



**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE  
LONG ISLAND CITY, NEW YORK 11101-3045  
TELEPHONE (718) 391-1000  
WEBSITE [www.nyc.gov/buildnyc](http://www.nyc.gov/buildnyc)

**LAW**

**VOLUME 1 OF 3**

**BID BOOKLET**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED  
FOR:

**PROJECT ID: HWMBRT5A (MED-607B)**

**EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE**

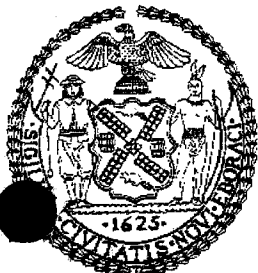
**FROM FDR DRIVE TO LEXINGTON AVENUE**

**INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK**

Together With All Work Incidental Thereto  
**BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
*STV INCORPORATED*

**MARCH 15, 2013**



**3-051**  
**3-051**





Bid Tab

Revised

**Description**

**EAST 34TH STREET SELECT BUS SERVICE FROM FDR  
DRIVE TO LEXINGTON AVENUE - BOROUGH OF  
MANHATTAN**

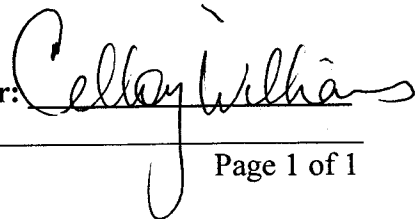
<b>Bid Date</b>	<b>6/19/2013</b>	<b>FMS ID</b>	<b>HWMBRT5A</b>
<b>Estimated Cost</b>	<b>\$24,877,136.00</b>	<b>DEP Supervised</b>	<b>No</b>
<b>Bid Security</b>	<b>10% of Total Bid Price</b>	<b>PLA</b>	<b>No</b>
<b>Time Allowed</b>	<b>910 CCD</b>	<b>Contract Manager</b>	<b>Vicky Ayo-Vaughan</b>
<b>Addendum</b>	<b>8</b>	<b>Project Manager</b>	<b>Dave, Gaurang</b>
<b>PIN</b>	<b>8502013HW0015C</b>	<b>E-PIN</b>	<b>85013B0107</b>
<b>Selective Bidding</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Consultant</b>	<b>STV Incorporated</b>

---

<b>Bid Rank</b>	<b>Vendor</b>	<b>Bid Amount</b>	<b>Security Type</b>
1	MFM CONTRACTING CORP.	*\$23,562,877.20	Bond
2	C.A.C. INDUSTRIES, INC.	\$24,323,122.98	Bond
3	TRIUMPH CONSTRUCTION CORP.	\$25,287,188.88	Bond
4	TROCOM CONSTRUCTION CORP	\$25,321,799.77	Bond
5	JLJ IV ENTERPRISES INC.	\$25,680,890.39	Bond
6	TULLY CONSTRUCTION CO. INC.	\$28,239,015.90	Bond

**Recorder: Phyllis Lopez – ext. 1283**

**Approver:**



**Bid Tab  
Pin: 8502013HW0015C**





NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

DAVID J. BURNEY, FAIA  
Commissioner

CAROL DIAGOSTINO  
Agency Chief  
Contracting Officer

October 29, 2013

CERTIFIED MAIL - RETURN RECEIPT REQUEST

MFM CONTRACTING CORP.  
335 Center Avenue  
Mamaroneck, NY 10543

RE: FMS ID: HWMBRT5A  
E-PIN: 85013B0107001  
DDC PIN: 8502013HW0015C  
EAST 34TH STREET SELECT BUS  
SERVICE FROM FDR DRIVE TO  
LEXINGTON AVENUE - BOROUGH OF  
MANHATTAN  
**NOTICE OF AWARD**

Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of \$23,562,877.20 submitted at the bid opening on June 19, 2013. Within ten (10) days of your receipt of this notice of award, you are required to take the actions set forth in Paragraphs (1) through (3) below. For your convenience, attached please find a copy of Schedule A of the General Conditions to the Contract, which sets forth the types and amounts of insurance coverage required for this contract.

- (1) Execute four copies of the Agreement in the Contracts Unit, 30-30 Thomson Avenue, 1<sup>st</sup> Floor, Long Island City, New York (IDCNY Building). A Commissioner of Deeds will be available to witness and notarize your signature. The Agreement must be signed by an officer of the corporation or a partner of the firm.
- (2) Submit to the Contracts Unit four properly executed performance and payment bonds. If required for this contract, copies of performance and payment bonds are attached.
- (3) Submit to the Contracts Unit the following insurance documentation: (a) original certificate of insurance for general liability in the amount required by Schedule A, and (b) original certificates of insurance or other proof of coverage for workers' compensation and disability benefits, as required by New York State Law. The insurance documentation specified in this paragraph is required for registration of the contract with the Comptroller's Office.



# **SPECIAL NOTICE TO BIDDERS**

Please be advised that there are no M/WBE requirements for this project. However, the Contractor is subject to DBE goals of 12% in accordance with the requirements of the FEDERAL TRANSIT ADMINISTRATION (FTA) THIRD PARTY REQUIREMENTS, Article 29, as contained in Volume 3 of 3 under Addendum No. 2.

(NO TEXT ON THIS PAGE)

## SPECIAL NOTICE TO BIDDERS

The New York City Department of Small Business Services (SBS), in conjunction with the New York Business Development Corporation (NYBDC), have established a **NYC Construction Loan** pilot program to provide prime contractors and subcontractors financing for mobilization costs on certain City Construction projects.

Under this initiative, loans are available for early stage mobilization needs such as insurance, labor, supplies and equipment. Bidders are strongly encouraged to visit "Growing Your Business" at [www.nyc.gov/nycbusiness](http://www.nyc.gov/nycbusiness) to learn more about the loan or contact [constructionloan@sbs.nyc.gov](mailto:constructionloan@sbs.nyc.gov) / (212) 513-6444 to obtain details and to determine preliminary eligibility.

A successful loan applicant will be required to make an assignment of its contract (or subcontract) payments to the lender NYBDC until the loan is repaid. If the loan is to a subcontractor, a prime contractor must honor the terms of such an assignment.

A prime contractor may not discriminate against a subcontractor or potential subcontractor by reason of the subcontractor's participation, or nonparticipation, in the NYC Construction Loan program.

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# **NOTICE TO BIDDERS**

## **DAMAGES FOR DELAY PILOT PROGRAM**

**Please be advised that this contract is part of a pilot program in which the Standard Construction Contract provisions concerning delay damages have been revised to allow contractors to be reimbursed for specified additional costs that are attributable to a delay in the performance of the work resulting from certain acts or omissions of the City agency or its representatives. Certain changes are highlighted here to alert bidders to the pilot program. Please see Articles 11, 12.3, and 13.10 of the Standard Construction Contract for a full understanding and the actual text of the pilot program. The text of the revised Standard Construction Contract is the controlling document should there be any discrepancies between this notice and the Standard Construction Contract.**

Changes to Articles 11, 12.3, and 13.10 of the Standard Construction Contract permit contractors to make claims for delay damages relating to the following circumstances:

The failure of the City to take reasonable measures to coordinate and progress the Work;

Extended delays attributable to the City in the review or issuance of change orders, in shop drawing reviews and approvals or as a result of the cumulative impact of multiple change orders, which constitute a material change to the Work and which have a verifiable impact on project costs.

The unavailability of the site for an extended period of time that significantly affects the scheduled completion of the contract.

The issuance by the City of a stop work order relative to a substantial portion of work for a period exceeding thirty days, that was not brought about through any action or omission of the Contractor.

Differing site conditions that were not known or 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.

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

Delays not contemplated by the parties;

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

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

Please see Article 11.4 for provisions regarding compensable delays.

Specific exclusions to claims for damages also apply, such as for third party (non-City) acts and omissions, court orders, strikes or *force majeure* events. For provisions related to non-compensable delays, please see Article 11.5.

For those delays where damages are available, Article 11 also sets forth what costs are recoverable. Please see Article 11.7 for which costs are recoverable and which costs are non-recoverable.

Article 11 also contains provisions concerning notice and documentation of claims. Please see Articles 11.1, 11.2, and 11.6. Contractors must comply with the notice requirements in order to preserve their claims. Consequently, please read these sections carefully. Delay damages are compensable only if they were actually, reasonably and necessarily incurred and are verified by appropriate documentation submitted at the appropriate times.

Claims for delay damages are not covered by the dispute resolution process in Article 27 of the Standard Construction Contract. See Article 11.8. When the amount of delay damages are agreed upon, such damages may be paid through a change order.

# **CONSTRUCTION REFORM PILOT PROJECT CONTRACT**

## ***(Damages for Delays Allowed in Certain Instances)***

The City of New York wishes to expand bidding and competition for public works projects, to promote timely completion of such projects and to contain escalating construction costs, to the maximum feasible extent. For these reasons, beginning in July 2008, the City has commenced a three-year pilot project, to test the use of new contract language altering the allocation of the risk of project delays, as between the City and the contractor. Approximately 25% of the public works projects valued at one million dollars or more, that City agencies will bid out during the three years of the pilot will contain the new Pilot Project Contract language on delay damages. **This contract is part of the pilot project.**

*Note: contractors intending to bid on City work are advised to read the bid packages, including all of the contract language, carefully. Not all projects will be part of this pilot initiative, and not all delay-related damages will be payable. This "FAQ" is provided for your assistance, but is not part of the contract; the bid package/contract language is the controlling legal document.*

**Q. How has the City typically addressed the question of delay-related costs incurred by construction contractors?**

A. The City's Standard Construction Contract does not allow contractors to recover for costs claimed to result from delays, even those caused in some manner by the City's own actions or inactions. In general, City contractors have recovered delay-related damages only when they file a claim with the Comptroller and only for delays resulting from the City's willful misconduct or gross negligence, the City's abandonment of the contract, the City's breach of a fundamental obligation (such as not giving the worksite to the contractor), and certain other delays that can be shown not to have been contemplated by the parties.

**Q. How does the new Pilot Project Contract language change what contractors may recover?**

A. For Pilot Project Contracts, the City will also accept responsibility for delays it causes in coordinating or failing to coordinate the work, for extended delays in processing change orders or approving shop drawings, for site conditions that are materially different from those anticipated, and for some stop work orders, as well as for those delays for which costs may currently be recovered under the Standard Construction Contract through the claims process.

## *Frequently Asked Questions*

**Q. Will contractors be limited in the kinds of delay damages they may recover?**

A. Yes, it is important to read the Pilot Project Contract language very carefully. Not all damages relating to delays are compensable. For example, delays caused by utilities and other third parties are not the responsibility of the City, only delays caused by City agencies. In addition, the Pilot Project Contract language spells out the necessary actions the contractor must take and the documentation that must be provided, in order to recover delay-related claims.

**Q. How will disputes over delay damages be addressed during the Pilot Project?**

A. When the amount of damages is agreed upon between the City and the contractor, such damages may be paid through a change order, if appropriate. The contractor may also file a claim with the Comptroller, in accordance with the contract. Delay-related damages will not be subject to the Contract Dispute Resolution Board process outlined in Article 27 of the Standard Construction Contract.

**Q. What is the City's goal for the Pilot Project?**

A. The City is interested in determining whether some contractors decline to bid on City projects because of the delay risks, and whether contractors are factoring such costs into their bids, because they cannot predict what will happen if delays do occur. For Pilot Projects, contractors will have contractual protections that appropriate compensation will be made for delays that are reasonably considered to be the City's responsibility.

**Q. How will the City decide if the Pilot Project is a success?**

A. Throughout the Pilot Project's three years, the City's Office of Management and Budget, Law Department, Office of Contract Services, the comptroller's Office, and all of the construction agencies will monitor the results of these contracts. They will look at such data as bid prices, number of competitors, total project costs, project completion schedules and the number and types of disputes that arise, to determine if, overall, the new Pilot Project Contract language contributes to a better, more competitive public works environment for the benefit of City taxpayers. The City will continue to consult with construction contractor organizations and representatives as part of this monitoring and review process.

*For any other questions regarding this Pilot Project, please contact the Agency Chief Contracting Officer for the agency bidding out the project. A list of ACCOs can be found at <http://www.nyc.gov/html/selltonyc/html/acco.html>.*

**CITY OF NEW YORK**

**DEPARTMENT OF  
DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**BID BOOKLET**

FOR FURNISHING ALL LABOR AND MATERIALS  
NECESSARY AND REQUIRED FOR:

**PROJECT ID: HWMBRT5A (MED-607B)**

**EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE**

**FROM FDR DRIVE TO LEXINGTON AVENUE**

**INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK**

Together With All Work Incidental Thereto  
**BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

(NO TEXT ON THIS PAGE)

**PROJECT ID: HWMBRT5A**

**CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**BID BOOKLET**

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**CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**SPECIAL NOTICE TO BIDDERS**

**BID SUBMISSION REQUIREMENTS**

**THE FOLLOWING DOCUMENTS ARE TO BE COMPLETED AND SUBMITTED WITH THE BID:**

1. Bid Schedule and Bid Form, including Affirmation
2. Bid Security (if required, see Attachment 1 on Page A-1)
3. Buy America Certification (Appendix A in Addendum No. 2)

**FAILURE TO SUBMIT ITEMS (1), (2) AND (3)  
WILL RESULT IN THE DISQUALIFICATION OF THE BID.**

4. Safety Questionnaire
5. Construction Employment Report (if bid is \$1,000,000 or more)
6. Contract Certificate (if bid is less than \$1,000,000)
7. Confirmation of Vendex Compliance
8. Bidder's Certification of Compliance with Iran Divestment Act
9. Special Experience Requirements (if applicable)
10. ~~Apprenticeship Program Questionnaire (if applicable)~~ N/A
11. NYCDOT DBE Utilization Goal in Compliance with FTA DBE Requirements  
(Forms AAP 15, AAP 19 and AAPHC 89 FTA in Addendum No. 2)
12. Disclosure of Lobbying Activities (Appendix A1 in Addendum No. 2)
13. Debarment and Suspension Certification (Appendix A2 in Addendum No. 2) (To be submitted by successful Bidder)

This Contract must meet the requirements of 49 CFR Part 29. As such, the Contractor is required to verify that neither the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945 from transactions by any federal department or agency.

**FAILURE TO SUBMIT ITEMS (4) THROUGH (13)  
MAY RESULT IN THE DISQUALIFICATION OF THE BID.**

**NOTES:**

- (1) All of the above referred to blank forms to be completed and submitted with the bid are included in the BID BOOKLET, unless otherwise specified.
- (2) If additional information is required, please contact the Department of Design and Construction at 718-391-2601.
- (3) VENDEX QUESTIONNAIRES: The Bidder is advised that Vendex Questionnaires and procedures have been changed. Vendex Questionnaires, as well as detailed instructions, may be obtained at [www.nyc.gov/vendex](http://www.nyc.gov/vendex). The bidder may also obtain Vendex forms and instructions by contacting the Agency Chief Contracting Officer or the contact person for this contract.
- (4) SPECIAL EXPERIENCE REQUIREMENTS: The Bidder is advised that Special Experience Requirements may apply to this contract. Such requirements are set forth on pages 3 and 4 of this Bid Booklet.

**SPECIAL NOTICE TO BIDDERS**  
**SPECIAL EXPERIENCE REQUIREMENTS (Revised 02/2007)**

- (A) **EXPERIENCE REQUIREMENTS FOR THE BIDDER:** 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 requirements set forth below under Article (B) apply to this contract where indicated by a blackened box (■) or by X in a □ to left.

- (B) **EXPERIENCE REQUIREMENTS FOR INSTALLER OF TRUNK WATER MAIN:** The special experience requirements set forth below apply to the contractor who will install the Trunk Water Main. 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) The contractor who will install the Trunk Water Main 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.

- (C) **SUBMISSION REQUIREMENTS:** For each project submitted to meet the experience requirements set forth above, the bidder must complete and submit the Qualification Form set forth in the Bid Booklet. Separate Qualification Forms shall be provided for bidder and the contractor who will install the Trunk Water Main.

- (D) **CONDITIONS:** In determining compliance with the special experience requirements for the bidder set forth above, the City may consider prior projects completed by principal(s) or other employees of the bidder while affiliated with another entity, subject to the conditions set forth below.

- (1) Any principal or other employee on whose prior experience the bidder is relying to demonstrate compliance with this special experience requirement must have held the following: (a) a significant management role in the prior entity with which he/she was affiliated, and (b) a significant management role in the entity submitting the bid for a period of six months or more from the inception of the bidding entity.

- (2) The bidder may not rely on the experience of its principals or other employees to demonstrate compliance with any other requirements, including without limitation, financial requirements or requirements for a specified minimum amount of annual gross revenues.

- (E) **JOINT VENTURES:** In the event the bidder is a joint venture, at least one firm in the joint venture must meet the above described experience requirements.

- (F) **COMPLIANCE:** Compliance with the experience requirements set forth herein will be determined solely by the City, prior to an award of contract. The bidder is advised that failure to meet the above described experience will result in the rejection of the bid as non-responsive.

**Qualification Form**

List previous projects completed to meet the special experience requirements for this contract.  
Please photocopy this form for submission of all required projects.

Name of Contractor: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Location of Project: \_\_\_\_\_

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Brief description of the Project completed or the Project in progress: \_\_\_\_\_

\_\_\_\_\_

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: \_\_\_\_\_

Amount of Contract, Subcontract or Sub-subcontract: \_\_\_\_\_

Start Date and Completion Date: \_\_\_\_\_

\*\*\*\*\*

Name of Contractor: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Location of Project: \_\_\_\_\_

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Brief description of the Project completed or the Project in progress: \_\_\_\_\_

\_\_\_\_\_

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: \_\_\_\_\_

Amount of Contract, Subcontract or Sub-subcontract: \_\_\_\_\_

Start Date and Completion Date: \_\_\_\_\_

\_\_\_\_\_

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**ATTACHMENT 1 - BID INFORMATION**

**PROJECT ID: HWMBRT5A**

**PIN: 8502013HW0015C**

Description and Location of Work:

EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE

FROM FDR DRIVE TO LEXINGTON AVENUE

INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

Documents Available At:

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101  
8:30 A.M. to 4:00 P.M. – Monday through Friday

Submission of Bids To:

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101  
Before 11:00 A.M. on **JUNE 19, 2013**

Bid Opening:

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101

Time and Date: 11:00 A.M. on **JUNE 19, 2013**

Pre-Bid Conference:

Yes \_\_\_\_\_ No   X    
If Yes, Mandatory \_\_\_\_\_ Optional: \_\_\_\_\_  
Time and Date: \_\_\_\_\_  
Location: \_\_\_\_\_

Bid Security:

Bid Security is required in the amount set forth below; provided, however, bid security is not required if the TOTAL BID PRICE set forth on the Bid Form is less than \$ 1,000,000.00.

- (1) Bond in an amount not less than 10% of the TOTAL BID PRICE set forth on the Bid Form, OR
- (2) Certified Check in an amount not less than 10% of the TOTAL BID PRICE set forth on the Bid Form.

Performance and Payment Security: 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.

Agency Contact Person:

Lorraine Holley  
Phone: 718-391-2601 FAX: 718-391-2615

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**1. Participation by Disadvantaged Business Enterprises (DBE)**

- 1.1. Bidders' attention is called to NYCDOT DBE Utilization Goal in Compliance with FTA DBE Requirements included in the FTA Contract Clauses (annexed to Addendum No. 2). A DBE utilization goal of 12 percent (**12%**) has been established for this Contract.
- 1.2. Bidders are required to document sufficient DBE participation to meet the contract specific goal of twelve percent (**12%**) DBE participation or, alternatively, document adequate good faith efforts to do so, as provided for in 49 CFR 26.53. Award of this contract is conditioned on submission of the following:
- NYCDOT DBE Utilization Goal Forms attached hereto as part of the FTA DBE Requirements. Please complete and submit with the bid the following (annexed to Addendum No. 2) :
    - a) (Form AAP 15) Please fill out to provide the Name of Bidder's Designated DBE Officer;
    - b) (Form AAP 19 FTA - DBE Schedule of Utilization).

**In preparation of the Bid Form, Bidders shall consider the Dollar Value of work to be performed by the potential DBE subcontractors. Please note that for Materials or Suppliers (MS) utilized to attain the project's 12% DBE goal, only 60% of associated supplier contract value could be accounted for the Dollar Value of Utilization.**

**The following forms shall be provided by the successful bidder:**

**2. Complete form AAPHC 89 FTA (DBE Utilization Worksheet) and 89-1 FTA to report if there has been any changes from original utilization plan (annexed to Addendum No. 2) to be submitted by the successful Bidder as a part of post-bid submission. Federal Aid Requirements**

- 2.1. Payments for the Contract Work will be funded in part by Federal funds from the Federal Transit Administration ("FTA") and New York State Department of Transportation (NYSDOT). The receipt of such funds is conditioned upon the Bidder's compliance with certain Federal and State provisions with respect to the submission of bids. The Bidder must comply with the applicable provisions set forth in the FTA Contract Clauses (annexed to Addendum No. 2), as well as Standard Clauses for All New York State Contracts (annexed to Addendum No. 2). The Bidder shall be responsible for submitting all certifications, schedules, documents and any other materials required hereunder.

**3. Federal Requirements Compliance Certifications**

- 3.1. FTA regulations require Bidders to complete and submit the following certifications which are annexed to the FTA Requirements:

3.1.1. Buy America Certification (To be submitted with bid)

- This solicitation and the resulting contract are subject to the Buy America requirements of 49 U.S.C. Section 5323(j) and the Federal Transit Administration's implementing regulations found at 49 C.F.R. Part 661. These regulations require, as a matter of responsiveness, that the Bidder submits with its bid a completed certification in accordance with Part 661.6 or 661.12, as appropriate. These certifications are set forth in this solicitation at Appendix A (annexed to Addendum No. 2). **Bids that are not accompanied by a completed Buy America Certification shall be rejected as non-responsive.**
  - If the Bidder seeks a waiver to the Buy America provision, an application for a waiver must be submitted. The application should contain its justification to support the waiver and must be submitted within five (5) working days of the bid opening. (The Bidder is referred to 49 CFR 661.7, for guidance on preparation of a Buy America waiver application).
- 3.1.2. Debarment and Suspension Certification (To be submitted by successful Bidder)
- 3.1.2.1. This Contract must meet the requirements of 49 CFR Part 29. As such, the contractor is required to verify that neither the contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945 from transactions by any federal department or agency.
  - 3.1.2.2. Fill out and submit form on Appendix A2 (annexed to Addendum No. 2).
  - 3.1.2.3. The Contractor must also ensure that they and their subcontractors are not included in the Excluded Parties list by visiting the Federal website and inserting their name in the "search exclusions" in the left hand bar and must provide the printout of the search result that shows that they are not listed in the Excluded Parties list <https://www.epls.gov/>.
- 3.1.3. Lobbying Certification (To be submitted by successful Bidder)
- 3.1.3.1. Contractors who apply or bid for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352.
  - 3.1.3.2. Fill out and submit form on Appendix A1 (annexed to Addendum No. 2).
- 3.1.4. Non-Collusive Bidding (See "Standard Clauses for all State Contracts" annexed to Addendum No. 2)



- 3.1.4.1. Both State law and Federal regulation require that for work performed under competitively bid contracts, financed with State and/or Federal funds, contractor submitting bids for such contracts certify that they have not engaged in any activity that would artificially affect prices or restrict competition through the exchange or sharing of information among bidders. In addition, Federal law required that the bidder certify that he/she is an eligible bidder under Federal regulations and is not under, or about to be faced with, any sanction imposed by any Federal agency.
- 3.1.5. DBE (See FTA Contract Clauses and Appendix B annexed to Addendum No. 2)
- 3.1.6. Federal Davis-Bacon Wage Rates. All Bidders are directed to the specific provisions of the Contract, that Applicable Statutes and Applicable Agreements that mandate compliance with legal requirements related to payment of wages, in particular, Federal Davis-Bacon Wage Rates applicable to the Contract work to be performed by the contractor at the time the work is performed.
  - 3.1.6.1. A copy of the current federal Davis-Bacon Wage rates as of the date this IFB was prepared is attached to Addendum No. 2. Bidders and the selected Contractor, if any, shall be responsible for confirming and adhering to the actual Davis-Bacon Wage rates in effect at the time after the issuance of this IFB including, without limitation, during the contract term. Federal Davis-Bacon Wage rates may be accessed through the US department of Labor's Website at: <http://www.wdol.gov/wdol/scafiles/davisbacon/ny.html>.

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BID SCHEDULE

NOTICE TO BIDDERS

Items listed in this Bid Schedule which have one (1) digit followed by a decimal (e.g. 4.02 CB) shall comply with the requirements of the corresponding numerical Sections of the NYCDOT Standard Highway Specifications, dated November 1, 2010, and as amended by Addendum No. 1, herein Volume 3 of 3.

Items listed in this Bid Schedule which have two (2) digits beginning with the number "5" followed by a decimal (e.g. 52.11D12) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer Specifications, dated August 1, 2009, and as amended by Addendum No. 4, herein Volume 3 of 3.

Items listed in the Bid Schedule which have two (2) digits beginning with the number "6" followed by a decimal (e.g. 60.11R612) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Water Main Specifications, dated August 1, 2009, and as amended by Addendum No. 4, herein Volume 3 of 3.

Items listed in the Bid Schedule which have two (2) digits beginning with the number "7" followed by a decimal (e.g. 70.91SW20), except for Item "79.11 AATA", shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer Specifications, dated August 1, 2009, or the NYCDEP Standard Water Main Specifications, dated August 1, 2009, as applicable, and as amended by Addendum No. 4, herein Volume 3 of 3.

Item number 79.11 AATA in this Bid Schedule shall comply with the requirements of the Section 79.11 AATA incorporated in Addendum No. 7, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "BMP-GI-" (e.g. BMP-GI-PK28) shall comply with the requirements of the corresponding alphanumeric Section incorporated in Addendum No. 1, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the letter "E" (e.g. E 260519 G) shall comply with the requirements of the corresponding alphanumeric Section incorporated in Addendum No. 5, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "HW-" (e.g. HW-900) shall comply with the requirements of the corresponding alphanumeric Section incorporated in Addendum No. 4, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "SL-" (e.g. SL-21.09.05) are Street Lighting Items less the prefix, which shall be done in accordance with the requirements of Sub-Section 1.06.23.(D) and Section 1.06.49 in the Standard Highway Specifications.

Items listed in this Bid Schedule beginning with the prefix "T-" (e.g. T-2.22) are Traffic Items less the prefix, which shall be done in accordance with the requirements of Sub-Section 1.06.23.(D) and Section 1.06.49 in the Standard Highway Specifications, except for Items "T-60000B" and "T-93000" which shall comply with the requirements of Sections T-60000B and T-93000, respectively, in Addendum No. 1, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "UTL-" (e.g. UTL-6.07) are for Gas Cost Sharing (EP-7) work and shall comply with the requirements of Addendum No. 3, herein Volume 3 of 3.

**BID FORM  
THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**BID FOR FURNISHING ALL LABOR AND  
MATERIAL NECESSARY AND REQUIRED FOR:**

**PROJECT ID: HWMBRT5A**

**EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE  
FROM FDR DRIVE TO LEXINGTON AVENUE**

**INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK**

**Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

Name of Bidder: MFM Contracting Corp.

Date of Bid Opening: June 19, 2013

Bidder is: (Check one, whichever applies) Individual ( ) Partnership ( ) Corporation ()

Place of Business of Bidder: 335 Center Avenue, Manass Neck, N.Y. 10543

Bidder's Telephone Number: 914-777-8292 Fax Number: 914-777-0194

Bidder's E-Mail Address: mvp@petromfm.com

Residence of Bidder (If Individual): \_\_\_\_\_

If Bidder is a Partnership, fill in the following blanks:

Names of Partners

Residence of Partners

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If Bidder is a Corporation, fill in the following blanks:

Organized under the laws of the State of New York

Name and Home Address of President: Michael V. Petricillo - 10 Orchard Drive, Purchase, N.Y. 10577

Name and Home Address of Secretary: Felix J. Petricillo - 68 Muchmore Road, Harrison, N.Y. 10528

Name and Home Address of Treasurer: same as Secretary

## BID FORM

---

The above-named 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 page C-6 of this Bid Booklet.

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

5. 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

AFFIRMATION

The undersigned bidder affirms and declares that said bidder is not in arrears to the City of 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 the bidder to receive public contracts except: None

(If none, the bidder shall insert the word "None" in the space provided above.)

Full Name of Bidder: MEM Contracting Corp.  
Address: 335 Center Avenue  
City Mamaroneck State N.Y. Zip Code 10543

CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:

A - Individual or Sole Proprietorship\*  
SOCIAL SECURITY NUMBER

-----

B - Partnership, Joint Venture or other unincorporated organization  
EMPLOYER IDENTIFICATION NUMBER

-----

C - Corporation  
EMPLOYER IDENTIFICATION NUMBER

13-4130805

By: Michael R.  
Signature

Title: President

If a corporation, place seal here

This affirmation must be signed by an officer or duly authorized representative.

\*Under the Federal Privacy Act the furnishing of Social Security Numbers by bidders on City contracts is voluntary. Failure to provide a Social Security Number will not result in a bidder's disqualification. Social Security Numbers will be used to identify bidders, proposers or vendors to ensure their compliance with laws, to assist the City in enforcement of laws, as well as to provide the City a means of identifying of businesses which seek City contracts.

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Qualification Form

List previous projects completed to meet the special experience requirements for this contract. Please photocopy this form for submission of all required projects.

Name of Contractor: MFM Contracting Corp.

Name of Project: BED 790

Location of Project: Brooklyn

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

Name: Jeff Vollmuth - Vollmuth + Boush  
Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Brief description of the Project completed or the Project in progress: Installation of 48" welded steel water main + 20" + 12" ductile iron water main + restoration

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

Amount of Contract, Subcontract or Sub-subcontract: \$5MM

Start Date and Completion Date: 8/2010 to 3/2012

\*\*\*\*\*

Name of Contractor: MFM Contracting Corp.

Name of Project: MED 610

Location of Project: 13<sup>th</sup> St - Manhattan, N.Y.

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

Name: Peter Rellaft - Tectonic  
Title: Resident Engineer Phone Number: 646-412-3401

Brief description of the Project completed or the Project in progress: Installation of 36" welded steel water main + appurtenances. Installation of private utilities + restoration

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

Amount of Contract, Subcontract or Sub-subcontract: \$10,250,000

Start Date and Completion Date: 1/1/13 to 4/14





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

BID SCHEDULE

- NOTE: (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
- (2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the several classes of work in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
- (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM. Alterations must be initialed in ink by the bidder.
- (4) The Extended Amount entered in Column 5 shall be the product of the Estimated Quantity in Column 2 times the Unit Price Bid in Column 4.
- (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows: B - 3 through B - 77



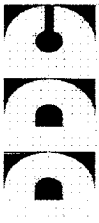
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502013HW0015C  
Project ID HWMBRT5A

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
4.02 CB (001)	1,023.0 TONS	ASPHALTIC CONCRETE MIXTURE	\$ 62	50	\$ 63,937	50
4.02 I4-2 (002)	14,000.0 S.Y.	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 2" THICK	\$ 8	50	\$ 119,000	00
4.02 I4-3 (003)	7,650.0 S.Y.	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 3" THICK	\$ 12	50	\$ 95,625	00
4.05 AXP (004)	300.0 C.Y.	HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS) (PIGMENTED)	\$ 460	00	\$ 138,000	00

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			DOLLARS	CTS	DOLLARS	CTS
4.06 (005)	10.0 C.Y.	CONCRETE IN STRUCTURES, CLASS A-40	\$ 415	00	\$ 4150	00
4.07 CB (006)	50.0 L.F.	NEW GRANITE CURB, STRAIGHT	\$ 170	00	\$ 8500	00
4.07 CC (007)	60.0 L.F.	NEW GRANITE CURB, CORNER	\$ 295	00	\$ 17700	00
4.07 SBS-CB (008)	375.0 L.F.	NEW BUS BULBS GRANITE CURB, STRAIGHT	\$ 170	00	\$ 63750	00

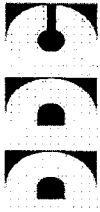


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			DOLLARS	CTS	DOLLARS	CTS
4.07 SBS-CC (009)	90.0 L.F.	NEW BUS BULBS GRANITE CURB, CORNER	\$ 290	00	\$ 26100	00
4.08 AA (010)	180.0 L.F.	CONCRETE CURB (18" DEEP)	\$ 59	00	\$ 10620	00
4.09 AD (011)	80.0 L.F.	STRAIGHT STEEL FACED CONCRETE CURB (18" DEEP)	\$ 82	00	\$ 6560	00
4.09 ADB (012)	200.0 L.F.	STRAIGHT STEEL FACED CONCRETE CURB (20" DEEP)	\$ 76	00	\$ 15200	00

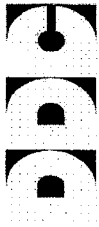


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			DOLLARS	CTS	DOLLARS	CTS
4.09 CD (013)	20.0 L.F.	CORNER STEEL FACED CONCRETE CURB (18" DEEP)	\$ 125	00	\$ 2500	00
4.09 CDB (014)	320.0 L.F.	CORNER STEEL FACED CONCRETE CURB (20" DEEP)	\$ 125	00	\$ 40000	00
4.11 CA (015)	100.0 C.Y.	FILL, PLACE MEASUREMENT	\$ 65	00	\$ 6500	00
4.13 AAS (016)	5,100.0 S.F.	4" CONCRETE SIDEWALK (UNPIGMENTED)	\$ 8	00	\$ 40800	00



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			DOLLARS	CTS	DOLLARS	CTS
4.13 AAT (017)	250.0 S.F.	4" CONCRETE SIDEWALK ON EXISTING FOUNDATION (UNPIGMENTED)	7	00	\$ 1750	00
4.13 ABS (018)	13,800.0 S.F.	4" CONCRETE SIDEWALK (PIGMENTED)	9	00	\$ 124200	00
4.13 BAS (019)	3,200.0 S.F.	7" CONCRETE SIDEWALK (UNPIGMENTED)	10	00	\$ 32000	00
4.13 BBS (020)	900.0 S.F.	7" CONCRETE SIDEWALK (PIGMENTED)	14	00	\$ 12600	00



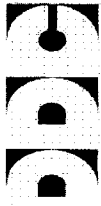
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			DOLLARS	CTS	DOLLARS	CTS
4.13 DE (021)	320.0 S.F.	EMBEDDED PREFORMED DETECTABLE WARNING UNITS	\$ 50	00	\$ 16000	00
4.13 DSBS (022)	820.0 S.F.	EMBEDDED PRECAST CONCRETE DETECTABLE WARNING PAVERS FOR SBS STATIONS	\$ 6	00	\$ 4920	00
4.14 (023)	500.0 LBS.	STEEL REINFORCEMENT BARS	\$ 2	25	\$ 1125	00
4.15 SS (024)	120.0 C.Y.	STRUCTURAL SOIL FOUNDATION MATERIAL	\$ 140	00	\$ 16800	00



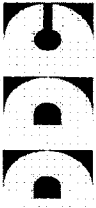
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			DOLLARS	CTS	DOLLARS	CTS
4.16 CA510 (025)	1.0 EACH	TREES PLANTED, 3" TO 3-1/2" CALIPER, ALL TYPES, IN 5' X 10' TREE PITS	\$ 940	00	\$ 940	00
4.18 A (026)	45.0 EACH	MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	\$ 260	00	\$ 11700	00
4.18 B (027)	18.0 EACH	MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	\$ 395	00	\$ 7110	00
4.21 (028)	4,300.0 P/HR	TREE CONSULTANT	\$ 25	00	\$ 107500	00

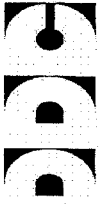
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			DOLLARS	CTS	DOLLARS	CTS
50.11MS056040 (029)	290.0 L.F.	5'-6"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	\$ 1986	00	\$ 57940	00
50.21C3C072D (030)	50.0 L.F.	72" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	\$ 2300	00	\$ 115000	00
50.31CC15 (031)	120.0 L.F.	15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	\$ 600	00	\$ 72000	00
51.11C001 (032)	1.0 EACH	CHAMBER NO. 1	\$ 150000	00	\$ 150000	00

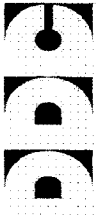


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			DOLLARS	CTS	DOLLARS	CTS
51.21L001000V (033)	1.0 EACH	SPECIAL MANHOLE NO. 1	\$ 70000	00	\$ 70000	00
51.21L002000V (034)	1.0 EACH	SPECIAL MANHOLE NO. 2	\$ 90000	00	\$ 90000	00
51.21S0A1000V (035)	1.0 EACH	STANDARD MANHOLE TYPE A-1	\$ 5000	00	\$ 5000	00
51.41S001 (036)	12.0 EACH	STANDARD CATCH BASIN, TYPE 1	\$ 6000	00	\$ 72000	00
					\$ <del>72000</del>	00

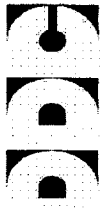


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			DOLLARS	CTS	DOLLARS	CTS
51.41S002 (037)	4.0 EACH	STANDARD CATCH BASIN, TYPE 2	\$ 6000	00	\$ 24000	00
51.42B1W (038)	1.0 EACH	INCREMENTAL COST OF TYPE 3 CATCH BASIN WITH CURB PIECE IN LIEU OF TYPE 1 CATCH BASIN	\$ 6000	00	\$ 6000	00
51.42B2W (039)	1.0 EACH	INCREMENTAL COST OF TYPE 3 CATCH BASIN WITH CURB PIECE IN LIEU OF TYPE 2 CATCH BASIN	\$ 6000	00	\$ 6000	00
52.11D12 (040)	750.0 L.F.	12" DUCTILE IRON PIPE BASIN CONNECTION	\$ 240	00	\$ 180000	00



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

Contract PIN 8502013HW0015C  
Project ID HMBRT5A

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
52.41C08R (041)	40.0 L.F.	8" C.I.S.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 100	00	\$ 4000	00
52.41C10R (042)	20.0 L.F.	10" C.I.S.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 110	00	\$ 2200	00
52.41C12R (043)	40.0 L.F.	12" C.I.S.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 114	00	\$ 4560	00
53.11DR (044)	465.0 L.F.	TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	\$ 20	00	\$ 9300	00

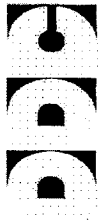


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			DOLLARS	CTS	DOLLARS	CTS
55.11AB (045)	4.0 EACH	ABANDONING BASINS AND INLETS	\$ 1000	00	\$ 4000	00
6.02 AAN (046)	2,210.0 C.Y.	UNCLASSIFIED EXCAVATION	\$ 50	00	\$ 110500	00
6.02 XHEC (047)	50.0 C.Y.	INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) TRANSIT FACILITIES AND BUILDING VAULTS	\$ 100	00	\$ 5000	00
6.02 XSCW (048)	20.0 C.Y.	INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) TRANSIT FACILITIES	\$ 80	00	\$ 1600	00



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			DOLLARS	CTS	DOLLARS	CTS
6.23 BD (049)	1.0 L.F.	FURNISH AND INSTALL 4-PAIR FIRE ALARM CABLE	11	20	\$ 11	20
6.25 RS (050)	1,420.0 S.F.	TEMPORARY SIGNS	40	00	\$ 56800	00
6.26 (051)	11,700.0 L.F.	TIMBER CURB	2	00	\$ 23400	00
6.28 AA (052)	9,090.0 L.F.	LIGHTED TIMBER BARRICADES	3	00	\$ 27270	00



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			DOLLARS	CTS	DOLLARS	CTS
6.28 ME (053)	1,850.0 L.F.	LIGHTED TIMBER FENCING FOR USE IN LOWER MANHATTAN PROJECTS	\$ 8	00	\$ 14800	00
6.29 TTM (054)	4,500.0 EACH	TEMPORARY TUBULAR MARKERS	\$ 6	00	\$ 27000	00
6.34 ACT (055)	6,600.0 L.F.	TEMPORARY CHAIN LINK FENCE, 6'-0" HIGH	\$ 3	00	\$ 19800	00
6.34 ACTP (056)	2,000.0 L.F.	TEMPORARY CHAIN LINK FENCE, 6'-0" HIGH (WITH TOP AND BOTTOM RAILS AND POSTS MOUNTED ON STEEL PLATES)	\$ 4	00	\$ 8000	00



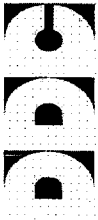
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			DOLLARS	CTS	DOLLARS	CTS
6.40 D (057)	36.0 MONTH	ENGINEER'S FIELD OFFICE (TYPE D)	\$ 8000	00	\$ 288000	00
6.43 (058)	300.0 SETS	PHOTOGRAPHS	\$ 18	00	\$ 5400	00
6.44 (059)	50,000.0 I.F.	THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	\$ 1	10	\$ 55000	00
6.44 POR (060)	4,000.0 S.Y.	RED BUS LANE PAVEMENT OVERLAY	\$ 31	60	\$ 126400	00

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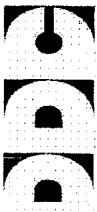


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			DOLLARS	CTS	DOLLARS	CTS
6.49 (061)	2,000.0 L.F.	TEMPORARY PAVEMENT MARKINGS (4" WIDE)	\$ 1	20	\$ 2400	00
6.52 (062)	8,000.0 P/HR	UNIFORMED FULL-TIME FLAGPERSON  Unit price bid shall not be less than: \$ 75.00	\$ 95	00	\$ 760000	00
6.53 (063)	6,500.0 L.F.	REMOVE EXISTING LANE MARKINGS (4" WIDE)	\$ 0	80	\$ 5200	00
6.55 (064)	6,660.0 L.F.	SAWCUTTING EXISTING PAVEMENT	\$ 4	00	\$ 26,640	00





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			DOLLARS	CTS	DOLLARS	CTS
6.49 (061)	2,000.0 L.F.	TEMPORARY PAVEMENT MARKINGS (4" WIDE)	\$ 1	20	\$ 2400	00
6.52 (062)	8,000.0 P/HR	UNIFORMED FULL-TIME FLAGPERSON  Unit price bid shall not be less than: \$ 75.00	\$ 95	00	\$ 760000	00
6.53 (063)	6,500.0 L.F.	REMOVE EXISTING LANE MARKINGS (4" WIDE)	\$ 0	80	\$ 5200	00
6.55 (064)	6,660.0 L.F.	SAWCUTTING EXISTING PAVEMENT	\$ 4	00	\$ 26400	00



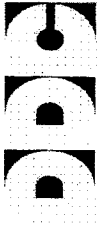
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			DOLLARS	CTS	DOLLARS	CTS
6.59 P (065)	150.0 L.F.	TEMPORARY CONCRETE BARRIER	\$ 65	00	\$ 9750	00
6.67 (066)	10.0 C.Y.	SUBBASE COURSE, SELECT GRANULAR MATERIAL	\$ 17	00	\$ 170	00
6.75 (067)	2,700.0 C.Y.	GRINDING EXISTING ASPHALTIC CONCRETE WEARING COURSE	\$ 60	00	\$ 162,000	00
6.82 A (068)	100.0 S.F.	REMOVING EXISTING TRAFFIC AND STREET NAME SIGNS	\$ 25	00	\$ 2,500	00

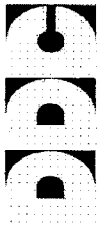
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			DOLLARS	CTS	DOLLARS	CTS
6.82 B (069)	150.0 L.F.	REMOVING EXISTING TRAFFIC AND STREET NAME SIGN POSTS	\$ 11	00	\$ 1650	00
6.83 AB (070)	300.0 L.F.	FURNISHING NEW TRAFFIC SIGN POSTS	\$ 4	00	\$ 1200	00
6.83 AR (071)	100.0 S.F.	FURNISHING NEW REFLECTORIZED TRAFFIC SIGNS	\$ 33	00	\$ 3300	00
6.83 BA (072)	100.0 S.F.	INSTALLING TRAFFIC SIGNS	\$ 90	00	\$ 9000	00



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			DOLLARS	CTS	DOLLARS	CTS
6.83 BB (073)	300.0 L.F.	INSTALLING TRAFFIC SIGN POSTS	\$ 40	00	\$ 12000	00
6.84 B (074)	1.0 F.S.	LOLLIPOP TYPE BUS STOP SIGNS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 3,000.00	\$ 3,000.00		\$ 3,000.00	
6.85 A (075)	1.0 F.S.	TRAFFIC ENFORCEMENT AGENTS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 9,316,104.39	\$ 9,316,104.39		\$ 9,316,104.39	
6.87 (076)	3,100.0 EACH	PLASTIC BARRELS	\$ 10	00	\$ 31000	00



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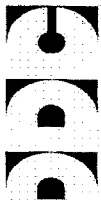
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			DOLLARS	CTS	DOLLARS	CTS
6.91 (077)	12,150.0 L.F.	REFLECTIVE CRACKING MEMBRANE (18" WIDE)	\$ 2	00	\$ 24300	00
6.94 TFD (078)	20.0 L.F.	THRU-FLOW TRENCH DRAIN	\$ 900	00	\$ 18000	00
6.97 A (079)	1,460.0 C.Y.	EXTRA-HIGH-EARLY STRENGTH CONCRETE	\$ 350	00	\$ 511000	00
6.99 (080)	1.0 L.S.	AUDIO AND VIDEO DOCUMENTATION SURVEY	\$ 3000	00	\$ 3000	00



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			DOLLARS	CTS	DOLLARS	CTS
60.11R520 (081)	1,970.0 L.F.	FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 150	00	\$ 295500	00
60.11R530 (082)	30.0 L.F.	FURNISHING AND DELIVERING 30-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 343	00	\$ 103300	00
60.11R536 (083)	30.0 L.F.	FURNISHING AND DELIVERING 36-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 440	00	\$ 132000	00
60.11R606 (084)	250.0 L.F.	FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	\$ 52	00	\$ 130000	00

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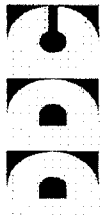
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			DOLLARS	CTS	DOLLARS	CTS
60.11R612 (085)	1,475.0 L.F.	FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	\$ 62	00	\$ 91450	00
60.12D06 (086)	305.0 L.F.	LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 95	00	\$ 28975	00
60.12D12 (087)	1,685.0 L.F.	LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 90	00	\$ 151650	00
60.12D20 (088)	2,395.0 L.F.	LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 120	00	\$ 287400	00



