at least 4 weeks prior to the date the ACP-7 is submitted to Verizon.

An original of the asbestos waste manifest is to be provided to the Verizon/ECS representative for all shipments that leave the work site. A signed copy (by the selected landfill) of the waste manifest is to be provided to Verizon/ECS not later than 10 days from the date the shipment leaves the site.

e. Exhibits

The forms are a component part of this item.

1-NYCDEP Form ACP-7
2-NYCDEP Form ACP-9R1
3-NYSDOL Form DOSH-483
4-USEPA - Notification Form

f. Work Plan

1. For this item the contractor must submit to Verizon/ECS for review and approval a detailed site specific work plan.

2. The contractor must submit to Verizon/ECS for review and approval any alternate proposals for variance requested from Regulatory Statutes (NYSDOL & NYCDEP).

3. The contractor shall provide all sampling and laboratory analysis required under the Industrial Code Rule 56 Subpart 17 and all applicable Blanket Variances. All sampling and analysis shall be performed by a firm independent from the Contractor. The price for the cost for compliance air monitoring sampling and analysis shall be included in the price bid for listed items.

4. Within five (5) calendar days of the receipt of the results of any part of the compliance air sampling and analysis, the Contractor shall forward a copy of those results (showing the name and address of the laboratory, the type of test performed, the method of measurement and all information normally relevant to sampling and analysis of asbestos remediation procedure) to Verizon/ECS on-site representative.

g. Project Folder

Upon completion of the abatement, the Contractor shall provide a complete job folder with the following documents, which shall include chain of custody records:

a. Copy of Supervisor/Handler certifications
b. Copy of the Subcontractor's Enclosure Entry Permit
c. Result of Analysis for All Bulk Samples, Air and Clearance Monitoring
d. Copy of all Notifications (City, State, Federal)
e. Copy of the Vendor's Certificate of Insurance
f. Copy of the Waste Transporter Permit
g. Signed Asbestos Waste

D. Method of Measurement

Payment under this item shall be paid for by the linear foot (L.F.) of each conduit removed. A linear foot of conduit shall be defined as one (1) single conduit up to and including 4" nominal diameter measured along its longitudinal axis that has been broken out and removed.

E. Price to Cover

The unit price per linear foot (L.F.) shall cover the actual costs of all supervision, labor, insurance, (including asbestos liability insurance), materials and equipment necessary to complete the work. The Contractor shall cover the cost of preparing variance application, all filing fees and will submit the application with associated fees to the NYCDEP for processing.

Any contractor's alternative proposals for variance requested from regulatory statutes (NYSDOL & NYCDEP) shall be also included in the actual cost.

Excavation and backfill shall be paid for under JB 401.

F. References

N/A

JB 403T – FURNISH AND INSTALL STEEL PROTECTION PLATES FOR TELECOMMUNICATIONS FACILITIES

A. Description

Under this section, the Contractor shall furnish and install as required permanent steel protection plates over telecommunications facilities where directed by the facility operator(s).

B. Materials

Material shall be:

¼" thick ASTM A-36 plates. Maximum size 24" by 48".

3/8" thick ASTM A-36 plates. Maximum size 12" by 18".

Thickness to be determined by the facility operator(s)

C. Method of Construction

Steel protection plates shall be placed in accordance with the attached facility operator(s) standard sketch JB 403T. All protective plates shall overlap a minimum of 3".

D. Method of Measurement

The quantity for payment shall be the area of permanent steel plating protection furnished and installed (excluding overlap) and measured in place in Square Feet (S.F.).

JB 403T.1 – Furnish and Install 1/4" thick steel plate (S.F.)

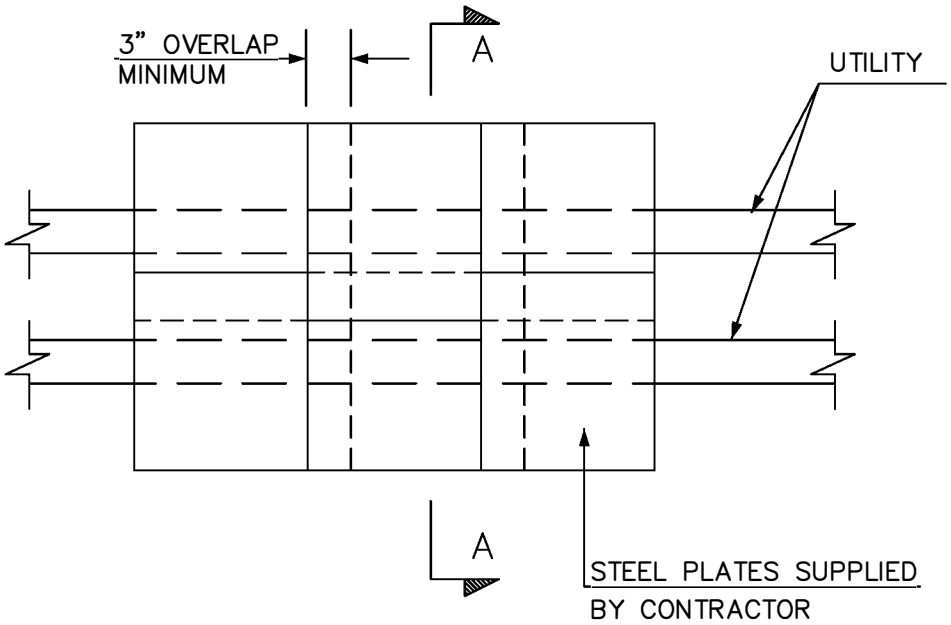
JB 403T.2 – Furnish and Install 3/8" thick steel plate (S.F.)

E. Price to Cover

The price shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to complete the work.

F. References

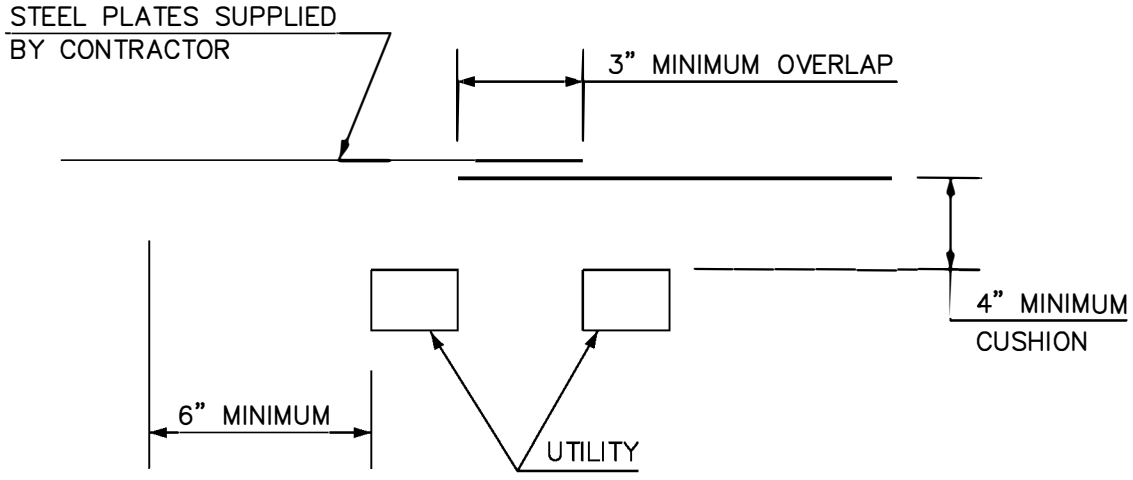
Sketch JB 403T



AREA FOR PAYMENT
SHALL BE AS MEASURED
IN PLACE (EXCLUDE OVERLAP)

PLAN

NOT TO SCALE



SECTION A–A

NOT TO SCALE

TYPICAL PLATE SIZES:
6" x 48" x 1/4"
12" x 48" x 1/4"
24" x 48" x 1/4"
12" x 24" x 3/8"

J.B. SKETCH	
PLACING STEEL PROTECTION PLATES FOR COMMUNICATION FACILITIES	
CONTRACT NO.	SKETCH NO. JB 403 T

REVISIONS
09/13/2017

JB 404 - PIER AND PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAINS AND OTHER SHALLOW FACILITIES

A. Description

Under this section the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to protect ductile iron water mains that are installed with a cover of 24 inches or less crossing over various utility facilities. This section shall also apply for other facilities with shallow cover where protection plates are not sufficient and pier and plate method is required. The work shall be performed in accordance with the contract plans, specifications and at the direction of the facility operator.

B. Materials

The Contractor shall supply all material (concrete, beams, plates, etc.) necessary to provide the pier and plate method of protection as shown on BWS Standard Drawing No. 46464-Z.

C. Method of Construction

The Contractor shall provide pier and plate protection in accordance with BWS Standard Drawing No. 46464-Z. The Contractor shall support, maintain and accommodate the water main and all other utility facilities during the installation of the pier and plating components. The Contractor shall be solely and totally responsible for disturbances and/or any damages to such facilities.

D. Method of Measurement

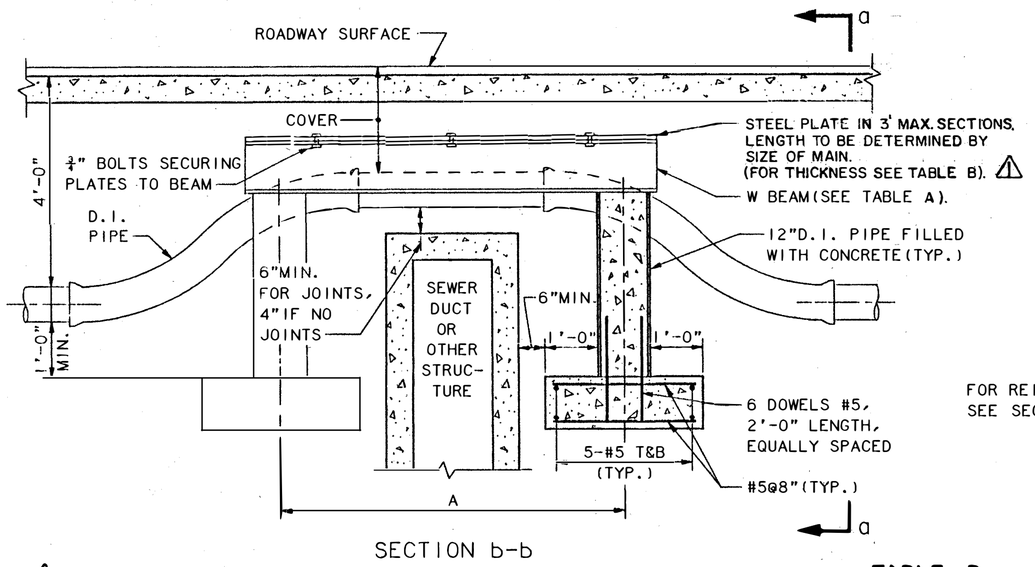
The quantity to be measured for payment shall be the additional amount of square foot (S.F.) of steel plate required to be installed to protect ductile iron water mains crossing over utility facilities with a cover of 24 inches or less, or for other shallow facilities where the pier and plate method may be required, as directed by the Facility Operator.

E. Price to Cover

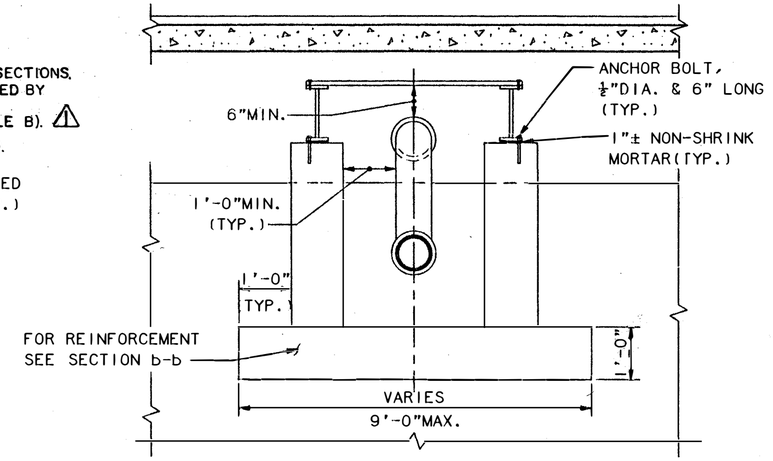
The price shall cover the cost of all supervision, labor, material, equipment, and incidentals necessary to construct the specified method of protection. The work shall also cover the cost to cut, break and remove additional pavement, additional excavation, special care excavation around utilities, sheeting, maintenance of traffic, traffic plates, and to furnish and install additional backfill and pavement restoration.

F. References

1. BWS Standard Drawing No. 46464-Z



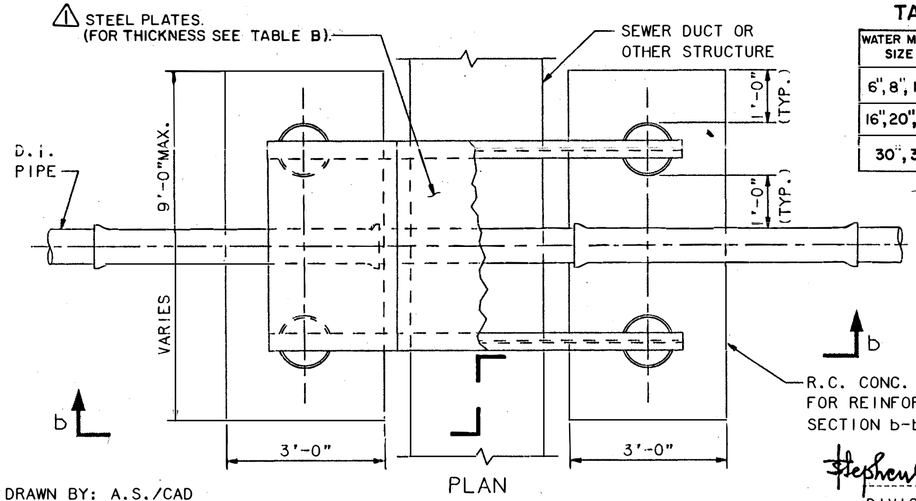
SECTION b-b



SECTION a-a

TABLE A

A ft	M_y k-ft	S_x MIN. in^3	SUGGESTED BEAM SIZE	
5	29.13	15.8	W12x16 W10x17	W8x18
6	35.7	19.2	W12x19 W10x19	W8x24
7	42.5	22.9	W12x22 W10x22	W8x28
8	54.8	30.44	W12x26 W10x30	W8x35
9	66.73	37.07	W14x30 W12x30	W10x39
10	79.1	43.94	W14x34 W12x35	W10x45
11	91.7	50.94	W14x38 W12x40	W10x49
12	104.7	58.17	W14x43 W12x45	W10x54
13	117.92	65.51	W16x40 W14x48	W12x53
14	131.5	73.06	W16x45 W14x53	W12x58
15	145.3	80.72	W16x50 W14x61	W12x65



PLAN

TABLE B

WATER MAIN SIZE	STEEL PLATE THICKNESS
6", 8", 12"	1"
16", 20", 24"	1¼"
30", 36"	1½"

⚠1

NOTES:

1. OFFSETS SHALL HAVE RESTRAINED JOINTS.
2. CLEAN FILL TO BE THOROUGHLY COMPACTED AROUND PIPE BETWEEN BEAMS.
3. ALL PAVEMENT RESTORATION OVER PLATES TO HAVE 6" MIN. CONCRETE BASE. WHEN THE STEEL PLATE IS ADJACENT TO THE BOTTOM OF THE CONCRETE BASE, A BOND BREAKER SUCH AS TAR PAPER SHALL BE INSTALLED BETWEEN THE PLATE AND THE CONCRETE.
4. THE DESIGN FOR PROTECTION OF MAINS MAY BE VARIED AS REQUIRED FOR A PARTICULAR LOCATION, BUT SHALL CONFORM TO THE GENERAL REQUIREMENTS AS SHOWN ON THIS DRAWING. ANY MAJOR DEVIATION FROM THESE REQUIREMENTS SHALL BE APPROVED BY THE ENGINEER.
5. SUPPORT OF PIERS OR BEAMS DIRECTLY ON SEWER, SUBWAY OR OTHER STRUCTURES SHALL BE APPROVED BY THE ENGINEER.
6. IF COVER IS LESS THAN 1'-6", PIPE SHALL BE INSULATED WITH 2" MIN. THICK OF APPROVED INSULATION WITH ALUMINUM JACKET.
7. DIMENSIONS SHOWN FOR CONCRETE SUPPORT ARE APPLICABLE UP TO AND INCLUDING 36" DIAMETER OFFSET.
8. STEEL BEAMS, EXTERIORS OF PIPE COLUMNS, AND OTHER EXPOSED METAL COMPONENTS SHALL BE COATED WITH COAL TAR ENAMEL BEFORE BACKFILLING THE EXCAVATIONS.
9. ⚠1 **ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A-36**

CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY

METHOD FOR PROTECTING D.I. WATER MAINS WITH SHALLOW (LESS THAN 24") COVER

SCALE: NOT TO SCALE MAY 1986

Stephen Gyimesi P.E.
DIVISION ENGINEER

Walter C. Fitzpatrick P.E.
CHIEF OF DESIGN

Edward A. Abrahams P.E.
DEPUTY DIRECTOR

DRAWN BY: A.S./CAD
CHECKED BY: A.B.

NO.	DATE	REVISIONS	DIV. ENG.	CH. OF DES	DEP DIR.
⚠1	02-10-87	ADDED TABLE B & NOTE 9	J. Butler	WCF	EAA

46464-Z

JB 405 - EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals necessary to excavate, maintain trenches and backfill for the installation of new utility facilities including but not limited to:

1. Conduits
2. Non-cost sharing gas facilities
3. Steam mains
4. Steel pipe(s)

The trench to be excavated shall be determined by the size of the utility facility to be installed. The work shall be performed in accordance with applicable specifications, at the direction of the facility operator.

B. Materials

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator.

C. Methods of Construction

1. Excavation – The Contractor shall saw cut and/or break and remove existing roadway which may include but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant and as directed by the facility operator. The trench shall be adjusted so as to provide a nominal cover as defined in the specifications for the facility being installed over the new utility facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator. The width of the trench shall be as directed by the facility operator or as shown on Sketch JB 603T (ECS only). The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of backfill material or in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new utility facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new utility facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new utility facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator.

Care shall be taken that no existing utility facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new utility facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

2. Maintenance of Trench Excavation - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator to facilitate the installation of the new utility facility. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator. Upon completion of installation of the new utility facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

3. Pavement and Sidewalk Restoration - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6”) thick asphaltic concrete mixture in roadway areas or a two inches (2”) thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract.

D. Method of Measurement

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated and backfilled as directed by the facility operator or as shown on Sketch JB 603T for JB 603T Items. The volume occupied by existing pipes or other structures will not be deducted from the total volume measured.

JB 405.1 - Trench Excavations for installation of Utility Facilities with total depths less than five feet (C.Y.)

JB 405.2 - Trench Excavations for Utility Facilities with total depths equal to or greater than five feet (C.Y.)

E. Price to Cover

The unit price bid for the various trench excavation items shall include the cost of all labor, materials, equipment, insurance, and incidentals necessary to completely expose, protect and maintain the integrity of the facilities without disruption of service to the customers and in accordance with the contract documents. The price shall also include, installation of traffic plates as well as opening and closing of plates as may be required in order to provide access to trench; installation, removal and maintenance of tight sheeting as required; cutting, breaking and removing various thickness of surface and base pavement; excavation by hand to expose

existing structures; furnishing, placing and compacting clean backfill following installation of utility facility in compliance with DOT requirements. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be paid under city items. The price shall also include the cost of locating and protecting all utilities encountered as required.

Clean backfill material in accordance with specifications shall be used around gas facilities and critical facilities shall be paid for under item JB 303.

F. <u>References</u>

1. Item JB 303
2. Sketch JB603T
3. Con Edison Specifications, latest revisions

CEHSP S13.00 – Excavation and Trenching

JB 450 – CONSTRUCTION FIELD SUPPORT

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals necessary to provide construction field support, while maintaining and protecting surface and subsurface facilities, at various locations approved solely by the facility operator. The Contractor shall encounter various surface and subsurface utility facilities while performing various construction field support operations, which may include but are not limited to working over, under, adjacent to, around, in between and in close proximity of:

1. Conduits
2. Conductors
3. Concrete encased conduit banks
4. Steel pipes
5. Gas mains
6. Steam mains
7. Oil-o-static facilities
8. Utility structures and covers

The actual construction field support operation to be performed by the Contractor shall be performed in accordance with the contract plans, specifications or as determined based on actual field conditions and at the sole discretion and direction of the facility operator. This item shall apply to various field support operation tasks for which there are no other applicable JB Items to cover the required work. This item will not apply and will not be paid when there are other applicable JB items available either partly or completely covering tasks described below as determined solely by the facility operator.

The Contractor is expressly notified that the work under this Section affects the timing of other work to be performed on this Contract. The Contractor is advised to carefully investigate the relationship between this work and other work and adjust his schedule accordingly. The Contractor shall also coordinate his efforts with that of the facility operator with respect to all work impacting the facilities in question.

B. Materials

All materials used to provide construction field support shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer.

C. Methods of Construction

It is the intent of this item that the Contractor provides field support construction crews suffice to perform various item type tasks required as described. For the purpose of this item a crew consists of more than one non-management individual. The Contractor shall provide all labor and equipment necessary to perform the required task as described below under existing field conditions at various locations and at the sole discretion and direction of the facility operator in consultation with the Resident Engineer. The Contractor shall perform the necessary construction field support, while maintaining and protecting surface and subsurface facilities. The Contractor shall employ approved methods of operation, including the use of appropriate equipment and tools that will enable him to complete the field support operation work as described in the Item

Type description below. Existing facilities that are encountered during the construction field support operation shall be supported and protected similar to those indicated on sketches JB 100A and 100B and in a manner suitable to the facility operator in consultation with the Resident Engineer and are deemed included in this item except as included under JB-402T. The Contractor shall properly dispose of all materials excavated away from site, which may require the use of hand-held tools and equipment in order to ensure that the integrity of the underground utility facilities is not jeopardized. Care should be taken to avoid damage to existing utility facilities and structures, and to adjacent curbs, sidewalks, pavements and their foundations, and to avoid caving or sliding banks within excavations.

D. <u>Method of Measurement</u>

1 – Quantity - The quantity to be measured for payment shall be the number of actual crew hours (CRHRS.) provided by the Contractor for performing the various types of construction field support operation as directed by the facility operator in consultation with the Resident Engineer.

2 – Type – The unit type to be measured for payment shall be based on the actual task performed by the contractor and covered by the applicable Item Type. The tasks described within the Bid Item Type below are provided as a guide only as to the general nature of the various functions included, but these examples in no way limit the use of the item to these functions only. The contractor should use this information in order to approximate the various required crew sizes necessary to perform the work covered by this item in a productive, safe and efficient manner. The actual construction crew size required to perform the field support operation shall be determined solely by the contractor in order to perform the required construction field support operation. It is the responsibility of the contractor to provide appropriate field support crews capable of performing required tasks in a productive, safe and efficient manner. The actual crew performing the operation will not be considered, by the facility operator in consultation with the Resident Engineer, when determining the applicable item type, which shall be only as per the task performed.

Note: Only one measurement type will be used for each defined construction field support area.

Type .1 = Construction Field Support requiring an average size survey crew that will perform typical field survey functions and provide quality data analysis reports.

Type .2 = Construction Field Support requiring an average small size crew capable of performing various tasks not requiring the use of a machine or operator, which may include but are not limited to: opening/closing subsurface structure cover(s), setting/resetting MPT setup(s), assisting Utility Facility/Specialty crew(s) not included in JB 402T or JB 450.5, performing conduit occupancy identification, clean-up storage work-site area, etc.

Type .3 = Construction Field Support requiring an average medium size crew capable of performing various tasks which include the use of a machine and operator, which may include but are not limited to: excavations due to cable failures, including emergency type excavations, construct manhole enclosures, installing support system for utility facilities, dewatering utility structures and excavations, opening/closing traffic and/or pedestrian plates, etc. not included in JB 402T or JB 450.5.

Type .4 = Construction Field Support requiring an average large size crew capable of performing various tasks that requires the use of multiple machine(s) and operator(s), which may include but are not limited to: assistance during heat contingency, welding, repositioning and placing large diameter pipe, etc.

Type .5 = Construction Field Support requiring an average small size crew when requested by the facility operator on an on-demand hourly basis for a maximum of 2 hours per day or as approved by the facility operator to assist the facility operator or specialty contractor hired by the facility operator in shifting and supporting the conduits during pipe-ripping operations and all else necessary as required to complete the work including but not limited to constructing temporary work platform and temporary weather protection.

E. Price to Cover

The unit price bid for the various construction field support items shall include the cost of all labor, materials, equipment, insurance, and incidentals necessary to provide construction field support, which may include but is not limited to working over, under, adjacent to, around, in between and in close proximity of surface and subsurface utility facilities and exposing, supporting, protecting and maintaining the integrity of the facilities without disruption of service to the general public, utility customers and in accordance with the Contract Documents at various locations approved by the Facility Operator in consultation with the Resident Engineer. The unit price shall also include openings and closings of plates, and cones, barrels, arrow-boards, etc. and installing, shifting, moving and relocating cones, barrels, arrow-boards, etc. as may be required in order to provide access to excavations and during specialty work being performed by others excluding work operations covered under JB402T. The unit price shall also include excavating by hand to expose existing structures. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price bid. The unit price shall also include the cost of supporting and protecting all utilities encountered during the construction field support operation, as required except work operations covered under JB 402T. The unit price bid shall also include alternate methods for construction field support, which may include changes in equipment and special operations, and sequencing and the use of only all hand-held tools due to existing field conditions, including potential delays and extended performance. Any and all Contractor method changes and operation modifications employed for construction field support are deemed to be included in the price bid for this item. Work under this item may be paid in combination with other City, utility or facility accommodation Items bid under other contract items except where expressedly excluded from that item.

F. References

1. Sketches JB 100A, JB 100B

JB 603T - FURNISH AND INSTALL TELECOMMUNICATIONS CONDUITS

A. Description

Under this Section, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals required to procure and install conduit for the purpose of installing the facility operator's utilities. Conduit runs shall be as shown on the contract drawings or as specified by the facility operator in consultation with the Resident Engineer.

B. Materials

Conduit shall consist of:
PVC – 2" and 4" diameter or 1 ¼" Quad, Type "C" as supplied by American Pipe and Plastics or approved equal
Steel - 4" diameter, ASTM A53, Schedule 40 or approved equal
All conduit including sleeves, couplings, bends, pulling lines, etc. shall be supplied by the Contractor and approved by the facility operator in consultation with the resident Engineer.
The Contractor shall supply all material (Mortar, Brick, etc.) to make repairs to opening(s) as approved by the facility operator in consultation with the Resident Engineer.

C. Method of Construction

The Contractor shall install the specified conduit(s) then rod, mandrel and wire (install pulling line) the new conduits. When conduit pipes are to be connected to existing underground ducts, manholes, or boxes, the Contractor, using hand-held tools only, shall cut existing conduit, to pick-up existing underground conduits with new conduits, make openings into manholes or boxes, install/connect the conduit, and make repairs to seal the openings in the structure.

Steel pipe shall be used for shallow cover and crossing or paralleling steam mains as directed by the facility operator in consultation with the Resident Engineer.

When the facility operator required a combination of conduit types and materials the facility operator will define the configuration of the conduit system and the location of each type within the conduit bank. All conduit shall be spaced 1 ½" both vertically and horizontally from the adjacent conduit(s). All conduits shall be encased in lean concrete (f'c = 1200 to 1500 psi maximum) which shall extend 2" beyond each face of the conduit formation, above and each side of the conduit formation.

If due to subsurface conditions, the cover is less than 20" from finished grade, the duct shall be protected with steel plates furnished by the facility operator(s) and measured for payment under Item JB 403.

The work shall be performed in accordance with the contract plans, specifications, and at the directions of the facility operator in consultation with the Resident Engineer.

D. Methods of Measurement

The quantity to be measured for payment shall be the number of linear feet (LF) of conduit trench for which conduit was furnished and installed:

1. 603T.1 - Install 1 ea. 2", 4" or 1 ¼" Quad" Conduit (PVC or Steel) in any combination
2. 603T.2 - Install 2 ea. 2", 4" or 1 ¼" Quad Conduits (PVC or Steel) in any combination
3. 603T.3 - Install 4 ea. 4" or 1 ¼" Quad Conduits (PVC or Steel) in any combination
4. 603T.4 - Install 6 ea. 4" or 1 ¼" Quad Conduits (PVC or Steel) in any combination
5. 603T.5 - Install 8 ea. 4" or 1 ¼" Quad Conduits (PVC or Steel) in any combination
6. 603T.6 - Install 12 ea. 4" or 1 ¼" Quad Conduits (PVC or Steel) in any combination
7. 603T.7 - Install 15 ea. 4" or 1 ¼" Quad Conduits (PVC or Steel) in any combination
8. 603T.8 - Install 24 ea. 4" or 1 ¼" Quad Conduits (PVC or Steel) in any combination
9. 603T.9 - Install 30 ea. 4" or 1 ¼" Quad Conduits (PVC or Steel) in any combination

A Quad, consisting of four 1 ¼" conduits shall be supplied as one unit. For purposes of measurement and payment each quad unit of four 1 ¼" ducts shall be counted as one duct.

For any equivalent combination not fitting the above categories payment shall be based on the next higher category.

E. Price to Cover

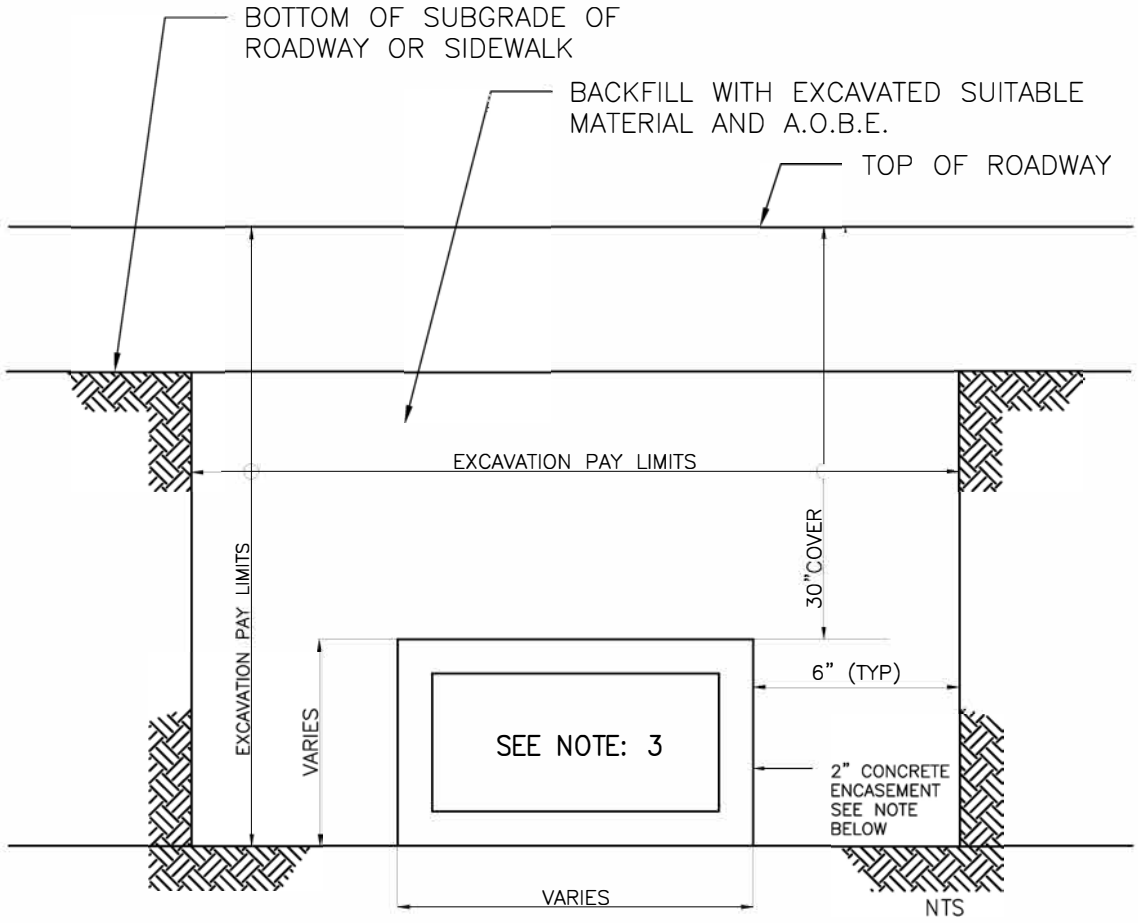
The unit price per linear foot of Conduit trench shall cover the cost of all labor, materials, equipment, insurance and incidentals necessary to furnish, install, rod, rope, and perform any other associated work required to install the conduit completely in place. Where conduits are to be connected to ducts, manholes or boxes, the cost of cutting and/or breaking into the ducts, manholes or boxes, installing and sealing the conduit, including duct plugs; and making repairs to the openings in the structure shall be considered as included in the unit price bid for the installation of the conduit. All acceptance testing, including passing a mandrill with a diameter of 1/8" less than the inside diameter of the duct through the entire length of the duct, as required by the facility operator shall be considered as included in the unit price.

Payment for trench excavation shall be paid under Item JB 405.

Steel protection plates shall be paid for under Item JB 403T

F. References

1. Sketch JB 603T
2. Item JB 405
3. American Pipe and Plastics, P.O. Box 577, Binghamton, N.Y. 13902



TYPICAL CONDUIT EXCAVATION AND BACKFILL

NOTES:

QUEENS, BROOKLYN & STATEN ISLAND

1– CONCRETE ENCASE REQUIRED IF TOP OF DUCTS IS 20" OR LESS FROM SURFACE AND ALL BENDS, SWEEPS AND CHANGE OF GRADE. FOR COVER LESS THAN 20", 3/8" STEEL (A36M) COVER PLATES IN ADDITION TO THE CONCRETE ENCASEMENT SHALL BE PROVIDED.

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2– FOR COVER LESS THAN 20", 1/4" STEEL (A36M) COVER COVER PLATES IN ADDITION TO THE CONCRETE ENCASEMENT SHALL BE PROVIDED.

3– CONDUIT CONFIGURATION TO BE DETERMINED BY ECS/VERIZON REPRESENTATIVE.

J.B. SKETCH	
TRENCH EXCAVATION FOR CONDUIT	
09/13/2017	CONTRACT NO. / SKETCH NO. JB 603T

JB 610 - INSTALLATION OF STEEL GAS PIPE

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to install gas pipe and service pipe connections within the Consolidated Edison service territory. The Contractor shall satisfactorily clean, test and install new gas pipes, tracer wire, tracer wire termination boxes and appurtenances, complete as specified herein and as indicated on the contract drawings / layouts in accordance with the specifications of Con Edison Gas Engineering and as directed by the authorized Con Edison field representative. All work shall be performed in accordance with Con Edison Requirements, standard drawings and specifications referenced herein.

The Contractor shall install new gas utility facilities and appurtenances including but not limited to:

1. Non gas cost sharing gas facilities
2. Steel gas pipes
3. Phenolic board
4. Foam board
5. Adjustable & non-adjustable steel valve box risers
6. Pipe coatings (refer to Con Edison Specification G-8209)
7. Fittings
8. Valves

The trench to be excavated shall be determined by the size of the gas facility to be installed, extended or modified. The work shall be performed in accordance with all applicable specifications, and / or at the direction of the facility operator in consultation with the Resident Engineer and paid under other applicable contract bid items

B. Materials

All materials will be provided by Con Edison unless specifically noted otherwise. All materials provided by Con Edison shall be delivered to the Contractor at the construction site and unloaded by the Contractor.

C. Methods of Construction

The Contractor shall install the steel gas pipe(s), as shown on layouts and or drawings and sketches and as directed by the facility operator from designated facility operator service points and in accordance with the contract plans and Con Edison standard specifications. The method of construction shall include all labor, equipment and materials that are necessary to complete the installation of the steel gas pipe including cutting of the pipe, joining by welding, for each one (1) 40’ random full length of pipe, complete with coating of pipe, installation of appurtenances and testing operations. The Contractor shall thoroughly clean each pipe length and fitting in order to remove all internal debris and foreign matter prior to the pipe being lowered into the trench. The installation of the new pipe must be performed by Operator Qualified mechanics. The Contractor must be approved by Con Edison.

A **'WARNING BURIED GAS LINES BELOW'** tape (class and stock number 024-6660) must be installed at a minimum of 12 inches above the top of the direct buried new replacement main.

Cathodic Protection

All buried or inserted steel pipe, fittings and appurtenances shall be coated and cathodically protected in accordance with the applicable Con Edison specifications

Protection plates shall be A36 steel 3/8" thick, provided by Con Edison.

Pressure Testing And Inerting:

The newly completed gas pipe shall be subjected to a combination strength-proof and leakage test by the Contractor in accordance with G-8204.

The Contractor shall install test connections as indicated on the drawings / layouts and EO-5261-C, "high Hats for Plugs and Nipples on 6 NPS – 30 NPS Steel Gas Mains 13.8 -2413.2 kPa".

All exposed coated steel gas mains where the coating is found damaged, shall be cleaned and the coating shall be replaced in kind in accordance with Con Edison specification G-8062.

Magnesium anodes and test stations shall be installed at the locations shown on the plans and layouts or as directed by the Engineer. Con Edison will supply thermit weld equipment. All test lead wires shall be tested by Con Edison's Corrosion Survey Section before backfilling.

D. Method of Measurement

The quantity to be paid for under this item shall be the actual number of linear feet (L.F.) of gas pipe installed for each pipe size, as measured along the center line of the pipe in its final position. The various types of pipe sizes are defined as follows:

JB 610.1 - Installation of Steel Gas Pipe - 1" Diameter
JB 610.2 - Installation of Steel Gas Pipe - 1-1/2" Diameter
JB 610.3 - Installation of Steel Gas Pipe - 2" Diameter
JB 610.4 - Installation of Steel Gas Pipe - 3" Diameter
JB 610.5 - Installation of Steel Gas Pipe - 4" Diameter
JB 610.6 - Installation of Steel Gas Pipe - 6" Diameter
JB 610.7 - Installation of Steel Gas Pipe - 8" Diameter
JB 610.8 - Installation of Steel Gas Pipe - 12" Diameter
JB 610.9 - Installation of Steel Gas Pipe - 16" Diameter
JB 610.10 - Installation of Steel Gas Pipe - 20" Diameter
JB 610.11 - Installation of Steel Gas Pipe - 24" Diameter
JB 610.12 - Installation of Steel Gas Pipe - 30" Diameter
JB 610.36 - Installation of Steel Gas Pipe - 36" Diameter

E. Price to Cover

The unit price bid per linear feet (L.F.) shall include the cost of all labor, equipment and materials not provided by Con Edison as necessary to complete the work. The price per linear foot (L.F.) of steel gas pipe shall include pipe installation, cutting of pipe, joining by welding, installation of magnesium anodes, and installation of test stations, and repair of damaged pipe coatings and testing and inerting operations. Other work such as pavement saw-cutting, trench excavation, temporary timber sheeting, and backfilling with granular materials, compacting, valve installation, protection plates and pavement / curb restoration shall be paid for separately under other appropriate contract bid items.

F. References

The following Con Edison Standards apply to all materials:

1. Specifications:

G-100,285:	Compression End Couplings, Tees, Elbows, Line Caps and Riser Tees for Gas pipe and Tubing.
G-100,281:	Weld End Forged Fittings For Gas Piping
SPEC. 900:	Installing Gas Mains, Regulator Stations and Services in New York City and Westchester County.
G-699:	Installation of Gas Services Regulators Vent Line Protectors.
G-1064:	Shielded Metal Arc Welding Procedure for Welding Steel Pipe and Fittings.
G-1065:	Qualification of Welders and Welding Procedures.
G-1066:	Qualification of Radiographers and Radiographic Procedures.
G-1070:	Radiographic Inspection of Pipeline Welds.
G-8003:	Transportation, Handling and Storage of Steel Pipe for Gas Mains & Services.
G-8005:	General Specification for the Installation of Gas Distribution Mains.
G-8005:	Plastic Pipe Main Installations Section 6.0.
G-8062:	Extruded Polyolefin Coating on Steel Gas Pipe.
G-8100:	General Specification for the Installation of Gas Services.
G-8129:	Purging Gas Mains, Services and Regulator Stations.
G-8153:	Reinforcing Compression Fittings
G-8194:	Street Opening Color Coding, Permit Signs at Worksite and Pavement Restoration Markers.
G-8195:	Qualification of Contractors' Maintenance Engineers and Field Supervisors Engaged in Gas Maintenance / Installations of Mains and/or services.
G-8201:	Electric Spark Inspection of Coating on Steel pipe.
G-8204:	Gas Mains and Services
G-8205	Corrosion Control of Steel Gas Distribution Mains and Services.
G-8209:	Field Coatings of Steel Pipe and Fittings Installed Underground and in Subsurface Structures.
G-8217:	Regulator Vent Line Protectors

2. Drawings:

EO-4067-G: Precast Concrete Cover for Curb Valve Box in Sidewalk.
EO-4070-C: Cover for Curb Valve Box Located in the Street.
EO-13987-B Temporary Locking Device for Cast Iron Curb Gas Valve Box.
EO-19241-D: Base for .75 NPS through 2 NPS Plastic Valves and 1.5 NPS and 2 NPS Steel Valves Used on Gas Mains and Services.
EO-3942-C3: Wood Plugs for Use with Cast Iron and Steel Pipes Street Valve Box.
EO-4019-C: Street Valve Box.
EO-4044-C: Cast Iron Curb Valve Box 2 ft. Extension – Type CV24
EO-4045-C: Cast Iron Curb Valve Box 2 ft. 8 inch Extension – Type CV32
EO-5102-D: Precast Concrete Base for Street Valve Box.
EO-5261-C: High Hats for Plugs and Nipples on 6" NPS through 30 "NPS Steel
EO-5315-D: Bed Blocks and Wedges for Laying Gas Pipe.
EO-6799-C: Protective Covers for Gas Main Installations.
EO-14134-C: Thermit Weld Process for Attaching Wire to Pipe or Fittings.
EO-14620-C: Segmenting Long Radius Forged Elbows.
EO-13911-B: Installation of 6" NPS through 30" NPS Weld End Ball Valve and Valve Box for High Pressure Gas Mains.
EO-16954-B: Sheeting for Trenches and Excavations.
EO-15636-C: Field Fabricated Extension for Gas Valve Installations over 4 feet of Cover.
502664: Installation of Electronic Markers on Gas Mains & Services Pressure Testing Requirements for New and Replacement.

JB 611 - INSTALLATION OF STEEL GAS PIPE FITTINGS

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to install gas pipe fittings and service pipe fittings within the Consolidated Edison service territory. The Contractor shall satisfactorily clean, test and install new gas pipe fittings, tracer wire, tracer wire termination boxes and appurtenances, complete as specified herein and as indicated on the contract drawings / layouts in accordance with the specifications of Con Edison Gas Engineering and as directed by the authorized Con Edison Field Representative. All work shall be performed in accordance with Con Edison requirements, standard drawings and specifications referenced herein.

The Contractor shall install new gas utility facility fittings and appurtenances including but not limited to:

1. Non cost sharing gas facilities
2. Steel gas pipes
3. Phenolic board
4. Foam board
5. Adjustable & non-adjustable steel valve box risers
6. Pipe coatings (refer to Con Edison Specification G-8209)
7. Fittings
8. Valves

The trench to be excavated shall be determined by the size of the gas facility fittings to be installed, extended or modified. The work shall be performed in accordance with all applicable specifications, and / or at the direction of the facility operator in consultation with the Resident Engineer and paid under other applicable contract bid items

B. Materials

All materials will be provided by Con Edison unless specifically noted otherwise. All materials provided by Con Edison will be delivered to the Contractor at the construction site and unloaded by the Contractor.