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			DOLLARS	CTS	DOLLARS	CTS
60.12D30 (089)	40.0 L.F.	LAYING 30-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 160	00	\$ 6400	00
60.12D36 (090)	40.0 L.F.	LAYING 36-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 160	00	\$ 6400	00
60.13M0A24 (091)	20.5 TONS	FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	\$ 7000	00	\$ 143500	00
60.13M5S30 (092)	2.0 EACH	FURNISHING AND DELIVERING 30-INCH DUCTILE IRON MECHANICAL JOINT SLEEVES (CLASS 55)	\$ 6500	00	\$ 13000	00

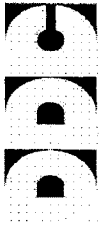
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			DOLLARS	CTS	DOLLARS	CTS
60.13M5S36 (093)	2.0 EACH	FURNISHING AND DELIVERING 36-INCH DUCTILE IRON MECHANICAL JOINT SLEEVES (CLASS 55)	\$ 7200	00	\$ 14400	00
60.21SP3T30 (094)	50.0 L.F.	FURNISHING, DELIVERING AND LAYING 30-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS	\$ 1400	00	\$ 70000	00
60.21SP3T36 (095)	300.0 L.F.	FURNISHING, DELIVERING AND LAYING 36-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS	\$ 1327	00	\$ 398100	00
60.21SP4T48 (096)	400.0 L.F.	FURNISHING, DELIVERING AND LAYING 48-INCH STRAIGHT STEEL PIPE, 1/2-INCH WALL THICKNESS	\$ 1560	00	\$ 624000	00



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			DOLLARS	CTS	DOLLARS	CTS
60.22BR3T36 (097)	20.0 L.F.	FURNISHING, DELIVERING AND LAYING 36-INCH STEEL BENDS AND REDUCERS, 3/8-INCH WALL THICKNESS	\$ 3800	00	\$ 76000	00
60.22BR4T48 (098)	20.0 L.F.	FURNISHING, DELIVERING AND LAYING 48-INCH STEEL BENDS AND REDUCERS, 1/2-INCH WALL THICKNESS	\$ 3200	00	\$ 64000	00
60.24SB48 (099)	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING 48-INCH DIAMETER STEEL BULKHEAD	\$ 10000	00	\$ 20000	00
60.25PSO (100)	4,000.0 LBS.	FURNISHING, DELIVERING AND INSTALLING PLATE STEEL OUTLETS ON STEEL PIPE, ACCESS MANHOLE OUTLETS WITH COVERS, AND NUTS AND BOLTS COMPLETE	\$ 15	00	\$ 60000	00

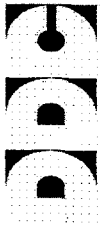


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			DOLLARS	CTS	DOLLARS	CTS
60.29CP (101)	1.0 L.S.	FURNISHING, INSTALLING AND TESTING CORROSION CONTROL AND/OR CATHODIC PROTECTION SYSTEM	\$ 30750	00	\$ 30750	00
61.11DFM06 (102)	2.0 EACH	FURNISHING AND DELIVERING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 1400	00	\$ 2800	00
61.11DFM20 (103)	2.0 EACH	FURNISHING AND DELIVERING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 17000	00	\$ 34000	00
61.11DNM06 (104)	13.0 EACH	FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 950	00	\$ 12350	00



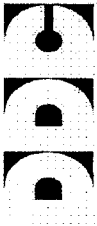
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			DOLLARS	CTS	DOLLARS	CTS
61.11DM12 (105)	7.0 EACH	FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 2800	00	\$ 19600	00
61.11DM20 (106)	12.0 EACH	FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 15950	00	\$ 191400	00
61.11TWC03 (107)	16.0 EACH	FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 2100	00	\$ 33600	00
61.11TWC04 (108)	8.0 EACH	FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 2200	00	\$ 17600	00





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			DOLLARS	CTS	DOLLARS	CTS
61.11TWC06 (109)	4.0 EACH	FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 3200	00	\$ 15200	00
61.11TWC08 (110)	22.0 EACH	FURNISHING AND DELIVERING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 5400	00	\$ 118800	00
61.11TWC12 (111)	12.0 EACH	FURNISHING AND DELIVERING 12-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 6000	00	\$ 72000	00
61.12DFM06 (112)	2.0 EACH	SETTING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 750	00	\$ 1500	00

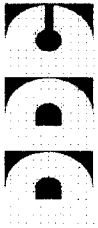


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			DOLLARS	CTS	DOLLARS	CTS
61.12DEM20 (113)	2.0 EACH	SETTING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 1100	00	\$ 2200	00
61.12DM06 (114)	13.0 EACH	SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 750	00	\$ 9750	00
61.12DM12 (115)	7.0 EACH	SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 950	00	\$ 6650	00
61.12DM20 (116)	12.0 EACH	SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1000	00	\$ 12000	00



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			DOLLARS	CTS	DOLLARS	CTS
61.12TWC03 (117)	16.0 EACH	SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 3867	00	\$ 61872	00
61.12TWC04 (118)	8.0 EACH	SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 5368	00	\$ 42944	00
61.12TWC06 (119)	4.0 EACH	SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 5633	00	\$ 22540	00
61.12TWC08 (120)	22.0 EACH	SETTING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 6540	00	\$ 143880	00

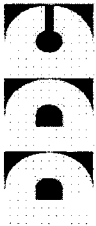


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			DOLLARS	CTS	DOLLARS	CTS
61.12TWC12 (121)	12.0 EACH	SETTING 12-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 9979	00	\$ 119748	00
61.21BVB48 (122)	1.0 EACH	FURNISHING, DELIVERING AND INSTALLING 48-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	\$ 110,000	00	\$ 110,000	00
61.23EJB48 (123)	1.0 EACH	DELIVERING AND INSTALLING 48-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET	\$ 32,000	00	\$ 32,000	00
62.11SD (124)	14.0 EACH	FURNISHING AND DELIVERING HYDRANTS	\$ 2800	00	\$ 39200	00



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			DOLLARS	CTS	DOLLARS	CTS
62.12SG (125)	14.0 EACH	SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 2400	00	\$ 33600	00
62.13RH (126)	13.0 EACH	REMOVING HYDRANTS	\$ 650	00	\$ 8450	00
62.14FS (127)	34.0 EACH	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	\$ 1300	00	\$ 44200	00
63.11MH (128)	2.5 TONS	FURNISHING, DELIVERING AND INSTALLING 36-INCH CAST IRON MANHOLE HEADS AND COVERS	\$ 4500	00	\$ 11250	00



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			DOLLARS	CTS	DOLLARS	CTS
63.11MS (129)	84.0 EACH	FURNISHING, DELIVERING AND INSTALLING MANHOLE STEPS TYPE PS2-PF	\$ 29	00	\$ 2100	00
63.11VC (130)	11.5 TONS	FURNISHING AND DELIVERING VARIOUS CASTINGS	\$ 4100	00	\$ 47150	00
64.11EL (131)	4.0 EACH	WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	\$ 1100	00	\$ 4400	00
64.11ST (132)	2.0 EACH	WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	\$ 945	00	\$ 1890	00

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			DOLLARS	CTS	DOLLARS	CTS
64.12COEG (133)	1,000.0 L.F.	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	\$ 49	00	\$ 49,000	00
64.12COLT (134)	600.0 L.F.	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	\$ 40	00	\$ 24,000	00
64.12ESEG (135)	1,000.0 L.F.	EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	\$ 50	00	\$ 50,000	00
64.12ESLT (136)	600.0 L.F.	EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	\$ 60	00	\$ 36,000	00



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			DOLLARS	CTS	DOLLARS	CTS
64.13WC12 (137)	16.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 29.00	00	\$ 464.00	00
64.13WC20 (138)	46.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 4.00	00	\$ 184.00	00
65.11BR (139)	3,560.0 LBS.	FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	\$ 1	00	\$ 3560	00
65.21PS (140)	2,500.0 L.F.	FURNISHING AND PLACING POLYETHYLENE SLEEVE  Unit price bid shall not be less than: \$ 0.50	\$ 0	50	\$ 1250	00



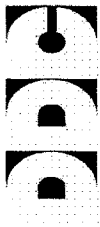


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			DOLLARS	CTS	DOLLARS	CTS
65.31FF (141)	76,140.0 S.F.	FURNISHING, DELIVERING AND PLACING FILTER FABRIC  Unit price bid shall not be less than: \$ 0.10	\$ 0	00	\$ 7614	00
65.41PS06 (142)	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING 6-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 1500	00	\$ 3000	00
65.41PS20 (143)	6.0 EACH	FURNISHING, DELIVERING AND INSTALLING 20-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 2600	00	\$ 15600	00
65.41PS30 (144)	4.0 EACH	FURNISHING, DELIVERING AND INSTALLING 30-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 4000	00	\$ 16000	00

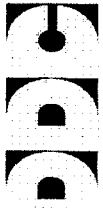


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			DOLLARS	CTS	DOLLARS	CTS
65.41PS36 (145)	4.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 4800	00	\$ 19200	00
65.41PS48 (146)	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING 48-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 4200	00	\$ 8400	00
65.51PC (147)	125.0 C.Y.	FURNISHING AND PLACING CAST-IN-PLACE CONCRETE CLASS 40 AND PRECAST CONCRETE CLASS 50	\$ 2650	00	\$ 331250	00
65.61SS (148)	17,500.0 LBS.	FURNISHING, DELIVERING AND PLACING STRUCTURAL, REINFORCING AND MISCELLANEOUS STEEL	\$ 2	00	\$ 35000	00



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			DOLLARS	CTS	DOLLARS	CTS
65.71SG (149)	1,210.0 C.Y.	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	\$ 57	00	\$ 68970	00
7.13 B (150)	30.0 MONTH	MAINTENANCE OF SITE  Unit price bid shall not be less than: \$ 7,500.00	\$ 7500	00	\$ 225000	00
7.19 (151)	350.0 L.F.	LOAD TRANSFER JOINT	\$ 35	00	\$ 12250	00
7.36 (152)	6,100.0 L.F.	PEDESTRIAN STEEL BARRICADES	\$ 5	00	\$ 30500	00



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			UNIT PRICES (IN FIGURES)	EXTENDED AMOUNTS (IN FIGURES)	DOLLARS	CTS
7.88 AA (153)	1.0 L.S.	RODENT INFESTATION SURVEY AND MONITORING  Unit price bid shall not be less than: \$ 36,000.00	\$ 36,000.00	\$ 36,000.00		
7.88 AB (154)	620.0 EACH	RODENT BAIT STATIONS  Unit price bid shall not be less than: \$ 75.00	\$ 75.00	\$ 46,500.00		
7.88 AC (155)	620.0 EACH	BAITING OF RODENT BAIT STATIONS  Unit price bid shall not be less than: \$ 12.00	\$ 12.00	\$ 7,440.00		
7.88 AD (156)	134.0 BLOCK	WATERBUG BAIT APPLICATIONS  Unit price bid shall not be less than: \$ 85.00	\$ 85.00	\$ 11,390.00		

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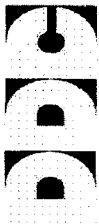
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			DOLLARS	CTS	DOLLARS	CTS
70.11TT (157)	8,750.0 V.F.	TIMBER PILES (TREATED)  Unit price bid shall not be less than: \$ 17.50	\$ 17	50	\$ 153125	00
70.19TTM000 (158)	3,500.0 V.F.	INCREMENTAL COST OF MINI-PILES (GROUTED) IN LIEU OF TIMBER PILES (TREATED)	\$ 172	50	\$ 603750	00
70.21DK (159)	1,050.0 S.Y.	DECKING	\$ 120	00	\$ 126000	00
70.31FN (160)	4,500.0 L.F.	FENCING  Unit price bid shall not be less than: \$ 2.50	\$ 2	50	\$ 11250	00



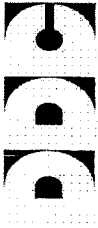
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			DOLLARS	CTS	DOLLARS	CTS
70.51EO (161)	450.0 C.Y.	EXCAVATION OF BOULDERS IN OPEN CUT  Unit price bid shall not be less than: \$ 75.00	\$ 75.00		\$ 33750.00	
70.61RE (162)	150.0 C.Y.	ROCK EXCAVATION	\$ 800.00		\$ 120000.00	
70.71SB (163)	105.0 C.Y.	STONE BALLAST  Unit price bid shall not be less than: \$ 15.00	\$ 15.00		\$ 1575.00	
70.81CB (164)	2,060.0 C.Y.	CLEAN BACKFILL  Unit price bid shall not be less than: \$ 15.00	\$ 15.00		\$ 30900.00	

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			DOLLARS	CTS	DOLLARS	CTS
70.91SW12 (165)	19,800.0 S.F.	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	\$ 1	00	\$ 19800	00
70.91SW20 (166)	28,520.0 S.F.	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER	\$ 1	00	\$ 28520	00
73.11AB (167)	300.0 C.Y.	ADDITIONAL BRICK MASONRY  Unit price bid shall not be less than: \$ 62.50	\$ 62	50	\$ 18750	00
73.21AC (168)	70.0 C.Y.	ADDITIONAL CONCRETE  Unit price bid shall not be less than: \$ 62.50	\$ 62	50	\$ 4375	00



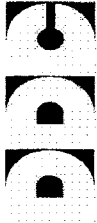
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			DOLLARS	CTS	DOLLARS	CTS
73.31AE0 (169)	240.0 C.Y.	ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS)  Unit price bid shall not be less than: \$ 25.00	\$ 25	00	\$ 6000	00
73.41AG (170)	100.0 C.Y.	ADDITIONAL SELECT GRANULAR BACKFILL  Unit price bid shall not be less than: \$ 15.00	\$ 15	00	\$ 1500	00
73.51AS (171)	3,500.0 LBS.	ADDITIONAL STEEL REINFORCING BARS  Unit price bid shall not be less than: \$ 1.00	\$ 1	00	\$ 3500	00
75.11RT (172)	3,205.0 L.F.	REMOVAL OF ABANDONED TRACKS	\$ 10	00	\$ 32050	00





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			DOLLARS	CTS	DOLLARS	CTS
76.11CR (173)	1.0 L.S.	CONSTRUCTION REPORT	\$ 10,000.00		\$ 10,000.00	
79.11AATA (174)	1.0 F.S.	ALLOWANCE FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING TRANSIT AUTHORITY DUCT INSULATION (REMOVAL OF ACM, REPLACEMENT WITH NON-ACM, AND SUPPORT AND PROTECTION OF EXISTING TRANSIT AUTHORITY DUCT, COMPLETE) PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 50,000.00	\$ 50,000.00		\$ 50,000.00	
8.08 (175)	4.0 EACH	VARIABLE MESSAGE BOARD	\$ 16,000.00		\$ 64,000.00	
9.04 HW (176)	1.0 F.S.	ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 22,500.00	\$ 22,500.00		\$ 22,500.00	

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			DOLLARS	CTS	DOLLARS	CTS
9.06 HW (177)	1.0 F.S.	ALLOWANCE FOR DECORATIVE MESH FABRIC  PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 45,000.00	\$ 45,000.00		\$ 45,000.00	
9.99 M (178)	30.0 MONTH	FLASHING ARROW BOARD	\$ 600.67		\$ 18020.10	
BMP-GI-4.15ES (179)	65.0 C.Y.	ENGINEERED SOIL	\$ 41.00		\$ 2665.00	
BMP-GI-4.16BS (180)	3.0 EACH	PLANTING NEW TREES (IN BIOSWALE)	\$ 730.00		\$ 2190.00	

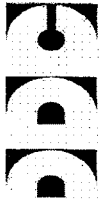
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			DOLLARS	CTS	DOLLARS	CTS
BMP-GI-59.28V (181)	500.0 S.F.	HDPE BARRIER	\$ 6.00		\$ 3000.00	00
BMP-GI-6.18TG-4 (182)	250.0 L.F.	STEEL TREE PIT GUARD - TYPE "D"	\$ 82.75		\$ 20687.50	50
BMP-GI-PK28 (183)	85.0 S.Y.	BARK CHIP MULCH	\$ 10.50		\$ 892.50	50
BMP-GI-PK46 (184)	80.0 EACH	PERENNIALS #1 can	\$ 19.75		\$ 1580.00	00

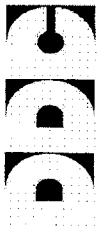


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			DOLLARS	CTS	DOLLARS	CTS
BMP-GI-PK50 (185)	32.0 EACH	GRASSES #1 CAN	\$ 27	00	\$ 864	00
BMP-GI-PK51 (186)	12.0 EACH	GRASSES #2 Can	\$ 33	90	\$ 402	00
BMP-GI-PK54 (187)	48.0 EACH	GROUNDCOVERS #1 can	\$ 27	00	\$ 1296	00
E 260519 E (188)	350.0 L.F.	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 8 AWG WIRE)	\$ 3	32	\$ 1162	00

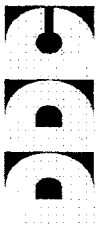


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			DOLLARS	CTS	DOLLARS	CTS
E 260519 G (189)	250.0 L.F.	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 10 AWG WIRE)	\$ 3	32	\$ 830	00
E 260553-B (190)	300.0 L.F.	RIGID GALVANIZED STEEL CONDUIT- 1" NOM. DIA.	\$ 23	84	\$ 7152	00
E 262400 A (191)	6.0 EACH	INSTALLING TEMPORARY FARE MACHINE HOOK UPS	\$ 192	11	\$ 1152	66
E 262400 AR (192)	6.0 EACH	REMOVING TEMPORARY FARE MACHINE HOOK UPS	\$ 154	47	\$ 926	82

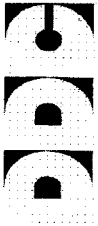


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			DOLLARS	CTS	DOLLARS	CTS
HW-900 (193)	1.0 F.S.	ALLOWANCE FOR MAXIMUM INCENTIVE FOR EARLY COMPLETION PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 500,000.00	\$ 500,000.00		\$ 500,000.00	
HW-900H (194)	1.0 F.S.	ALLOWANCE FOR CITY WORK ACCELERATION PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 500,000.00	\$ 500,000.00		\$ 500,000.00	
SL-20.02.02A (195)	1.0 EACH	FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION AS PER DWG. #-3788A FOR INSTALLING TYPE 30' DAVIT LAMPOST. PRICE PER UNIT ITEM.	\$ 840	37	\$ 840	37
SL-20.07.01 (196)	1.0 EACH	FURNISH AND INSTALL ADDITIONAL RIGID CONDUIT BEND, SIZE AS ORDERED. USE THIS ITEM WHEN INSTALLING A NEW FOUNDATION.	\$ 192	11	\$ 192	11

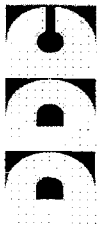


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			DOLLARS	CTS	DOLLARS	CTS
SL-20.07.02 (197)	2.0 EACH	ROTOR FOUNDATION. FURNISH AND INSTALL RIGID CONDUIT BEND, SIZE AS ORDERED.	\$ 384	11	\$ 768	22
SL-21.03.02 (198)	1.0 EACH	FURNISH AND INSTALL TYPE 2S, 4S, 6S, 8S OR 12S LAMPOST WITH TRANSFORMER BASE	\$ 2459	01	\$ 2459	01
SL-21.09.05 (199)	3.0 EACH	REMOVE STANDARD FABRICATED STEEL, SPUN ALUMINUM NO. 10, ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY.	\$ 463	52	\$ 1390	56
SL-21.09.08 (200)	8.0 EACH	REMOVE ALL STREET LIGHTING EQUIPMENT FROM TYPE "M-2" TRAFFIC POST (ARM(S), PHOTOELECTRIC CONTROLLER, LUMINAIRE(S), SHAFT EXTENSION, WIRING, ETC.)	\$ 463	52	\$ 3,708	16



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			DOLLARS	CTS	DOLLARS	CTS
SL-22.03.18 (201)	18.0 EACH	FURNISH AND INSTALL TYPE COBRA HEAD LUMINAIRE WITH 150 WATT HPS WITH SOLID STATE BALLAST AND STRAY VOLTAGE INDICAFOR FOR 100 VOLT LAMP.	\$ 384	83	\$ 6926	94
SL-24.02.02 (202)	19.0 EACH	FURNISH AND INSTALL FABRICATED STEEL 8 Ft. ARM ON LAMPOST OR "M-2" TRAFFIC POLE SHAFT EXTENSION.	\$ 507	89	\$ 9649	91
SL-24.02.10 (203)	3.0 EACH	REMOVE ARM, LUMINAIRE, CONTROL AND APPURTENANT EQUIPMENT FROM LAMPOST OR WALL	\$ 309	05	\$ 927	15
SL-24.02.16 (204)	7.0 EACH	FURNISH AND INSTALL FABRICATED STEEL 6 FT. SHAFT EXTENSION (SINGLE ARM) FOR "M-2" TRAFFIC POST AS PER DWGs H-5159 OR H-5255.	\$ 746	86	\$ 5228	02





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			DOLLARS	CTS	DOLLARS	CTS
SL-24.02.33 (205)	5.0 EACH	FURNISH AND INSTALL FABRICATED STEEL 6FT. SHAFT EXTENSION (TWIN ARMS) FOR "M-2" TRAFFIC POST AS PER DWGS H-5159, OR H-5255.	\$ 1184	56	\$ 5922	80
SL-26.01.01 (206)	16.0 EACH	FURNISH AND INSTALL, OR FURNISH AND REPLACE A PLUG-IN SOLID STATE PHOTOELECTRIC CONTROL	\$ 21	46	\$ 343	36
SL-26.06.02 (207)	2.0 EACH	FURNISH AND INSTALL LED FIRE ALARM LUMINAIRES.	\$ 404	84	\$ 809	68
SL-29.01.01 (208)	3.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE EQUIPMENT FOR TEMPORARY LIGHTING (PYLON), AS PER DRAWINGS F-5005 AND F-5005A	\$ 1148	18	\$ 3444	54

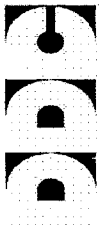
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			DOLLARS	CTS	DOLLARS	CTS
SL-33.02.02 (209)	150.0 L.F.	FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL FOR OVERHEAD INSTALLATION	\$ 4	56	\$ 684	00
T-1.1 (210)	1.0 EACH	INSTALL TYPE "S" OR "T" FOUNDATION	\$ 786	36	\$ 786	36
T-1.10 (211)	1.0 EACH	INSTALL ONE STEEL CYLINDER (32" DIAMETER X 9")	\$ 229	64	\$ 229	64
T-1.18 (212)	1.0 EACH	REMOVE TYPE "A", "B", "S" OR "T" SERIES FOUNDATION	\$ 777	55	\$ 777	55



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			DOLLARS	CTS	DOLLARS	CTS
T-1.20 (213)	9.0 EACH	REMOVE TYPE "M" SERIES FOUNDATION	\$ 777	55	\$ 6997	95
T-1.26 (214)	1.0 EACH	REMOVE STEEL CYLINDER (32" DIAMETER X 9")	\$ 777	55	\$ 777	55
T-1.29 (215)	1.0 EACH	RAISE OR LOWER FOUNDATION TO GRADE	\$ 777	55	\$ 777	55
T-1.3 (216)	9.0 EACH	INSTALL TYPE "M2-5S" FOUNDATION	\$ 1198	97	\$ 10790	73



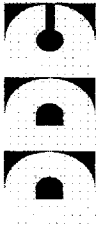
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			DOLLARS	CTS	DOLLARS	CTS
T-2.1 (217)	1.0 EACH	INSTALL TYPE "S-1" OR "T-1" SERIES POST	\$ 463	52	\$ 463	52
T-2.15 (218)	2.0 EACH	REORIENT MAST ARM	\$ 309	05	\$ 618	10
T-2.16 (219)	3.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE TEMPORARY POST OR PYLON WITH SIGNALS	\$ 993	60	\$ 2980	30
T-2.18 (220)	1.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE TEMPORARY POST OR PYLON WITH CONTROLLER AND SIGNALS	\$ 1068	76	\$ 1068	76

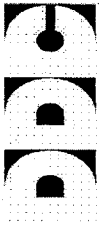
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			DOLLARS	CTS	DOLLARS	CTS
T-2.22 (221)	1.0 EACH	REMOVE TYPE "S-1" OR "T-1" SERIES POST	\$ 618	10	\$ 618	10
T-2.24 (222)	9.0 EACH	REMOVE TYPE "M" SERIES POST	\$ 1081	62	\$ 9734	58
T-2.4 (223)	9.0 EACH	INSTALL TYPE "M-2" POST	\$ 1854	19	\$ 16687	71
T-2.6 (224)	5.0 EACH	INSTALL 5 FOOT MAST ARM EXTENSION W/CUSTOM FINISH	\$ 772	57	\$ 3862	85



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			DOLLARS	CTS	DOLLARS	CTS
T-2.7 (225)	1.0 EACH	INSTALL SHAFT ON "M-2" POST	\$ 927	04	\$ 927	04
T-20000 (226)	1.0 EACH	FURNISH TEN FOOT ALUMINUM SIGNAL POST TYPE "S-1"	\$ 994	32	\$ 994	32
T-20020 (227)	3.0 EACH	a) FURNISH 3/4" ANCHOR BOLT ASSEMBLIES FOR S-1 (EACH) (3 REQUIRED PER POST)	\$ 22	50	\$ 67	50
T-20160 (228)	7.0 EACH	FURNISH 20 FOOT SIGNAL MAST ARM POLE ASSEMBLY TYPE "M-2"	\$ 3147	80	\$ 22032	80

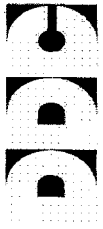


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			DOLLARS	CTS	DOLLARS	CTS
T-20184 (229)	5.0 EACH	a) FURNISH 5' EXTENSION ARM ASSEMBLY WITH FITTINGS	\$ 436	36	\$ 2181	80
T-20220 (230)	36.0 EACH	c) FURNISH 1-1/4" ANCHOR BOLT ASSEMBLIES FOR M-2 (EACH) (4 REQUIRED PER POST)	\$ 42	09	\$ 1515	24
T-3.1 (231)	18.0 EACH	INSTALL "ONE-WAY" SIGNAL UNIT ON MAST ARM OR TOP OF TRAFFIC POST	\$ 154	47	\$ 2780	46
T-3.18 (232)	11.0 EACH	REMOVE SIGNAL HEAD FROM ANY TYPE POST	\$ 154	47	\$ 1699	17



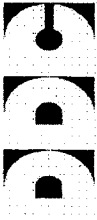
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			DOLLARS	CTS	DOLLARS	CTS
T-3.2 (233)	3.0 EACH	INSTALL "ONE-WAY" SIGNAL UNIT ON THE SHAFT OF ANY POST	\$ 154	47	\$ 463	41
T-3.21 (234)	19.0 EACH	REMOVE PEDESTRIAN SIGNAL OR SIGN UNIT OR OTHER ILLUMINATED SIGNS FROM ANY POST	\$ 115	91	\$ 2202	29
T-3.4 (235)	1.0 EACH	INSTALL "ONE-WAY" SIGNAL UNIT OR PEDESTRIAN SIGNAL ON STEEL STRUCTURE (PER FACE)	\$ 309	05	\$ 309	05
T-3.6 (236)	19.0 EACH	INSTALL PEDESTRIAN SIGNAL ON ANY TYPE POST	\$ 309	05	\$ 5871	95



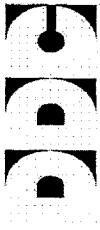


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			DOLLARS	CTS	DOLLARS	CTS
T-30013L (237)	23.0 EACH	FURNISH ADJUSTABLE 3 SECTION 1-WAY, DIE CAST ALUMINUM TRAFFIC SIGNALS 8" - W/LED LENS	\$ 314	75	\$ 7239	25
T-30014-R (238)	2.0 EACH	FURNISH 8 INCH RED LED (AS PER ITE SPECIFICATION 1/1/98)	\$ 50	08	\$ 100	16
T-31150 (239)	3.0 EACH	FURNISH "1SA" ALUMINUM DIE CASTINGS AND ASSEMBLY FOR POST SIGNAL MOUNTING	\$ 64	38	\$ 193	14
T-31200 (240)	3.0 EACH	e) "VB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 64	38	\$ 193	14



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			DOLLARS	CTS	DOLLARS	CTS
T-31205 (241)	2.0 EACH	FURNISH MAST ARM SIGNAL MOUNTING ASSEMBLY - a) "1MS"	\$ 64	38	\$ 128	76
T-31210 (242)	12.0 EACH	h) "HUB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 28	61	\$ 343	32
T-31215 (243)	1.0 EACH	b) "2MS"	\$ 207	45	\$ 207	45
T-31225 (244)	5.0 EACH	c) "3MS"	\$ 236	50	\$ 1180	30

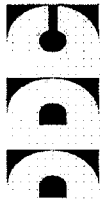


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			DOLLARS	CTS	DOLLARS	CTS
T-31235 (245)	2.0 EACH	d) "4MS"	\$ 228	91	\$ 457	82
T-31340 (246)	3.0 EACH	f) "VB-P" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 71	53	\$ 214	59
T-31351 (247)	9.0 EACH	g) "VB-2P" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 178	84	\$ 1609	56
T-31500AL (248)	5.0 EACH	FURNISH 12" LENS & SIGNAL SECTION (LED AMBER ARROWS)	\$ 257	52	\$ 1287	60



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			DOLLARS	CTS	DOLLARS	CTS
T-31500GL (249)	5.0 EACH	FURNISH 12" LENS & SIGNAL SECTION (LED GREEN ARROWS)	\$ 286	14	\$ 1430	70
T-31500L (250)	1.0 EACH	FURNISH ADJUSTABLE 3 SECTION 1-WAY, DIE CAST ALUMINUM TRAFFIC SIGNALS 12" - W/LED LENS	\$ 443	51	\$ 443	51
T-33000L (251)	20.0 EACH	FURNISH POLYCARBONATE INCANDESCENT PED SIGNAL W/LED LENS	\$ 257	52	\$ 5150	40
T-4.1 (252)	3.0 EACH	INSTALL ONE CONTROL BOX AND CONTROLLER ON ANY POST OR SUPPORT	\$ 1286	16	\$ 3858	48



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			DOLLARS	CTS	DOLLARS	CTS
T-4.23 (253)	2.0 EACH	INSTALL BATTERY BACK-UP POWER SUPPLY SYSTEM ON ANY POST	\$ 636	86	\$ 1273	72
T-4.8 (254)	3.0 EACH	REMOVE ONE CONTROL BOX AND CONTROLLER FROM ANY POST OR SUPPORT	\$ 618	10	\$ 1854	30
T-4.9 (255)	2.0 EACH	REMOVE CONTROL BOX FROM ANY POST OR SUPPORT	\$ 618	10	\$ 1236	20
T-5.1 (256)	160.0 L.F.	FURNISH AND INSTALL 2" RIGID UNDERGROUND CONDUIT IN UNPAVED ROADWAY	\$ 32	24	\$ 5158	40



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			DOLLARS	CTS	DOLLARS	CTS
T-5.2 (257)	1,440.0 L.F.	FURNISH AND INSTALL 2" RIGID UNDERGROUND CONDUIT IN PAVED ROADWAY	\$ 29	13	\$ 41947	20
T-5.3 (258)	20.0 L.F.	FURNISH AND INSTALL 2" RIGID UNDERGROUND CONDUIT IN PAVED SIDEWALK	\$ 29	13	\$ 582	60
T-5.32 (259)	1,338.0 L.F.	RESTORING PERMANENT ROADWAY (INCLUDING SAWCUT)	\$ 18	44	\$ 24672	72
T-5.34 (260)	20.0 S.F.	RESTORING PERMANENT SIDEWALK	\$ 8	27	\$ 165	40

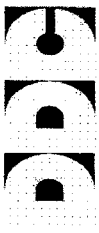
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			DOLLARS	CTS	DOLLARS	CTS
T-5.7 (261)	110.0 L.F.	FURNISH AND INSTALL ADDITIONAL 2" RIGID UNDERGROUND CONDUIT	\$ 12	23	\$ 1345	30
T-6.1 (262)	400.0 L.F.	INSTALL CABLE (INCLUDES OVERHEAD)	\$ 6	22	\$ 2488	00
T-6.10 (263)	6,000.0 L.F.	REMOVE CABLE (INCLUDES OVERHEAD)	\$ 0	83	\$ 4980	00
T-6.2 (264)	6,000.0 L.F.	INSTALL MULTIPLE CABLE (INCLUDES OVERHEAD)	\$ 7	78	\$ 46680	00



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			DOLLARS	CTS	DOLLARS	CTS
T-60000B (265)	2,000.0 L.F.	FURNISH 2 c # 10B (BREAKDOWN = 2#10 WITH 3RD WIRE FOR GROUNDING).	\$ 1	87	\$ 3740	00
T-60040 (266)	2,000.0 L.F.	c) 7 CONDUCTOR, 14 A.W.G.	\$ 2	28	\$ 4560	00
T-60190 (267)	3,500.0 L.F.	e) 13 CONDUCTOR, 14 A.W.G.	\$ 3	73	\$ 13055	00
T-7.11 (268)	1.0 EACH	INSTALL FLASHER MECHANISM	\$ 309	05	\$ 309	05





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COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
T-79999 (269)	3.0 EACH	FURNISH ADVANCED SOLID STATE TRF CONTROLLER (6 LOAD SWITCH).	\$ 12017	74	\$ 36053	22
T-8.10 (270)	5.0 EACH	RELOCATE CONCRETE PYLON WITH POST	\$ 927	94	\$ 4635	20
T-8.8 (271)	5.0 EACH	INSTALL CONCRETE PYLON	\$ 618	10	\$ 3090	50
T-8.9 (272)	5.0 EACH	REMOVE CONCRETE PYLON	\$ 309	05	\$ 1545	25

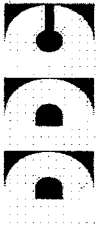


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BID PAGES

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

Contract PIN 8502013HW0015C  
Project ID HMMBRT5A

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
T-81000 (273)	5.0 EACH	FURNISH CONCRETE PYLON	\$ 600	89	\$ 3004	45
T-93000 (274)	3.0 EACH	FURNISH AND INSTALL COMPLETE DOME CCTV CAMERA SYSTEM ON CITY-OWNED UTILITY POLE.	\$ 13631	51	\$ 40894	53
UTL-6.01.1 (275)	1.0 EACH	GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01)  Unit price bid shall not be less than: \$ 1,040.00	\$ 1040	00	\$ 1040	00
UTL-6.01.10 (276)	2.0 EACH	GAS MAIN CROSSING WATER MAIN 24" THRU 30" IN DIAMETER (S6.01)  Unit price bid shall not be less than: \$ 550.00	\$ 550	00	\$ 1100	00

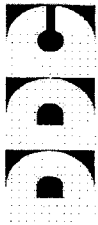


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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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			DOLLARS	CTS	DOLLARS	CTS
UTL-6.01.11 (277)	1.0 EACH	GAS MAIN CROSSING WATER MAIN 36" THRU 42" IN DIAMETER (S6.01)  Unit price bid shall not be less than: \$ 685.00	\$ 685	00	\$ 685	00
UTL-6.01.12 (278)	2.0 EACH	GAS MAIN CROSSING WATER MAIN 48" THRU 54" IN DIAMETER (S6.01)  Unit price bid shall not be less than: \$ 810.00	\$ 810	00	\$ 1620	00
UTL-6.01.6M (279)	2.0 EACH	GAS MAIN CROSSING 5'-6"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (6.01)  Unit price bid shall not be less than: \$ 2,540.00	\$ 2540	60	\$ 5080	00
UTL-6.01.8 (280)	25.0 EACH	GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01)  Unit price bid shall not be less than: \$ 465.00	\$ 465	00	\$ 11625	00



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			DOLLARS	CTS	DOLLARS	CTS
UTL-6.01.9 (281)	11.0 EACH	GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (S6.01)  Unit price bid shall not be less than: \$ 485.00	\$ 485	00	\$ 5335	00
UTL-6.02 (282)	5.0 EACH	EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (S6.02)  Unit price bid shall not be less than: \$ 715.00	\$ 1400	00	\$ 7000	00
UTL-6.03 (283)	4,000.0 L.F.	REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (S6.03)  Unit price bid shall not be less than: \$ 15.00	\$ 15	00	\$ 60,000	00
UTL-6.03.1 (284)	700.0 L.F.	REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (S6.03)  Unit price bid shall not be less than: \$ 25.00	\$ 25	00	\$ 17500	00

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BID PAGES



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
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			DOLLARS	CTS	DOLLARS	CTS
UTL-6.04 (285)	10.0 EACH	ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04)  Unit price bid shall not be less than: \$ 35.00	\$ 35	00	\$ 350	00
UTL-6.05 (286)	20.0 EACH	ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05)  Unit price bid shall not be less than: \$ 65.00	\$ 65	00	\$ 1300	00
UTL-6.06 (287)	1,000.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06)  Unit price bid shall not be less than: \$ 180.00	\$ 180	00	\$ 180,000	00
UTL-6.07 (288)	100.0 C.Y.	TEST PITS FOR GAS FACILITIES (S6.07)  Unit price bid shall not be less than: \$ 100.00	\$ 100	00	\$ 10,000	00



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			DOLLARS	CTS	DOLLARS	CTS
UTL-6.08A (289)	2.0 EACH	PIER AND/OR PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAIN WITH LESS THAN 24" COVER (S6.08A)  Unit price bid shall not be less than: \$ 5,800.00	\$ 5800	90	\$ 11600	00
UTL-6.09 (290)	2,630.0 C.Y.	TRENCH EXCAVATION AND BACKFILL FOR GAS MAINS AND SERVICES. GAS INSTALLED BY OTHERS.  Unit price bid shall not be less than: \$ 200.00	\$ 200	00	\$ 526000	00
UTL-GCS-2WS (291)	1.0 F.S.	GAS INTERFERENCES AND ACCOMMODATIONS  PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 50,000.00	\$ 50,000.00	00	\$ 50,000.00	00



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			DOLLARS	CTS	DOLLARS	CTS
6.39 A (292)	1.0 LUMP SUM	MOBILIZATION PRICE BID SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.				
SUB-TOTAL:					\$ 22,762,637	20
TOTAL BID PRICE:					\$ 23,562,877	20
TOTAL BID PRICE:					\$ 22,562,637	20

PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.

THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN  
THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.







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BID PAGES

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
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Contract PIN 8502013HW0015C  
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			DOLLARS	CTS	DOLLARS	CTS
SUB-TOTAL:					\$ 22,762,637	20
6.39 A (292)	1.0 LUMP SUM	MOBILIZATION PRICE BID SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.			\$ 800,000	00
TOTAL BID PRICE:					\$ 23,562,637	20

PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.

THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.

(NO TEXT ON THIS PAGE)

BID FORM

PROJECT ID. HWMBRT5A

TOTAL BID PRICE: In the space provided below, the Bidder shall indicate its Total Bid Price in figures. Such Total Bid Price is set forth on the final page of the Bid Schedule.

TOTAL BID PRICE:  
( a/k/a BID PROPOSAL)

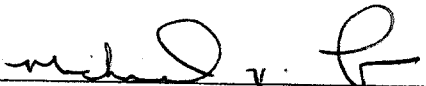
23,562,877.20  
~~\$ 23,562,637.20~~

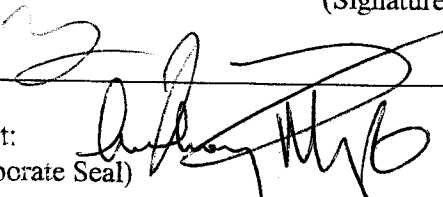
W/A/B  
P.8

BIDDER'S SIGNATURE AND AFFIDAVIT

**WARNING!!!** If M/WBE goals have been established for this Contract, you **MUST** complete and submit the Affirmations on the 2nd page of the Subcontractor Utilization Plan (or a pre-approved waiver) at the time you submit your bid. Failure to comply will result in the rejection of your bid.

Bidder: MFM Contracting Corp.

By:   
(Signature of Partner or corporate officer)

Attest:  Secretary of Corporate Bidder  
(Corporate Seal)

Affidavit on the following page should be subscribed  
and sworn to before a Notary Public



BID FORM

PROJECT ID. HWMBRT5A

TOTAL BID PRICE: In the space provided below, the Bidder shall indicate its Total Bid Price in figures. Such Total Bid Price is set forth on the final page of the Bid Schedule.

TOTAL BID PRICE:  
(a/k/a BID PROPOSAL)

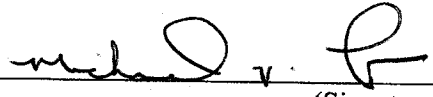
\$ 23,562,637.20

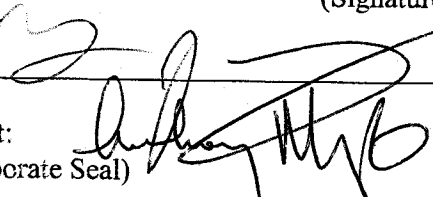
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P.8

BIDDER'S SIGNATURE AND AFFIDAVIT

**WARNING!!!** If M/WBE goals have been established for this Contract, you **MUST** complete and submit the Affirmations on the 2nd page of the Subcontractor Utilization Plan (or a pre-approved waiver) at the time you submit your bid. Failure to comply will result in the rejection of your bid.

Bidder: MFM Contracting Corp.

By:   
(Signature of Partner or corporate officer)

Attest:  Secretary of Corporate Bidder  
(Corporate Seal)

Affidavit on the following page should be subscribed and sworn to before a Notary Public

**BID FORM (TO BE NOTARIZED)**

AFFIDAVIT WHERE BIDDER IS AN INDIVIDUAL

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_ ss:

being duly sworn says:

I am the person described in and who executed the foregoing bid, and the several matters therein stated are in all respects true.

\_\_\_\_\_  
(Signature of the person who signed the Bid)

Subscribed and sworn to before me this  
\_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_  
Notary Public

AFFIDAVIT WHERE BIDDER IS A PARTNERSHIP

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_ ss:

being duly sworn says:

I am a member of \_\_\_\_\_ the firm described in and which executed the foregoing bid. I subscribed the name of the firm thereto on behalf of the firm, and the several matters therein stated are in all respects true.

\_\_\_\_\_  
(Signature of Partner who signed the Bid)

Subscribed and sworn to before me this  
\_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_  
Notary Public

AFFIDAVIT WHERE BIDDER IS A CORPORATION

STATE OF NEW YORK, COUNTY OF Westchester ss:

being duly sworn says:

I am the President of the above named corporation whose name is subscribed to and which executed the foregoing bid. I reside at Purchase N.Y. 10577.  
I have knowledge of the several matters therein stated, and they are in all respects true.

Michael V. Petriello  
(Signature of Corporate Officer who signed the Bid)

Subscribed and sworn to before me this  
19<sup>th</sup> day of June, 2013

Anthony Mastrangelo  
Notary Public

**Anthony Mastrangelo**  
Notary Public, State of New York  
Registration # 01MA6038438  
Qualified in Westchester County  
My Commission Expires March 13, 20 14

BID BOND 1  
FORM OF BID BOND

KNOW ALL MEN BY THESE PRESENTS. That we, MFM CONTRACTING CORPORATION  
335 CENTER AVENUE, MAMARONECK, NY 10543

hereinafter referred to as the "Principal", and ARCH INSURANCE COMPANY  
THREE PARKWAY, SUITE 1500, PHILADELPHIA, PA 19102

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 \_\_\_\_\_

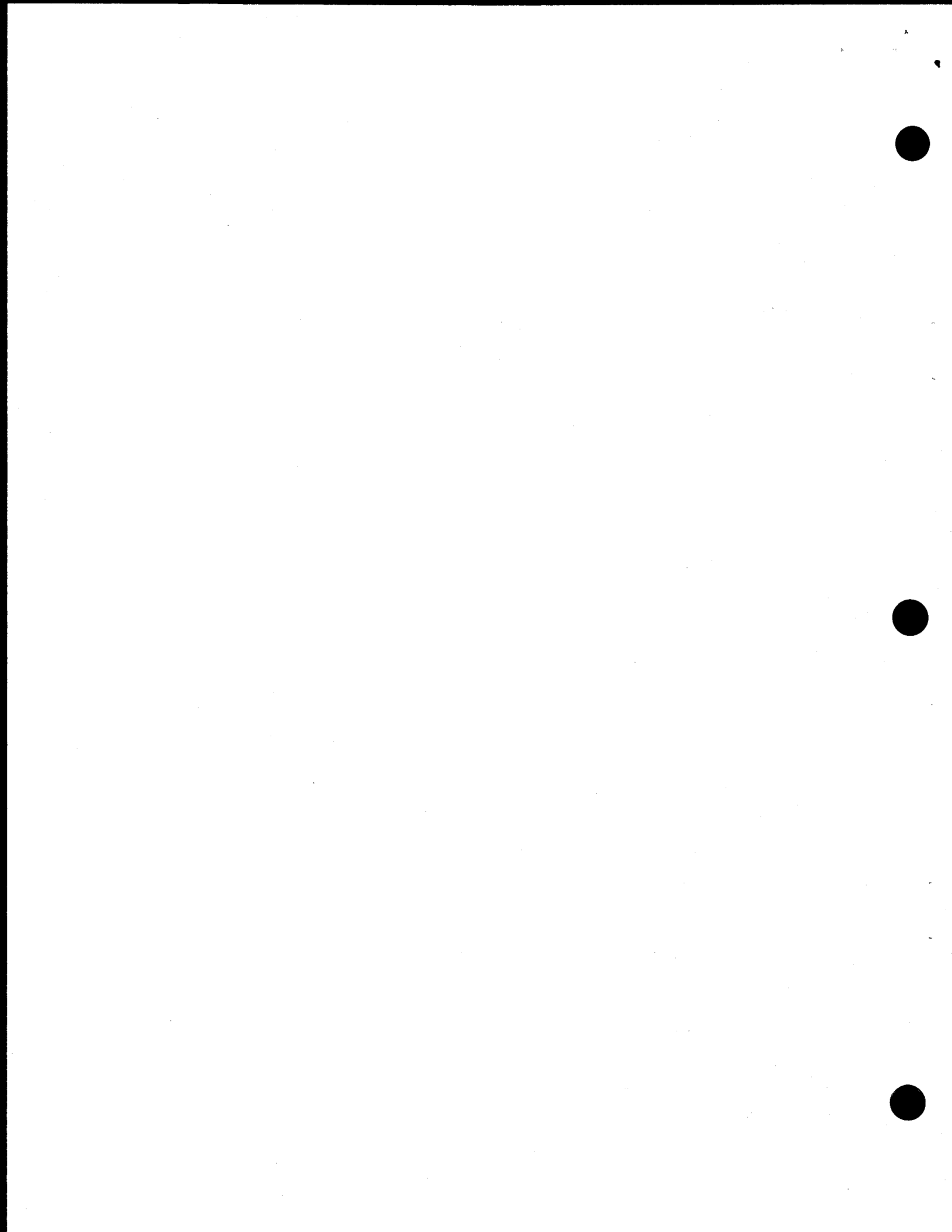
TEN PERCENT OF PROPOSAL PRICE

(\$ 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 EAST 34TH STREET SELECT  
BUS SERVICE IMPROVEMENTS. PROJECT ID# HWMBERT5A

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.





BID BOND 2

In the event that the Proposal of the Principal shall be accepted and the Contract be awarded to him 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 11TH day of JUNE, 2013.

(Seal)

MFM CONTRACTING CORPORATION (L.S.)

Principal

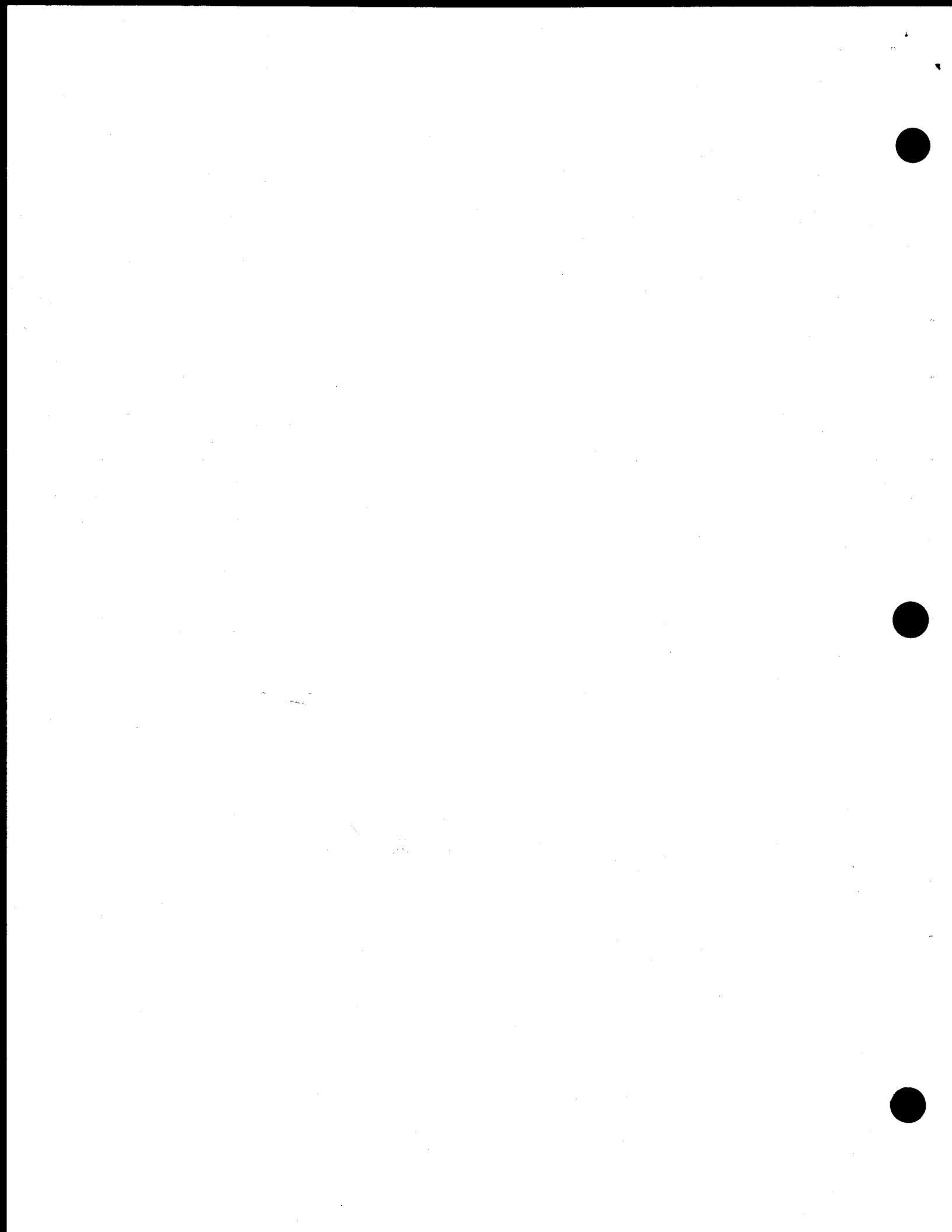
By: Michael V. F.

(Seal)

ARCH INSURANCE COMPANY

Surety

By: Thomas Bean  
THOMAS BEAN, ATTORNEY-IN-FACT



BID BOND 3

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Westchester ss:  
On this 17<sup>th</sup> day of June, 2013, before me personally came  
Michael V. Petrella to me known, who, being by me duly sworn, did depose and say  
that he resides at Purchase N.Y. 10577  
that he is the President of MEM Contracting Corp.  
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.

Anthony Mastrangelo  
Notary Public, State of New York  
Registration # 01MAS038438  
Qualified in Westchester County  
My Commission Expires March 13, 2014

[Signature]  
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 acknowledged to me that he executed the same as and for the act and deed of said  
firm.

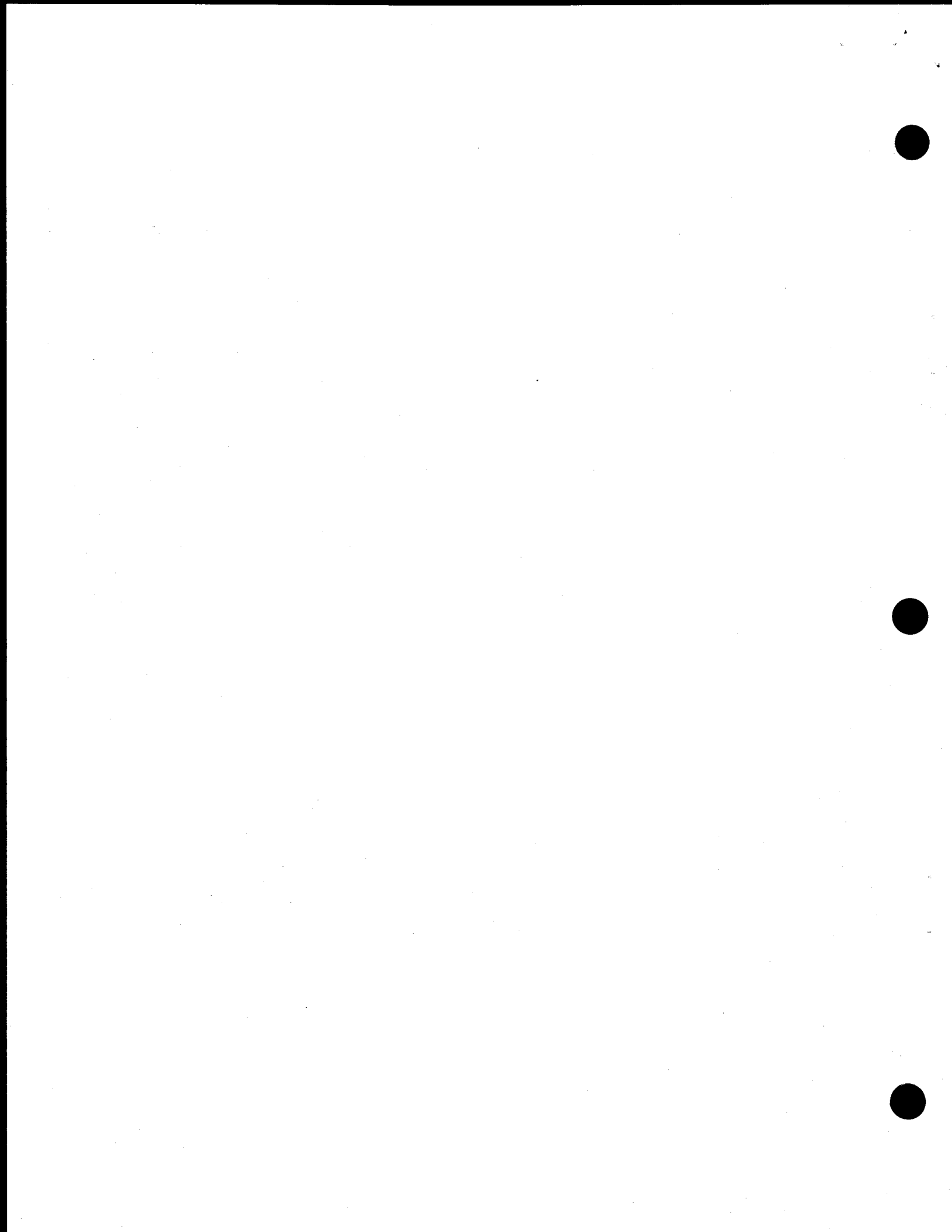
\_\_\_\_\_  
Notary Public

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 executed the same.

\_\_\_\_\_  
Notary Public

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES



**THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON BLUE BACKGROUND.**

***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. Not valid for Mortgage, Note, Loan, Letter of Credit, Bank Deposit, Currency Rate, Interest Rate or Residential Value Guarantees.***

## POWER OF ATTORNEY

Know All Persons By These Presents:

That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal administrative office in Jersey City, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

Camille Maitland, Colette R. Chisholm, George O. Brewster, Gerard S. Macholz, Kristy Caporale, Lee Ferrucci, Rita Sagistano, Robert T. Pearson, Susan Lupski and Thomas Bean of Uniondale, NY (EACH)

its true and lawful Attorney(s)-in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds, undertakings, recognizances and other surety obligations, in the penal sum not exceeding Ninety Million Dollars (\$90,000,000.00).

This authority does not permit the same obligation to be split into two or more bonds in order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Jersey City, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on September 15, 2011, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:

"VOTED, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on September 15, 2011:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on September 15, 2011, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.

In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 29<sup>th</sup> day of April, 2013.

Attested and Certified

Arch Insurance Company

*Patrick K. Nails*  
Patrick K. Nails, Secretary

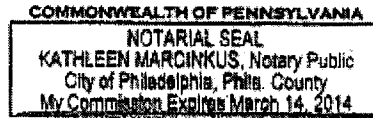


*David M. Finkelstein*  
David M. Finkelstein, Executive Vice President

STATE OF PENNSYLVANIA SS

COUNTY OF PHILADELPHIA SS

I, Kathleen Marcinkus, a Notary Public, do hereby certify that Patrick K. Nails and David M. Finkelstein personally known to me to be the same persons whose names are respectively as Secretary and Executive Vice President of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.



*Kathleen Marcinkus*  
Kathleen Marcinkus, Notary Public  
My commission expires 03/14/2014

CERTIFICATION

I, Patrick K. Nails, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated April 29, 2013 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said David M. Finkelstein, who executed the Power of Attorney as Executive Vice President, was on the date of execution of the attached Power of Attorney the duly elected Executive Vice President of the Arch Insurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this JUN 11 2013 day of JUN 11 2013, 2013.

*Patrick K. Nails*  
Patrick K. Nails, Secretary

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

PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:

Arch Insurance – Surety Division  
3 Parkway, Suite 1500  
Philadelphia, PA 19102

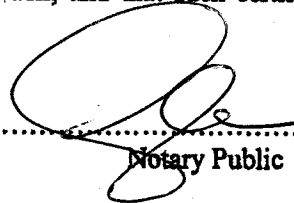


ACKNOWLEDGMENT OF SURETY COMPANY

STATE OF ..... New York ..... } ss  
COUNTY OF ..... Nassau ..... }

On this June 11, 2013, before me personally came THOMAS BEAN  
to me know, 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  
ARCH 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 it was so affixed by order of  
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 ARCH 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.

GRACE ACKERSON  
Notary Public, State of New York  
Nassau County  
Lic. #01AC6111590  
Term Expires June 14, 2016

  
.....  
Notary Public

NY acknowledgment

GRACE ACKERSON  
History Public State of New York  
Nassau County  
LIC #134611290  
Term Expires June 14, 2018



ARCH INSURANCE COMPANY  
STATEMENT OF FINANCIAL CONDITION  
December 31, 2012


Assets

Cash in Banks	\$	142,123,391
Bonds owned		1,626,957,843
Stocks		335,746,944
Premiums in course of collection		199,715,124
Accrued interest and other assets		<u>392,357,134</u>
 Total Assets	 \$	 <u><u>2,696,900,436</u></u>


Liabilities

Reserve for losses and adjustment expenses	\$	1,138,208,564
Reserve for unearned premiums		328,958,704
Ceded reinsurance premiums payable		179,607,905
Amounts withheld or retained by company for account of others		173,229,865
Reserve for taxes, expenses and other liabilities		<u>313,412,183</u>
 Total Liabilities		 2,133,417,221
 Surplus as regards policyholders		 <u>563,483,215</u>
 Total Surplus and Liabilities	 \$	 <u><u>2,696,900,436</u></u>

By:

  
\_\_\_\_\_  
Senior Vice President, Chief  
Financial Officer and Treasurer

Attest:

  
\_\_\_\_\_  
Senior Vice President,  
General Counsel and Secretary

State of New York )

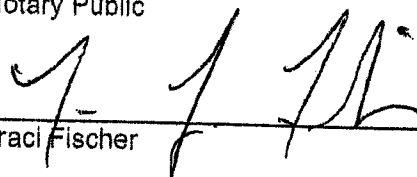
) SS

County of Hudson )

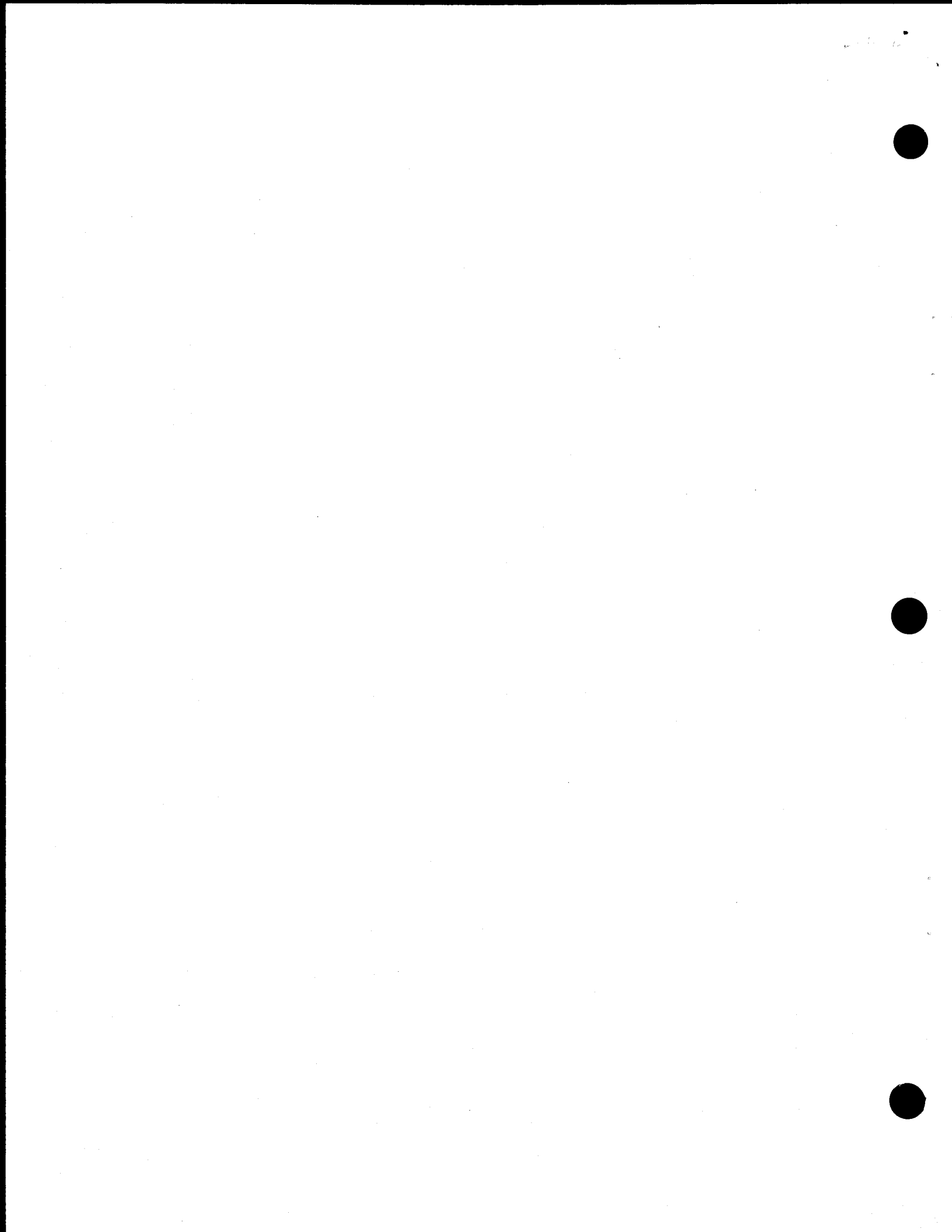
Thomas James Ahern, Senior Vice President, Chief Financial Officer and Treasurer and Patrick Kenneth Nails, Senior Vice President, General Counsel and Secretary being duly sworn, of ARCH INSURANCE COMPANY, Missouri; and that the foregoing is a true and correct statement of financial condition of said company, as of December 31, 2012.

Subscribed and sworn to before me, this 12 day of March, 2013.

Notary Public

  
\_\_\_\_\_  
Traci Fischer

Traci J. Fischer  
Notary Public, State of New Jersey  
No. 2409092  
Qualified in Hudson County  
Commission Expires May 31, 2018



## M/WBE PROGRAM

### SUBCONTRACTOR UTILIZATION PLAN – SCHEDULE B

Subcontractor Utilization Plan (Schedule B): The Subcontractor Utilization Plan (Schedule B) for this Contract is set forth on the following pages of this Bid Booklet. The Subcontractor Utilization Plan (Part I) indicates whether participation goals have been established for this Contract. If participation goals have been established for this Contract, the bidder must submit a Subcontractor Utilization Plan (Part II) with its bid.

Contract Provisions: Contract provisions regarding the participation of MWBE firms are set forth in Article 77 of the Contract. The bidder is advised to review these contract provisions.

Waiver: The bidder may seek a full or partial pre-award waiver of the Target Subcontracting Percentage in accordance with Article 77 of the Contract (See Part A, Section 10). The bidder's request for a waiver must be submitted at least seven (7) calendar days prior to the bid date. Waiver requests submitted after the deadline will not be considered. The form for requesting a waiver of the Target Subcontracting Percentage is set forth in the Subcontractor Utilization Plan (Part III).

Rejection of the Bid: The bidder must complete the Subcontractor Utilization Plan (Part II) set forth on the following pages. Subcontractor Utilization Plans which do not include the required affirmations will be deemed to be non-responsive, unless a full waiver of the Target Subcontracting Percentage is granted (Subcontractor Utilization Plan, Part III). In the event that the City determines that the bidder has submitted a Subcontractor Utilization Plan where the required affirmations are completed but other aspects of the Plan are not complete, or contain a copy or computation error that is at odds with the affirmation, the bidder 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 plan to the Agency. Failure to do so will result in a determination that the Bid is non-responsive. Receipt of notification is defined as the date notice is emailed or faxed (if the bidder has provided an email address or fax number), or no later than five (5) days from the date of mailing or upon delivery, if delivered.

Impact on LBE Requirements: If goals have been established for the participation of M/WBEs, the contractor is not required to comply with the Locally Based Enterprise Program ("LBE"). The LBE Program is set forth in Article 67 of the Contract.



THE CITY OF NEW YORK

**SCHEDULE B - Subcontractor Utilization Plan - Part I: Agency's Target**

This page to be completed by contracting agency

**Contract Overview**

Pin # 8502013HW0015C FMS Project ID#: HWMBRT5A  
 Project Title East 34<sup>th</sup> Street Selective Bus Service  
 Contracting Agency Department of Design and Construction  
 Agency Address 30-30 Thomson Ave City Long Island City State NY Zip Code 11101  
 Contact Person Jessica Lavidés Title MWBE Liaison & Compliance Analyst  
 Telephone # (718) 391-1065 Email lavidésje@ddc.nyc.gov

**Project Description** (attach additional pages if necessary)

**EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE  
 FROM FDR DRIVE TO LEXINGTON AVENUE  
 INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
 REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
 STREET LIGHTING, AND TRAFFIC SIGNAL WORK  
 Together With All Work Incidental Thereto  
 BOROUGH OF MANHATTAN  
 CITY OF NEW YORK**

(1)  **Target Subcontracting Percentage**  
 Percentage of total contract dollar value that agency estimates will be awarded to subcontractors in amounts under \$1 million for construction and professional services.

EXEMPT %

**Subcontractor Participation Goals\***

Complete and enter total for each Construction or Professional Services, or both (if applicable)

Group	Construction	Professional Services
Black American	UNSPECIFIED %	0 %
Hispanic American	UNSPECIFIED %	0 %
Asian American	UNSPECIFIED %	No Goal
Caucasian Female	No Goal	0 %
<b>Total Participation Goals</b>	<b>(2) 0 %</b>	<b>(3) 0 %</b>

\*Note: For this procurement, individual ethnicity and gender goals are not specified. The Total Participation Goals for construction subcontracts may be met by using Black American, Hispanic American or Asian American firms or any combination of such firms.

**SCHEDULE B - Subcontractor Utilization Plan – Part II: Bidder/Proposer Subcontracting Plan**

This page and the next (Part II herein) are to be completed by the bidder/proposer. **AFFIRMATIONS:** Bidder/proposer must check the applicable boxes below, affirming compliance with M/WBE requirements.

Bidder/proposer  **AFFIRMS** or  **DOES NOT AFFIRM** [statement below]

It is a material term of the contract to be awarded that, with respect to the total amount of the contract to be awarded, bidder/proposer will award one or more subcontracts for amounts under one million dollars, sufficient to meet or exceed the Target Subcontracting Percentage (as set forth in Part I) unless it obtains a full or partial waiver thereof, and it will award subcontracts sufficient to meet or exceed the Total Participation Goals (as set forth in Part I) unless such goals are modified by the Agency.

- Bidder/proposer  **AFFIRMS** that it intends to meet or exceed the Target Subcontracting Percentage (as set forth in Part I); or
- AFFIRMS** that it has obtained a full/partial pre-award waiver of the Target Subcontracting Percentage (as set forth in Part I) and intends to award the modified Target Subcontracting Percentage, if any; or
- DOES NOT AFFIRM**

**Section I: Prime Contractor Contact Information**

Tax ID # \_\_\_\_\_ FMS Vendor ID # \_\_\_\_\_

Business Name \_\_\_\_\_ Contact Person \_\_\_\_\_

Address \_\_\_\_\_

Telephone # \_\_\_\_\_ Email \_\_\_\_\_

**Section II: General Contract Information**

**1. Define the industry in which work is to be performed.**

- **Construction** includes all contracts for the construction, rehabilitation, and/or renovation of physical structures. This category does include CM Build as well as other construction related services such as: demolition, asbestos and lead abatement, and painting services, carpentry services, carpet installation and removal, where related to new construction and not maintenance. This category does not include standard services which may be associated with construction projects but which do not constitute construction, such as trucking, site protection, site security, site surveying, soil testing, extermination, and maintenance/operations.
- **Professional Services** are a class of services that typically require the provider to have some specialized field or advanced degree. Services of this type include: legal, management consulting, information technology, accounting, auditing, actuarial, advertising, health services, pure construction management, environmental analysis, scientific testing, architecture and engineering, and traffic studies, and similar services.

a. Type of work on Prime Contract (Check one):      b. Type of work on Subcontract (Check all that apply):

Construction     Professional Services       Construction     Professional Services     Other

2. What is the expected percentage of the total contract dollar value that you expect to award to all subcontracts? \_\_\_\_\_ %

3. Will you award subcontract(s) in amounts below \$ 1 million for construction and/or professional services contracts within the first 12 months of the notice to proceed on the contract?     Yes     No

**Section III: Subcontractor Utilization Summary**

**IMPORTANT: If you do not anticipate that you will subcontract at the target level the agency has specified, because you will perform more of the work yourself, you must seek a waiver of the Target Subcontracting Percentage by completing p.9).**

Step 1:	Subcontracts under \$1M (4) (construction/professional services)	Total Bid/Proposal Value	Calculated Target Subcontracting Percentage
Calculate the percentage (of your total bid) that will go towards subcontracts under \$ 1M for construction and/or professional services	\$ _____	÷ \$ _____	X 100 = _____ %
• <b>Subcontracts under \$1M (construction/professional services):</b> Enter the value you expect to award to subcontractors in dollars for amounts under \$1 million for construction and/or professional services. This value defines the amount that participation goals apply to, and will be entered into the first line of Step 2.			
• <b>Total Bid/Proposal Value:</b> Provide the dollar amount of the bid/proposal.			
• <b>Calculated Target Subcontracting Percentage:</b> The percentage of the total contract dollar value that will be awarded to one or more subcontractors for amounts under \$1 million for construction and/or professional services. <b>This percentage must equal or exceed the percentage listed by the agency on page 6, at line (1).</b>			

NOTE: The "Calculated Target Subcontracting Percentage" MUST equal or exceed the Target Subcontracting Percentage listed by the agency on Page 6, Line (1).

**SCHEDULE B - Subcontractor Utilization Plan – Part II: Bidder/Proposer Subcontracting Plan – cont.**

**Step 2:**

Calculate value of subcontractor participation goals

<p>a. Copy value from Step 1, line (4) – the total value of all expected subcontracts Under \$1M for construction and/or professional services</p> <p>b. • From line a. above, allocate the dollar value of "Subcontracts under \$1M" by Construction and Professional Services.                  • If all subcontracts under \$1M are in one industry, enter "0" for the industry with no subcontracts.                  • Amounts listed on these lines should add up to the value from line a.</p> <p>c. • <b>Total Participation Goals Percentages must be copied from Part I, lines (2) and (3).</b></p> <p>d. Value of Total Participation Goals</p>	<p><b>Subcontracts under \$1M</b> (construction/professional services)</p> <p>\$ _____</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p><b>Construction</b></p> <p>\$ _____</p> <p>x _____ %</p> <p>\$ _____</p> </div> <div style="text-align: center;"> <p><b>Professional Services</b></p> <p>\$ _____</p> <p>x _____ %</p> <p>\$ _____</p> </div> </div>
--	--

**Step 3:**

✓ **Subcontracts in Amounts Under \$1 M Scope of Work – Construction** *Enter brief description of type(s) of subcontracts in amounts under \$1M anticipated, by Type of work, not by name of subcontractor*

:

✓ **Subcontracts in Amounts Under \$1 M Scope of Work – Professional Services** *Enter brief description of type(s) of subcontracts in amounts under \$1M anticipated, by Type of work, not by name of subcontractor*

**Section IV: Vendor Certification and Required Affirmations**

*I hereby 1) acknowledge my understanding of the M/WBE requirements as set forth herein and the pertinent provisions of Local Law 129 of 2005, and the rules promulgated thereunder; 2) affirm that the information supplied in support of this subcontractor utilization plan is true and correct; 3) agree, if awarded this Contract, to comply with the M/WBE requirements of this Contract and the pertinent provisions of Local Law 129 of 2005, 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 subcontract(s) sufficient to meet the Target Subcontracting Percentage, unless a waiver is obtained, and the Vendor will award subcontract(s) sufficient to meet the Total Participation Goals unless such goals are modified by the Agency; and 5) agree and affirm, if awarded this contract the Vendor intends to make all reasonable, good faith efforts to meet the Target Subcontracting Percentage, or If the Vendor has obtained a waiver, the Vendor intends to meet the modified Target Subcontracting Percentage, if any, and the Vendor intends to solicit and obtain the participation of M/WBEs so as to meet the Total Participation Goals unless modified by the Agency.*

Signature _____	Date _____
Print Name _____	Title _____

**SCHEDULE B - PART III - REQUEST FOR WAIVER OF TARGET SUBCONTRACTING PERCENTAGE**

**Contract Overview**

Tax ID # \_\_\_\_\_ FMS Vendor ID # \_\_\_\_\_

Business Name \_\_\_\_\_

Contact Name \_\_\_\_\_ Telephone # \_\_\_\_\_ Email \_\_\_\_\_

Type of Procurement  Competitive Sealed Bids  Other Bid/Response Due Date \_\_\_\_\_

PIN # (for this procurement) \_\_\_\_\_ Type of work on Prime Contract \_\_\_\_\_ Type of work on Subcontract (Check all that apply):

(Check one):

Construction

Construction

Other

Professional Services

Professional Services

SUBCONTRACTING as described in bid/solicitation documents (Copy this % figure from the solicitation)

\_\_\_\_\_ % of the total contract value anticipated by the agency to be subcontracted for construction/professional services subcontracts valued below \$1 million (each)

ACTUAL SUBCONTRACTING as anticipated by vendor seeking waiver

\_\_\_\_\_ % of the total contract value anticipated in good faith by the bidder/proposer to be subcontracted for construction/professional services subcontracts valued below \$1 million (each)

**Basis for Waiver Request:** Check appropriate box & explain in detail below (attach additional pages if needed)

- Vendor does not subcontract construction/professional services, and has the capacity and good faith intention to perform all such work itself.
- Vendor subcontracts some of this type of work but at lower % than bid/solicitation describes, and has the capacity and good faith intention to do so on this contract.
- Other \_\_\_\_\_

**References**

List 3 most recent contracts/subcontracts performed for NYC agencies (if any)

CONTRACT NO. \_\_\_\_\_ AGENCY \_\_\_\_\_ DATE COMPLETED \_\_\_\_\_

CONTRACT NO. \_\_\_\_\_ AGENCY \_\_\_\_\_ DATE COMPLETED \_\_\_\_\_

CONTRACT NO. \_\_\_\_\_ AGENCY \_\_\_\_\_ DATE COMPLETED \_\_\_\_\_

List 3 most recent contracts/subcontracts performed for other agencies/entities (complete ONLY if vendor has performed fewer than 3 NYC contracts)

TYPE OF WORK \_\_\_\_\_ AGENCY/ENTITY \_\_\_\_\_ DATE COMPLETED \_\_\_\_\_

Manager at agency/entity that hired vendor (Name/Phone No.) \_\_\_\_\_

TYPE OF WORK \_\_\_\_\_ AGENCY/ENTITY \_\_\_\_\_ DATE COMPLETED \_\_\_\_\_

Manager at agency/entity that hired vendor (Name/Phone No.) \_\_\_\_\_

TYPE OF WORK \_\_\_\_\_ AGENCY/ENTITY \_\_\_\_\_ DATE COMPLETED \_\_\_\_\_

Manager at agency/entity that hired vendor (Name/Phone No.) \_\_\_\_\_

**VENDOR CERTIFICATION:** I hereby affirm that the information supplied in support of this waiver request is true and correct, and that this request is made in good faith.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_ Title: \_\_\_\_\_

*Shaded area below is for agency completion only*

**AGENCY CHIEF CONTRACTING OFFICER APPROVAL**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**CITY CHIEF PROCUREMENT OFFICER APPROVAL**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**(NO TEXT ON THIS PAGE)**



## APPRENTICESHIP PROGRAM REQUIREMENTS

Bidders are advised that the Apprenticeship Program Requirements set forth below apply to each contract for which a check mark is indicated before the word "Yes". Compliance with these requirements will be determined solely by the City.

\_\_\_\_\_ YES                       NO

### (1) Apprenticeship Program Requirements

Notice to Bidders: Please be advised that, pursuant to the authority granted to the City under Labor Law Section 816-b, the Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this Invitation for Bids, and any of its subcontractors with subcontracts worth one million dollars or over, have, prior to entering into such contract or subcontract, apprenticeship agreements appropriate for the type and scope of work to be performed that have been registered with, and approved by, the New York State Commissioner of Labor. In addition, the contractor and its subcontractors will be required to show that such apprenticeship programs have three years of current, successful experience in providing career opportunities.

The failure to prove, upon request, that these requirements have been met shall result in the contract not being awarded to the contractor or the subcontract not being approved.

Please be further advised that, pursuant to Labor Law Section 220, the allowable ratio of apprentices to journeypersons in any craft classification shall not be greater than the ratio permitted to the contractor as to its workforce on any job under the registered apprenticeship program.

### (2) Apprenticeship Program Questionnaire

The bidder must submit a completed and signed Apprenticeship Program Questionnaire. The Questionnaire is set forth on the following page of the Bid Booklet.

**APPRENTICESHIP PROGRAM QUESTIONNAIRE**

**PROJECT ID: HWMBRT5A**

The bidder must submit a completed and signed Apprenticeship Program Questionnaire.

Name of Bidder: \_\_\_\_\_

1. Does the bidder have an Apprenticeship Program appropriate for the type and scope of work to be performed?  
[Note: Participation may be by either direct sponsorship or through collective bargaining agreement(s).]  

\_\_\_\_\_ YES                      \_\_\_\_\_ NO
2. Has the bidder's Apprenticeship Program been registered with, and approved by, the New York State Commissioner of Labor?  

\_\_\_\_\_ YES                      \_\_\_\_\_ NO
3. Has the bidder's Apprenticeship Program had three years of successful experience in providing career opportunities?  

\_\_\_\_\_ YES                      \_\_\_\_\_ NO

If the answer to Question #3 is "Yes", the bidder shall, in the space below, provide information regarding the experience the Apprenticeship Program has had in providing career opportunities. The bidder may attach additional pages if necessary.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Bidder: \_\_\_\_\_

By: \_\_\_\_\_ Title: \_\_\_\_\_  
(Signature of Partner or Corporate Officer)

Date: \_\_\_\_\_

## 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.

**1. Bidder Information:**

Company Name: \_\_\_\_\_

DDC Project Number: \_\_\_\_\_

Company Size:            \_\_\_\_\_ Ten (10) employees or less  
    \_\_\_\_\_ Greater than ten (10) employees

\_\_\_\_\_ Company has previously worked for DDC

**2. Type(s) of Construction Work**

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)	_____	_____
_____	_____	_____

**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 contractor may obtain its EMR by contacting its insurance broker or the NCCI. If the contractor cannot obtain its EMR, it must submit a written explanation as to why.

Project ID. \_\_\_\_\_

The Contractor 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	<u>INTRASTATE RATE</u>	<u>INTERSTATE RATE</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

**If the Intrastate and/or Interstate EMR for any of the past three years is greater than 1.00, the 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:**

\_\_\_\_\_ Contractor has received a willful violation issued by OSHA or New York City Department of Buildings (NYCDOB) within the last three years.

\_\_\_\_\_ Contractor has had an incident requiring OSHA notification within 8 hours (i.e., fatality, or hospitalization of three or more employees).

The Occupational Safety and Health Act (OSHA) of 1970 requires employers with ten or more employees, on a yearly basis to complete and maintain on file the form entitled "Log of Work-related Injuries and Illnesses". This form is commonly referred to as the OSHA 300 Log (OSHA 200 Log for 2001 and earlier).

The OSHA 300-Log must be submitted for the last three years for contractors with more than ten employees.

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

The contractor must submit the Incident Rate for Lost Time Injuries (the Incident Rate) for the past three 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 300 Log. The 200,000 hours represents the equivalent of 100 employees working forty hours a week, fifty weeks per year.

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

Project ID. \_\_\_\_\_

YEAR	TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES	INCIDENT RATE
_____	_____	_____
_____	_____	_____
_____	_____	_____

**If the 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 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)**

\_\_\_\_\_ Contractor previously audited by the DDC Office of Site Safety.

DDC Project Number(s): \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Accident on previous DDC Project(s).

\_\_\_\_\_ Fatality or Life-altering Injury on DDC Project(s) within the last three years.  
[Examples of a life-altering injury include loss of limb, loss of a sense (e.g., sight, hearing), or loss of neurological function].

Date: \_\_\_\_\_ By: \_\_\_\_\_  
(Signature of Owner, Partner, Corporate Officer)

Title: \_\_\_\_\_

(NO TEXT ON THIS PAGE)

## 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, such information must be submitted by the bidder 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 facsimile or in writing and will specify the types of information must be submitted. The types of information the bidder may be required to submit are described below. 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 on pages 17 through 19 of this Bid Booklet. The Project Reference Form consists of 3 parts: (1) Similar 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.



**A. PROJECT REFERENCES – SIMILAR CONTRACTS COMPLETED BY THE BIDDER**

List all contracts substantially completed within the last 4 years similar to the contract being awarded, 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

**B. PROJECT REFERENCES – 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

**C. PROJECT REFERENCES – 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

(NO TEXT ON THIS PAGE)

**OFFICE OF THE MAYOR  
BUREAU OF LABOR SERVICES  
CONTRACT CERTIFICATE**

To be completed if the contract is less than \$1,000,000

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_  
\_\_\_\_\_

Contracting Agency or Owner: \_\_\_\_\_

Project Number: \_\_\_\_\_

Proposed Contract Amount: \_\_\_\_\_

Description and Address of Proposed Contract: \_\_\_\_\_

Names of Subcontractors in the amount of 750,000 or more on this contract (if not known at this time, so state indicating that trades will be subcontracted):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I, (fill in name of person signing) \_\_\_\_\_,  
hereby affirm that I am authorized by the above-named contractor to certify that said contractor's  
proposed contract with the above-named owner or city agency is less than \$1,000,000. This affirmation  
is made in accordance with Executive Order No. 50 (1980) as amended and its implementing regulations.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

**WILLFUL OR FRAUDULENT FALSIFICATION OF ANY DATA OR INFORMATION  
SUBMITTED HEREWITH MAY RESULT IN THE TERMINATION OF ANY CONTRACT BETWEEN  
THE CITY AND THE BIDDER OR CONTRACTOR AND BAR THE BIDDER OR CONTRACTOR FROM  
PARTICIPATION IN ANY CITY CONTRACT FOR A PERIOD OF UP TO THREE YEARS. FURTHER,  
SUCH FALSIFICATION MAY RESULT IN CRIMINAL PROSECUTION.**

(NO TEXT ON THIS PAGE)

**VENDEX COMPLIANCE**

(A) **Vendex Fees:** Pursuant to Procurement Policy Board Rule 2-08(f)(2), the contractor will be charged a fee for the administration of the VENDEX system, including the Vendor Name Check process, if a Vendor Name Check review is required to be conducted by the Department of Investigation. The contractor shall also be required to pay the applicable required fees for any of its subcontractors for which Vendor Name Check reviews are required. The fee(s) will be deducted from payments made to the contractor under the contract. For contracts with an estimated value of less than or equal to \$1,000,000, the fee will be \$175 per Vendor Name Check review. For contracts with an estimated value of greater than \$1,000,000, the fee will be \$350 per Vendor Name Check review.

(B) **Confirmation of Vendex Compliance:** The Bidder shall submit this Confirmation of Vendex Compliance to the Department of Design and Construction, Contracts Section, 30-30 Thomson Avenue – First Floor, Long Island City, NY 11101.

**Bid Information:** The Bidder shall complete the bid information set forth below.

Name of Bidder: MFM Contracting Corp.  
Bidder's Address: 335 Center Avenue, Mamaroneck, N.Y. 10543  
Bidder's Telephone Number: 914-777-8292  
Bidder's Fax Number: 914-777-0194  
Date of Bid Opening: 6/19/13  
Project ID: HWMBRISA

**Vendex Compliance:** To demonstrate compliance with Vendex requirements, the Bidder shall complete either Section (1) or Section (2) below, whichever applies.

(1) **Submission of Vendex Questionnaires to MOCS:** By signing in the space provided below, the Bidder certifies that as of the date specified below, the Bidder has submitted Vendex Questionnaires to the Mayor's Office of Contract Services, Attn: VENDEX, 253 Broadway, 9<sup>th</sup> Floor, New York, New York 10007.

Date of Submission: 3/16/12

By: Michael V. Petrillo  
(Signature of Partner or corporate officer)

Print Name: Michael V. Petrillo

(2) **Submission of Certification of No Change to DDC:** By signing in the space provided below, the Bidder certifies that it has read the instructions in a "Vendor's Guide to Vendex" and that such instructions do not require the Bidder to submit Vendex Questionnaires. The Bidder has completed **TWO ORIGINALS** of the Certification of No Change set forth on the next page of this Bid Booklet.

By: Michael V. Petrillo  
(Signature of Partner or corporate officer)

Print Name: Michael V. Petrillo





# Certificate of No Change Form



- Please submit two completed forms. Copies will not be accepted.
- Please send both copies to the agency that requested it, unless you are advised to send it directly to the Mayor's Office of Contract Services (MOCS).
- A materially false statement willfully or fraudulently made in connection with this certification, and/or the failure to conduct appropriate due diligence in verifying the information that is the subject of this certification, may result in rendering the submitting entity non-responsible for the purpose of contract award.
- A materially false statement willfully or fraudulently made in connection with this certification may subject the person making the false statement to criminal charges.

I, Michael V. Petrillo, being duly sworn, state that I have read  
*Enter Your Name*

and understand all the items contained in the vendor questionnaire and any submission of change as identified on page one of this form and certify that as of this date, these items have not changed. I further certify that, to the best of my knowledge, information and belief, those answers are full, complete, and accurate, and that, to the best of my knowledge, information, and belief, those answers continue to be full, complete, and accurate.

In addition, I further certify on behalf of the submitting vendor that the information contained in the principal questionnaire(s) and any submission of change identified on page two of this form have not changed and have been verified and continue, to the best of my knowledge, to be full, complete and accurate.

I understand that the City of New York will rely on the information supplied in this certification as additional inducement to enter into a contract with the submitting entity.

## Vendor Questionnaire *This section is required.*

*This refers to the vendor questionnaire(s) submitted for the vendor doing business with the City.*

Name of Submitting Entity: MFM Contracting Corp.

Vendor's Address: 335 Center Avenue, Mamaroneck, N.Y. 10543

Vendor's EIN or TIN: 13-4130805 Requesting Agency: NYCADC

Are you submitting this Certification as a parent? (Please circle one) Yes  No

Signature date on the last full vendor questionnaire signed for the submitting vendor: 3/6/12

Signature date on change submission for the submitting vendor: N/A



# Principal Questionnaire

This section refers to the most recent principal questionnaire submissions.



Principal Name	Date of signature on last full Principal Questionnaire	Date(s) of signature on submission of change
1 Michael V. Petrillo	3/16/12	N/A
2 Felix J. Petrillo	3/16/12	N/A
3		
4		
5		
6		

Check if additional changes were submitted and attach a document with the date of additional submissions.

## Certification This section is required.

This form must be signed and notarized. Please complete this twice. Copies will not be accepted.

### Certified By:

Michael V. Petrillo  
Name (Print)

President  
Title

MFM Contracting Corp.  
Name of Submitting Entity

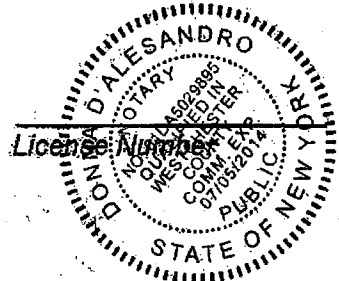
Michael V. Petrillo  
Signature

10/11/13  
Date

### Notarized By:

Donna Alessandro  
Notary Public

Westchester  
County License Issued



Sworn to before me on October 11, 2013  
Date



## IRAN DIVESTMENT ACT COMPLIANCE RIDER

### FOR NEW YORK CITY CONTRACTORS

The Iran Divestment Act of 2012, effective as of April 12, 2012, is codified at State Finance Law (“SFL”) §165-a and General Municipal Law (“GML”) §103-g. The Iran Divestment Act, with certain exceptions, prohibits municipalities, including the City, from entering into contracts with persons engaged in investment activities in the energy sector of Iran. Pursuant to the terms set forth in SFL §165-a and GML §103-g, a person engages in investment activities in the energy sector of Iran if:

- (a) The person provides goods or services of twenty million dollars or more in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; or
- (b) The person is a financial institution that extends twenty million dollars or more in credit to another person, for forty-five days or more, if that person will use the credit to provide goods or services in the energy sector in Iran and is identified on a list created pursuant to paragraph (b) of subdivision three of Section 165-a of the State Finance Law and maintained by the Commissioner of the Office of General Services.

A bid or proposal shall not be considered for award nor shall any award be made where the bidder or proposer fails to submit a signed and verified bidder’s certification.

Each bidder or proposer must certify that it is not on the list of entities engaged in investment activities in Iran created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. In any case where the bidder or proposer cannot certify that they are not on such list, the bidder or proposer shall so state and shall furnish with the bid or proposal a signed statement which sets forth in detail the reasons why such statement cannot be made. The City of New York may award a bid to a bidder who cannot make the certification on a case by case basis if:

- (1) The investment activities in Iran were made before the effective date of this section (i.e., April 12, 2012), the investment activities in Iran have not been expanded or renewed after the effective date of this section and the person has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran: or
- (2) The City makes a determination that the goods or services are necessary for the City to perform its functions and that, absent such an exemption, the City would be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.

**BIDDER'S CERTIFICATION OF COMPLIANCE WITH  
IRAN DIVESTMENT ACT**

Pursuant to General Municipal Law §103-g, which generally prohibits the City from entering into contracts with persons engaged in investment activities in the energy sector of Iran, the bidder/proposer submits the following certification:

[Please Check One]

**BIDDER'S CERTIFICATION**

- By submission of this bid or proposal, each bidder/proposer and each person signing on behalf of any bidder/proposer 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, that each bidder/proposer is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law.
- I am unable to certify that my name and the name of the bidder/proposer does not appear on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. I have attached a signed statement setting forth in detail why I cannot so certify.