C. Methods of Construction

The Contractor shall install the steel gas pipe fitting(s), (including but not limited to valves, elbows, weld end caps and tees), as shown on layouts and or drawings and sketches and as directed by the facility operator from designated facility operator service points and in accordance with the contract plans and Con Edison standard specifications. The method of construction shall include all labor, equipment and materials that are necessary to complete the installation of the gas steel pipe fittings including miter cut, joining by welding, coating of pipe fitting, and appurtenances complete, and testing operations. The Contractor shall thoroughly clean each pipe fitting in order to remove all internal dirt and foreign matter prior to the pipe being lowered into the trench. The

installation of the new pipe must be performed by Operator Qualified mechanics. The Contractor must be approved by Con Edison.

Fittings:

Fittings shall be defined as couplings, forged fittings, and valves, insulating joints, weld end cap and weldolets. All forged bends shall conform to Con Edison Specification G-100, 281, "Welded Forged Fittings for Gas Piping. Prior to installation, each insulating joint shall be checked with a continuity tester by Con Edison. The insulating joint shall not be installed until the Contractor has verified with the Con Edison Field Representative that a continuity test is acceptable. The cost for testing the insulation joint shall be included in the unit price for the appropriate size of the gas main.

A **'WARNING BURIED GAS LINES BELOW'** tape (class and stock number 024-6660) must be installed at a **minimum** of 12 inches above the top of the direct buried new / replacement main.

Cathodic Protection

All buried or inserted steel pipe fittings and appurtenances shall be coated and cathodically protected in accordance with the applicable Con Edison Specifications

Protection Plates shall be A36 steel 3/8" thick, provided by Con Edison.

Pressure Testing And Inerting:

The newly completed gas pipe fitting(s) shall be subjected to a combination strength-proof and leakage test by the Contractor in accordance with G-8204

The Contractor shall install test connections as indicated on the drawings / layouts and EO-5261-C, "high Hats for Plugs and Nipples on 6 NPS – 30 NPS Steel Gas Mains 13.8 -2413.2 kPa".

All exposed coated steel gas pipe fittings where the coating is found damaged shall be cleaned and the coating shall be replaced in kind in accordance with Con Edison Specification G-8062.

Magnesium anodes and test stations shall be installed at the locations shown on the plans and layouts or as directed by the Engineer. Con Edison will supply thermit weld equipment. All test lead wires shall be tested by Con Edison's Corrosion Survey Section before backfilling.

D. Method of Measurement

The quantity to be paid for under this item shall be the actual number of each (EA) steel gas pipe fitting installed for each pipe size. The various types of pipe sizes are defined as follows:

JB 611.1 - Installation of Steel Gas Pipe Fitting - 1" Diameter
JB 611.2 - Installation of Steel Gas Pipe Fitting - 1-1/2" Diameter
JB 611.3 - Installation of Steel Gas Pipe Fitting - 2" Diameter
JB 611.4 - Installation of Steel Gas Pipe Fitting - 3" Diameter
JB 611.5 - Installation of Steel Gas Pipe Fitting - 4" Diameter
JB 611.6 - Installation of Steel Gas Pipe Fitting - 6" Diameter

JB 611.7 - Installation of Steel Gas Pipe Fitting - 8" Diameter
JB 611.8 - Installation of Steel Gas Pipe Fitting - 12" Diameter
JB 611.9 - Installation of Steel Gas Pipe Fitting - 16" Diameter
JB 611.10 - Installation of Steel Gas Pipe Fitting - 20" Diameter
JB 611.11 - Installation of Steel Gas Pipe Fitting - 24" Diameter
JB 611.12 - Installation of Steel Gas Pipe Fitting - 30" Diameter
JB 611.36 - Installation of Steel Gas Pipe Fitting - 36" Diameter

E. Price to Cover

The unit price bid per each (EA) shall include the cost of all labor, equipment and materials not provided by Con Edison as necessary to completely install the steel gas pipe fitting. The price per each (EA) fitting shall include pipe fitting installation, (including but not limited to valves, elbows, weld end caps and tees), miter cut, joining by welding, installation of magnesium anodes, and installation of test stations, and repair of damaged pipe coatings and testing and inerting operations. Other work such as pavement saw-cutting, trench excavation, temporary timber sheeting, and backfilling with granular materials, compacting, valve installation, protection plates and pavement / curb restoration shall be paid for separately under other appropriate contract bid items.

F. References

The following Con Edison Standards apply to all materials:

1. Specifications:

G-100,285:	Compression End Couplings, Tees, Elbows, Line Caps and Riser Tees for Gas pipe and Tubing.
G-100,281:	Weld End Forged Fittings For Gas Piping
SPEC. 900:	Installing Gas Mains, Regulator Stations and Services in New York City and Westchester County.
G-699:	Installation of Gas Services Regulators Vent Line Protectors.
G-1064:	Shielded Metal Arc Welding Procedure for Welding Steel Pipe and Fittings.
G-1065:	Qualification of Welders and Welding Procedures.
G-1066:	Qualification of Radiographers and Radiographic Procedures.
G-1070:	Radiographic Inspection of Pipeline Welds.
G-8003:	Transportation, Handling and Storage of Steel Pipe for Gas Mains & Services.
G-8005:	General Specification for the Installation of Gas Distribution Mains.
G-8005:	Plastic Pipe Main Installations Section 6.0.
G-8062:	Extruded Polyolefin Coating on Steel Gas Pipe.
G-8100:	General Specification for the Installation of Gas Services.
G-8129:	Purging Gas Mains, Services and Regulator Stations.
G-8153:	Reinforcing Compression Fittings
G-8194:	Street Opening Color Coding, Permit Signs at Worksite and Pavement Restoration Markers.
G-8195:	Qualification of Contractors' Maintenance Engineers and Field Supervisors Engaged in Gas Maintenance / Installations of Mains and/or services.
G-8201:	Electric Spark Inspection of Coating on Steel pipe.
G-8204:	Gas Mains and Services
G-8205	Corrosion Control of Steel Gas Distribution Mains and Services.

G-8209: Field Coatings of Steel Pipe and Fittings Installed Underground and in Subsurface Structures.
G-8217: Regulator Vent Line Protectors

2. Drawings:

EO-4067-G: Precast Concrete Cover for Curb Valve Box in Sidewalk.
EO-4070-C: Cover for Curb Valve Box Located in the Street.
EO-13987-B Temporary Locking Device for Cast Iron Curb Gas Valve Box.
EO-19241-D: Base for .75 NPS through 2 NPS Plastic Valves and 1.5 NPS and 2 NPS Steel Valves Used on Gas Mains and Services.
EO-3942-C3: Wood Plugs for Use with Cast Iron and Steel Pipes Street Valve Box.
EO-4019-C: Street Valve Box.
EO-4044-C: Cast Iron Curb Valve Box 2 ft. Extension – Type CV24
EO-4045-C: Cast Iron Curb Valve Box 2 ft. 8 inch Extension – Type CV32
EO-5102-D: Precast Concrete Base for Street Valve Box.
EO-5261-C: High Hats for Plugs and Nipples on 6" NPS through 30 "NPS Steel
EO-5315-D: Bed Blocks and Wedges for Laying Gas Pipe.
EO-6799-C: Protective Covers for Gas Main Installations.
EO-14134-C: Thermit Weld Process for Attaching Wire to Pipe or Fittings.
EO-14620-C: Segmenting Long Radius Forged Elbows.
EO-13911-B: Installation of 6" NPS through 30" NPS Weld End Ball Valve and Valve Box for High Pressure Gas Mains.
EO-16954-B: Sheeting for Trenches and Excavations.
EO-15636-C: Field Fabricated Extension for Gas Valve Installations over 4 feet of Cover.
502664: Installation of Electronic Markers on Gas Mains & Services Pressure Testing Requirements for New and Replacement.

JB 615 - INSTALLATION OF PLASTIC GAS PIPE

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to install plastic gas pipes and service connections within the Consolidated Edison service territory. The Contractor shall satisfactorily clean, test and install new plastic gas pipes, tracer wire, tracer wire termination boxes and appurtenances, complete as specified herein and as indicated on the contract drawings / layouts in accordance with the specifications of Con Edison Gas Engineering and as directed by the authorized Con Edison representative. All work shall be performed in accordance with Con Edison Requirements, standard drawings and specifications referenced herein.

The Contractor shall install new Gas Utility Facilities and appurtenances including but not limited to:

1. Non cost sharing gas facilities
2. Plastic pipes
3. Phenolic board
4. Foam board
5. Adjustable & non-adjustable valve box risers
6. Pipe coatings (refer to Con Edison Specification G-8209)
7. Molded fittings
8. Plastic valves

The trench to be excavated shall be determined by the size of the Gas facility to be installed, extended or modified. The work shall be performed in accordance with all applicable specifications, and / or at the direction of the facility operator in consultation with the Resident Engineer.

B. Materials

All materials will be provided by Con Edison unless specifically noted otherwise. All materials provided by Con Edison will be delivered to the Contractor at the construction site and unloaded by the Contractor.

C. Methods of Construction

The Contractor shall install the plastic gas pipe(s), as shown on layouts and or drawings and sketches and as directed by the facility operator from designated facility operator service points and in accordance with the contract plans and Con Edison Standard specifications. The method of construction shall include all labor, equipment and materials that are necessary to complete the installation of the plastic gas pipe including cutting of the pipe, joining by fusing, for each one (1) 40’ random full length of pipe, and appurtenances complete, and testing operations. The Contractor shall thoroughly clean each pipe length and fitting in order to remove all internal debris

and foreign matter prior to the pipe being lowered into the trench. The installation of the new pipe must be performed by Operator Qualified mechanics. The Contractor must be approved by Con Edison.

A **'WARNING BURIED GAS LINES BELOW'** tape (class and stock number 024-6660) must be installed at a **minimum** of 12 inches above the top of the direct buried new / replacement main. When new / replacement mains are inserted, the tape is to be installed above all exposed pipe in tie-in and service excavations.

Protection Plates shall be A36 steel 3/8" thick, provided by Con Edison.

Pressure Testing Inerting:

The newly completed gas pipe shall be subjected to a combination strength-proof and leakage test by the Contractor in accordance with G-8204

The Contractor shall furnish all material, transportation and equipment, including gas and air necessary to perform and complete the pressure testing and inerting operations, including the equipment used to record the test. Inerting shall be defined as the process of displacing air or natural gas in a facility with an inert gas.

D. Method of Measurement

The quantity to be paid for under this item shall be the actual number of linear feet (LF) of plastic gas pipe installed for each pipe size, as measured along the center line of the pipe in its final position.

JB 615.1A - Installation of Plastic Gas Pipe – ½" Diameter
JB 615.1 - Installation of Plastic Gas Pipe - 1" Diameter
JB 615.2 - Installation of Plastic Gas Pipe - 1-1/4" Diameter
JB 615.3 - Installation of Plastic Gas Pipe - 1-1/2" Diameter
JB 615.4 - Installation of Plastic Gas Pipe - 2" Diameter
JB 615.5 - Installation of Plastic Gas Pipe - 3" Diameter
JB 615.6 - Installation of Plastic Gas Pipe - 4" Diameter
JB 615.7 - Installation of Plastic Gas Pipe - 6" Diameter
JB 615.8 - Installation of Plastic Gas Pipe - 8" Diameter
JB 615.9 - Installation of Plastic Gas Pipe - 12" Diameter
JB 615.10 - Installation of Plastic Gas Pipe - 16" Diameter

E. Price to Cover

The unit price bid per linear feet (LF) shall include the cost of all labor, equipment and materials not provided by Con Edison as necessary to complete the work. The price per linear foot (LF) of plastic gas pipe shall include pipe installation, cutting of pipe, joining by fusing, and all other work necessary to completely install the plastic gas pipe, and testing and inerting operations. Other work such as pavement saw-cutting, trench excavation, temporary timber sheeting, and backfilling with granular materials, compacting, valve installation, protection plates and pavement / curb restoration shall be paid for separately under the appropriate contract bid items.

F. References

The following Con Edison Standards apply to all materials:

1. Specifications:

G-100,285: Compression End Couplings, Tees, Elbows, Line Caps and Riser Tees for Gas pipe and Tubing.
G-100,281: Weld End Forged Fittings For Gas Piping
SPEC. 900: Installing Gas Mains, Regulator Stations and Services in New York City and Westchester County.
G-699: Installation of Gas Services Regulators Vent Line Protectors.
G-1064: Shielded Metal Arc Welding Procedure for Welding Steel Pipe and Fittings.
G-1065: Qualification of Welders and Welding Procedures.
G-1066: Qualification of Radiographers and Radiographic Procedures.
G-1070: Radiographic Inspection of Pipeline Welds.
G-8003: Transportation, Handling and Storage of Steel Pipe for Gas Mains & Services.
G-8005: General Specification for the Installation of Gas Distribution Mains.
G-8005: Plastic Pipe Main Installations Section 6.0.
G-8062: Extruded Polyolefin Coating on Steel Gas Pipe.
G-8100: General Specification for the Installation of Gas Services.
G-8129: Purging Gas Mains, Services and Regulator Stations.
G-8153: Reinforcing Compression Fittings
G-8194: Street Opening Color Coding, Permit Signs at Worksite and Pavement Restoration Markers.
G-8195: Qualification of Contractors' Maintenance Engineers and Field Supervisors Engaged in Gas Maintenance / Installations of Mains and/or services.
G-8201: Electric Spark Inspection of Coating on Steel pipe.
G-8204: Gas Mains and Services
G-8205: Corrosion Control of Steel Gas Distribution Mains and Services.
G-8209: Field Coatings of Steel Pipe and Fittings Installed Underground and in Subsurface Structures.
G-8217: Regulator Vent Line Protectors

2. Drawings:

EO-4067-G: Precast Concrete Cover for Curb Valve Box in Sidewalk.
EO-4070-C: Cover for Curb Valve Box Located in the Street.
EO-13987-B: Temporary Locking Device for Cast Iron Curb Gas Valve Box.
EO-19241-D: Base for .75 NPS through 2 NPS Plastic Valves and 1.5 NPS and 2 NPS Steel Valves Used on Gas Mains and Services.
EO-3942-C3: Wood Plugs for Use with Cast Iron and Steel Pipes Street Valve Box.
EO-4019-C: Street Valve Box.
EO-4044-C: Cast Iron Curb Valve Box 2 ft. Extension – Type CV24
EO-4045-C: Cast Iron Curb Valve Box 2 ft. 8 inch Extension – Type CV32
EO-5102-D: Precast Concrete Base for Street Valve Box.
EO-5261-C: High Hats for Plugs and Nipples on 6" NPS through 30 "NPS Steel
EO-5315-D: Bed Blocks and Wedges for Laying Gas Pipe.
EO-6799-C: Protective Covers for Gas Main Installations.
EO-14134-C: Thermit Weld Process for Attaching Wire to Pipe or Fittings.

EO-14620-C: Segmenting Long Radius Forged Elbows.
EO-13911-B: Installation of 6” NPS through 30” NPS Weld End Ball Valve and Valve Box for High Pressure Gas Mains.
EO-16954-B: Sheeting for Trenches and Excavations.
EO-15636-C: Field Fabricated Extension for Gas Valve Installations over 4 feet of Cover.
502664: Installation of Electronic Markers on Gas Mains & Services Pressure Testing Requirements for New and Replacement.

JB 616 - INSTALLATION OF PLASTIC GAS PIPE FITTING

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to install plastic gas pipe fittings and service pipe fitting connections within the Consolidated Edison service territory. The Contractor shall satisfactorily clean, test and install new plastic gas pipe fittings, tracer wire, tracer wire termination boxes and appurtenances, complete as specified herein and as indicated on the contract drawings / layouts in accordance with the specifications of Con Edison Gas Engineering and as directed by the authorized Con Edison representative. All work shall be performed in accordance with Con Edison Requirements, standard drawings and specifications referenced herein.

The Contractor shall install new Gas Utility Facility Fittings and appurtenances including but not limited to:

1. Non Cost Sharing Gas Facilities
2. Plastic Pipes
3. Phenolic Board
4. Foam Board
5. Adjustable & Non Adjustable Valve Box Risers
6. Pipe Coatings Refer to Con Edison Specification G-8209
7. Molded Fittings
8. Plastic Valves

The trench to be excavated shall be determined by the size of the Gas facility to be installed, extended or modified. The work shall be performed in accordance with all applicable specifications, and / or at the direction of the facility operator in consultation with the Resident Engineer and paid under other contract bid items.

B. Materials

All materials will be provided by Con Edison unless specifically noted otherwise. All materials provided by Con Edison will be delivered to the Contractor at the construction site and unloaded by the Contractor.

C. Methods of Construction

The Contractor shall install the plastic gas pipe fitting(s), (including but not limited to valves, elbows, weld end caps and tees) as shown on layouts and or drawings and sketches and as directed by the facility operator from designated facility operator service points and in accordance with the contract plans and Con Edison Standard specifications. The method of construction shall include all labor, equipment and materials that are necessary to complete the installation of the plastic gas pipe fitting(s) including miter cut, joining the pipe by fusing, and appurtenances complete, and testing operations. The Contractor shall thoroughly clean each pipe length and fitting in order to remove all internal dirt and foreign matter prior to the pipe being lowered into the

trench. The installation of the new pipe must be performed by Operator Qualified mechanics. The Contractor must be approved by Con Edison.

FITTINGS:

Plastic Valves

Plastic valves are approved up to and including 16" diameter. Where the same diameter valve comes in reduced port and full port openings, a full port valve shall be used (unless otherwise noted on a layout or requested by Gas Distribution Engineering).

Plastic Molded Fittings

Plastic molded fittings (caps, elbows, reducers, tees and valves) can only be joined to plastic pipe or other molded fittings by butt fusion or electrofusion. Plastic molded fittings can never be joined to plastic pipe or other molded fittings by mechanical fittings.
See Spec G-8005.

A **'WARNING BURIED GAS LINES BELOW'** tape (class and stock number 024-6660) must be installed at a **minimum** of 12 inches above the top of the direct buried new / replacement main. When new / replacement mains are inserted, the tape is to be installed above all exposed pipe in tie-in and service excavations.

Protection Plates shall be A36 steel 3/8" thick, provided by Con Edison.

Pressure Testing Inerting:

The newly completed gas pipe shall be subjected to a combination strength-proof and leakage test by the Contractor in accordance with G-8204

The Contractor shall furnish all material, transportation and equipment, including gas and air necessary to perform and complete the pressure testing and inerting operations, including the equipment used to record the test. Inerting shall be defined as the process of displacing air or natural gas in a facility with an inert gas.

D. Method of Measurement

The quantity to be paid for under this item shall be the actual number of each (EA) plastic gas pipe fitting installed for each pipe size. The various types of pipe sizes are defined as follows:

JB 615.1A - Installation of Plastic Gas Pipe Fitting - ½" Diameter
JB 616.1 - Installation of Plastic Gas Pipe Fitting - 1" Diameter
JB 616.2 - Installation of Plastic Gas Pipe Fitting - 1-1/4" Diameter
JB 616.3 - Installation of Plastic Gas Pipe Fitting - 1-1/2" Diameter
JB 616.4 - Installation of Plastic Gas Pipe Fitting - 2" Diameter
JB 616.5 - Installation of Plastic Gas Pipe Fitting - 3" Diameter
JB 616.6 - Installation of Plastic Gas Pipe Fitting - 4" Diameter
JB 616.7 - Installation of Plastic Gas Pipe Fitting - 6" Diameter
JB 616.8 - Installation of Plastic Gas Pipe Fitting - 8" Diameter
JB 616.9 - Installation of Plastic Gas Pipe Fitting - 12" Diameter
JB 616.10 - Installation of Plastic Gas Pipe Fitting - 16" Diameter

E. Price to Cover

The unit price bid per each (EA) shall include the cost of all labor, equipment and materials not provided by Con Edison as necessary to completely install the plastic gas pipe fitting. The price per each (EA) plastic gas pipe fitting shall include pipe installation, (including but not limited to valves, elbows, weld end caps and tees), miter cut, joining by fusing, and all other work necessary to completely install the plastic gas pipe fitting, and testing and inerting operations. Other work such as pavement saw-cutting, trench excavation, temporary timber sheeting, and backfilling with granular materials, compacting, valve installation, protection plates and pavement / curb restoration shall be paid for separately under the appropriate contract bid items.

F. References

The following Con Edison Standards apply to all materials:

1. Specifications:

G-100,285:	Compression End Couplings, Tees, Elbows, Line Caps and Riser Tees for Gas pipe and Tubing.
G-100,281:	Weld End Forged Fittings For Gas Piping
SPEC. 900:	Installing Gas Mains, Regulator Stations and Services in New York City and Westchester County.
G-699:	Installation of Gas Services Regulators Vent Line Protectors.
G-1064:	Shielded Metal Arc Welding Procedure for Welding Steel Pipe and Fittings.
G-1065:	Qualification of Welders and Welding Procedures.
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G-1070:	Radiographic Inspection of Pipeline Welds.
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G-8005:	General Specification for the Installation of Gas Distribution Mains.
G-8005:	Plastic Pipe Main Installations Section 6.0.
G-8062:	Extruded Polyolefin Coating on Steel Gas Pipe.
G-8100:	General Specification for the Installation of Gas Services.
G-8129:	Purging Gas Mains, Services and Regulator Stations.
G-8153:	Reinforcing Compression Fittings
G-8194:	Street Opening Color Coding, Permit Signs at Worksite and Pavement Restoration Markers.
G-8195:	Qualification of Contractors' Maintenance Engineers and Field Supervisors Engaged in Gas Maintenance / Installations of Mains and/or services.
G-8201:	Electric Spark Inspection of Coating on Steel pipe.
G-8204:	Gas Mains and Services
G-8205:	Corrosion Control of Steel Gas Distribution Mains and Services.
G-8209:	Field Coatings of Steel Pipe and Fittings Installed Underground and in Subsurface Structures.
G-8217:	Regulator Vent Line Protectors

2. Drawings:

EO-4067-G: Precast Concrete Cover for Curb Valve Box in Sidewalk.

EO-4070-C: Cover for Curb Valve Box Located in the Street.
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EO-19241-D: Base for .75 NPS through 2 NPS Plastic Valves and 1.5 NPS and 2 NPS Steel Valves Used on Gas Mains and Services.
EO-3942-C3: Wood Plugs for Use with Cast Iron and Steel Pipes Street Valve Box.
EO-4019-C: Street Valve Box.
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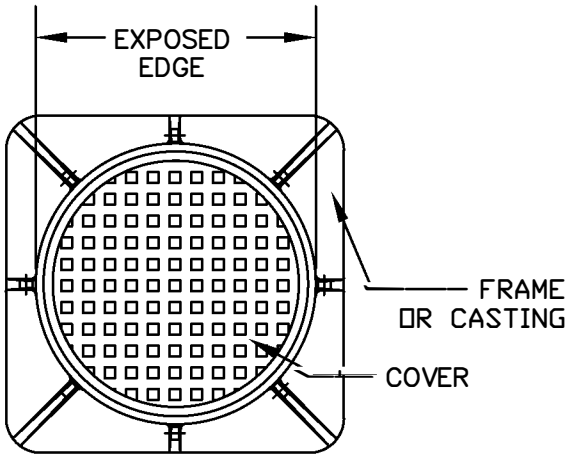
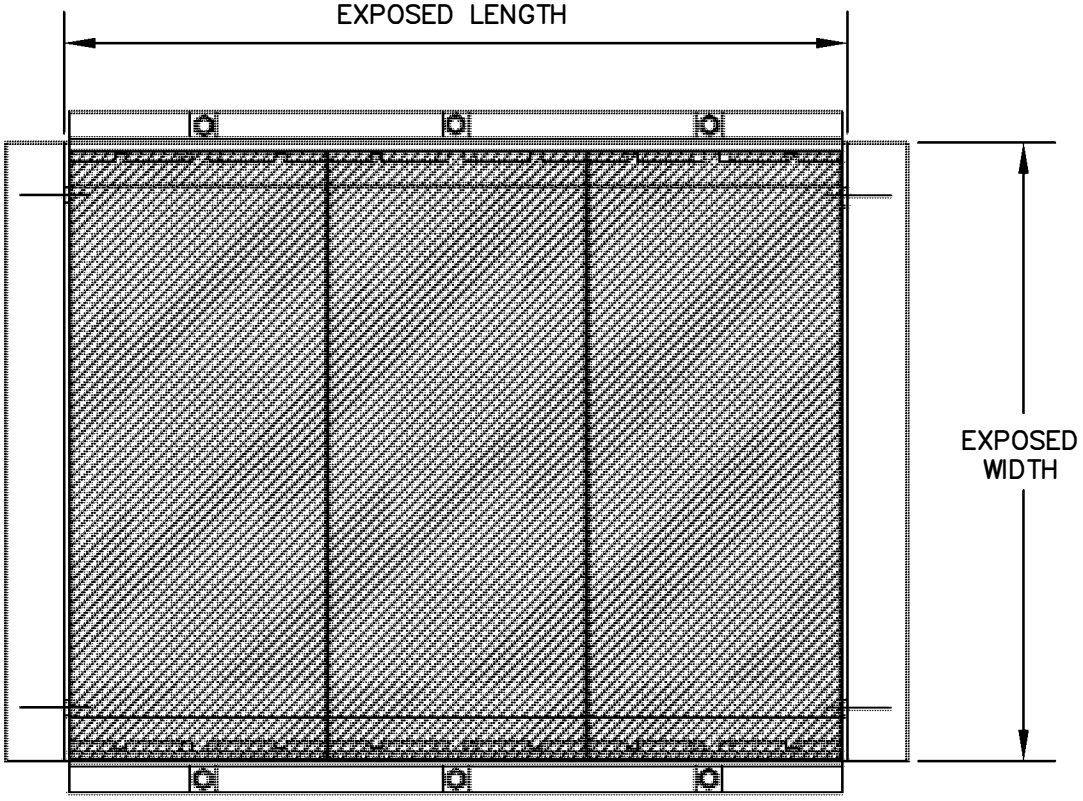
EO-5102-D: Precast Concrete Base for Street Valve Box.
EO-5261-C: High Hats for Plugs and Nipples on 6" NPS through 30 "NPS Steel
EO-5315-D: Bed Blocks and Wedges for Laying Gas Pipe.
EO-6799-C: Protective Covers for Gas Main Installations.
EO-14134-C: Thermit Weld Process for Attaching Wire to Pipe or Fittings.
EO-14620-C: Segmenting Long Radius Forged Elbows.
EO-13911-B: Installation of 6" NPS through 30" NPS Weld End Ball Valve and Valve Box for High Pressure Gas Mains.
EO-16954-B: Sheeting for Trenches and Excavations.
EO-15636-C: Field Fabricated Extension for Gas Valve Installations over 4 feet of Cover.
502664: Installation of Electronic Markers on Gas Mains & Services Pressure Testing Requirements for New and Replacement.

ROUND COVERS



RECTANGULAR COVERS/FRAMES



PLAN VIEW

N.T.S.

ADJUSTMENT OF
UTILITY HARDWARE

LAST REVISION	SKETCH NO.
6/30/2015	JB 636E

JB 636E - ADJUSTMENT OF UTILITY HARDWARE

Under this section the Contractor shall adjust existing utility street hardware including vault grates, valve boxes, etc., to the proposed grade by either building up or lowering the installation and resetting the castings, as and where directed by the facility operator.

A. Description

Building up or lowering the installation and resetting the castings shall consist of removing the existing frame and cover, building up or decreasing the existing installation, replacing the frame and/or cover if damaged, as determined by the facility operator, with a new frame and/or cover furnished by the facility operator, and setting the frame and cover to the new elevation.

B. Materials

Materials used shall comply with the Standards and specifications of the facility operator having jurisdiction over the installations. Where high-early strength concrete is required by the Resident Engineer to be placed adjacent to utility installations then the requirement for mortar shall be quick setting mortar capable of obtaining a minimum compressive strength of 1,500 psi in two (2) hours, and the requirement for concrete shall be high-early strength complying with current N.Y. State Department of Transportation, Standard Specifications for Class F concrete.

When castings and/or covers are deemed inadequate at a location as determined by the facility operator, the facility operators shall furnish new castings and/or covers to the Contractor for installation. The Contractor is required to inform the utility operator in advance of the need for the castings. Materials supplied by the facility operator shall be delivered to the contractor’s designated storage area.

C. Methods of Construction

The Contractor shall breakout and dispose of sidewalk, curb, pavement and/or pavement base around existing casting, excavate as required to remove casting and install existing or replacement casting, remove casting, protect opening, reinstall existing casting or install new casting to the proposed grades, backfill, grade and compact fill around casting, install base concrete and or sidewalk pavement and curb, tack coat around frame, install and remove temporary pavement around casting where directed by the facility operator; and install and compact asphalt binder and wearing course or other permanent pavement around casting and perform all work in accordance with the contract plans and the specifications.

Setting or resetting the castings shall be done with bricks plus mortar and/or by raising or lowering adjustable castings according to the standards of the utility owner having jurisdiction over the installation. Work shall be done in a workmanlike manner. Any damage resulting from the Contractor's operations to the existing installation which is to remain shall be satisfactorily corrected at the Contractor's own expense, as directed by the facility operator. Castings, which are deemed unacceptable for resetting, shall become the property of the Contractor and shall be removed and disposed of by him away from the site.

No traffic shall be allowed on adjusted utility hardware until permitted by the facility operator.

D. Method of Measurement

The quantity to be measured for payment shall be the number of utility hardware units (EA) in each size group actually adjusted as specified under each item. The size of each utility hardware unit, measured in width, shall be defined as either, the diameter of the exposed edge of the casting, or the exposed edge of the longest side of rectangular frames as indicated in sketch JB 636.

JB 636 EA - Adjustment of Utility Hardware (Under 7" Width)

JB 636 EB - Adjustment of Utility Hardware (7" to under 14" Width)

JB 636 EC - Adjustment of Utility Hardware (14" to under 30" Width)

JB 636 ED - Adjustment of Utility Hardware (30" to under 34" Width)

JB 636 EE – Adjustment of Utility Hardware (34” to under 41” Width)

JB 636 EG - Adjustment of Utility Hardware (41" to under 75" Width)

JB 636 EH - Adjustment of Utility Hardware (75" to under 125" Width)

JB 636 EI - Adjustment of Utility Hardware (125" to under 170" Width)

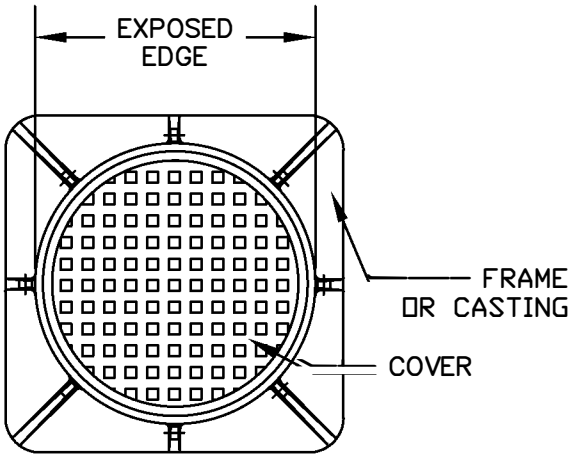
E. Price to Cover

The price for re-grading utility hardware shall be the unit price per each (EA.) and shall cover the cost of furnishing all labor, materials, plant, equipment, and incidentals required to remove existing frames and covers; build up the existing installations with brick and mortar, or lower the existing installations by removing bricks and mortar; replace damaged frames and/or covers with frames and/or covers furnished by others; break out pavement and/or pavement base; protect existing opening and installation; set the frames and covers to new elevations; grade and compact fill; install base concrete; tack coat frame; install, remove, and dispose temporary pavement; install and compact asphalt binder and wearing course or other permanent pavement; repair minor structural damage to existing installations prior to resetting frames; unloading of furnished castings at the Contractor's yard and transporting castings from the Contractor's yard to the job site as required; and complete the work in accordance with the plans, the specifications, and the directions of the facility operator.

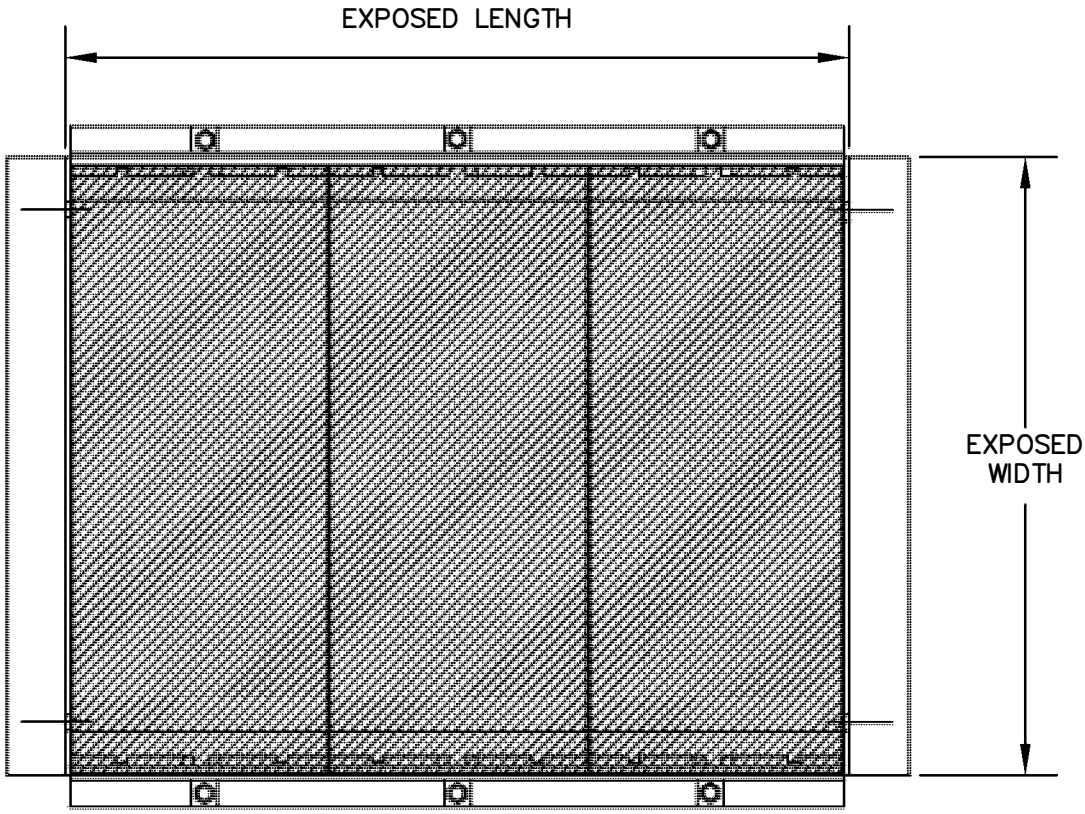
F. References

1. NYS DOT Standard Specs for Class F Concrete
2. Con Edison Specifications, latest revisions. EO-10321-B, latest revision – Chimneys, collars & grading blocks for manholes & vaults construction and installation
3. Sketch JB 636E

ROUND COVERS



RECTANGULAR COVERS/FRAMES



PLAN VIEW

N.T.S.

ADJUSTMENT OF
UTILITY HARDWARE

LAST REVISION	SKETCH NO.
6/30/2015	JB 636E

JB 636 M - MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE DURING PAVEMENT MILLING AND RESURFACING OPERATIONS

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals required to maintain, protect, and accommodate the integrity of utility hardware during pavement milling and resurfacing operations. Hardware includes castings, frames, and covers on utility structures, valve box cover castings, concrete collars around steam castings, and all other hardware protecting utility facilities.

B. Materials – N/A

C. Method of Construction

Removal of existing pavement around utility hardware shall be performed by the Contractor with extreme caution by utilizing appropriate methods of operation, by employing specialized construction equipment, and by special operations and sequencing.

The Contractor shall not mill existing pavement within 12” of the perimeter of utility hardware. Removal of pavement within 12” of the perimeter of utility hardware shall be by cutting with pavement breakers or other methods as proposed by the Contractor. All methods shall be presented to the facility operator and the Resident Engineer by the Contractor prior to the start of construction and shall be approved by the facility operator in consultation with the Resident Engineer.

During removal of existing pavement and for the duration of project, the Contractor shall protect utility hardware from damage by the Contractor’s operations and traffic. Contractor shall also provide all necessary protection to pedestrians to prevent injury to pedestrians when crossing utility hardware during the project. Utility street hardware damaged by the Contractor or others during the project shall be replaced by the Contractor at Contractor’s expense.

The Contractor shall not place any paving materials over utility hardware during the project.

D. Method of Measurement

The quantity to be measured for payment shall be the number of utility hardware units (ea) in each size group actually adjusted as specified under each item. The size of each hardware unit, measured in width, shall be defined as the diameter of circular covers, the major axis of elliptical covers, or the larger length or width of rectangular covers.

1. Item 636 MA – Modification of Work Methods to Accommodate Utility Hardware (Under 7" Width)
2. Item 636 MB – Modification of Work Methods to Accommodate Utility Hardware (7" to under 14" Width)

3. Item 636 MC – Modification of Work Methods to Accommodate Utility Hardware (14" to under 30" Width)
4. Item 636 MD – Modification of Work Methods to Accommodate Utility Hardware (30" to under 34" Width)
5. Item 636 ME – Modification of Work Methods to Accommodate Utility Hardware (34” to under 41” Width)
6. Item 636 MG – Modification of Work Methods to Accommodate Utility Hardware (41" to under 75" Width)
7. Item 636 MH – Modification of Work Methods to Accommodate Utility Hardware (75" to under 125" Width)
8. Item 636 MI – Modification of Work Methods to Accommodate Utility Hardware (125" to under 170" Width)
9. Item 636 SMB – Modification of Work Methods to Accommodate Utility Steam Hardware (Under and including 8" Width)
10. Item 636 SMC – Modification of Work Methods to Accommodate Utility Steam Hardware (Above 8" to 34" Width)

A. Price to Cover

The price to modify work methods to accommodate Utility Hardware during pavement milling and resurfacing operations shall include the cost of all incremental labor, materials, time, equipment, insurance and incidentals required for removal and disposal of existing pavement, installation and compaction of base and wearing course materials, installation and compaction and removal of temporary asphalt concrete mixture, tack coating; in accordance with the plans, the specifications and the directions of the facility operator in consultation with the Resident Engineer. The price to cover shall further include the cost of maintaining, protecting, and accommodating the integrity of utility street hardware during the project and during the performance of milling and resurfacing and the incremental additional work and effort made necessary to protect pedestrians from injury when crossing utility hardware during the project. The price to cover shall further include additional areas of modification of work methods beyond 12” of the perimeter of the utility street hardware due to the milling equipment and the location of other utility hardware, city street hardware, utility poles, street lights, traffic signals, curbs, sidewalks, medians, guide rails, pavement stops, cobblestones, and pavers. The price to cover for Items 636 SMB and 636 SMC shall also include modification of work methods due to existing concrete collars surrounding these castings.

Payment for all work herein specified shall be made on a one-time basis only; no payment for work herein specified shall be made for the same area more than one time. Adjustment to utility hardware shall be paid for under the appropriate JB 636E item.

F. References

1. JB 636E

JB 638NT – FIELD CONSTRUCTED TELECOMMUNICATIONS MANHOLE STRUCTURES

Under this item the Contractor shall perform the complete installation of field constructed utility structures approved by the facility operator in consultation with the Resident Engineer. The utility structure shall be field constructed and installed in compliance with standard utility specifications and/or methods approved by the facility operator in consultation with the Resident Engineer.

A. Description

Installation of field constructed utility structure shall comply with utility standard specifications and/or as directed by the facility operator in consultation with the Resident Engineer and shall include:

- Service Boxes (various sizes)
- Manholes (various sizes)

Where approved by the facility operator, telephone structures may as an alternate be constructed of precast reinforced concrete.

B. Materials

The facility operator will furnish cable racks, pulling-in irons, sump castings, hardware, manhole steps/ladder supports and cast iron frames and covers. All other materials required for a complete manhole installation including concrete, reinforcing steel and structural steel shall be supplied by the Contractor and shall comply with the standards of the facility operator.

The Contractor shall notify the facility operator a minimum of 30 days prior to manhole construction for scheduling materials to be furnished by the utility company. The Contractor shall pick up said materials at the facility operator's yard.

All concrete shall have a minimum compressive strength of 4,000 psi at 28 days.

Reinforcing steel shall be deformed bars conforming to ASTM, Grade 60.

Structural steel shall conform to the requirements of ASTM A-36. Bolts shall conform with the requirements of ASTM A-325.

The Contractor shall supply all necessary materials (mortar, concrete, brick, etc.) for sealing duct entrance windows in manholes and for constructing chimneys and bricking up castings to grade.

C. Method of Construction

All work shall comply with the utility specifications, plans, and standards of the facility operator.

Refer to specification JB 406 for excavation and sheeting requirements associated with telephone manhole construction. Where replacement manholes are indicated on the plans, the demolition

and removal of the existing manhole structure and the protection of existing cables and splices will be paid separately under JB 638R.

The Contractor shall perform the necessary field construction of the floor, walls, and roof of the utility structure as shown on the Plans and as directed by the facility operator in consultation with the Resident Engineer. No traffic shall be allowed on the structure until permitted by the facility operator in consultation with the Resident Engineer.

Field conditions may require the contractor to modify the design of the manhole structure, as directed by the facility operator in consultation with the Resident Engineer.

Refer to specification JB 636E for guidelines relating to the installation of new frames and covers.

All structural steel roof beams shall be ground free of burrs and painted with one shop coat and two field coats of finish paint. The Contractor shall make provisions for and incorporate into the manhole all required materials as shown on the Plans, standard utility details or as directed by the facility operator in consultation with the Resident Engineer.

The Contractor shall provide duct entry windows in the new manhole as shown on the Plans and as directed by the facility operator. All windows shall be properly sealed around new ducts per utility company requirements.

All cable racks and wall brackets shall be supported on walls with ½" dia. X 2-½" long galvanized steel machine bolts using ½" concrete inserts or expansion bolts. Vertical spacing of inserts shall not exceed 18" o.c. (typ).

The Contractor shall confirm placement of concrete inserts for cable rack supports, pulling-in irons, and other embedments shown on the Plans with the facility operator, in consultation with the Resident Engineer, prior to manhole construction.

All work shall be done in a workmanlike manner and any damage resulting from the Contractor's operations shall be satisfactorily corrected as directed by the facility operator in consultation with the Resident Engineer and at the Contractor's expense. The contractor shall perform the installation of the utility structure while maintaining, supporting, and protecting and accommodating the integrity of all utility facilities (without disruption of service) located within the areas of the excavation and the field constructed structure.

This item shall also apply when partially or totally rebuilding or modifying an existing utility structure.

The Contractor is advised that in lieu of poured-in-place structures the substitution of Precast Reinforced Concrete Structures that comply with Utility Specifications, will be permitted only when approved by the facility operator in consultation with the Resident Engineer, along with the following provisions:

1. Precast telephone manholes shall be constructed to the interior manhole dimensions and details shown on the Plans.

2. The Contractor shall submit shop drawings and design calculations for each precast manhole structure for review and approval by the facility operator and the Resident Engineer prior to fabrication. Shop drawings shall show the overall structure dimensions, roof openings, window sizes and locations, sump locations, reinforcing steel and details, construction joint types and locations including sealant material proposed. The inside face of all windows (4 sides) shall be beveled and provisions made for all inserts and hardware for a complete manhole installation, including cable pulling iron embedments and cable rack insert embedments in accordance with the standards and requirements of the facility operator.
3. Precast manhole design criteria shall be as follows:
    - Concrete Minimum Compressive Strength: 4,000 psi or greater at 28 days.
    - Steel Reinforcement: ASTM A-615, Grade 60.
    - Design Loading: AASHTO HS20-44
    - Shop drawings and calculations shall state design methodology used and all design assumptions including soil pressures and ground water levels used in the design.

4. A 9-inch thick compacted stone ballast leveling pad shall be provided as a foundation for all precast manholes.

D. Method of Measurement

The quantity to be measured for payment shall be the number of cubic yards (CY) of concrete, cast on site or pre-cast, as specified, concrete, brick, and mortar in place to the nearest hundredth of a cubic yard. No deductions will be made for the spaces occupied by steel reinforcement.