Dated: \_\_\_\_\_, New York  
\_\_\_\_\_, 20\_\_

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
PRINTED NAME

\_\_\_\_\_  
TITLE

Sworn to before me this  
\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Notary Public

Dated:

**THE CITY OF NEW YORK  
DEPARTMENT OF SMALL BUSINESS SERVICES  
DIVISION OF LABOR SERVICES  
CONTRACT COMPLIANCE UNIT  
110 WILLIAMS STREET  
NEW YORK, NEW YORK 10038  
PHONE: (212) 513-6323  
FAX: (212) 618-8879**

## **CONSTRUCTION**

## **EMPLOYMENT**

## **REPORT**

**(NO TEXT ON THIS PAGE)**



The City of New York  
 Department of Small Business Services  
 Division of Labor Services  
 Contract Compliance Unit  
 110 William Street  
 New York, New York 10038  
 Phone: (212) 513 - 6323  
 Fax: (212) 618-8879

**CONSTRUCTION EMPLOYMENT REPORT  
 INSTRUCTIONS**

**WHO MUST FILE A CONSTRUCTION EMPLOYMENT REPORT**

A Construction Employment Report (ER) must be filed if you meet the following conditions:

CONTRACT FUNDING SOURCE	CONTRACTOR	CONTRACT VALUE	SUBMISSION REQUIREMENT
Federally assisted	Prime and subcontractors	\$10,000 or greater	Construction Employment Report
City and state funded	Prime contractor	\$1,000,000 or greater	
	Subcontractor	\$750,000 or greater	
			Less than \$750,000

Prime Contractor:

- A general contractor or construction manager selected to perform work on a construction project funded (in whole or in part) by the federal government with a proposed contract value of \$10,000 or more.
- A general contractor or construction manager selected to perform work on a construction project funded or assisted by the City of New York with a proposed contract value of \$1,000,000 or more.

Subcontractor:

- A subcontractor selected to perform work on a construction project funded (in whole or in part) by the federal government with a proposed contract value of \$10,000 or more.
- A subcontractor selected to perform work on a construction project funded or assisted by the City of New York with a proposed contract value of \$750,000 or more.
- A subcontractor selected to perform work on a construction project funded or assisted by the City of New York with a proposed contract value of less than \$750,000 must submit a "Less than \$750,000" waiver.

**WHERE TO FILE**

Employment Reports must be filed with the City agency awarding the contract. If you are a contractor or subcontractor who will be working for a private developer in receipt of funding or assistance from the City, the ER must be filed with the City agency with jurisdiction over the developer's project.

**DLS REVIEW PROCESS**

In accordance with Executive Order 50 (EO 50), upon receipt by DLS of a completed ER, DLS conducts a review of the contractor's current employment policies, practices and procedures, as well as perform a statistical analysis of the contractor's workforce, if necessary. The process is as follows:

1. Within five (5) business days, DLS will review the ER for completeness and accuracy. If any information is omitted

or incorrect, or if necessary documents are not submitted, the submission shall be deemed incomplete and DLS will inform the contractor. The substantive compliance review does not commence until the submission is complete. **An incomplete submission will delay the review process and may preclude or interrupt the contract approval.**

2. If the ER submission is complete, the compliance review will proceed, resulting in one of the following:

**Certificate of Approval**

The contractor is found to be in compliance with all applicable laws and regulations. The approval is valid for 36 months.

**Continued Approval Certificate**

The contractor has been issued a Certificate of Approval in the previous 36 months which is good for the applicable contract.

**Conditional Certificate of Compliance**

The contractor is required to take corrective actions in order to be in compliance with EO 50. The contractor must meet the conditions within one month of the issue of the Conditional Certificate.

**Determination of Nonperformance**

The contractor has failed to take the required corrective actions stipulated in the Conditional Certificate. A determination of nonperformance may prevent a contractor from receiving an award of a contract.

## HOW TO COMPLETE THE EMPLOYMENT REPORT

### Contents

**General Information**

**Part I: Contractor/Subcontractor Information**

**Part II: Employment Policies and Practices**

**Part III: Contract Bid Information and Projected and Current Workforce Forms**

**Signature Page**

### PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION

- Questions 4 – 8: Please provide the required contact information for your company. All contracts must have a designated Equal Employment Officer.
- Question 9: If you are a subcontractor, you must state the name of the contractor for whom you are providing the construction services.
- Question 10: Please provide the number of permanent employees in your company.
- Question 11a-h: The Project Identification Number (PIN) and the Contract Registration ID Number (CT#) can be obtained from the City agency. Provide a description of the trade work you will perform on this project and the address where the work will be performed. Subcontractors can obtain this information from the contract they have with the prime contractor.
- Questions 12 – 14: If your company has received a valid Certificate of Approval within the past 36 months, been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP), or if your company has submitted an ER for a different contract for which you have not yet received a compliance certificate, then you only need to complete and submit the following:
- General Information section
  - Part I - Contractor/Subcontractor Information
  - Form B - Projected Workforce
  - Signature Page

If your company is currently waiting for an approval on another contract previously submitted, be certain to identify the date on which you submitted the completed Employment Report, the name of

the City contracting agency with which the contract was made, and the name and telephone number of the person to whom the Employment Report was submitted.

If your company was issued a Conditional Certificate of Approval, all required corrective actions must have been taken or DLS will not issue a Continued Certificate.

- Question 15: If the company was audited by the OFCCP, also provide the following:
- Identify the reviewing OFCCP office by its name and address
  - If an unconditional certificate of compliance was issued by the OFCCP, attach a copy of the certificate in lieu of completing Parts II and III;
  - Include copies of all corrective actions and documentation of OFCCP's performance; and
  - Provide a copy of all stated OFCCP findings.
- Question 16: Please provide a copy of any Collective Bargaining Agreement(s) which is negotiated through an employer trade association on behalf of your organization or any of its affiliates.

**PART II: EMPLOYMENT POLICIES AND PRACTICES**

*Remember to label all documents with the question number for which they are submitted.*

Questions 17a – j: You must respond to the questions as to whether or not your firm has documents reflecting written policies, benefits and procedures. If so, then you must identify by name each document in which the policy(ies), procedure(s) and benefit(s) is located and submit copies of all of the document(s). If your firm follows unwritten practices or procedures, include an explanation of how they operate. Please submit the most current document(s), including all applicable amendments. Label each document and/or unwritten practice according to the question to which it corresponds (e.g. 18a, 18b, etc.)

Questions 18a – h: Inquires about the manner/methods by which you comply with the requirements of the Immigration Reform and Control Act of 1986 (IRCA).

Question 19: Inquires into where and how I-9 forms are maintained and stored.

Questions 20a – e: Inquires into whether or not there is a requirement that an applicant or employee be subjected to a medical examination at any given time. Copies of the medical information questionnaire and instructions must be submitted with the Employment Report.

Question 21: Indicate the existence and location of all statements of your firm's Equal Employment Opportunity policy and attach a copy of each statement.

Question 22: Submit any current Affirmative Action Plan(s) created pursuant to Executive Order 11246.

Question 23: If your firm or collective bargaining agreement has an internal grievance procedure, indicate this and submit a copy of the policy and procedure. If unwritten, explain its nature and operation. Explain how your firm's procedure addresses EEO complaints.

Question 24: If your employees have used the procedure in the last three (3) years, please submit an explanation in the format indicated below:

1. Number of complaint(s)	2. Nature of the complaint(s)	3. Position(s) of the complainant(s)	4. Was an investigation conducted? Y/N	5. Current status of the disposition
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Question 25: Indicate whether in the past three (3) years complaints have been filed with a court of law or administrative agency, naming your company as a defendant (or respondent) in a complaint alleging violation of any anti-discrimination or affirmative action laws. If yes, develop and submit a log to show, for each administrative/and or judicial action filed, the following information:

1. Name(s) of complainant(s)	2. Administrative agency or court in which action was filed	3. Nature of the complaint(s)	4. Current status	5. If not pending, the complaint's disposition
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Question 26: Identify each job for which a physical qualification exists. Identify and explain the physical qualification(s) for each stated job. Submit job descriptions for each job and the reasons for the qualifications.

Question 27: Identify each job for which there exists any qualification related to age, race, color, national origin, sex, creed, disability, marital status, sexual orientation or citizenship status. Identify and explain the specific related qualification for each job stated. Submit job descriptions for each job and the reasons for the qualifications.

**PART III: CONTRACT BID INFORMATION AND PROJECTED AND CURRENT WORKFORCE FORMS**

**FORM A: CONTRACT BID INFORMATION – USE OF SUBCONTRACTORS/TRADES**

Your projections for the utilization of subcontractors on the proposed contract are to be provided in this section. A chart has been provided for the identification of subcontractors. Information is to be provided to the extent known at the time the ER is filed for review by DLS. If the subcontractor's name is unknown, then write "unknown". Under "ownership", enter the appropriate race/ethnic and gender code. If the contract is federally funded or assisted and the subcontractor is being utilized in accordance with applicable federal requirements with respect to Minority Business Enterprise or Woman Business Enterprise requirements, enter the appropriate code. This will also apply to state funded contracts with similar requirements for minority and female owned businesses.

**FORM B: PROJECTED WORKFORCE FOR WORK TO BE PERFORMED ON THIS PROJECT**

For each trade to be engaged by your company for this project, enter the projected workforce for Males and Females by trade classification in the charts provided.

**FORM C: CURRENT WORKFORCE FOR WORK TO BE PERFORMED ON THIS PROJECT**

For each trade *currently* engaged by your company for all work performed in NYC, enter the current workforce for Males and Females by trade classification in the charts provided.

**SIGNATURE PAGE**

The signatory of this Employment Report and all other documents submitted to DLS must be an official authorized to enter into a binding legal agreement. The signature page must be completed in its entirety and notarized. Only original signatures will be accepted.

**CONSTRUCTION EMPLOYMENT REPORT**

**GENERAL INFORMATION**

1. Your contractual relationship in this contract is: Prime contractor  Subcontractor
- 1a. Are M/WBE goals attached to this project? Yes  No
2. Please check one of the following if your firm would like information on how to certify with the City of New York as a:  
 Minority Owned Business Enterprise  Locally based Business Enterprise  
 Women Owned Business Enterprise  Emerging Business Enterprise
- 2a. If you are certified as an **MBE, WBE, or LBE**, what city/state agency are you certified with?  
\_\_\_\_\_ Are you DBE certified? Yes  No
3. Please indicate if you would like assistance from SBS in identifying certified M/WBEs for contracting opportunities: Yes  No
4. Is this project subject to a project labor agreement? Yes  No

**PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION**

5. \_\_\_\_\_  
Employer Identification Number or Federal Tax I.D./ \_\_\_\_\_ Email Address
6. \_\_\_\_\_  
Company Name
7. \_\_\_\_\_  
Company Address and Zip Code
8. \_\_\_\_\_  
Chief Operating Officer Telephone Number
9. \_\_\_\_\_  
Designated Equal Opportunity Compliance Officer Telephone Number  
(If same as Item #7, write "same")
10. \_\_\_\_\_  
Name of Prime Contractor and Contact Person  
(If same as Item #5, write "same")
11. Number of employees in your company: \_\_\_\_\_

12. Contract information:

- (a) \_\_\_\_\_ (b) \_\_\_\_\_  
Contracting Agency (City Agency) Contract Amount
- (d) \_\_\_\_\_ (e) \_\_\_\_\_  
Procurement Identification Number (PIN) Contract Registration Number (CT#)
- (f) \_\_\_\_\_ (g) \_\_\_\_\_  
Projected Commencement Date Projected Completion Date

(h) Description and location of proposed contract:  
\_\_\_\_\_  
\_\_\_\_\_

13. Has your firm been reviewed by the Division of Labor Services (DLS) within the past 36 months and issued a Certificate of Approval? Yes\_\_\_ No\_\_\_

If yes, attach a copy of certificate.

14. Has DLS within the past month reviewed an Employment Report submission for your company and issued a Conditional Certificate of Approval? Yes\_\_\_ No\_\_\_

If yes, attach a copy of certificate.

**NOTE: DLS WILL NOT ISSUE A CONTINUED CERTIFICATE OF APPROVAL IN CONNECTION WITH THIS CONTRACT UNLESS THE REQUIRED CORRECTIVE ACTIONS IN PRIOR CONDITIONAL CERTIFICATES OF APPROVAL HAVE BEEN TAKEN.**

15. Has an Employment Report already been submitted for a different contract (not covered by this Employment Report) for which you have not yet received compliance certificate?  
Yes\_\_\_ No\_\_\_ If yes,

Date submitted: \_\_\_\_\_  
Agency to which submitted: \_\_\_\_\_  
Name of Agency Person: \_\_\_\_\_  
Contract No: \_\_\_\_\_  
Telephone: \_\_\_\_\_

16. Has your company in the past 36 months been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP)? Yes\_\_\_ No\_\_\_

If yes,

(a) Name and address of OFCCP office.  
\_\_\_\_\_  
\_\_\_\_\_

(b) Was a Certificate of Equal Employment Compliance issued within the past 36 months?  
Yes\_\_\_ No\_\_\_

If yes, attach a copy of such certificate.

- (c) Were any corrective actions required or agreed to? Yes\_\_\_ No\_\_\_

If yes, attach a copy of such requirements or agreements.

- (d) Were any deficiencies found? Yes\_\_\_ No\_\_\_

If yes, attach a copy of such findings.

17. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes\_\_\_ No\_\_\_

If yes, attach a list of such associations and all applicable CBA's.

## PART II: DOCUMENTS REQUIRED

18. For the following policies or practices, attach the relevant documents (e.g., printed booklets, brochures, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation of the practices. See instructions.

- \_\_\_ (a) Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)
- \_\_\_ (b) Disability, life, other insurance coverage/description
- \_\_\_ (c) Employee Policy/Handbook
- \_\_\_ (d) Personnel Policy/Manual
- \_\_\_ (e) Supervisor's Policy/Manual
- \_\_\_ (f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
- \_\_\_ (g) Collective bargaining agreement(s).
- \_\_\_ (h) Employment Application(s)
- \_\_\_ (i) Employee evaluation policy/form(s).
- \_\_\_ (j) Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?

19. To comply with the Immigration Reform and Control Act of 1986 when and of whom does your firm require the completion of an I-9 Form?

- (a) Prior to job offer Yes\_\_\_ No\_\_\_
- (b) After a conditional job offer Yes\_\_\_ No\_\_\_
- (c) After a job offer Yes\_\_\_ No\_\_\_
- (d) Within the first three days on the job Yes\_\_\_ No\_\_\_
- (e) To some applicants Yes\_\_\_ No\_\_\_
- (f) To all applicants Yes\_\_\_ No\_\_\_
- (g) To some employees Yes\_\_\_ No\_\_\_
- (h) To all employees Yes\_\_\_ No\_\_\_

20. Explain where and how completed I-9 Forms, with their supportive documentation, are maintained and made accessible.

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21. Does your firm or any of its collective bargaining agreements require job applicants to take a medical examination? Yes\_\_\_ No\_\_\_

If yes, is the medical examination given:

- |                                   |        |       |
|-----------------------------------|--------|-------|
| (a) Prior to a job offer          | Yes___ | No___ |
| (b) After a conditional job offer | Yes___ | No___ |
| (c) After a job offer             | Yes___ | No___ |
| (d) To all applicants             | Yes___ | No___ |
| (e) Only to some applicants       | Yes___ | No___ |

If yes, list for which applicants below and attach copies of all medical examination or questionnaire forms and instructions utilized for these examinations.

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22. Do you have a written equal employment opportunity (EEO) policy? Yes\_\_\_ No\_\_\_

If yes, list the document(s) and page number(s) where these written policies are located.

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23. Does the company have a current affirmative action plan(s) (AAP)

- \_\_\_ Minorities and Women  
\_\_\_ Individuals with handicaps  
\_\_\_ Other. Please specify \_\_\_\_\_

24. Does your firm or collective bargaining agreement(s) have an internal grievance procedure with respect to EEO complaints? Yes\_\_\_ No\_\_\_

If yes, please attach a copy of this policy.

If no, attach a report detailing your firm's unwritten procedure for handling EEO complaints.

25. Has any employee, within the past three years, filed a complaint pursuant to an internal grievance procedure or with any official of your firm with respect to equal employment opportunity? Yes\_\_\_ No\_\_\_

If yes, attach an internal complaint log. See instructions.

26. Has your firm, within the past three years, been named as a defendant (or respondent) in any administrative or judicial action where the complainant (plaintiff) alleged violation of any anti-discrimination or affirmative action laws? Yes\_\_\_ No\_\_\_

If yes, attach a log. See instructions.



27. Are there any jobs for which there are physical qualifications? Yes\_\_\_ No\_\_\_

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

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28. Are there any jobs for which there are age, race, color, national origin, sex, creed, disability, marital status, sexual orientation, or citizenship qualifications? Yes\_\_\_ No\_\_\_

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

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**SIGNATURE PAGE**

I, (print name of authorized official signing) \_\_\_\_\_ hereby certify that the information submitted herewith is true and complete to the best of my knowledge and belief and submitted with the understanding that compliance with New York City's equal employment requirements, as contained in Chapter 56 of the City Charter, Executive Order No. 50 (1980), as amended, and the implementing Rules and Regulations, is a contractual obligation.

I also agree on behalf of the company to submit a certified copy of payroll records to the Division of Labor Services on a monthly basis.

\_\_\_\_\_  
Contractor's Name

\_\_\_\_\_  
Name of person who prepared this Employment Report Title

\_\_\_\_\_  
Name of official authorized to sign on behalf of the contractor Title

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Signature of authorized official Date

If contractors are found to be underutilizing minorities and females in any given trade based on Chapter 56 Section 3H, the Division of Labor Services reserves the right to request the contractor's workforce data and to implement an employment program.

Contractors who fail to comply with the above mentioned requirements or are found to be in noncompliance may be subject to the withholding of final payment.

Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of future contracts for a period of up to five years. Further, such falsification may result in civil and/or criminal prosecution.

To the extent permitted by law and consistent with the proper discharge of DLS' responsibilities under Charter Chapter 56 of the City Charter and Executive Order No. 50 (1980) and the implementing Rules and Regulations, all information provided by a contractor to DLS shall be confidential.

**Only original signatures accepted.**

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
Notary Public Authorized Signature Date

**CONSTRUCTION EMPLOYMENT REPORT**

**GENERAL INFORMATION**

1. Your contractual relationship in this contract is: Prime contractor \_\_\_ Subcontractor X
- 1a. Are M/WBE goals attached to this project? Yes \_\_\_ No \_\_\_
2. Please check one of the following if your firm would like information on how to certify with the City of New York as a:  
\_\_\_ Minority Owned Business Enterprise                      \_\_\_ Locally based Business Enterprise  
\_\_\_ Women Owned Business Enterprise                      \_\_\_ Emerging Business Enterprise
- 2a. If you are certified as an **MBE, WBE, or LBE**, what city/state agency are you certified with?  
\_\_\_\_\_ Are you DBE certified? Yes \_\_\_ No \_\_\_
3. Please indicate if you would like assistance from SBS in identifying certified M/WBEs for contracting opportunities: Yes \_\_\_ No \_\_\_
4. Is this project subject to a project labor agreement? Yes \_\_\_ No \_\_\_

**PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION**

5. \_\_\_\_\_  
Employer Identification Number or Federal Tax I.D./ \_\_\_\_\_ Email Address
6. \_\_\_\_\_  
Company Name
7. \_\_\_\_\_  
Company Address and Zip Code
8. \_\_\_\_\_  
Chief Operating Officer Telephone Number
9. \_\_\_\_\_  
Designated Equal Opportunity Compliance Officer Telephone Number  
(If same as Item #7, write "same")
10. \_\_\_\_\_  
Name of Prime Contractor and Contact Person  
(If same as Item #5, write "same")
11. Number of employees in your company: \_\_\_\_\_

12. Contract information:

- (a) \_\_\_\_\_ Contracting Agency (City Agency)      (b) \_\_\_\_\_ Contract Amount  
(d) \_\_\_\_\_ Procurement Identification Number (PIN)      (e) \_\_\_\_\_ Contract Registration Number (CT#)  
(f) \_\_\_\_\_ Projected Commencement Date      (g) \_\_\_\_\_ Projected Completion Date

(h) Description and location of proposed contract:  
\_\_\_\_\_  
\_\_\_\_\_

13. Has your firm been reviewed by the Division of Labor Services (DLS) within the past 36 months and issued a Certificate of Approval? Yes\_\_\_ No\_\_\_

If yes, attach a copy of certificate.

14. Has DLS within the past month reviewed an Employment Report submission for your company and issued a Conditional Certificate of Approval? Yes\_\_\_ No\_\_\_

If yes, attach a copy of certificate.

**NOTE: DLS WILL NOT ISSUE A CONTINUED CERTIFICATE OF APPROVAL IN CONNECTION WITH THIS CONTRACT UNLESS THE REQUIRED CORRECTIVE ACTIONS IN PRIOR CONDITIONAL CERTIFICATES OF APPROVAL HAVE BEEN TAKEN.**

15. Has an Employment Report already been submitted for a different contract (not covered by this Employment Report) for which you have not yet received compliance certificate?  
Yes\_\_\_ No\_\_\_      If yes,

Date submitted: \_\_\_\_\_  
Agency to which submitted: \_\_\_\_\_  
Name of Agency Person: \_\_\_\_\_  
Contract No: \_\_\_\_\_  
Telephone: \_\_\_\_\_

16. Has your company in the past 36 months been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP)? Yes\_\_\_ No\_\_\_

If yes,

(a) Name and address of OFCCP office.  
\_\_\_\_\_  
\_\_\_\_\_

(b) Was a Certificate of Equal Employment Compliance issued within the past 36 months?  
Yes\_\_\_ No\_\_\_

If yes, attach a copy of such certificate.

(c) Were any corrective actions required or agreed to? Yes\_\_\_ No\_\_\_

If yes, attach a copy of such requirements or agreements.

(d) Were any deficiencies found? Yes\_\_\_ No\_\_\_

If yes, attach a copy of such findings.

17. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes\_\_\_ No\_\_\_

If yes, attach a list of such associations and all applicable CBA's.

## PART II: DOCUMENTS REQUIRED

18. For the following policies or practices, attach the relevant documents (e.g., printed booklets, brochures, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation of the practices. See instructions.

- \_\_\_ (a) Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)
- \_\_\_ (b) Disability, life, other insurance coverage/description
- \_\_\_ (c) Employee Policy/Handbook
- \_\_\_ (d) Personnel Policy/Manual
- \_\_\_ (e) Supervisor's Policy/Manual
- \_\_\_ (f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
- \_\_\_ (g) Collective bargaining agreement(s).
- \_\_\_ (h) Employment Application(s)
- \_\_\_ (i) Employee evaluation policy/form(s).
- \_\_\_ (j) Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?

19. To comply with the Immigration Reform and Control Act of 1986 when and of whom does your firm require the completion of an I-9 Form?

- |  |        |       |
|--|--------|-------|
| (a) Prior to job offer                     | Yes___ | No___ |
| (b) After a conditional job offer          | Yes___ | No___ |
| (c) After a job offer                      | Yes___ | No___ |
| (d) Within the first three days on the job | Yes___ | No___ |
| (e) To some applicants                     | Yes___ | No___ |
| (f) To all applicants                      | Yes___ | No___ |
| (g) To some employees                      | Yes___ | No___ |
| (h) To all employees                       | Yes___ | No___ |

20. Explain where and how completed I-9 Forms, with their supportive documentation, are maintained and made accessible.

\_\_\_\_\_

21. Does your firm or any of its collective bargaining agreements require job applicants to take a medical examination? Yes\_\_\_ No\_\_\_

If yes, is the medical examination given:

- (a) Prior to a job offer Yes\_\_\_ No\_\_\_
- (b) After a conditional job offer Yes\_\_\_ No\_\_\_
- (c) After a job offer Yes\_\_\_ No\_\_\_
- (d) To all applicants Yes\_\_\_ No\_\_\_
- (e) Only to some applicants Yes\_\_\_ No\_\_\_

If yes, list for which applicants below and attach copies of all medical examination or questionnaire forms and instructions utilized for these examinations.

\_\_\_\_\_

22. Do you have a written equal employment opportunity (EEO) policy? Yes\_\_\_ No\_\_\_

If yes, list the document(s) and page number(s) where these written policies are located.

\_\_\_\_\_

23. Does the company have a current affirmative action plan(s) (AAP)

- \_\_\_ Minorities and Women
- \_\_\_ Individuals with handicaps
- \_\_\_ Other. Please specify \_\_\_\_\_

24. Does your firm or collective bargaining agreement(s) have an internal grievance procedure with respect to EEO complaints? Yes\_\_\_ No\_\_\_

If yes, please attach a copy of this policy.

If no, attach a report detailing your firm's unwritten procedure for handling EEO complaints.

25. Has any employee, within the past three years, filed a complaint pursuant to an internal grievance procedure or with any official of your firm with respect to equal employment opportunity? Yes\_\_\_ No\_\_\_

If yes, attach an internal complaint log. See instructions.

26. Has your firm, within the past three years, been named as a defendant (or respondent) in any administrative or judicial action where the complainant (plaintiff) alleged violation of any anti-discrimination or affirmative action laws? Yes\_\_\_ No\_\_\_

If yes, attach a log. See instructions.

27. Are there any jobs for which there are physical qualifications? Yes\_\_\_ No\_\_\_

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

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---

28. Are there any jobs for which there are age, race, color, national origin, sex, creed, disability, marital status, sexual orientation, or citizenship qualifications? Yes\_\_\_ No\_\_\_

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

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**SIGNATURE PAGE**

I, (print name of authorized official signing) \_\_\_\_\_ hereby certify that the information submitted herewith is true and complete to the best of my knowledge and belief and submitted with the understanding that compliance with New York City's equal employment requirements, as contained in Chapter 56 of the City Charter, Executive Order No. 50 (1980), as amended, and the implementing Rules and Regulations, is a contractual obligation.

I also agree on behalf of the company to submit a certified copy of payroll records to the Division of Labor Services on a monthly basis.

\_\_\_\_\_  
Contractor's Name

\_\_\_\_\_  
Name of person who prepared this Employment Report Title

\_\_\_\_\_  
Name of official authorized to sign on behalf of the contractor Title

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Signature of authorized official Date

If contractors are found to be underutilizing minorities and females in any given trade based on Chapter 56 Section 3H, the Division of Labor Services reserves the right to request the contractor's workforce data and to implement an employment program.

Contractors who fail to comply with the above mentioned requirements or are found to be in noncompliance may be subject to the withholding of final payment.

Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of future contracts for a period of up to five years. Further, such falsification may result in civil and/or criminal prosecution.

To the extent permitted by law and consistent with the proper discharge of DLS' responsibilities under Charter Chapter 56 of the City Charter and Executive Order No. 50 (1980) and the implementing Rules and Regulations, all information provided by a contractor to DLS shall be confidential.

**Only original signatures accepted.**

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
Notary Public Authorized Signature Date



The City of New York Department of Small Business Services  
Division of Labor Services Contract Compliance Unit  
110 William Street, New York, New York 10038  
Phone: (212) 513 - 6323 Fax: (212) 618-8879

Date \_\_\_\_\_ File Number \_\_\_\_\_

**LESS THAN \$750,000 SUBCONTRACT CERTIFICATE**

Are you currently certified as one of the following? Please check yes or no:

MBE Yes \_\_\_ No \_\_\_ WBE Yes \_\_\_ No \_\_\_ LBE Yes \_\_\_ No \_\_\_ DBE Yes \_\_\_ No \_\_\_

If you are certified as an MBE, WBE, LBE or DBE, what city/state agency are you certified with?

Please check one of the following if your firm would like information on how to certify with the City of New York as a:

\_\_\_ Minority Owned Business Enterprise

\_\_\_ Locally based Business Enterprise

\_\_\_ Women Owned Business Enterprise

Company Name \_\_\_\_\_ Employer Identification Number or Federal Tax I.D. \_\_\_\_\_

Company Address and Zip Code \_\_\_\_\_

Contact Person (First Name, Last Name) \_\_\_\_\_ Telephone Number \_\_\_\_\_

Fax Number \_\_\_\_\_ E-mail Address \_\_\_\_\_

Description and location of proposed subcontract: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Procurement Identification Number (PIN)  
(City contracts only)

Contract Registration Number (CT#)  
(City contracts only)

Block and Lot Number  
(ICIP projects only)

ICIP Application Number  
(ICIP projects only)

I, (print name of authorized official) \_\_\_\_\_ hereby certify that I am authorized by the above-named subcontractor to certify that said subcontractor's proposed contract with the above named owner or City agency is less than \$750,000. This affirmation is made in accordance with NYC Charter Chapter 56, Executive Order No. 50 (1980) and the implementing Rules.

Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of future contracts for a period of up to five years. Further, such falsification may result in civil and/or criminal prosecution.

Signature of authorized official \_\_\_\_\_ Date \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_  
**Only original signatures accepted.**

Notary Public \_\_\_\_\_ Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

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**FORM A. CONTRACT BID INFORMATION: USE OF SUBCONTRACTORS/TRADES**

1. Do you plan to subcontractor work on this contract? Yes \_\_\_ No \_\_\_
2. If yes, complete the chart below.

**NOTE: All proposed subcontractors with a subcontract in excess of \$750,000 must complete an Employment Report for review and approval before the contract may be awarded and work commences.**

SUBCONTRACTOR'S NAME*	OWNERSHIP (ENTER APPROPRIATE CODE LETTERS BELOW)	WORK TO BE PERFORMED BY SUBCONTRACTOR	TRADE PROJECTED FOR USE BY SUBCONTRACTOR	PROJECTED DOLLAR VALUE OF SUBCONTRACT

\*If subcontractor is presently unknown, please enter the trade (craft name).

**OWNERSHIP CODES**

- W: White
- B: Black
- H: Hispanic
- A: Asian
- N: Native American
- F: Female

**FORM B: PROJECTED WORKFORCE**

**TRADE CLASSIFICATION CODES**

- (J) Journeylevel Workers
- (H) Helper
- (TOT) Total by Column
- (A) Apprentice
- (TRN) Trainee

For each trade to be engaged by your company for this project, enter the projected workforce for Males and Females by trade classification on the charts below.

Trade:	MALES					FEMALES									
	(1)		(2)		(3)	(4)		(5)	(6)		(7)	(8)		(9)	(10)
	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	Hisp.	Asian	Native Amer.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	Hisp.	Asian	Native Amer.	
J															
H															
A															
TRN															
TOT															

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?



**FORM C: CURRENT WORKFORCE**

**TRADE CLASSIFICATION CODES**

- (J) Journeylevel Workers
- (H) Helper
- (TOT) Total by Column
- (A) Apprentice
- (TRN) Trainee

For each trade currently engaged by your company for all work performed in New York City, enter the current workforce for Males and Females by trade classification on the charts below.

Trade:	MALES					FEMALES				
	(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.	(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.
Union Affiliation, if applicable										
Total (Col. #1-10):	J									
Total Minority, Male & Female (Col. #2,3,4,5,7,8,9, & 10):	H									
Total Female (Col. #6 - 10):	A									
	TRN									
	TOT									

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

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**FORM C: CURRENT WORKFORCE**

Trade: \_\_\_\_\_

Union Affiliation, if applicable \_\_\_\_\_

Total (Col. #1-10): \_\_\_\_\_

Total Minority, Male & Female  
(Col. #2,3,4,5,7,8,9, & 10): \_\_\_\_\_

Total Female  
(Col. #6 - 10): \_\_\_\_\_

**MALES**

	(1)		(2)		(3)		(4)		(5)	
	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	Asian	Asian	Native Amer.	Native Amer.
J										
H										
A										
TRN										
TOT										

**FEMALES**

	(6)		(7)		(8)		(9)		(10)	
	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	Asian	Asian	Native Amer.	Native Amer.
J										
H										
A										
TRN										
TOT										

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

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NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

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**INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

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**VOLUME 1 OF 3**

PROJECT ID: HWMBRT5A (MED-607B)

EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE

FROM FDR DRIVE TO LEXINGTON AVENUE

INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

---

*Contractor.*

---

Dated \_\_\_\_\_, 20\_\_\_\_

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**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE  
LONG ISLAND CITY, NEW YORK 11101-3045  
TELEPHONE (718) 391-1000  
WEBSITE [www.nyc.gov/buildnyc](http://www.nyc.gov/buildnyc)

**LAW**

**VOLUME 2 OF 3**

**INFORMATION FOR BIDDERS  
CONTRACT  
PERFORMANCE AND PAYMENT BONDS  
PREVAILING WAGE SCHEDULE**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED  
FOR:

**PROJECT ID: HWMBRT5A (MED-607B)**

**EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE**

**FROM FDR DRIVE TO LEXINGTON AVENUE**

**INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK**

Together With All Work Incidental Thereto  
**BOROUGH OF MANHATTAN  
CITY OF NEW YORK**



FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
*STV INCORPORATED*

**MARCH 15, 2013**

**8-051**





**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE  
LONG ISLAND CITY, NEW YORK 11101-3045  
TELEPHONE (718) 391-1000  
WEBSITE [www.nyc.gov/buildnyc](http://www.nyc.gov/buildnyc)

**VOLUME 2 OF 3**

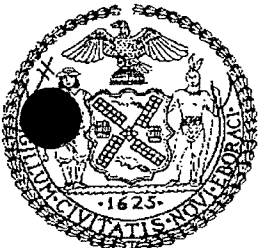
**INFORMATION FOR BIDDERS  
CONTRACT**

**PERFORMANCE AND PAYMENT BONDS  
PREVAILING WAGE SCHEDULE**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED  
FOR:

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
*IN-HOUSE DESIGN*

**MARCH 3, 2010**





## Notice to Bidders:

In 2013 the City will be implementing a new web based subcontractor reporting system. Once this subcontractor reporting system is implemented, and Contractor receives notice of its implementation, Contractor will be required to list in the system all of the subcontractors that it knows it will use or is already using in the performance of this contract. For each subcontractor listed, Contractor will be required to provide the following information: maximum contract value, description of subcontractor work, start and end date of the subcontract and identification of the subcontractor's industry. Identification of subcontractors in the system along with the required information will be required in order to obtain subcontractor approval under [section 3.02 of Appendix A][ Article 17 of the Standard Construction Contract] and PPB Rule § 4-13 for all subcontractors that have not been approved as of the implementation date. Thereafter, Contractor will be required to report in the system the payments made to each subcontractor within 30 days of making the 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...

When the subcontractor reporting system is implemented, Contractor will receive a written notice from the City which will contain the information the Contractor will need to list its subcontractors and report payments. Contractor will not be required to comply with the requirements set forth herein until such notice is issued. Contractor will have 30 days from the date of the notice to list its current subcontractors for which it has already received Agency approval, if any. Thereafter, for those subcontractors that have not yet been approved by the Agency, subcontractors will have to be listed in the system in order to obtain the required Agency approval.

Failure of the Contractor to list a subcontractor and/or to report subcontractor payments in a timely fashion may result in the Agency declaring the Contractor in default of the Contract and may 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. For construction contracts, the provisions of Article 15 of the Standard Construction Contract shall govern the issue of liquidated damages.

Contractor hereby agrees to these provisions and acknowledges that they will become effective on the date set forth in the notice.

(NO TEXT ON THIS PAGE)



## **NOTICE TO BIDDERS, PROPOSERS, CONTRACTORS, AND RENEWAL CONTRACTORS**

This contract includes a provision concerning the protection of employees for whistleblowing activity, pursuant to New York City Local Law Nos. 30-2012 and 33-2012, effective October 18, 2012 and September 18, 2012, respectively. The provisions apply to contracts with a value in excess of \$100,000.

Local Law No. 33-2012, the Whistleblower Protection Expansion Act ("WPEA"), prohibits a contractor or its subcontractor from taking an adverse personnel action against an employee or officer for whistleblower activity in connection with a City contract; requires that certain City contracts include a provision to that effect; and provides that a contractor or subcontractor may be subject to penalties and injunctive relief if a court finds that it retaliated in violation of the WPEA. The WPEA is codified at Section 12-113 of the New York City Administrative Code.

Local Law No. 30-2012 requires a contractor to prominently post information explaining how its employees can report allegations of fraud, false claims, criminality, or corruption in connection with a City contract to City officials and the rights and remedies afforded to employees for whistleblowing activity. Local Law No. 30-2012 is codified at Section 6-132 of the New York City Administrative Code.

## WHISTLEBLOWER PROTECTION EXPANSION ACT RIDER

1. In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the New York City Administrative Code, respectively,
  - (a) 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 (i) the Commissioner of the Department of Investigation, (ii) a member of the New York City Council, the Public Advocate, or the Comptroller, or (iii) the City Chief Procurement Officer, ACCO, Agency head, or Commissioner.
  - (b) If any of Contractor's officers or employees believes that he or she has been the subject of an adverse personnel action in violation of subparagraph (a) of paragraph 1 of this rider, he or she shall be entitled to bring a cause of action against Contractor to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (i) an injunction to restrain continued retaliation, (ii) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (iii) reinstatement of full fringe benefits and seniority rights, (iv) payment of two times back pay, plus interest, and (v) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.
  - (c) 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:
    - (i) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the Contract; and
    - (ii) the rights and remedies afforded to its employees under New York City 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 with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the Contract.
  - (d) For the purposes of this rider, "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.
  - (e) This rider is applicable to all of Contractor's subcontractors having subcontracts with a value in excess of \$100,000; accordingly, Contractor shall include this rider in all subcontracts with a value in excess of \$100,000.
2. Paragraph 1 is not applicable to this Contract if it is valued at \$100,000 or less. Subparagraphs (a), (b), (d), and (e) of paragraph 1 are not applicable to this Contract if it was solicited pursuant to a finding of an emergency. Subparagraph (c) of paragraph 1 is neither applicable to this Contract if it was solicited prior to October 18, 2012 nor if it is a renewal of a contract executed prior to October 18, 2012.

# NOTICE TO BIDDERS

Please be advised that the City of New York has revised the form of the performance bond that is required for City construction contracts that exceed \$5 million. The form of bond required for contracts that do not exceed \$5 million has not changed. The City's payment bond remains unchanged.

**The bond form for contracts that do not exceed \$5 million has been approved by the U.S. Small Business Administration ("SBA") for participation in their Bond Guarantee Program.** The SBA's Bond Guarantee Program enables eligible small businesses to obtain or increase bonding by having the SBA act as a partial guarantor of the contractor to the surety. For information concerning the SBA program, including current limits on what size contracts are eligible for participation in the program, go to [www.sba.gov/osg](http://www.sba.gov/osg). If you are interested in participating in this program, we suggest that you contact your broker or the SBA.

In order to maximize participation by small businesses in the SBA Guarantee Program, the City also encourages prime contractors who are awarded contracts greater than \$5 million to allow their subcontractors to use the SBA-approved form, particularly on contracts that are subject to Local Law 129 (the M/WBE program), if the prime contractor requires subcontractors to obtain performance bonds.

(NO TEXT ON THIS PAGE)

**CITY OF NEW YORK**

**DEPARTMENT OF  
DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURES**

**INFORMATION FOR BIDDERS**

**SEPTEMBER 2008**

(NO TEXT ON THIS PAGE)

*CITY OF NEW YORK CITY  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFORMATION FOR BIDDERS*

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## INFORMATION FOR BIDDERS

### 1. Description and Location of Work

The description and location of the work for which bids are requested are specified in Attachment 1, "Bid Information". Attachment 1 is included as page A-1 of the Bid Booklet.

### 2. Time and Place for Receipt of Bids

Sealed bids shall be received on or before the date and hour specified in Attachment 1, at which time they will be publicly opened and read aloud in the presence of the Commissioner or his 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, if used, 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 at the location set forth in Attachment 1.

(C) Deposit for Copy of Invitation For Bids Documents: Prospective bidders may obtain a copy of the Invitation For Bids Documents by complying with the conditions set forth in the Notice of Solicitation. The deposit must be in the form of a check or money order made payable to the City of New York, and drawn upon a state or national bank or trust company, or a check of such bank or trust company signed by a duly authorized officer thereof.

(D) Return of Invitation For Bids Documents: All Invitation For Bids Documents must be returned to the Department upon request. If the bidder elects not to submit a bid thereunder, the

Invitation For Bids Documents shall be returned to the Department, along with a statement that no bid will be submitted.

(E) Return of Deposit: Such deposit will be returned within 30 days after the award of the contract or the rejection of all bids as set forth in the advertisement, provided the Invitation For Bids Documents are returned to the location specified in Attachment 1, in physical condition satisfactory to the Commissioner.

(F) Additional Copies: Additional copies of the Invitation For Bids Documents may be obtained, subject to the conditions set forth in the advertisement for bids.

5. Pre-Bid Conference

A pre-bid conference shall be held as set forth in Attachment 1. 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 Attachment 1.

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 Attachment 1.

(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 he finds that they do so materially differ, or that they could not have been reasonably anticipated by the contractor and were not anticipated by the City, the Contract may be modified with his 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 Attachment 1, 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 his option, may ask to be relieved of his 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.

(D) 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. VENDEX Questionnaires

(A) Requirement: Pursuant to Administrative Code Section 6-116.2 and the PPB Rules, bidders may be obligated to complete and submit VENDEX Questionnaires. Generally, if this bid is \$100,000 or more, or if this bid when added to the sum total of all contracts, concessions and franchises the bidder has received from the City and any subcontracts received from City contractors over the past twelve months, equals or exceeds \$100,000, Vendex Questionnaires must be completed. If required, Vendex Questionnaires must be completed and submitted before any award of contract may be made or before approval is given for a proposed subcontractor. Non-compliance with these submission requirements may result in the disqualification of the bid, disapproval of a subcontractor, subsequent withdrawal of approval for the use of an approved subcontractor, or the cancellation of the contract after its award.

(B) Submission: Vendex Questionnaires must be submitted directly to the Mayor's Office of Contract Services, ATTN: Vendex, 253 Broadway, 9th Floor, New York, New York 10007. In addition, the bidder must submit a Confirmation of Vendex Compliance to the agency. A form for this confirmation is set forth in the Bid Booklet.

(C) Obtaining Forms: Vendex Questionnaires, as well as detailed instructions, may be obtained at [www.nyc.gov/vendex](http://www.nyc.gov/vendex). The bidder may also obtain Vendex forms and instructions by contacting the

Agency Chief Contracting Office or the contract person for this contract.

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)669-2797.

26. Bid, Performance and Payment Security

(A) Bid Security: Each bid must be accompanied by bid security in an amount and type specified in Attachment 1 (page A-1 of the Bid Booklet). 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 Attachment 1. 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 Attachment 1 (page A-1 of the Bid Booklet). 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 202-512-1800; (2) through the Internet at <http://www.fms.treas.gov/c570/index.html>, and (3) through a computerized public bulletin board, which can be accessed by using your computer modem and dialing 202-874-6887.

(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 his 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 his 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 Bid Booklet.

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 it 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 on page 2 of the Bid Booklet.

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.

**CITY OF NEW YORK**  
**DEPARTMENT OF DESIGN AND CONSTRUCTION**  
**SAFETY REQUIREMENTS**

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**THE DDC SAFETY REQUIREMENTS INCLUDE THE FOLLOWING SECTIONS:**

- I. POLICY ON SITE SAFETY .....**
- II. PURPOSE .....**
- III. DEFINITIONS.....**
- IV. RESPONSIBILITIES.....**
- V. SAFETY QUESTIONNAIRE .....**
- VI. SAFETY PROGRAM AND 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 jobsites must, at a minimum, comply with applicable federal, state and city laws, rules and regulations, including without limitation:

- ❑ U. S. Department of Labor 29 Code of Federal Regulations (CFR) Part 1926 and applicable Sub-parts of Part 1910 – U.S. Occupational Safety and Health Administration (OSHA) including, but not limited to “Respiratory Protection” (29 CFR 1910.134), “Permit-Required Confined Spaces” (29 CFR 1910.146), and “Hazard Communication” (29 CFR 1910.1200);
- ❑ New York State Department of Labor Industrial Code Rule 23 – Protection in Construction, Demolition and Excavation;
- ❑ New York City Construction Codes, Title 28
- ❑ NYC Department of Transportation Title 34 Chapter 2 – Highway Rules
- ❑ New York State Department of Labor Industrial Code Rule 753
- ❑ NYC Local Law No. 113 (2005) Noise Control Code

In addition, all regulations promulgated by the NYC Department of Transportation, including requirements for Maintenance and Protection of Traffic (MPT), are applicable when contained in contract specifications. While MPT is a significant component of work in our Infrastructure Division, it does not supersede or exempt Contractors from complying with other applicable health and safety standards (for example, excavating and trenching standards, operation of heavy equipment and compliance with City environmental and noise regulations).

## 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 hazard, 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 shall mean the person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the 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.

**Construction Safety Auditor:** A representative of the QACS Construction Safety Unit 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 surveys, reviewing health and safety plans, reviewing construction permits, and rendering technical advice and assistance to DDC Resident Engineers and Project Managers.



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**Construction Safety Unit:** A part of QACS within the Division of Technical Support that assesses contractor safety on DDC jobsites and advises responsible parties of needed corrective actions.

**Construction Superintendent:** A representative of the contractor responsible for overseeing performance of the required construction work. This individual must engage in sound construction practices, and is responsible to maintain a safe work site. In the case of a project involving the demolition, alteration or new construction of buildings, the Construction Superintendent must be licensed by the NYC Department of Buildings.

**Contractor:** For purposes of these Safety Requirements, the term “Contractor” shall mean any person or entity that enters into a contract for the performance of construction work on a DDC project. The term “Contractor” shall 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”).

**Director - Quality Assurance and Construction Safety (QACS):** Responsible for the operations of the QACS Construction Safety Unit and the DDC Site Safety management programs.

**Job Hazard Assessment (JHA):** A process of identifying site-specific hazards that may be present during construction and establishing the means and methods to reduce or eliminate those hazards.