E. Price to Cover

The unit price under this item shall be a unit price per cubic yard (CY) of concrete, cast on site or pre-cast, as specified, concrete, brick, and mortar placed in the field constructed utility structure. The unit price shall cover the cost of all labor, materials, plant, equipment, insurance and incidentals required to field construct partially or totally, rebuild or modify, a utility structure. The unit price shall also include all formwork installation and removal, installation of concrete, bricks, mortar, steel reinforcement, structural steel beams, furnish and install pre-cast concrete, chimney, and installation of interior and exterior hardware, including frames and covers. The Contractor shall also install pipes, conduits, sumps, drains, sleeves, related steel or cast iron materials or equipment through the structures as shown on the drawings. Upon removal of forms, the Contractor shall remove debris and face off the entire interior of the structure. The unit price includes necessary realignment of existing ducts into the new structure up to five feet from the outside face of the new structure; any additional duct realignment required shall be paid under a separate JB item. The unit price shall further include the cost of maintaining, supporting, protecting and accommodating the integrity of all utility facilities (without disruption of service) during the work within the areas of excavation and the field constructed structure, and the furnishing of samples, as required. All work shall comply with the plans, specifications, standards, and directions of the facility operator in consultation with the Resident Engineer.

All pavement breaking, pavement removal and disposal, excavation, haul away, and disposal, furnish and install backfill, temporary pavement, sheeting, bracing, and all necessary incidentals shall be paid under item JB 406, only if required. All required break out and disposal of all types of conduits/duct banks in new structure area, including maintenance and support of cable shall be included in JB 638R. Where precast reinforced concrete manholes are used in lieu of poured in place manholes, the cost for furnishing, delivery and installation of the precast reinforced structures, additional excavation associated with the widening and deepening of trench due to increased width of precast structures and due to the placement of a stone ballast leveling pad; stone ballast; connections; and all work incidental thereto all in accordance with the Plans, Specification and Standards, shall be deemed included under this item. No additional or separate payments will be made for any work associated with the installation of precast reinforced structures.

The cost of providing an anti-freeze additive in concrete, when required, shall be paid for under Item 9.04 HW.

F. References

1. JB 406
2. JB 636E
3. JB 638R
4. Standard Utility Specifications and Drawings

JB 638RT – BREAK OUT AND REMOVE TELEPHONE/COMMUNICATIONS UTILITY STRUCTURE CONTAINING ACTIVE FACILITIES

A. Description

Under this section the Contractor shall provide all labor, materials, equipment, insurance and incidentals necessary to partially or totally break out and remove existing utility structures using methods approved by the facility operator. Breaking out and removing existing utility structures shall be performed while maintaining and protecting all subsurface facilities, at locations approved by the Facility Operator. The Contractor will encounter various underground facilities, located both inside and outside the utility structure, while partially or totally breaking out and removing existing utility structures and will be required to excavate and perform work over, under, adjacent to, around, in between and in close proximity of various congested configurations of multiple facilities, conduits, pipes and cables.

All work required to partially or totally break out and remove existing utility structures shall comply with standard utility specifications and/or as directed by the facility operator and shall include but not be limited to:

- Service Boxes (various sizes)
- Manholes (various sizes)
- Vaults (various sizes)
- Valve Boxes (various sizes)
- Concrete encased conduits containing cables

B. Materials

All materials used shall be supplied by the Contractor and comply with the standards of the facility operator.

C. Method of Construction

The Contractor shall perform the necessary breaking out and removal of the existing utility structure while maintaining and protecting all subsurface facilities. The Contractor will encounter various underground facilities located both inside and outside the utility structure, while partially or totally breaking out and removing existing utility structures and will be required to excavate and perform work over, under, adjacent to, around, in between and in close proximity of various congested configurations of multiple facilities, conduits, pipes and cables, as directed by the facility operator. All work shall be done in a workmanlike manner and any damage resulting from the Contractor's operations shall be satisfactorily corrected as directed by the facility operator and at the Contractor's expense.

This item shall also apply when partially or totally breaking out and removing an existing utility structure.

The rebuilding of the utility structure is covered under JB 638NT.

D. Method of Measurement

The quantity to be measured for payment shall be the number of cubic yards (CY) of concrete, reinforced concrete, brick, and mortar of the existing utility structure broken out, removed and disposed to the nearest hundredth of a cubic yard. No deductions will be made for the spaces occupied by steel reinforcement.

E. Price to Cover

The unit price bid under this item shall be a unit price per cubic yard (CY) of concrete, reinforced concrete, brick, and mortar of the existing utility structure broken out, removed and disposed. The unit price shall also cover the cost of all labor, materials, plant, equipment, insurance, and incidentals required to partially or totally break out, remove and dispose of existing utility structure. The unit price shall also include demolition of the existing utility structure, haul away and disposal of demolished materials, formwork, concrete, bricks, mortar, steel reinforcement, structural steel beams, interior hardware, exterior hardware, including frames and covers. The unit price shall further include the cost of maintaining, supporting, protecting and accommodating the integrity of all utility facilities (without disruption of service) during the work within the areas of excavation and the existing structure. All work shall comply with the plans, specifications and standards, provided by and at the directions of the facility operator.

The unit price shall include providing access to the facility operator tenants to verify and test cables before, during and after breaking out and removal of the utility and after conduit removal by the Contractor. The unit price shall include, but not limited to, opening and closing of fences; removal and replacement of temporary timber curb and opening and closing of traffic plates. Access to adjacent manholes impacted by the run is included in this item. JB 450 shall not be used in conjunction with JB 638RT as JB 638RT covers access to the work site at all times.

All pavement breaking, pavement removal and disposal, excavation, haul away, and disposal, furnish and install backfill, temporary pavement, sheeting, bracing, and all necessary incidentals shall be paid under item JB 406, only if required.

F. References

1. JB 406
2. Standard Utility Specifications and Drawings

JB 798 - MODIFICATION OF NON CONCRETE YOKE TROLLEY STRUCTURES REMOVAL WHEN CROSSING UTILITY FACILITES

A. Description

This JB item shall only be applied to trolley structure systems that do not contain concrete yoke foundations. This JB item shall only be used for trolley systems that have rails and wood ties only.

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain and protect and accommodate the integrity of utility facilities that include but are not limited to:

1. Conduits;
2. Conductors;
3. Concrete encased Conduit banks;
4. Steel Pipes; Steam Facilities;
5. Oil-o-static Facilities;
6. Non-cost Sharing Gas Facilities;
7. Steam Facilities;

of various sizes and configurations crossing trolley structures at various angles located within a zone of protection, as indicated on Sketch JB 798, during the removal of trolley structures and subsequent backfilling operations. Utility facilities that run parallel to trolley structures are not included within this item and will be paid for under the appropriate JB item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and directed by the facility operator.

B. Materials – N/A

C. Method of Construction

The Contractor shall maintain, protect, and accommodate the integrity of all utility facilities of various sizes and configurations crossing trolley structures within a zone of protection as indicated in Sketch JB 798, during removal of trolley structures and subsequent backfilling and compaction operations under other contract item(s). The facility operator shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility and ascertain the numerical relationships and/or dimensions of these utilities with respect to the proposed excavation. Contractor shall perform test pits at locations determined by the facility operator to expose utility as specified in JB 400. Upon exposing the affected utilities sufficiently, and at the sole discretion of the facility operator to determine relationships and/or dimensions, the Contractor shall be permitted to proceed with care to remove existing trolley structure within the zone of protection whose limit shall be defined as a distance of 24 inches from the outside face of each utility crossing.

D. Method of Measurement

The quantity to be measured for payment shall be the number of linear feet of modified trolley structure removal within the zone of protection as indicated on JB Sketch 798, measured along the centerline of trench. The trench is defined as one track set containing two rails. The zone of protection shall be defined, for the purpose of this agreement, as the boundary/area designated on the plans or a boundary/area 24 inches to either side of each of the designated facilities, based upon available records and/or information obtained from prior or new test pits, or any combination thereof. Where overlapping of the zones occurs due to multiple facilities, the boundary/area shall be modified to one zone measured from the outside limits. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

E. Price to Cover

The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain and protect and accommodate the integrity of utility facilities during the removal of trolley structures (including rails, timber ties, trolley conduits and main conduit), and backfilling and compacting within a zoned area designated for protection of utilities by the facility operator.

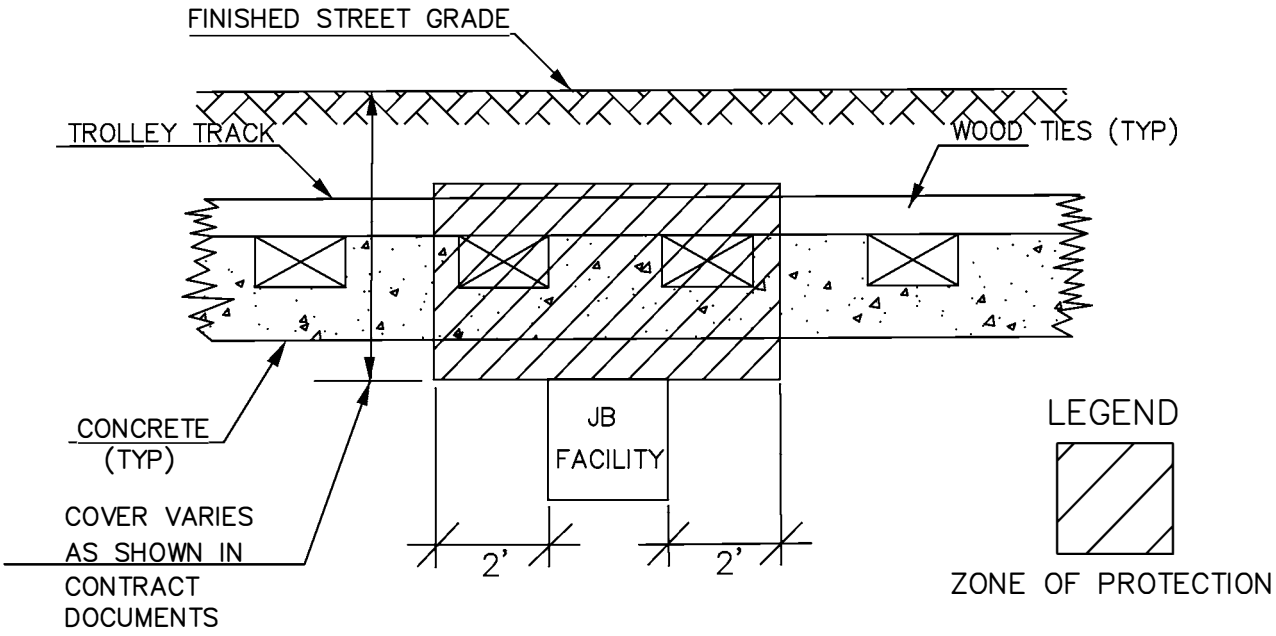
The price shall include any additional cutting, removing and disposing of roadway materials; hand or machine excavation; trucking and disposing of excavated materials, installation and removal of sheeting; and furnishing, installing and compacting backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The price shall also include means to ascertain the numerical relationship between utility and the trolley structure and the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to trolley demolition operations that are not performed in accordance with the specifications.

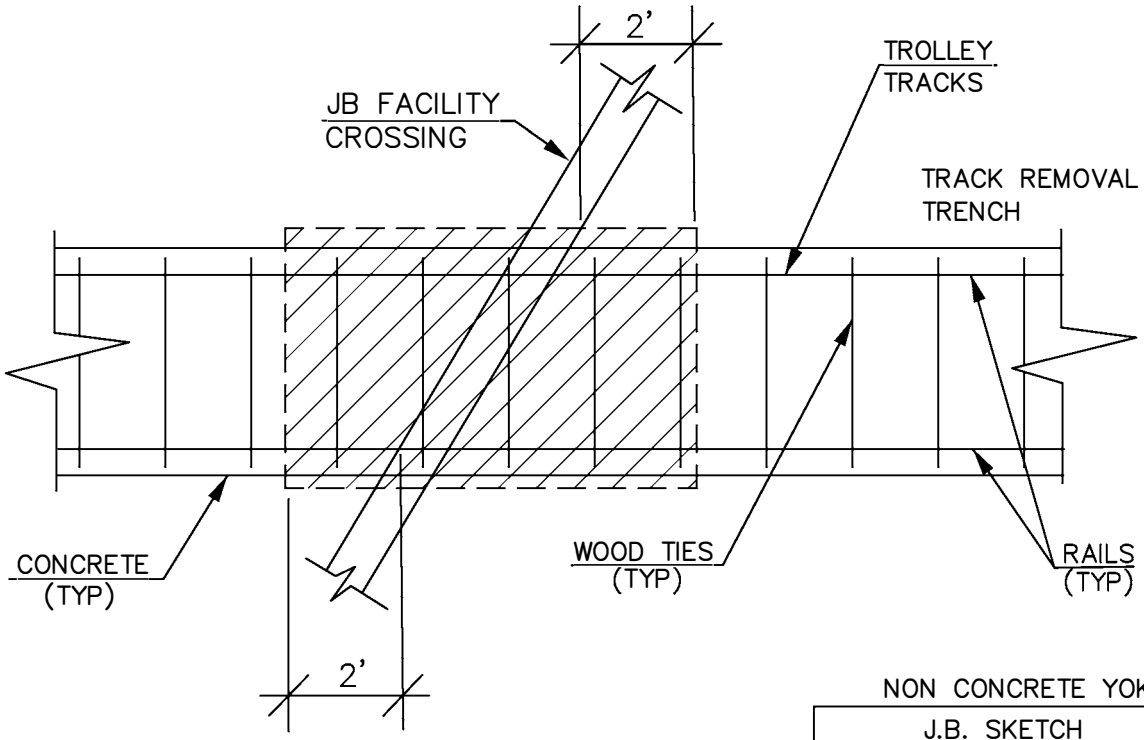
When this work is performed within a mass excavation area, a credit will be taken for the removed trolley structure.

F. References

1. NYS Industrial Code Rule 753
2. Sketch JB 798



SECTION OF JB FACILITIES CROSSING TROLLEY TRACKS



PLAN OF JB FACILITIES CROSSING TROLLEY TRACKS

NON CONCRETE YOKE

J.B. SKETCH

ACCOMODATION FACILITIES CROSSING TROLLEY RAILROAD STRUCTURES

REVISIONS	CONTRACT NO.	SKETCH NO.
11/28/2018		JB 798

JB 799 - MODIFICATION OF NON CONCRETE TROLLEY STRUCTURES REMOVAL PARALLEL TO UTILITY FACILITIES

A. Description

This JB item shall only be applied to trolley structure systems that do not contain concrete yoke foundations. This JB item shall only be used for trolley systems that have rails and wood ties only.

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities that include but are not limited to:

1. Conduits;
2. Conductors;
3. Concrete encased Conduit banks;
4. Steel Pipes; Steam Facilities;
5. Oil-o-static Facilities; and
6. Non-cost Sharing Gas Facilities;
7. Steam Facilities.

of various sizes and configurations paralleling or encroaching trolley structures located within a zone of protection, as indicated on the Plans or as directed by the field representative, during all trolley structure removal operations and subsequent backfilling operations. Utility facilities which cross over, under and between the trolley structures are not included within this item and will be paid for under the appropriate JB item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and directed by the facility operator(s).

B. Materials – N/A

C. Method of Construction

The Contractor shall maintain, protect, support and accommodate the integrity of all utility facilities of various sizes and configurations paralleling or encroaching trolley structures within a zone of protection as indicated on the Plans or as directed by the field representative, during removal of trolley structures and subsequent backfilling and compaction operations under other contract item(s). The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility and ascertain the numerical relationships and/or dimensions of these utilities with respect to the proposed excavation. Contractor shall perform test pits at locations determined by the facility operator to expose utility as specified in JB 400. Upon exposing the affected utilities sufficiently, and at the sole discretion of the facility operator(s) to determine relationships and/or dimensions, the Contractor shall be permitted to proceed with care to remove existing trolley structure within the zone of protection whose limit shall be defined as a distance of 24 inches from the outside face of each utility to the edge of the trolley structure.

D. Method of Measurement

The quantity to be measured for payment shall be the number of linear feet of modified trolley structure removal within the zone of protection as indicated on the plans, measured along the centerline of trench. The trench is defined as one track set containing two rails. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

E. Price to Cover

The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities paralleling or encroaching trolley structures during the removal of trolley structures (including rails, timber ties, trolley conduits, and main conduits), and backfilling and compacting within a zoned area designated for protection of utilities by the facility operator(s).

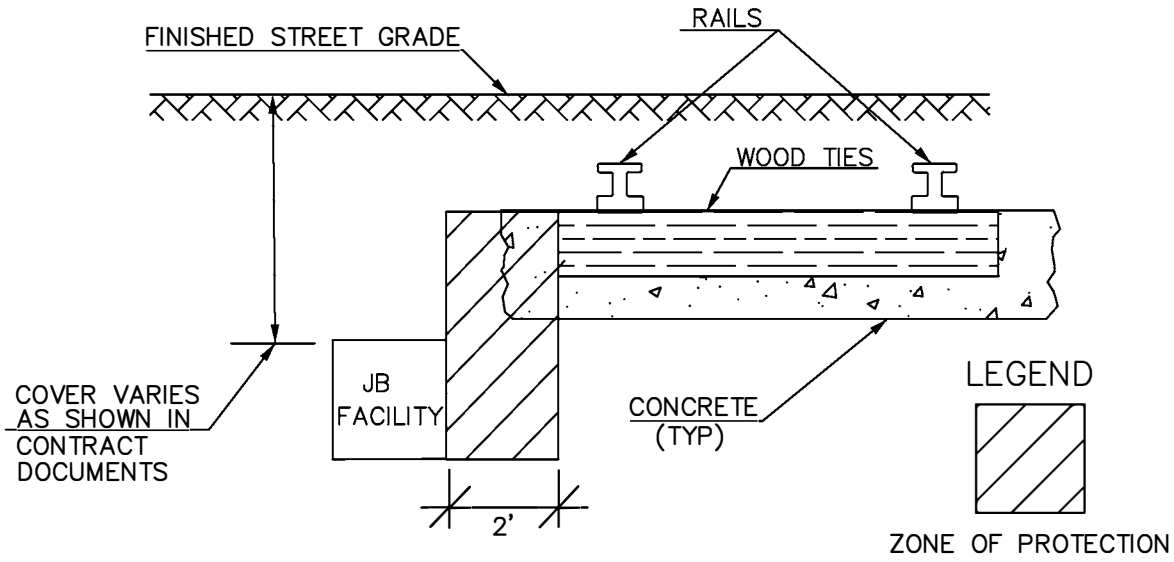
The unit price shall also include any additional cutting, removing and disposing of roadway materials; hand or machine excavation; trucking and disposing of excavated materials, installation and removal of sheeting; and furnishing, installing and compacting backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The price shall also include means to ascertain the numerical relationship between utility and the trolley structure, and the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to trolley demolition operations that are not performed in accordance with the specifications.

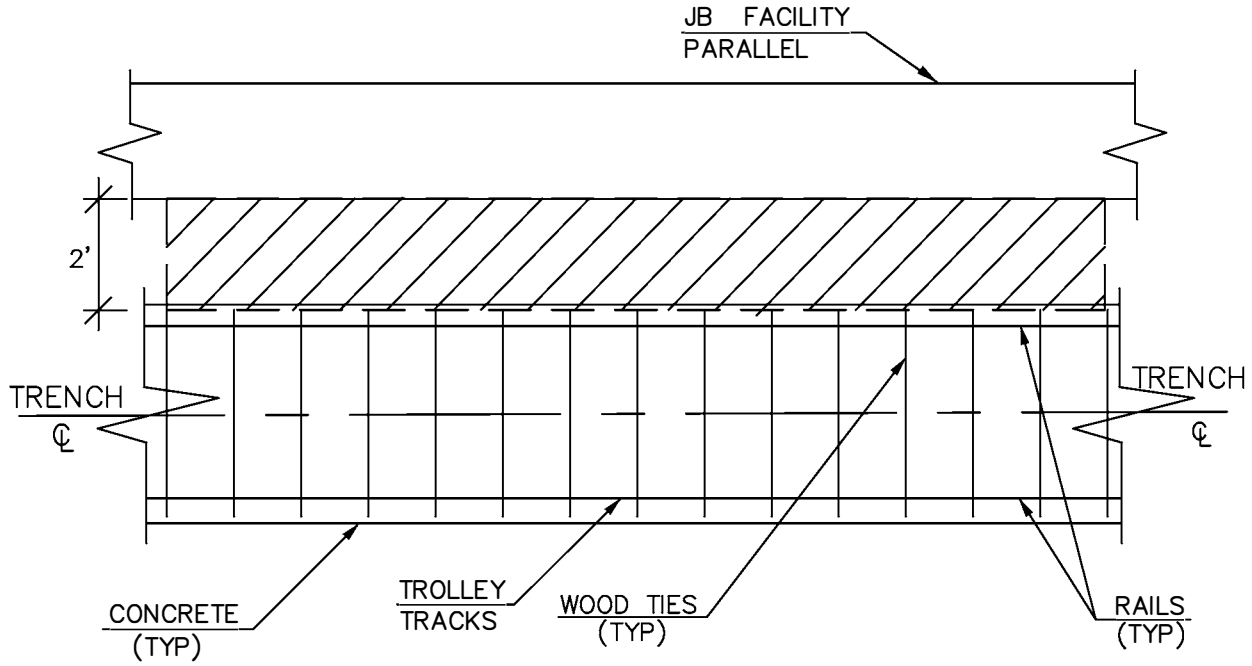
When this work is performed within a mass excavation area, a credit will be taken for the removed trolley structure.

F. References

1. NYS Industrial Code Rule 753
2. Sketch JB 799



SECTION OF JB FACILITIES PARALLELING TROLLEY TRACKS



PLAN OF JB FACILITIES PARALLELING TROLLEY TRACKS

NON CONCRETE YOKE

J.B. SKETCH

ACCOMODATION FACILITIES PARALLEL TROLLEY RAILROAD STRUCTURES

REVISIONS	CONTRACT NO.	SKETCH NO.
11/28/2018		JB 799

JB 800 - MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURES REMOVAL WHEN CROSSING UTILITY FACILITES

A. Description

This JB item shall only be applied to trolley structure systems that contain concrete yoke foundations. This JB item shall not be used for trolley systems that have rails and wood ties only.

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain and protect and accommodate the integrity of utility facilities that include but are not limited to:

1. Conduits
2. Conductors
3. Concrete encased conduit banks
4. Steel pipes
5. Oil-o-static facilities
6. Non-cost Sharing Gas Facilities and
7. Steam Facilities

of various sizes and configurations crossing trolley structures at various angles located within a zone of protection, as indicated on Sketch JB 800, during the removal of trolley structures and subsequent backfilling operations. Utility facilities that run parallel to trolley structures are not included within this item and will be paid for under the appropriate JB item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and directed by the facility operator.

B. Materials – N/A

C. Method of Construction

The Contractor shall maintain, protect, and accommodate the integrity of all utility facilities of various sizes and configurations crossing trolley structures within a zone of protection as indicated in Sketch JB 800, during removal of trolley structures and subsequent backfilling and compaction operations under other contract item(s). The facility operator shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility and ascertain the numerical relationships and/or dimensions of these utilities with respect to the proposed excavation. Contractor shall perform test pits to expose the utilities as specified under JB 400. Upon exposing the affected utilities sufficiently, and at the sole discretion of the facility operator to determine relationships and/or dimensions, the Contractor shall be permitted to proceed with hand held power tools to remove existing trolley structure within the zone of protection whose limit shall be defined as a perimeter located 24 inches from the outside face of each utility crossing.

D. Method of Measurement

The quantity to be measured for payment shall be the number of linear feet of modified trolley structure removal within the zone of protection as indicated on JB Sketch 800, measured along the centerline of trench. The trench is defined as one track set containing two rails. The zone of protection shall be defined, for the purpose of this agreement, as the boundary/area designated on the plans or a boundary/area 3 feet to either side of each of the designated facilities, based upon available records and/or information obtained from prior or new test pits, or any combination thereof. Where overlapping of the zones occurs due to multiple facilities, the boundary/area shall be modified to one zone measured from the outside limits. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

E. Price to Cover

The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain and protect and accommodate the integrity of utility facilities during the removal of trolley structures (including rails, timber ties, yokes, trolley conduits, main conduit, rail and yoke foundations), and backfilling and compacting within a zoned area designated for protection of utilities by the facility operator.

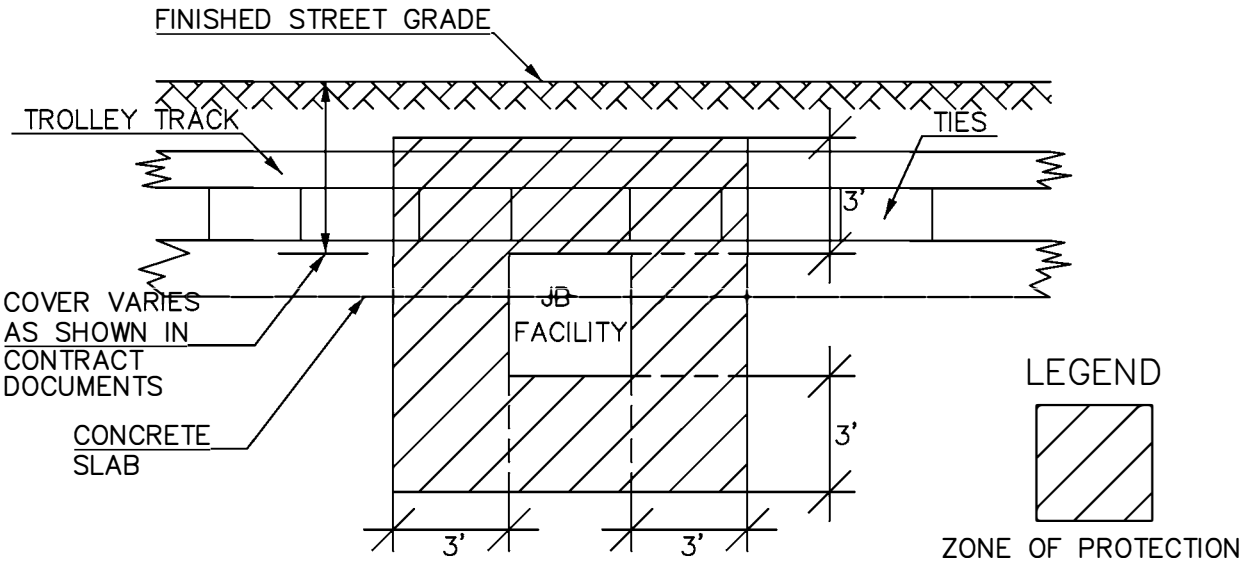
The unit price shall also include any additional cutting, removing and disposing of roadway materials; hand or machine excavation; trucking and disposing of excavated materials, installation and removal of sheeting; and furnishing, installing and compacting backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The unit price shall also include the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to trolley demolition operations that are not performed in accordance with the specifications.

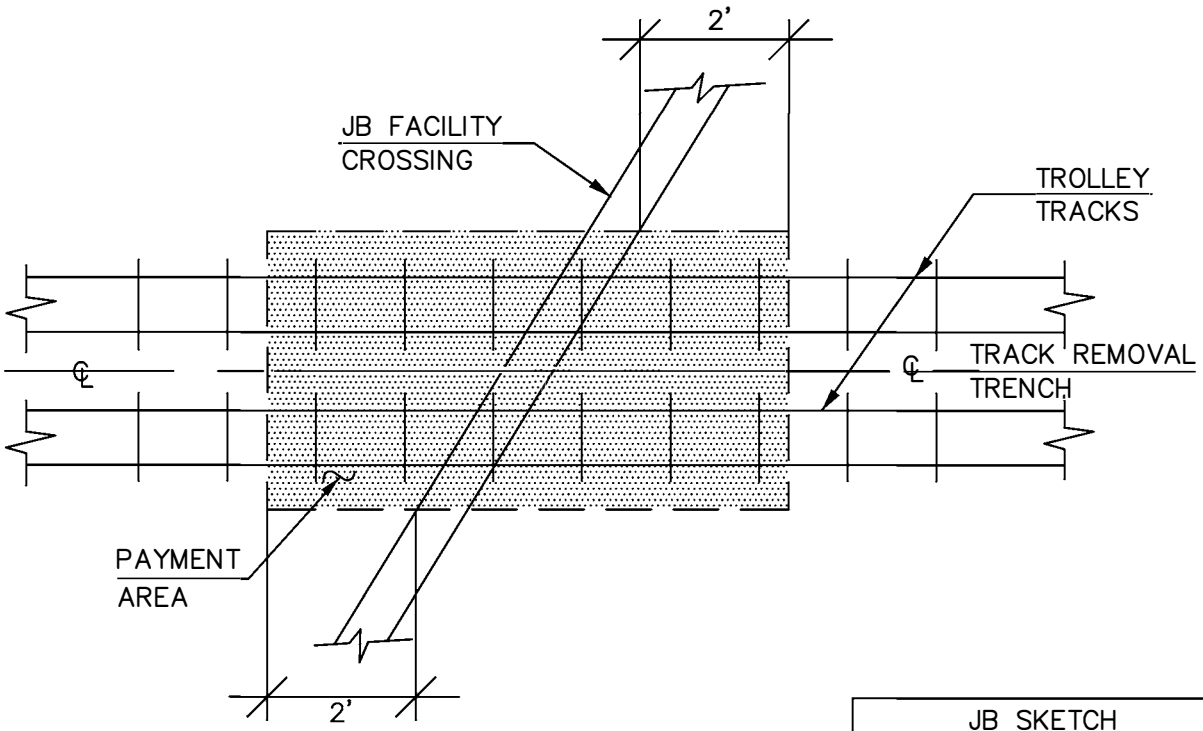
When this work is performed within a mass excavation area, a credit will be taken for the removed trolley structure.

F. References

1. NYS Industrial Code Rule 753
2. Sketch JB 800



SECTION OF JB FACILITIES CROSSING TROLLEY TRACKS



PLAN OF JB FACILITIES CROSSING TROLLEY TRACKS

JB SKETCH	
ACCOMODATION FACILITIES AT TROLLEY RAILROAD STRUCTURES	
REVISIONS	
11/28/2018	CONTRACT NO. / SKETCH NO. JB 800

JB 801 - MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURES REMOVAL PARALLEL TO UTILITY FACILITIES

A. Description

This JB item shall only be applied to trolley structure systems that contain concrete yoke foundations. This JB item shall not be used for trolley systems that have rails and wood ties only.

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities that include but are not limited to:

1. Conduits
2. Conductors
3. Concrete encased conduit banks
4. Steel pipes
5. Oil-o-static facilities
6. Non-cost sharing gas facilities and
7. Steam facilities

of various sizes and configurations paralleling or encroaching trolley structures located within a zone of protection, as indicated in sketch JB 801 or as directed by the field representative, during all trolley structure removal operations and subsequent backfilling operations. Utility facilities which cross over, under and between the trolley structures are not included within this item and will be paid for under the appropriate JB item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and directed by the facility operator(s).

B. Materials – N/A

C. Method of Construction

The Contractor shall maintain, protect, support and accommodate the integrity of all utility facilities of various sizes and configurations paralleling or encroaching trolley structures within a zone of protection as indicated in sketch 801 or as directed by the field representative, during removal of trolley structures and subsequent backfilling and compaction operations under other contract item(s). The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility and ascertain the numerical relationships and/or dimensions of these utilities with respect to the proposed excavation. Contractor shall perform test pits to expose the utilities as specified under JB 400. Upon exposing the affected utilities sufficiently, and at the sole discretion of the facility operator(s) to determine relationships and/or dimensions, the Contractor shall be permitted to proceed with hand held power tools to remove existing trolley structure within the zone of protection whose limit shall be defined as a perimeter located 24 inches from the outside face of each utility.

D. Method of Measurement

The quantity to be measured for payment shall be the number of linear feet of modified trolley structure removal within the zone of protection as indicated on the plans, measured along the centerline of trench. The trench is defined as one track set containing two rails. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

E. Price to Cover

The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities paralleling or encroaching trolley structures during the removal of trolley structures (including rails, timber ties, yokes, trolley conduits, main conduit, rail and yoke foundations), and backfilling and compacting within a zoned area designated for protection of utilities by the facility operator(s).

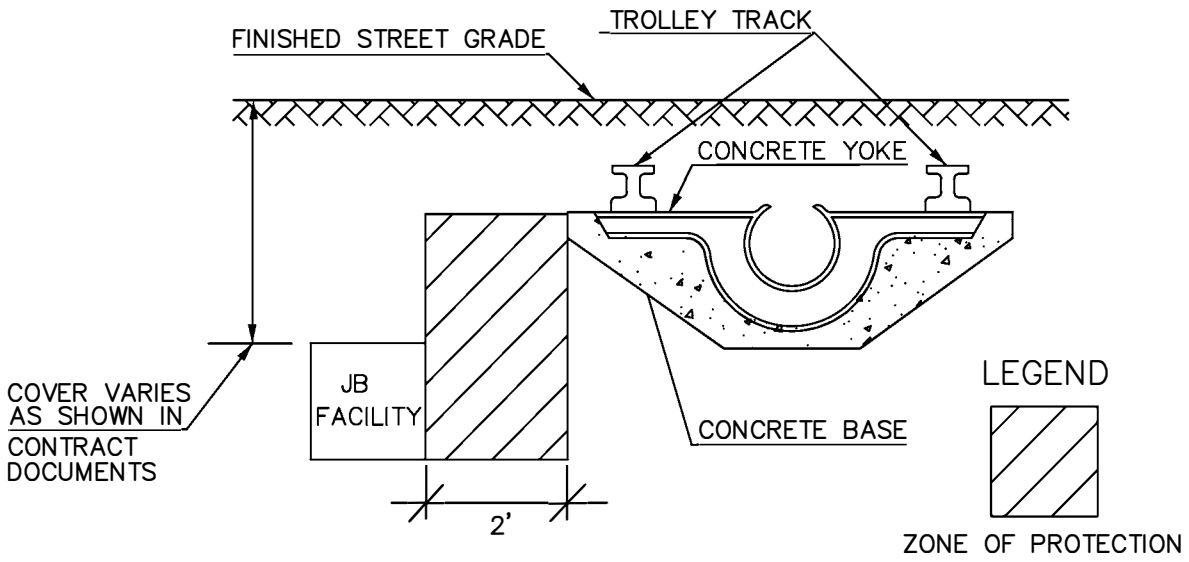
The unit price shall also include any additional cutting, removing and disposing of roadway materials; hand or machine excavation; trucking and disposing of excavated materials, installation and removal of sheeting; and furnishing, installing and compacting backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The unit price shall also include the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to trolley demolition operations that are not performed in accordance with the specifications.

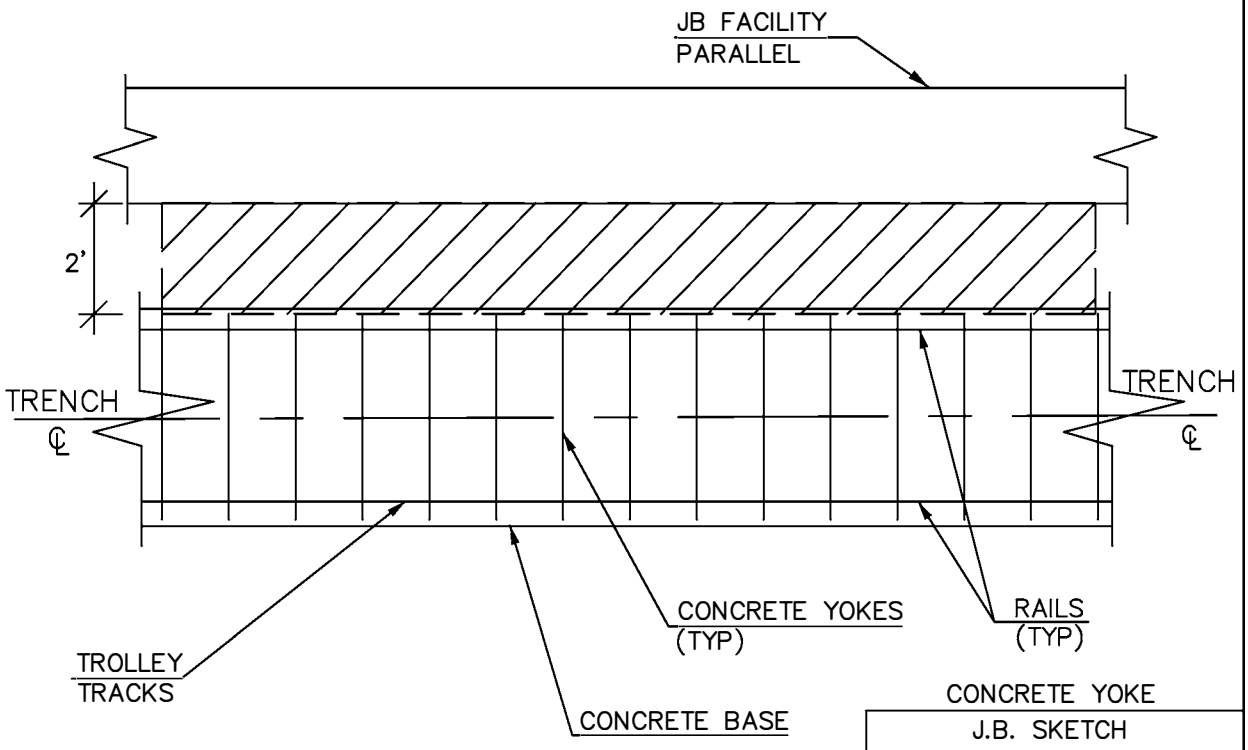
When this work is performed within a mass excavation area, a credit will be taken for the removed trolley structure.

F. References

1. NYS Industrial Code Rule 753
2. Sketch JB 801



SECTION OF JB FACILITIES PARALLELING TROLLEY TRACKS



PLAN OF JB FACILITIES PARALLELING TROLLEY TRACKS

J.B. SKETCH	
ACCOMODATION FACILITIES PARALLEL TROLLEY RAILROAD STRUCTURES	
REVISIONS	
11/28/2018	CONTRACT NO. / SKETCH NO. JB 801

JB 802 - SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW CURBS AND SIDEWALKS

A. Description

Under this Section, the Contractor shall be required to modify work methods of installing new curb and sidewalk in order to maintain, protect and accommodate the integrity of private Utility Facilities located within a zone of protection immediately beneath existing sidewalk and curb designated to be replaced under other Contract items. The zone of protection shall define an area of curb and sidewalk where: work is within the vicinity of private Utility Facilities as shown on the Special Care Excavation Plan or where utilities are encountered during construction that are within 18 inches of either face of curb and/or 12 inches of the base material of proposed curb and/or sidewalk.

B. Materials – N/A

C. Method of Operation/Construction

Once clearances have been verified by available records to the satisfaction of the facility operator, the Contractor shall exercise extreme caution to install new curb and sidewalks within zoned areas of protection. Exercising extreme caution shall mean utilizing appropriate methods of operation/construction, special operations and sequencing, and by employing hand labor, using hand held tools only, under the personal direction of the appropriate facility operator. The work shall incorporate, but not be limited by, the following restrictions:

1. Removal of Existing Curb and Sidewalk

Removal of existing curb and sidewalk material shall be performed by saw cutting the curb and sidewalk, for a depth of not less than 2", to assist the Contractor in breaking up the concrete curb and sidewalk for removal by hand. Curb and sidewalk removal shall be done with hand labor, using hand held tools only while working from adjacent undisturbed sidewalk and/or pavement. Furthermore, it shall be understood to mean that digging and/or excavating directly with power-mechanized earth moving equipment will not be permitted. Power mechanized earth moving equipment may only be used as a depository of material removed from the excavation by hand as described above. All equipment, methods, and maintenance and protection provisions shall require full authorization by the facility operator.

2. Preparation and Installation of New Curb and Temporary and New Sidewalk

Backfilling, filling, grading of sub base, and installation of new curb and both temporary and new sidewalk, as required under other Contract Items, shall be performed utilizing materials, equipment and methods of construction that will insure the integrity of the private utility facilities and at the same time meet all requirements for this work as specified in other sections of this contract.

3. Compaction

The Contractor shall compact all sub-grade and new sub-base materials by utilizing native and/or blended fill material, equipment and methods of construction that will ensure integrity of private Utility Facilities and at the same time meet all requirements for compaction as specified in Section 4.11 of the Standard Highway Specifications.

4. Powered Excavating Equipment Limitations

The Contractor shall not employ powered or mechanical excavating equipment within the zone of protection. Powered or mechanical excavating equipment may only be used as a depository for material removed from the excavation by hand as described above.

The Contractor shall not be permitted to store, stand and/or travel equipment/vehicles on specified unpaved zoned protection areas.

D. Method of Measurement

1. ITEM JB 802A

The quantity of "Special Care Excavation and Restoration for Sidewalk Work" to be measured for payment shall be the number of square feet (SF) of new sidewalk actually installed under other contract items within the zone of protection areas requested by the facility operator. For payment purposes, the horizontal limits for a zone of protection area shall be defined as the area designated on the plans or an area equal to the length of the designated facility multiplied by its width plus 18 inches on each side. Where overlapping of zones occur due to multiple facilities, the area will be modified to one zone measured from the outside limits. Where the 18-inch area falls beyond the curb line the outside boundary shall be the curb line.

2. ITEM JB 802B

The quantity of "Special Care Excavation and Restoration for Curb Work" to be measured for payment shall be equal to the number of linear feet (LF) of new curb actually installed under other contract items within the zone of protection areas requested by the facility operator.

E. Price to Cover

1. ITEM JB 802A

The contract price per square foot for "Special Care Excavation and Restoration for Sidewalk Work" shall be the incremental cost difference of all labor, materials, equipment, insurance and incidentals required for excavation and disposal of pavement, base and all other material to new sub-grade within and adjacent to zone of protection areas; saw cutting, grading, preparation of sub-grades, backfilling and compaction within zone of protection areas; all in accordance with the plans, the specifications and the directions of the facility operator. The price shall further include the cost of maintaining, protecting and accommodating the integrity of private Utility Facilities during the performance of sidewalk reconstruction (under other Contract Items) within zone of protection areas designated on the plans or as directed by the facility operator.

2. ITEM JB 802B

The contract price per linear foot for "Special Care Excavation and Restoration for Curb Work" shall be the incremental cost difference of all labor, materials, equipment, insurance and incidentals required to install new curbs and temporary restoration material under other Contract items, within and adjacent to zone of protection areas; all in accordance with the plans, the specifications and the directions of the facility operator. The price shall further include the cost of maintaining, protecting, and accommodating the integrity of private Utility Facilities during the performance of curb reconstruction (under other Contract Items) within zone of protection areas designated on the plans or as directed by the facility operator.

Payment for all work specified herein shall be made on a one-time basis only; no payment will be made for the same area of sidewalk or length of curb more than one time. In addition, work under these items shall not be paid in combination with other utility items.

F. References

1. Section 4.11 Standard Highway Specification

JB 803 - LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS

A. Description

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities that include but are not limited to oil o static facilities, and any other facilities of various sizes and configurations paralleling or crossing proposed saw cut areas located within a zone of protection associated with roadway removal operations, as determined by the utility operator. Utility facilities which cross under and between the saw cut area are included within this item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and determined by the facility operator(s).

B. Materials – N/A

C. Method of Construction

The Contractor shall maintain, protect, support and accommodate the integrity of all utility facilities of various sizes and configurations paralleling or crossing the saw cut area within a zone of protection as determined by the Facility Operator, during the roadway saw cut. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use pneumatic tools to line cut the pavement in lieu of saw cut by machine. It is the sole discretion of the facility operator(s) to determine relationships and/or dimensions, and advise the Contractor to proceed with pneumatic tools to line cut existing roadway structure.

D. Method of Measurement

The quantity to be measured for payment shall be the number of linear feet of line cut performed by pneumatic tools measured along the length of cut. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

JB 803.1 Line cut Asphalt Roadway (LF)
JB 803.2 Line cut any combination of Asphalt and Concrete Roadway (LF)
JB 803.3 Line cut any combination of Asphalt, Concrete, and Belgium Block (LF)

E. Price to Cover

The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities paralleling or crossing the saw cut area associated with the removal of roadway designated for protection of utilities by the facility operator(s).

The unit price shall also include any additional cutting, removing and disposing of roadway materials; and any backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The price shall also include the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to saw cutting operations that are not performed in accordance with the specifications.

F. References

1. NYS Industrial Code Rule 753

JB 850 (CUSTOM – HWMWTCA7E) - Placing Rubber Sheets for Utility Facilities

A. Description

Under this Section, the Contractor shall place permanent Rubber Sheets supplied by the facility operator(s) to protect utility facilities where directed by the facility operator(s) in consultation with the Resident Engineer.

B. Materials

Materials shall be supplied and delivered by the facility operator(s) at the job site or Construction Yard as directed by the Contractor.

C. Method of Construction

Rubber Sheets shall be placed in accordance with the attached facility operator(s) Specification for the Installation of High Pressure Pipe For 69, 138 and 345 kV Cable Systems, CE-TS-3352, under section 1.2.4.

D. Method of Measurement

The quantity for payment shall be the area of permanent rubber sheets installed and measured in Square Feet (S.F.). Each rubber sheet is typically 1/2" thick, 48" wide by 18' long.

E. Price to Cover

The unit price bid shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to complete the work.

F. References

1. Specification for the Installation of High Pressure Pipe For 69, 138 and 345 kV Cable Systems, CE-TS-3352.

LISTING OF COMPANIES NAMED FOR THIS CONTRACT

COMPANY NAME	CONTACT NAME	CONTACT TELEPHONE	E-MAIL
The Consolidated Edison Company of New York, Inc. (“Coned”)	Dennis Brady	917-608-3435	BradyD@Coned.com
Empire City Subway Company, LTD	Aubrey Markhanlall	516-758-3705	Aubrrey.n.makhanlall@verizon.com
Altice USA, Inc, (“Altice”)	Al Clark	516-315-1754	Al.clark@alticeusa.com

JOINT BID WORKSHEET

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

MASTER JB LIST

ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE

FOR CONSOLIDATED EDISON OF NEW YORK, INC.

JOINT BID ITEM NUMBER	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY
JB 108.1	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	EA.	6.0
JB 108.2	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	EA.	6.0
JB 109.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	EA.	8.0
JB 109.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	EA.	8.0
JB 111.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)	EA.	3.0
JB 111.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)	EA.	3.0
JB 225.1A	INSTALLATION AND/OR REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	22.0
JB 225.2A	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	17.0
JB 225.3A	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	5.0
JB 300A	SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG)	C.Y.	507.0
JB 300.1	SPECIAL CARE EXCAVATION & BACKFILLING IN TRENCH LESS THAN 5' DEEP	C.Y.	232.0
JB 303	FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL	C.Y.	1800.0
JB 330E	SUPPORT AND PROTECTION OF UTILITY FACILITIES DURING EXCAVATION	L.F.	707.0
JB 330G	SUPPORTS FOR PARALLEL FULLY EXPOSED GAS MAINS IN TRENCH	EA.	82.0
JB 400	TEST PITS FOR UTILITY FACILITIES	C.Y.	666.0
JB 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	C.Y.	280.0
JB 402.1	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	250.0
JB 402.1A	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	250.0
JB 402.2	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	250.0
JB 402.2A	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	250.0
JB 405.1	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	C.Y.	400.0
JB 405.2	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRING SHEETING	C.Y.	50.0
JB 406	EXCAVATION FOR UTILITY STRUCTURE	C.Y.	30.0
JB 410.1	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% (TYPE .1)	C.Y.	245.0
JB 410.2	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% (TYPE .2)	C.Y.	245.0
JB 450.1	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	Crhrs.	350.0
JB 450.2	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	Crhrs.	190.0
JB 450.3	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	Crhrs.	870.0
JB 636 EB	ADJUSTMENT OF UTILITY HARDWARE (7" TO UNDER 14" WIDTH)	EA.	2.0
JB 636 EE	ADJUSTMENT OF UTILITY HARWARE (34" TO UNDER 41" WIDTH)	EA.	3.0
JB 636 EH	ADJUSTMENT OF UTILITY HARWARE (75" TO UNDER 125" WIDTH)	EA.	2.0

JOINT BID WORKSHEET

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

MASTER JB LIST

ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE

FOR CONSOLIDATED EDISON OF NEW YORK, INC.

JOINT BID ITEM NUMBER	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY
JB 700.0	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	C.Y.	84.0
JB 802A	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	S.F.	2703.0
JB 802B	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	L.F.	156.0

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK
SUPPORT & PROTECTION
HED562
EAST 233 ST TRUNK
WATER MAIN INSTALLATION

JB 108.1 **UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN GRENADA PLACE AND BAYCHESTER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 108.1 = 6.00

JB 108.2 **UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN GRENADA PLACE AND BAYCHESTER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 108.2 = 6.00

JB 109.1 **UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN GRENADA PLACE AND BAYCHESTER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 109.1 = 8.00

JB 109.2 **UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN GRENADA PLACE AND BAYCHESTER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 109.2 = 8.00

JB 111.1 **UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN GRENADA PLACE AND BAYCHESTER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 111.1 = 3.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK
SUPPORT & PROTECTION
HED562
EAST 233 ST TRUNK
WATER MAIN INSTALLATION

JB 111.2 **UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN GRENADA PLACE AND BAYCHESTER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 111.2 = 3.00

JB 225.1A **INSTALLATION AND/OR REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 225.1A = 22.00

JB 225.2A **INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 225.2A = 17.00

JB 225.3A **REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 225.3A = 5.00

JB 300A **SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG)** **C.Y.**

At the following locations:

BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 232 ST
AT VARIOUS LOCATIONS

Total quantity for JB 300A = 507.00

JB 300.1 **SPECIAL CARE EXCAVATION & BACKFILLING IN TRENCH LESS THAN 5' DEEP** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 300.1 = 232.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK
SUPPORT & PROTECTION
HED562
EAST 233 ST TRUNK
WATER MAIN INSTALLATION

JB 303 **FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 303 = 1800.00

JB 330E **SUPPORT AND PROTECTION OF UTILITY FACILITIES DURING EXCAVATION** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 330E = 707.00

JB 330G **SUPPORTS FOR PARALLEL FULLY EXPOSED GAS MAINS IN TRENCH** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 330G = 82.00

JB 400 **TEST PITS FOR UTILITY FACILITIES** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 400 = 666.00

JB 401 **TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 401 = 280.00

JB 402.1 **EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 402.1 = 250.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK

SUPPORT & PROTECTION

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

JB 402.1A **EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 402.1A = 250.00

JB 402.2 **EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 402.2 = 250.00

JB 402.2A **EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 402.2A = 250.00

JB 405.1 **TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 405.1 = 400.00

JB 405.2 **TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRING SHEETING** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 405.2 = 50.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK
SUPPORT & PROTECTION
HED562
EAST 233 ST TRUNK
WATER MAIN INSTALLATION

JB 406 **EXCAVATION FOR UTILITY STRUCTURE** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 406 = 30.00

JB 410.1 **MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% (TYPE .1)** **C.Y.**

At the following locations:

INTERSECTION OF EAST 233 STREET AND BRONXWOOD AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 410.1 = 245.00

JB 410.2 **MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% (TYPE .2)** **C.Y.**

At the following locations:

INTERSECTION OF EAST 233 STREET AND BRONXWOOD AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 410.2 = 245.00

JB 450.1 **CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)** **Crhrs.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 450.1 = 350.00

JB 450.2 **CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)** **Crhrs.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 450.2 = 190.00

JB 450.3 **CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)** **Crhrs.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 450.3 = 870.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK
SUPPORT & PROTECTION
HED562
EAST 233 ST TRUNK
WATER MAIN INSTALLATION

JB 636 EB **ADJUSTMENT OF UTILITY HARDWARE (7" TO UNDER 14" WIDTH)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 636 EB = 2.00

JB 636 EE **ADJUSTMENT OF UTILITY HARWARE (34" TO UNDER 41" WIDTH)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 636 EE = 3.00

JB 636 EH **ADJUSTMENT OF UTILITY HARWARE (75" TO UNDER 125" WIDTH)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 636 EH = 2.00

JB 700.0 **SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 700.0 = 84.00

JB 802A **SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK** **S.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 802A = 2703.00

JB 802B **SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
AT VARIOUS LOCATIONS

Total quantity for JB 802B = 156.00

JOINT BID WORKSHEET

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

SPECIALTY ITEMS

ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE

FOR CONSOLIDATED EDISON OF NEW YORK, INC.

JOINT BID ITEM NUMBER	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY
JB 610.36	36" DIAMETER STEEL GAS PIPE	L.F.	180.00
JB 611.36	36" DIAMETER STEEL GAS PIPE FITTING	EA.	20.00
JB 615.8	8" DIAMETER PLASTIC GAS PIPE	L.F.	104.00
JB 615.9	12" DIAMETER PLASTIC GAS PIPE	L.F.	544.00
JB 615.16	16" DIAMETER PLASTIC GAS PIPE	L.F.	471.00
JB 616.1	1" DIAMETER PLASTIC GAS PIPE FITTING	EA.	35.00
JB 616.7	6" DIAMETER PLASTIC GAS PIPE FITTING	EA.	20.00
JB 616.8	8" DIAMETER PLASTIC GAS PIPE FITTING	EA.	56.00
JB 616.9	12" DIAMETER PLASTIC GAS PIPE FITTING	EA.	56.00
JB 616.16	16" DIAMETER PLASTIC GAS PIPE FITTING	EA.	105.00
JB 850	PLACING RUBBER SHEETS FOR UTILITY FACILITIES	S.F.	300.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK - SPECIALTY ITEMS

SUPPORT & PROTECTION

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

JB 610.36 **36" DIAMETER STEEL GAS PIPE** **L.F.**

At the following locations:

BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 610.36 = 180.00

JB 611.36 **36" DIAMETER STEEL GAS PIPE FITTING** **EA.**

At the following locations:

BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 611.36 = 20.00

JB 615.8 **8" DIAMETER PLASTIC GAS PIPE** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 615.8 = 104.00

JB 615.9 **12" DIAMETER PLASTIC GAS PIPE** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 615.9 = 544.00

JB 615.16 **16" DIAMETER PLASTIC GAS PIPE** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 615.16 = 471.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK - SPECIALTY ITEMS

SUPPORT & PROTECTION

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

JB 616.1 **1" DIAMETER PLASTIC GAS PIPE FITTING** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 616.1 = 35.00

JB 616.7 **6" DIAMETER PLASTIC GAS PIPE FITTING** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 616.7 = 20.00

JB 616.8 **8" DIAMETER PLASTIC GAS PIPE FITTING** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 616.8 = 56.00

JB 616.9 **12" DIAMETER PLASTIC GAS PIPE FITTING** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 616.9 = 56.00

JB 616.16 **16" DIAMETER PLASTIC GAS PIPE FITTING** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 616.16 = 105.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK - SPECIALTY ITEMS

SUPPORT & PROTECTION

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

JB 850 **PLACING RUBBER SHEETS FOR UTILITY FACILITIES** **S.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for JB 850 = 300.00

JOINT BID WORKSHEET

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

CITY ACCOMODATION ITEMS

ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE

FOR CONSOLIDATED EDISON OF NEW YORK, INC.

JOINT BID ITEM NUMBER	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY
4.02 AF-R	ASPHALTIC WEARING COURSE, 2" THICK	S.Y.	287.0
4.02 CA	BINDER MIXTURE	TONS.	21.0
4.02AG	ASPHALTIC CONCRETE WEARING COURSE, 3" THICK	S.Y.	287.0
4.04 H	CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH EARLY STRENGTH)	C.Y.	52.0
4.09AE	STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)	L.F.	96.0
4.09CE	CURVED STEEL FACED CONCRETE CURB (21" DEEP)	L.F.	60.0
4.13AAS	4" CONCRETE SIDEWALK (UNPIGMENTED)	S.F.	2203.0
4.13BAS	7" CONCRETE SIDEWALK (UNPIGMENTED)	S.F.	500.0
4.16 AA	TREES REMOVED (4" TO UNDER 12" CALIPER)	EA.	1.0
4.16 CA	TREES PLANTED, 3" TO 3 1/2" CALIPER ALL TYPES	EA.	3.0
65.71SG	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR BROKEN STONE BEDDING	C.Y.	80.0

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK - CITY ACCOMODATION ITEMS

SUPPORT & PROTECTION

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

4.02 AF-R **ASPHALTIC WEARING COURSE, 2" THICK** **S.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.02 AF-R = 287.00

4.02 CA **BINDER MIXTURE** **TONS.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.02 CA = 21.00

4.02AG **ASPHALTIC CONCRETE WEARING COURSE, 3" THICK** **S.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.02AG = 287.00

4.04 H **CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH EARLY STRENGTH)** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.04 H = 52.00

4.09AE **STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.09AE = 96.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK - CITY ACCOMODATION ITEMS

SUPPORT & PROTECTION

HED562

EAST 233 ST TRUNK

WATER MAIN INSTALLATION

4.09CE **CURVED STEEL FACED CONCRETE CURB (21" DEEP)** **L.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.09CE = 60.00

4.13AAS **4" CONCRETE SIDEWALK (UNPIGMENTED)** **S.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.13AAS = 2203.00

4.13BAS **7" CONCRETE SIDEWALK (UNPIGMENTED)** **S.F.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.13BAS = 500.00

4.16 AA **TREES REMOVED (4" TO UNDER 12" CALIPER)** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.16 AA = 1.00

4.16 CA **TREES PLANTED, 3" TO 3 1/2" CALIPER ALL TYPES** **EA.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 4.16 CA = 3.00

65.71SG **FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR BROKEN STONE BEDDING** **C.Y.**

At the following locations:

EAST 233 STREET BETWEEN BRONXWOOD AVENUE AND DE REIMER AVENUE
BRONXWOOD AVENUE BETWEEN BUSSING AVENUE AND EAST 233 ST
AT VARIOUS LOCATIONS

Total quantity for 65.71SG = 80.00

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Schedule JB: Engineer's Estimate for Joint Bid Item Quantity

JB ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
JB 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .1)	EACH	5
JB 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .2)	EACH	7
JB 101.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	EACH	7
JB 101.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	EACH	3
JB 101.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	EACH	2
JB 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	EACH	3
JB 102.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .2)	EACH	2
JB 108.1	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	EACH	4
JB 108.2	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	EACH	4
JB 109.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	EACH	10
JB 109.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	EACH	4
JB 109.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	EACH	2
JB 111.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)	EACH	8
JB 111.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)	EACH	3
JB 111.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)	EACH	2
JB 200	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	80
JB 225.1A	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EACH	2
JB 225.2A	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EACH	2

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Schedule JB: Engineer's Estimate for Joint Bid Item Quantity

JB 300.1	SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH LESS THAN 5' DEEP	C.Y.	7
JB 300.2	SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH GREATER THAN 5' DEEP	C.Y.	10
JB 330T1	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED CITY TRENCH	L.F.	150
JB 330T2.1	COMMUNICATIONS FACILITY OPERATOR(S) REQUESTS THE TRENCH BE WIDENED	L.F.	100
JB 330T2.2	COMMUNICATION FACILITY OPERATOR(S) REQUESTS THE TRENCH / SHEETING BE MODIFIED	L.F.	16
JB 351	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	EACH	2
JB 400	TEST PITS FOR UTILITY FACILITIES	C.Y.	30
JB 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	C.Y.	488
JB 402T.1A	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	3500
JB 402T.V1A	EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	1050
JB 402T.3	ACM REMOVAL AND DISPOSAL OF VERIZON/ECS CONDUITS WITH ASBESTOS CONTAINING MATERIAL TRANSITE PIPES (ACM-TP) UP TO AND INCLUDING 4” DIAMETER	L.F.	25
JB 450.3	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	CREW/HR	100
JB 711	USE SHEETING LINE AS FORM	L.F.	30
JB 803.2	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS (LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY)	L.F.	100

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Schedule JB: Scope of Work for Joint Bid Items

JB 100.1

UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .1)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
SWC OF INT OF E233RD STREET AND LACONIA AVENUE	3
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1
JB 100.1 TOTAL	**5**

JB 100.2

UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .2)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	2
SWC OF INT OF E233RD STREET AND LACONIA AVENUE	2
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	2
JB 100.2 TOTAL	**7**

JB 101.1

UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
NEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	2
SWC OF INT OF E233RD STREET AND ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	2
JB 101.1 TOTAL	**7**

JB 101.2

UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
SWC OF INT OF E233RD STREET AND LACONIA AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1
JB 101.2 TOTAL	**3**

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Schedule JB: Scope of Work for Joint Bid Items

JB 101.3

UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1

JB 101.3	TOTAL	2

JB 102.1

UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
NEC OF INT OF E233RD STREET AND BRUNER AVENUE	1
N SIDE OF INT OF E233RD STREET AND ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1

JB 102.1	TOTAL	3

JB 102.2

UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .2)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
W SIDE OF INT OF E233RD STREET AND ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1

JB 102.2	TOTAL	2

JB 108.1

UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
SWC OF INT OF E233RD STREET AND ELY AVENUE	1
NWC OF INT OF E233RD STREET AND STRANG AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1

JB 108.1	TOTAL	4

JB 108.2

UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
SWC OF INT OF E233RD STREET AND LACONIA AVENUE	1
NWC OF INT OF E233RD STREET AND STRANG AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1

JB 108.2	TOTAL	4

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Schedule JB: Scope of Work for Joint Bid Items

JB 109.1

UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	2
NEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	3
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
NEC OF INT OF E233RD STREET AND BRUNER AVENUE	1
N SIDE OF INT OF E233RD STREET AND ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	2
JB 109.1 TOTAL	**10**

JB 109.2

UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
SEC OF INT OF E233RD STREET AND LACONIA AVENUE	1
NWC OF INT OF E233RD STREET AND ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1
JB 109.2 TOTAL	**4**

JB 109.3

UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1
JB 109.3 TOTAL	**2**

JB 111.1

UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	3
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
NEC OF INT OF E233RD STREET AND BRUNER AVENUE	1
SWC OF INT OF E233RD STREET AND ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	2
JB 111.1 TOTAL	**8**

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Schedule JB: Scope of Work for Joint Bid Items

JB 111.2

UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
N SIDE OF E233RD STREET BTWN LACONIA AVENUE AND ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1
JB 111.2 TOTAL	**3**

JB 111.3

UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1
JB 111.3 TOTAL	**2**

JB 200

EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES

@ THE FOLLOWING LOCATIONS

	QTY(L.F.)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	14
SWC OF INT OF E233RD STREET AND LACONIA AVENUE	50
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	16
JB 200 TOTAL	**80**

JB 225.1A

INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
SWC OF INT OF E233RD STREET AND LACONIA AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1
JB 225.1A TOTAL	**2**

JB 225.2A

INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1
JB 225.2A TOTAL	**2**

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Schedule JB: Scope of Work for Joint Bid Items

JB 300.1

SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH LESS THAN 5' DEEP

@ THE FOLLOWING LOCATIONS

	QTY(C.Y.)
NWC OF INT OF E233RD STREET AND STRANG AVENUE	5
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	2
JB 300.1 TOTAL	**7**

JB 300.2

SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH GREATER THAN 5' DEEP

@ THE FOLLOWING LOCATIONS

	QTY(C.Y.)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	10
JB 300.2 TOTAL	**10**

JB 330T1

SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED CITY TRENCH

@ THE FOLLOWING LOCATIONS

	QTY(L.F.)
NEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	10
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	50
NWC OF INT OF E233RD STREET AND STRANG AVENUE	60
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	30
JB 330T1 TOTAL	**150**

JB 330T2.1

COMMUNICATIONS FACILITY OPERATOR(S) REQUESTS THE TRENCH BE WIDENED

@ THE FOLLOWING LOCATIONS

	QTY(L.F.)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	100
JB 330T2.1 TOTAL	**100**

JB 330T2.2

COMMUNICATION FACILITY OPERATOR(S) REQUESTS THE TRENCH / SHEETING BE MODIFIED

@ THE FOLLOWING LOCATIONS

	QTY(L.F.)
NWC OF INT OF E233RD STREET AND STRANG AVENUE	8
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	8
JB 330T2.2 TOTAL	**16**

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Schedule JB: Scope of Work for Joint Bid Items

JB 351

INSTALL AND REMOVE "A" FRAME ON UTILITY POLES

@ THE FOLLOWING LOCATIONS

	QTY(EACH)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	2
JB 351 TOTAL	**2**

JB 400

TEST PITS FOR UTILITY FACILITIES

@ THE FOLLOWING LOCATIONS

	QTY(C.Y.)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	30
JB 400 TOTAL	**30**

JB 401

TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES

@ THE FOLLOWING LOCATIONS

	QTY(C.Y.)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	40
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	93
W SIDE OF INT OF BRONXWOOD AVENUE BTWN E 233RD STREET & E 232ND STREET	143
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	112
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	100
JB 401 TOTAL	**488**

JB 402T.1A

EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT

@ THE FOLLOWING LOCATIONS

	QTY(L.F.)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	480
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	800
W SIDE OF INT OF BRONXWOOD AVENUE BTWN E 233RD STREET & E 232ND STREET	1320
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	200
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	700
JB 402T.1A TOTAL	**3500**

JB 402T.V1A

EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT

@ THE FOLLOWING LOCATIONS

	QTY(L.F.)
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	400
W SIDE OF INT OF BRONXWOOD AVENUE BTWN E 233RD STREET & E 232ND STREET	440
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	210
JB 402T.V1A TOTAL	**1050**

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Schedule JB: Scope of Work for Joint Bid Items

JB 402T.3

ACM REMOVAL AND DISPOSAL OF VERIZON/ECS CONDUITS WITH ASBESTOS CONTAINING MATERIAL TRANSITE PIPES (ACM-TP) UP TO AND INCLUDING 4" DIAMETER

@ THE FOLLOWING LOCATIONS

	L.F.
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	25

JB 402T.3 **TOTAL** **25**

JB 450.3

CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)

@ THE FOLLOWING LOCATIONS

	QTY(CREW/HR)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	100

JB 450.3 **TOTAL** **100**

JB 711

USE SHEETING LINE AS FORM

@ THE FOLLOWING LOCATIONS

	QTY(L.F.)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	30

JB 711 **TOTAL** **30**

JB 803.2

LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS (LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY)

@ THE FOLLOWING LOCATIONS

	QTY(L.F.)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	100

JB 803.2 **TOTAL** **100**

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Engineer's Estimate for Specialty Item Quantity with Prices

JB ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
51.42S1SO	INCREMENTAL COST OF STANDARD CATCH BASIN TYPE 3 WITH CURB PIECE IN LIEU OF STANDARD CATCH BASIN TYPE 1	EACH	1

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Scope of Work for Specialty Items

51.42S1SO
INCREMENTAL COST OF STANDARD CATCH BASIN TYPE 3 WITH CURB PIECE IN LIEU OF STANDARD CATCH BASIN TYPE 1

@ THE FOLLOWING LOCATIONS

	EACH
NWC INT OF E 233RD STREET & BRONXWOOD AVENUE	1
51.42S1SO TOTAL	**1**

ECS **JUNE 2024**

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Bid Item Accomodation Estimate

ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
4.02 AF-R	ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	QTY(SY)	311
4.02 CA	BINDER MIXTURE	QTY(TON)	11
4.04 H	CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS, FOR TRENCH RESTORATION (HIGH EARLY STRENGTH)	QTY(CY)	85
6.02 AAN	UNCLASSIFIED EXCAVATION	QTY(CY)	2
60.11R612	FURNISHING AND DELIVERING ADDL 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	QTY(LF)	3
60.12D12	LAYING ADDL 12-INCH DUCTILE IRON PIPE AND FITTINGS	QTY(LF)	5
65.31FF	FURNISHING, DELIVERING AND PLACING FILTER FABRIC	QTY(SF)	28
70.81CB	CLEAN BACKFILL	QTY(CY)	2

HED562
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
Borough of The Bronx
Bid Item Accommodation Scope

4.02 AF-R
ASPHALTIC CONCRETE WEARING COURSE, 2" THICK
@ THE FOLLOWING LOCATIONS

	QTY(SY)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	22
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	56
W SIDE OF INT OF BRONXWOOD AVENUE BTWN E 233RD STREET & e 232ND STREET	61
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	111
NWC INT OF STRANG AVENUE & ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	60
4.02 AF-R **TOTAL**	**311**

4.02 CA
BINDER MIXTURE
@ THE FOLLOWING LOCATIONS

	QTY(TON)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	4
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	10
W SIDE OF INT OF BRONXWOOD AVENUE BTWN E 233RD STREET & e 232ND STREET	10
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	19
NWC INT OF STRANG AVENUE & ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	10
4.02 CA **TOTAL**	**11**

4.04 H

CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS, FOR TRENCH RESTORATION (HIGH EARLY STRENGTH)
@ THE FOLLOWING LOCATIONS

	QTY(CY)
NWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	6
SWC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	14
W SIDE OF INT OF BRONXWOOD AVENUE BTWN E 233RD STREET & e 232ND STREET	16
SEC OF INT OF E233RD STREET AND BRONXWOOD AVENUE	28
NWC INT OF STRANG AVENUE & ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	20
4.04 H **TOTAL**	**85**

6.02 AAN
UNCLASSIFIED EXCAVATION
@ THE FOLLOWING LOCATIONS

	QTY(CY)
NWC INT OF STRANG AVENUE & ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1
6.02 AAN **TOTAL**	**2**

60.11R612

FURNISHING AND DELIVERING ADDL 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)

@ THE FOLLOWING LOCATIONS

	QTY(LF)
NWC INT OF STRANG AVENUE & ELY AVENUE	2
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1

60.11R612	**TOTAL**	**3**

60.12D12

LAYING ADDL 12-INCH DUCTILE IRON PIPE AND FITTINGS

@ THE FOLLOWING LOCATIONS

	QTY(LF)
NWC INT OF STRANG AVENUE & ELY AVENUE	4
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1

60.12D12	**TOTAL**	**5**

65.31FF

FURNISHING, DELIVERING AND PLACING FILTER FABRIC

@ THE FOLLOWING LOCATIONS

	QTY(SF)
NWC INT OF STRANG AVENUE & ELY AVENUE	22
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	6

65.31FF	**TOTAL**	**28**

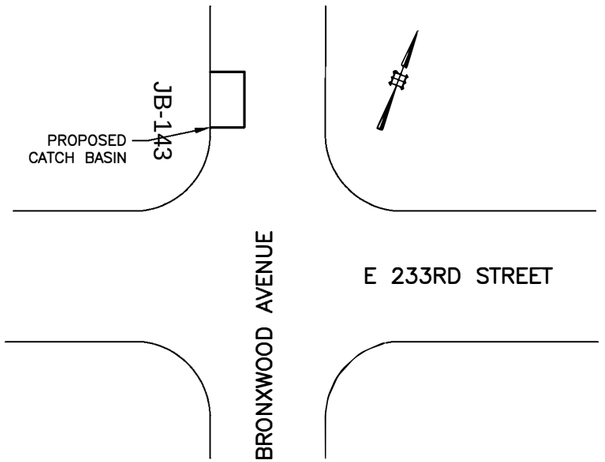
70.81CB

CLEAN BACKFILL

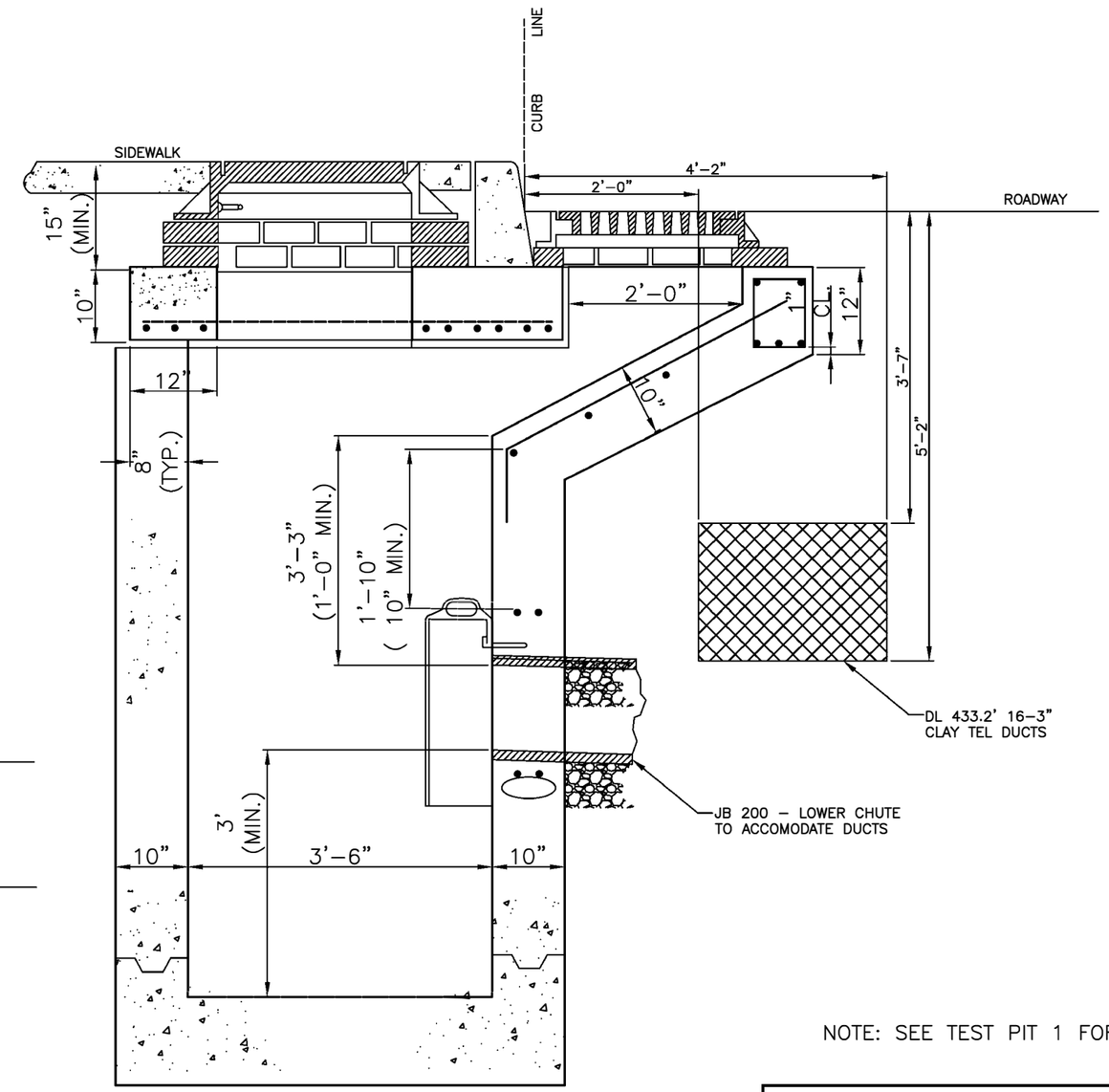
@ THE FOLLOWING LOCATIONS

	QTY(CY)
NWC INT OF STRANG AVENUE & ELY AVENUE	1
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	1

70.81CB	**TOTAL**	**2**



LOCATION PLAN
(N.T.S)



(LOOKING NORTH)

NOTE: SEE TEST PIT 1 FOR MORE DETAILS.

EMPIRE CITY SUBWAY CO/LTD
A Verizon Company

LOCATION-1
(N.T.S)

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION

ECS TYPE-3 CATCH BASIN REQUEST

BRONXWOOD AVENUE & E 233RD STREET
BOROUGH OF THE BRONX

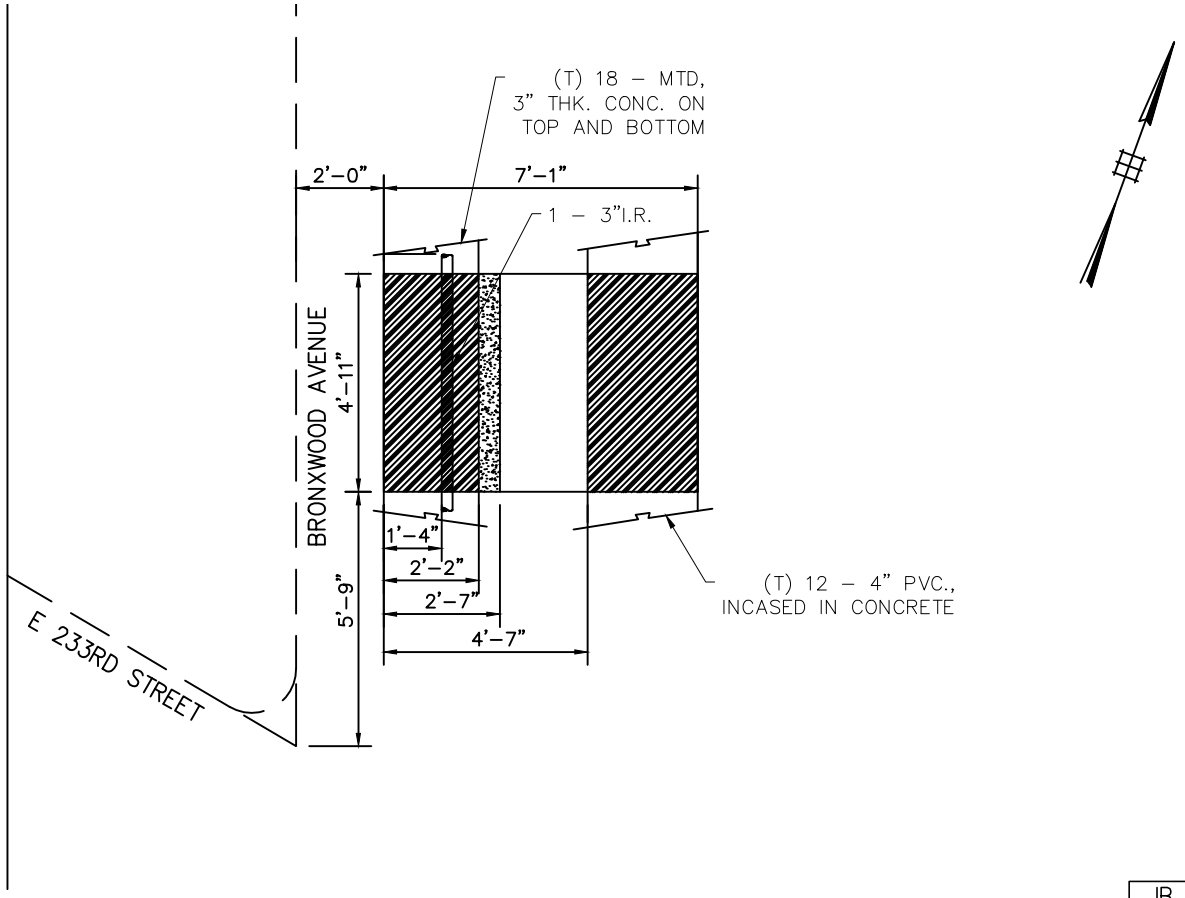
SHEET 1 OF 1	CONTRACT NO. HED562

EMPIRE CITY SUBWAY CO/LTD
A Verizon Company

JOB NO.: HED562
JOB: REPLACEMENT OFWATER MAINS AND SEWER ALONG E. 233RD ST

TEST PIT #: 1
TP DATE: 09/23/2016
INSPECTOR: W.I.

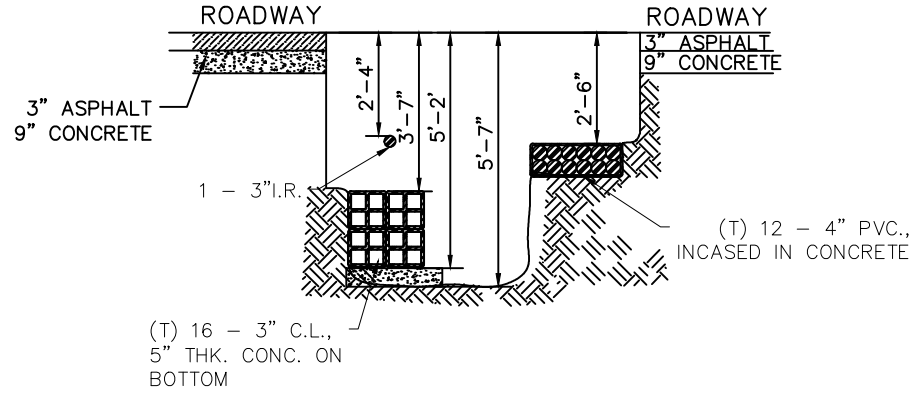
LOCATION: NORTHWEST CORNER OF BRONXWOOD AVENUE AND E 233RD STREET
PURPOSE: LOCATE EXISTING UNDERGROUND TELEPHONE FACILITIES
DIMENSION: 7'–1"x4'–11"x3'–10" VOLUME: 4.94 C.Y. SHEET NO. 1 OF 2



NOTE:
1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.

PLAN

JB ITEM
100.1
100.2
200
225.2A



SECTION LOOKING NORTH

HED562

UTILTY DRAWING LIST

GENERAL:

DRAWING TITLE	**DRAWING NO.**	**NO. OF SHEETS**
GENERAL NOTES AND CONDITION FOR UTILITY WORK	JB-U1	1

CON EDISON:

DRAWING TITLE	DRAWIN NO.	NO. OF SHEETS
Mass Excavation Area	JB-U2 TO JB-U3	2
Low Tension and Service Plans	JB-U4 TO JB-U10	7
Conduit and Duct Occupancy Plate	JB-U11 to JB-U17	7
Gas Mains and Service Plate	JB-U18 to JB-U24	7

VEIZON:

DRAWING TITLE	**DRAWIN NO.**	**NO. OF SHEETS**
Mainline Overhead	JB-U8 TO JB-U11	4
ECS Conduit Utililty Plate	JB-U12 To JB-13	2

TOTAL NUMBER OF CONTRACT DRAWING ATTACHED IS 29

GENERAL NOTES AND CONDITIONS

GENERAL

1. THE CONTRACTOR SHALL BE REQUIRED, WHEN WARRANTED BY FIELD CONDITIONS, AND AT LOCATIONS DESIGNATED BY THE RESIDENT OR BOROUGH ENGINEER, TO CHANGE THE VERTICAL OR HORIZONTAL ALIGNMENT OF WATER MAINS INCLUDING BUT NOT LIMITED TO ALL ADDITIONAL LABOR, FURNISHING, DELIVERING, AND LAYING OFFSET FITTINGS AND PIPES NECESSARY IN ORDER TO COMPLETE WATER MAIN INSTALLATION AND AVOID ELECTRIC, TELEPHONE, NON COST SHARING GAS, STEAM AND CABLE TV INTERFERENCES IN THE PROJECT AREA. SUCH WORK SHALL BE PERFORMED AS DIRECTED BY THE RESIDENT ENGINEER AND IN ACCORDANCE WITH CONTRACT SPECIFICATIONS AND LATEST EDITION OF THE BUREAU OF WATER SUPPLY STANDARD SPECIFICATIONS. SUCH WORK SHALL BE PAID UNDER APPROPRIATE CITY CONTRACT BID ITEMS AS DETERMINED BY THE RESIDENT ENGINEER.
2. EACH FACILITY OPERATOR SHALL PROVIDE INSPECTORS AT THE WORK SITE TO MONITOR AND INSPECT METHODS OF WORK INCLUDING THE MAINTENANCE AND SUPPORT AND RELOCATION OF UTILITY FACILITIES, VERIFY QUANTITIES AND ITEMS OF UTILITY WORK, COORDINATE ALL PHASES OF THE FACILITY OPERATOR'S OPERATIONS, AND PROVIDE GUIDANCE WITH RESPECT TO BOTH UTILITY INTERFERENCE AND RELOCATION WORK. THE CITY RESIDENT ENGINEER SHALL CONSULT WITH THE FACILITY OPERATOR AND SHALL HAVE COMPLETE AUTHORITY FOR THE ADMINISTRATION OF ALL WORK UNDER THE CONSTRUCTION CONTRACT.
3. ANY REQUESTS FOR ADDITIONAL AND/OR MODIFICATIONS TO THE MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) PLAN, FOR THE PRIVATE UTILITIES, SHALL REQUIRE THE APPROVAL OF THE RESIDENT ENGINEER IN CONSULTATION WITH THE FACILITY OPERATOR. MODIFICATIONS REQUIRED TO PERFORM JB ITEMS, INCLUDED THE UTILITY JOINT BID SCOPE OF WORK, BEYOND THOSE ESTABLISHED IN THE CONTRACT MPT PLAN IS DEEMED INCLUDED IN THE COSTS ASSOCIATED WITH THE APPLICABLE JB CONTRACT BID ITEM.
4. WHEN UTILITY FACILITIES LIE WITHIN OR AT THE LIMITS OF THE PROPOSED CITY TRENCH, THE CONTRACTOR SHALL MODIFY THE SHEETING METHOD, SUBJECT TO THE APPROVAL OF THE FACILITY OPERATOR AND THE RESIDENT ENGINEER. ALL WORK SHALL BE PERFORMED WITHOUT RISKING THE INTEGRITY OF THE UTILITY FACILITIES AND SHALL BE DONE IN ACCORDANCE WITH JB 330E AND ALL SAFETY STANDARDS AS DIRECTED BY THE FACILITY OPERATOR.
5. PAVEMENT RESTORATION FOR ANY CON EDISON WORK PERFORMED OUTSIDE THE CONTRACT LIMITS, SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNMENTAL AUTHORITY HAVING JURISDICTION. USING APPLICABLE BID ITEMS 4.02AG, 4.02CA, AND 4.04HD AS DIRECTED BY THE FACILITY OPERATOR IN CONSULTATION WITH THE RESIDENT ENGINEER.
6. OUTSIDE OF JB 100 SPECIFICATIONS, ANY SUPPORT DESIGN REQUIREMENT SHALL BE PROVIDED BY THE CITY CONTRACTOR AND APPROVED BY THE PRIVATE FACILITY OPERATORS.
7. WHEN OIL-O-STATIC LINES LIE WITHIN OR IN THE LIMITS OF THE PROPOSED MASS EXCAVATION, THE CONTRACTOR SHALL SUPPORT, PROTECT AND MAINTAIN THE OIL-O-STATIC LINES. THE SUPPORT OF THE OIL-O-STATIC LINES INCLUDING THE DESIGN OF THE SUPPORT SYSTEMS, WHICH ARE SUBJECT TO THE APPROVAL OF CON EDISON, SHALL BE INCLUDED IN THE JB 410 ITEM.
8. THE "DIGITAL DATE" IS AN INFORMATIONAL RECORD OF THE APPROXIMATE LOCATIONS OF THE FACILITIES OF CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. ("CON EDISON") BASED ON AVAILABLE RECORDS AND TESTING DATA. NO REPRESENTATION IS MADE AS TO THE ACCURACY OF THE LOCATIONS OF CON EDISON'S FACILITIES AS SHOWN ON THE DIGITAL DATA AND CON EDISON EXPRESSLY DISCLAIMS ANY AND ALL LIABILITY WITH RESPECT TO ANY INFORMATION INCLUDED IN THE DIGITAL DATA.

APPLICABLE CODES AND STANDARDS

1. WHERE DOCUMENTS ARE REFERENCED IN THE GENERAL AND/OR DESIGN NOTES THEY SHALL BE THE LATEST EDITIONS, UNLESS OTHERWISE NOTED.
2. ALL UTILITY WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE APPLICABLE UTILITY COMPANY. CONTRACTOR SHALL REVIEW COPIES OF APPLICABLE UTILITY STANDARDS AS THEIR REQUIREMENTS MAY EXCEED/DIFFER FROM THOSE REQUIRED BY NYC, NYS OR OSHA. IN ALL CASES THE STRICTER REQUIREMENT SHALL CONTROL.
3. CHANGES/MODIFICATIONS TO CITY SEWERS, CATCH BASINS, CHUTE CONNECTIONS, AND WATER MAINS SHALL CONFORM TO NYCDDC SPECIFICATIONS AND AS SHOWN ON APPLICABLE JOINT BID SPECIFICATIONS.
4. THE CONTRACTOR WILL ADHERE TO ALL CODE 753 REQUIREMENTS PRIOR TO PERFORMING ANY EXCAVATIONS.
5. IN AREAS WHERE CONGESTED UNDERGROUND INFRASTRUCTURES EXIST, THE CITY RESIDENT OR BOROUGH ENGINEER MAY WAIVE CITY STANDARD MINIMUM CLEARANCE REQUIREMENTS. WHEN CLEARANCES ARE LESS THAN 12 INCHES, A NEOPRENE/POLYETHYLENE SHIELD, FURNISHED BY THE APPLICABLE FACILITY OPERATOR(S) SHALL BE INSTALLED BY THE CONTRACTOR, AS DIRECTED BY THE RESIDENT ENGINEER IN CONSULTATION WITH THE FACILITY OPERATOR AND IS CONSIDERED PART OF ALL WORK ITEM SPECIFICATIONS. PAYMENT FOR THIS WORK SHALL BE DEEMED INCLUDED IN THE APPROPRIATE BID ITEM.
6. THE FOLLOWING SPECIFICATIONS ARE AVAILABLE FOR CONTRACTOR REVIEW WITH THE DDC:
   - A. CON EDISON STEAM SPECIFICATION 122, LATEST REVISION
   - B. CON EDISON TRENCHING MANUAL, LATEST REVISION
   - C. CON EDISON GAS GENERAL SPECIFICATION NO. 117, LATEST REVISION
   - D. GAS CONSTRUCTION SPECIFICATION NO. 900, LATEST REVISION
   - E. BELL SYSTEM PRACTICE 622-505-210, DATED APRIL 1974 – MANHOLES
   - F. BELL SYSTEM PRACTICE 919-240-300, DATED DEC. 1974 – MANHOLES
   - G. CON EDISON CONSTRUCTION STANDARDS, SPECIFICATIONS AND DRAWINGS FOR EXCAVATING TRENCHES AND OPENINGS AND INSTALLING OUTSIDE PLANT ELECTRIC FACILITIES.