**Jobsite Safety Coordinator:** A person designated by the Contractor to be onsite during all activities. This individual shall have received, at a minimum, the OSHA 10-hour construction safety program. Other examples of acceptable training are the 30-hour OSHA Safety and Health Standards for the Construction Industry training program (OSHA 510) or a degree/certificate in a safety and health from a college-level curriculum. This person does not necessarily have to be dedicated full-time to site safety, but must have sufficient experience and authority to undertake corrective action and must qualify to be a competent person. For certain projects, as defined in NYC Construction Codes – Title 28, this person may be required to have a Site Safety Manager’s License issued by the NYC DOB.

**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 and trenching and shoring, among others.

**Resident Engineer (RE) / Construction Project Manager (CPM):** Representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the work. (The RE/CPM may be a third-party consultant, including a CM, retained by DDC.)

**Safety Program:** Established by the Contractor that covers all operations of that Contractor and establishes the Contractor’s overall safety policy, regulatory compliance plan and minimum safety standards. The Safety Program must be submitted prior to the commencement of work at the site and is subject to review and acceptance by the Construction Safety Unit.

**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 Plan:** A site-specific safety plan developed by the Contractor for a specific project. The Site Safety Plan must identify hazards associated with the project, and include specific safety precautions and training appropriate and necessary to complete the work. The Site Safety Plan must be submitted prior to the commencement of work at the site and is subject to review and acceptance by the Construction Safety Unit.

**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 documented 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.

#### IV. RESPONSIBILITIES

All persons who manage, perform, and provide support for construction projects shall 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 / Construction Project Manager / Construction Manager

- Monitors the issuance of safety-related permits, approvals and drawings and maintains copies on site.
- Monitors construction-related work activities to confirm that they are conducted in accordance with DDC policies and all applicable regulations that pertain to construction safety.
- Maintains documentation and periodically attends weekly safety meeting.
- Notifies the Construction Safety Unit and the ACCO's Insurance and Risk Management Unit of project-related accidents and emergencies, as per DDC's Construction Safety Emergency Protocol.
- Gathers facts related to all accidents and prepares DDC Accident Reports.
- Notifies the Construction Safety Unit of outside regulatory agency inspections and forwards a copy of the inspection report within three days of its receipt.
- Monitors the conditions at the site for conformance with the Site Safety Plan and DDC construction documents.
- Notifies the contractor and DDC in the event that any condition or activity exists that is not in compliance with the 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.
- Notifies DDC of any emergency condition and directs the contractor to provide such labor, materials, equipment and supervision to abate such conditions.
- Reports gross safety violations to the Construction Safety Unit immediately.

##### B. Contractors

- Complete a Safety Questionnaire and submit with its bid or as part of a pre-qualification package.
- Provide a Written Job Hazard Assessment (JHA) that identifies expected safety issues of the work to be performed. JHA shall be included with the Site Safety Plan submitted by the contractor.
- Submit a Site Safety Plan and Safety Program within 15 days of issuance of the Notice to Proceed, or as otherwise directed. The Site Safety Plan and Safety Program are subject to review and acceptance by the Construction Safety Unit prior to the commencement of work at the site. The Site Safety Plan shall be revised and updated as necessary.
- Ensure that all employees are aware of the hazards associated with the project through formal and informal training and/or other communications. Conduct and document weekly safety meetings for the duration of the project. Documentation to be provided to the RE/CPM/CM on a monthly basis.
- Name a Construction Superintendent, if required.
- Name a Job Site Safety Coordinator. The Contractor will be required to identify the Job Site Safety Coordinator in the Site Safety Plan.
- Comply with all mandated federal, state and local safety and health rules and regulations.
- Comply with all provisions of the Site Safety Plan.
- As part of the Site Safety Plan, prepare a site specific MPT (if not otherwise provided in the contract documents) and comply with all of its provisions.

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- Conduct and document site-specific safety orientation for Contractor 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 Job Site Safety Coordinator will conduct this training prior to mobilization and provide documentation to the RE/CPM/CM.
- 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.).
- Report unsafe conditions or hazards to the DDC RE/CPM/CM as soon as practical, but no more than 24 hours after discovery, and take action to remove or abate such conditions.
- Report any accident involving injuries to workers or the general public, as well as property damage, to the DDC RE/CPM/CM within two (2) hours.
- Notify the DDC RE/CPM/CM within two (2) hours of the start of an inspection by any regulatory agency personnel, including OSHA.
- Maintain all records pertaining to all required compliance documents and accident and injury reports.
- Respond to DDC recommendations on safety, which shall 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 and environmental 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 must submit a completed DDC Safety Questionnaire listing their workers' compensation experience modification rating and OSHA Incidence 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 must provide the requested update within 30 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 years; and
- Criteria 4: A fatality (worker or member of public) experienced on or near Contractor's worksite within the last three (3) years; and
- Criteria 5: An unacceptable rating by QACS based on past performance on DDC projects; and
- Criteria 6: Contractor has in place an acceptable corporate safety program and its employees shall have completed all documented relative safety training; and
- Criteria 7: Contractor shall provide OSHA Injury Records (currently OSHA 300 Log) for the last three (3) years.

If the Contractor fails to meet the basic criteria listed above, the Construction Safety Unit may request, through the ACCO, more detail concerning the Contractor's safety experience. DDC may request the Contractor to provide copies of, among other things, OSHA records, OSHA and DOB citations, EPA citations and written Safety Programs.

## VI. SAFETY PROGRAM AND SITE SAFETY PLAN

Within fifteen (15) days of issuance of the Notice to Proceed, or as otherwise directed, the Contractor shall submit the following: (1) Safety Program, and (2) Site Safety Plan. The Safety Program shall set forth the Contractor's overall safety policy, regulatory compliance plan and minimum safety standard, and the Site Safety Plan shall identify hazards associated with the project, and include specific safety precautions and training appropriate and necessary to complete the work. The Safety Program and the Site Safety Plan are subject to review and acceptance by the Construction Safety Unit prior to the commencement of work at the site. Failure by the contractor to submit an acceptable Site Safety Plan and Safety Program shall be grounds for default.

The Site Safety Plan shall apply to all Contractor and subcontractor operations, and shall have at a minimum, the following elements. Each element shall be described in a separate section in the written document. It may be necessary to modify the basic format for certain unique or high-risk projects (such as tunnels or high-rise construction). The basic elements are as follows:

1. **Responsibility and Organization:** Identify the person or persons with authority and responsibility for implementing the Site Safety Plan. Provide an organization chart and define levels of authority and responsibility. Identify the Competent Person, the Construction Superintendent (if required), the Job Safety Coordinator and the Qualified Person required for this project.
2. **Communication:** Establish a system for communicating with employees and subcontractors on matters relating to worker and public safety and health and environmental protection, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. An emergency response notification protocol is to be established that also includes after hours contact numbers. The plan must also include provisions for weekly safety meetings held by the Job Site Safety Coordinator.
3. **Job Hazard Assessment:** A written document submitted by the contractor, used to identify expected job hazards and public safety risks and state the specific means and methods to reduce, control or eliminate those hazards. This part of the Site Safety Plan must also include how on-going evaluations of those risks and hazards will be carried out, including plans for periodic inspections to identify unsafe conditions, work practices and public safety hazards.
4. **Accident/Exposure Investigation:** Establish a procedure to investigate and report occupational and public injury or illness, property damage, vehicle accidents or other mishaps.
5. **Hazard Correction:** Establish means, methods and/or procedures for correcting unsafe or unhealthy conditions that might be exposing both the public and workers to hazards. Corrective actions must be taken immediately when observed or discovered. Should an imminent hazard exist which cannot be immediately abated without endangering employees, the public and/or property, remove or restrict all exposed persons from the area except those necessary to correct the existing condition. Employees necessary to correct the hazardous condition shall be provided the necessary safeguards. When corrective actions cannot be taken immediately, temporary measures should be taken until such time permanent measures are taken to eliminate the potential risks or hazards.
6. **Training:** Describe site-specific hazard training programs. In addition to the required safety orientation, additional site specific training, in the form of required weekly safety meetings, will be required. Contractors must also initiate training when: a) new employees are hired; b) employees are given new job assignments for which training has not been previously received; c) new substances, processes, procedures or equipment are introduced that might represent a new public or worker hazard; d) the employee is made aware of a new or previously unrecognized hazard; e) new supervisors are assigned to familiarize themselves with the safety and health hazards to which employees under their immediate direction and control may be exposed; and f) after a jobsite incident or accident has occurred.

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7. Recordkeeping: Establish procedures to maintain records of scheduled and periodic inspections, weekly safety meetings, and training records. Updated records shall be maintained at the jobsite, accessible to the Construction Safety Auditors and/or Quality Assurance Auditors/RE/CPM, and retained in accordance with DDC policy.

The most critical component of the Site Safety Plan is the Job Hazard Assessment section. This section must address specific hazards that are anticipated throughout the project. Each Site Safety Plan must address, at a minimum:

- Public and pedestrian safety
- Fall protection
- Electrical hazards
- Scaffolding
- Fire protection
- Emergency notification & response
- Housekeeping / debris removal
- Dust control
- Maintenance and protection of traffic
- Trenching and excavating
- Heavy equipment operations
- Material / equipment storage
- Environmental contamination
- Sheeting and shoring
- Alcohol and Drug Abuse Policy

The following additional hazards must be addressed, if applicable, based on the contract safety specifications and/or the results of the JHA (the list is not all-inclusive):

- Basic Personal Protective Equipment
- Compressed Air
- Compressed Gas Cylinders
- Cranes, Derricks and Hoists
- Demolition
- Electrical safety
- Excavations and Trenching
- Fall Protection – Floor openings/Stairways
- Fall Protection – Guardrails Toe boards etc
- Fall Protection – Leading Edge
- Fall Protection – Personal Fall Protection Devices
- Fire Protection and Fire Prevention
- Hazard Communication (RIGHT TO KNOW)
- Hazardous Energy & Lock Out / Tag Out
- Housekeeping/ Sanitation
- Maintenance and Protection of Traffic (MPT)
- Man Lifts /Aerial Lifts
- Marine Operations
- Motor Vehicle Safety
- Overhead Power lines
- Permit Required Confined Space
- Portable Ladders
- Powered Actuated Tools
- Powered Material Handling Equipment
- Scaffolds – Mobile
- Scaffolds – Stationary
- Scaffolds – Suspended
- Slings
- Steel Erection

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- Welding and Cutting (Hot Work)
- Airborne Contaminants – Particulates – General
- Asbestos
- Blood borne Pathogens
- Hearing Protection
- Lead in Construction
- Mercury in Construction
- PCB's
- Respiratory Protection
- Silica
- Thermal Stress
- West Nile Virus
- Rodents and Vermin
- Noise Mitigation Plan

Certain DDC programs, such as Job Order Contracting System (JOCS), may not necessarily require Site Safety Plans. The JOCS contractor will be required to submit a Safety Program. In addition, certain DDC Operating Units may establish program or client-specific safety requirements. The contractor's Site Safety Plan must address such program or client specific safety requirements.

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

As part of the construction kick-off meeting, a Site Safety Plan review will be part of the agenda. A QACS representative will participate in this meeting with the contractor prior to the start of the project for the purpose of:

- A. Reviewing the safety issues detailed in the contract.
- B. Reviewing the Site Safety Plan.
- C. Reviewing any new issues or information that was not previously addressed.
- D. Discussing planned inspections and audits of the site by DDC 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 Construction Safety Unit or other designated DDC representative or Consultant during regular, unannounced inspections of the job site. Field Exit Conferences will be held with the RE/CPM, Contractor Superintendents or Safety Representatives.
- B. The RE/CPM will continually monitor the safety and environmental performance of the contractor's employees and work methods. Deficiencies shall be brought to the attention of the contractor's representative on site for immediate correction. The DDC representative will maintain a written record of these deficiencies and forward them to the Construction Safety Unit on a weekly basis. Any critical deficiencies shall be immediately reported to QACS phone# (718) 391-1624 or (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- QACS, or designee will meet with the Contractor's safety representative, the DDC project manager, the RE/CPM, or 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.

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- D. If the deficiencies continue to occur with inadequate attention by the contractor, this shall, among other remedies available, be grounds for default.
- E. The contractor shall inform the Construction Safety Unit and ACCO Insurance and Risk Management Unit of all medical injuries or illnesses that require doctors' treatment resulting from an on-the-job incident within 24 hours of the occurrence. The Construction Safety Unit shall also be immediately informed of all fatalities, catastrophic accidents with more than one employee hospitalized, any injuries to members of the general public and major equipment damage (e.g., property damage, equipment rollovers, loads dropped from crane). QACS shall maintain a record of all contractor injuries and illnesses during the project and provide regular reports to the Agency.
- F. The Construction Safety Unit shall be immediately notified at the start of any NYS-DOL/ NYC-COSH/ OSHA/ EPA inspections. The Director of Quality Assurance & Construction Safety shall maintain a log of all contractor OSHA/EPA inspections and citations during the project.

**IX. SAFETY PERFORMANCE EVALUATION**

The contractor's safety record, including all DDC 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 shall be a reason to rate a Contractor unsatisfactory which will be reflected in the City's Vendex system and will be considered for future procurement actions as set forth in the City's Procurement Policy Board Rules.

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**CITY OF NEW YORK**  
**STANDARD CONSTRUCTION CONTRACT**  
**DELAY DAMAGES PILOT**

**September 2008**

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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 content 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 this Contract:

1.1.1 All provisions required by law to be inserted in this Contract, whether actually inserted 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 and Proposal For Bids; Bid or Proposal, and, if used, the Bid Booklet;

1.1.6 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.

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 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.

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

2.1.5 "**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.

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

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

2.1.8 "**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.

2.1.9 "**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.

2.1.10 "**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.

2.1.11 "**Contractor**" shall mean the entity which executed this Contract, whether a corporation, firm, partnership, joint venture, individual, or any combination thereof, and it(s), 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.

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

2.1.13 "**Engineer**" or "**Architect**" or "**Project Manager**" shall mean the person so designated in writing by the Commissioner to act as such in relation to this Contract, including a private Architect or Engineer or Project Manager, as the case may be.

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

2.1.15 "**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.

2.1.16 "**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.

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

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

2.1.19 "**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.

2.1.20 "**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.

2.1.21 "**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.

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

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

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

2.1.25 "**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.

2.1.26 "**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.

2.1.27 "**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.

2.1.28 "**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.

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

2.1.30 "**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, at the site. Wherever the word Subcontractor appears, it shall also mean Sub-Subcontractor.

2.1.31 "**Substantial Completion**" shall mean the written determination by the Commissioner that the Work required under this Contract is substantially, but not entirely, complete.

2.1.32 "**Treasurer**" shall mean the Commissioner of the Department of Finance of the City of New York.

2.1.33 "**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 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 and design 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**, or his/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 right to 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 Department of Environmental Protection.

5.3.2 The Contractor agrees to comply with Section 24-219 of the Administrative Code of the City ("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 work 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 New York City Department of Environmental Protection. In addition, the Contractor's certified Construction Noise Mitigation Plan is subject inspection by the Department of Environmental Protection in accordance with 15 RCNY §28-101. No Contract work may take place at a worksite 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 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 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.

#### 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 to fulfill the requirements of this Article 5.4.2, where the Commissioner of the New York 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 City agencies and Contractors. Any such determination shall expire after six months unless renewed.

5.4.2(c) Contractors shall not be required to comply with this Article 5.4.2 where the 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 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 is available. Any finding made pursuant to this subdivision shall expire after sixty days, at which time the requirements of this Article 5.4.2 shall be in full force and effect unless the 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](http://www.dep.nyc.gov) or by contacting the Agency issuing this solicitation.

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 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 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 calendar 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)(1) Where the 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 those paragraphs is unavailable for such vehicle, Contractor shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle.

5.4.3(d)(2) 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, 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)(3) In determining which technology to use for the purposes of Articles 5.4.3(d)(1) and 5.4.3(d)(2) above, 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)(4) Contractors 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 Agency issuing the solicitation. Any finding or waiver made or issued pursuant to Articles 5.4.3(d)(1) and 5.4.3(d)(2) above shall expire after one hundred eighty days, at which time the requirements of Article 5.4.3(a) shall be in full force and effect unless the 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. Contractors 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) 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 and ten thousand 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 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 Department the following information:

5.4.6(1) The total number of diesel-powered Nonroad Vehicles used to fulfill the requirements of this Public Works Contract;

5.4.6(2) The number of such Nonroad Vehicles that were powered by Ultra Low Sulfur Diesel Fuel;

5.4.6(3) 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(4) 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(5) The locations where such Nonroad Vehicles were used; and

5.4.6(6) 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.

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 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 of New York 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 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 terms shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five horsepower 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.

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 horsepower (HP) rating of 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.

## 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; NOTICES AND 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 the persons and 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 notify in writing the commercial general liability insurance carrier, and, where applicable, the worker's compensation and/or other insurance carrier, of any such loss, damage, injury, or accident, and any claim or suit arising therefrom, immediately, but not later than 20 days after such event. The **Contractor's** notice to the commercial general liability insurance carrier must expressly specify that "this notice is being given on behalf of the City of New York as Additional Insured as well as [the Contractor] as Named Insured." The **Contractor's** notice to the insurance carrier shall contain the following information: the name of the **Contractor**, the number of the **Contract**, the date of the occurrence, the location (street address and borough) of the occurrence, and the identity of the persons or things injured, damaged or lost.

7.3.2(a) At the time notice is provided to the insurance carrier(s), the **Contractor** shall provide copies of such notice to the **Comptroller** and the **Commissioner**. Notice to the **Comptroller** shall be sent to the Insurance Unit, NYC Comptroller's Office, 1 Centre Street – Room 1222, New York, New York, 10007. Notice to the **Commissioner** shall be sent to the address set forth in Schedule A of the General Conditions.

7.3.2(b) If the **Contractor** fails to provide any of the foregoing notices to any appropriate 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 indemnify, defend and hold the **City**, its employees and agents (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 or contributing 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 **Contractor** waives all rights against the **City** for any damages or losses for which either is covered under any insurance required under Article 22 (whether or not such insurance is actually procured) or any other insurance applicable to the operations of the **Contractor** and/or its **Subcontractors** in the performance of this **Contract**.

7.6 The provisions of this Article 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 **Work** on the date specified in a written notice signed by the **Commissioner**. The time for performance of the **Work** under the **Contract** shall be computed from the date specified in such written notice. **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 herein, 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 with this **Contract**, unless otherwise directed by the **Engineer**, shall submit to the **Engineer** a proposed progress schedule in 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 various operations 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**; 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** 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 enable 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 seven (7) **Days** after the commencement of such condition, the **Contractor** must notify the **Engineer** 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.

11.1.2 If the **Contractor** shall claim to be sustaining damages for delay as provided for in this Article, within forty-five (45) **Days** from the time such damages are first incurred, and every thirty (30) **Days** thereafter for as long as such damages are being incurred, the **Contractor** shall submit to the **Commissioner** verified written statements of the details and the amounts of such damages, together with documentary evidence of such damages, ("statement of delay damages") as further detailed in Section 11.6. 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. On failure of the **Contractor** to fully comply with all of 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 arising under or by reason of this **Contract** shall not be different from or in excess of the statements made and documentation provided pursuant to this article.

11.1.3 Within 60 days of submission of the final verified statement of claims pursuant to Article 44, the **Commissioner** shall make a determination as to whether a compensable

delay has occurred and, if so, the amount of compensation due the **Contractor**. Notwithstanding the above, the **Commissioner** may make a determination as to whether a compensable delay has occurred at any time after the **Contractor's** first submission of a statement of delay damages.

11.2 Failure of the **Contractor** to strictly comply with the requirements of Article 11.1.1 may, in the 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 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 delay in the performance of this **Contract** necessarily extending the time for completion of the **Work** or resulting from acceleration directed by the City and required to maintain the project 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**, 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 Extended delays attributable to the **City** in the review or issuance of change orders, in shop drawing reviews and approvals or as a result of the cumulative impact of multiple change orders, which have a verifiable impact on project costs.

11.4.1.3 The unavailability of the site for an extended period of time that significantly affects the scheduled completion of the **contract**.

11.4.1.4 The issuance by the **Engineer** of a stop work order relative to a substantial portion of work for a period exceeding thirty days, that was not brought about through any action or omission of the **Contractor**.

11.4.1.5 Differing site conditions that were not known or 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 The provisions of this Article 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 section shall be allowed.

11.5 Non-Compensable Delays. The **Contractor** agrees to make no monetary request for, and has 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 generally recognized 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 action or omission by the **City**;

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

11.5.5 Any shortages of supplies of materials 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 war or of the public enemy or terrorist acts;

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 dates of the claimed periods of delay and, in addition, a description of the operations that were delayed, the reasons for the delay and an explanation of how they were delayed.

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 amount of additional compensation sought and a breakdown of that amount into categories as described in Article 26.2, subject to the limitations set forth in section 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 Labor;

11.7.1.2 Materials;

11.7.1.3 Equipment;

- 11.7.1.4 Extended Field Office Costs;
  - 11.7.1.5 Extended Contract Site Overhead;
  - 11.7.1.6 Extended Home office overhead; and
  - 11.7.1.7 Insurance and Bond Costs.
- 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 11.7.1.1 through 11.7.1.6, and an additional overhead of 5% of the costs outlined in 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;
  - 11.7.3.2 Consequential damages, including but not limited to interest on monies in dispute, including interest which is paid on such monies, 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;
  - 11.7.3.4 Direct or indirect costs attributable to performance of work where the **Contractor**, because of situations or conditions within its control, has not progressed the work in a satisfactory manner; and
  - 11.7.3.5 Attorneys' fees and dispute and claims preparation expenses.
- 11.8 Determinations 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 If the parties agree that a compensable delay has occurred and agree on the amount of compensation, payment may be made pursuant to a written change order, subject to pre-audit by the **Engineering Audit Officer**, and may be post-audited by the **Comptroller** and/or the **Department**.

## **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** shall determine 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. Except as provided for in Article 11.4.1.1, the **Contractor** agrees to make no claim against the **City** for

any damages relating to or arising out of any timely directions issued by the **Engineer** pursuant to this article (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 this **Contractor's** failure to comply with the **Engineer's** direction 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 **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 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 suit based upon such claim and if any judgment or claims (even if the allegations of the suit 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 and the **PPB** Rules.

13.2 Any extension of time may be granted only by the **Commissioner** 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 officers, 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 **Commissioner** 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 **Commissioner** 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 of delay resulting from such act, fault or omission.

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

13.6 The granting of an application for an extension of time for causes of delay other than those herein referred to shall be entirely within the discretion of the **Commissioner** or the Board.

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 **Commissioner** of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the **Commissioner** 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 bid amount;

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 **Commissioner** 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 multiple of six (6) months involved beyond the one (1) year period; or

13.9.1(d) If exceptional circumstances exist, the **Commissioner** 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 **Commissioner** 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 **Commissioner**, 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 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** except as set forth in Article 11, and agrees that all it may be entitled to on account of any such delay for which compensation is not specifically provided for in Article 11 is an extension of time to complete performance of the **Work** as provided herein.

#### **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 in Articles 14.2.1 and 14.2.2 have been met. The **Commissioner** will then issue a Certificate of **Substantial Completion**.

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

14.2.2 **Approval of Final Punch List and Date for Final Acceptance:** Following inspection of the **Work**, the **Engineer** shall furnish the **Contractor** a final punch list, specifying all items of **Work** to be completed. The **Contractor** shall then submit to the **Engineer** dates for the completion of each specified item of **Work**. Within a reasonable time after receipt, the **Engineer**, in a written notification to the **Contractor**, shall approve the **Contractor's** completion dates or, if they are unable to agree, 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 **Determining the Date of Final Acceptance:** The **Work** will be accepted as final and complete as of the date of the **Engineer's** inspection if, upon such inspection, the **Engineer** finds that all items on the **Final Approved Punch List** are complete and no further **Work** remains to be done. The **Commissioner** will then issue a written determination of **Final Acceptance**.

14.4 **Request for Inspection:** Inspection of the **Work** by the **Engineer** for the purpose of **Substantial Completion** or **Final Acceptance** shall be made within ten (10) **Days** after receipt of the **Contractor's** written request therefor.

14.5 **Request for Re-inspection:** If upon inspection for the purpose of **Substantial Completion** or **Final Acceptance**, the **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** 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** shall be made within ten (10) **Days** after receipt of the **Contractor's** written request therefor.

14.6 **Initiation of Inspection by the 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** may initiate such inspection or re-inspection.

## ARTICLE 15. LIQUIDATED DAMAGES

15.1 In the event the **Contractor** fails to complete the **Work** within the time fixed for such 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 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 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 shall apply to the **Contractor** if it 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** 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 this article. In the event the **Commissioner** takes over, uses, occupies, or operates any part of the **Work**:

16.1.1 the **Commissioner** 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, 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 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.

17.4 The **Commissioner** will notify the **Contractor** in writing whether the proposed **Subcontractor** is qualified or not qualified. If the proposed **Subcontractor** is not qualified, the **Contractor** may submit another proposed **Subcontractor** unless the **Contractor** decides to do the **Work**. No **Subcontractor** shall be permitted on the **Site** unless approved.

17.5 Before entering into any subcontract hereunder, the **Contractor** shall inform the **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**.

17.6 Documents given to a **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.

17.7 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.

17.8 The **Contractor** shall be responsible for ensuring that all **Subcontractors** performing **Work** at the **Site** have either their own insurance coverage or are covered by the **Contractor's** insurance as required by Article 22.

17.9 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:

17.9.1 **Payment to Subcontractors:** The agreement between the **Contractor** and its **Subcontractors** 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**.

17.9.2 **Prevailing Rate of Wages:** The agreement between the **Contractor** and its **Subcontractors** shall include the prevailing wage rates and supplemental benefits to be paid in accordance with Labor Law Section 220.

17.9.3 **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 its **Subcontractors** in excess of \$50,000 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.).

17.10 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 adjusted.

17.11 On **Contracts** where 100% 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.

17.12 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, or conveyance shall not be valid until filed in the office of the **Commissioner** and the **Treasurer**, 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 or conveyance, 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 GUARANTY**

**ARTICLE 19. SECURITY DEPOSIT**

19.1 The bid deposit, if required, shall be retained by the **Comptroller** as security for the **Contractor's** faithful performance of the **Contract** and will be returned to the **Contractor** only after the sum retained under Article 21 equals the amount of the bid deposit, subject to the other provisions of this **Contract**. If performance and payment bonds are required, any bid security posted shall be returned within a reasonable time after posting of such bonds and execution of this **Contract** by the **City**. When no partial payments are provided, the bid deposit will be released when final payment is certified to the **Comptroller** for payment.

19.2 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**:

19.2.1 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

19.2.2 To indemnify the **City** against any and all claims.

**ARTICLE 20. PAYMENT GUARANTEE**

20.1 On **Contracts** where 100% performance bonds and payment bonds are executed, this article does not apply.

20.2 In the event the terms of this **Contract** do not require the **Contractor** to provide a payment bond, the **City** shall, in accordance with the terms of this article, guarantee payment of all lawful demands 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 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 this Article 20.3.

20.3.2 Nothing in this article 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**.

20.3.3 All demands made against the **City** pursuant to this article shall be made within four (4) months from the date payment is due on the invoice or invoices submitted by the beneficiary to the **Contractor** for labor or **Work** done or for materials or supplies delivered, or, if the demand is for wages, four (4) months from the date the wages were due to be paid to the beneficiary.

20.3.4 All demands made against the **City** by such beneficiary shall be presented to the **Engineer** along with all written documentation concerning the demand which the **Engineer** deems 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.

20.3.5 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.

20.3.6 The **City** will not initiate the payment process of this article or make payment on a demand where the beneficiary making the demand has filed a lien against the **Work** or otherwise sues the **City** prior to receiving a written notice from the **City** that it will not pay the demand.

20.3.7 No beneficiary shall be entitled to interest from the **City**, or to any other costs, including, but not limited to, attorney's fees.

20.4 Upon the receipt by the **City** of a demand pursuant to this article, 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.

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**.

20.4.2 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 lien has been filed, the terms and conditions set forth in Article 23 shall apply.

20.5 The provisions of this article 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, 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 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 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 his **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 within the one year limitations period set forth in Section 137(4)(b).

#### **ARTICLE 21. RETAINED PERCENTAGE**

21.1 If this **Contract** requires 100% 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 100% performance and payment security and if the price for which this **Contract** was awarded does not exceed \$500,000, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, ten (10%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.3 If this **Contract** does not require 100% performance and payment security and if the price for which this **Contract** was awarded exceeds \$500,000, 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: 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**), the **Contractor** shall effect 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 issued by companies that meet the standards of Article 22.2.1 and shall be primary (and non-contributing) to any insurance or self-insurance maintained by the **City**.

22.1.1 Commercial General Liability Insurance: The **Contractor** shall provide a Commercial General Liability Insurance policy covering the **Contractor** as Named Insured and the **City** as an Additional Insured. This policy shall protect the **City** and the **Contractor** from claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this **Contract**. Coverage under this policy shall be at least as broad as that provided by ISO Form CG 0001 (10/01 ed.), must be "occurrence" based rather than "claims-made", and shall 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, Medical Payments, Independent Contractors, Personal Injury (Contractual Exclusion deleted), Explosion, Collapse and Underground Property, and Incidental Malpractice. If such insurance contains an aggregate limit, it shall apply separately to this **Project**.

22.1.1(a) Such Commercial General Liability Insurance shall name the City, together with its officials and employees, as an Additional Insured under this policy. Coverage for the City as Additional Insured shall specifically include the City's officials and employees, and shall be at least as broad as either Insurance Services Office ("ISO") Form CG 20 10 (07/04 ed.) or Form CG 20 33 (07/04 ed.) and shall provide completed operations coverage at least as broad as CG 20 37 (07/04 ed.).

22.1.1(b) If this **Contract** is equal to or greater than Ten Million Dollars (\$10,000,000.00), each Commercial General Liability Insurance policy provided shall contain each of the following endorsements:

22.1.1(b)(i) The Duties in the Event of Occurrence, Claim or Suit condition of the policy is amended per the following: If and insofar as knowledge of an "occurrence", "claim", or "suit" is relevant to the City of New York as Additional Insured under this policy, such knowledge by an agent, servant, official, or employee of the City of New York will not be considered knowledge on the part of the City of New York of the "occurrence", "claim", or "suit" unless the following position shall have received notice thereof from such agent, servant, official, or employee: Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department; and

22.1.1(b)(ii) Any notice, demand or other writing by or on behalf of the Named Insured to the Insurance Company shall also be deemed to be a notice, demand, or other writing on behalf of the City as Additional Insured. Any response by the Insurance Company to such notice, demand or other writing shall be addressed to Named Insured and to the City at the following addresses: Insurance Unit, NYC Comptroller's Office, 1 Centre Street - Room 1222, New York, N.Y. 10007; and Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, NY 10007.

22.1.2 Workers' Compensation Insurance and Disability Benefits Insurance: The **Contractor** shall provide, and ensure that each **Subcontractor** provides, Workers Compensation 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 qualifying for insurance pursuant to Article 22.1.4).

22.1.3 Employers' Liability Insurance: The **Contractor** shall provide, and ensure that each **Subcontractor** provides, Employers Liability Insurance affording compensation due to bodily injury by accident or disease sustained by any employee arising out of and in the course of his/her employment under this **Contract** (except for those qualifying for insurance pursuant to Article 22.1.4).

22.1.4 United States Longshoremen's and Harbor Workers Act and/or Jones Act Insurance: The **Contractor** shall provide, and ensure that each **Subcontractor** provides, 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**.

22.1.5 Builders' Risk Insurance: The **Contractor** shall provide a Builders' Risk Insurance policy covering all risks in completed value form. Such policy shall cover the total value of the **Work** performed in accordance with Schedule A, as well as the value of any equipment, supplies and/or material for the **Project** that may be in storage (on or off the **Site**) or in transit. The policy shall cover the cost of removing debris, including demolition as may be legally necessary by the operation of any law, ordinance or regulation, and for loss or damage to any owned, borrowed, leased or rented capital equipment, tools, including tools of their agents and employees, staging towers and forms,



and property of the **City** held in their care, custody and/or control. Such policy shall name as insureds the **City**, the **Contractor**, and its **Subcontractors**. The Builders' Risk policy shall contain the following endorsements:

22.1.5(a) The **City** and the **Contractor** shall be named as loss payee for the **Work** in order of precedence, as their interest may appear; and

22.1.5(b) In the event the loss occurs at an occupied facility, the policy shall permit occupancy without the consent of the Insurance Company; and

22.1.5(c) In the event that the insurance policy has been issued by a mutual insurance company, the following language shall be included: "The City of New York is not liable for any premium or assessment under this policy of insurance. The First Named Insured is solely liable therefor."

22.1.6 Comprehensive Business Automobile Liability Insurance: The **Contractor** shall provide a Comprehensive Business Automobile Liability policy for liability arising out of any owned, non-owned, leased and hired vehicles to be used in connection with this **Contract**. Coverage should be at least as broad as ISO Form CA0001, ed. 10/01.

22.1.6(a) If autos 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.

22.1.7 Pollution/Environmental Liability Insurance: The **Contractor** shall provide Pollution/Environmental Liability Insurance covering bodily injury and property damage, including loss of use of damaged property or of property that has not been physically injured. 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, suit, or proceedings against the **City** arising from the operations under this **Contract**. Such insurance shall be in the **Contractor's** name and list the **City** as an Additional Insured. Coverage for the **City** as Additional Insured shall specifically include the **City's** officials and employees, and shall be at least as broad as provided to the **Contractor** for this **Project**.

22.1.7(a) If such coverage 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 years from the time the **Work** under this **Contract** is completed.

22.1.8 Marine Insurance:

22.1.8(a) Marine Protection and Indemnity Insurance: The **Contractor** shall provide a Marine Protection and Indemnity policy with coverage at least as broad as policy form SP-23. The policy shall provide coverage for the **Contractor** and for the **City** (together with its officials and employees) as Additional Insured for bodily injury and property damage arising from marine operations under this **Contract** including injury or death of crew members (if not fully provided through other insurance), damage to piers, wharves and other fixed or movable structures and loss of or damage to any other vessel or craft, or to property on such other vessel or craft, not caused by collision.

22.1.8(b) Ship Repairers Legal Liability Insurance: The **Contractor** shall provide a Ship Repairers Legal Liability Insurance policy covering all repair operations under this **Contract** at

or in the vicinity of a designated approved port or yard under this **Contract**. The policy shall provide coverage from the point of acceptance of care custody and control of any **City** vessel. The policy shall provide Bailee Coverage for any **City** vessel in the **Contractor's** care, custody and control and coverage for damage to property of others caused by any **City** vessel in the **Contractor's** care custody and control.

22.1.8(c) Collision Liability/Towers Liability Insurance: The **Contractor** shall provide a Collision Liability/Towers Liability Insurance policy with coverage for the **Contractor** and for the **City** (together with its officials and employees) as Additional Insured at least as broad as the American Institute Tug Form (08/01/76) for all tugs used under this **Contract** and Collision Liability per American Institute Hull Clauses (6/2/77).

22.1.8(d) Marine Pollution Liability Insurance: The **Contractor** shall provide a Marine Pollution Liability Insurance policy covering itself as Named Insured and the **City** (together with its officials and employees) as Additional Insured for liability arising from the discharge or substantial threat of a 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 to real property, personal property or natural resources. Coverage under this policy shall be at least as broad as that provided by Water Quality Insurance Syndicate Form (09/98 ed.).

22.1.9 The **Contractor** shall provide such other types of insurance, at such minimum limits, as are specified in Schedule A of the General Conditions.

## 22.2 General Requirements for Insurance 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 AA, unless prior written approval is obtained from the Mayor's Office of Operations.

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 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 All required insurance policies, except for insurance required pursuant to Sections 22.1.2, 22.1.3, and 22.1.4, shall contain the following endorsement: "This policy may not be cancelled, terminated, modified or changed unless thirty (30) days prior written notice is sent by the Insurance Company to the Named Insured (or First Named Insured, as appropriate), the **Commissioner**, and to the **Comptroller**, attn: Office of Contract Administration, Municipal Building, Room 1005, New York, New York 10007."

### 22.3 Proof of Insurance:

22.3.1 Within ten (10) **Days** of award, the **Contractor** shall, for each policy required under this **Contract**, except for Workers Compensation Insurance and Disability Benefits Insurance and builders' risk insurance, file a Certificate of Insurance with the **Commissioner** pursuant to Article 22.6. For Workers' Compensation Insurance and Disability Benefits Insurance, the **Contractor** shall file proof of insurance in a form acceptable to the **Commissioner** within ten (10) **Days** of award. Accord forms are not acceptable proof of workers' compensation coverage. The Contractor must submit one of the following forms to the Department, or another form acceptable to the Department: C-105.2 -- Certificate of Workers' Compensation Insurance, or U-26.3 -- State Insurance Fund Certificate of Workers' Compensation Insurance. For builders' risk insurance, the **Contractor** shall file a Certificate of Insurance with the **Commissioner** at the direction of the **Commissioner** but in any event no later than ten (10) **Days** prior to commencement of the **Work**.

22.3.1(a) All Certificates of Insurance shall be in a form acceptable to the **City** and shall certify the issuance and effectiveness of the types of insurance specified in Schedule A, each with the specified minimum limits and evidence of the compliance with the Additional Insured or Named Insured provisions of Articles 22.1.1(a), 22.1.5, 22.1.7, and 22.1.8, as applicable. All Certificate(s) of Insurance shall be accompanied by either a duly executed "Certification by Broker" in the form contained in Part II of Schedule A or completed copies of all policies referenced in the Certificate of Insurance. In the absence of completed policies, binders are acceptable.

22.3.2 Certificates of Insurance confirming renewals of insurance shall be submitted to the **Commissioner** prior to the expiration date of coverage of policies required under this **Contract**. Such Certificates of Insurance shall comply with the requirements of Article 22.3.1(a) and, if applicable, Article 22.3.1(b).

22.3.3 The **Contractor** shall be obligated to provide the **City** with a copy of any policy required by this Article 22 upon the demand for such policy by the **Commissioner** or the New York City Law Department.

### 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 hereunder does not excuse the **Contractor** from securing a policy consistent with all provisions of this Article or of any liability arising from its failure to do 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.

22.5 The **City** as Additional Insured or Loss Payee under **Subcontractors'** Insurance. The Contractor shall ensure that each **Subcontractor** name the **City** as Additional Insured or loss payee, as appropriate, under all

policies covering **Work** performed by such **Subcontractor** under this **Contract**. The **City's** coverage as **Additional Insured** shall include the **City's** officials and employees and be at least as broad as that provided to the **Contractor**. The foregoing requirements shall not apply to insurance provided pursuant to Articles 22.1.2, 22.1.3, and 22.1.4.

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 If the **Contract** involves disposal of hazardous materials, the **Contractor** shall dispose such materials only at sites where the disposal site operator maintains Pollution Legal Liability Insurance in the amount of at least \$2,000,000 for losses arising from such disposal site.

22.8 **Materiality/Non-Waiver:** The **Contractor's** failure to secure policy(ies) in complete conformity with this Article, or to give the Insurance Company timely notice of any sort required in this **Contract** on behalf of the **City**, or to do anything else required by this Article 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.

22.9 **Other Remedies:** Insurance coverage in the minimum amounts provided for herein shall not relieve the **Contractor** or **Subcontractors** of any liability under this **Contract**, nor shall it preclude the **City** from exercising any rights or taking such other actions as are 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., as referred 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, and return the balance, if any, without interest, to the **Contractor**.

23.3 **Liens:** If at any time before or within thirty (30) **Days** after the **Work** is completed and accepted by the **City**, any persons claiming to have performed any labor or furnished any material toward the performance or completion of this **Contract**, shall file with the **Agency** and with the **Treasurer** any notice as is described in the

New York State Lien Law, or any act of the Legislature of the State of New York, the City shall retain, from the monies due or to become due under this Contract, so much of such monies as shall be sufficient to pay the amount claimed in said notice, together with the reasonable costs of any action or actions brought or that may be brought to enforce such lien. The monies so retained shall be held by the City until the lien thereon created by the said act and the filing of the said notice shall be discharged pursuant to Law.

#### **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 guarantee are provided for.

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 by authorizing 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 expiration of 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 or lessees of the premises.

**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 **Laws** 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 in the 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 to a 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 **Department**.

**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 for that 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 a time and material basis 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 on a time and material basis 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.

26.2.1 Necessary materials (including transportation to the **Site**); plus

26.2.2 Necessary direct labor, including payroll taxes 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, 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:  $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$ . 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 PRIMEDIA (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 PRIMEDIA (the "Blue Book"). The reasonable rental value is 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 percent of such rental rates; second shift shall be sixty percent of the first shift rate; and third shift shall be forty percent of the first shift rate. Equipment on standby shall be reimbursed at one-third the prorated monthly rental rate. **Contractor**-owned equipment includes equipment from rental companies affiliated with or controlled by the **Contractor**, as determined by the **Commissioner**. In establishing cost reimbursement for non-operating contractor-owned 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 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 Reasonable rental costs of non-**Contractor**-owned 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:  $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$ . 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

26.2.7 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 shall be based upon the Manual Rate for such insurance for the applicable work classifications/codes, in accordance with the most recent schedule promulgated by the New York Compensation Insurance Rating Board; plus

26.2.8 Additional costs incurred as a result of the **Extra Work** for performance and payment bonds; plus

26.2.9 Ten (10%) 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

26.2.10 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus item 26.2.9, 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

26.2.11 Five (5%) percent of the total of items in Article 26.2.6, 26.2.7, and 26.2.8 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**. The cost of such **Extra Work** and of such omitted or reduced **Work** shall be computed based upon applicable **Contract** unit prices. Where there are no applicable **Contract** unit prices, the cost of such **Extra Work** and of such omitted or reduced **Contract Work** shall be computed in accordance with items 26.2.1 through 26.2.8. If the cost of such **Extra Work** exceeds the costs of such omitted or reduced **Contract Work**, the **Contract** price shall be increased by the difference, plus percentages for overhead and profit as provided in Articles 26.2.9 through 26.2.11. If the cost of the omitted or reduced **Contract Work** exceeds the cost of the **Extra Work**, then the **Contract** price shall be reduced by the difference.

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 that arise under, or by virtue of, this **Contract** shall be finally resolved in accordance with the provisions of this article 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 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 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 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 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, 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** in the 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 disputed 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 **Contractor** thus brought into the dispute resolution proceeding shall have the same rights and obligations under this article 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** 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. 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 **Agency** 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 section 7-201 and 7-203 of the New York City 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 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 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;

27.6.1.1 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

27.6.2 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, 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 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 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 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 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 Corporation Counsel, the Director of the Office of Construction, 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 Laws 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.

27.8 Any termination, cancellation, or alleged breach of the **Contract** prior to or during the pendency of any proceedings pursuant to this article 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.

## **ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK**

28.1 While the **Contractor** or any of its **Subcontractors** is performing **Extra Work** on a Time and Material Basis ordered by the **Commissioner** under Article 25, or is performing **disputed Work**, or complying with a determination or order under protest in accordance with Articles 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 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 with respect to such **Extra** 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 for as long as such damages are incurred, 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 fully 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.

30.2 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, 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, 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, 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** or **Comptroller** 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** or **Comptroller** 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.

30.5 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 is not complied with as required, then the **Contractor** hereby consents to the dismissal of the action or dispute resolution procedure.

**CHAPTER VII**  
**POWERS OF THE RESIDENT ENGINEER,**  
**THE ENGINEER OR ARCHITECT 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 by the **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 issue an **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** 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**, officer, 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 **Resident Engineer**, or any other officer, 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 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 hours in duration.

### 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 qualified and 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.

36.1.5 The aforesaid provisions of this article covering every **Contract** for or on behalf of the State or a municipality for the manufacture, sale or distribution of materials, equipment or supplies shall be limited to operations performed within the territorial limits of the State of New York.

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 repair of 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 section 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 applicant for 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, rates of 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 all information and reports including an Employment Report before the award of the **Contract** which are required by E.O. 50, the Rules and Regulations promulgated thereunder, and orders of the 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.

Failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in the **Agency** declaring the **Contractor** to be non-responsible.

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 Administrative Code, that:

36.5.1 The **Contractor** will not engage in any unlawful discriminatory practice in violation of Title VIII of the Administrative Code;

36.5.2 every agreement between the **Contractor** and its **Subcontractors** in excess of \$50,000 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.); and

36.5.3 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 Section 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) calendar **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**. Minimum wages shall be the rates fixed by Federal **Law** and regulations.

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.

37.4 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 wage scale as provided in Labor Law Section 220, as amended, or

37.4.1(b) Less than 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) and Minimum Wages (Article 37.2.6), the party responsible therefore 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 suits brought by the Corporation Counsel in the name of the **City**, in addition to damage for any other breach of this **Contract**, 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 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 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, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public work projects are rendered simultaneously, such **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public work 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 work 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 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 work 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 or she is working. If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand dollars, such notice shall also include a statement that, that each worker, laborer or mechanic 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 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, which signed statement shall be maintained with the payroll records required by this **Contract**; and

37.6.3.1 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:** Provide laminated identification badges which indicate the worker's, laborer's or mechanic's name, trade, employer's name and employment starting date (month/day/year). Further, require as a condition 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**; 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 in Article 37.6.1 in that language or languages as may be required. The **Contractor** is responsible for all distributions under 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 If this **Contract** is for an amount greater than \$1,000,000, 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 \$750,000, 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 used if 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** or **Subcontractor(s)** 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**.

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 with the provisions of this article 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** for 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** shall maintain on the **Site** the original payrolls or transcripts thereof which the **Contractor** and its **Subcontractor(s)** are required to maintain pursuant to **Labor Law** Section 220. The **Contractor** and **Subcontractor(s)** shall submit original payrolls or transcripts, subscribed and affirmed by it as true, with each and every payment requisition. 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 original payrolls or transcripts thereof, subscribed and affirmed by it as true, and the statements signed by each worker pursuant to this Chapter VIII. In addition, the **Contractor** and **Subcontractor(s)** shall furnish to the **Engineer** upon written demand any other information to satisfy the **Engineer** that this Chapter VIII and the **Labor Law**, as to the hours of employment and rates of wages, are being observed. The **Contractor** shall maintain the payrolls or transcripts thereof for six (6) years from the date of completion of the **Work** on this **Contract**.

38.2 When directed by the **Engineer**, the **Contractor** or **Subcontractor** shall provide the **Engineer** with an attendance sheet for each **Day** on which **Work** is performed on the **Site**. Such attendance sheet shall be in a form acceptable to the **Agency** and shall provide information for employees of the **Contractor** and **Subcontractor(s)**.