PROJECT DOCUMENTS

1. THIS SET OF UTILITY DRAWINGS TOGETHER WITH THE CONTRACT AND NOTED UTILITY SPECIFICATIONS, CONSTITUTES THE COMPLETE DOCUMENTATION BY WHICH ALL CONTRACT WORK SHALL FOLLOW.
2. IN PROJECTS WITH UNDEFINED SCOPE, THE CONTRACTOR SHALL REQUEST UTILITY MAPS & PLATES FROM THE UTILITY OPERATOR FIELD REPRESENTATIVE. ALL INFORMATION CONTAINED IN SUCH DOCUMENTS IS SUBJECT TO FIELD VERIFICATION.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE PROPER SHORING AND BRACING DURING CONSTRUCTION WHENEVER AND WHEREVER NECESSARY, WHICH SHALL NOT BE REMOVED AS LONG AS REQUIRED FOR SAFETY AS DIRECTED BY THE RESIDENT ENGINEER.
4. IN THE EVENT THAT CERTAIN DETAILS OF CONSTRUCTION ARE NOT FULLY SHOWN OR NOTED ON DRAWINGS, CONSTRUCTION SHALL BE OF THE SAME TYPE AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR NOTED, SUBJECT TO THE APPROVAL OF THE FACILITY OPERATOR REPRESENTATIVE AND RESIDENT ENGINEER.

MATERIALS

1. ALL MATERIALS SUPPLIED BY THE FACILITY OPERATOR(S) SHALL BE DELIVERED FREE ON BOARD (F.O.B.) TO THE CONTRACTOR'S REQUESTED LOCATION. IT SHALL THEN BE THE CONTRACTOR'S RESPONSIBILITY AND EXPENSE TO THE DELIVER AND/OR DISTRIBUTE THE MATERIAL SUPPLIED BY THE FACILITY OPERATOR(S) TO THE REQUIRED JOB LOCATION(S) THEREAFTER.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY, TO INSPECT, UNLOAD AND VERIFY THE QUANTITIES OF FURNISHED SPECIALIZED MATERIAL IMMEDIATELY UPON DELIVERY AND ADVISE THE FACILITY OPERATOR(S) OF ALL DAMAGED MATERIAL. THE CONTRACTOR, AT NO ADDITIONAL EXPENSE TO THE CITY OR THE FACILITY OPERATOR(S), SHALL REPLACE ANY MATERIAL, WHICH IS DAMAGED OR LOST AFTER THE CONTRACTOR'S INSPECTION AND ACCEPTANCE. ALL ASSOCIATED COSTS ARE DEEMED INCLUDED IN THE APPLICABLE JOINT BID ITEMS.
3. GENERAL BACKFILL AND BEDDING MATERIALS FOR EXCAVATION AROUND CON EDISON FACILITIES SHALL BE PERFORMED IN ACCORDANCE WITH EO-1180, EO-1181, EO-8085, AND THE APPROPRIATE FACILITY INSTALLATION SPECIFICATION. ALL OTHER BACKFILLING SHALL SATISFY NYCDOT METHODS AND STANDARDS. ALL COSTS ASSOCIATED SHALL BE INCLUDED IN THE APPLICABLE JB ITEMS.

CONSTRUCTION SEQUENCE NOTES

THE FOLLOWING CONSTRUCTION SEQUENCING NOTES ARE ISSUED TO SUPPLEMENT THE CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO THE MAINTENANCE AND PROTECTION OF TRAFFIC PLANS AND JOINT BID ITEM SPECIFICATIONS. THE NOTES PROVIDED BELOW SHALL BE USED IN CONJUNCTION WITH SAID CONTRACT DOCUMENTS TO ESTABLISH THE SEQUENTIAL ORDER OF INSTALLATION OF NEW COMMUNICATION AND ELECTRIC UTILITIES, NON COST SHARING GAS, STEAM, AND CABLE TV AND THE CITY PLANNED WORK AS SPECIFIED WITHIN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUBMIT A WORK SCHEDULE THAT WILL INCLUDE THE UTILITY WILL INCLUDE THE UTILITY WORK TO EMPIRE CITY SUBWAY CO., LTD. (ECS), CON EDISON, TIME WARNER CABLE AND RCN, FOR APPROVAL BY THE UTILITY FACILITY OPERATORS IN CONSULTATION WITH THE RESIDENT ENGINEER.

CONSTRUCTION SEQUENCING FOR PRIVATE UTILITY FACILITIES AND CITY WORK WITHIN THE ABOVE REFERENCED PROJECT

1. PRIOR TO MASS EXCAVATING, THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY FACILITY OPERATORS AND APPLICABLE CITY AGENCIES INCLUDING THE NEW YORK CITY TRANSIT AUTHORITY (NYCTA).
2. THE CONTRACTOR SHALL REMOVE THE EXISTING SURFACE AND BASE PAVEMENT FOR A WIDTH OF ROADWAY SPECIFIED IN THE MPT PLANS. CITY CONTRACT BID ITEMS, FOR THIS WORK, SHALL APPLY. AS ENCOUNTERED, THE CONTRACTOR SHALL REMOVE ABANDONED TROLLEY TRACKS, INCLUDING YOKES AND OTHER APPURTENANCES.
3. THE CONTRACTOR SHALL PERFORM MASS EXCAVATION AS SPECIFIED IN JOINT BID ITEM NUMBER JB 410 – "MASS EXCAVATION", AND INDICATED IN THE THE MASS EXCAVATION PLAN. THE WIDTH OF EXCAVATION SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS IN ACCORDANCE WITH THE MPT PLANS AND AS DIRECTED BY ECS AND CON EDISON REPRESENTATIVES IN CONSULTATION WITH THE RESIDENT ENGINEER. THE LENGTH OF THE EXCAVATION SHALL BE AS REQUIRED TO FACILITATE THE DISPOSAL OF ALL EXCAVATED AND/OR REMOVAL OF MATERIALS. THE TOTAL LENGTH OF MASS EXCAVATION OPEN AT ANY ONE TIME SHALL BE CONSISTENT WITH THE MPT PLANS.
4. ECS, TIME WARNER CABLE, RCN AND CON EDISON REPRESENTATIVES, IN CONSULTATION WITH THE RESIDENT ENGINEER AND, IN COOPERATION WITH THE CONTRACTOR SHALL DETERMINE A SUITABLE LOCATION FOR INSTALLATION OF THE NEW PRIVATE UTILITY FACILITIES. ONCE THE LOCATIONS HAVE BEEN ESTABLISHED, THE CONTRACTOR WILL ASSUME FULL RESPONSIBILITY FOR THE LANES SELECTED AND WILL THEREBY GUARANTEES THAT THE NEW FACILITIES SHALL NOT OBSTRUCT THE PLANNED CITY CONTRACT WORK. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMMUNICATE IN WRITING, FOR EACH UTILITY LANE SELECTED, WHERE IN THE CONTRACTOR'S OPINION A LOCATION FOR THE INSTALLATION OF THE NEW UTILITY FACILITIES WILL OBSTRUCT THE PLANNED CITY WORK, SO THAT AN ALTERNATE APPROACH IS EVALUATED TO MITIGATE THE IMPENDING INTERFERENCE(S).
5. THE MASS EXCAVATION AND CONSTRUCTION OF NEW UTILITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND STAGED IN ACCORDANCE WITH THE MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) PLANS.
6. THE CONTRACTOR SHALL REMOVE EXISTING OBSTRUCTIONS, INCLUDING BUT NOT LIMITED TO RETIRED AND ABANDONED EXISTING FACILITIES AND STRUCTURES, AS REQUIRED FOR INSTALLATION OF THE NEW UTILITY FACILITIES, CATCH BASINS, CHUTE CONNECTIONS, WATER MAINS, ETC. THE REMOVAL AND RELOCATION WORK SHALL BE COVERED UNDER APPROPRIATE CITY AND/OR JOINT BID ITEMS AND SHALL BE COORDINATED WITH ECS, TIME WARNER CABLE AND CON EDISON REPRESENTATIVES, IN CONSULTATION WITH THE RESIDENT ENGINEER.
7. THE CONTRACTOR SHALL PERFORM MODIFICATIONS TO EXISTING UTILITY FACILITIES AND/OR STRUCTURES TO ACCOMMODATE THE NEW UTILITY FACILITIES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE FACILITY OPERATOR IN CONSULTATION WITH THE RESIDENT ENGINEER.
8. THE CONTRACTOR SHALL INSTALL THE NEW FACILITIES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
9. UPON COMPLETION OF THE INSTALLATION OF THE UTILITY WORK, THE CONTRACTOR SHALL BACKFILL, COMPACT AND INSTALL TEMPORARY PAVEMENT AS DIRECTED BY THE FACILITY OPERATOR IN CONSULTATION WITH THE RESIDENT ENGINEER.
10. WHERE APPROPRIATE, AND AS DIRECTED BY THE FACILITY OPERATORS IN CONSULTATION WITH THE RESIDENT ENGINEER, THE CONTRACTOR SHALL BE PERMITTED TO INSTALL THE CITY WATER MAINS, CATCH BASINS, CATCH BASIN CONNECTIONS, SEWERS, SEWER MANHOLES, AND OTHER CITY CONTRACT WORK ITEMS AND APPURTENANCES IN COORDINATION AND DURING THE MASS EXCAVATION OPERATION, ONLY IF THIS PHASING SERVES TO BENEFIT THE SEQUENCING OF THE PROJECT THAT WILL REDUCE THE OVERALL PROJECT TIME DURATION AND DOES NOT ADDITIONALLY BURDEN THE PRIVATE UTILITIES WITH UNANTICIPATED FINANCIAL EXPENSES, AND ONLY IF APPROVED BY THE PRIVATE FACILITY OPERATORS IN CONSULTATION WITH THE RESIDENT ENGINEER.
11. THE CONTRACTOR EXPLICITLY ASSUMES FULL RESPONSIBILITY AND ANY AND ALL ADDITIONAL COSTS INCURRED IF HE CHOOSES TO MODIFY THIS SEQUENCING PLAN WITHOUT THE CONSENT OF THE FACILITY OPERATORS IN CONSULTATION WITH THE RESIDENT ENGINEER.
12. ALTERNATE SEQUENCING IN PART OR TOTAL WILL BE CONSIDERED FOR APPROVAL, IF PROPOSED BY THE CONTRACTOR IN WRITING, TO THE FACILITY OPERATORS AND THE RESIDENT ENGINEER.
13. SEQUENCING OF LAYOUT WORK FOR PRIVATE UTILITIES, WHICH RELIEVES DIRECT INTERFERENCE, SHALL BE SCHEDULED, SEQUENCED AND PERFORMED PRIOR TO THE INSTALLATION OF CITY IMPROVEMENTS THAT ARE IMPACTED BY THE DIRECT INTERFERENCE.

SPECIAL CONDITIONS

1. TIME REQUIRED TO ACCOMPLISH ALL UTILITY SPECIALTY WORK, WHICH SHALL BE PERFORMED BY OTHERS HIRED BY THE FACILITY OPERATOR(S), HAS BEEN INCLUDED AS INDICATED AS INDICATED IN SCHEDULE A, ALLOCATED FOR THE PROJECT. UTILITY SPECIALTY WORK INCLUDES BUT IS NOT LIMITED TO ALL CABLE WORK INCLUDING; INSTALLATION, REMOVAL, SPLICING VERIFICATION OF LIVE/DEAD FACILITIES, INSTALLATION OF ALL TYPES OF GAS PIPING, CUTTING AND CAPPING GAS MAINS, LIVE GAS CONNECTIONS, SERVICE REPLACEMENTS, TESTING LIVE/DEAD GAS MAINS, ALL LIVE STEAM WORK, FLANGE REMOVAL, PIPE REPLACEMENT, WELDING, STEAM TRAP REPLACEMENTS, STEAM SERVICE REPLACEMENTS, ALL ASSOCIATED STEAM STRUCTURES REPLACE AND STEAM ANCHORS. THE CONTRACTOR WILL ENSURE THAT COMPLETE AND SAFE ACCESS TO THE PROJECT SITE IS MADE AVAILABLE TO THE SPECIALTY CONTRACTOR UPON REQUEST BY THE FACILITY OPERATOR REPRESENTATIVE AND IN COORDINATION WITH THE RESIDENT ENGINEER. THE CONTRACTOR MAY BE REQUIRED TO ASSIST THE FACILITY OPERATOR'S SPECIALTY CREWS (ELECTRIC, GAS, STEAM AND TELECOMMUNICATIONS) PERFORMING SPECIALTY WORK NOT INCLUDED IN CONTRACT BID ITEMS. THIS WORK MAY INCLUDE BUT IS NOT LIMITED TO, SUPPORTING, PROTECTING AND REMOVING EXISTING AND INSTALLING NEW FACILITIES. WHERE APPLICABLE, CONTRACTOR CONSTRUCTION FIELD SUPPORT WILL BE PAID UNDER CONTRACT BID ITEMS JB 450.1, 450.2 450.3, 450.4 AND 450.5
2. THE PRICE TO COVER FOR ALL JOINT BID ITEMS SHALL NOT INCLUDE ITEMS OF WORK WHICH ARE PAID FOR BY THE UTILITIES UNDER THE APPLICABLE SHARED COST ITEMS, INCLUDING, BUT NOT LIMITED TO, MPT ITEMS, TRAFFIC ENFORCEMENT AGENTS, FIELD OFFICE, ETC.
3. SPECIALTY WORK WHICH SHALL BE PERFORMED BY THE FACILITY OPERATOR(S) OR OTHERS HIRED BY THE FACILITY OPERATOR(S) SHALL INCLUDE BUT IS NOT BE LIMITED TO:

   3.1 ECS
   - A. RINGING AND RIPPING IRON/STEEL CONDUITS WHEN CABLES MUST BE REMOVED FROM THE CONDUITS SHALL BE PERFORMED BY ECS FORCES.
   - B. ALL CABLE WORK – EX. PLACING, SPLICING, VERIFICATION OF LIVE/DEAD FACILITIES, FAILURES, ETC. – SHALL BE PERFORMED BY ECS TENANTS.

   3.2 TIME WARNER CABLE
   - A. RINGING AND RIPPING IRON/STEEL CONDUITS WHEN CABLES MUST BE REMOVED FROM THE CONDUITS SHALL BE PERFORMED BY TWC FORCES.
   - B. ALL CABLE WORK – EX. PLACING, SPLICING, VERIFICATION OF LIVE/DEAD FACILITIES, FAILURES, ETC. – SHALL BE PERFORMED BY TWC TENANTS.

   3.3 AT&T AND RCN
   - A. RINGING AND RIPPING ANY CONDUIT CONTAINING AN ACTIVE "LIVE" CABLE SHALL BE PERFORMED BY AT&T FORCES.
   - B. ALL CABLE WORK – EX. PLACING, SPLICING, VERIFICATION OF LIVE/DEAD FACILITIES, FAILURES, ETC. – SHALL BE PERFORMED BY AT&T FORCES.

   3.4 CON EDISON
   - A. FREE, CLEAR, AND UNIMPEDED ACCESS TO ALL CON EDISON FACILITIES LOCATED INSIDE THE PROJECT LIMITS AND CONTRACTOR'S WORK ZONE/MPT SHALL BE DEEMED INCLUDED IN THE CONTRACT PRICES. NO ADDITIONAL PAYMENTS WILL BE FURNISHED FOR ACCESS TO THE SITE.
   - B. UPON COMMENCENT OF THE WORK THE CONTRACTOR SHALL PROVIDE THE UTILITY OPERATOR, IN WRITING, THE NAME OF THE DESIGNATED ELECTRICALLY COMPETENT QUALIFIED MUNICIPAL CONTRACTOR EMPLOYEE.
   - C. CON EDISON SHALL PERFORM ALL CABLE WORK – INSTALLATION, REMOVAL, SPLICING, AND VERIFICATION OF LIVE/ DEAD FACILITIES AND/OR FAILURE REPLACEMENTS.
   - D. GAS COST SHARING (EP7) TRENCHING TO BE PAID UNDER ITEM 6.09 OF THE GAS COST SHARING PACKAGE. INSTALLATION FOR GAS MAINS AND FITTINGS TO BE PAID FOR UNDER THE APPROPRIATE JOINT BID ITEMS.
   - E. WHEN APPLICABLE, GAS WORK SHALL BE PERFORMED BY AN APPROVED AND QUALIFIED CONTRACTOR(S). THE CONTRACTOR(S) SHALL BE "GAS QUALIFIED CONTRACTOR(S)" AND/OR "GAS QUALIFIED SUB-CONTRACTOR(S)" AS DEFINED BY THE UTILITY OPERATOR(S). THE CONTRACTOR SHALL PERFORM INSTALLATION OF ALL TYPES OF GAS PIPING INCLUDING BUT NOT LIMITED TO CUTTING AND CAPPING GAS MAINS, LIVE GAS CONNECTIONS, SERVICE REPLACEMENTS, AND TESTING LIVE GAS MAINS, AS NEEDED.
   - F. DURING THE PERIOD FROM JUNE 1ST TO SEPTEMBER 15TH, SCHEDULING OF CON EDISON CABLE WORK WILL BE CONTINGENT UPON SYSTEM AND WEATHER CONDITIONS.
   - G. DURING THE PERIOD FROM OCTOBER 1ST TO APRIL 15TH, SCHEDULING OF CON EDISON GAS AND, IF APPLICABLE, STEAM WORK WILL BE CONTINGENT UPON SYSTEM AND WEATHER CONDITIONS.
   - H. CONTRACTOR SHALL PERFORM TEST PITS, PAID FOR UNDER JOINT BID ITEM 400 AND EP-7 ITEM 6.07.
   - I. ALL TRANSMISSION SYSTEMS WITHIN PROXIMITY (5 FT OR LESS) OF CONTRACT WORK SHALL BE EXPOSED BY HAND EXCAVATION PRIOR TO COMMENCEMENT OF THE SPECIFIC WORK ITEMS.
   - J. ALL CON ED MANHOLES / FACILITY ENTRANCES / GATES MUST REMAIN ACCESSIBLE. IF, DUE TO THE CONTRACTOR'S OPERATION, ACCESS IS INTERRUPTED OR BLOCKED, THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE IMMEDIATE ACCESS AT HIS/HER EXPENSE AND IN ACCORDANCE WITH CON ED REQUIREMENTS.
   - K. EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES (EXCEPT FOR GAS INSTALLATIONS) SHALL BE PAID UNDER JB 405.1, JB 405.2 AND JB 406 WILL INCLUDE THE COST OF SHEETING IF DEEMED NECESSARY BY THE FACILITY OPERATOR IN CONSULTATION WITH THE RESIDENT ENGINEER.
   - L. ALL EXPOSED CON EDISON GAS TRANSMISSION FACILITIES ARE TO BE TEMPORARILY SUPPORTED AND PROTECTED IN PLACE. REFER TO THE LATEST VERSION OF THE GAS TRANSMISSION SPECIFICATIONS, FOR TRANSMISION GAS FACILITY SUPPORT DESIGN CRITERIA. SUPPORT, PROTECTION, AND SHEETING METHODS MUST BE SIGNED AND SEALED BY A NEW YORK STATE PROFESSIONAL ENGINEER AND SUBMITTED BY THE CONTRACTOR TO THE CITY AND CON EDISON FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. PRICE TO BE COVERED UNDER APPROPRIATE JOINT BID ITEMS.
   - M. MASS EXCAVATION WILL BE USED IN THE INTERSECTION OF EAST 233 STREET AND BRONXWOOD AVENUE TO DETERMINE ANY POTENTIAL INTERFERENCES BETWEEN THE EXISTING GAS TRANSMISSION MAINS AND THE PROPOSED TRUNK WATER MAIN. THE CONTRACTOR SHALL HIRE A SURVEY COMPANY TO PERFORM A COMPLETE PLAN AND PROFILE OF THE MASS EXCAVATION AREA IDENTIFYING ALL EXISTING PIPES WITHIN THE MASS EXCAVATION AREA. SURVEY COSTS INCLUDED IN VARIOUS JOINT BID ITEMS.
   - N. IF TREE(S) REMOVAL IS/ARE REQUIRED DUE TO RELOCATION OF CONEDISON GAS FACILITITES, THE CONTRCTOR MUST BE REQUIRED TO OBTAIN NYCDPR APPROVAL. THE TREE(S) REMOVAL WILL BE AS PER SECTION 4.16 OF NYCDOT STANDARD HIGHWAY SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.
   - O. REPLACEMENT OF TREE(S) WILL BE PLANTED AS DIRECTED AND APPROVED BY NYCDPR AND ENGINEER IN ACCORDANCE WITH SECTION 4.16 OF NYCDOT STANDARD HIGHWAY SPECIFICATIONS.
   - P. TREE(S) REMOVAL AND REPLACEMENT COST WILL BE PAID FOR UNDER GAS COST SHARING GENERAL PROVISIONS AT A NEGOTIATED UNIT PRICE OR THROUGH OTHER CONTRACT PROVISIONS.
   - Q. ANY QUESTION ABOUT THE NATURE, TYPE, VOLTAGE AND LOCATION OF ENERGIZED OVERHEAD ELECTRICAL LINES OR EQUIPMENT WITHIN THE GEOGRAPHICAL LIMITS OF A NYCDDC PROJECT WORK SHALL BE DIRECTED TO THE AUTHORIZED CON EDISON REPRESENTATIVE. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR BE PERMITTED TO CONNECT OR TIE OFF OTHER UTILITY CABLES AND WIRES, SUCH AS TELEPHONE, CABLE TV AND FIRE ALARM, TO CON EDISON OVERHEAD FACILITIES.

   CON EDISON OVERHEAD ELECTRICAL DISTRIBUTION SYSTEMS

   CON EDISON'S OVERHEAD ELECTRICAL DISTRIBUTION SYSTEM CONSISTS OF TWO VOLTAGE CLASSIFICATIONS: PRIMARY AND SECONDARY SYSTEMS. THE PRIMARY SYSTEM HAS VOLTAGES IN EXCESS OF 2,000 VOLTS BETWEEN ANY SINGLE CONDUCTOR AND GROUND, AND A VOLTAGE DIFFERENTIAL GREATER THAN 4,000 VOLTS BETWEEN ANY PAIR OF CONDUCTORS. THE SECONDARY SYSTEM HAS VOLTAGES RANGING FROM 120 TO 477 VOLTS.

   PRIMARY SYSTEMS

   PRIMARY SYSTEM CONDUCTORS ARE FOUND IN THE UPPER PART OF POLES AND ARE SOMETIMES CONNECTED TO TRANSFORMERS. PRIMARY CONDUCTORS MAY BE JACKETED OR BARE WIRE. THE JACKETING IS NOT INTENDED TO OFFER ANY PERSONAL PROTECTION OR INSULATING VALUE AGAINST ELECTRICAL HAZARD. THEREFORE, CONTRACTOR PERSONNEL AND EQUIPMENT SHALL MAINTAIN A 10 FOOT CLEARANCE FROM THE CLOSEST PRIMARY CONDUCTOR, UNLESS APPROVED CONDUCTOR PROTECTION IS INSTALLED AND A 3 FOOT MINIMUM CLEARANCE CAN BE OBTAINED.

   CON EDISON ALSO UTILIZES AN AERIAL CABLE SYSTEM THAT OPERATES AT PRIMARY VOLTAGES. AERIAL CABLE IS ELECTRICALLY INSULATED UNDERGROUND-TYPE CABLE, WHICH IS INSTALLED ON A MESSENGER WIRE AND HAS A GROUNDED EXTERIOR METALLIC SHEATH. CONTRACTOR PERSONNEL AND EQUIPMENT SHALL MAINTAIN A MINIMUM CLEARANCE OF 3 FEET FROM THESE FACILITIES.

   SECONDARY SYSTEMS

   CON EDISON'S SECONDARY SYSTEM CONDUCTORS ARE NORMALLY FOUND ON POLES ABOVE THE TELEPHONE CABLES AND CABLE TV WIRES. THEY PROVIDE POWER TO CUSTOMER SERVICE POINTS THROUGH SEVERAL CONFIGURATIONS THAT MAY CONSIST OF SINGLE OR MULTIPLE CONDUCTORS, STREETLIGHTS AND TRAFFIC SIGNALS.

   CONTRACTOR PERSONNEL AND EQUIPMENT SHALL MAINTAIN A 10 FOOT CLEARANCE FROM THE CLOSEST SECONDARY CONDUCTOR, UNLESS APPROVED CONDUCTOR PROTECTION IS INSTALLED AND A 3 FOOT MINIMUM CLEARANCE CAN BE OBTAINED.

   PRIMARY AND SECONDARY RISERS

   THE CONTRACTOR MAY ENCOUNTER LOCATIONS WHERE THERE IS A TRANSITION OF CABLE SYSTEMS FROM OVERHEAD TO UNDERGROUND. THE CONDUCTORS ARE INSULATED AND HOUSED IN CONDUIT. CONTRACTOR PERSONNEL AND EQUIPMENT ARE TO AVOID CONTACT WITH THESE FACILITIES.

   CONTRACTOR SHALL REFER TO SKETCHES JB 350A AND 350B FOR ADDITIONAL INFORMATION ABOUT THE TYPICAL ARRANGEMENT AND CLEARANCE REQUIREMENTS OF OVERHEAD ENERGIZED CONDUCTORS.

	SIGNATURES	DATE		SIGNATURES	DATE
conEdison	AUTHORIZED REPRESENTATIVE SIGNATURE PRINT NAME MOSS J. WEINTRAUB			AUTHORIZED REPRESENTATIVE SIGNATURE Al Clark 7/24/24 PRINT NAME Al Clark Altice USA	
EMPIRE CITY SUBWAY (1913) LTD A Vertex Company	AUTHORIZED REPRESENTATIVE SIGNATURE PRINT NAME ROHAN ECCLES			AUTHORIZED REPRESENTATIVE SIGNATURE PRINT NAME	

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

GENERAL NOTES AND CONDITIONS

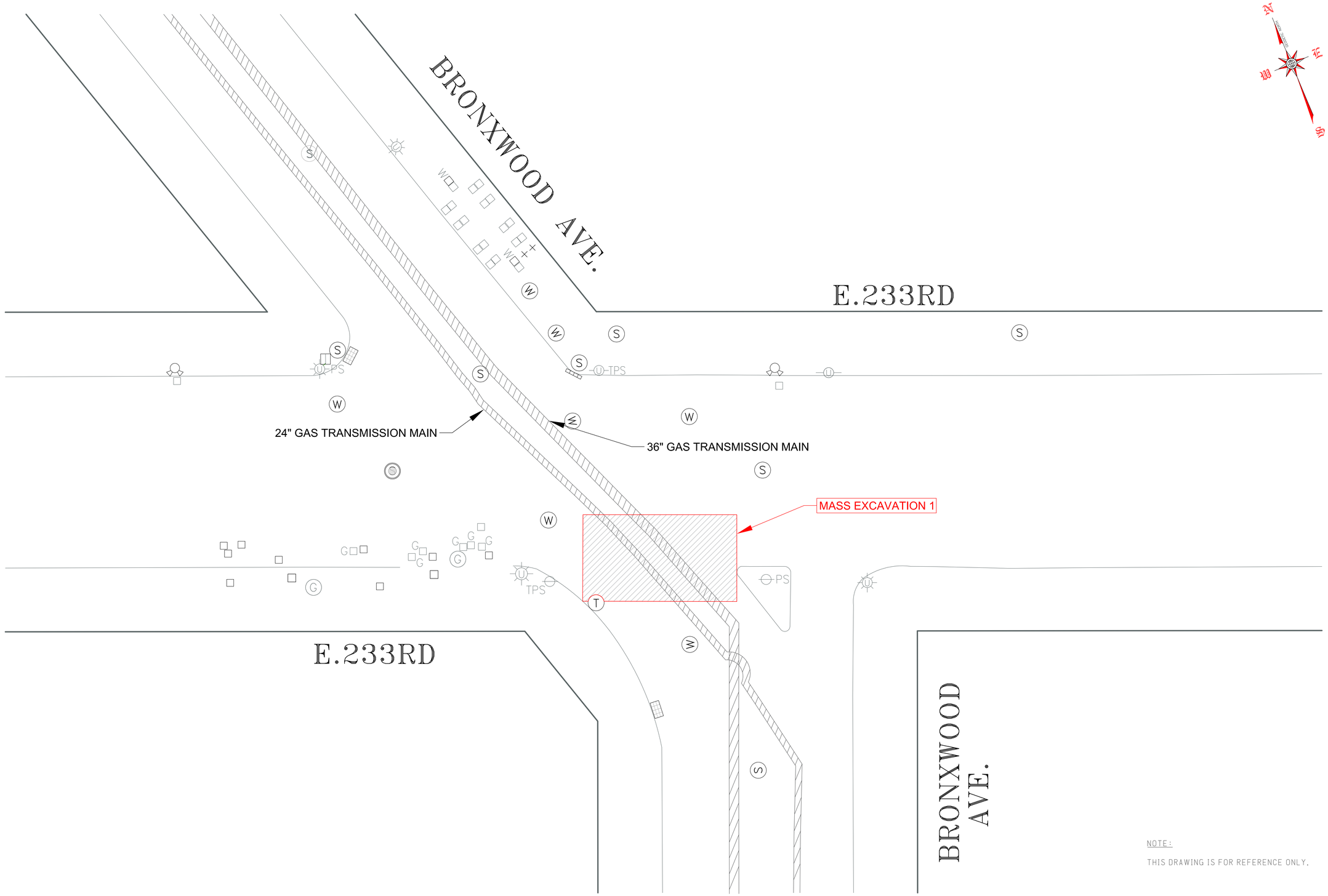
DRAWN BY CADD FILE

EAST 233 STREET
TRUNK WATER MAIN INSTALLATION
BOROUGH OF THE BRONX

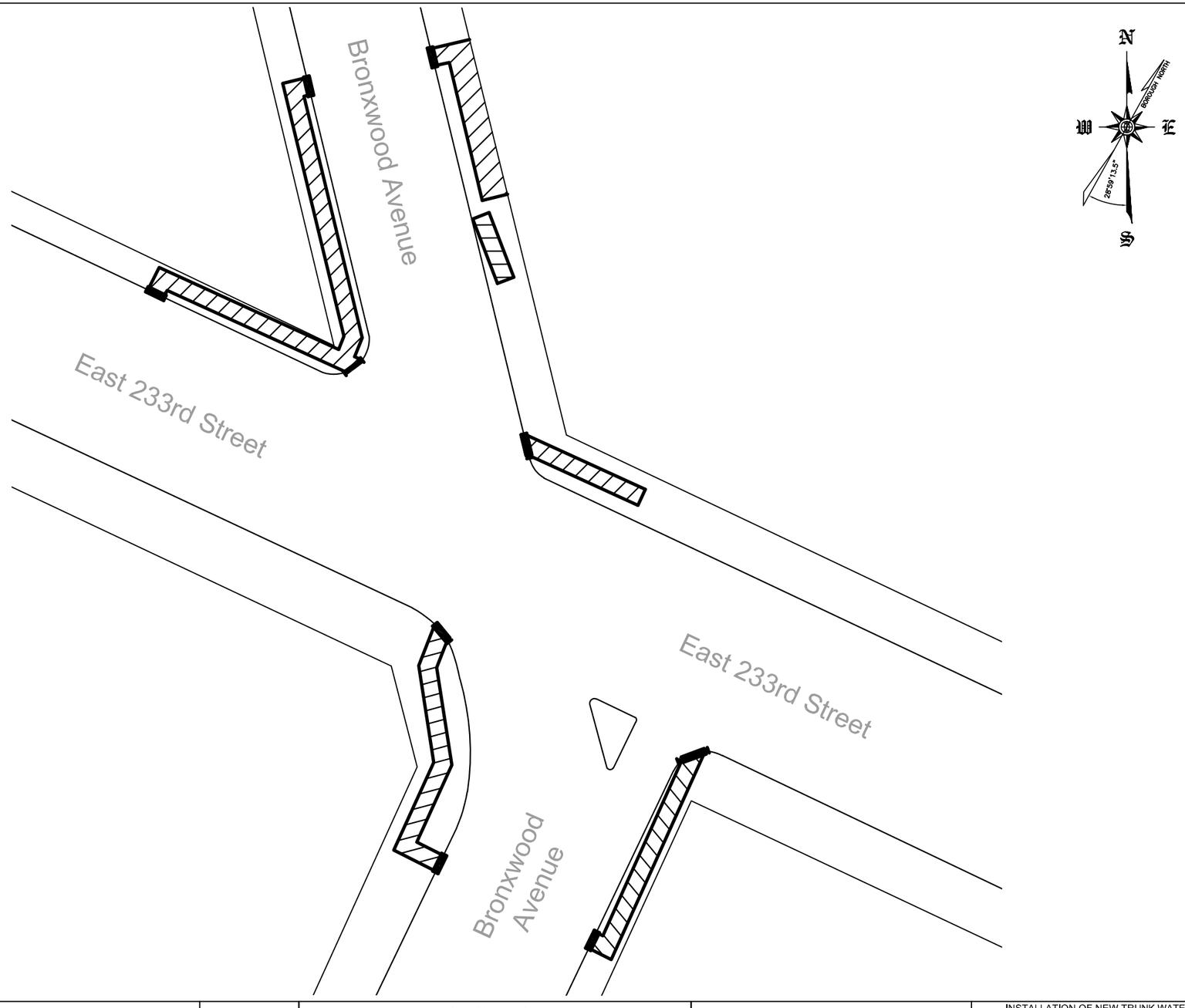
PROJECT ID: **HED562**

SHEET 1 OF 1

JB1 / JB1



CONSOLIDATED EDISON CO. OF NEW YORK, INC.	**MASS EXCAVATION AREA**	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX
		06/10/2024 SHEET 1 OF 1

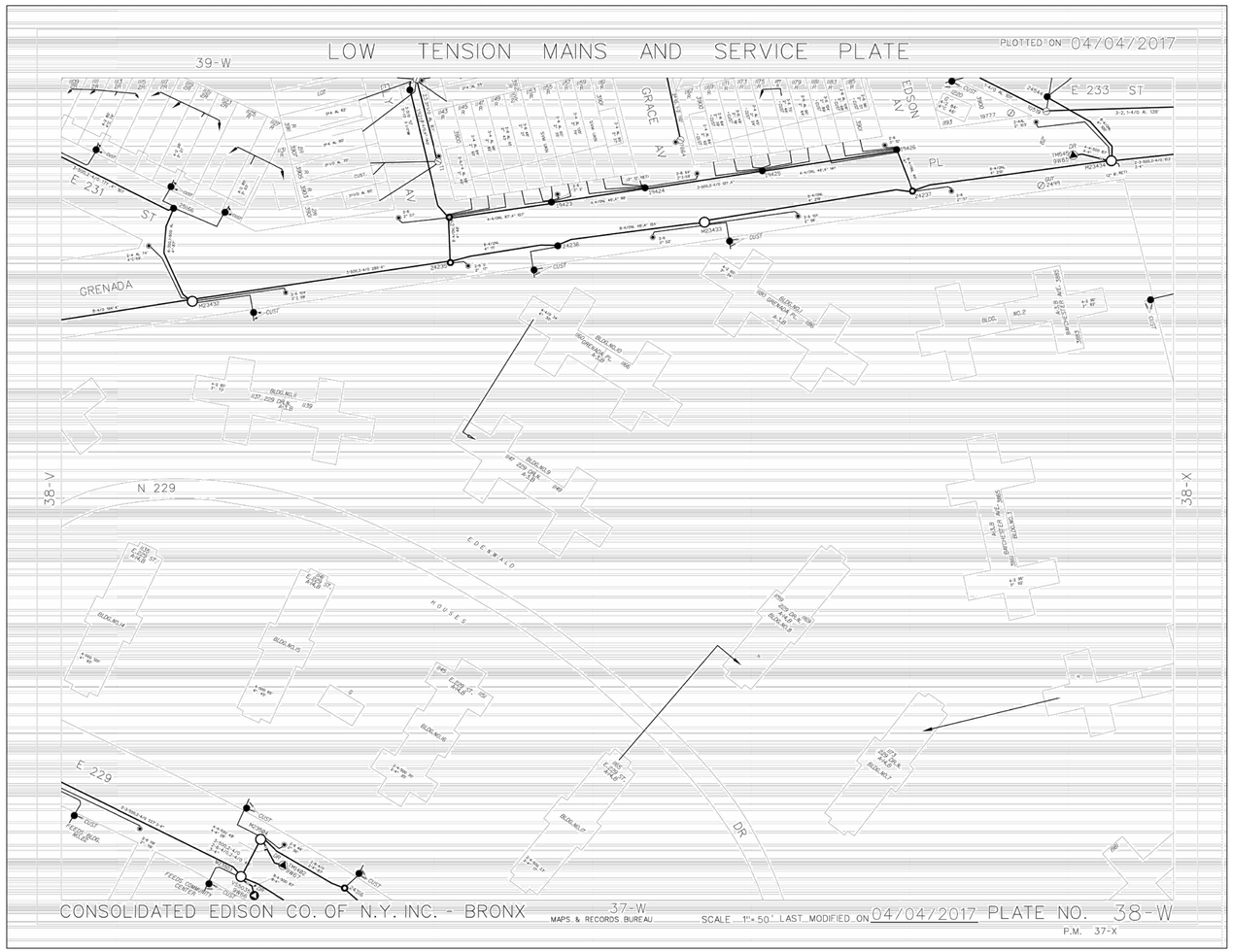


LEGEND:

JB 802.A
JB 802.B

CONSOLIDATED EDISON CO. OF NEW YORK, INC.	SCALE: N.T.S.	CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE BUREAU OF DESIGN	SPECIAL CARE EXCAVATION PLAN	INSTALLATION OF NEW TRUNK WATER MAIN ON EAST 233rd STREET BOROUGH OF THE BRONX
	CADD FILE _____			PROJECT ID: HED562 | DATE: 06/10/2024 | SHEET 1 OF 1

LOW TENSION MAINS AND SERVICE PLATE



NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. LOW TENSION MAINS AND SERVICE PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 1/21

LOW TENSION MAINS AND SERVICE PLATE

NOTE:

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	CONSOLIDATED EDISON CO. OF NEW YORK, INC. LOW TENSION MAINS AND SERVICE PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 2/21

LOW TENSION MAINS AND SERVICE PLATE

NOTE:

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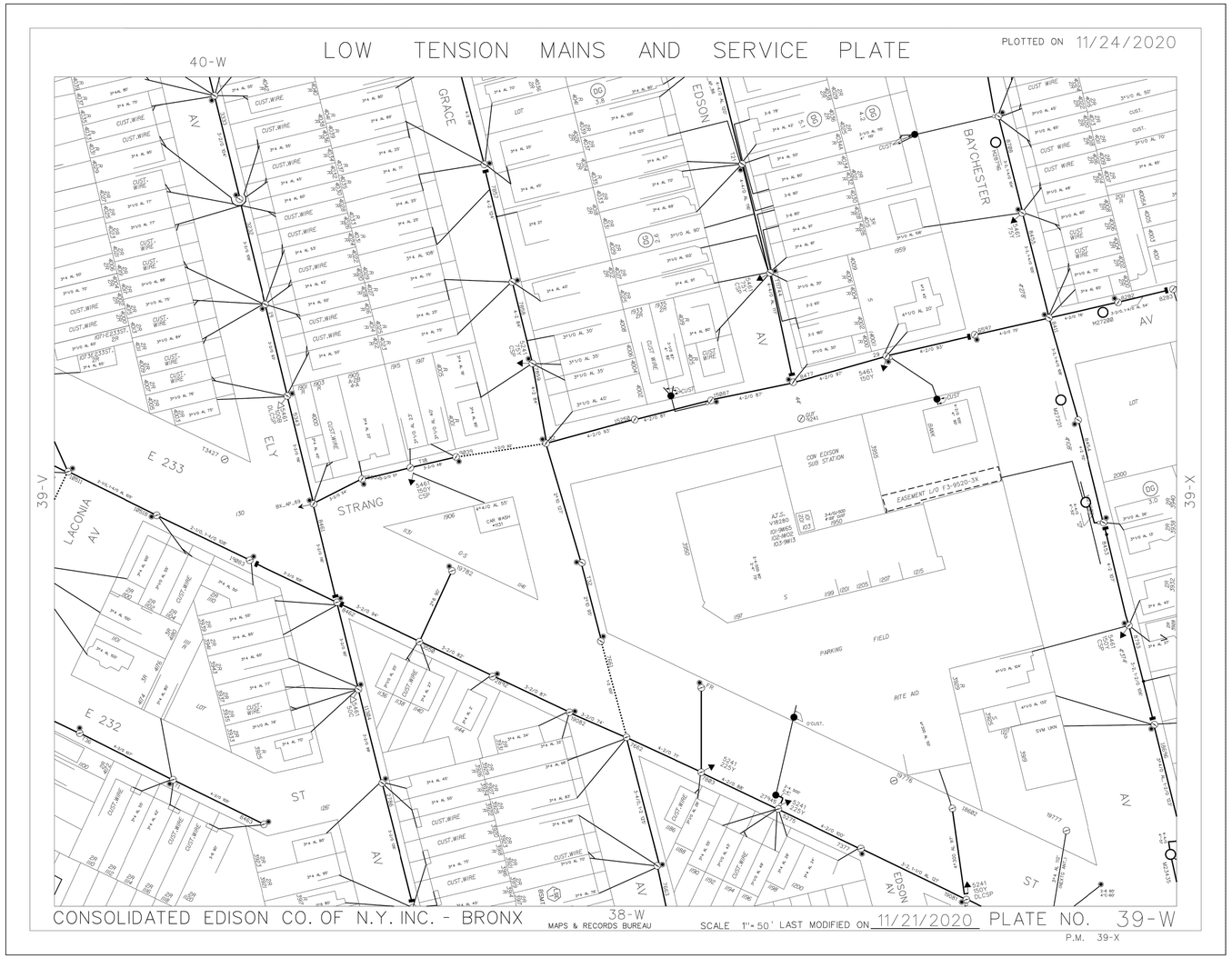
	CONSOLIDATED EDISON CO. OF NEW YORK, INC. LOW TENSION MAINS AND SERVICE PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 3/21

LOW TENSION MAINS AND SERVICE PLATE

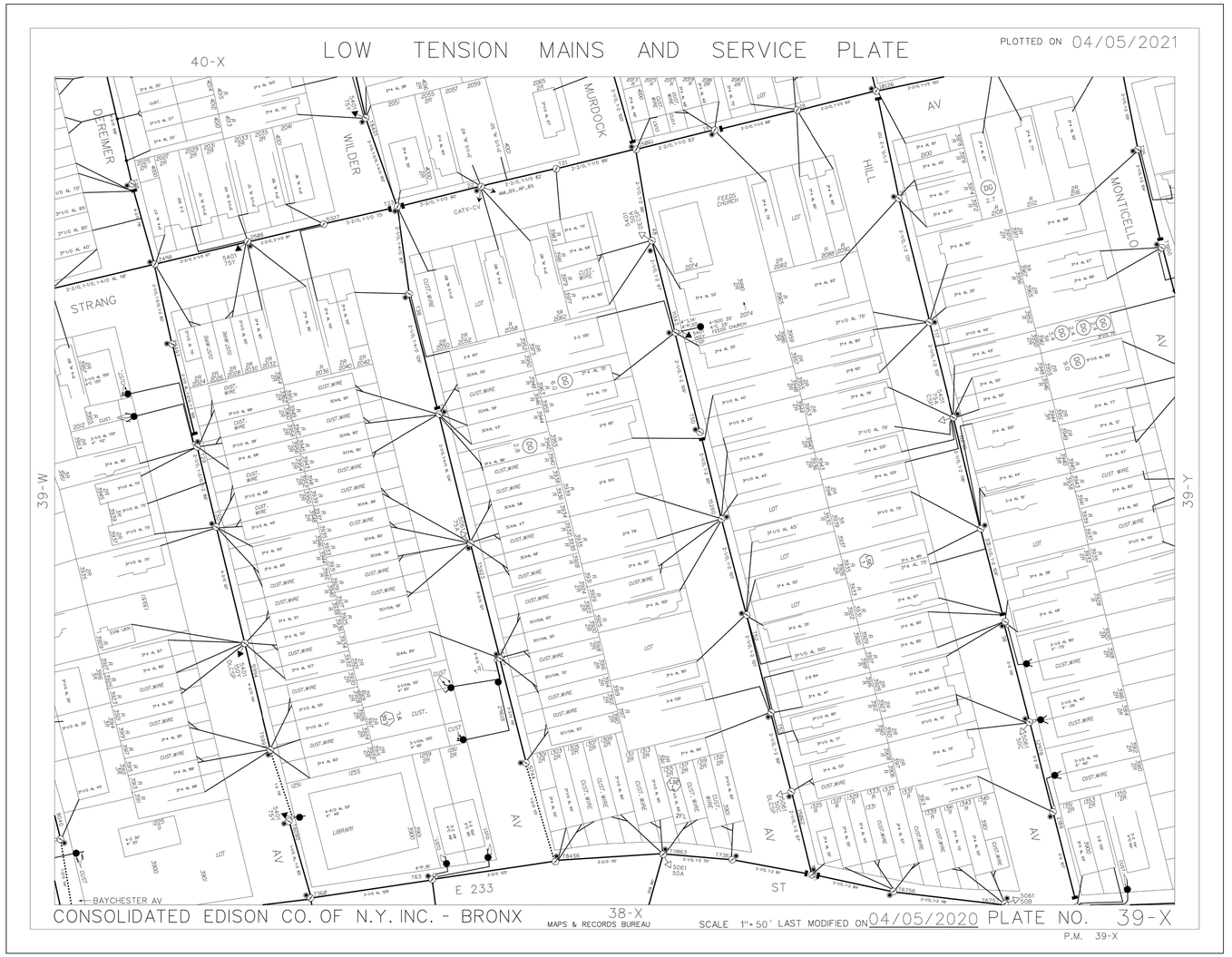


NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. LOW TENSION MAINS AND SERVICE PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 4/21

LOW TENSION MAINS AND SERVICE PLATE

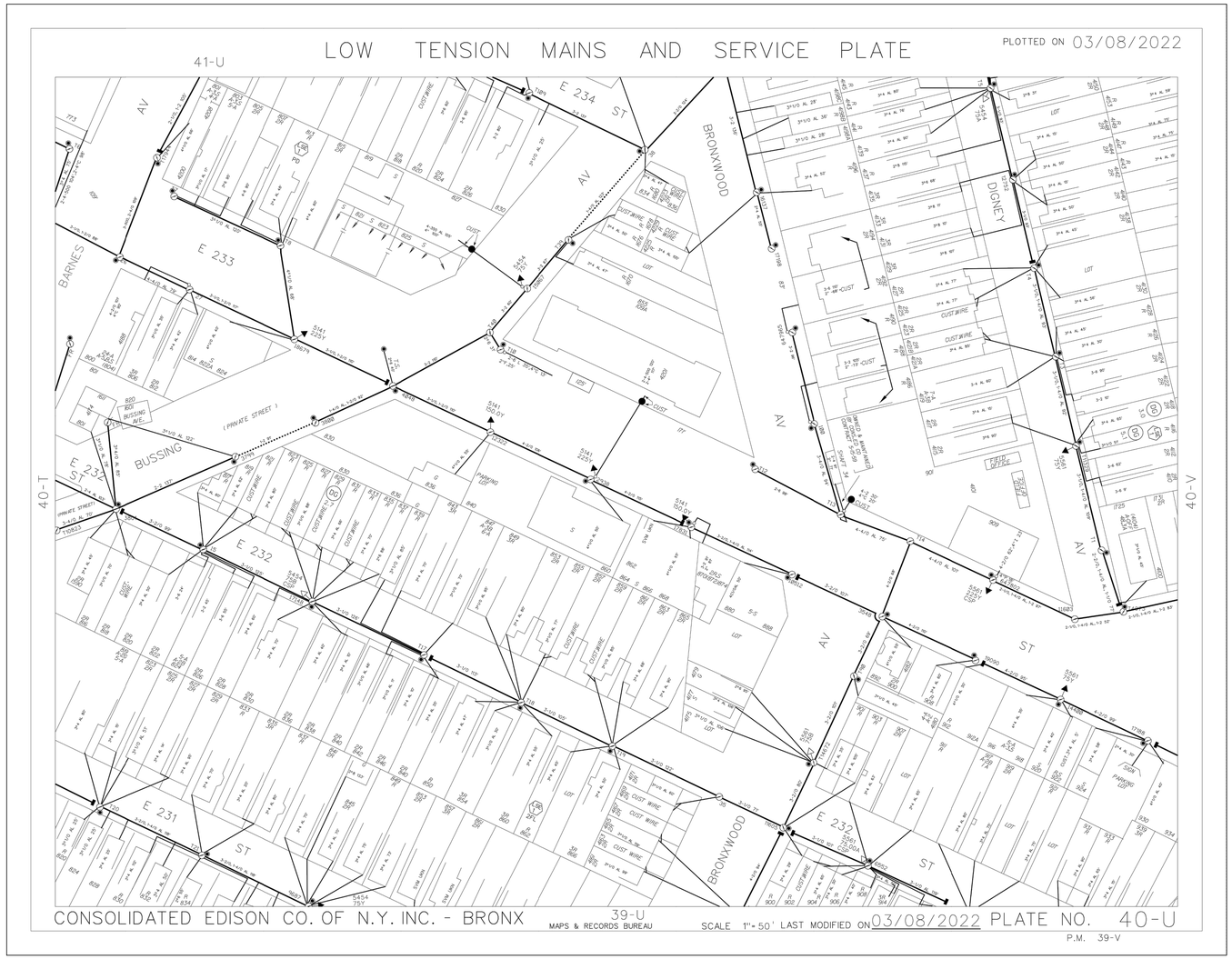


NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. LOW TENSION MAINS AND SERVICE PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 5/21

LOW TENSION MAINS AND SERVICE PLATE

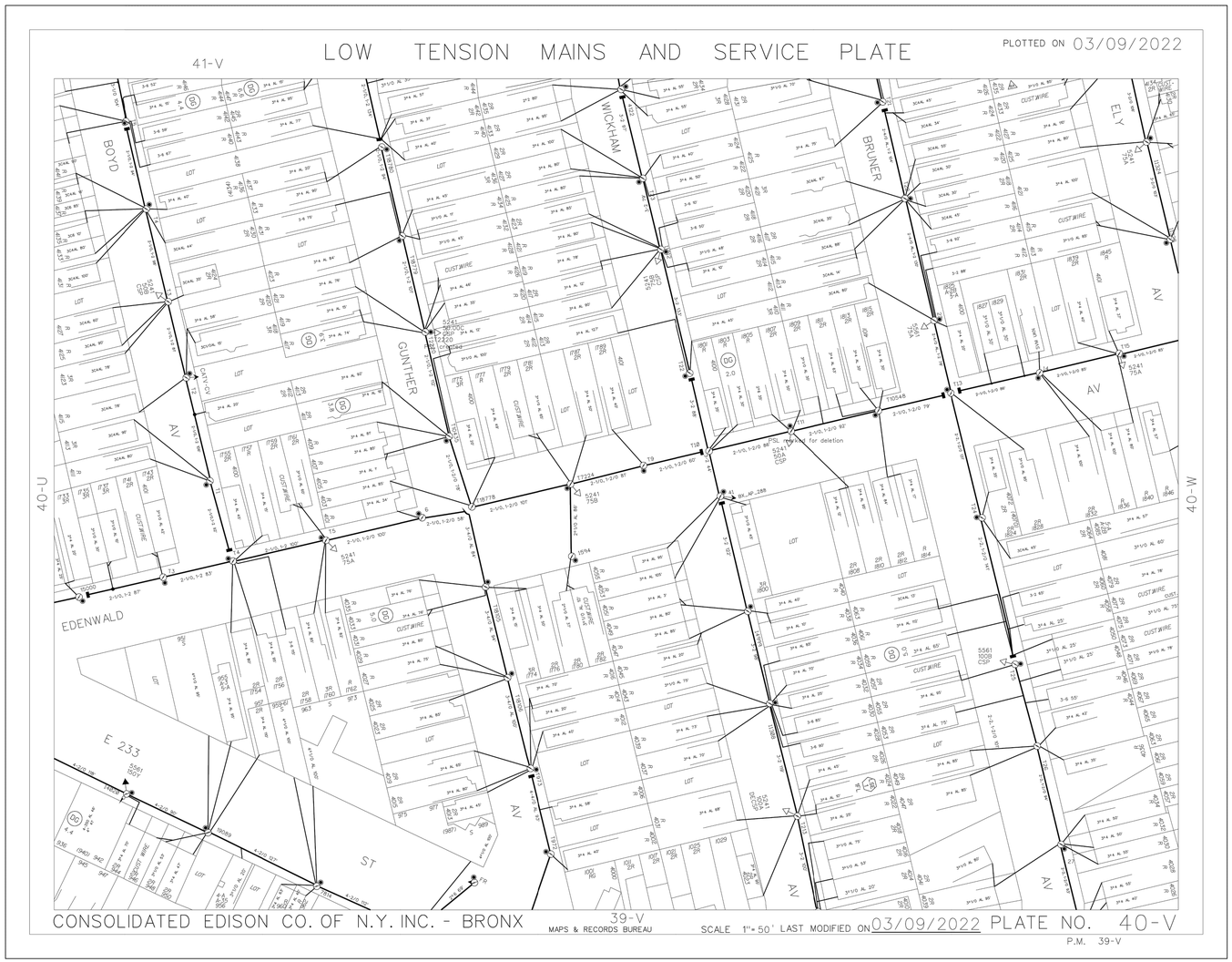


NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. LOW TENSION MAINS AND SERVICE PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 6/21

LOW TENSION MAINS AND SERVICE PLATE

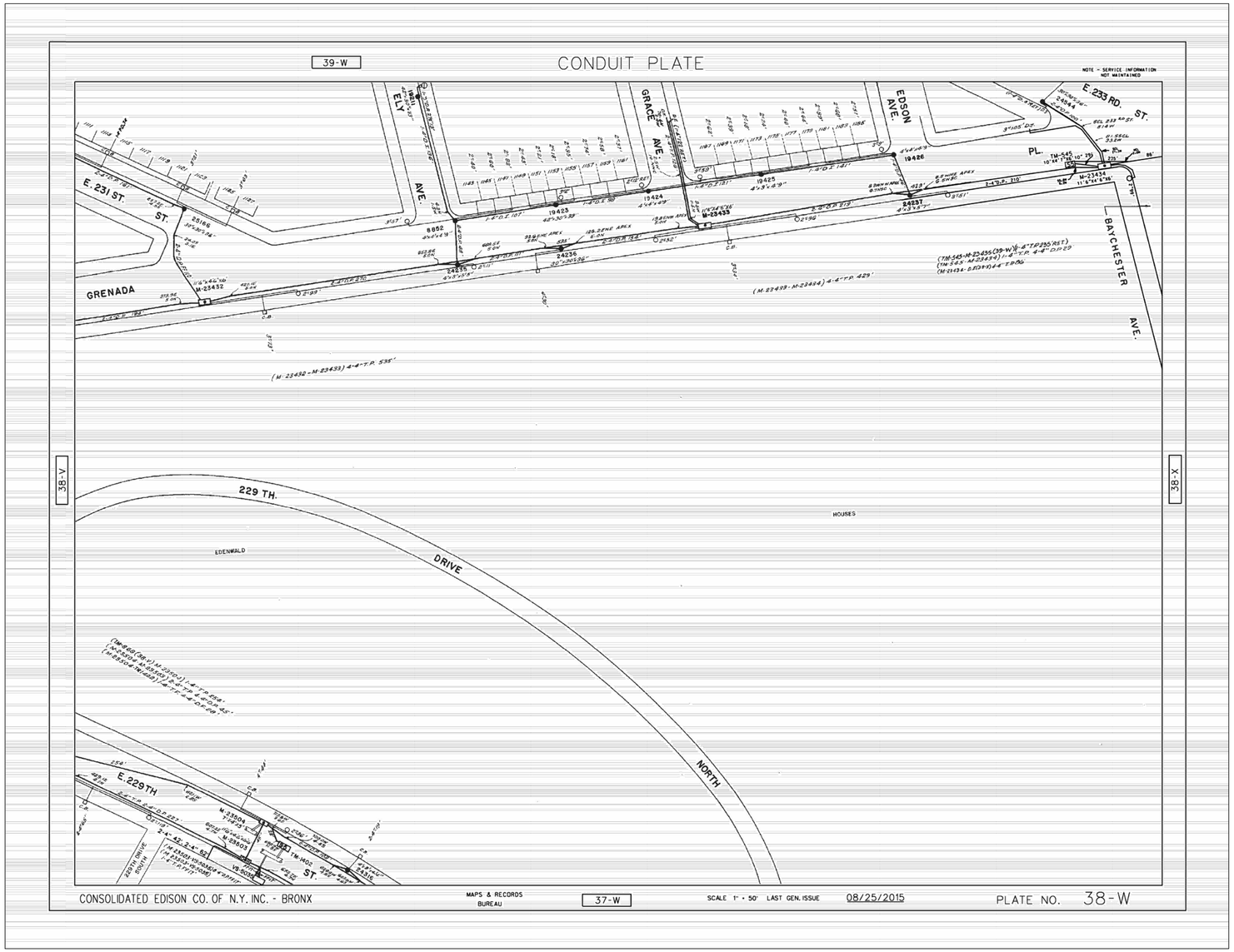


NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. LOW TENSION MAINS AND SERVICE PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 7/21

CONDUIT AND DUCT OCCUPANCY PLATE



NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

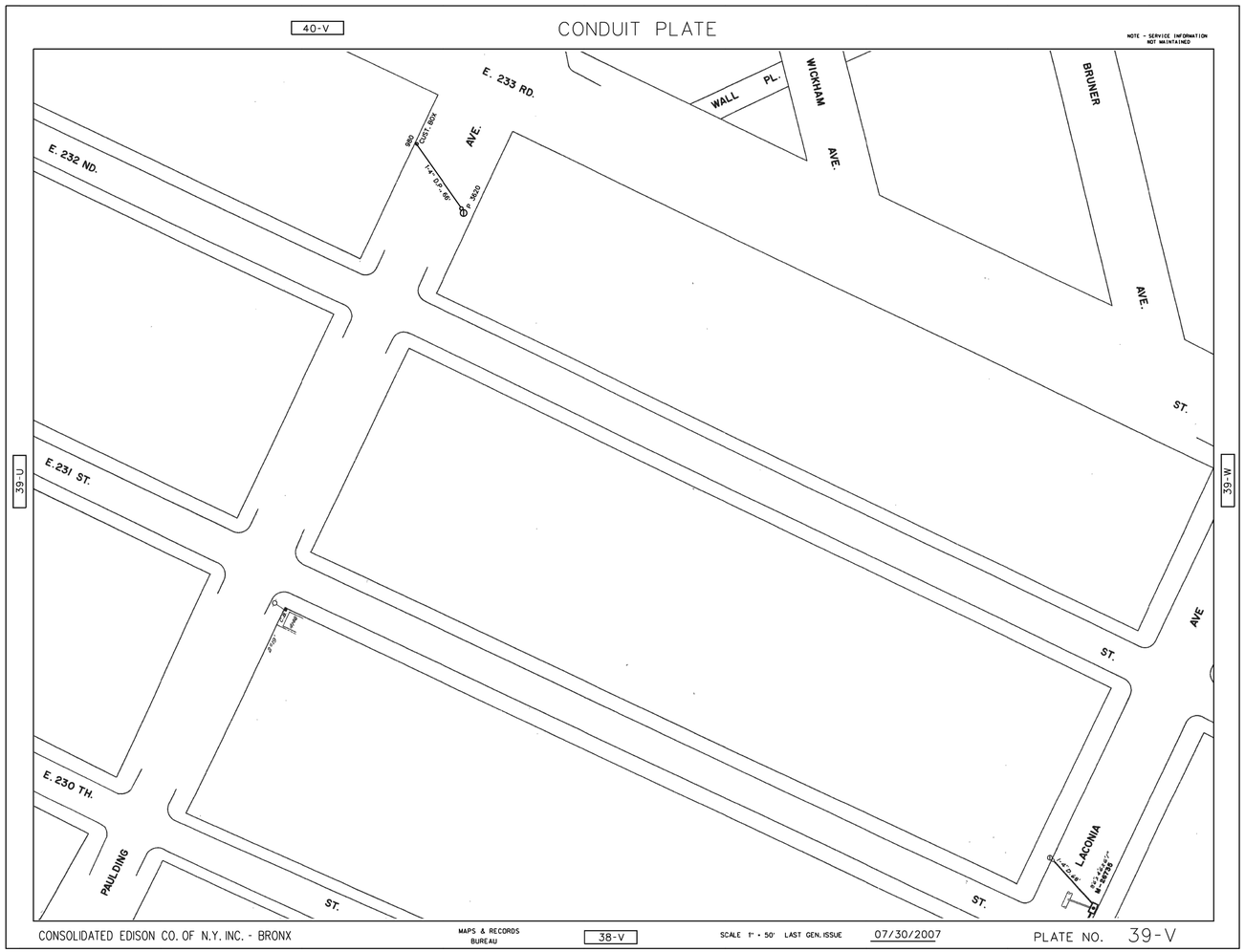
CONDUIT AND DUCT OCCUPANCY PLATE

NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. CONDUIT AND DUCT OCCUPANCY PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 9/21

CONDUIT AND DUCT OCCUPANCY PLATE

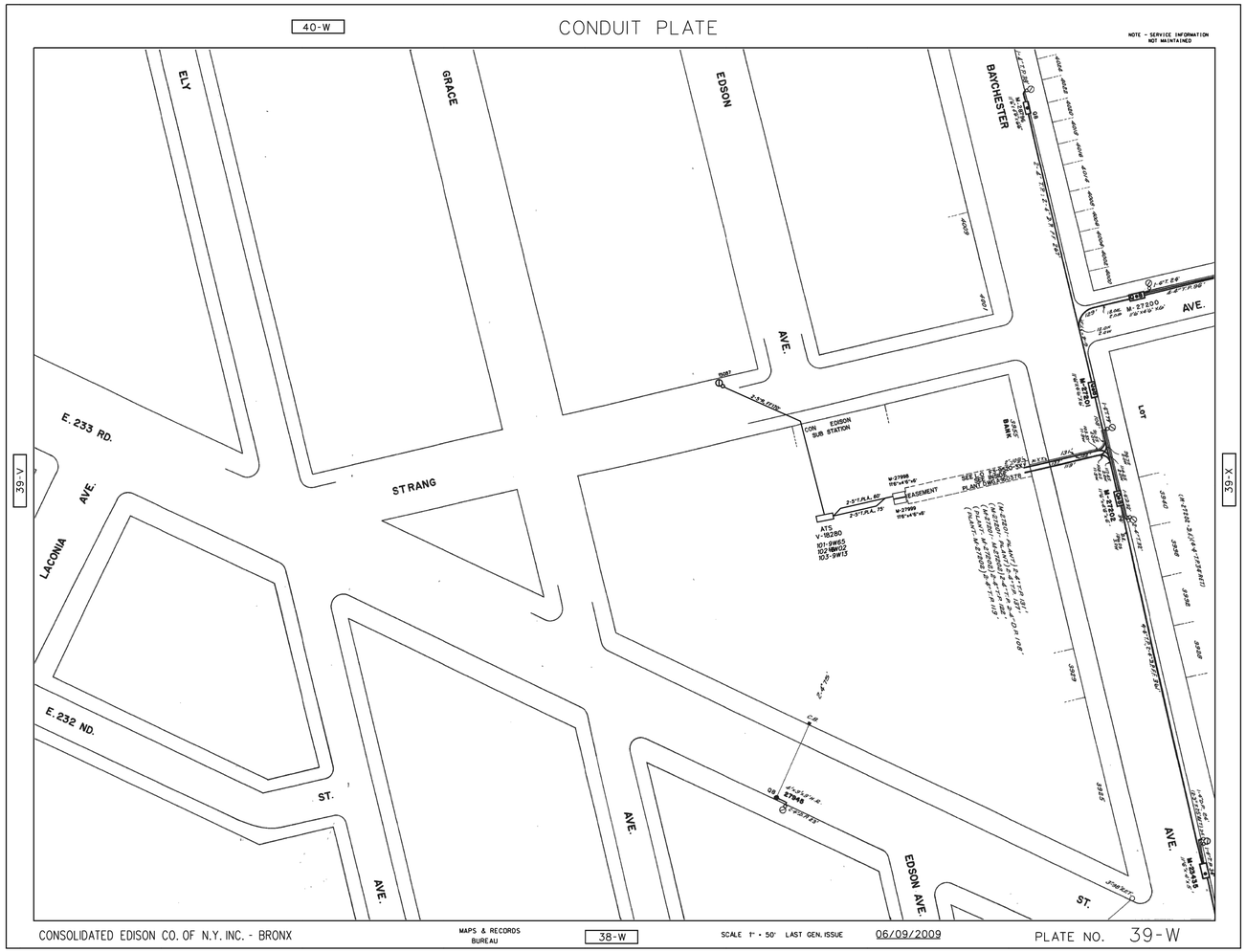


NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. CONDUIT AND DUCT OCCUPANCY PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 10/21

CONDUIT AND DUCT OCCUPANCY PLATE

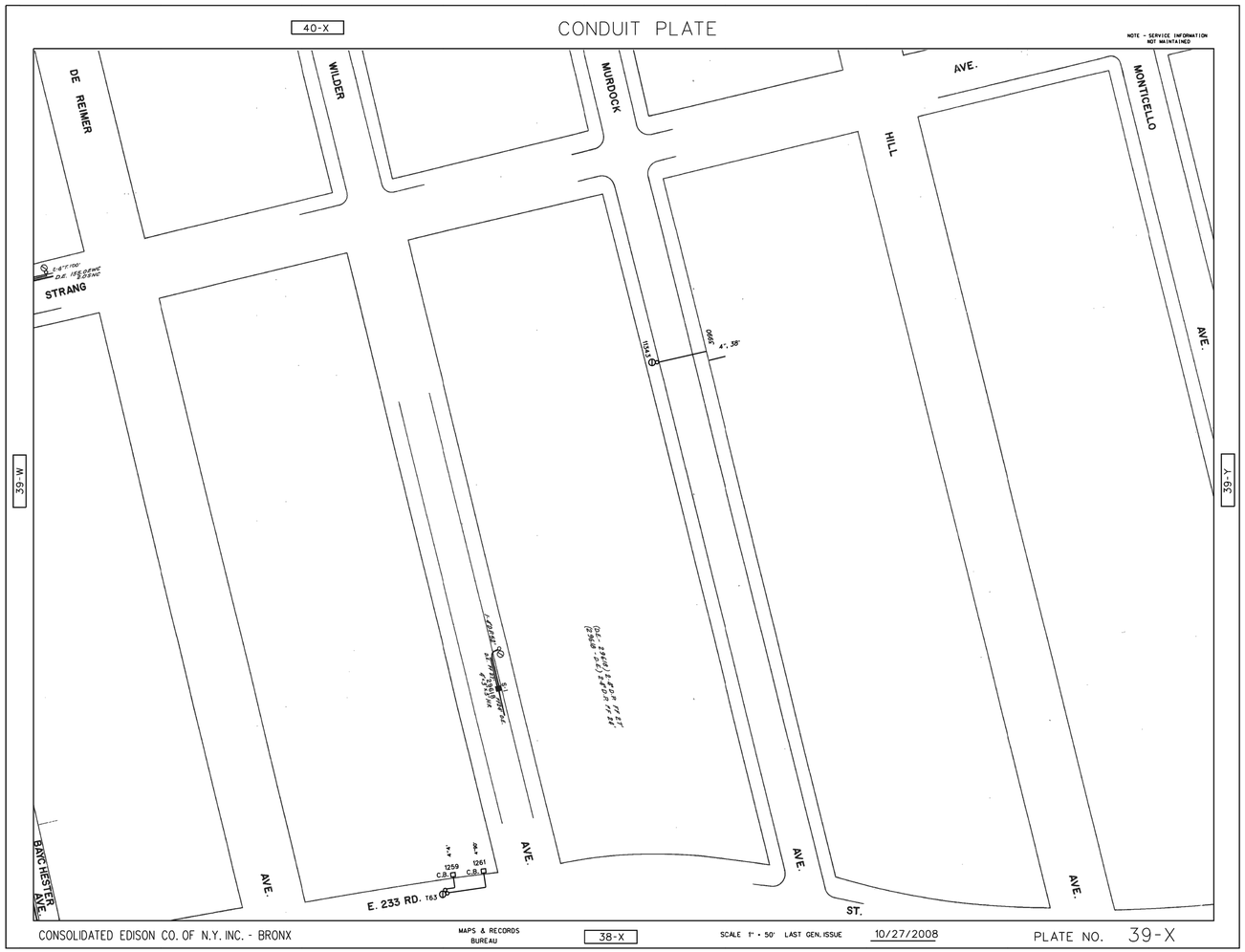


NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. CONDUIT AND DUCT OCCUPANCY PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 11/21

CONDUIT AND DUCT OCCUPANCY PLATE

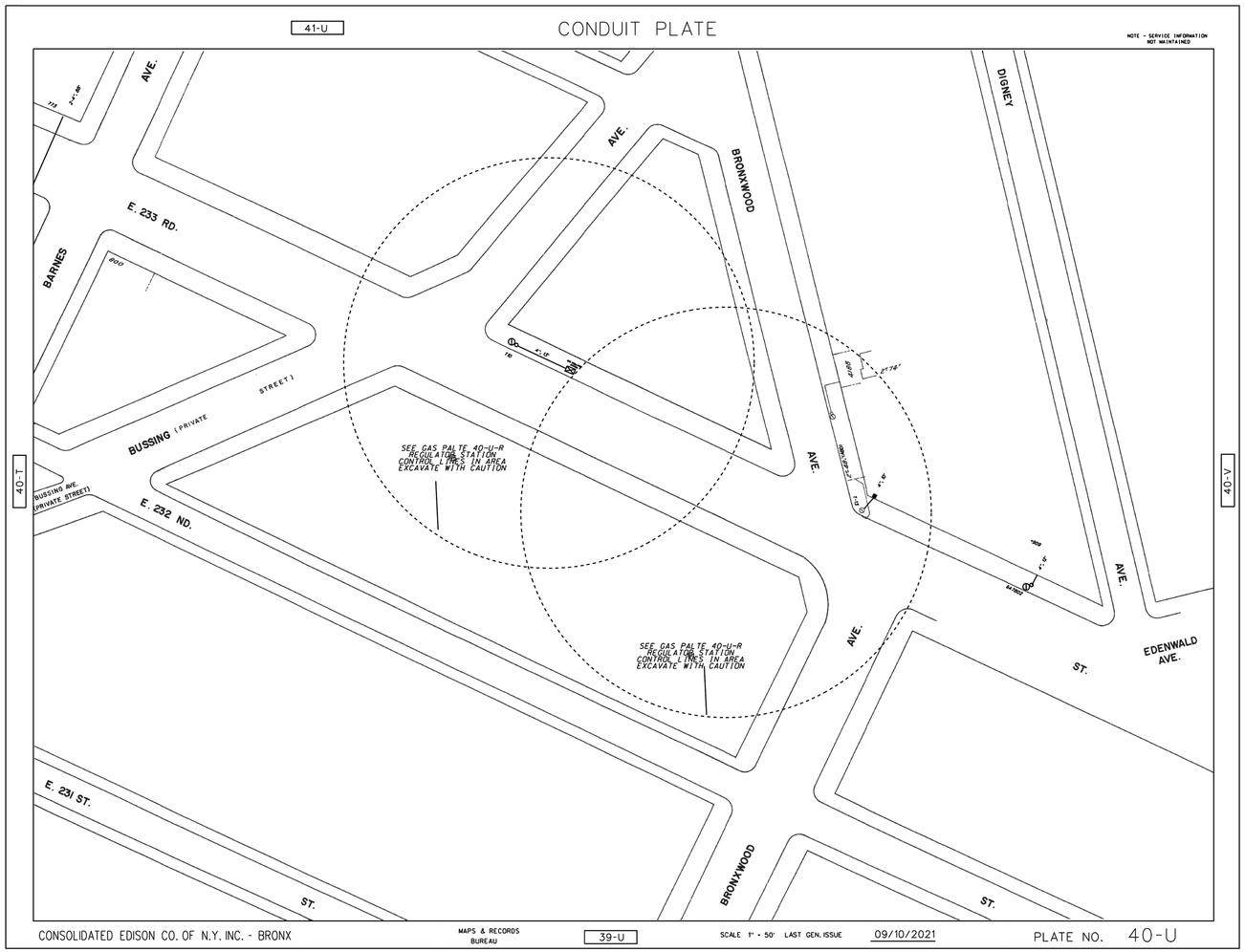


NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. CONDUIT AND DUCT OCCUPANCY PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 12/21

CONDUIT AND DUCT OCCUPANCY PLATE



NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. CONDUIT AND DUCT OCCUPANCY PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 13/21

CONDUIT AND DUCT OCCUPANCY PLATE

NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	conEdison CONSOLIDATED EDISON CO. OF NEW YORK, INC. CONDUIT AND DUCT OCCUPANCY PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 14/21

GAS MAINS AND SERVICE PLATE

NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. GAS MAINS AND SERVICES PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 15/21

GAS MAINS AND SERVICE PLATE

NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. GAS MAINS AND SERVICES PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 16/21

GAS MAINS AND SERVICE PLATE

NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

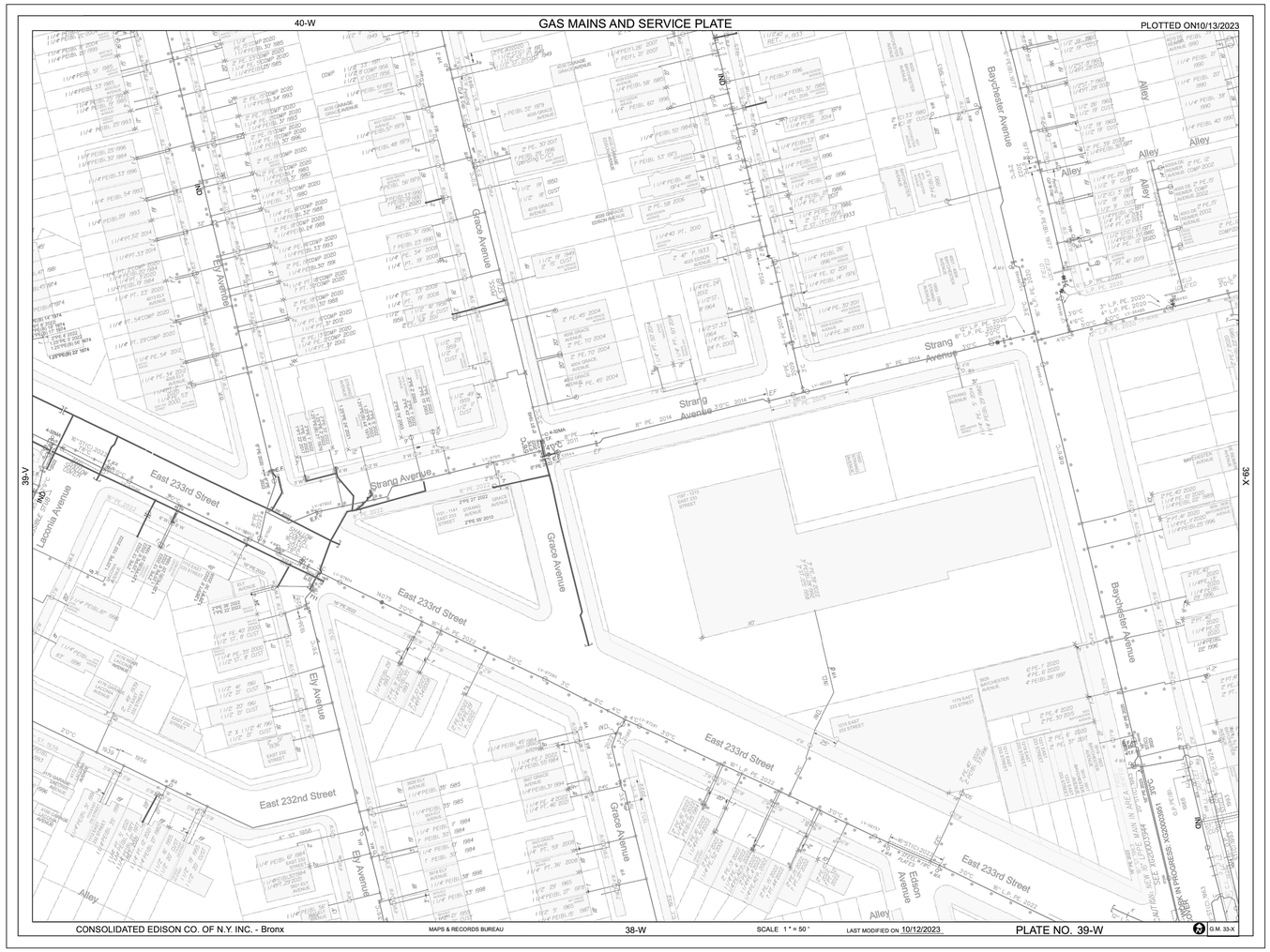
conEdison

CONSOLIDATED EDISON CO. OF NEW YORK, INC.
GAS MAINS AND SERVICES PLATES

CAPITAL PROJECT HED562
LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE
BOROUGH OF THE BRONX

SHEET 17/21

GAS MAINS AND SERVICE PLATE



NOTE:

THIS DRAWING IS FOR REFERENCE ONLY.

	CONSOLIDATED EDISON CO. OF NEW YORK, INC. GAS MAINS AND SERVICES PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 18/21

GAS MAINS AND SERVICE PLATE

NOTE:

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	CONSOLIDATED EDISON CO. OF NEW YORK, INC. GAS MAINS AND SERVICES PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 19/21

GAS MAINS AND SERVICE PLATE

NOTE:

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	CONSOLIDATED EDISON CO. OF NEW YORK, INC. GAS MAINS AND SERVICES PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 20/21

GAS MAINS AND SERVICE PLATE

NOTE:

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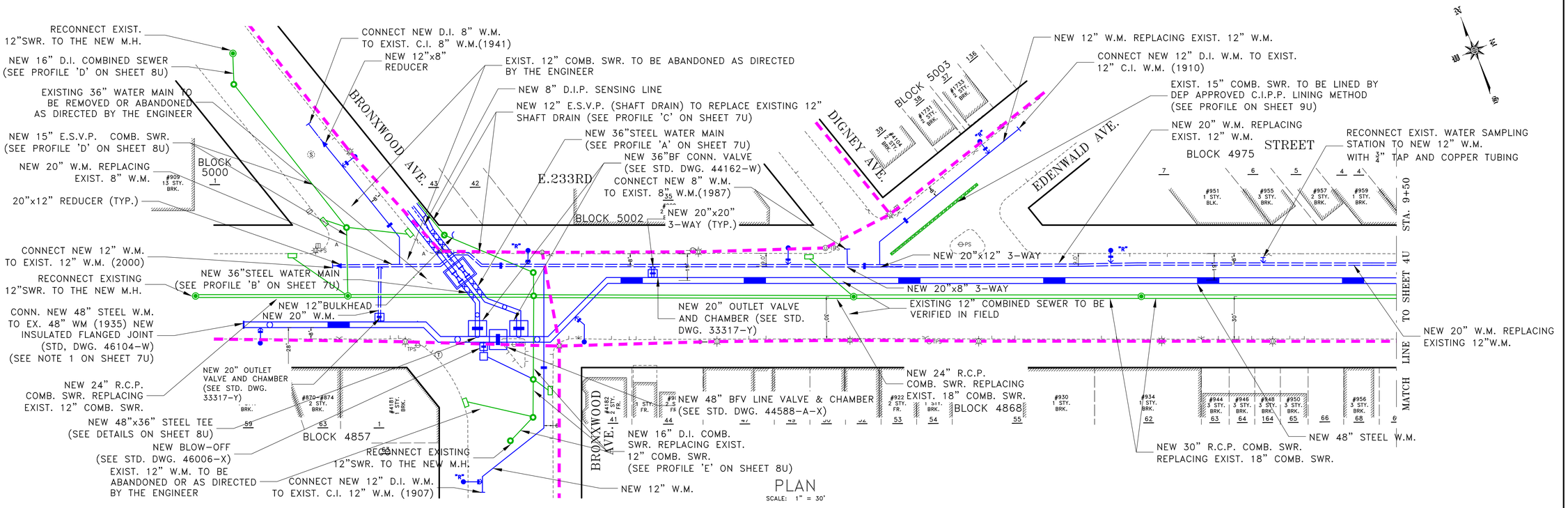
	CONSOLIDATED EDISON CO. OF NEW YORK, INC. GAS MAINS AND SERVICES PLATES	**CAPITAL PROJECT HED562** LOCATION EAST 233 ST BTW. BRONXWOOD AVE AND DE REIMER AVE BOROUGH OF THE BRONX	SHEET 21/21



LEGEND:

ECS OVERHEAD FACILITIES

1.ALL ECS LINES WILL REMAIN IN PLACE AND ACTIVE DURING ALL PHASES OF THE WORK OPERATIONS EXCEPT THAT THE SERVICE WIRES WILL BE REMOVED AND RECONNECTED DAILY BY ECS FOR PILE DRIVING OPERATIONS ONLY.

2.CONTRACTOR SHALL MAINTAIN A SAFE OPERATING DISTANCE TO AVOID CONTACT WITH THE OVERHEAD LINES.

3.ECS POLES TO BE SUPPORTED AS PER SKETCH JB 351T IN CONSULTATION WITH VERIZON REPRESENTATIVES.

EMPIRE CITY SUBWAY CO/LTD
A Verizon Company

SCALE AS SHOWN

CADD FILE_____

ENGINEER-IN-CHARGE

DEPUTY DIRECTOR

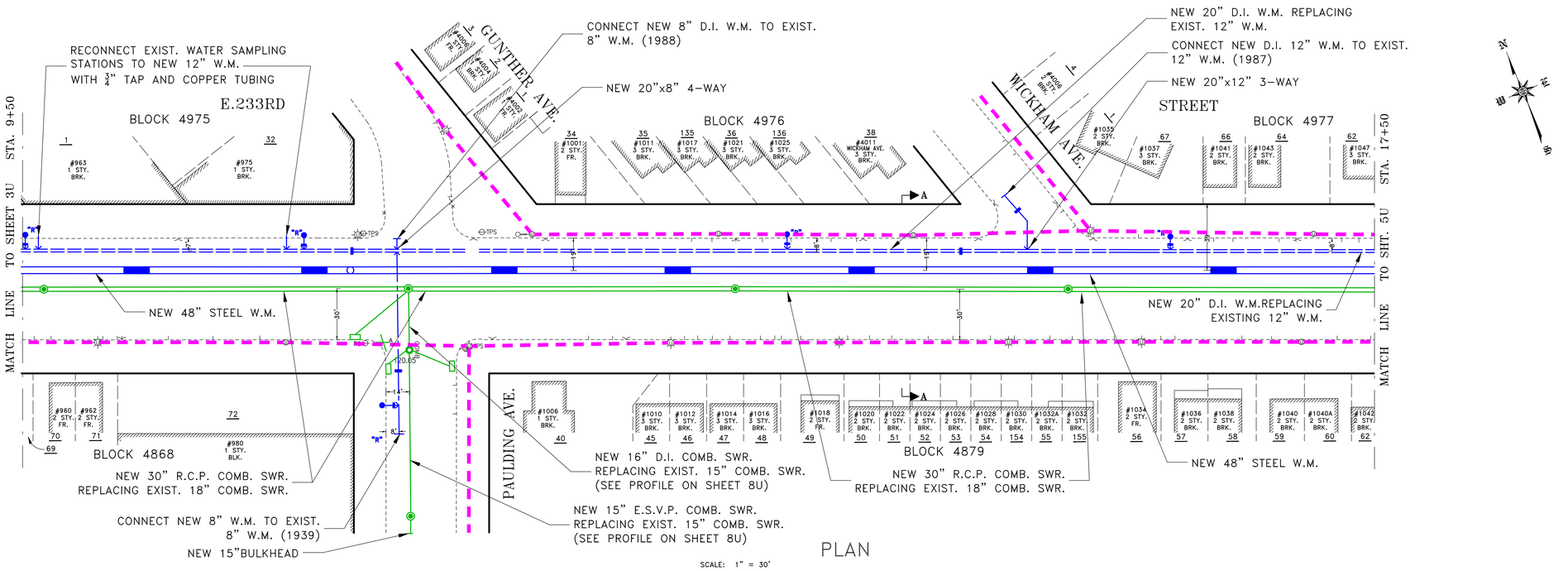
CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

ECS OVERHEAD MAINLINE PLANS

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
BOROUGH OF THE BRONX

PROJECT ID: HED562 | DATE: | SHEET 1/4

PROJECT ID: HED562



LEGEND:

ECS OVERHEAD FACILITIES

1.ALL ECS LINES WILL REMAIN IN PLACE AND ACTIVE DURING ALL PHASES OF THE WORK OPERATIONS EXCEPT THAT THE SERVICE WIRES WILL BE REMOVED AND RECONNECTED DAILY BY ECS FOR PILE DRIVING OPERATIONS ONLY.

2.CONTRACTOR SHALL MAINTAIN A SAFE OPERATING DISTANCE TO AVOID CONTACT WITH THE OVERHEAD LINES.

3.ECS POLES TO BE SUPPORTED AS PER SKETCH JB 351T IN CONSULTATION WITH VERIZON REPRESENTATIVES.