### 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** void.

## 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 price or unit prices 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, unless otherwise directed by the **Resident Engineer**, the **Contractor** shall submit to 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 a month, 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 such satisfactory payment application, 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 **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 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 section 43.5 herein, then the **Contractor** shall pay interest on amounts due to such **Subcontractor** or **Materialman** at a 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 NY General Business Law. Accrual of interest shall commence on the day immediately following the expiration of the seventh day following receipt of payment to the **Contractor** by 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 suppliers 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 When the **Work** in the opinion of the **Commissioner**, has been substantially but not entirely completed, he/she shall issue a certificate of **Substantial Completion**.

44.2 The **Contractor** shall submit with the **Substantial Completion** requisition:

44.2.1 A Final Verified Statement of any and all alleged claims against the **City** and any pending dispute resolution procedures in accord with the **PPB** Rules and this **Contract**, 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.

44.2.1(a) With respect to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the Corporation Counsel of the **City** 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 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, will have waived any such claims.

44.2.2 A **Final Approved Punch List**.

44.2.3 Where required, a request for a substantial or final extension of time.

44.3 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 where the **Contractor** shall fail 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.

44.4 No further partial payments shall be made to the **Contractor** after the **Commissioner** issues a Certificate of **Substantial Completion**, except the **Substantial Completion** payment and **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.

44.5 The **Contractor** acknowledges that nothing contained in this article 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. 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 and all alleged claims against the **City**, and any pending dispute resolution procedures in accord with the **PPB** Rules and this **Contract**, 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 Corporation Counsel of the **City** 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, is entitled 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 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 to 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 officers, 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 44 and 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, or those for amounts deducted by the **Commissioner** from the final requisition or by the **Comptroller** 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 officer, 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 from commencing an action for breach of **Contract** under this provision to the extent permitted by **Law** and by the terms of the **Contract** 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 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 intended for 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 the 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; or if

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.

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 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 a lawsuit 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 provision 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 complete 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 previous provisions of this Chapter X shall be in addition to any and all other legal or equitable remedies permissible in the premises.

54.3 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**.

54.4 The expense of such completion, 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**.

## 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 perform the **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 lawsuit, 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 lawsuit be instituted or maintained on any such claims unless such lawsuit is commenced within six (6) months after the date the **Commissioner** issues a Certificate of **Substantial Completion** pursuant to Article 44; except that:

56.2.1 Any claims arising out of events occurring after the date the **Commissioner** issues a Certificate of **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 Any claims for monies deducted, retained or withheld under the provisions of this **Contract** shall be asserted within six (6) months after the date when such monies becomes 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 lawsuit 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 indemnify the **City** against any and all claims and judgments for damages for any infringement of copyright and patents or use of patented articles, tools, materials, equipment, appliances or processes in the performance or completion of the **Work**, including all costs and expenses which the **City** shall or may incur or be obligated to pay by reason thereof.

## ARTICLE 58. NO CLAIM AGAINST OFFICERS, AGENTS OR EMPLOYEES

58.1 No claim whatsoever shall be made by the **Contractor** against any officer, 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. SERVICES OF NOTICES

59.1 The **Contractor** hereby designates the business 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. Actual delivery of any such notice, direction or communication to the aforesaid place, or depositing it in a postpaid wrapper addressed thereto in any post office box (P.O. Box) regularly maintained by the United States Postal Service, shall be conclusively deemed to be sufficient service thereof upon the **Contractor** as the date of such delivery or deposit.

59.2 Such address 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, local taxes and Sales and Compensation Use Taxes of the State of New York and of cities and counties on all materials and supplies 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** or a **Subcontractor**, or to supplies and materials which even though they are consumed, are not incorporated into the completed **Work** (consumable supplies), and the **Contractor** and its **Subcontractors** shall be responsible for and pay any and all applicable taxes, including Sales and Compensation Use Taxes, on such leased tools, machinery, equipment or other property and upon all such unincorporated supplies and materials.

62.2 The **Contractor** agrees to sell and the **City** agrees to purchase all supplies and materials, other than consumable supplies, 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 supplies and materials shall be in full payment and consideration for the sale of such supplies and materials herein.

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 for the performance of such **Work**, labor and services, and the sum so paid pursuant to this **Contract** for such **Work**, labor, etc., 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** and labor.

62.3 The purchase by the **Contractor** of the supplies and materials sold hereunder shall be a purchase or procurement for resale and therefore not subject to the New York State or **City** Sales or Compensation Use Taxes or any such taxes of cities or counties. The sale of such supplies and materials by the **Contractor** to the **City** is exempt from the aforesaid sales or compensating use taxes. With respect to such supplies and materials, 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 supplies and materials, free of liens and/or encumbrances, and the **Contractor** shall mark or otherwise identify all such materials as the property of the **City**.

62.4 Title to all materials 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 supplies and materials to the **Site** and prior to its becoming a part of the permanent structure and/or construction. Notwithstanding such transfer of title, the **Contractor** shall have the full and continuing responsibility to install such materials and supplies in accordance with the provisions of this **Contract**, protect them, maintain them in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional materials 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 such supplies and materials are rejected as being defective or otherwise unsatisfactory, title to all such supplies and materials shall be deemed to have been transferred back to the **Contractor**.

62.5 The purchase by **Subcontractors** of supplies and materials to be sold hereunder shall also be a purchase or procurement for resale to the **Contractor** (either directly or through other **Subcontractors**) and therefore not subject to the aforesaid Sales or Compensation Use Taxes, provided that the subcontract agreements provide for the resale of such supplies and materials prior to and separate and apart from the incorporation of such supplies and materials into the permanent structure and/or construction and that such subcontract agreements are in a form similar to this **Contract** with respect to the separation of the sale of materials from the **Work** and labor, services, consumable supplies and any other matters to be provided, and provided further that the subcontract agreements provide separate prices for materials and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for supplies and materials from the payments for other **Work** and labor and other things to be provided.

62.6 The **Contractor** and its **Subcontractors** and Materialmen shall obtain any and all necessary **Contractor** Exempt Purchase Certificates or Resale Certificates from the appropriate governmental **Agency** or

**Agencies**, and furnish a **Contractor Exempt Purchase Certificate** or **Resale Certificate** to all persons, firms or corporations from which they purchase supplies and materials for the performance of the **Work** covered by this **Contract**.

62.7 In the event any of the provisions of this article shall be deemed to be in conflict with any other provisions of this **Contract** or create any ambiguity, then the provisions of this article 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 New York 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 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;

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 **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**.

63.7 The **Commissioner** shall consider and address in reaching his/her determination and in assessing 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 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.

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 that has 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 herein 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 herein 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 herein 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 herein 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 **Contract**.

64.2 In the event of termination by the **City** pursuant to this article, 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 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 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, less salvage value, 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:

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, whichever is less, 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 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 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.

64.2.2 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 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 will be made pursuant to Article 64.2.1(b).

64.2.3 Time and Material Contracts or Items: On all **Contracts** or items in a **Contract** where time and material records are specified as the basis for payment of the **Work**, 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 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 Cost shall not include overhead.

64.3 In no event shall any payments under this article exceed the **Contract** price for such items.

64.4 All payments pursuant to this article 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, 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 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** of New York, State of New York, 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 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 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 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 United States 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 State of New York, upon request of the **City**, the **Contractor** shall either consent to a transfer of the action to a State 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

**Contractor** shall consent to dismiss such action without prejudice and may thereafter reinstate the action in a State Court of competent jurisdiction in the **City**.

65.3 If any provision(s) of this article 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 of the Export Administration Act of 1979, as amended, or the regulations of the United States Department of Commerce 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, 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.

67.2 Unless specifically waived by the **Commissioner** with the approval of the Division of Economic and Financial Opportunity of the 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 enterprise ("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 prime **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 LBE's 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 **Contract**. Remedy for such breach of **Contract** may include the imposition of any or all of the following sanctions:

67.6.1 Reducing a **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 Where non-compliance is by an LBE, de-certifying and declaring the LBE 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 construction 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** and rules, 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 to and 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 assess, 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 action efforts 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 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. HEALTH INSURANCE COVERAGE

70.1 If the price for which this **Contract** was awarded exceeds \$100,000, or if the price for which this **Contract** was awarded when combined with other construction or services contracts awarded the **Contractor** by the **City** in the year prior to award of this **Contract** exceeds \$100,000, the **Contractor**, following registration of the **Contract**, shall be required to submit responses to requests for information regarding the nature of any health insurance provided by the **Contractor** to its employees and their spouses and domestic partners, upon request of the **Agency** or other designated **City** agency.

#### 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 strict accordance with the **Specifications** and **Addenda** thereto, numbered \_\_\_\_\_.

**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 of: SEE BELOW Dollars, (\$23,562,877.20), 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. TWENTY THREE MILLION, FIVE HUNDRED SIXTY TWO THOUSAND, EIGHT HUNDRED SEVENTY SEVEN DOLLARS 20100

**ARTICLE 76. ELECTRONIC FUNDS TRANSFER**

76.1 In accordance with Section 6-107.1 of the New York City Administrative Code, the Contractor agrees to accept payments under this Agreement from the City by electronic funds transfer. An electronic funds transfer 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 Agreement, Contractor shall designate one financial institution or other authorized payment agent and shall complete the "EFT Vendor Payment Enrollment Form" (available at <http://www.nyc.gov/dof>) in order to provide the Commissioner of Finance with information necessary for Contractor to receive electronic funds transfer payments through the 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 agreement. 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 agency head may waive the application of the requirements herein to payments on contracts entered into pursuant to §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 contracting agency may waive the requirements hereunder 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 - PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT**

**NOTICE TO ALL PROSPECTIVE CONTRACTORS**

**ARTICLE I. M/WBE PROGRAM**

Local Law No. 129 of 2005 added Section 6-129 to the Administrative Code of the City of New York. The local law creates a program for participation by minority-owned and women-owned business enterprises (MBEs and WBEs) in City procurement. As stated in the 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 made pursuant to Local Law 129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the Minority-Owned and Women-Owned Business Enterprise ("M/WBE") program created by Local Law 129, the specific requirements of M/WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "Subcontractor Utilization Plan"), and are detailed below.

The Contractor must comply with all applicable M/WBE requirements for this Contract.

Article I, Part A, below, sets forth provisions related to the participation goals for construction 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 AND PROFESSIONAL SERVICES CONTRACTS

1. The Target Subcontracting Percentage applicable to this Contract is set forth in Schedule B (Subcontractor Utilization Plan) Part I to this Contract [see First Page, line (1)]. (The Subcontractor Utilization Plan is included in the Bid Booklet.)

The "Target Subcontracting Percentage" is the percentage of the total Contract which Agency anticipates that the prime contractor for this Contract would in the normal course of business award to one or more subcontractors for amounts under \$1 million for construction and professional services.

A prospective contractor may seek a full or partial pre-award waiver of the Target Subcontracting Percentage in accordance with Local Law 129 and Part A, Section 10 below. To apply for a full or partial waiver of the Target Subcontracting Percentage, a prospective contractor must complete the Subcontractor Utilization Plan (Part III of Schedule B), and must submit such request no later than seven (7) days prior to the date and time the bids or proposals are due, in writing to the Agency by e-mail at [poped@ddc.nyc.gov](mailto:poped@ddc.nyc.gov) or via facsimile at (718-391-1885). Bidders/proposers who have submitted requests will receive a response by no later than two (2) calendar days prior to the date bids or proposals are due, provided, however, that if that date would fall on a weekend or holiday, a response will be provided by close-of-business on the business day before such weekend or holiday date.

2. The Subcontractor Participation Goals established for this Contract are set forth on Schedule B (Subcontractor Utilization Plan), Part I included in this Contract [see First Page, line (2) and/or line (3)].

The Subcontractor Participation Goals represent a percentage of the total dollar value of all construction and/or professional services subcontracts under this Agreement for amounts under \$1 million.

3. If Subcontractor Participation Goals have been established for this Contract, Contractor agrees or shall agree as a material term of the Agreement that, with respect to the total amount of the Agreement to be awarded to one or more subcontractors pursuant to subcontracts for amounts under \$1 million, Contractor shall be subject to the Subcontractor Participation Goals, unless the goals are modified by Agency in accordance with Local Law 129 and Part A, Section 11 below.

4. If Subcontractor 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, Part II Subcontractor Utilization Plan (see Second and Third Pages) indicating: (a) the percentage of work it intends to subcontract; (b) the percentage of work it intends to award to subcontractors for amounts under \$1 million; (c) in cases where the prospective contractor intends to award subcontracts for amounts under \$1 million, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs; and (d) the general time frames in which such work by MBEs and/or WBEs is scheduled to occur. In the event that this Subcontractor Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to award the Target Subcontracting Percentage, 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 Target Subcontracting Percentage in accordance with Local Law 129 and Part A, Section 10 below.

**THE BIDDER/PROPOSER MUST COMPLETE THE SUBCONTRACTOR UTILIZATION PLAN (SCHEDULE B, PART II) INCLUDED IN THE BID BOOKLET. SUBCONTRACTOR UTILIZATION PLANS WHICH DO NOT INCLUDE THE REQUIRED AFFIRMATIONS WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE TARGET SUBCONTRACTING PERCENTAGE IS GRANTED (SCHEDULE B, SUBCONTRACTOR UTILIZATION PLAN, PART III). IN THE EVENT THAT THE CITY DETERMINES THAT VENDOR HAS SUBMITTED A SUBCONTRACTOR UTILIZATION PLAN WHERE THE REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE PLAN ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE AFFIRMATION, THE VENDOR 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 PLAN 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 EMAILED OR FAXED (IF THE VENDOR HAS PROVIDED AN EMAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.**

5. Where a Subcontractor 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. 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. M/WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the M/WBE participation goals. Such certification must occur prior to the firms' commencement of work as subcontractors. A list of M/WBE firms may be obtained from the DSBS website at [www.nyc.gov/getcertified](http://www.nyc.gov/getcertified), by emailing DSBS at [MWBE@sbs.nyc.gov](mailto:MWBE@sbs.nyc.gov), by calling the DSBS certification hotline at (212) 513-6311, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7<sup>th</sup> floor. Eligible firms that have not yet been certified may contact DSBS (as indicated above) in order to seek certification.

7. Where a Subcontractor 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 paid to subcontractors (including subcontractors that are not MBEs or WBEs); the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor pursuant to such plan as well as 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 paid to subcontractors (including subcontractors that are not MBEs or WBEs); 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 hired pursuant to such plan, 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 Subcontractor Utilization Plan, Agency shall take appropriate action, in accordance with Local Law 129 and Article II below, unless the Contractor has obtained a modification of its Subcontractor Utilization Plan in accordance with Local Law 129 and Part A, Section 11 below.

9. Where a Subcontractor Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds 10 percent of the Agreement, Agency shall establish participation goals for the work to be performed pursuant to the change order.

10. Pre-award waiver of Target Subcontracting Percentage. Agency may grant a full or partial waiver of the Target Subcontracting Percentage to a bidder or proposer, as applicable, who demonstrates—before submission of the bid or proposal—that it has legitimate business reasons for proposing the level of subcontracting in its Subcontractor Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder or proposer, 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 for under one million dollars represented by the Target Subcontracting Percentage. In making such determination, Agency may consider whether the Subcontractor Utilization Plan is consistent with past subcontracting practices of the bidder or proposer, as applicable, and whether the bidder or proposer, as applicable, has made good faith efforts to identify portions of the Contract that it intends to subcontract.

11. Modification of Subcontractor Utilization Plan. A Contractor may request a modification of its Subcontractor Utilization Plan (Subcontractor Participation Goals) after award of this Contract. The Agency may grant such request if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the Subcontractor Participation Goals. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:

- (a) 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;
- (b) The Contractor provided notice of specific opportunities to participate in the contract, in a timely manner, to minority and women's business organizations;
- (c) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs and WBE's that their interest in the contract was solicited;
- (d) 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 contractor utilization plan, and for which the Contractor claims an inability to retain MBE's or WBE's;
- (e) 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;
- (f) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts;
- (g) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;
- (h) 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 WBE's.

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

12. If Subcontractor Participation Goals have been established for 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 Subcontractor 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 Subcontractor Utilization Plan.
2. Pursuant to DSBS rules, construction contracts that include a requirement for a Subcontractor Utilization Plan shall not be subject to the law governing Locally Based Enterprises set forth in Administrative Code Section 6-108.1.
3. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and WBEs in contracts.
4. Prospective contractors are encouraged to enter into joint ventures with MBEs and WBEs.
5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE requirements set forth herein and the pertinent provisions of Local Law 129 of 2005, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE requirements of this Contract and pertinent provisions of Local Law 129 of 2005, 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 M/WBE's to meet the required Subcontractor 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 Subcontractor Utilization Plan, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering 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 this Section 6-129, including, but not limited any Subcontractor 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) assess liquidated damages or reduction of fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the program established by Section 6-129, 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) exercise 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) take any other appropriate remedy.

4. Whenever Agency has reason to believe that an MBE 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), 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.


5. 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 or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.

6. The Contractor's record in implementing its Subcontractor Utilization Plan shall be a factor in the evaluation of its performance. Whenever a contracting agency determines that a contractor's compliance with a Subcontractor Utilization Plan has been unsatisfactory, the agency shall, after consultation with the city chief procurement officer, file an advice of caution form for inclusion in VENDEX as caution data.




IN WITNESS WHEREOF, the Commissioner, on behalf of the City of New York, and the Contractor, have executed this agreement in quadruplicate, two parts of which are to remain with the Commissioner, another to be filed with the Comptroller of the City, and the fourth to be delivered to the Contractor.

THE CITY OF NEW YORK

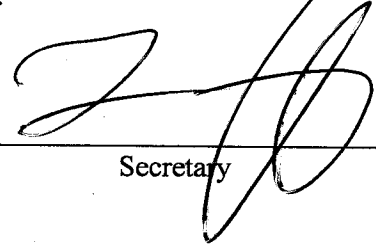
By:   
Deputy Commissioner

CONTRACTOR: MFM Contracting Corp

By:   
(Member of Firm or Officer of Corporation)

Title: President

(Where Contractor is a Corporation, add):  
Attest:

  
Secretary

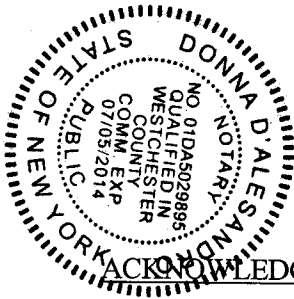
(Seal)

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Westchester ss:

On this 5<sup>th</sup> day of November, 2013, before me personally came Michael V. Petrillo to me known who, being by me duly sworn did depose and say that he resides at Purchase, N.Y. 10577 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.



Donna D'Alessandro  
Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT 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

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

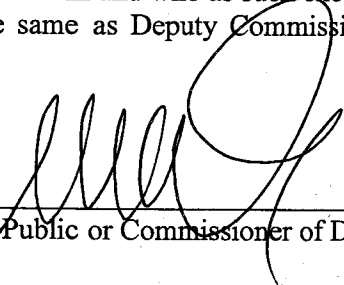
On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared \_\_\_\_\_ to me known, and known to me to be the person described in and who executed the foregoing instrument; and acknowledged that he executed the same.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT BY COMMISSIONER

State of New York County of Queens ss:

On this 12<sup>th</sup> day of NOV, 2013 before me personally came Eric MacFarlane to me known, and known to be the Deputy Commissioner of the Department of Design and Construction of The City of New York, the person described as such in and who as such executed the foregoing instrument and acknowledged to me that he executed the same as Deputy Commissioner for the purposes therein mentioned.

  
\_\_\_\_\_  
Notary Public or Commissioner of Deeds

VICTORIA AYO-VAUGHAN  
Notary Public, State of New York  
Registration #01AY5014042  
Qualified In Queens County  
Commission Expires July 15, 2015

AUTHORITY

MAYOR'S CERTIFICATE NO. CBX  
BUDGET DIRECTOR'S CERTIFICATE NO.

DATED  
DATED

APPROPRIATION  
COMMISSIONER'S CERTIFICATE

In conformity with the provisions of Section 6-101 of the Administrative Code of the City of New York, it is hereby certified that the estimated cost of the work, materials and supplies required by the within Contract, amounting to


Twenty Three Million, Five Hundred  
Sixty Two Thousand, Eight Hundred  
Seventy Seven Dollars and 20/100  
Dollars (\$ 23,562,877.20)

is chargeable to the fund of the Department of Design and Construction entitled Code

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Department of Design and Construction

I hereby certify that the specifications contained herein comply with the terms and conditions of the BUDGET.

  
\_\_\_\_\_  
Deputy Commissioner

COMPTROLLER'S CERTIFICATE

The City of New York \_\_\_\_\_

Pursuant to the provisions of Section 6-101 of the Administrative Code of the City of New York, I hereby certify that there remains unapplied and unexpended a balance of the above mentioned fund applicable to this Contract sufficient to pay the estimated expense of executing the same viz:

\$ \_\_\_\_\_

\_\_\_\_\_  
Comptroller

**Performance Bond #2 (Pages 82 to 85): Use if the total contract price is more than \$5 Million.**

BOND NO. SU1124589

PERFORMANCE BOND #2 (Page 1)

**PERFORMANCE BOND #2**

**KNOW ALL PERSONS BY THESE PRESENTS,**

That we, MFM CONTRACTING CORPORATION

335 CENTER AVENUE, MAMARONECK, NY 10543

hereinafter referred to as the "Principal,"  
and, \_\_\_\_\_

ARCH INSURANCE COMPANY

THREE PARKWAY, SUITE 1500, PHILADELPHIA, PA 19102

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 \_\_\_\_\_

TWENTY THREE MILLION FIVE HUNDRED SIXTY TWO THOUSAND EIGHT HUNDRED

SEVENTY SEVEN AND 20/100 DOLLARS

(\$ 23,562,877.20) 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.

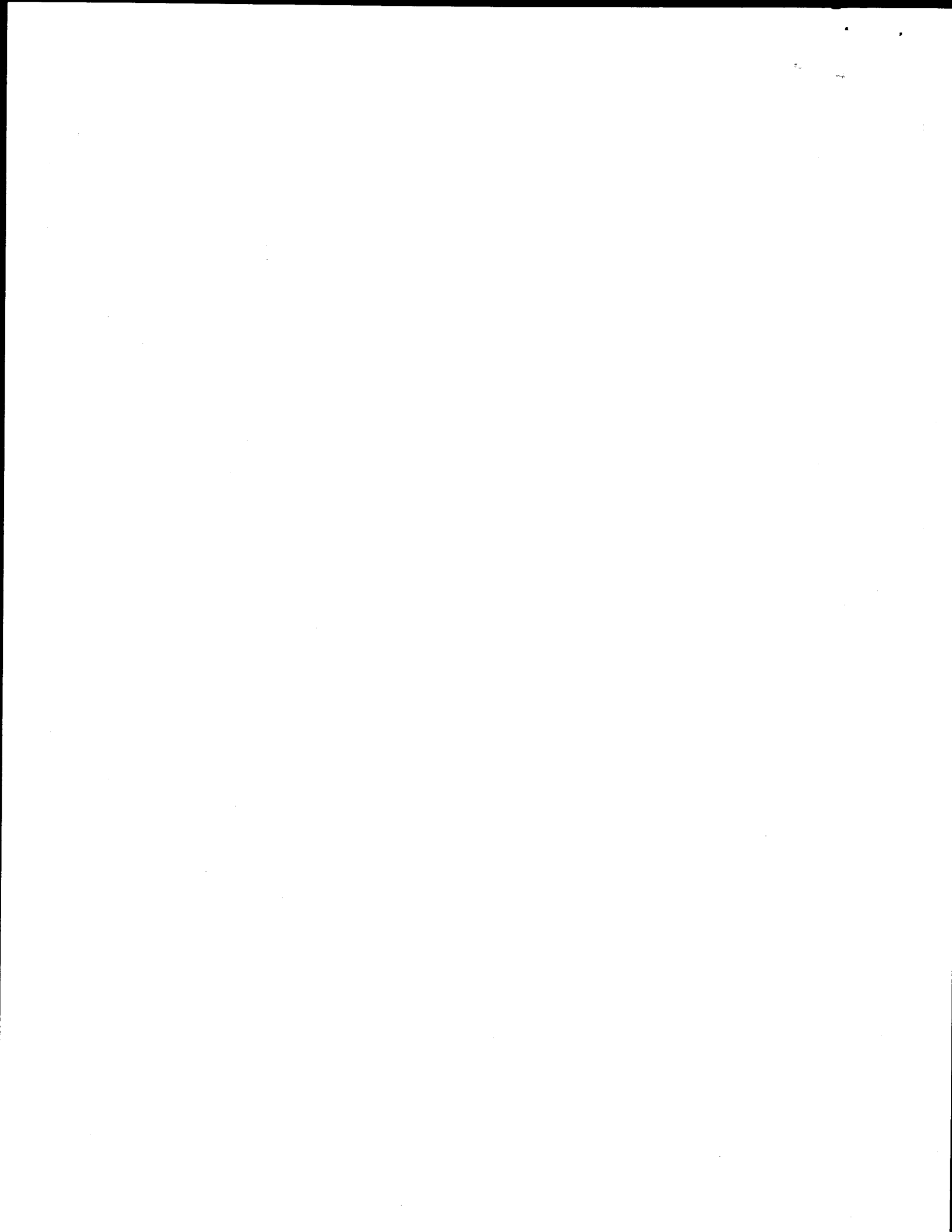
**WHEREAS,** the Principal is about to enter, or has entered, into a Contract in writing with the City for

CONTRACT NO. HWMBRT5A - EAST 34TH STREET SELECT BUS SERVICE FROM FDR

DRIVE TO LEXINGTON AVENUE-BOROUGH OF MANHATTAN.

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, 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



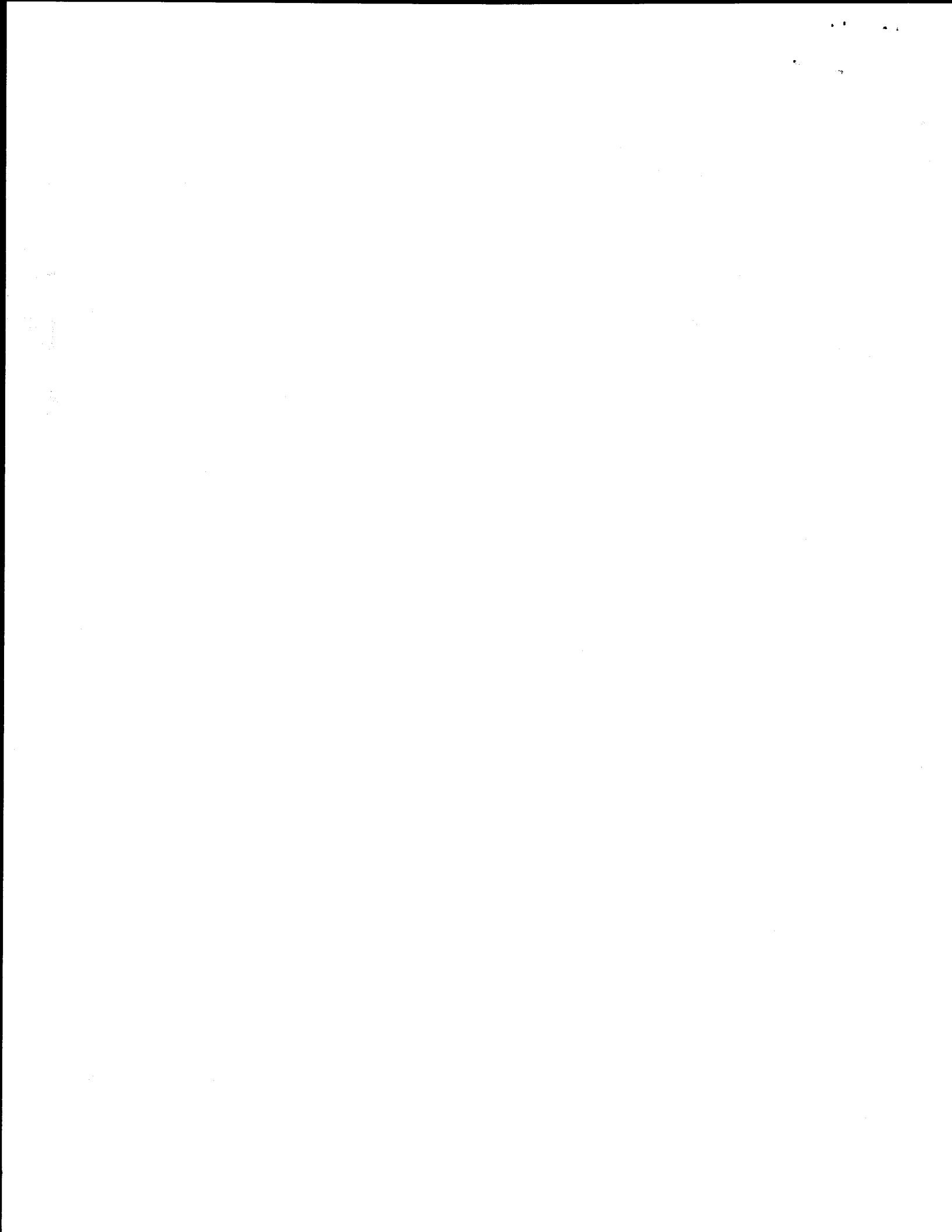
**Performance Bond #2 (Pages 82 to 85): Use if the total contract price is more than \$5 Million.**

**PERFORMANCE BOND #2 (Page 2)**

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 null and void, otherwise to remain in full force and effect.

The Surety (Sureties), for value received, hereby stipulates and agrees, upon written notice from the City that 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 the Contract, 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 the Contract, including physical site work, within twenty-five (25) business days after written notice thereof from 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 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 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 by any extension of time, modification, omission, addition, or change in or to 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 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 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 by or in relation to said Principal.





**Performance Bond #2 (Pages 82 to 85): Use if the total contract price is more than \$5 Million.**

**PERFORMANCE BOND #2 (Page 3)**

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

31ST day of OCTOBER 2013  
(Seal)

MFM CONTRACTING CORPORATION (L.S.)  
Principal

(Seal)

By: Michael V. [Signature]

Surety

By: ARCH INSURANCE COMPANY  
[Signature]

(Seal)

SUSAN LUPSKI  
ATTORNEY-IN-FACT

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

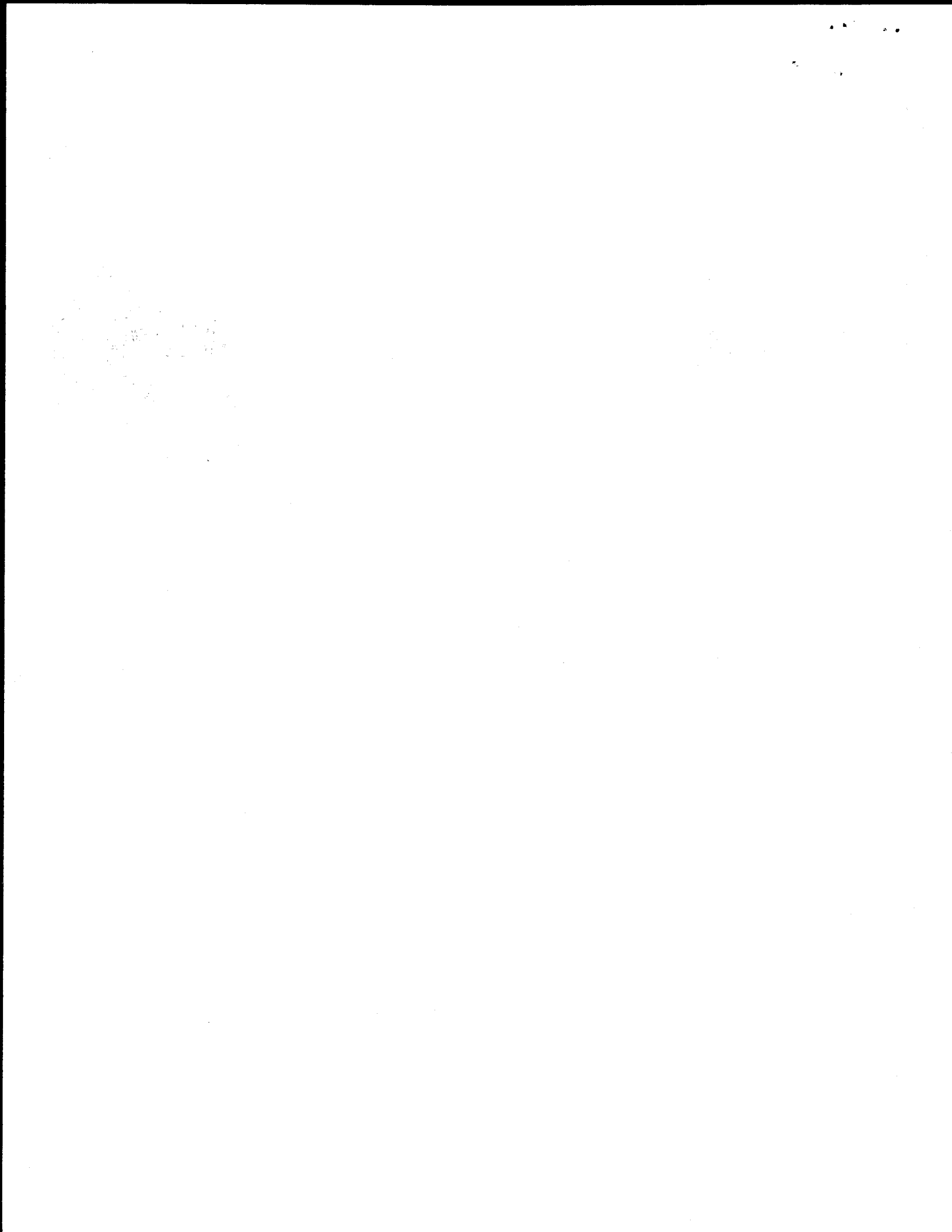
Bond Premium Rate \$14.45/SLIDING SCALE

Bond Premium Cost \$191,729.00

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 a duly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.



**Performance Bond #2 (Pages 82 to 85): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page 4)

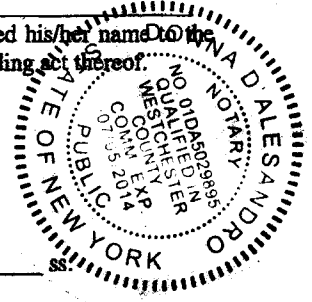
**ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION**

State of New York County of Westchester ss:

On this 5<sup>th</sup> day of November, 20 13 before me personally came Michael V. Petriilo, to me known, who, being by me duly sworn did depose and say that he resides at Purchase, N.Y. 10577

; 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.

Deanna Walis and  
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 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.



**THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON BLUE BACKGROUND.**

***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. Not valid for Mortgage, Note, Loan, Letter of Credit, Bank Deposit, Currency Rate, Interest Rate or Residential Value Guarantees.***

## POWER OF ATTORNEY

Know All Persons By These Presents:

That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal administrative office in Jersey City, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

Camille Maitland, Colette R. Chisholm, Desiree Cardlin, George O. Brewster, Gerard S. Macholz, Kristy Caporale, Lee Ferrucci, Nelly Renchwich, Rita Sagistano, Robert T. Pearson, Susan Lupski, Thomas Bean and Vincent A. Walsh of Uniondale, NY (EACH)

its true and lawful Attorney(s)-in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds, undertakings, recognizances and other surety obligations, in the penal sum not exceeding Ninety Million Dollars (\$90,000,000.00).

This authority does not permit the same obligation to be split into two or more bonds in order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Jersey City, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on September 15, 2011, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:

"VOTED, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."


This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on September 15, 2011:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on September 15, 2011, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.

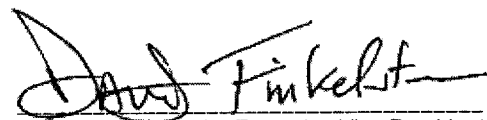
In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 8<sup>th</sup> day of October, 2013.

Attested and Certified

Arch Insurance Company

  
Patrick K. Nails, Secretary

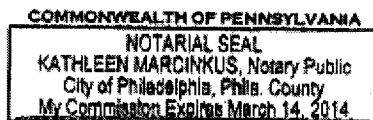


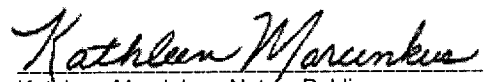
  
David M. Finkelstein, Executive Vice President

STATE OF PENNSYLVANIA SS

COUNTY OF PHILADELPHIA SS

I, Kathleen Marcinkus, a Notary Public, do hereby certify that Patrick K. Nails and David M. Finkelstein personally known to me to be the same persons whose names are respectively as Secretary and Executive Vice President of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.

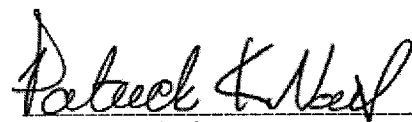


  
Kathleen Marcinkus, Notary Public  
My commission expires 03/14/2014

CERTIFICATION

I, Patrick K. Nails, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated October 8, 2013 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said David M. Finkelstein, who executed the Power of Attorney as Executive Vice President, was on the date of execution of the attached Power of Attorney the duly elected Executive Vice President of the Arch Insurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this \_\_\_\_\_ day of OCT 31 2013, 20\_\_\_\_\_.

  
Patrick K. Nails, Secretary

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

**PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:**

Arch Insurance – Surety Division  
3 Parkway, Suite 1500  
Philadelphia, PA 19102




ACKNOWLEDGMENT OF SURETY COMPANY

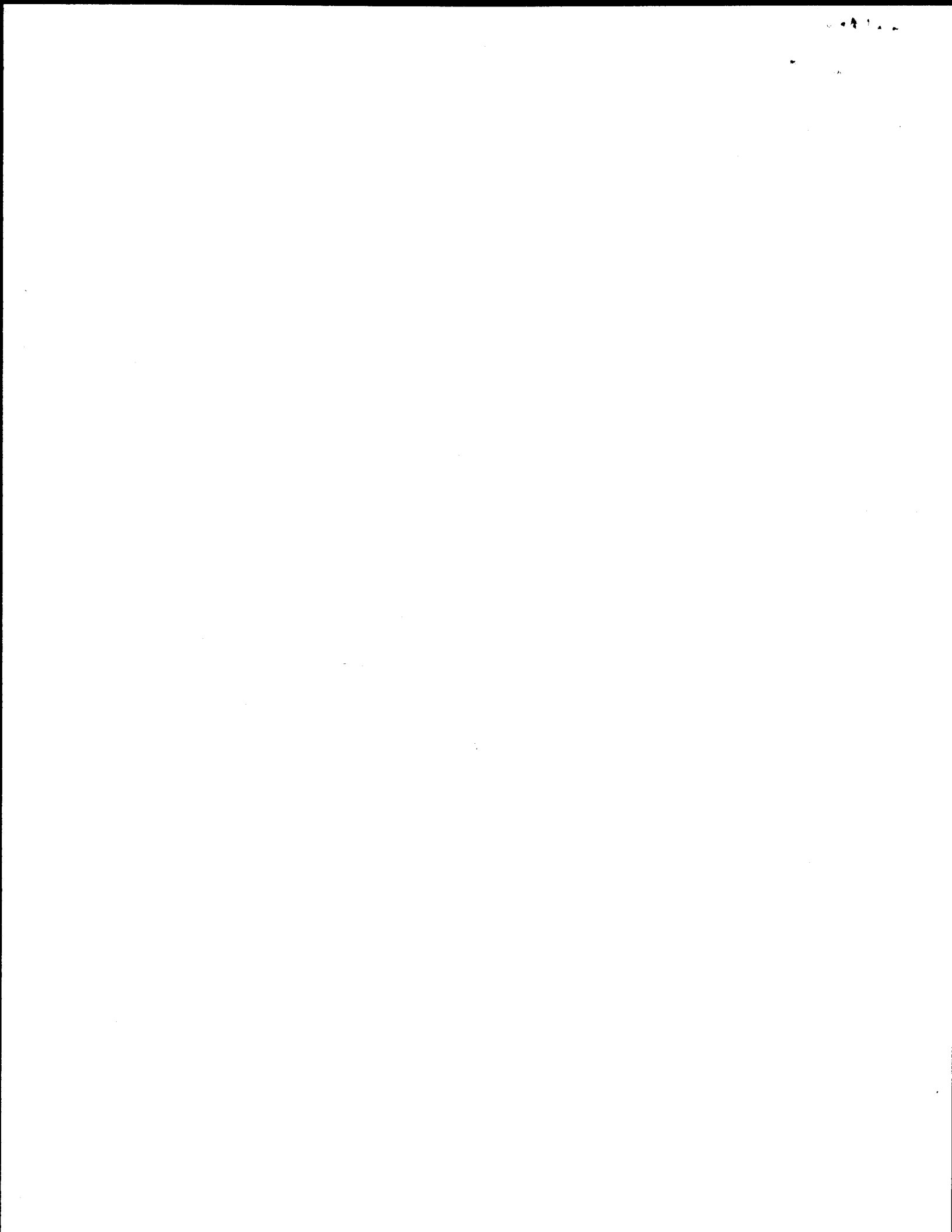
STATE OF ..... New York ..... } ss  
COUNTY OF ... Nassau ..... }

On this ..... OCTOBER 31, 2013 ..... before me personally came..... SUSAN LUPSKI  
to me know, who, being by me duly sworn, did depose and say; that he/she resides in  
..... NASSAU COUNTY ..... State of NEW YORK ..... that he/she is the Attorney-In-Fact of the  
..... ARCH 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 it was so affixed by order of  
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 ARCH 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.

GRACE ACKERSON  
Notary Public, State of New York  
Nassau County  
Lic. #01AC6111590  
Term Expires June 14, 2016

  
.....  
Notary Public

NY acknowledgment









**Payment Bond (Pages 86 to 89): Use for any contract for which a Payment Bond is required.**

BOND NO. SU1124589

PAYMENT BOND (Page 1)

**PAYMENT BOND**

KNOW ALL PERSONS BY THESE PRESENTS, That we, \_\_\_\_\_

MFMC CONTRACTING CORPORATION

335 CENTER AVENUE, MAMARONECK, NY 10543

hereinafter referred to as the "Principal", and \_\_\_\_\_

ARCH INSURANCE COMPANY

THREE PARKWAY, SUITE 1500, PHILADELPHIA, PA 19102

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

TWENTY THREE MILLION FIVE HUNDRED SIXTY TWO THOUSAND EIGHT HUNDRED SEVENTY

SEVEN AND 20/100 DOLLARS

(\$<sup>23,562,877.20</sup>) 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.

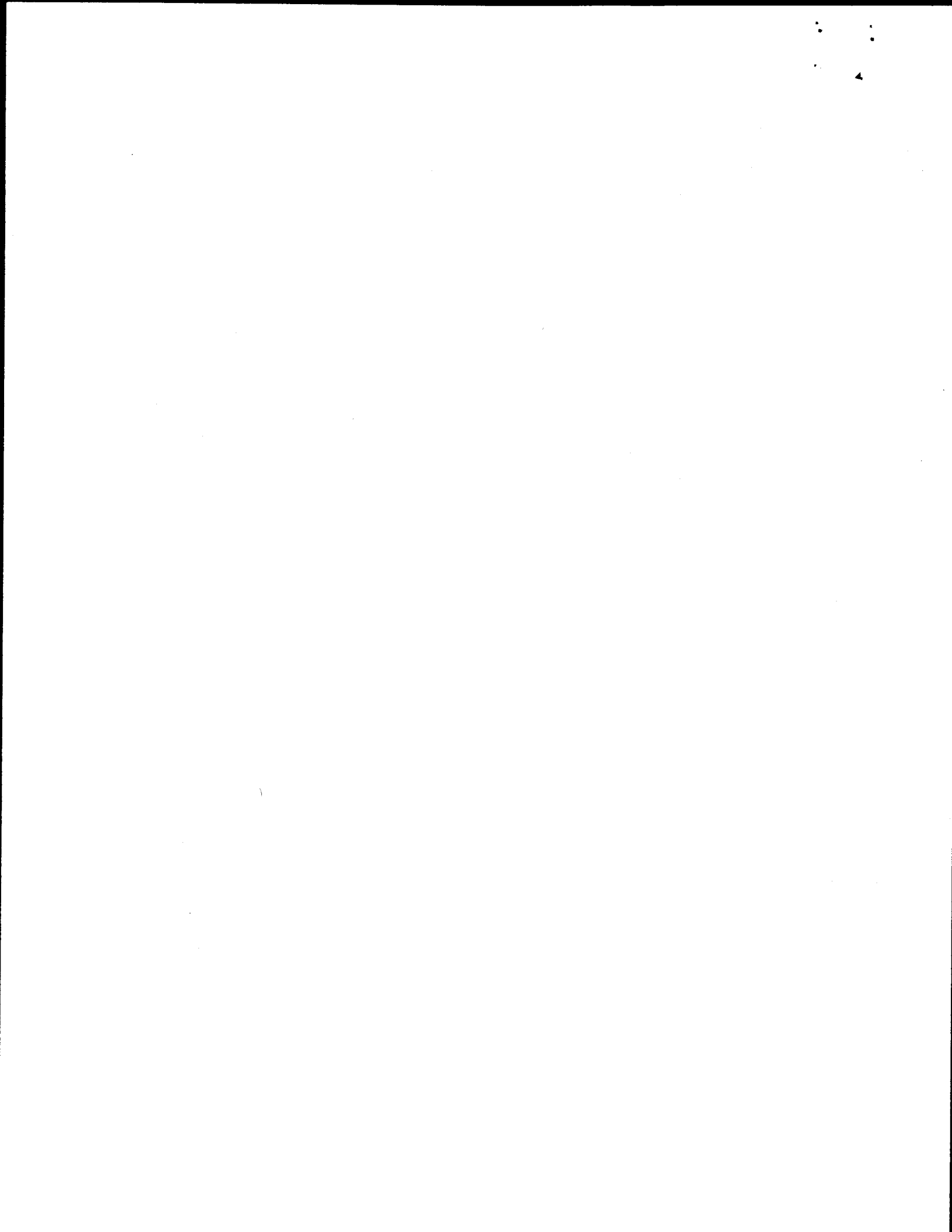
WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

CONTRACT NO. HWMBRT5A - EAST 34TH STREET SELECT BUS SERVICE FROM FDR DRIVE  
TO LEXINGTON AVENUE - BOROUGH OF MANHATTAN.

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



**Payment Bond (Pages 86 to 89): Use for any contract for which a Payment Bond is required.**

**PAYMENT BOND (Page 2)**

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 in full 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.

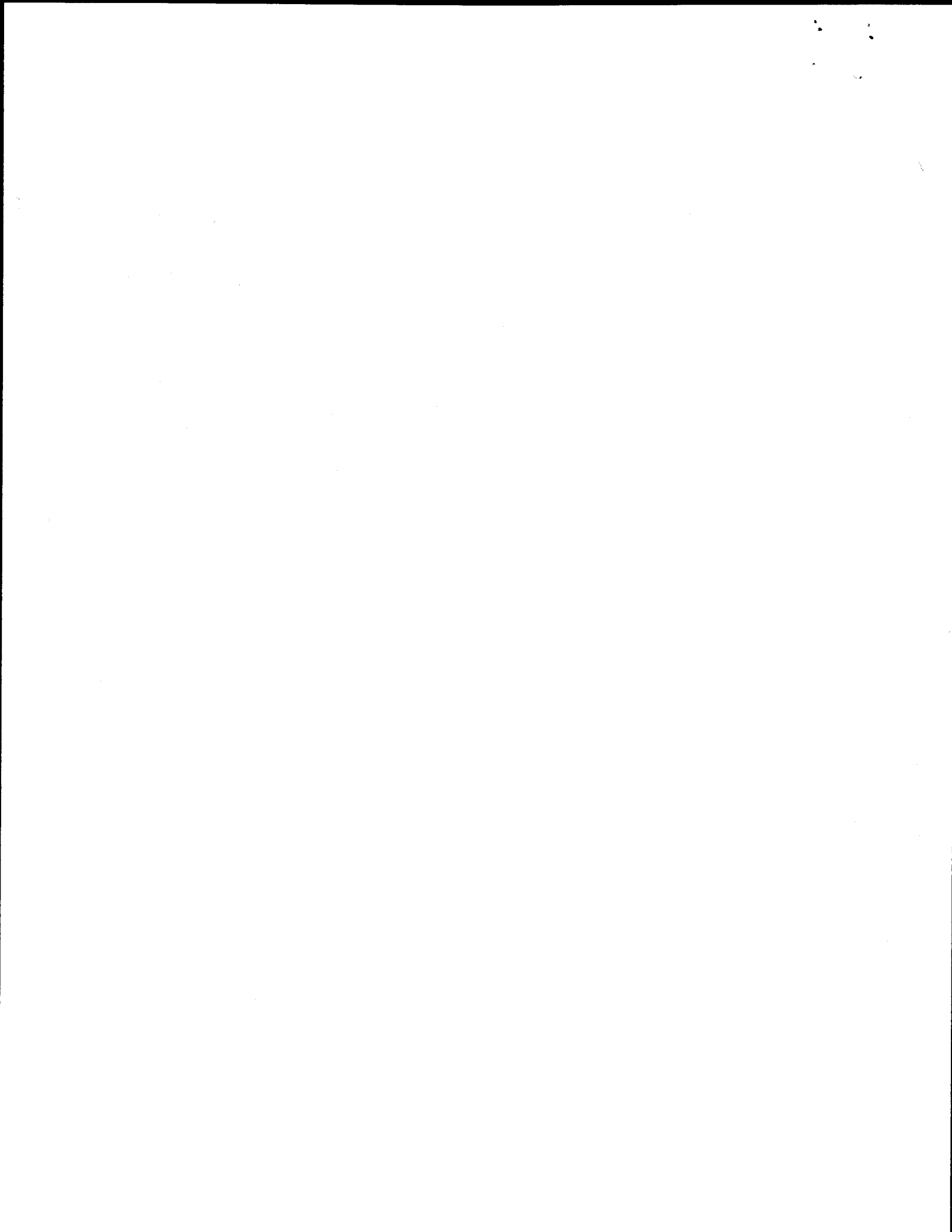
(c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs of otherwise, obtained by either or both of them against a laborer or materialman in a suit brought by either a laborer or materialman under this bond for moneys allegedly due for performing 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 right of the City to require a bond containing the foregoing provisions, and they do hereby further expressly waive any 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 placed 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.



**Payment Bond (Pages 86 to 89): Use for any contract for which a Payment Bond is required.**

**PAYMENT BOND (Page 3)**

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 31ST day of OCTOBER, 2013.

(Seal)

MEM CONTRACTING CORPORATION (L.S.)

Principal

By: Michael V. R.

(Seal)

ARCH INSURANCE COMPANY

Surety

By: Susan Lupski  
SUSAN LUPSKI, ATTORNEY-IN-FACT

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

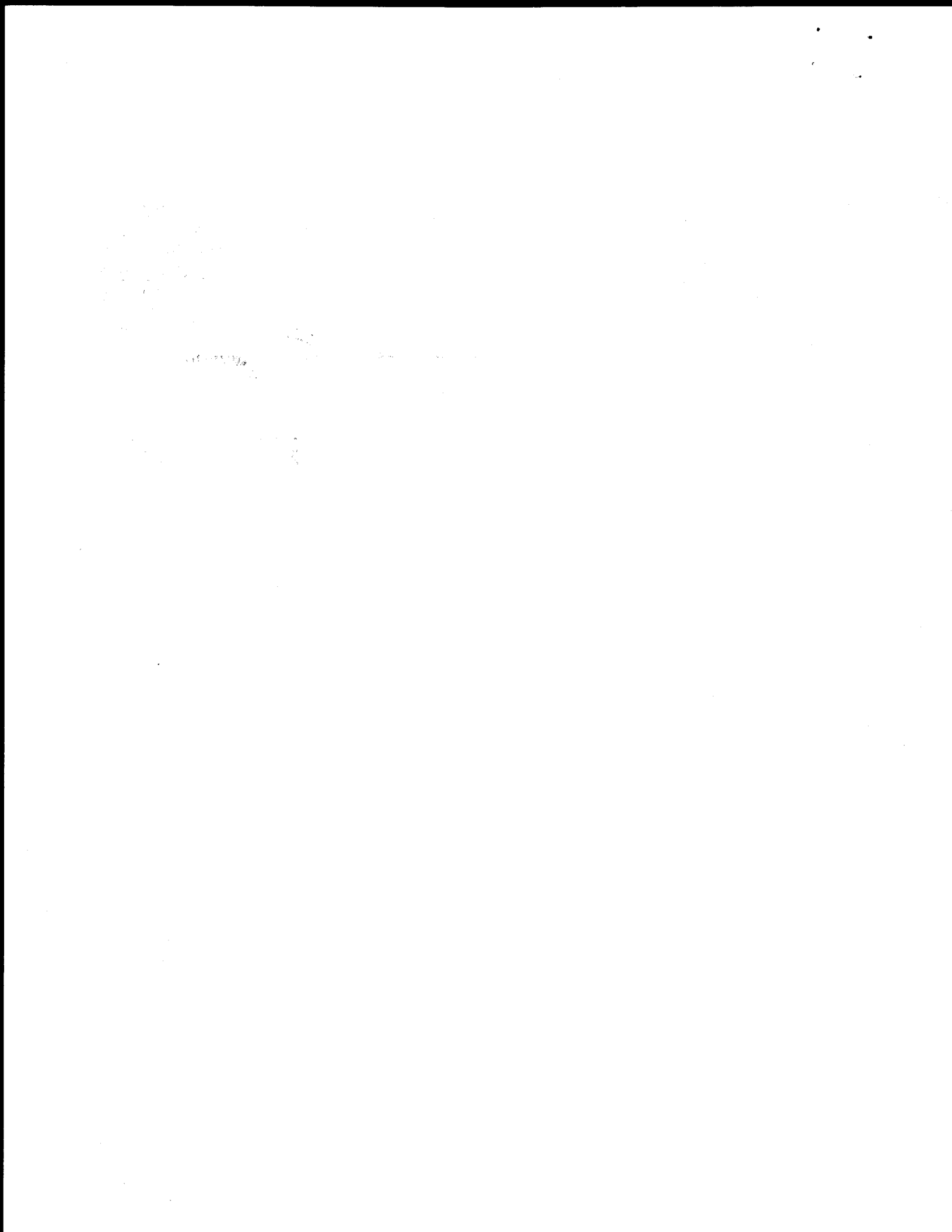
Surety

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 a duly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.





**Payment Bond (Pages 86 to 89): Use for any contract for which a Payment Bond is required.**

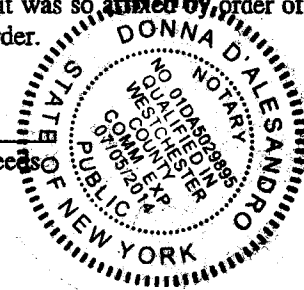
PAYMENT BOND (Page 4)

**ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION**

State of New York County of Westchester ss:

On this 5<sup>th</sup> day of November, 2013, before me personally came Michael V. Petrillo to me known, who, being by me duly sworn did depose and say that he resides at Purchase, N.Y. 10577 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~~ affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

Donna D. Alessandro  
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 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.



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***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. Not valid for Mortgage, Note, Loan, Letter of Credit, Bank Deposit, Currency Rate, Interest Rate or Residential Value Guarantees.***

## POWER OF ATTORNEY

Know All Persons By These Presents:

That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal administrative office in Jersey City, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

Camille Maitland, Colette R. Chisholm, Desiree Cardlin, George O. Brewster, Gerard S. Macholz, Kristy Caporale, Lee Ferrucci, Nelly Renchiwich, Rita Sagistano, Robert T. Pearson, Susan Lupski, Thomas Bean and Vincent A. Walsh of Uniondale, NY (EACH)

its true and lawful Attorney(s)-in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds, undertakings, recognizances and other surety obligations, in the penal sum not exceeding Ninety Million Dollars (\$90,000,000.00).

This authority does not permit the same obligation to be split into two or more bonds in order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Jersey City, New Jersey.

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"VOTED, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

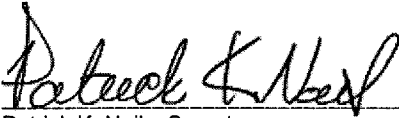
This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on September 15, 2011:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on September 15, 2011, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.

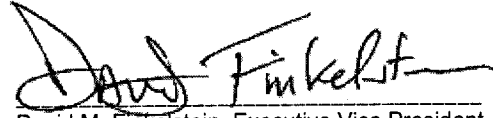
In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 8<sup>th</sup> day of October, 2013.

Attested and Certified

Arch Insurance Company

  
Patrick K. Nails, Secretary

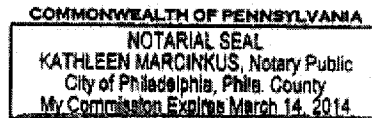



  
David M. Finkelstein, Executive Vice President

STATE OF PENNSYLVANIA SS

COUNTY OF PHILADELPHIA SS

I, Kathleen Marcinkus, a Notary Public, do hereby certify that Patrick K. Nails and David M. Finkelstein personally known to me to be the same persons whose names are respectively as Secretary and Executive Vice President of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.




  
Kathleen Marcinkus, Notary Public  
My commission expires 03/14/2014

CERTIFICATION

I, Patrick K. Nails, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated October 8, 2013 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said David M. Finkelstein, who executed the Power of Attorney as Executive Vice President, was on the date of execution of the attached Power of Attorney the duly elected Executive Vice President of the Arch Insurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this \_\_\_\_\_ day of October, 2013.

  
Patrick K. Nails, Secretary

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

**PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:**

Arch Insurance – Surety Division  
3 Parkway, Suite 1500  
Philadelphia, PA 19102

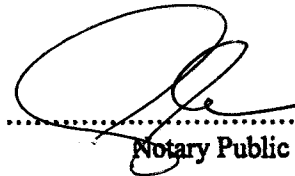


ACKNOWLEDGMENT OF SURETY COMPANY

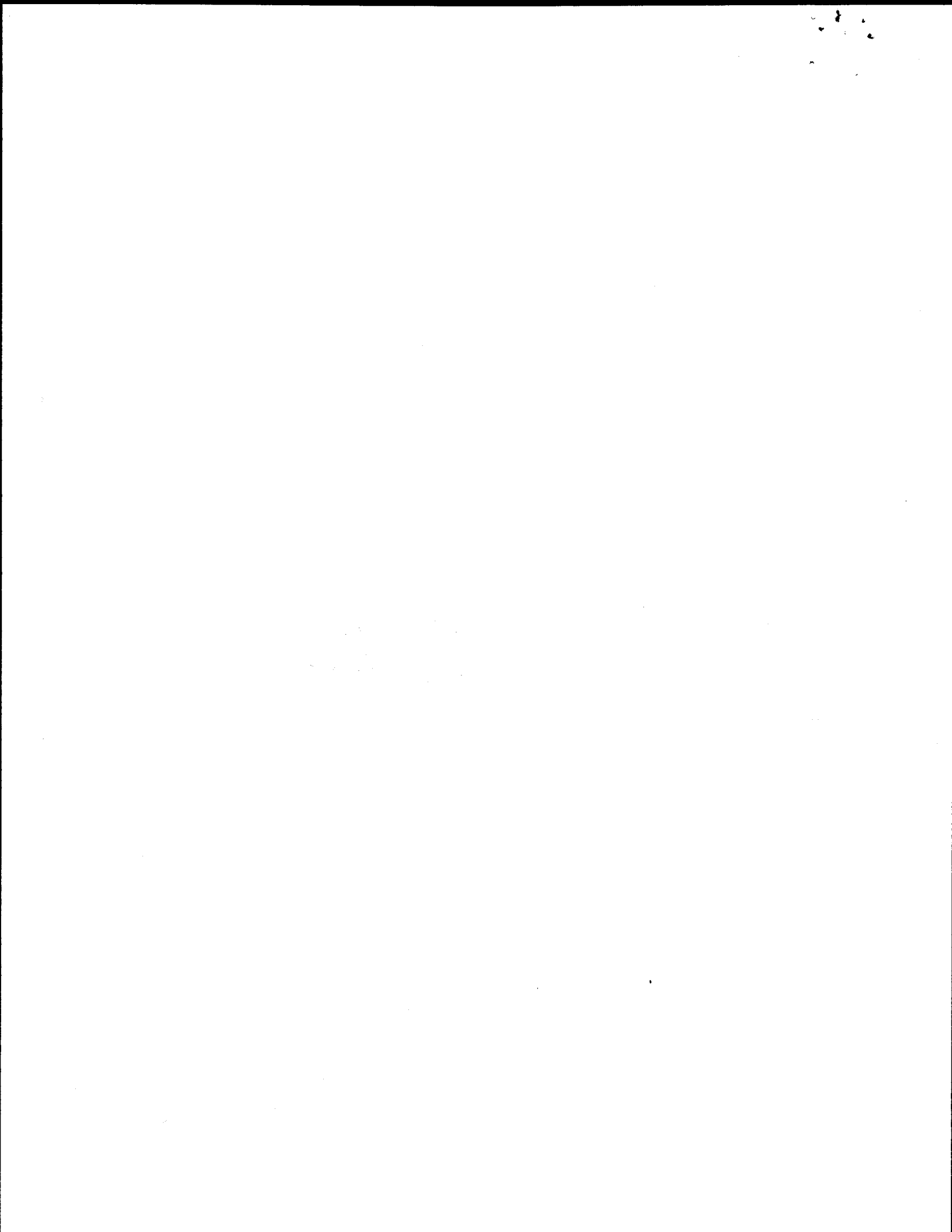
STATE OF ..... New York ..... } ss  
COUNTY OF ..... Nassau ..... }

On this ..... OCTOBER 31, 2013 ..... before me personally came..... SUSAN LUPSKI  
to me know, who, being by me duly sworn, did depose and say; that he/she resides in  
..... NASSAU COUNTY ..... State of NEW YORK....., that he/she is the Attorney-In-Fact of the  
..... ARCH 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 order of  
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 ARCH 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.

GRACE ACKERSON  
Notary Public, State of New York  
Nassau County  
Lic. #01AC6111590  
Term Expires June 14, 2016

  
.....  
Notary Public

NY acknowledgment



ARCH INSURANCE COMPANY  
STATEMENT OF FINANCIAL CONDITION  
December 31, 2012

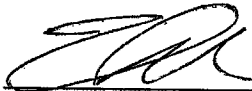
Assets

Cash in Banks	\$	142,123,391
Bonds owned		1,626,957,843
Stocks		335,746,944
Premiums in course of collection		199,715,124
Accrued interest and other assets		392,357,134
 Total Assets	 \$	 2,696,900,436


Liabilities

Reserve for losses and adjustment expenses	\$	1,138,208,564
Reserve for unearned premiums		328,958,704
Ceded reinsurance premiums payable		179,607,905
Amounts withheld or retained by company for account of others		173,229,865
Reserve for taxes, expenses and other liabilities		313,412,183
 Total Liabilities		 2,133,417,221
 Surplus as regards policyholders		 563,483,215
 Total Surplus and Liabilities	 \$	 2,696,900,436

By:

  
\_\_\_\_\_  
Senior Vice President, Chief  
Financial Officer and Treasurer

Attest:

  
\_\_\_\_\_  
Senior Vice President,  
General Counsel and Secretary

State of New York )

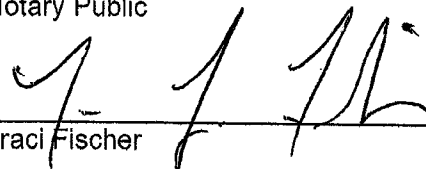
) SS

County of Hudson )

Thomas James Ahern, Senior Vice President, Chief Financial Officer and Treasurer and Patrick Kenneth Nails, Senior Vice President, General Counsel and Secretary being duly sworn, of ARCH INSURANCE COMPANY, Missouri; and that the foregoing is a true and correct statement of financial condition of said company, as of December 31, 2012.

Subscribed and sworn to before me, this 12 day of March, 2013.

Notary Public

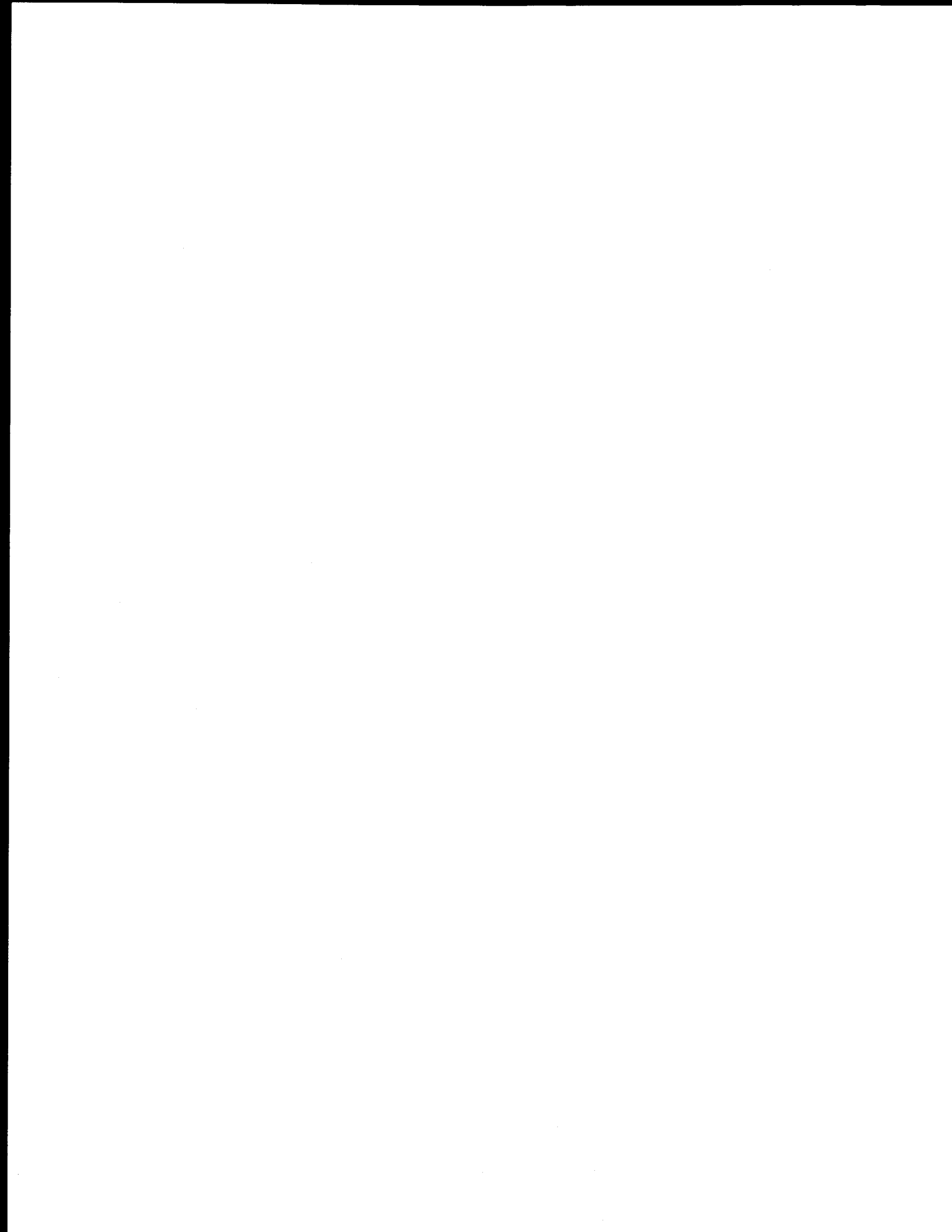
  
\_\_\_\_\_  
Traci Fischer

Traci J. Fischer  
Notary Public, State of New Jersey  
No. 2409092  
Qualified in Hudson County  
Commission Expires May 31, 2016

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**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)**

**PART II. BROKER'S CERTIFICATION**

[Pursuant to Article 22.3.1(a) of the **Contract**, every Certificate Of Insurance must be accompanied by either the following certification by the broker setting forth the following text and required information and signatures or complete copies of all policies referenced in the Certificate Of Insurance. In the absence of completed policies, binders are acceptable.]

**CERTIFICATION BY BROKER**


The undersigned insurance broker represents to the City of New York that the attached Certificate Of Insurance is accurate in all material respects, and that the described insurance is effective as of the date of this Certification.

Alliant Insurance Services, Inc.

\_\_\_\_\_  
[Name Of Broker (Typewritten)]

333 Earle Ovington Blvd., Uniondale, NY 11553

\_\_\_\_\_  
[Address Of Broker (Typewritten)]



\_\_\_\_\_  
[Signature Of Authorized Official Or Broker]

James Schoenleber- Account Manager

\_\_\_\_\_  
[Name And Title Of Authorized Official (Typewritten)]

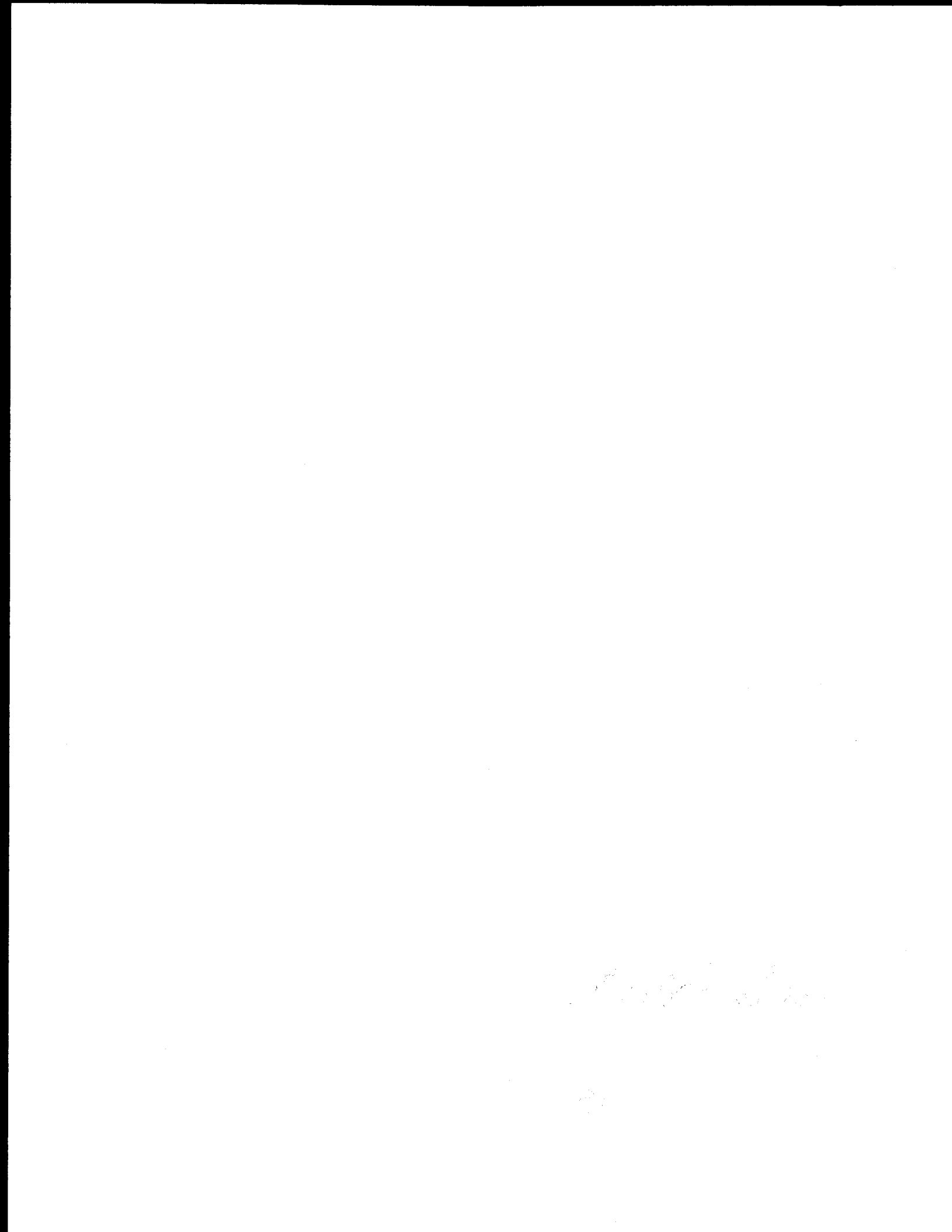
Sworn to before me this

5th day of November, 2013



\_\_\_\_\_  
NOTARY PUBLIC

Kristen M. Banta  
Notary Public, State of New York  
No. 01BA6106389  
Qualified in Nassau County  
Term Expires March 1, 2015



STATE OF NEW YORK  
WORKERS' COMPENSATION BOARD

**CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE**

<b>1a. Legal Name &amp; Address of Insured (Use street address only)</b> MFM Contracting Corp. 335 Center Avenue Mamaroneck, NY 10543  <i>Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)</i>	<b>1b. Business Telephone Number of Insured</b> 914-777-8292 <b>1c. NYS Unemployment Insurance Employer Registration Number of Insured</b>  <b>1d. Federal Employer Identification Number of Insured or Social Security Number</b> 13-4130805
<b>2. Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)</b> New York City Department of Design & Construction 30-30 Thomson Avenue Long Island City, NY 11101	<b>3a. Name of Insurance Carrier</b> Chubb Indemnity Insurance Company <b>3b. Policy Number of entity listed in box "1a"</b> 004-472-7444-00 <b>3c. Policy effective period</b> 01/01/2013 to 01/01/2014 <b>3d. The Proprietor, Partners or Executive Officers are</b> <input checked="" type="checkbox"/> included. (Only check box if all partners/officers included) <input type="checkbox"/> 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 will also notify the above certificate holder 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.*

**Please Note: Upon the 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: James Schoenleber  
(Print name of authorized representative or licensed agent of insurance carrier)  
Approved by: James Schoenleber 11/5/13  
(Signature) (Date)  
Title: Account Manager

Telephone Number of authorized representative or licensed agent of insurance carrier: 516-414-8938

**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.

STATE OF NEW YORK  
WORKERS' COMPENSATION BOARD

CERTIFICATE OF INSURANCE COVERAGE UNDER THE NYS DISABILITY BENEFITS LAW

**PART 1. To be completed by Disability Benefits Carrier or Licensed Insurance Agent of that Carrier**

1a. Legal Name and Address of Insured (Use street address only)

MFM Contracting Corp.  
335 Center Avenue  
Mamaroneck, NY 10543

1b. Business Telephone Number of Insured  
914-777-8292

1c. NYS Unemployment Insurance Employer Registration  
Number of Insured

1d. Federal Employer Identification Number of Insured or  
Social Security Number  
13-4130805

2. Name and Address of the Entity Requesting Proof of  
Coverage (Entity Being Listed as the Certificate Holder)

New York City Department of Design and Construction  
30-30 Thomson Avenue  
Long Island City, NY 11101

3a. Name of Insurance Carrier  
HARTFORD LIFE INSURANCE COMPANY

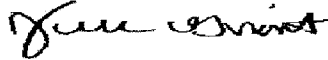
3b. Policy Number of entity listed in box "1a":  
LNY-631248

3c. Policy effective period:  
01/01/2013-01/01/2014

4. Policy covers:

- a.  All of the employer's employees eligible under the New York Disability Benefits Law  
b.  Only the following class or classes of the 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 Benefits insurance coverage as described above.



Date Signed 11/05/2013

By \_\_\_\_\_

(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number (800) 454-7020 Title Manager

**IMPORTANT:** If box "4a" is 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" is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the Disability Benefits Law. It must be mailed for completion to the Workers' Compensation Board, DB Plans Acceptance Unit, 20 Park Street, Albany, New York 12207.

**PART 2. To be completed by NYS Workers' Compensation Board (Only if box "4b" 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 Benefits Law with respect to all of his/her employees.

Date Signed \_\_\_\_\_

By \_\_\_\_\_

(Signature of NYS Workers' Compensation Board Employee)

Telephone Number \_\_\_\_\_

Title \_\_\_\_\_

**Please Note:** Only insurance carriers licensed to write NYS disability 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 benefits under the New York State Disability Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in box "2". *This Certificate is valid for the earlier of one year after this form is approved by the insurance carrier or its licensed agent, or the policy expiration date listed in box "3c".*

Please Note: Upon the cancellation of the disability 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 NYS Disability Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability Benefits Law.

### DISABILITY 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 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 the payment of disability 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 for all employees has been secured as provided by this article.



## SCHEDULE OF WORKMEN, MECHANICS AND LABORERS

The following is a list of classifications for workmen, mechanics and laborers which are anticipated to be employed in the performance of work under this contract, followed by a schedule of the prevailing wage rates and supplemental benefits for all classifications as established by the Comptroller of the City of New York.

Request for interpretation or correction under Subsection A of Section No. 3 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 classification of trades required to be used at the time of the award of 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.

<u>CODE</u>	<u>CLASSIFICATION</u>
15 42 001	Rigger
15 42 002	Sign Erector
16 11 001	Gardener
16 11 002	Tree Pruner
16 11 003	Tree Remover
16 11 011	Asphalt Raker (Highway & Paving)
16 11 012	Tamper (Highway & Paving)
16 11 013	Curbsetter (Highway & Paving)
16 11 014	Formsetter (Highway & Paving)
16 11 015	Rammerman (Highway & Paving)
16 11 016	Laborer (Highway & Paving)
16 11 017	ALL OTHER TITLES (Highway & Paving)
16 23 001	Laborer
16 23 002	Operating Engineer (Heavy Construction-Maintenance)
16 23 003	Junior Operating Engineer
16 23 004	Junior Operating Engineer
16 23 005	Junior Operating Engineer
16 23 006	Fireman (Heavy Construction)
16 23 007	Oiler (Heavy Construction)
16 23 051	Surveyor-Heavy Construction
16 23 052	Surveyor-Heavy Construction-Instrument Man
16 23 053	Surveyor-Heavy Construction-Rodman
16 23 057	Surveyor-Land Surveying-Party Chief
16 23 058	Surveyor-Land Surveying-Instrument Man
16 23 059	Surveyor-Land Surveying-Rodman

<u>CODE</u>	<u>CLASSIFICATION</u>
16 23 061	Operating Engineer-Road & Heavy Construction
16 23 062	Operating Engineer-Paving
16 23 063	Operating Engineer-Concrete
16 23 071	Teamster-Heavy Equipment Trailer Driver
16 23 072	Teamster-Dump Truck Driver
16 23 073	Teamster-Flat Bed Trailer Driver (3-Axle)
16 23 074	Teamster-Redi-Mix (Sand and Gravel)
16 29 011	Drill Runners
17 11 001	Plumbers
17 21 001	Painter (Brush & Roller)
17 31 001	Electrician
17 41 001	Bricklayer
17 41 002	Mason Tender
17 41 004	Cement Mason
17 42 002	Metallic Lather
17 51 001	Carpenter
17 51 002	Dock Builder
17 71 001	Cement & Concrete Worker
17 91 001	Structural Iron Worker
17 95 001	Barman
17 96 021	Derrickmen & Riggers
17 99 001	Ornamental Iron Worker
17 99 002	Sandblaster
17 99 005	Pointers (Waterproofer)
17 99 011	Welders

Each classification may include trainees depending upon project staffing schedules and as required by the terms of this contract.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

LABOR LAW §220 PREVAILING WAGE SCHEDULE

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. Contractors are solely responsible for maintaining original payroll records which delineate, among other things, the hours each employee worked within a given classification. Contractors using rates and/or classifications not promulgated by the Comptroller do so at their own risk. Additionally, prior to bid, Agency Chief Contracting Officers must contact the Bureau of Labor Law when the need arises for a work classification not published in this schedule.

Pursuant to Labor Law §220 (3) 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 contracts. Contracting agencies anticipating doing work which requires the employment of a trade or classification not included in this schedule must request the Comptroller to establish a proper classification for the work pursuant to Labor Law §220 (3-a) (a). The prevailing rate schedule as promulgated by the Comptroller, must, in compliance with law, be annexed to and form part of the contract.

The appropriate schedule of prevailing wages and benefits must be posted at all public work sites pursuant to Labor Law §220 (3-a) (a).

This schedule is applicable for work performed during the effective period, unless otherwise noted. You will be notified of any changes to this schedule by addenda published on our web site at [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov). The rate of wages and supplemental benefits to be paid or provided are those that prevail at the time the work is being performed. Preliminary schedules for future one-year periods are published annually in the City Record on or about June 1<sup>st</sup> of each succeeding year. Final schedules are published on or about July 1<sup>st</sup> in the City Record and on our web site at [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov).

The Comptroller's Office has attempted to include all overtime, shift and night differential, Holiday, Saturday, Sunday or other premium time work. However, this schedule does not set forth every prevailing practice with respect to such rates with which employers must comply. All such practices are nevertheless part of the employer's prevailing wage obligation and contained in the collective bargaining agreements of the prevailing wage unions. These collective bargaining agreements are available for inspection by appointment. Requests for appointments may be made by calling (212) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

Answers to questions concerning prevailing trade practices may be obtained from the Classification Unit by calling (212) 669-7974. Please direct all other compliance issues to: Bureau of Labor Law, Attn: Wasył Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

Prevailing rates and ratios for apprentices are attached to this schedule in the Appendix. 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 employed on a public work project. Workers who are not journey persons or not registered apprentices pursuant to Labor Law §220 (3-e) may not be substituted for apprentices and must be paid as journey persons.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Prevailing Rate Schedule Information:** The information below is intended to assist you in meeting your prevailing wage rate obligation.

**Covered Workers:** Any and all individuals who are engaged, employed or otherwise occupied as Workers, Laborers or Mechanics on the public work site.

Contractors are advised to review the applicable Collective Bargaining Agreements and the Comptroller's Prevailing Wage Schedule before bidding on Public Work. If there are any questions concerning prevailing wages, benefits, overtime, Holiday pay, shift differentials or any prevailing practice, please contact this office.

Public Work construction, reconstruction, demolition, excavation, rehabilitation, repair, renovation, alteration, or improvement contracts 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 <http://www.nyc.gov/html/mocs/html/vendors/pla.shtml>.

All the provisions of Labor Law section 220 remain applicable to PLA work including, but not limited to, the enforcement of prevailing wage requirements by the Comptroller; however, we will enforce shift, premium, overtime and other non-standard rates as they appear in a project's pre-negotiated labor agreement.

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.

In order to meet their obligation to provide prevailing supplemental benefits to each covered employee, employers must either:

- 1) Provide bona-fide 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 benefits and wage supplements which cost the employer no less than the prevailing supplemental benefits rate in total.

Particular attention should be given to the supplemental benefits requirement. Although in most instances the payment or provision for supplemental benefits is for each hour worked, some classifications require the payment or provision of supplemental benefits for each hour paid. Consequently, some prevailing practices require benefits to be purchased at the overtime, shift differential, Holiday, Saturday, Sunday or other premium time rate.

**Benefits are paid for EACH HOUR WORKED unless otherwise noted.**

Wasył Kinach, P.E.  
Director of Classifications  
Bureau of Labor Law

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

220 SCHEDULE OF PREVAILING WAGES AND SUPPLEMENTAL BENEFITS ADDENDUM  
EFFECTIVE PERIOD JANUARY 1, 2013 THROUGH JUNE 30, 2013

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List of Amended Classifications

1. BOILERMAKER
2. CEMENT MASON
3. DERRICKPERSON AND RIGGER
4. DRIVER: TRUCK (TEAMSTER)
5. ENGINEER - FIELD (BUILDING CONSTRUCTION)
6. ENGINEER - OPERATING
7. HEAT AND FROST INSULATOR
8. HOUSE WRECKER
9. IRON WORKER - ORNAMENTAL
10. IRON WORKER - STRUCTURAL
11. MASON TENDER
12. MASON TENDER (INTERIOR DEMOLITION WORKER)
13. MOSAIC MECHANIC
14. PAPERHANGER
15. PLASTERER
16. PLASTERER - TENDER
17. PLUMBER
18. PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)
19. PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)
20. ROOFER

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**21. SHEET METAL WORKER**

**22. SIGN ERECTOR**

**23. STEAMFITTER**

**24. STEAMFITTER - REFRIGERATION AND AIR CONDITIONER**

**25. TILE FINISHER**

**26. TILE LAYER - SETTER**

The prevailing wage for the above listed occupations shall be the prevailing wage as determined by the Department of Labor, State of New York, for the same or similar work in the same or similar locality as that in which the work is to be performed. The prevailing wage shall be the prevailing wage for the same or similar work in the same or similar locality as that in which the work is to be performed. The prevailing wage shall be the prevailing wage for the same or similar work in the same or similar locality as that in which the work is to be performed.

The prevailing wage for the above listed occupations shall be the prevailing wage as determined by the Department of Labor, State of New York, for the same or similar work in the same or similar locality as that in which the work is to be performed. The prevailing wage shall be the prevailing wage for the same or similar work in the same or similar locality as that in which the work is to be performed. The prevailing wage shall be the prevailing wage for the same or similar work in the same or similar locality as that in which the work is to be performed.

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The prevailing wage for the above listed occupations shall be the prevailing wage as determined by the Department of Labor, State of New York, for the same or similar work in the same or similar locality as that in which the work is to be performed. The prevailing wage shall be the prevailing wage for the same or similar work in the same or similar locality as that in which the work is to be performed. The prevailing wage shall be the prevailing wage for the same or similar work in the same or similar locality as that in which the work is to be performed.

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**ASBESTOS HANDLER**

(Hazardous Material; Disturbs, removes, encapsulates, repairs, or encloses friable asbestos material)

**Asbestos Handler**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$35.10**

Supplemental Benefit Rate per Hour: **\$14.85**

**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 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)

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**BLASTER**

**Blaster**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$43.20**

Supplemental Benefit Rate per Hour: **\$37.29**

**Blaster (Hydraulic)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$43.95**

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Supplemental Benefit Rate per Hour: \$37.29

**Blaster - Trac Drill Hydraulic**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.96

Supplemental Benefit Rate per Hour: \$37.29

**Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.24

Supplemental Benefit Rate per Hour: \$37.29

**Blaster - Operators of Jack Hammers**

Chippers: Spaders: Concrete Breakers: and all other pneumatic tools of like usage: Walk Behind Self Propelled Hydraulic Asphalt and Concrete Breakers: Hydro (Water) Demolition

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.29

Supplemental Benefit Rate per Hour: \$37.29

**Blaster - Powder Carriers**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$33.73

Supplemental Benefit Rate per Hour: \$37.29

**Blaster - Hydraulic Trac Drill Chuck Tender**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$32.57

Supplemental Benefit Rate per Hour: \$37.29

**Blaster - Chuck Tender & Nipper**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$31.88

Supplemental Benefit Rate per Hour: \$37.29

**Blaster - Magazine Keepers: (Watch Person)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$19.26

Supplemental Benefit Rate per Hour: \$37.29

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**Overtime Description**

For Blaster - Magazine Keepers: (Watch Person) only - time and one half the regular rate for work after an 8 hour day, Saturday, Sunday and holidays listed below.

**Overtime**

Double time 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
- Presidential Election Day
- Thanksgiving Day
- Christmas Day

**Paid Holidays**

None

**Shift Rates**

A single shift shall be 8 hours plus an unpaid lunch, starting at 8:00 A.M. (or between 6:00 A.M. and 10:00 A.M. on weekdays). When two (2) shifts are employed, each shift shall be 8 hours plus ½ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half (7 ½) hours, but will be paid for eight (8) hours, since only one-half (½) hour is allowed for mealtime. When two (2) or more shifts are employed, single time will be paid for each shift. The first 8 hours of any and all work performed Monday through Friday inclusive of any off-shift shall be at the single time rate.

(Local #29)

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**BOILERMAKER**

On 11/20/2012, the Comptroller was notified that the prevailing wage schedule for Boilermakers, as shown in the attached schedule, is to be revised. The new prevailing wage schedule for Boilermakers is as follows:

**Boilermaker**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$47.98

Supplemental Benefit Rate per Hour: \$37.88

Supplemental Note: The above rate applies to repair or maintenance and new construction; For time and one half overtime - \$56.36; For double overtime - \$74.86.

Effective Period: 1/1/2013 - 3/31/2013

Wage Rate per Hour: \$49.47

Supplemental Benefit Rate per Hour: \$39.48

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Supplemental Note: The above rate applies to repair or maintenance and new construction; For time and one half overtime - \$58.78; For double overtime - \$78.07.

Effective Period: 4/1/2013 - 6/30/2013

Wage Rate per Hour: \$49.47

Supplemental Benefit Rate per Hour: \$39.78

Supplemental Note: The above rate applies to repair or maintenance and new construction; For time and one half overtime - \$59.08; For double overtime - \$78.37.

### 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

When shifts are required, the first shift shall work eight (8) hours at the regular straight-time hourly rate. The second shift shall work seven and one-half (7 ½) hours and receive eight hours at the regular straight time hourly rate plus twenty-five cents (\$0.25) per hour. The third shift shall work seven (7) hours and receive eight hours at the regular straight time hourly rate plus fifty cents (\$0.50) per hour. A thirty (30) minute-lunch period shall not be considered as time worked. Work in excess of the above shall be paid overtime at the appropriate new construction work or repair work overtime wage and supplemental benefit hourly rate.

(Local #5)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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## BRICKLAYER

### Bricklayer

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$46.44

Supplemental Benefit Rate per Hour: \$27.53

### 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.

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

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

Overtime rates to be paid outside the regular scheduled work day.

(Bricklayer District Council)

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## CARPENTER - BUILDING COMMERCIAL

### Building Commercial

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$46.15

Supplemental Benefit Rate per Hour: \$38.50

### 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.

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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  
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.

(Carpenters District Council)

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## CARPENTER - HEAVY CONSTRUCTION WORK (Construction of Engineering Structures and Building Foundations)

### Heavy Construction Work

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$46.74

Supplemental Benefit Rate per Hour: \$42.37

### 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

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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 10:00 P.M. shall work eight and one half hours allowing for one half hour for lunch, but will be paid for 9 hours including benefits at the straight time rate for 8 hours.

(Carpenters District Council)

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**CEMENT & CONCRETE WORKER**

**Cement & Concrete Worker**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$38.98**

Supplemental Benefit Rate per Hour: **\$25.67**

Supplemental Note: **\$28.42 on Saturdays; \$31.17 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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)

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**CEMENT MASON**

**Cement Mason**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$42.50

Supplemental Benefit Rate per Hour: \$39.06

Supplemental Note: Overtime supplemental benefit rate per hour: \$57.56

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$37.63

Supplemental Benefit Rate per Hour: \$39.06

Supplemental Note: Overtime supplemental benefit rate per hour: \$57.56

**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

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.



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**Shift Rates**

For an off shift day, (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)

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**CORE DRILLER**

**Core Driller**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$35.44**

Supplemental Benefit Rate per Hour: **\$19.75**

**Core Driller Helper**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$28.60**

Supplemental Benefit Rate per Hour: **\$19.75**

**Core Driller Helper(Third year in the industry)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$25.74**

Supplemental Benefit Rate per Hour: **\$19.75**

**Core Driller Helper (Second year in the industry)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$22.88**

Supplemental Benefit Rate per Hour: **\$19.75**

**Core Driller Helper (First year in the industry)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$20.02**

Supplemental Benefit Rate per Hour: **\$19.75**

**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.

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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  
Thanksgiving Day  
Christmas Day

**Shift Rates**

The shift day shall be the continuous eight and one-half (8½) hours from 6:00 A.M. to 2:30 P.M. and from 2:30 P.M. to 11:00 P.M., including one-half (½) hour of employees regular rate of pay for lunch. 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 seventy-five cents (\$0.75) 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)

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**DERRICKPERSON AND RIGGER**

**Derrick Person & Rigger**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$40.50

Supplemental Benefit Rate per Hour: \$42.07

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. \$43.49 - For work performed in Staten Island.

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$41.00

Supplemental Benefit Rate per Hour: \$46.07

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. \$47.49 - For work performed in Staten Island.

**Derrick Person & Rigger - Site Work**

For site work where no rigging is involved.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$30.00

Supplemental Benefit Rate per Hour: \$31.32

**Overtime Description**

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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. Deduct \$1.42 from the Staten Island hourly benefits rate before computing overtime.