EMPIRE CITY SUBWAY CO/LTD
A Verizon Company

SCALE AS SHOWN

CADD FILE_____

ENGINEER-IN-CHARGE

DEPUTY DIRECTOR

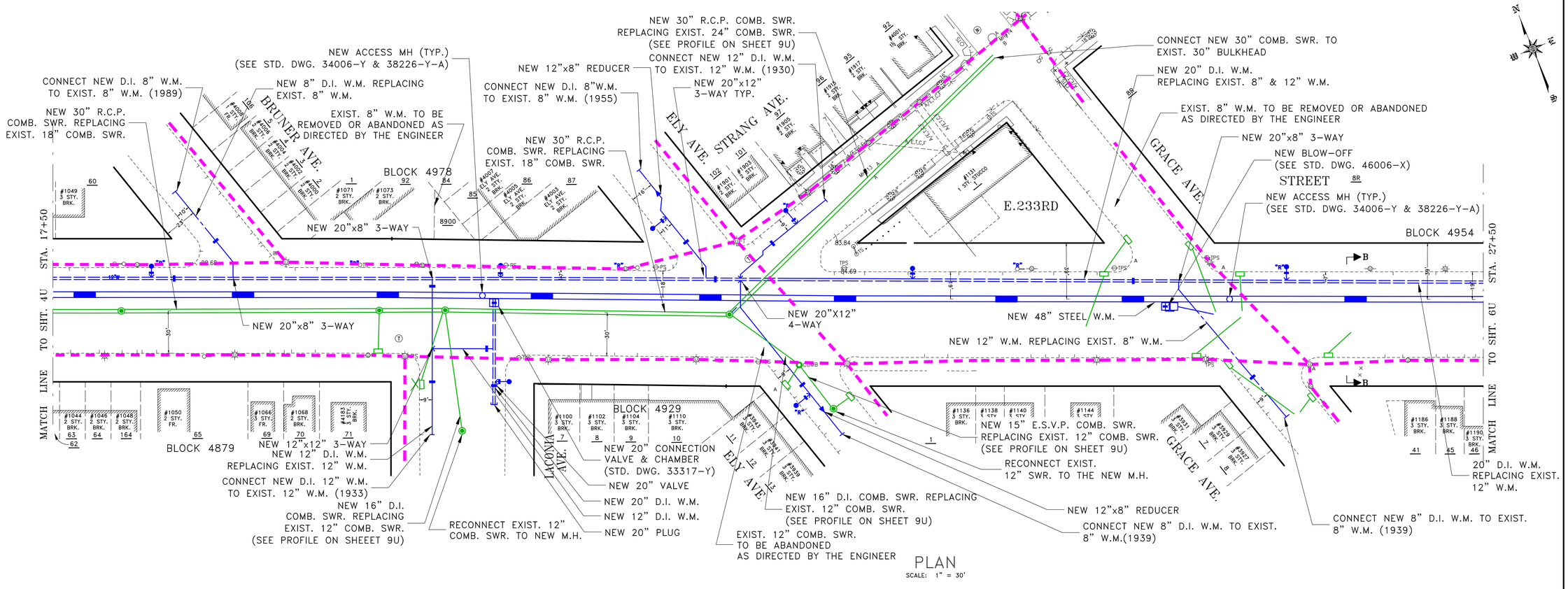
CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

ECS OVERHEAD MAINLINE PLANS

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
BOROUGH OF THE BRONX

PROJECT ID: HED562 | DATE: | SHEET 2/4

PROJECT ID: HED562



PLAN
SCALE: 1" = 30'

LEGEND:

ECS OVERHEAD FACILITIES

1.ALL ECS LINES WILL REMAIN IN PLACE AND ACTIVE DURING ALL PHASES OF THE WORK OPERATIONS EXCEPT THAT THE SERVICE WIRES WILL BE REMOVED AND RECONNECTED DAILY BY ECS FOR PILE DRIVING OPERATIONS ONLY.

2.CONTRACTOR SHALL MAINTAIN A SAFE OPERATING DISTANCE TO AVOID CONTACT WITH THE OVERHEAD LINES.

3.ECS POLES TO BE SUPPORTED AS PER SKETCH JB 351T IN CONSULTATION WITH VERIZON REPRESENTATIVES.

EMPIRE CITY SUBWAY CO/LTD
A Verizon Company

SCALE AS SHOWN

CADD FILE_____

ENGINEER-IN-CHARGE

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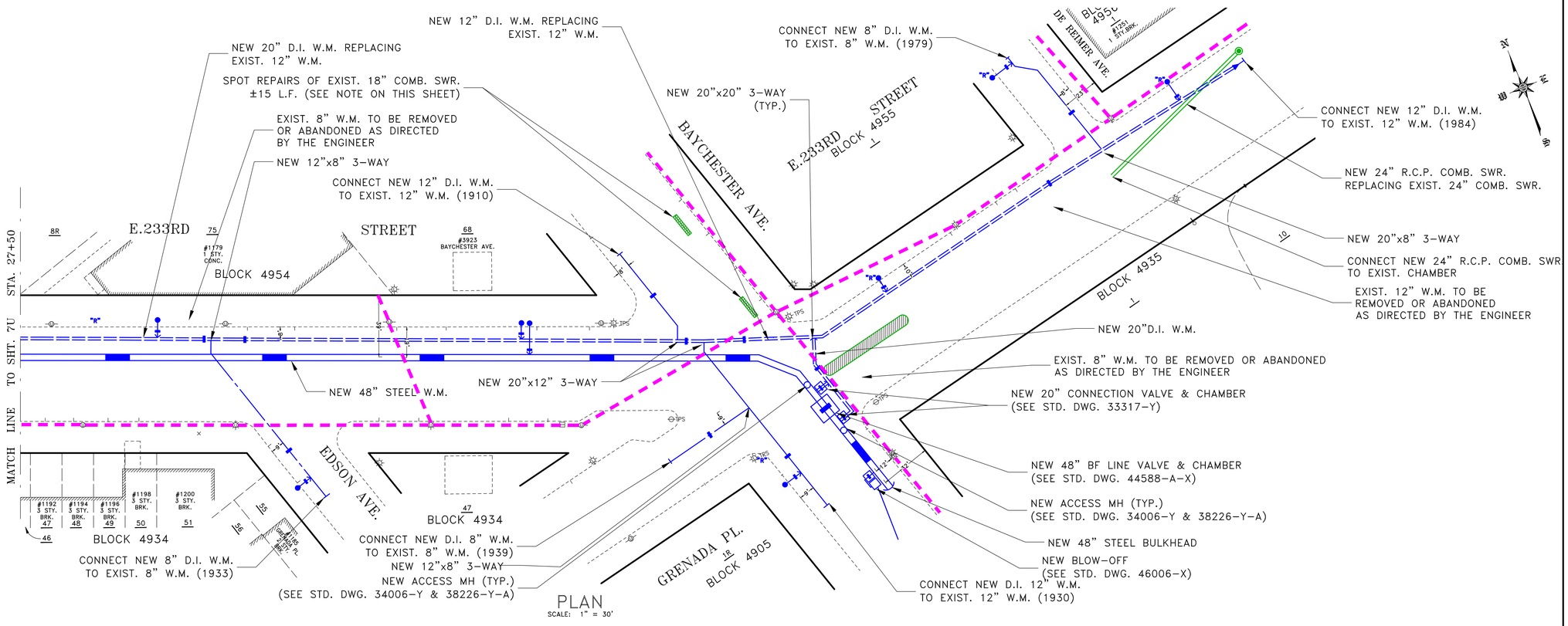
CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

ECS OVERHEAD MAINLINE PLANS

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
BOROUGH OF THE BRONX

PROJECT ID: HED562 | DATE: | SHEET 3/4

PROJECT ID: HED562



LEGEND:

ECS OVERHEAD FACILITIES

1.ALL ECS LINES WILL REMAIN IN PLACE AND ACTIVE DURING ALL PHASES OF THE WORK OPERATIONS EXCEPT THAT THE SERVICE WIRES WILL BE REMOVED AND RECONNECTED DAILY BY ECS FOR PILE DRIVING OPERATIONS ONLY.

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EMPIRE CITY SUBWAY CO/LTD
A Verizon Company

SCALE AS SHOWN

CADD FILE_____

ENGINEER-IN-CHARGE

DEPUTY DIRECTOR

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

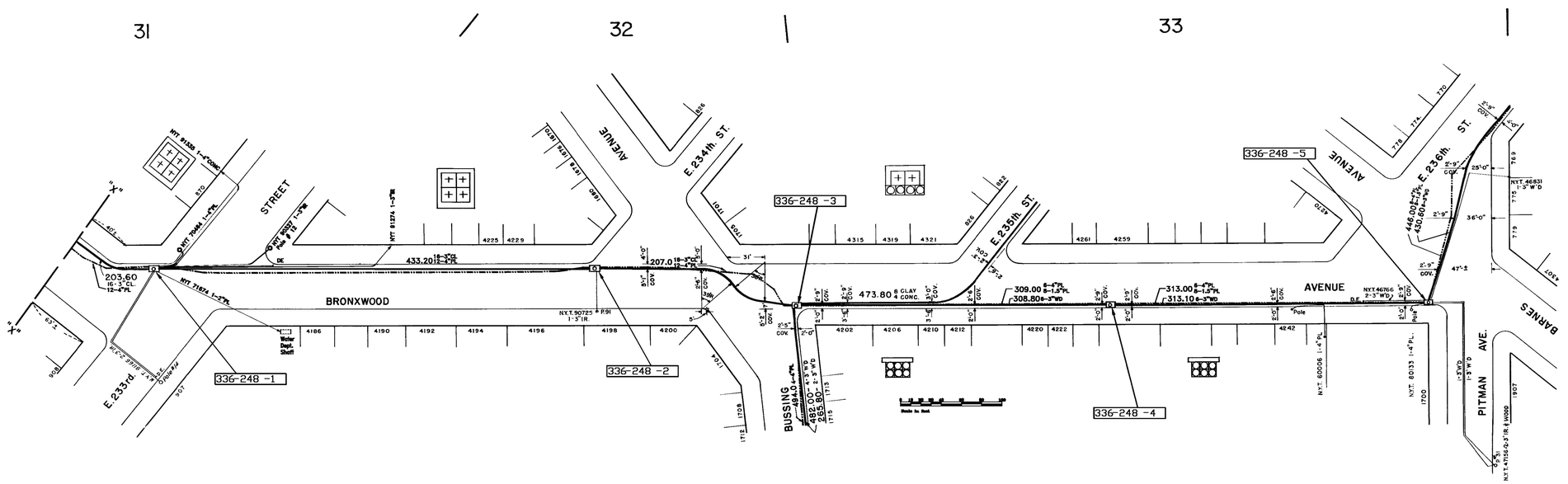
ECS OVERHEAD MAINLINE PLANS

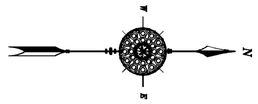
NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET, ETC.
BOROUGH OF THE BRONX

PROJECT ID: HED562 | DATE: | SHEET 4/4

PROJECT ID: HED562

JB-U28





REVISIONS

REV	BL/SUB	LOCATION	DATE
CZ		UPDATED	3/24/92
SL	484.0	BUSSING AVE.	6/24/98
DR	203.80	233rd ST	7/5/00
DR	433.20	234th ST	7/5/00
DR	207.00	BUSSING AVE	7/5/00
NS	310.00	235th ST.	2/21/06
NS	308.00	236th ST.	2/21/06
NS		UPDATED	5/23/12

BRONXWOOD AVENUE

E.233rd St. to BARNES Ave.

Empire City Subway Co., Ltd.

248

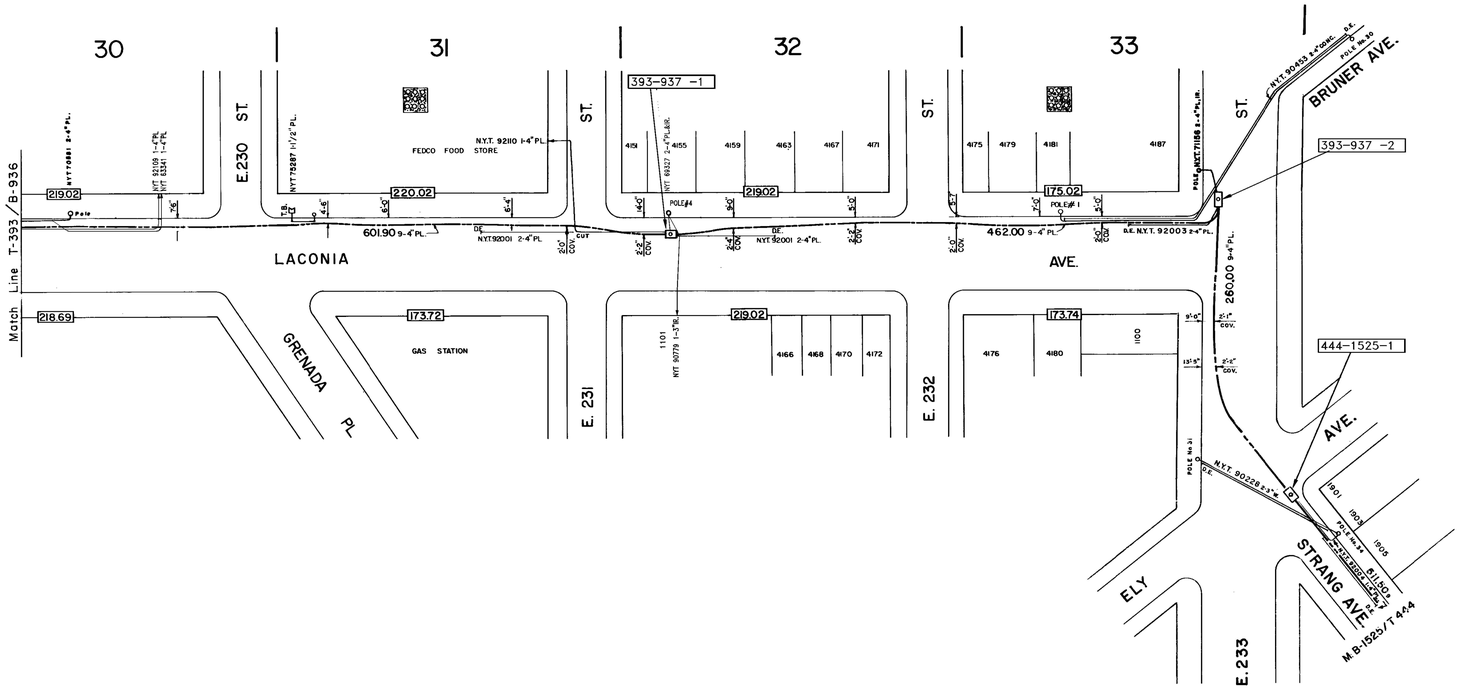
336

NOTES:

(1) NOT TO SCALE

(2) THIS PRINT IS NOT GUARANTEED FOR ACCURACY

	NOT TO SCALE	EMPIRE CITY SUBWAY CO/LTD A Verizon Company	ECS CONDUIT UTILITY PLATE	**PROJECT HED562** INSTALLATION OF NEW TRUNK WATER MAIN IN E. 233RD ST BTWN BRONXWOOD AVE & BAYCHESTER AVE BOROUGH OF THE BRONX	BRONXWOOD AVENUE 248-336 SHEET 1/2



REVISIONS

REV	BL/SUB	LOCATION	DATE
NS CW	69327	UPDATED EAST 231st STREET	12/28/95 7/20/06

Scale in feet

LACONIA AVE.
S/o E.230th ST. to E.233rd ST.

Empire City Subway Co., Ltd.

937

393

NOTES:
(1) NOT TO SCALE
(2) THIS PRINT IS NOT GUARANTEED FOR ACCURACY

	NOT TO SCALE	EMPIRE CITY SUBWAY CO/LTD A Verizon Company	ECS CONDUIT UTILITY PLATE	**PROJECT HED562** INSTALLATION OF NEW TRUNK WATER MAIN IN E. 233RD ST BTWN BRONXWOOD AVE & BAYCHESTER AVE BOROUGH OF THE BRONX	LACONIA AVENUE 937-393 SHEET 2/2

JB-U30

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: January 09, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: January 09, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		LL 12/12/24

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

12/12/2024

ADDENDUM No. # 1

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Bidders Questions and Responses to Questions:**
   No Attachment A is included with this Addendum.

2. **Revisions to Documents:**
   Attachment B is included with this Addendum.

3. **Revisions to PASSPort forms:**
   No See Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFx tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

DDC strongly advises vendors to finalize and submit bids 48 hours prior to due date and time. The City is not responsible for technical issues (e.g. internet connection, power outages, technology malfunction, computer errors, etc.) related to bid submissions.

If additional information is required, please contact the Department of Design and Construction, Contract Section via PASSPort (in the Discussions with Buyer section).

Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

None

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

A) Updated VOL2 OF 3:

Deleted the bracketed language of New York City Mayoral Executive Order No. 39 Rider (Page 36).

B) ADDED New DOCUMENT:

Added "Temporary ACCESS FORM" for Pre-bid conference scheduled on 12/17/2024.
The Bidder needs to fill out the form and return/send it to DEP as noted on the form to attend the Pre-bid conference.

NYC Environmental Protection

Clear Form

DEP POLICE USE ONLY	
Access: ☐ Approved ☐ Denied	Date/Time:
Reviewing Officer: Initials:	Badge #:

TEMPORARY ACCESS FORM

Type of Access Requested. Select one:

☐ **DAY WORKER ACCESS -** For persons working on a day-to-day basis at a DEP facility and/or project site and who are not part of a contractor's regular staff. DEP Police will notify the employee, construction manager, and post officer if access is granted.

☐ **DAY TOUR ACCESS -** For persons attending tours of DEP critical infrastructure. DEP Police will notify the individual and sponsoring DEP entity if access is granted.

☐ **PRE-BID MEETING SITE ACCESS -** For prospective bidders attending pre-bid meetings at a DEP facility and/or project site. Any bidder who does not fax or e-mail this form to the appropriate DEP Project Manager at least one week prior to the scheduled visit will be required to bring the requested information to the site no less than 30 minutes prior to the scheduled meeting start time; there is no admittance of any bidder more than 30 minutes after the scheduled meeting start time.

☐ **DELIVERIES -** For persons delivering materials to a DEP site (other than UPS or FedEx).

SUBMIT FORM TO:	East of Hudson - Eastview Command Center T: (914) 593-7500 / F: (914) 345-1840 E: PoliceEastviewComm@dep.nyc.gov	West of Hudson - Ashokan Dispatch T: (845) 657-8433 / F: (845) 657-6145 E: Ashokancomm@dep.nyc.gov

This form expires fifteen (15) days from the date of submission. Access beyond that date requires official DEP-issued identification or submission of a new Temporary Access Form.

All fields are required. Please print clearly or type:	Today's Date:
Date(s) Access Requested: From:	To:
Site Location (name and/or address):	
Company or Group Affiliation Name:	
Security Point of Contact: Name:	
Telephone #:	
Work to be Performed:	
Name: Last , First , M.I.	
Date of Birth (mm/dd/yyyy):	Social Security # (last 4 only):
Contact Telephone Number(s):	or
Driver License #:	, Issuing State
If no driver license, other form of government issued photo identification and number:	

I hereby affirm that the above information is true and that I agree to comply with all DEP policies and rules while I am on DEP property. I understand that 1) I must bring my identification to the site for physical inspection, 2) expired identification will not be accepted, and 3) providing false or misleading information or identification may result in criminal charges, denial of access to DEP sites and facilities, or rejection of any bid submitted by the applicant's company.

Signature

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 2 of the procurement.

Please note that numbering of addenda is independent of rounds.

Questionnaire Changes:

None

Item Grid Changes:

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: January 09, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: January 09, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		
#2 Revisions to PASSPort;	0	12/13/2024		LL 12/13/24

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

12/13/2024

ADDENDUM No. # 2

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Bidders Questions and Responses to Questions:**
   No Attachment A is included with this Addendum.

2. **Revisions to Documents:**
   No Attachment B is included with this Addendum.

3. **Revisions to PASSPort forms:**
   See Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFx tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

DDC strongly advises vendors to finalize and submit bids 48 hours prior to due date and time. The City is not responsible for technical issues (e.g. internet connection, power outages, technology malfunction, computer errors, etc.) related to bid submissions.

If additional information is required, please contact the Department of Design and Construction, Contract Section via PASSPort (in the Discussions with Buyer section).

Signed For Nasrin Akter
Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

None

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

None

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum is included within Round 2 of the procurement.

Please note that numbering of addenda is independent of rounds.

Setup Changes:

1. Pre-Proposal/Pre-Bid Conference: Please note the following updated information concerning the pre-bid conference/site visit:

Notice to Bidders: Please contact Mr. Djidda Djibrine P.E. of the Department of Design and Construction at 718-391-2027 to submit security clearance information and set up an appointment at least two (2) days prior to the scheduled visit.

Questionnaire Changes:

None

Item Grid Changes:

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: January 09, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: January 09, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		
#2 Revisions to PASSPort;	0	12/13/2024		
#3 Revisions to PASSPort;	0	12/17/2024		

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

12/17/2024

ADDENDUM No. # 3

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Bidders Questions and Responses to Questions:**
   No Attachment A is included with this Addendum.

2. **Revisions to Documents:**
   No Attachment B is included with this Addendum.

3. **Revisions to PASSPort forms:**
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If additional information is required, please contact the Department of Design and Construction, Contract Section via PASSPort (in the Discussions with Buyer section).

Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

None

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

None

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum is included within Round 2 of the procurement.

Please note that numbering of addenda is independent of rounds.

Setup Changes:

1. Pre-Proposal/Pre-Bid Conference:

(A) Reschedule the Pre-bid Conference on 12/19/2024.

(B) Please note the following updated information concerning the pre-bid conference/site visit:

Notice to Bidders: "Only approved bidders will be allowed to access the shaft. The bidder must fill in the "Temporary Access Form" attached in Addendum 1 and return it to Djidda Djibrine @ djibrindj@ddc.nyc.gov. Note that approved bidders must bring their own PPE to access the shaft. Bidders must have prior security clearance".

Questionnaire Changes:

None

Item Grid Changes:

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: January 09, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: January 09, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		
#2 Revisions to PASSPort;	0	12/13/2024		
#3 Revisions to PASSPort;	0	12/17/2024		
#4 Questions from Bidders and Responses to Questions; Revisions to Documents. Revisions to PASSPort forms	0	12/24/2024		 12/23/25

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

12/24/2024

ADDENDUM No. # 4

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Bidders Questions and Responses to Questions:**
   See Attachment A is included with this Addendum.

2. **Revisions to Documents:**
   See Attachment B is included with this Addendum.

3. **Revisions to PASSPort forms:**
   See Attachment C is included with this Addendum. **THE BIDDER IS ADVISED TO BEGIN THE NYSDOL REGISTRATION PROCESS EARLY TO PREVENT ISSUES WITH BID SUBMISSION.**

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFx tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

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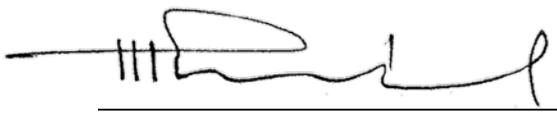
If additional information is required, please contact the Department of Design and Construction, Contract Section via PASSPort (in the Discussions with Buyer section).



for RJ

Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

No.	Bidders Questions	DDC Responses
1	Recently, the NYC Mayor's Office of Contract Services introduced a new requirement that, effective December 30, 2024, all bids and proposals for construction projects must include a copy of the bidder or proposer's certificate of registration with the New York State Department of Labor (DOL), and that all contractors and subcontractors in New York City who are submitting bids or performing construction work on public projects must provide a copy of their Certificate of Registration from the New York State Department of Labor (DOL). Does this requirement apply only to bids released a□er December 30, 2024, or does it affect bids currently released but are still due after December 30, 2024? Please advise.	Please refer the attachment C of this Addendum.
2	The Contractor, our subcontractors, and venders respectfully request a 2-week time extension for submitting our proposal.	No extension can be granted at this time.
3	We respectfully request the list of plan holders for this bid.	Please refer the attachment B of this Addendum.

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

1) Planholder List Uploaded

Vendor
CAC INDUSTRIES INC
COPPOLA PAVING & LANDSCAPING CORP.
DIFAZIO IND LLC
ADC CONSTRUCTION L.L.C
JRCRUZ CORP
HALCYON CONSTRUCTION CORP
P&T II CONTRACTING CORP
J PIZZIRUSSO LANDSCAPING CORP
JLJ IV ENTERPRISES INC
LAWS CONSTRUCTION CORP.
MFM Contracting Corp.
JUDLAU CONTRACTING INC
PERFETTO CONTRACTING CORP
RESTANI CONSTRUCTION CORP
INTER CONTRACTING CORP
DELOITTE CONSULTING LLP
TRIUMPH CONSTRUCTION CORP
AKELA CONTRACTING LLC
HUICATAO CORP
AMERICAN DARLING VALVE A DIV O
ATLANTIC FLUID TECHNOLOGY INC.
NORTHWEST PIPE CO
SAM LIVINGSTON
DIFAZIO INFRASTRUCTURE- DIFAZIO INDUSTRIES JV
Bond Civil & Utility Construction Inc
M.P.D. LLC

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 3 of the procurement.

Please note that numbering of addenda is independent of rounds.

Document Submission Setup

"Added Requested Document" → information for NYSDOL Public Work Contractor and Subcontractor Registry requirements.

Questionnaire Changes:

Added NYSDOL Public Work Contractor and Subcontractor Registry requirements under Section "Affirmation Certification".

Item Grid Changes:

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: January 09, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: January 09, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		
#2 Revisions to PASSPort;	0	12/13/2024		
#3 Revisions to PASSPort;	0	12/17/2024		
#4 Questions from Bidders and Responses to Questions; Revisions to Documents. Revisions to PASSPort forms	0	12/24/2024		
#5 Revisions to Documents. Questions from Bidders and Responses to Questions;	0	12/31/2024		 12/31/24

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

12/31/2024

ADDENDUM No. # 5

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Bidders Questions and Responses to Questions:**
   See Attachment A is included with this Addendum.

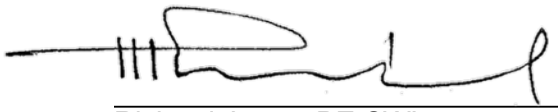
2. **Revisions to Documents:**
   See Attachment B is included with this Addendum.

3. **Revisions to PASSPort forms:**
   No Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFx tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

DDC strongly advises vendors to finalize and submit bids 48 hours prior to due date and time. The City is not responsible for technical issues (e.g. internet connection, power outages, technology malfunction, computer errors, etc.) related to bid submissions.

If additional information is required, please contact the Department of Design and Construction, Contract Section via PASSPort (in the Discussions with Buyer section).



for RJ

Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

No.	Bidders Questions	DDC Responses
1	Ref Spec 61.21M F,D&I Metal Seated Butterfly Valve section 12(J) requires all wetted components be NSF61 compliant however, 12(K)1 requires a static graphite gasket behind the disc seal ring; 12(K)6 requires a static graphoil gasket behind the seal ring, 12(L) requires the packing to be graphite; these are all wetted components. Graphite and graphoil are not NSF61 compliant and therefore these requirements directly contradict one another. The graphite seat ring components allow the valve to achieve bi-directional zero leakage. Please clarify if the use of sole source Adams Valves containing graphite and graphoil will be allowed. If not, will relief to the bi-directional zero leakage requirement be provided?	DEP will consider other alternative material such as Teflon in lieu of graphite or graphoil to meet the NSF 61 compliance.
2	Ref Drawings 17U and 19U. Please clarify if the rubber seated butterfly valves are to be operated from both the sidewalk level and chamber level through a bevel gear that provides both a vertical square nut input and a horizontal handwheel input. What bid item covers the cost of the bevel gear, it's support, the extended input shaft?	The cost of bevel gear is included with the item #61.21BVO36. The operation will be from both the sidewalk level and the chamber grating level.
3	Reference drawing 17U note 9 regarding pipe supports for the air release and blow-off valves. What is the material specification for the pipe supports?	Material specification for 4" and 6" piping supports shall be Type 316 Stainless Steel.
4	Please clarify what grade stainless steel is required for the bolt, nut and washer assemblies inside the chamber.	Refer to Attachment B of this Addendum.
5	Ref Drawing 22U, what bid item covers the hydrant valve box and packing gland details?	The hydrant valve box is paid under item 63.11VC and the packing gland is paid under item 62.21BV036.

No.	Bidders Questions	DDC Responses
6	Please clarify if all flanged joints inside the chamber ie. pipe to pipe, pipe to valve, valve to riser cap for the 36in piping, air release and blow-off piping are to be fully insulated joints. Are insulated joints required at flange connections that are not dissimilar metal ie rubber seated butterfly valves to pipe and pipe to pipe?	All flanged joints are fully insulated.
7	Ref Drawing 13U Piping Plan, DHM1Electrical Removal Plan. The electrical removal plan points to trunk main pipe to remain that the piping plan shows as being new. Please provide a drawing showing the existing pipe and valve removal scope and clarify which bid items cover the removal of the old piping and valves inside the chamber.	The shaft chamber work is for water main and appurtenances removals and installation. DHM1-DHM4 is related to the dehumidifier work. For the removals, refer to NYC DEP sewer and water main specifications, section 10.13 (4).
8	In reading section HW-900H and both Article 25 and Article 26 of the Standard Construction Contract it states no overhead and profit will be applied to this item on a percentage basis. It is not clear whether the cost of direct field supervision; superintendent, engineers, etc. will be reimbursed when required to work as part of the acceleration. More specifically if the city directs the contractor to work weekends to accomplish the acceleration; will we be able to bill the cost of the field supervision required to oversee this work that is occurring on the weekends.	According to Article 26.2.11, all costs and expenses in connection with administration and management superintendence are included in the overhead. The costs and expenses associated with field supervision cannot be billed under item # HW-900H.
9	Please share the list of contractors that attended the pre-bid meeting.	C.A.C. INDUSTRIES, INC P & T II CONTRACTING CORP JR CRUZ CORP. PERFETTO CONTRACTING CORP TRIUMPH CONSTRUCTION CORP

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

1) VOL3 OF 3 :
   a. SW-Page : Added Paragraph at Point 32 in Section A - Notice to Bidders of SW-Pages.

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 4 of the procurement.

Please note that numbering of addenda is independent of rounds.

Questionnaire Changes:

None

Item Grid Changes:

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: February 06, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: February 06, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		
#2 Revisions to PASSPort;	0	12/13/2024		
#3 Revisions to PASSPort;	0	12/17/2024		
#4 Questions from Bidders and Responses to Questions; Revisions to Documents. Revisions to PASSPort forms	0	12/24/2024		
#5 Revisions to Documents. Questions from Bidders and Responses to Questions;	0	12/31/2024		
#6 Revised Bid Opening Date Revisions to PASSPort forms	0	01/07/2025		

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

01/07/2025

ADDENDUM No. # 6

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **The Bid Opening for the contract described above scheduled for January 09, 2025, at 11:30 am is rescheduled to February 06, 2025, at 11:30 am.**

2. **Bidders Questions and Responses to Questions:**
   No Attachment A is included with this Addendum.

3. **Revisions to Documents:**
   No Attachment B is included with this Addendum.

4. **Revisions to PASSPort forms:**
   See Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFx tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

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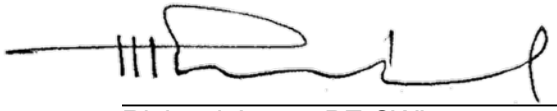

for RJ

Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

None

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

None

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum included Round 4 of the procurement.

Please note that numbering of addenda is independent of rounds.

Bid Opening Date Changes:

The Bid Opening for the contract described above scheduled for January 09, 2025, at 11:30 am is rescheduled to February 06, 2025, at 11:30 am

Questionnaire Changes:

None

Item Grid Changes:

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: February 06, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: February 06, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		
#2 Revisions to PASSPort;	0	12/13/2024		
#3 Revisions to PASSPort;	0	12/17/2024		
#4 Questions from Bidders and Responses to Questions; Revisions to Documents. Revisions to PASSPort forms	0	12/24/2024		
#5 Revisions to Documents. Questions from Bidders and Responses to Questions;	0	12/31/2024		
#6 Revised Bid Opening Date Revisions to PASSPort forms	0	01/07/2025		
#7 Revisions to Documents. Questions from Bidders and Responses to Questions; Revisions to PASSPort forms	0	01/14/2025		LL 1/13/2025

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

01/14/2025

ADDENDUM No. # 7

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Bidders Questions and Responses to Questions:**
   See Attachment A is included with this Addendum.

2. **Revisions to Documents:**
   See Attachment B is included with this Addendum.

3. **Revisions to PASSPort forms:**
   See Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFx tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

DDC strongly advises vendors to finalize and submit bids 48 hours prior to due date and time. The City is not responsible for technical issues (e.g. internet connection, power outages, technology malfunction, computer errors, etc.) related to bid submissions.

If additional information is required, please contact the Department of Design and Construction, Contract Section via PASSPort (in the Discussions with Buyer section).

Digitally signed by
Richard Jones,
PE CWI CDT

Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

No.	Bidders Questions	DDC Responses
1	The item for Lining the 15" ESVP Sewer as indicated by drawing 3U is not in the Bid Schedule. Is this work part of this project? If so, please add an appropriate bid item.	The 15"ESVP Sewer to be lined by others, under separate contract as indicated in the contract drawing.
2	On Sheet 3U (3/90), the sewer profile specifies the installation of a "New 24" R.C.P. Cl III Combined Sewer Encased in Concrete", however, there is no corresponding item listed on the bid schedule. Please clarify.	Item 50.21C4E024D "24 inch RCP Class IV Comb. Sewer Encased in Concrete" quantity is changed from 225 LF to 130 LF. New line item is added 50.21C3E024D "24 inch RCP Class III Comb. Sewer encased in concrete" with quantity of 225 LF.
3	On Sheets 3U (3/90) and 5U (5/90), the utility plan indicates the installation of a 16" D.I. Combined Sewer to be encased in concrete, as referenced on Sheets 8U and 9U. However, the bid item for this (Line 30 - 50.41C6C16) states that the sewer will be placed on a concrete cradle. Please clarify.	Item 50.41C6C16 "16 inch DIP Class 56 Comb. Sewer on concrete cradle" is deleted and replaced with appropriate line item 50.41C6E16 "16 inch DIP Class 56 Comb. Sewer Encased in concrete".
4	On Sheet 9U (9/90), the sewer profile along Strang Ave shows a "30" R.C.P. Cl III Combined Sewer Encased in Concrete," but there is no corresponding bid item to account for this. Please clarify.	Item 50.21C4E030D "30 inch RCP Class IV Comb. Sewer encased in concrete" is deleted and replaced with appropriate line item 50.21C3E030D " 30 inch RCP Class III Comb. Sewer encased in concrete.
5	Will the gas company cut and loop the services?	**Yes,** contractor have to notify the Gas Company to schedule a process in order for the gas company to come out and cut & loop the gas services.

No.	Bidders Questions	DDC Responses
6	Please be advised there is no specification for the following JB items: • JB 610.36 • JB 611.36 • JB 615.8 • JB 615.9 • JB 615.16 • JB 616.1 • JB 616.7 • JB 616.8 • JB 616.9 • JB 616.16 Please provide the complete specifications for these items so we may accurately provide an estimate.	Please refer the attachment B of this attachment.
7	Please provide the specification for Biditem 60.28ARV3A. There are several mentions of this item in the plans as well as volume 3 of the bid documents, however, the specification section is missing.	Refer to the Page 407 of "STANDARD SEWER AND WATER MAIN SPECIFICATIONS".

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

1) Updated Bid Schedule

A) Item Added : 50.21C3E024D , 50.21C3E030D and 50.41C6E16

B) Item Deleted : 50.21C4E030D and 50.41C6C16

C) Item Qty Revised: 50.21C4E024D.

2) VOL3 OF 3:
JB Page ➔ Added Item JB SECTION C, Page JB-C32 and JB-C67 to JB-C82.

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$3,425,000.00**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
1	4.02 AF-R	Bid Item	ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	25,458.00	S.Y.		$0.00	
2	4.02 AG	Bid Item	ASPHALTIC CONCRETE WEARING COURSE, 3" THICK	787.00	S.Y.		$0.00	
3	4.02 CA	Bid Item	BINDER MIXTURE	6,382.00	TONS		$0.00	
4	4.04 H	Bid Item	CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	1,282.00	C.Y.		$0.00	
5	4.05 AX	Bid Item	HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	100.00	C.Y.		$0.00	
6	4.08 BA	Bid Item	CONCRETE CURB (21" DEEP)	450.00	L.F.		$0.00	
7	4.09 AE	Bid Item	STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)	546.00	L.F.		$0.00	
8	4.09 AF	Bid Item	STRAIGHT STEEL FACED CONCRETE CURB (27" DEEP)	300.00	L.F.		$0.00	
9	4.09 BE	Bid Item	DEPRESSED STEEL FACED CONCRETE CURB (21" DEEP)	440.00	L.F.		$0.00	
10	4.09 CE	Bid Item	CORNER STEEL FACED CONCRETE CURB (21" DEEP)	560.00	L.F.		$0.00	
11	4.13 AAS	Bid Item	4" CONCRETE SIDEWALK (UNPIGMENTED)	12,303.00	S.F.		$0.00	
12	4.13 BAS	Bid Item	7" CONCRETE SIDEWALK (UNPIGMENTED)	12,100.00	S.F.		$0.00	
13	4.13 DE	Bid Item	EMBEDDED PREFORMED DETECTABLE WARNING UNITS	180.00	S.F.		$0.00	
14	4.15	Bid Item	TOPSOIL	200.00	C.Y.		$0.00	
15	4.16 AA	Bid Item	TREES REMOVED (4" TO UNDER 12" CALIPER)	5.00	EACH		$0.00	
16	4.16 CA	Bid Item	TREES PLANTED, 3" TO 3-1/2" CALIPER, ALL TYPES	7.00	EACH		$0.00	
17	4.18 A	Bid Item	MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	72.00	EACH		$0.00	
18	4.18 B	Bid Item	MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	44.00	EACH		$0.00	
19	4.18 C	Bid Item	MAINTENANCE TREE PRUNING (18" TO UNDER 24" CAL.)	34.00	EACH		$0.00	
20	4.18 D	Bid Item	MAINTENANCE TREE PRUNING (24" CAL. AND OVER)	9.00	EACH		$0.00	
21	4.19	Bid Item	SODDING	150.00	S.Y.		$0.00	
22	4.2	Bid Item	SEEDING	500.00	S.Y.		$0.00	
23	4.21	Bid Item	TREE CONSULTANT	954.00	P/HR		$0.00	
24	50.21C3C024D	Bid Item	24" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	220.00	L.F.		$0.00	
25	50.21C3C030D	Bid Item	30" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	1,860.00	L.F.		$0.00	
26	50.21C3E024D	Bid Item	24" R.C.P. CLASS III COMBINED SEWER, ENCASED IN CONCRETE	225.00	L.F.		$0.00	
27	50.21C3E030D	Bid Item	30" R.C.P. CLASS III COMBINED SEWER, ENCASED IN CONCRETE	150.00	L.F.		$0.00	
28	50.21C4E024D	Bid Item	24" R.C.P. CLASS IV COMBINED SEWER, ENCASED IN CONCRETE	130.00	L.F.		$0.00	
29	50.31CC15	Bid Item	15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	700.00	L.F.		$0.00	
30	50.31CC18	Bid Item	18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	30.00	L.F.		$0.00	
31	50.41C6E12	Bid Item	12" D.I.P. CLASS 56 COMBINED SEWER, ENCASED IN CONCRETE	120.00	L.F.		$0.00	
32	50.41C6E16	Bid Item	16" D.I.P. CLASS 56 COMBINED SEWER, ENCASED IN CONCRETE	200.00	L.F.		$0.00	
33	51.11P004	Bid Item	STANDARD 4'-0" DIAMETER PRECAST MANHOLE	10.00	EACH		$0.00	
34	51.11P005	Bid Item	STANDARD 5'-0" DIAMETER PRECAST MANHOLE	6.00	EACH		$0.00	
35	51.11P006	Bid Item	STANDARD 6'-0" DIAMETER PRECAST MANHOLE	1.00	EACH		$0.00	
36	51.11P007	Bid Item	STANDARD 7'-0" DIAMETER PRECAST MANHOLE	1.00	EACH		$0.00	
37	51.21S0A1000V	Bid Item	STANDARD MANHOLE TYPE A-1	15.00	EACH		$0.00	
38	51.41S001	Bid Item	STANDARD CATCH BASIN, TYPE 1	11.00	EACH		$0.00	
39	51.42S1SO	Bid Item	INCREMENTAL COST OF STANDARD CATCH BASIN TYPE 3 WITH CURB PIECE IN LIEU OF STANDARD CATCH BASIN TYPE 1	1.00	EACH		$0.00	
40	52.11D12	Bid Item	12" DUCTILE IRON PIPE BASIN CONNECTION	450.00	L.F.		$0.00	
41	52.31D06C16	Bid Item	6" DUCTILE IRON PIPE SPUR FOR HOUSE CONNECTION ON 16" D.I.P. COMBINED SEWER	2.00	EACH		$0.00	
42	52.31V06C15	Bid Item	6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	12.00	EACH		$0.00	
43	52.41V06R	Bid Item	6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	685.00	L.F.		$0.00	
44	52.41V08R	Bid Item	8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	425.00	L.F.		$0.00	
45	53.11DR	Bid Item	TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	3,740.00	L.F.		$0.00	
46	6.02 AAN	Bid Item	UNCLASSIFIED EXCAVATION	3,932.00	C.Y.		$0.00	
47	6.25 RS	Bid Item	TEMPORARY SIGNS	890.00	S.F.		$0.00	
48	6.26	Bid Item	TIMBER CURB	8,890.00	L.F.		$0.00	
49	6.27 A	Bid Item	DEMOLITION OF STRUCTURES	25.00	C.Y.		$0.00	
50	6.28 AA	Bid Item	LIGHTED TIMBER BARRICADES	192.00	L.F.		$0.00	
51	6.34 ADTP	Bid Item	TEMPORARY CHAIN LINK FENCE, 8'-0" HIGH (WITH TOP AND BOTTOM RAILS AND POSTS MOUNTED ON STEEL PLATES)	1,000.00	L.F.		$0.00	

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$3,425,000.00**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	**Item Number**	**Line Type**	**Item Description**	**Engineer's Estimate of Quantity**	**Unit**	**Unit Price**	**Extended Amount**	**Price Criteria**
52	6.40 DU	Bid Item	ENGINEER'S FIELD OFFICE (JOINT USE) (TYPE DU)	42.00	MONTH		$0.00	
53	6.43 D	Bid Item	DIGITAL PHOTOGRAPHS	650.00	SETS		$0.00	
54	6.44	Bid Item	THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	12,380.00	L.F.		$0.00	
55	6.49	Bid Item	TEMPORARY PAVEMENT MARKINGS (4" WIDE)	12,380.00	L.F.		$0.00	
56	6.52 CG	Bid Item	CROSSING GUARD	7,812.00	P/HR		$0.00	Unit price bid shall not be less than: $100.00
57	6.53	Bid Item	REMOVE EXISTING LANE MARKINGS (4" WIDE)	8,946.00	L.F.		$0.00	
58	6.84 B	Bid Item	LOLLIPOP TYPE BUS STOP SIGNS	1.00	F.S	$25,000.00	$25,000.00	Price bid shall be for the Fixed Sum of: $25,000.00
59	6.87	Bid Item	PLASTIC BARRELS	2,080.00	EACH		$0.00	
60	60.11R520	Bid Item	FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	3,900.00	L.F.		$0.00	
61	60.11R606	Bid Item	FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	530.00	L.F.		$0.00	
62	60.11R608	Bid Item	FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	810.00	L.F.		$0.00	
63	60.11R612	Bid Item	FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	1,253.00	L.F.		$0.00	
64	60.12D06	Bid Item	LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	650.00	L.F.		$0.00	
65	60.12D08	Bid Item	LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS	1,015.00	L.F.		$0.00	
66	60.12D12	Bid Item	LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	1,355.00	L.F.		$0.00	
67	60.12D20	Bid Item	LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	4,100.00	L.F.		$0.00	
68	60.13M0A24	Bid Item	FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	29.00	TONS		$0.00	
69	60.21SP3T36	Bid Item	FURNISHING, DELIVERING AND LAYING 36-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS	300.00	L.F.		$0.00	
70	60.21SP4T48	Bid Item	FURNISHING, DELIVERING AND LAYING 48-INCH STRAIGHT STEEL PIPE, 1/2-INCH WALL THICKNESS	3,460.00	L.F.		$0.00	
71	60.22BR3T36	Bid Item	FURNISHING, DELIVERING AND LAYING 36-INCH STEEL BENDS AND REDUCERS, 3/8-INCH WALL THICKNESS	150.00	L.F.		$0.00	
72	60.22BR4T48	Bid Item	FURNISHING, DELIVERING AND LAYING 48-INCH STEEL BENDS AND REDUCERS, 1/2-INCH WALL THICKNESS	200.00	L.F.		$0.00	
73	60.23ST36T48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH X 36-INCH STEEL TEE	2.00	EACH		$0.00	
74	60.24SB36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER STEEL BULKHEAD	2.00	EACH		$0.00	
75	60.24SB48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH DIAMETER STEEL BULKHEAD	1.00	EACH		$0.00	
76	60.25PSO	Bid Item	FURNISHING, DELIVERING AND INSTALLING PLATE STEEL OUTLETS ON STEEL PIPE, ACCESS MANHOLE OUTLETS WITH COVERS, AND NUTS AND BOLTS COMPLETE	20,000.00	LBS.		$0.00	
77	60.27RSC36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER BOLTED, SPLIT SLEEVE-TYPE RESTRAINED COUPLING	6.00	EACH		$0.00	
78	60.27RSC48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH DIAMETER BOLTED, SPLIT SLEEVE-TYPE RESTRAINED COUPLING	2.00	EACH		$0.00	
79	60.28ARV3A	Bid Item	FURNISHING, DELIVERING AND INSTALLING BLOW OFF AND AIR RELEASE VALVES AND PIPES, ETC., COMPLETE FOR SHAFT CHAMBER 3A	1.00	L.S.		$0.00	
80	60.28DHM3A	Bid Item	FURNISHING, DELIVERING AND INSTALLING DEHUMIDIFIER SYSTEM ETC. COMPLETE FOR SHAFT 3A	1.00	L.S.		$0.00	
81	60.29CP	Bid Item	FURNISHING, INSTALLING AND TESTING CORROSION CONTROL AND/OR CATHODIC PROTECTION SYSTEM	1.00	L.S.		$0.00	
82	60.81FM36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER FLOW METER TUBE AND APPURTENANCES, COMPLETE	2.00	EACH		$0.00	
83	61.11DFM06	Bid Item	FURNISHING AND DELIVERING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	6.00	EACH		$0.00	
84	61.11DFM12	Bid Item	FURNISHING AND DELIVERING 12-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	3.00	EACH		$0.00	
85	61.11DFM20	Bid Item	FURNISHING AND DELIVERING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	5.00	EACH		$0.00	
86	61.11DMM06	Bid Item	FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	26.00	EACH		$0.00	
87	61.11DMM08	Bid Item	FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	6.00	EACH		$0.00	
88	61.11DMM12	Bid Item	FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	11.00	EACH		$0.00	
89	61.11DMM20	Bid Item	FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	13.00	EACH		$0.00	
90	61.11TWC03	Bid Item	FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	4.00	EACH		$0.00	

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
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BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$3,425,000.00**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
91	61.11TWC04	Bid Item	FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	3.00	EACH		$0.00	
92	61.12DFM06	Bid Item	SETTING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	6.00	EACH		$0.00	
93	61.12DFM12	Bid Item	SETTING 12-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	3.00	EACH		$0.00	
94	61.12DFM20	Bid Item	SETTING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	5.00	EACH		$0.00	
95	61.12DMM06	Bid Item	SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	26.00	EACH		$0.00	
96	61.12DMM08	Bid Item	SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	6.00	EACH		$0.00	
97	61.12DMM12	Bid Item	SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	11.00	EACH		$0.00	
98	61.12DMM20	Bid Item	SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	13.00	EACH		$0.00	
99	61.12TWC03	Bid Item	SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	4.00	EACH		$0.00	
100	61.12TWC04	Bid Item	SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	3.00	EACH		$0.00	
101	61.21BVB36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	2.00	EACH		$0.00	
102	61.21BVB48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	2.00	EACH		$0.00	
103	61.21BVM36	Bid Item	FURNISHING, DELIVERING, AND INSTALLING 36-INCH METAL SEATED BUTTERFLY VALVE, COMPLETE (NO BY-PASS)	4.00	EACH		$0.00	
104	61.21BVO36	Bid Item	FURNISHING, DELIVERING, AND INSTALLING 36-INCH BUTTERFLY VALVE, COMPLETE	2.00	EACH		$0.00	
105	62.11SD	Bid Item	FURNISHING AND DELIVERING HYDRANTS	30.00	EACH		$0.00	
106	62.12SG	Bid Item	SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	30.00	EACH		$0.00	
107	62.13RH	Bid Item	REMOVING HYDRANTS	22.00	EACH		$0.00	
108	62.14FS	Bid Item	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	60.00	EACH		$0.00	
109	63.11MH	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH CAST IRON MANHOLE HEADS AND COVERS	6.00	TONS		$0.00	
110	63.11MS	Bid Item	FURNISHING, DELIVERING AND INSTALLING MANHOLE STEPS TYPE PS2-PF	215.00	EACH		$0.00	
111	63.11VC	Bid Item	FURNISHING AND DELIVERING VARIOUS CASTINGS	67.00	TONS		$0.00	
112	64.11EL	Bid Item	WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	15.00	EACH		$0.00	
113	64.11ST	Bid Item	WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	85.00	EACH		$0.00	
114	64.12COEG	Bid Item	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	150.00	L.F.		$0.00	
115	64.12COLT	Bid Item	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	200.00	L.F.		$0.00	
116	64.12ESEG	Bid Item	EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	150.00	L.F.		$0.00	
117	64.12ESLT	Bid Item	EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	200.00	L.F.		$0.00	
118	64.13WC20	Bid Item	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	7.00	EACH		$0.00	
119	64.14A	Bid Item	REPLACEMENT OF SERVICE LINE UP TO 1 IN, UP TO 40 FT	9.00	EACH		$0.00	
120	64.14AL	Bid Item	ADDITIONAL LENGTH OF SERVICE LINE UP TO 1 IN BEYOND 40 FT	300.00	L.F.		$0.00	
121	64.14AM	Bid Item	REPLACEMENT OF SERVICE LINE UP TO 1 IN BETWEEN BUILDING CONTROL VALVE AND METER	50.00	L.F.		$0.00	
122	64.14B	Bid Item	REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, UP TO 40 FT	8.00	EACH		$0.00	
123	64.14BL	Bid Item	ADDITIONAL LENGTH OF SERVICE LINE 1 -1/4 TO 2 IN BEYOND 40 FT	220.00	L.F.		$0.00	
124	64.14BM	Bid Item	REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, BETWEEN BUILDING CONTROL VALVE AND METER	50.00	L.F.		$0.00	
125	64.14V	Bid Item	INSTALL NEW BUILDING CONTROL VALVE 2 IN AND UNDER	17.00	EACH		$0.00	
126	65.11BR	Bid Item	FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	3,650.00	LBS.		$0.00	
127	65.21PS	Bid Item	FURNISHING AND PLACING POLYETHYLENE SLEEVE	5,435.00	L.F.		$0.00	Unit price bid shall not be less than: $2.00
128	65.31FF	Bid Item	FURNISHING, DELIVERING AND PLACING FILTER FABRIC	72,028.00	S.F.		$0.00	Unit price bid shall not be less than: $0.10

Department of Design and Construction

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TOTAL BID PRICE: **$3,425,000.00**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	Item Number	Line Type	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
129	65.41PS06	Bid Item	FURNISHING, DELIVERING AND INSTALLING 6-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	6.00	EACH		$0.00	
130	65.41PS08	Bid Item	FURNISHING, DELIVERING AND INSTALLING 8-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	6.00	EACH		$0.00	
131	65.41PS12	Bid Item	FURNISHING, DELIVERING AND INSTALLING 12-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	4.00	EACH		$0.00	
132	65.41PS20	Bid Item	FURNISHING, DELIVERING AND INSTALLING 20-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	10.00	EACH		$0.00	
133	65.41PS36	Bid Item	FURNISHING, DELIVERING AND INSTALLING 36-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	10.00	EACH		$0.00	
134	65.41PS48	Bid Item	FURNISHING, DELIVERING AND INSTALLING 48-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	6.00	EACH		$0.00	
135	65.51PC	Bid Item	FURNISHING AND PLACING CAST-IN-PLACE CONCRETE CLASS 40 AND PRECAST CONCRETE CLASS 50	760.00	C.Y.		$0.00	
136	65.61SS	Bid Item	FURNISHING, DELIVERING AND PLACING STRUCTURAL, REINFORCING AND MISCELLANEOUS STEEL	250,350.00	LBS.		$0.00	
137	65.71SG	Bid Item	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	4,780.00	C.Y.		$0.00	
138	67.11AA48	Bid Item	INCREMENTAL COST FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING 48-INCH DIAMETER STEEL PIPE WATER MAIN TO BE REMOVED, COMPLETE	50.00	L.F.		$0.00	
139	7.13 B	Bid Item	MAINTENANCE OF SITE	36.00	MONTH		$0.00	
140	7.19	Bid Item	LOAD TRANSFER JOINT	250.00	L.F.		$0.00	
141	7.35	Bid Item	PEDESTRIAN CHANNELIZER	12,380.00	L.F.		$0.00	
142	7.88 AA	Bid Item	RODENT INFESTATION SURVEY AND MONITORING	1.00	L.S.		$0.00	Unit price bid shall not be less than: $15,000.00
143	7.88 AB	Bid Item	RODENT BAIT STATIONS	1,120.00	EACH		$0.00	Unit price bid shall not be less than: $65.00
144	7.88 AC	Bid Item	BAITING OF RODENT BAIT STATIONS	1,120.00	EACH		$0.00	Unit price bid shall not be less than: $11.00
145	7.88 AD	Bid Item	WATERBUG BAIT APPLICATIONS	288.00	BLOCK		$0.00	Unit price bid shall not be less than: $75.00
146	70.21DK	Bid Item	DECKING	13,260.00	S.Y.		$0.00	
147	70.31FN	Bid Item	FENCING	20,860.00	L.F.		$0.00	Unit price bid shall not be less than: $2.00
148	70.51EO	Bid Item	EXCAVATION OF BOULDERS IN OPEN CUT	800.00	C.Y.		$0.00	Unit price bid shall not be less than: $75.00
149	70.61RE	Bid Item	ROCK EXCAVATION	500.00	C.Y.		$0.00	
150	70.81CB	Bid Item	CLEAN BACKFILL	5,262.00	C.Y.		$0.00	Unit price bid shall not be less than: $15.00
151	70.91SW12	Bid Item	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	4,370.00	S.F.		$0.00	
152	70.91SW20	Bid Item	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER	7,510.00	S.F.		$0.00	
153	72.11HF	Bid Item	HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS	53.00	C.Y.		$0.00	
154	73.11AB	Bid Item	ADDITIONAL BRICK MASONRY	85.00	C.Y.		$0.00	Unit price bid shall not be less than: $62.50
155	73.21AC	Bid Item	ADDITIONAL CONCRETE	185.00	C.Y.		$0.00	Unit price bid shall not be less than: $62.50
156	73.31AE0	Bid Item	ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS)	395.00	C.Y.		$0.00	Unit price bid shall not be less than: $20.00
157	73.41AG	Bid Item	ADDITIONAL SELECT GRANULAR BACKFILL	180.00	C.Y.		$0.00	Unit price bid shall not be less than: $15.00
158	73.51AS	Bid Item	ADDITIONAL STEEL REINFORCING BARS	150.00	LBS.		$0.00	Unit price bid shall not be less than: $1.00
159	76.11CR	Bid Item	CONSTRUCTION REPORT	1.00	L.S.		$0.00	
160	76.21MR	Bid Item	MONITORING AND POST-CONSTRUCTION REPORT	1.00	L.S.		$0.00	
161	8.01 C1	Bid Item	HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	4,970.00	TONS		$0.00	Unit price bid shall not be less than: $85.00
162	8.01 C2	Bid Item	SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	51.00	SETS		$0.00	Unit price bid shall not be less than: $2,000.00
163	8.01 H	Bid Item	HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	1,657.00	TONS		$0.00	Unit price bid shall not be less than: $400.00
164	8.01 S	Bid Item	HEALTH AND SAFETY	1.00	L.S.		$0.00	Unit price bid shall not be less than: $20,000.00
165	8.01 W1	Bid Item	REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	365.00	DAY		$0.00	Unit price bid shall not be less than: $1,700.00
166	8.01 W2	Bid Item	SAMPLING AND TESTING OF CONTAMINATED WATER	365.00	SETS		$0.00	Unit price bid shall not be less than: $1,400.00
167	8.02 A	Bid Item	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	1,000.00	S.F.		$0.00	
168	9.04 HW	Bid Item	ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE	1.00	F.S	$50,000.00	$50,000.00	Price bid shall be for the Fixed Sum of: $50,000.00
169	9.06 HW	Bid Item	ALLOWANCE FOR DECORATIVE MESH FABRIC	1.00	F.S	$30,000.00	$30,000.00	Price bid shall be for the Fixed Sum of: $30,000.00
170	9.23	Bid Item	PRICE ADJUSTMENTS	1.00	F.S	$15,000.00	$15,000.00	Price bid shall be for the Fixed Sum of: $15,000.00
171	9.28	Bid Item	EXPANDED WORK ALLOWANCE	1.00	F.S	$1,576,000.00	$1,576,000.00	Price bid shall be for the Fixed Sum of: $1,576,000.00
172	9.3	Bid Item	STORM WATER POLLUTION PREVENTION	1.00	L.S.		$0.00	

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TOTAL BID PRICE: **$3,425,000.00**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	**Item Number**	**Line Type**	**Item Description**	**Engineer's Estimate of Quantity**	**Unit**	**Unit Price**	**Extended Amount**	**Price Criteria**
173	HW-900H	Bid Item	ALLOWANCE FOR CITY WORK ACCELERATION	1.00	F.S	$629,000.00	$629,000.00	Price bid shall be for the Fixed Sum of: $629,000.00
174	JB 100.1	Bid Item	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .1)	5.00	EACH		$0.00	Unit price bid shall not be less than: $620.00
175	JB 100.2	Bid Item	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .2)	7.00	EACH		$0.00	Unit price bid shall not be less than: $929.00
176	JB 101.1	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	7.00	EACH		$0.00	Unit price bid shall not be less than: $3,099.00
177	JB 101.2	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	3.00	EACH		$0.00	Unit price bid shall not be less than: $3,556.00
178	JB 101.3	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	2.00	EACH		$0.00	Unit price bid shall not be less than: $4,796.00
179	JB 102.1	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	3.00	EACH		$0.00	Unit price bid shall not be less than: $3,861.00
180	JB 102.2	Bid Item	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .2)	2.00	EACH		$0.00	Unit price bid shall not be less than: $4,338.00
181	JB 108.1	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	10.00	EACH		$0.00	Unit price bid shall not be less than: $945.00
182	JB 108.2	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	10.00	EACH		$0.00	Unit price bid shall not be less than: $1,627.00
183	JB 109.1	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	18.00	EACH		$0.00	Unit price bid shall not be less than: $1,370.00
184	JB 109.2	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	12.00	EACH		$0.00	Unit price bid shall not be less than: $1,904.00
185	JB 109.3	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	2.00	EACH		$0.00	Unit price bid shall not be less than: $2,576.00
186	JB 111.1	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)	11.00	EACH		$0.00	Unit price bid shall not be less than: $2,224.00
187	JB 111.2	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)	6.00	EACH		$0.00	Unit price bid shall not be less than: $2,976.00
188	JB 111.3	Bid Item	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)	2.00	EACH		$0.00	Unit price bid shall not be less than: $3,959.00
189	JB 200	Bid Item	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	80.00	L.F.		$0.00	Unit price bid shall not be less than: $261.00
190	JB 225.1A	Bid Item	INSTALLATION AND REMOVAL OF CATCH BASIN WITH UTILITY INTERFERENCES	24.00	EACH		$0.00	Unit price bid shall not be less than: $4,352.00
191	JB 225.2A	Bid Item	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	19.00	EACH		$0.00	Unit price bid shall not be less than: $2,176.00
192	JB 225.3A	Bid Item	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	5.00	EACH		$0.00	Unit price bid shall not be less than: $1,998.00
193	JB 300.1	Bid Item	SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH LESS THAN 5' DEEP	239.00	C.Y.		$0.00	Unit price bid shall not be less than: $281.00
194	JB 300.2	Bid Item	SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH GREATER THAN 5' DEEP	10.00	C.Y.		$0.00	Unit price bid shall not be less than: $319.00
195	JB 300A	Bid Item	SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG)	507.00	C.Y.		$0.00	Unit price bid shall not be less than: $338.00
196	JB 303	Bid Item	FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL	1,800.00	C.Y.		$0.00	Unit price bid shall not be less than: $224.00
197	JB 330E	Bid Item	SUPPORT AND PROTECTION OF UTILITY FACILITIES DURING EXCAVATION	707.00	L.F.		$0.00	Unit price bid shall not be less than: $192.00
198	JB 330G	Bid Item	SUPPORTS FOR PARALLEL FULLY EXPOSED GAS MAINS IN TRENCH	82.00	EACH		$0.00	Unit price bid shall not be less than: $1,764.00
199	JB 330T1	Bid Item	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED CITY TRENCH	150.00	L.F.		$0.00	Unit price bid shall not be less than: $166.00
200	JB 330T2.1	Bid Item	COMMUNICATIONS FACILITY OPERATOR(S) REQUEST THE TRENCH BE WIDENED	100.00	L.F.		$0.00	Unit price bid shall not be less than: $373.00
201	JB 330T2.2	Bid Item	COMMUNICATIONS FACILITY OPERATOR(S) REQUESTS THE TRENCH/SHEETING BE MODIFIED	16.00	L.F.		$0.00	Unit price bid shall not be less than: $483.00
202	JB 351	Bid Item	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	2.00	EACH		$0.00	Unit price bid shall not be less than: $1,533.00
203	JB 400	Bid Item	TEST PITS FOR UTILITY FACILITIES	696.00	C.Y.		$0.00	Unit price bid shall not be less than: $355.00
204	JB 401	Bid Item	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	768.00	C.Y.		$0.00	Unit price bid shall not be less than: $380.00
205	JB 402.1	Bid Item	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	250.00	L.F.		$0.00	Unit price bid shall not be less than: $76.00
206	JB 402.1A	Bid Item	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	250.00	L.F.		$0.00	Unit price bid shall not be less than: $87.00
207	JB 402.2	Bid Item	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	250.00	L.F.		$0.00	Unit price bid shall not be less than: $50.00
208	JB 402.2A	Bid Item	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	250.00	L.F.		$0.00	Unit price bid shall not be less than: $62.00
209	JB 402T.1A	Bid Item	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	3,500.00	L.F.		$0.00	Unit price bid shall not be less than: $83.00

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$3,425,000.00**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	**Item Number**	**Line Type**	**Item Description**	**Engineer's Estimate of Quantity**	**Unit**	**Unit Price**	**Extended Amount**	**Price Criteria**
210	JB 402T.3	Bid Item	ACM REMOVAL AND DISPOSAL OF VERIZON/ECS CONDUITS WITH ASBESTOS CONTAINING MATERIAL TRANSITE PIPES (ACM-TP) UP TO AND INCLUDING 4" DIAMETER	25.00	L.F.		$0.00	Unit price bid shall not be less than: $107.00
211	JB 402T.V1A	Bid Item	EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	1,050.00	L.F.		$0.00	Unit price bid shall not be less than: $53.00
212	JB 405.1	Bid Item	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	400.00	C.Y.		$0.00	Unit price bid shall not be less than: $398.00
213	JB 405.2	Bid Item	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRING SHEETING	50.00	C.Y.		$0.00	Unit price bid shall not be less than: $482.00
214	JB 406	Bid Item	EXCAVATION FOR UTILITY STRUCTURE	30.00	C.Y.		$0.00	Unit price bid shall not be less than: $332.00
215	JB 410.1	Bid Item	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% (TYPE .1)	245.00	C.Y.		$0.00	Unit price bid shall not be less than: $397.00
216	JB 410.2	Bid Item	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% (TYPE .2)	245.00	C.Y.		$0.00	Unit price bid shall not be less than: $473.00
217	JB 450.1	Bid Item	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	350.00	CREW/HR		$0.00	Unit price bid shall not be less than: $382.00
218	JB 450.2	Bid Item	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	190.00	CREW/HR		$0.00	Unit price bid shall not be less than: $538.00
219	JB 450.3	Bid Item	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	970.00	CREW/HR		$0.00	Unit price bid shall not be less than: $1,294.00
220	JB 610.36	Bid Item	36" DIAMETER STEEL GAS PIPE	180.00	L.F.		$0.00	Unit price bid shall not be less than: $166.00
221	JB 611.36	Bid Item	36" DIAMETER STEEL GAS PIPE FITTING	20.00	EACH		$0.00	Unit price bid shall not be less than: $4,325.00
222	JB 615.16(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE - 16" DIAMETER	471.00	L.F.		$0.00	
223	JB 615.8(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE - 8" DIAMETER	104.00	L.F.		$0.00	
224	JB 615.9(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE - 12" DIAMETER	544.00	L.F.		$0.00	
225	JB 616.1(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING- 1" DIAMETER	35.00	EACH		$0.00	
226	JB 616.16(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING - 16" DIAMETER	105.00	EACH		$0.00	
227	JB 616.7(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING - 6" DIAMETER	20.00	EACH		$0.00	
228	JB 616.8(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING - 8" DIAMETER	56.00	EACH		$0.00	
229	JB 616.9(CE)	Bid Item	INSTALLATION OF PLASTIC GAS PIPE FITTING - 12" DIAMETER	56.00	EACH		$0.00	
230	JB 636 EB	Bid Item	ADJUSTMENT OF UTILITY HARDWARE (7" TO UNDER 14" WIDTH)	2.00	EACH		$0.00	Unit price bid shall not be less than: $385.00
231	JB 636 EE	Bid Item	ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)	3.00	EACH		$0.00	Unit price bid shall not be less than: $1,176.00
232	JB 636 EH	Bid Item	ADJUSTMENT OF UTILITY HARDWARE (75" TO UNDER 125" WIDTH)	2.00	EACH		$0.00	Unit price bid shall not be less than: $1,485.00
233	JB 700	Bid Item	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	84.00	C.Y.		$0.00	Unit price bid shall not be less than: $146.00
234	JB 711	Bid Item	USE SHEETING LINE AS FORM	30.00	L.F.		$0.00	Unit price bid shall not be less than: $7.00
235	JB 802A	Bid Item	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	2,703.00	S.F.		$0.00	Unit price bid shall not be less than: $6.00
236	JB 802B	Bid Item	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	156.00	L.F.		$0.00	Unit price bid shall not be less than: $13.00
237	JB 803.2	Bid Item	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS (LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY)	100.00	L.F.		$0.00	Unit price bid shall not be less than: $24.00
238	JB 850(CE)	Bid Item	PLACING RUBBER SHEETS FOR UTILITY FACILITIES	300.00	S.F.		$0.00	
239	JB 9.28	Bid Item	UTILITY EXPANDED WORK ALLOWANCE	1.00	F.S	$1,050,000.00	$1,050,000.00	Price bid shall be for the Fixed Sum of: $1,050,000.00
240	SL-20.02.02A	Bid Item	FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION AS PER DWG. #-3788A FOR INSTALLING TYPE 30' DAVIT LAMPPOST. PRICE PER UNIT ITEM.	1.00	EACH		$0.00	
241	SL-21.03.07	Bid Item	INSTALL TRANSFORMER BASE.	1.00	EACH		$0.00	
242	SL-21.03.09	Bid Item	FURNISH FABRICATED STEEL TRANSFORMER BASE	1.00	EACH		$0.00	
243	SL-22.03.16	Bid Item	FURNISH TYPE LED COBRA HEAD TYPE STREET LIGHT LUMINAIRE, SPECIFICATION #466 (MAX. 110 WATTS)	1.00	EACH		$0.00	
244	SL-24.02.26	Bid Item	FURNISH AND INSTALL 4 Ft. STEEL ARM ON METAL LAMPPOST.	1.00	EACH		$0.00	
245	T-1.1	Bid Item	INSTALL TYPE "S" OR "T" FOUNDATION	5.00	EACH		$0.00	
246	T-1.18	Bid Item	REMOVE TYPE "A", "B", "S" OR "T" SERIES FOUNDATION	1.00	EACH		$0.00	
247	T-1.3	Bid Item	INSTALL TYPE "M2-5S" FOUNDATION	1.00	EACH		$0.00	
248	T-2.1	Bid Item	INSTALL TYPE "S-1" OR "T-1" SERIES POST	5.00	EACH		$0.00	
249	T-2.22	Bid Item	REMOVE TYPE "S-1" OR "T-1" SERIES POST	1.00	EACH		$0.00	
250	T-2.24	Bid Item	REMOVE TYPE "M" SERIES POST	1.00	EACH		$0.00	
251	T-2.4	Bid Item	INSTALL ONE TYPE "M-2A" POLE WITH TRAFFIC SIGNAL MAST ARM ASSEMBLY	1.00	EACH		$0.00	
252	T-2.6	Bid Item	INSTALL 5 FOOT MAST ARM EXTENSION W/CUSTOM FINISH	1.00	EACH		$0.00	
253	T-2.7	Bid Item	INSTALL SHAFT ON "M-2" POST	1.00	EACH		$0.00	
254	T-2.9	Bid Item	INSTALL MAST ARM ON EXISTING "M-2" TRAFFIC POST	1.00	EACH		$0.00	

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE

Project ID: HED562
ePIN: **85025B0027**

TOTAL BID PRICE: **$3,425,000.00**

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8	Col.9
Seq. No	**Item Number**	**Line Type**	**Item Description**	**Engineer's Estimate of Quantity**	**Unit**	**Unit Price**	**Extended Amount**	**Price Criteria**
255	T-20000	Bid Item	FURNISH TEN FOOT ALUMINUM SIGNAL POST TYPE "S-1"	5.00	EACH		$0.00	
256	T-20020	Bid Item	a) FURNISH 3/4" ANCHOR BOLT ASSEMBLIES FOR S-1 (EACH) (3 REQUIRED PER POST)	5.00	EACH		$0.00	
257	T-20160	Bid Item	FURNISH 20 FOOT SIGNAL MAST ARM POLE ASSEMBLY TYPE "M-2"	1.00	EACH		$0.00	
258	T-20170	Bid Item	M-2A POLE SHAFT WITH BOLT COVERINGS	1.00	EACH		$0.00	
259	T-20184	Bid Item	a) FURNISH 5' EXTENSION ARM ASSEMBLY WITH FITTINGS	1.00	EACH		$0.00	
260	T-20220	Bid Item	c) FURNISH 1-1/4" ANCHOR BOLT ASSEMBLIES FOR M-2 (EACH) (4 REQUIRED PER POST)	1.00	EACH		$0.00	
261	T-3.21	Bid Item	REMOVE PEDESTRIAN SIGNAL OR SIGN UNIT OR OTHER ILLUMINATED SIGNS FROM ANY POST	10.00	EACH		$0.00	
262	T-3.40	Bid Item	INSTALL ONE ACCESSIBLE PEDESTRIAN SIGNAL (APS) WITH APS INFORMATION SIGN ON METAL POLE	10.00	EACH		$0.00	
263	T-3.6	Bid Item	INSTALL PEDESTRIAN SIGNAL ON ANY TYPE POST	10.00	EACH		$0.00	
264	T-30013L	Bid Item	FURNISH ADJUSTABLE 3 SECTION 1-WAY, DIE CAST ALUMINUM TRAFFIC SIGNALS 8" - W/LED LENS	10.00	EACH		$0.00	
265	T-31200	Bid Item	e) "VB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	8.00	EACH		$0.00	
266	T-31340	Bid Item	f) "VB-P" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	7.00	EACH		$0.00	
267	T-31351	Bid Item	g) "VB-2P" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	1.00	EACH		$0.00	
268	T-31500AL	Bid Item	FURNISH 12" LENS & SIGNAL SECTION (LED AMBER ARROWS)	2.00	EACH		$0.00	
269	T-31500GL	Bid Item	FURNISH 12" LENS & SIGNAL SECTION (LED GREEN ARROWS)	2.00	EACH		$0.00	
270	T-31500RL	Bid Item	FURNISH 12" LENS & SIGNAL SECTION (LED RED ARROW)	2.00	EACH		$0.00	
271	T-33001-L	Bid Item	FURNISH POLYCARBONATE PEDESTRIAN SIGNAL (16 X 16) W/LED COUNT LENS (SPECIFICATION A-L)	20.00	EACH		$0.00	
272	T-33002	Bid Item	FURNISH AUDIBLE PEDESTRIAN SIGNAL UNIT	10.00	EACH		$0.00	
273	T-4.22	Bid Item	INSTALL ANY TYPE OF ADVANCED SOLID STATE TRAFFIC SIGNAL CONTROLLER AND CABINET ON METAL POLE	1.00	EACH		$0.00	
274	T-4.7	Bid Item	INSTALL CONTROLLER IN ANY CONTROL BOX	1.00	EACH		$0.00	
275	T-4.8	Bid Item	REMOVE ONE CONTROL BOX AND CONTROLLER FROM ANY POST OR SUPPORT	1.00	EACH		$0.00	
276	T-5.14	Bid Item	SAW CUT ROADWAY	290.00	L.F.		$0.00	
277	T-5.34	Bid Item	RESTORING PERMANENT SIDEWALK	150.00	S.F.		$0.00	
278	T-5.52	Bid Item	FURNISH AND INSTALL 2" HDPE UNDERGROUND CONDUIT IN UNPAVED AREA	350.00	L.F.		$0.00	
279	T-5.54	Bid Item	PERMANENT RESTORATION OF PAVED ROADWAY	265.00	L.F.		$0.00	
280	T-6.1	Bid Item	INSTALL CABLE (INCLUDES OVERHEAD)	350.00	L.F.		$0.00	
281	T-60200	Bid Item	FURNISH AND INSTALL AUDIBLE PEDESTRIAN SIGNALS CABLE	275.00	L.F.		$0.00	
282	T-99999	Bid Item	FURNISH 8 LOAD SWITCHES ADVANCED SOLID STATE TRAFFIC CONTROLLER (ASTC)	1.00	EACH		$0.00	
283	UTL-6.01.1 (CE)	Bid Item	GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01)	22.00	EACH		$0.00	Unit price bid shall not be less than: $1,040.00
284	UTL-6.01.12 (CE)	Bid Item	GAS MAIN CROSSING WATER MAIN 48" THRU 54" IN DIAMETER (S6.01)	30.00	EACH		$0.00	Unit price bid shall not be less than: $810.00
285	UTL-6.01.2 (CE)	Bid Item	GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01)	9.00	EACH		$0.00	Unit price bid shall not be less than: $1,770.00
286	UTL-6.01.8 (CE)	Bid Item	GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01)	19.00	EACH		$0.00	Unit price bid shall not be less than: $465.00
287	UTL-6.01.9 (CE)	Bid Item	GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (S6.01)	72.00	EACH		$0.00	Unit price bid shall not be less than: $485.00
288	UTL-6.02 (CE)	Bid Item	EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (S6.02)	30.00	EACH		$0.00	Unit price bid shall not be less than: $715.00
289	UTL-6.03 (CE)	Bid Item	REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (S6.03)	4,500.00	L.F.		$0.00	Unit price bid shall not be less than: $15.00
290	UTL-6.03.1A (CE)	Bid Item	REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (FOR CON EDISON WORK ONLY) (S6.03)	1,950.00	L.F.		$0.00	Unit price bid shall not be less than: $25.00
291	UTL-6.04 (CE)	Bid Item	ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04)	18.00	EACH		$0.00	Unit price bid shall not be less than: $35.00
292	UTL-6.05 (CE)	Bid Item	ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05)	12.00	EACH		$0.00	Unit price bid shall not be less than: $65.00
293	UTL-6.06 (CE)	Bid Item	SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06)	1,585.00	C.Y.		$0.00	Unit price bid shall not be less than: $180.00
294	UTL-6.07 (CE)	Bid Item	TEST PITS FOR GAS FACILITIES (S6.07)	379.00	C.Y.		$0.00	Unit price bid shall not be less than: $100.00
295	UTL-6.08A (CE)	Bid Item	PIER AND/OR PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAIN WITH LESS THAN 24" COVER (S6.08A)	4.00	EACH		$0.00	Unit price bid shall not be less than: $5,800.00
296	UTL-6.09A (CE)	Bid Item	TRENCH EXCAVATION AND BACKFILL FOR GAS MAINS AND SERVICES. GAS INSTALLED BY OTHERS (FOR CON EDISON WORK ONLY). (S6.09)	1,115.00	C.Y.		$0.00	Unit price bid shall not be less than: $200.00
297	UTL-GCS-2WS (CE)	Bid Item	GAS INTERFERENCES AND ACCOMMODATIONS	1.00	F.S	$50,000.00	$50,000.00	Price bid shall be for the Fixed Sum of: $50,000.00
		Subtotal	**SUBTOTAL**				**$3,425,000.00**	
298	6.39 B	Mob	MOBILIZATION	1.00	L.S.		$0.00	BID PRICE OF MOBILIZATION SHALL NOT EXCEED 8% OF THE ABOVE SUB-TOTAL PRICE.

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 5 of the procurement.

Please note that numbering of addenda is independent of rounds.

Document Submission Setup

"Revised the Language of Required Document Description" ➔ Information for NYSDOL Public Work Contractor and Subcontractor Registry requirements.

Questionnaire Changes:

Revised the Language for NYSDOL Public Work Contractor and Subcontractor Registry requirements under Section "Affirmation Certification".

Item Grid Changes:

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: February 12, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: February 12, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		
#2 Revisions to PASSPort;	0	12/13/2024		
#3 Revisions to PASSPort;	0	12/17/2024		
#4 Questions from Bidders and Responses to Questions; Revisions to Documents. Revisions to PASSPort forms	0	12/24/2024		
#5 Revisions to Documents. Questions from Bidders and Responses to Questions;	0	12/31/2024		
#6 Revised Bid Opening Date Revisions to PASSPort forms	0	01/07/2025		
#7 Revisions to Documents. Questions from Bidders and Responses to Questions; Revisions to PASSPort forms	0	01/14/2025		
#8 Revised Bid Opening Date Revisions to Documents. Questions from Bidders and Responses to Questions; Revisions to PASSPort forms	0	02/04/2025		2/3/25

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

02/04/2025

ADDENDUM No. # 8

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **The Bid Opening for the contract described above scheduled for February 06, 2025, at 11:30 am is rescheduled to February 12, 2025, at 11:30 am.**

2. **Bidders Questions and Responses to Questions:**
   See Attachment A is included with this Addendum.

3. **Revisions to Documents:**
   See Attachment B is included with this Addendum.

4. **Revisions to PASSPort forms:**
   See Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFx tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

DDC strongly advises vendors to finalize and submit bids 48 hours prior to due date and time. The City is not responsible for technical issues (e.g. internet connection, power outages, technology malfunction, computer errors, etc.) related to bid submissions.

If additional information is required, please contact the Department of Design and Construction, Contract Section via PASSPort (in the Discussions with Buyer section).

Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

No.	Bidders Questions	DDC Responses
1	Please note that Con Edison has included the same scope of work under the JB items & drawings for gas main relocation as well as the EP-7 specifications and item UTL-6.09A(CE). Please advise under which items the excavation will be paid under- joint bid items or UTL-6.09A(CE)?	Special care for gas will be paid under item 6.01.9A for Coned as required by the EP7 agreement. And special care for Electric will be under JB Item.
2	Can another site visit into Shaft 3A for prospective bidders be held?	No. A Prebid Conference has already taken place on December 19, 2024.

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

1) Updated Bid Schedule

A) Item Added : JB 100.1, JB 100.2, JB 101.1, JB 101.2, JB 101.3, JB 102.1, JB 102.2, JB 108.1, JB 108.2, JB 109.1, JB 109.2, JB 109.3, JB 111.1, JB 111.2, JB 111.3, JB 200 , JB 225.1A, JB 225.2A,JB 225.3A, JB 300.1, JB 300.2, JB 300A, JB 303, JB 330E, JB 330G, JB 330T1, JB 330T2.1, JB 330T2.2, JB 351, JB 400, JB 401, JB 402.1, JB 402.1A, JB 402.2, JB 402.2A , JB 402T.1A, JB 402T.3,JB 402T.V1A, JB 405.1, JB 405.2, JB 406, JB 410.1, JB 410.2, JB 450.1, JB 450.2, JB 450.3, JB 636 EB, JB 636 EE, JB 636 EH, JB 700, JB 711, JB 802A, JB 802B, JB 803.2 and JB 9.28.

B) Item Deleted : None

C) Item Qty Revised: 4.02 AF-R , 4.02 AG, 4.02 CA , 4.04 H ,4.09 AE, 4.09 CE, 4.13 AAS, 4.13 BAS, 4.16 AA, 4.16 CA, 51.42S1SO, 6.02 AAN and 60.11R612

2) **Refer to** HED562 Documents tab, HED562 – Volume 3 of 3, JB 5 Package
Delete HED562 – Volume 3 of 3 Addendum7, JB(5.0) Package in its entirety.
Replace with HED562 – Volume 3 of 3 Addendum8, JB Pages Open Competitive Package.

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 6 of the procurement.

Please note that numbering of addenda is independent of rounds.

Bid Opening Date Changes:

The Bid Opening for the contract described above scheduled for February 06, 2025, at 11:30 am is rescheduled to February 12, 2025, at 11:30 am

Document Submission Setup

None

Questionnaire Changes:

None

Item Grid Changes:

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: February 20, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: February 20, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		
#2 Revisions to PASSPort;	0	12/13/2024		
#3 Revisions to PASSPort;	0	12/17/2024		
#4 Questions from Bidders and Responses to Questions; Revisions to Documents. Revisions to PASSPort forms	0	12/24/2024		
#5 Revisions to Documents. Questions from Bidders and Responses to Questions;	0	12/31/2024		
#6 Revised Bid Opening Date Revisions to PASSPort forms	0	01/07/2025		
#7 Revisions to Documents. Questions from Bidders and Responses to Questions; Revisions to PASSPort forms	0	01/14/2025		
#8 Revised Bid Opening Date Revisions to Documents. Questions from Bidders and Responses to Questions; Revisions to PASSPort forms	0	02/04/2025		
#9 Revised Bid Opening Date Revisions to PASSPort forms	0	02/11/2024		

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

02/11/2025

ADDENDUM No. # 9

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **The Bid Opening for the contract described above scheduled for February 12, 2025, at 11:30 am is rescheduled to February 20, 2025, at 11:30 am.**

2. **Bidders Questions and Responses to Questions:**
   No Attachment A is included with this Addendum.

3. **Revisions to Documents:**
   No Attachment B is included with this Addendum.

4. **Revisions to PASSPort forms:**
   See Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFx tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

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If additional information is required, please contact the Department of Design and Construction, Contract Section via PASSPort (in the Discussions with Buyer section).

for RJ

Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

None

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

None

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum is included within Round 6 of the procurement.

Please note that numbering of addenda is independent of rounds.

Bid Opening Date Changes:

The Bid Opening for the contract described above scheduled for February 12, 2025, at 11:30 am is rescheduled to February 20, 2025, at 11:30 am

Document Submission Setup

None

Questionnaire Changes:

None

Item Grid Changes:

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: February 20, 2025; between 8:30am and 11:00am
BID OPENING DATE/ TIME: February 20, 2025; 11:30am

PROJECT No. : HED562

TITLE: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY: SPECS UNIT	GENERAL COUNSEL
#1 Revisions to Documents;	0	12/12/2024		
#2 Revisions to PASSPort;	0	12/13/2024		
#3 Revisions to PASSPort;	0	12/17/2024		
#4 Questions from Bidders and Responses to Questions; Revisions to Documents. Revisions to PASSPort forms	0	12/24/2024		
#5 Revisions to Documents. Questions from Bidders and Responses to Questions;	0	12/31/2024		
#6 Revised Bid Opening Date Revisions to PASSPort forms	0	01/07/2025		
#7 Revisions to Documents. Questions from Bidders and Responses to Questions; Revisions to PASSPort forms	0	01/14/2025		
#8 Revised Bid Opening Date Revisions to Documents. Questions from Bidders and Responses to Questions; Revisions to PASSPort forms	0	02/04/2025		
#9 Revised Bid Opening Date Revisions to PASSPort forms	0	02/11/2025		
#10 Questions from Bidders and Responses to Questions; Revisions to Documents.	0	02/19/2025		JP 2/19/25

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

02/19/2025

ADDENDUM No. # 10

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85025B0027-HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Bidders Questions and Responses to Questions:**
   Attachment A is included with this Addendum.

2. **Revisions to Documents:**
   Attachment B is included with this Addendum.

3. **Revisions to PASSPort forms:**
   No Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFx tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

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If additional information is required, please contact the Department of Design and Construction, Contract Section via PASSPort (in the Discussions with Buyer section).

Richard Jones, PE CWI
Executive Director, Executive-Engineering Services

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

No.	Bidders Questions	DDC Responses
1	Page SW-4 Item #24 of Volume 3 states that there is an allowance for asbestos work but the corresponding bid item and specifications require a bid price to be input. Is there supposed to be an allowance value for this work?	The asbestos will be paid under 67.11AA48.
2	We respectfully request a copy of the plan holder's list for HED562.	Please refer to the Attachment B of this Addendum.
3	Addendum No. 3 included the new Joint Bid – Open Competitive contract requirements. Section 1.30 of Article 1, Definitions, defines Specialty Utility Work as work traditionally performed only by the Utility using its own forces or Specialty Contractors that is necessary for the completion of the Joint Bid Project, including but not limited to, in this case, "live" gas work. However, Sheet JB-U1 notes under Special Conditions, Con Edison 3.4 E, that, when applicable, the approved and qualified Contractor shall perform installation of all types of gas piping, including but not limited to, cutting/capping gas mains, live gas connections, service replacements and testing live gas mains, as needed. Specifically, the 36" gas main requires hot tapping by TD Williamson, the only contractor approved by Con Edison to perform that specialty work and typically managed by Con Edison, for such a tie-in. Since the new Joint Bid requirements and Sheet JB-U1 conflict with each other as to who performs "live" gas work, please clarify accordingly.	A Con Edison gas qualified Contractor or their qualified Subcontractor will perform the dead gas main work shown in the contract documents. Live tie-ins, including the tie-in for the 36" steel main, will be performed by Con Edison crews or specialty contractors provided by Con Edison.

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

1) Added Plan Holder List

2) VOL2 OF 3:

Refer to PASSPort, Documents, HED562 –Volume 2 OF 3.
Delete HED562 VOL2 OF 3 12.05.24(Addendum1)in its entirety.
Replace with revised HED562 VOL2 OF 3 Addendum10

Note: Construction Worker & Construction Apprentice Prevailing Wage Schedule updated.

Vendor
CAC INDUSTRIES INC
COPPOLA PAVING & LANDSCAPING CORP.
DEBOE CONSTRUCTION CORP.
DAVE HEINER ASSOCIATES, INC.
DIFAZIO IND LLC
ADC CONSTRUCTION L.L.C
JRCRUZ CORP
HALCYON CONSTRUCTION CORP
HELLMAN ELECTRIC LLC
P&T II CONTRACTING CORP
J PIZZIRUSSO LANDSCAPING CORP
JLJ IV ENTERPRISES INC
LAWS CONSTRUCTION CORP.
J DANNUNZIO & SONS INC
MFM Contracting Corp.
JUDLAU CONTRACTING INC
PERFETTO ENTERPRISES COMPANY INC
PERFETTO CONTRACTING CORP
A.L.A.C. CONTRACTING CORP.
RESTANI CONSTRUCTION CORP
TULLY CONSTRUCTION CO. INC.
INTER CONTRACTING CORP
DELOITTE CONSULTING LLP
TRIUMPH CONSTRUCTION CORP
AKELA CONTRACTING LLC
HUICATAO CORP
AMERICAN DARLING VALVE A DIV O
ATLANTIC FLUID TECHNOLOGY INC.
NORTHWEST PIPE CO
SAM LIVINGSTON
DIFAZIO INFRASTRUCTURE- DIFAZIO INDUSTRIES JV
AERIAL WORKS INC
RMI ROAD MARKINGS INC
Bond Civil & Utility Construction Inc
MYLAHS ORGANIZATION INC
M.P.D. LLC
CBL Publishing LLC

DDC PROJECT #: **HED562**

PROJECT NAME: **NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC**

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 7 of the procurement.

Please note that numbering of addenda is independent of rounds.

Questionnaire Changes:

None

Item Grid Changes:

None

Department of Design and Construction

DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

VOLUME 3 OF 3

PROJECT ID: HED562

NEW 48" TRUNK WATER MAIN AND APPURTENANCES IN E. 233RD STREET ETC

INCLUDING DISTRIBUTION WATER MAIN, SEWERS, STREET LIGHTING, AND TRAFFIC SIGNAL WORK.

Together With All Work Incidental Thereto
BOROUGH OF THE BRONX
CITY OF NEW YORK

_____
Contractor

Dated_____**, 20**_____