### 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)

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## DIVER

### Diver (Marine)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$58.95

Supplemental Benefit Rate per Hour: \$42.37

### Diver Tender (Marine)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$42.10

Supplemental Benefit Rate per Hour: \$42.37

### 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).

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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)

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**DOCKBUILDER - PILE DRIVER**

**Dockbuilder - Pile Driver**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$46.74**

Supplemental Benefit Rate per Hour: **\$42.37**

**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**

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None

### Shift Rates

Off shift work, commencing between 5:00 P.M. and 10:00 P.M., shall work eight and one half hours allowing for one half hour for lunch but will be paid the straight time hourly wage for 9 hours and the straight time supplemental benefits for 8 hours.

(Carpenters District Council)

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## DRIVER: TRUCK (TEAMSTER)

### Driver - Automobile Chauffeur (Dump Truck)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$35.84

Supplemental Benefit Rate per Hour: \$36.93

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$37.01

Supplemental Benefit Rate per Hour: \$38.65

### Driver - Heavy Equipment Trailer Driver

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$37.34

Supplemental Benefit Rate per Hour: \$36.93

Note: For time and one half overtime Wage Rate - \$53.76; for double time overtime Wage Rate - \$71.68

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$38.51

Supplemental Benefit Rate per Hour: \$38.65

Note: For time and one half overtime Wage Rate - \$55.51; for double time overtime Wage Rate - \$74.01

### Driver - Euclid & Turnapull Operator

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$36.41

Supplemental Benefit Rate per Hour: \$36.93

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$37.57

Supplemental Benefit Rate per Hour: \$38.65

### Driver - Six Wheeler(3 Axle) Tractors & Trailers

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Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$36.84

Supplemental Benefit Rate per Hour: \$36.93

Note: For time and one half overtime Wage Rate - \$54.62; for double time overtime Wage Rate - \$72.82

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$38.01

Supplemental Benefit Rate per Hour: \$38.65

Note: For time and one half overtime Wage Rate - \$56.36; for double time overtime Wage Rate - \$75.14

**Driver - Boom Truck**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$37.09

Supplemental Benefit Rate per Hour: \$36.93

Note: For time and one half overtime Wage Rate - \$54.62; for double time overtime Wage Rate - \$72.82

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$38.26

Supplemental Benefit Rate per Hour: \$38.65

Note: For time and one half overtime Wage Rate - \$56.36; for double time overtime Wage Rate - \$75.14

**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).

President's Day

Columbus Day

Veteran's Day

Day after Thanksgiving

Triple time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

New Year's Day

President's Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

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**Driver - Redi-Mix Driver (Sand & Gravel)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.47

Supplemental Benefit Rate per Hour: \$38.65

**Overtime Description**

For Paid Holidays: Employees working two (2) days in the calendar week in which the holiday falls are to be paid for these holidays, provided they shape each remaining workday during that calendar 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).

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

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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(Local #282)

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**ELECTRICIAN**

(Including all low voltage cabling carrying data; video; and voice in combination with data and or video.)

**Electrician "A" (Regular Day)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$51.00

Supplemental Benefit Rate per Hour: \$42.45

**Electrician "A" (Regular Day Overtime)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$76.50

Supplemental Benefit Rate per Hour: \$45.13

**Electrician "A" (Day Shift)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$51.00

Supplemental Benefit Rate per Hour: \$42.45

**Electrician "A" (Day Shift Overtime After 8 hours)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$76.50

Supplemental Benefit Rate per Hour: \$45.13

**Electrician "A" (Swing Shift)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$59.84

Supplemental Benefit Rate per Hour: \$48.20

**Electrician "A" (Swing Shift Overtime After 7.5 hours)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$89.76

Supplemental Benefit Rate per Hour: \$51.36



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**Electrician "A" (Graveyard Shift)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$67.03

Supplemental Benefit Rate per Hour: \$53.07

**Electrician "A" (Graveyard Shift Overtime After 7 hours)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$100.55

Supplemental Benefit Rate per Hour: \$56.60

**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**

When so elected by the Employer, one or more shifts of at least five days duration may be scheduled as follows:

Day Shift: 8:00 am to 4:30 pm, Swing Shift 4:30 pm to 12:30 am, Graveyard Shift: 12:30 am to 8:00 am.

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.

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**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,

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$25.30

Supplemental Benefit Rate per Hour: \$17.52

**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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.95

Supplemental Benefit Rate per Hour: \$18.85

**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)

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**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)

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**Alarm Technician**

Effective Period: 7/1/2012 - 3/9/2013

Wage Rate per Hour: \$29.90

Supplemental Benefit Rate per Hour: \$13.70

Supplemental Note: \$12.20 only after 8 hours worked in a day

Effective Period: 3/10/2013 - 6/30/2013

Wage Rate per Hour: \$30.40

Supplemental Benefit Rate per Hour: \$13.90

Supplemental Note: \$12.40 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.

Double time 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 8:00 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

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(Local #3)

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**ELECTRICIAN-STREET LIGHTING WORKER**

**Electrician - Electro Pole Electrician**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$51.00

Supplemental Benefit Rate per Hour: \$44.18

**Electrician - Electro Pole Foundation Installer**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.66

Supplemental Benefit Rate per Hour: \$34.12

**Electrician - Electro Pole Maintainer**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$33.10

Supplemental Benefit Rate per Hour: \$30.84

**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

Resident's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

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(Local #3)

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## ELEVATOR CONSTRUCTOR

### Elevator Constructor

Effective Period: 7/1/2012 - 3/16/2013

Wage Rate per Hour: **\$55.20**

Supplemental Benefit Rate per Hour: **\$32.78**

Effective Period: 3/17/2013 - 6/30/2013

Wage Rate per Hour: **\$57.01**

Supplemental Benefit Rate per Hour: **\$34.48**

### Overtime Description

For New Construction: work performed after 7 or 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)

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## ELEVATOR REPAIR & MAINTENANCE

### Elevator Service/Modernization Mechanic

Effective Period: 7/1/2012 - 3/16/2013

Wage Rate per Hour: \$43.79

Supplemental Benefit Rate per Hour: \$31.37

Effective Period: 3/17/2013 - 6/30/2013

Wage Rate per Hour: \$45.14

Supplemental Benefit Rate per Hour: \$33.02

### **Overtime Description**

For Service Work: Double time - all work 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**

For Modernization Work (4pm to 12:30am) - regularly hourly rate plus a (15%) fifteen percent differential.

### **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)

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## ENGINEER

### Engineer - Heavy Construction Operating Engineer I

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Cherry-pickers 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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$58.75

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$94.00

### 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, Cherry-pickers. 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 man auger.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$57.00

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$91.20

### Engineer - Heavy Construction Maintenance Engineer I

Installing, Repairing, Maintaining, Dismantling and Manning 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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$56.74

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$90.78

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**Engineer - Heavy Construction Maintenance Engineer II**

On Base Mounted Tower Cranes

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$74.44

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$119.10

**Engineer - Heavy Construction Maintenance Engineer III**

On Generators, Light Towers

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.56

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$60.10

**Engineer - Heavy Construction Maintenance Engineer IV**

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.53

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$61.65

**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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$54.09

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$86.54

**Engineer - Heavy Construction Oilers I**

Gradalls, Cold Planer Grader, Concrete Pumps, Driving Truck Cranes, Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$51.19



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Supplemental Benefit Rate per Hour: \$31.07  
Supplemental Note: \$55.74 on overtime  
Shift Wage Rate: \$81.90

**Engineer - Heavy Construction Oilers II**

All gasoline, electric, diesel or air operated Shovels, Draglines, Backhoes, Keystones, Pavers, Gunite Machines, Battery of Compressors, Crawler Cranes, two-person Trenching Machines.

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$35.50  
Supplemental Benefit Rate per Hour: \$31.07  
Supplemental Note: \$55.74 on overtime  
Shift Wage Rate: \$56.80

**Engineer - Steel Erection Maintenance Engineers**

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$54.33  
Supplemental Benefit Rate per Hour: \$29.66  
Supplemental Note: \$53.17 on overtime  
Shift Wage Rate: \$86.93

**Engineer - Steel Erection Oiler I**

On a Truck Crane

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$50.91  
Supplemental Benefit Rate per Hour: \$29.66  
Supplemental Note: \$53.17 on overtime  
Shift Wage Rate: \$81.46

**Engineer - Steel Erection Oiler II**

On a Crawler Crane

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$39.04  
Supplemental Benefit Rate per Hour: \$29.66  
Supplemental Note: \$53.17 on overtime  
Shift Wage Rate: \$62.46

**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.

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**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
- Lincoln's Birthday
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Election 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

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**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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$51.62

Supplemental Benefit Rate per Hour: \$29.66

Supplemental Note: \$53.17 on overtime

**Engineer - Building Work Maintenance Engineers II**

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$40.34

Supplemental Benefit Rate per Hour: \$29.66

Supplemental Note: \$53.17 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

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**Cranes: Driving and Operating Fuel and Grease Trucks, Cherrypickers (hydraulic cranes) over 70,000 GVW, and machines of a similar nature.**

**Effective Period: 7/1/2012 - 6/30/2013**

**Wage Rate per Hour: \$49.12**

**Supplemental Benefit Rate per Hour: \$29.66**

**Supplemental Note: \$53.17 on overtime**

**Engineer - Building Work Oilers II**

**Oilers on Crawler Cranes, Backhoes, Trenching Machines, Gunite Machines, Compressors (three or more in Battery).**

**Effective Period: 7/1/2012 - 6/30/2013**

**Wage Rate per Hour: \$36.75**

**Supplemental Benefit Rate per Hour: \$29.66**

**Supplemental Note: \$53.17 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**

**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**

**Shift Rates**

**Off Shift: double time the regular hourly rate.**

**(Local #15)**

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**ENGINEER - CITY SURVEYOR AND CONSULTANT**

**Party Chief**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$34.61**

Supplemental Benefit Rate per Hour: **\$17.30**

**Instrument Person**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$28.59**

Supplemental Benefit Rate per Hour: **\$17.30**

**Rodperson**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$24.79**

Supplemental Benefit Rate per Hour: **\$17.30**

**Overtime Description**

Overtime Benefit Rate - \$23.63 per hour (time & one half) \$29.95 per hour (double time).

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

(Operating Engineer Local #15-D)

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**ENGINEER - FIELD (BUILDING CONSTRUCTION)**  
**(Construction of Building Projects, Concrete Superstructures, etc.)**

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**Field Engineer - BC Party Chief**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$53.64**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime Benefit Rate - \$37.48 per hour (time & one half) \$48.00 per hour (double time).

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$55.74**

Supplemental Benefit Rate per Hour: **\$29.73**

Supplemental Note: Overtime Benefit Rate - \$41.40 per hour (time & one half) \$53.06 per hour (double time).

**Field Engineer - BC Instrument Person**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$41.94**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime Benefit Rate - \$37.48 per hour (time & one half) \$48.00 per hour (double time).

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$43.30**

Supplemental Benefit Rate per Hour: **\$29.73**

Supplemental Note: Overtime Benefit Rate - \$41.40 per hour (time & one half) \$53.06 per hour (double time).

**Field Engineer - BC Rodperson**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$27.52**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime Benefit Rate - \$37.48 per hour (time & one half) \$48.00 per hour (double time).

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$27.97**

Supplemental Benefit Rate per Hour: **\$29.73**

Supplemental Note: Overtime Benefit Rate - \$41.40 per hour (time & one half) \$53.06 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

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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)

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**ENGINEER - FIELD (HEAVY CONSTRUCTION)**  
(Construction of Roads, Tunnels, Bridges, Sewers, Building Foundations,  
Engineering Structures etc.)

**Field Engineer - HC Party Chief**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$60.28

Supplemental Benefit Rate per Hour: \$29.73

Supplemental Note: Overtime benefit rate - \$41.40 per hour (time & one half), \$53.06 per hour (double time).

**Field Engineer - HC Instrument Person**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$44.28

Supplemental Benefit Rate per Hour: \$29.73

Supplemental Note: Overtime benefit rate - \$41.40 per hour (time & one half), \$53.06 per hour (double time).

**Field Engineer - HC Rodperson**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.11

Supplemental Benefit Rate per Hour: \$29.73

Supplemental Note: Overtime benefit rate - \$41.40 per hour (time & one half), \$53.06 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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)

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## **ENGINEER - FIELD (STEEL ERECTION)**

### **Field Engineer - Steel Erection Party Chief**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$54.50**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime benefit rate - \$37.48 per hour (time & one half), \$48.00 per hour (double time).

### **Field Engineer - Steel Erection Instrument Person**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$42.63**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime benefit rate - \$37.48 per hour (time & one half), \$48.00 per hour (double time).

### **Field Engineer - Steel Erection Rodperson**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$28.84**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime benefit rate - \$37.48 per hour (time & one half), \$48.00 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## **ENGINEER - OPERATING**

### **Operating Engineer - Road & Heavy Construction I**

Back Filling Machines, Cranes, Mucking Machines and Dual Drum Paver.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$64.38**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: **\$103.01**

### **Operating Engineer - Road & Heavy Construction II**

Backhoes, Power Shovels, Hydraulic Clam Shells, Steel Erection, Moles and machines of a similar nature.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$66.70**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: 51.85 overtime hours

Shift Wage Rate: **\$106.72**

### **Operating Engineer - Road & Heavy Construction III**

Mine Hoists, Cranes, etc. (Used as Mine Hoists)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$68.86**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: **\$110.18**

### **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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$67.21**



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Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$107.54

**Operating Engineer - Road & Heavy Construction V**

Pile Drivers & Rigs (employing Dock Builder foreperson): Derrick Boats, Tunnel Shovels.

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$65.86  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$105.38

**Operating Engineer - Road & Heavy Construction VI**

Mixers (Concrete with loading attachment), Concrete Pavers, Cableways, Land Derricks, Power Houses (Low Air Pressure Units).

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$62.51  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$100.02

**Operating Engineer - Road & Heavy Construction VII**

Barrier Movers , Barrier Transport and Machines of a Similar Nature.

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$50.27  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$80.43

**Operating Engineer - Road & Heavy Construction VIII**

Utility Compressors

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$36.37  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$46.38

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$38.78  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

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Shift Wage Rate: \$49.16

**Operating Engineer - Road & Heavy Construction IX**

Horizontal Boring Rig

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$56.24

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$89.98

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$59.39

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$95.02

**Operating Engineer - Road & Heavy Construction X**

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$54.50

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$87.20

**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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$42.11

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$67.38

**Operating Engineer - Road & Heavy Construction XII**

All Drills and Machines of a similar nature.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$63.18

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$101.09

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**Operating Engineer - Road & Heavy Construction XIII**

Concrete Pumps, Concrete Plant, Well Drilling Machines, Stone Crushers, Double Drum Hoist, Power Houses (other than above).

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$61.14

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$97.82

**Operating Engineer - Road & Heavy Construction XIV**

Concrete Mixer

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$58.34

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$93.49

**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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$39.03

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$62.45

**Operating Engineer - Road & Heavy Construction XVI**

Concrete Breaking Machines, Single Drum Hoists, Locomotives (over ten tons) and Dinkies over ten tons, Hydraulic Crane, Second Engineer.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$55.73

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$89.17

**Operating Engineer - Road & Heavy Construction XVII**

On-Site concrete plant engineer, On-site Asphalt Plant Engineer, and Vibratory console.

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Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$56.19  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$89.90

**Operating Engineer - Road & Heavy Construction XVIII**

Tower Crane

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$81.09  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$129.74

**Operating Engineer - Paving I**

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$59.25  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$94.80

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$62.51  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$100.02

**Operating Engineer - Paving II**

Asphalt Roller

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$57.65  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$92.24

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$60.85  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$97.36

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**Operating Engineer - Paving III**

Asphalt Plants

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$48.46

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$77.54

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$51.32

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$82.11

**Operating Engineer - Concrete I**

Cranes

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$63.49

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

**Operating Engineer - Concrete II**

Compressors

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$36.91

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

**Operating Engineer - Concrete III**

Micro-traps (Negative Air Machines), Vac-All Remediation System.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$50.31

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

**Operating Engineer - Steel Erection I**

Three Drum Derricks

Effective Period: 7/1/2012 - 12/31/2012

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Wage Rate per Hour: \$67.62  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$108.19

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$70.50  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$112.80

**Operating Engineer - Steel Erection II**

Cranes, 2 Drum Derricks, Hydraulic Cranes and Fork Lifts.

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$64.91  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$103.86

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$67.71  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$108.34

**Operating Engineer - Steel Erection III**

Compressors, Welding Machines.

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$37.87  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$60.59

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$39.86  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$63.78

**Operating Engineer - Steel Erection IV**

Compressors - Not Combined with Welding Machine.

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$36.00

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$57.60

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$37.93  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours  
Shift Wage Rate: \$60.69

**Operating Engineer - Building Work I**

Forklifts, House Cars, Rack and Pinion, Plaster (Platform machine), Plaster Bucket, Concrete Pump and all other equipment used for hoisting material.

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$53.09  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$55.46  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

**Operating Engineer - Building Work II**

Compressors, Welding Machines (Cutting Concrete-Tank Work), Paint Spraying, Sandblasting, Pumps (with the exclusion of Concrete Pumps), House Car (settlement basis only), All Engines irrespective of Power (Power-Pac) used to drive Auxiliary Equipment, Air, Hydraulic, etc.

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$39.35  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$41.32  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

**Operating Engineer - Building Work III**

Double Drum

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$60.66  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$63.25  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

**Operating Engineer - Building Work IV**

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$64.35  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$67.05  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

**Operating Engineer - Building Work V**

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$59.17  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$61.72  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

**Operating Engineer - Building Work VI**

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$58.53  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$61.06  
Supplemental Benefit Rate per Hour: \$28.65  
Supplemental Note: \$51.85 overtime hours

**Overtime Description**



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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  
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

### **Shift Rates**

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)

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## **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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$46.15

Supplemental Benefit Rate per Hour: \$38.50

### **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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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### 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

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

Two shifts may be utilized with the first shift working 8:00 A.M. to the end of the shift at the straight time of pay. The second shift will receive one hour at double time rate for the last hour of the shift. (eight for seven, nine for eight).

(Carpenters District Council)

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## GLAZIER (New Construction, Remodeling, and Alteration)

### Glazier

Effective Period: 7/1/2012 - 10/31/2012  
Wage Rate per Hour: **\$40.00**  
Supplemental Benefit Rate per Hour: **\$32.89**  
Supplemental Note: Supplemental Benefit Overtime Rate: \$40.54

Effective Period: 11/1/2012 - 6/30/2013  
Wage Rate per Hour: **\$40.50**  
Supplemental Benefit Rate per Hour: **\$33.24**  
Supplemental Note: Supplemental Benefit Overtime Rate: \$41.24

### Overtime Description

An optional 8th hour can be worked at straight time rate. If 9th hour is worked, then both hours or more (8th & 9th or more) will be at the double time rate of pay.

### Overtime

Double time the regular rate after a 7 hour day.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

### Paid Holidays

None

### Shift Rates

Shifts shall be any 7 hours beyond 4:00 P.M. for which the glazier shall receive 8 hours pay for 7 hours worked.

(Local #1281)

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## GLAZIER - REPAIR & MAINTENANCE

(For the Installation of Glass - All repair and maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$105,000. Except where enumerated (i.e. plate glass windows) does not apply to non-residential buildings.)

### Craft Jurisdiction for repair, maintenance and fabrication

Plate glass replacement, Residential glass replacement, Residential mirrors and shower doors, Storm windows and storm doors, Residential replacement windows, Herculite door repairs, Door closer repairs, Retrofit apartment house (non commercial buildings), Glass tinting.

Effective Period: 7/1/2012 - 4/30/2013

Wage Rate per Hour: \$23.40

Supplemental Benefit Rate per Hour: \$18.04

Effective Period: 5/1/2013 - 6/30/2013

Wage Rate per Hour: \$23.50

Supplemental Benefit Rate per Hour: \$18.54

### Overtime

Time and one half the regular rate after an 8 hour day.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Double time the regular rate for Sunday.  
Time and one half the regular hourly rate after 40 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

(Local #1281)

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## **HEAT AND FROST INSULATOR**

### **Heat & Frost Insulator**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: **\$54.28**  
Supplemental Benefit Rate per Hour: **\$31.36**

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: **\$55.98**  
Supplemental Benefit Rate per Hour: **\$32.36**

### **Overtime Description**

Double time shall be paid for supplemental benefits during overtime work.  
8th hour paid at time and one half.

### **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  
Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**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. Off hour work in occupied or retail buildings may be worked on weekdays with an increment of \$1.00 per hour and eight hours pay for seven (7) hours worked. Double time will apply for over seven (7) hours worked on weekdays, weekends or holidays.

(Local #12)

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**HOUSE WRECKER  
(TOTAL DEMOLITION)**

**House Wrecker - Tier A**

On all work sites the first, second, eleventh and every third House Wrecker thereafter shall be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). The 10th and 20th House Wrecker shall be apprentices. Other House Wreckers shall be Tier B House Wreckers.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$33.00**

Supplemental Benefit Rate per Hour: **\$24.15**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$33.51**

Supplemental Benefit Rate per Hour: **\$24.64**

**House Wrecker - Tier B**

On all work sites the first, second, eleventh and every third House Wrecker thereafter shall be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). The 10th and 20th House Wrecker shall be apprentices. Other House Wreckers shall be Tier B House Wreckers.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$23.05**

Supplemental Benefit Rate per Hour: **\$17.85**

Effective Period: 1/1/2013 - 6/30/2013

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Wage Rate per Hour: **\$23.25**

Supplemental Benefit Rate per Hour: **\$18.35**

**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)

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**IRON WORKER - ORNAMENTAL**

**Iron Worker - Ornamental**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$41.50**

Supplemental Benefit Rate per Hour: **\$39.52**

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$42.00**

Supplemental Benefit Rate per Hour: **\$42.89**

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

**Overtime Description**

Time and one half the regular rate after a 7 hour day for a maximum of two hours on any regular work day (the 8th and 9th hour) and double time shall be paid for all work on a regular work day thereafter, time and one half the regular rate for Saturday for the first seven hours of work and double time shall be paid for all work on a Saturday thereafter.

**Overtime**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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

For off shift work - 8 hours pay for 7 hours of work. When two or three shifts are employed on a job, Monday through Friday, the workday for each shift shall be seven hours and paid for ten and one-half hours at the single time rate. When two or three shifts are worked on Saturday, Sunday or holidays, each shift shall be seven hours and paid fifteen and three-quarters hours.

(Local #580)

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## IRON WORKER - STRUCTURAL

### Iron Worker - Structural

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$45.05

Supplemental Benefit Rate per Hour: \$57.85

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$46.00

Supplemental Benefit Rate per Hour: \$61.23

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.

### Overtime

Time and one half the regular rate after an 8 hour day.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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  
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.  
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.

(Local #40 & #361)

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## LABORER (Foundation, Concrete, Excavating, Street Pipe Layer and Common)

### Laborer

Excavation and foundation work for buildings, heavy construction, 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.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.70

Supplemental Benefit Rate per Hour: \$31.75

### 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).



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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New Year's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Presidential Election 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)

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**LANDSCAPING**

(Landscaping tasks, as well as tree pruning, tree removing, spraying and maintenance in connection with the planting of street trees and the planting of trees in city parks but not when such activities are performed as part of, or in connection with, other construction or reconstruction projects.)

**Landscaper (Above 6 years experience)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$24.25**

Supplemental Benefit Rate per Hour: **\$12.30**

**Landscaper (3 - 6 years experience)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$23.25**

Supplemental Benefit Rate per Hour: **\$12.30**

**Landscaper (up to 3 years experience)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$20.75**

Supplemental Benefit Rate per Hour: **\$12.30**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Groundperson**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$20.75  
Supplemental Benefit Rate per Hour: \$12.30

**Tree Remover / Pruner**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$29.25  
Supplemental Benefit Rate per Hour: \$12.30

**Landscaper Sprayer (Pesticide Applicator)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$19.25  
Supplemental Benefit Rate per Hour: \$12.30

**Watering - Plant Maintainer**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$14.25  
Supplemental Benefit Rate per Hour: \$12.30

**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)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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**MARBLE MECHANIC**

**Marble Setter**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$49.19

Supplemental Benefit Rate per Hour: \$32.24

**Marble Finisher**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$39.05

Supplemental Benefit Rate per Hour: \$31.43

**Marble Polisher**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$34.73

Supplemental Benefit Rate per Hour: \$24.60

**Overtime Description**

Supplemental Benefit contributions are to be made at the applicable overtime rates. Time and one half the regular rate after a 7 hour day or time and one half the regular rate after an 8 hour day - chosen by Employer at the start of the project and then would last for the full duration of the project.

**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

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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(Local #7)

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## MASON TENDER

### Mason Tender

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$34.24**

Supplemental Benefit Rate per Hour: **\$24.40**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$34.50**

Supplemental Benefit Rate per Hour: **\$25.14**

### 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.

(Local #79)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**MASON TENDER (INTERIOR DEMOLITION WORKER)**

(The erection, building, moving, servicing and dismantling of enclosures, scaffolding, barricades, protection and site safety structures etc., on Interior Demolition jobs.)

**Mason Tender Tier A**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$33.87**

Supplemental Benefit Rate per Hour: **\$19.22**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$34.07**

Supplemental Benefit Rate per Hour: **\$19.77**

**Mason Tender Tier B**

On Interior Demolition job sites 33 1/3 % of the employees shall be classified as Tier A Interior Demolition Workers and 66 2/3 % shall be classified as Tier B Interior Demolition Workers; provided that the employer may employ more than 33 1/3 % Tier A Interior Demolition Workers on the job site. Where the number of employees on a job site is not divisible by 3, the first additional employee (above the number of employees divisible by three) shall be a Tier B Interior Demolition Worker, and the second additional employee shall be a Tier A Interior Demolition Worker.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$23.07**

Supplemental Benefit Rate per Hour: **\$13.53**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$23.27**

Supplemental Benefit Rate per Hour: **\$14.08**

**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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

(Local #79)

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## METALLIC LATHER

### Metallic Lather

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$41.23**

Supplemental Benefit Rate per Hour: **\$38.35**

Supplemental Note: Supplemental benefits for overtime are paid at the appropriate overtime rate.

### Overtime Description

Overtime would be time and one half the regular rate after a seven (7) or eight (8) hours workday, which would be set at the start of the job.

### 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

Washington's Birthday

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election 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

There shall be either two (2) or three (3) shifts, each shift shall be eight (8) hours with nine (9) hours pay, including one half (1/2) hour for lunch. Off-Hour Start shall commence after 3:30 P.M. and shall conclude by 6:00 A.M. The first consecutive seven (7) hours shall be at straight time with a differential of twelve dollars (\$12.00) per hour. Fringes shall be paid at the straight time rate.

(Local #46)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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## MILLWRIGHT

### Millwright

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$46.19

Supplemental Benefit Rate per Hour: \$45.67

### 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

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

The first shift shall receive the straight time rate of pay. The second shift receives the straight time rate of pay plus fifteen (15%) per cent. Members of the second shift shall be allowed one half hour to eat, with this time being included in the hours of the workday established. There must be a first shift to work a second shift. All additional hours worked shall be paid at the time and one-half rate of pay plus fifteen (15%) per cent for weekday hours.

(Local #740)

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## MOSAIC MECHANIC

### Mosaic Mechanic - Mosaic & Terrazzo Mechanic

Effective Period: 7/1/2012 - 12/31/2012

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Wage Rate per Hour: **\$43.93**

Supplemental Benefit Rate per Hour: **\$33.08**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$44.05 per hour.

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$44.39**

Supplemental Benefit Rate per Hour: **\$35.12**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.09 per hour.

**Mosaic Mechanic - Mosaic & Terrazzo Finisher**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$42.36**

Supplemental Benefit Rate per Hour: **\$33.08**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$44.05 per hour.

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$42.78**

Supplemental Benefit Rate per Hour: **\$35.11**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.08 per hour.

**Mosaic Mechanic - Machine Operator Grinder**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$42.36**

Supplemental Benefit Rate per Hour: **\$33.08**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$44.05 per hour.

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$42.78**

Supplemental Benefit Rate per Hour: **\$35.11**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.08 per hour.

**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

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Paid Holidays**

None

(Local #7)

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**PAINTER**

**Painter - Brush & Roller**

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$35.50

Supplemental Benefit Rate per Hour: \$25.12

Supplemental Note: \$29.75 on overtime

Effective Period: 11/1/2012 - 4/30/2013

Wage Rate per Hour: \$36.00

Supplemental Benefit Rate per Hour: \$25.12

Supplemental Note: \$29.75 on overtime

Effective Period: 5/1/2013 - 6/30/2013

Wage Rate per Hour: \$37.50

Supplemental Benefit Rate per Hour: \$25.12

Supplemental Note: \$29.75 on overtime

**Spray & Scaffold / Decorative / Sandblast**

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$38.50

Supplemental Benefit Rate per Hour: \$25.12

Supplemental Note: \$29.75 on overtime

Effective Period: 11/1/2012 - 4/30/2013

Wage Rate per Hour: \$39.00

Supplemental Benefit Rate per Hour: \$25.12

Supplemental Note: \$29.75 on overtime

Effective Period: 5/1/2013 - 6/30/2013

Wage Rate per Hour: \$40.50

Supplemental Benefit Rate per Hour: \$25.12

Supplemental Note: \$29.75 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.

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**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
- Thanksgiving Day
- Christmas Day

**Paid Holidays**

None.

(District Council of Painters #9)

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**PAINTER - SIGN**

**Designer**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$36.15

Supplemental Benefit Rate per Hour: \$9.66

**Journey person**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$33.62

Supplemental Benefit Rate per Hour: \$9.66

**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.

Double time 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Christmas Day

### Shift Rates

All work performed outside the regular 8 hour work day (either 7:00 A.M to 3:30 P.M or 8:00 A.M. to 4:30 P.M) shall be paid at time and one half the regular hourly rate.

(Local #8A-28A)

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## PAINTER - STRIPER

### Striper (paint)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$33.00

Supplemental Benefit Rate per Hour: \$11.52

Supplemental Note: Overtime Supplemental Benefit rate - \$7.42; New Hire Rate (0-3 months) - \$0.00

### Lineperson (thermoplastic)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.00

Supplemental Benefit Rate per Hour: \$11.52

Supplemental Note: Overtime Supplemental Benefit rate - \$7.42; New Hire Rate (0-3 months) - \$0.00

### 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

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### Shift Rates

Employees hired before April 1, 2003: 15% night shift premium differential for work commenced at 9:00 PM or later.

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## 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. Vacation must be taken during winter months. 2 Personal Days except employees hired after 4/1/12 who do not have 2 years of service.

(Local #917)

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## **Painter - Structural Steel**

### Painters on Structural Steel

Effective Period: 7/1/2012 - 9/30/2012

Wage Rate per Hour: **\$46.25**

Supplemental Benefit Rate per Hour: **\$31.58**

Effective Period: 10/1/2012 - 6/30/2013

Wage Rate per Hour: **\$47.00**

Supplemental Benefit Rate per Hour: **\$32.08**

### Painter - Power Tool

Effective Period: 7/1/2012 - 9/30/2012

Wage Rate per Hour: **\$52.25**

Supplemental Benefit Rate per Hour: **\$31.58**

Effective Period: 10/1/2012 - 6/30/2013

Wage Rate per Hour: **\$53.00**

Supplemental Benefit Rate per Hour: **\$32.08**

## 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

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Paid Holidays**

None

**Shift Rates**

Regular hourly rates plus a ten per cent (10%) differential

(Local #806)

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**PAPERHANGER**

**Paperhanger**

Effective Period: 7/1/2012 - 4/30/2013

Wage Rate per Hour: **\$37.44**

Supplemental Benefit Rate per Hour: **\$29.23**

Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

Effective Period: 5/1/2013 - 6/30/2013

Wage Rate per Hour: **\$39.00**

Supplemental Benefit Rate per Hour: **\$29.23**

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.

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

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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

(District Council of Painters #9)

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## PAVER AND ROADBUILDER

### Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$42.86**

Supplemental Benefit Rate per Hour: **\$32.15**

### Paver & Roadbuilder - Laborer

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 before the installation of rubberized materials and similar surfaces; installation and repair of temporary construction fencing; slurry seal coating, maintenance of safety surfaces; play equipment installation, and other related work.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$38.99**

Supplemental Benefit Rate per Hour: **\$32.15**

### 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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$45.00**

Supplemental Benefit Rate per Hour: **\$32.15**

### Production Paver & Roadbuilder - Raker

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$44.49**

Supplemental Benefit Rate per Hour: **\$32.15**

### 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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$41.20**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Supplemental Benefit Rate per Hour: \$32.15

### Overtime Description

Veteran's Day is a Paid Holiday for employees working on production paving.

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 15%, except if an employee works on production paving on New Year's Day or Christmas Day, they receive the single time rate plus one day's pay for the holiday worked.

Employees who work on a holiday listed below receive the straight time rate plus one day's pay 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.

### Paid Holidays

Memorial Day

Independence Day

Labor Day

Columbus Day

Election 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 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.

Night Work - On night work, the first eight (8) hours of work will be paid for at fifteen percent (15%) over the single time rate, except that production paving work shall be paid at 25% over the single time rate. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

(Local #1010)

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## PLASTERER

### Plasterer

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$40.78

Supplemental Benefit Rate per Hour: \$26.80

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$40.78

Supplemental Benefit Rate per Hour: \$27.55

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### 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.

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

Martin Luther King Jr. 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

When it is not possible to conduct alteration work during regular work hours, in a building occupied by tenants, said work shall proceed on a shift basis: however work over seven (7) hours in any twenty four (24) hour period, the time after seven (7) hours shall be considered overtime.

The second shift shall start at a time between 3:30 p.m. and 7:00 p.m. and shall consist of seven (7) working hours and shall receive eight (8) hours of wages and benefits at the straight time rate. The workers on the second shift shall be allowed one-half (½) hour to eat with this time being included in the seven (7) hours of work.

(Local #530)

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## PLASTERER - TENDER

### Plasterer - Tender

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$34.24**

Supplemental Benefit Rate per Hour: **\$24.40**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$34.50**

Supplemental Benefit Rate per Hour: **\$25.14**



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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### 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)

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## PLUMBER

### Plumber

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$51.76

Supplemental Benefit Rate per Hour: \$37.19

Supplemental Note: Overtime supplemental benefit rate per hour: \$74.10

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$52.36

Supplemental Benefit Rate per Hour: \$37.34

Supplemental Note: Overtime supplemental benefit rate per hour: \$74.40

### Overtime Description

Double time the regular rate after a 7 hour day - unless for new construction site work where the plumbing contract price is \$1 million or less, and for public works jobs where the plumbing contract is \$1.5 million or less, the hours of labor can be 8 hours per day at the employers option. On Alteration jobs when other mechanical

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trades at the site are working an eighth hour at straight time, then the plumber shall also work an eighth hour at straight time.

**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

**Shift Rates**

Shift work, when directly specified in public agency or authority documents where plumbing contract is \$8 million or less, will be permitted. 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)

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**PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)**  
(Mechanical Equipment and Service work shall include any repair and/or replacement of the present plumbing system.)

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$32.96  
Supplemental Benefit Rate per Hour: \$15.93

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$33.21  
Supplemental Benefit Rate per Hour: \$16.43

**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.

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**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  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

(Plumbers Local # 1)

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**PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME  
CONSTRUCTION)**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$36.69

Supplemental Benefit Rate per Hour: \$25.46

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$37.11

Supplemental Benefit Rate per Hour: \$25.56

**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

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**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)

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**PLUMBER: PUMP & TANK  
(Installation and Maintenance)**

**Plumber - Pump & Tank**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$52.31

Supplemental Benefit Rate per Hour: \$31.56

**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)

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**POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION)**

**Pointer - Waterproofer, Caulker Mechanic**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$44.63**

Supplemental Benefit Rate per Hour: **\$23.10**

**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 4:30 P.M.) is to be paid at time and one half the regular rate.

(Bricklayer District Council)

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**ROOFER**

**Roofer**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$38.00**

Supplemental Benefit Rate per Hour: **\$27.07**

Effective Period: 1/1/2013 - 6/30/2013

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Wage Rate per Hour: \$39.00

Supplemental Benefit Rate per Hour: \$27.37

### 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

Presidential Election 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.

(Local #8)

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## SANDBLASTER - STEAMBLASTER (Exterior Building Renovation)

### Sandblaster / Steamblaster

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$44.63

Supplemental Benefit Rate per Hour: \$23.10

### 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).

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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 4:30 P.M.) is to be paid at time and one half the regular rate.

(Bricklayer District Council)

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**SHEET METAL WORKER**

**Sheet Metal Worker**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$45.65**

Supplemental Benefit Rate per Hour: **\$40.50**

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$45.65**

Supplemental Benefit Rate per Hour: **\$42.00**

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

**Sheet Metal Worker - Duct Cleaner**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$12.90**

Supplemental Benefit Rate per Hour: **\$8.07**

**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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$36.52**

Supplemental Benefit Rate per Hour: **\$40.50**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$36.52

Supplemental Benefit Rate per Hour: \$42.00

### 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

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 (seven 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. No journey person engaged in fan maintenance shall work in excess of forty (40) hours in any work week.

(Local #28)

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## 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.



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Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$40.09**

Supplemental Benefit Rate per Hour: **\$22.06**

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)

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## SIGN ERECTOR

(Sheet Metal, Plastic, Electric, and Neon)

### Sign Erector

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$41.55**

Supplemental Benefit Rate per Hour: **\$39.32**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$42.80**

Supplemental Benefit Rate per Hour: **\$42.17**

### Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

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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  
Washington's Birthday  
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)

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## **STEAMFITTER**

### **Steamfitter I**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$50.75**

Supplemental Benefit Rate per Hour: **\$49.68**

Supplemental Note: Overtime supplemental benefit rate: **\$98.62**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$51.25**

Supplemental Benefit Rate per Hour: **\$50.54**

Supplemental Note: Overtime supplemental benefit rate: **\$100.34**

### **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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

Work performed between 3:30 P.M. and 7:00 A.M. and on Saturdays, Sundays and Holidays shall be at double time the regular hourly rate and paid at the overtime supplemental benefit rate above.

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**Steamfitter II**

For heating, ventilation, air conditioning and mechanical public works contracts with a dollar value not to exceed \$15,000,000 and for fire protection/sprinkler public works contracts not to exceed \$1,500,000.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$50.75

Supplemental Benefit Rate per Hour: \$49.68

Supplemental Note: Overtime supplemental benefit rate: \$98.62

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$51.25

Supplemental Benefit Rate per Hour: \$50.54

Supplemental Note: Overtime supplemental benefit rate: \$100.34

**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**

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None

### Shift Rates

May be performed outside of the regular workday except Saturday, Sunday and Holidays. A shift shall consist of eight working hours. All work performed in excess of eight hours shall be paid at double time. No shift shall commence after 7:00 P.M. on Friday or 7:00 P.M. the day before holidays. All work performed after 12:01 A.M. Saturday or 12:01 A.M. the day before a Holiday will be paid at double time. When shift work is performed the wage rate for regular time worked is a thirty percent premium together with fringe benefits.

On Transit Authority projects, where work is performed in the vicinity of tracks all shift work on weekends and holidays may be performed at the regular shift rates.

Local #638

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## STEAMFITTER - REFRIGERATION AND AIR CONDITIONER (Maintenance and Installation Service Person)

### Refrigeration and Air Conditioner Mechanic

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$36.30

Supplemental Benefit Rate per Hour: \$11.76

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$37.05

Supplemental Benefit Rate per Hour: \$12.26

### Refrigeration and Air Conditioner Service Person V (4th year)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$29.82

Supplemental Benefit Rate per Hour: \$10.71

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$30.44

Supplemental Benefit Rate per Hour: \$11.13

### Refrigeration and Air Conditioner Service Person IV (3rd year)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$24.71

Supplemental Benefit Rate per Hour: \$9.80

Effective Period: 1/1/2013 - 6/30/2013

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Wage Rate per Hour: \$25.22

Supplemental Benefit Rate per Hour: \$10.16

**Refrigeration and Air Conditioner Service Person III (2nd year)**

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$21.21

Supplemental Benefit Rate per Hour: \$9.12

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$21.65

Supplemental Benefit Rate per Hour: \$9.44

**Refrigeration and Air Conditioner Service Person II (2nd six months)**

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$17.60

Supplemental Benefit Rate per Hour: \$8.50

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$17.96

Supplemental Benefit Rate per Hour: \$8.78

**Refrigeration and Air Conditioner Service Person I (1st six months)**

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$10.95

Supplemental Benefit Rate per Hour: \$7.90

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$11.18

Supplemental Benefit Rate per Hour: \$8.10

**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.

**Overtime Holidays**

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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 #638B)

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## **STONE MASON - SETTER**

### **Stone Mason - Setters**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$47.72**

Supplemental Benefit Rate per Hour: **\$35.28**

### **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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## **TAPER**

### **Drywall Taper**

Effective Period: 7/1/2012 - 12/25/2012

Wage Rate per Hour: \$43.32

Supplemental Benefit Rate per Hour: \$21.66

Effective Period: 12/26/2012 - 6/30/2013

Wage Rate per Hour: \$43.82

Supplemental Benefit Rate per Hour: \$21.66

### **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 the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus 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.

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**Shift Rates**

Time and one half the regular rate outside the regular work hours (8:00 A.M. through 3:30 P.M.)

(Local #1974)

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**TELECOMMUNICATION WORKER  
(Voice Installation Only)**

**Telecommunication Worker**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$35.94**

Supplemental Benefit Rate per Hour: **\$13.19**

Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. \$12.64 for Staten Island only.

**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 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



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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.)

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## TILE FINISHER

### Tile Finisher

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$38.17**

Supplemental Benefit Rate per Hour: **\$26.76**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$38.49**

Supplemental Benefit Rate per Hour: **\$27.42**

### 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

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

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### 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)

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## TILE LAYER - SETTER

### Tile Layer - Setter

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$47.75

Supplemental Benefit Rate per Hour: \$30.83

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$48.55

Supplemental Benefit Rate per Hour: \$31.46

### 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

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)

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## TIMBERPERSON

### Timberperson

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$42.63

Supplemental Benefit Rate per Hour: \$41.99

### 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 10:00 P.M., shall work eight and one half hours but will be paid for 9 hours, including benefits at the straight time rate for 8 hours.

(Local #1536)

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## TUNNEL WORKER

### Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$52.00

Supplemental Benefit Rate per Hour: \$46.85

### Tunnel Workers (Compressed Air Rates)

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Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$50.19  
Supplemental Benefit Rate per Hour: \$45.29

**Top Nipper (Compressed Air Rates)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$49.27  
Supplemental Benefit Rate per Hour: \$44.51

**Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$48.37  
Supplemental Benefit Rate per Hour: \$43.67

**Bottom Bell & Top Bell Signal Person: Shaft Person (Compressed Air Rates)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$48.37  
Supplemental Benefit Rate per Hour: \$43.67

**Changehouse Attendant: Powder Watchperson (Compressed Air Rates)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$42.09  
Supplemental Benefit Rate per Hour: \$41.41

**Blasters (Free Air Rates)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$49.62  
Supplemental Benefit Rate per Hour: \$44.75

**Tunnel Workers (Free Air Rates)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$47.48  
Supplemental Benefit Rate per Hour: \$42.84

**All Others (Free Air Rates)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$43.87  
Supplemental Benefit Rate per Hour: \$39.62

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Microtunneling (Free Air Rates)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$37.98**

Supplemental Benefit Rate per Hour: **\$34.27**

**Overtime Description**

For Repair-Maintenance Work on Existing Equipment and Facilities - Time and one half the regular rate after a 7 hour day, or for Saturday, or for Sunday. Double time the regular rate for work on a holiday.

**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

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

(Local #147)

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**WELDER**

**TO BE PAID AT THE RATE OF THE JOURNEYPERSON IN THE TRADE  
PERFORMING THE WORK.**

(NO TEXT ON THIS PAGE)

**OFFICE OF THE COMPTROLLER**

**CITY OF NEW YORK**

**220 APPRENTICESHIP PREVAILING WAGE SCHEDULE**

**APPENDIX**

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 employed on a public work project.

Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the journey person wage rate for the classification of work he 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.

**APPRENTICESHIP SCHEDULE OF PREVAILING WAGES AND SUPPLEMENTAL BENEFITS  
ADDENDUM  
EFFECTIVE PERIOD JANUARY 1, 2013 THROUGH JUNE 30, 2013**

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**List of Amended Classifications**

1. Boilermaker
2. House Wrecker
3. Iron Worker - Ornamental
4. Iron Worker - Structural
5. Mason Tender
6. Plasterer
7. Plumber



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## **ASBESTOS HANDLER**

(Ratio of Apprentice Journeyperson: 1 to 1, 1 to 3)

### **Asbestos Handler (First 1000 Hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 78% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$14.85

### **Asbestos Handler (Second 1000 Hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$14.85

### **Asbestos Handler (Third 1000 Hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 83% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$14.85

### **Asbestos Handler (Fourth 1000 Hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 89% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$14.85

(Local #78)

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## **BOILERMAKER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

### **Boilermaker (First Year)**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$27.41

Effective Period: 1/1/2013 - 3/31/2013  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$28.45

Effective Period: 4/1/2013 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyperson's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate Per Hour: \$28.75

**Boilermaker (Second Year: 1st Six Months)**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$28.91

Effective Period: 1/1/2013 - 3/31/2013

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$30.03

Effective Period: 4/1/2013 - 6/30/2013

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$30.33

**Boilermaker (Second Year: 2nd Six Months)**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate Per Hour: 75% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$30.40

Effective Period: 1/1/2013 - 3/31/2013

Wage Rate Per Hour: 75% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$31.61

Effective Period: 4/1/2013 - 6/30/2013

Wage Rate Per Hour: 75% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$31.91

**Boilermaker (Third Year: 1st Six Months)**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate Per Hour: 80% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$31.89

Effective Period: 1/1/2013 - 3/31/2013

Wage Rate Per Hour: 80% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$33.19

Effective Period: 4/1/2013 - 6/30/2013

Wage Rate Per Hour: 80% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$33.49

**Boilermaker (Third Year: 2nd Six Months)**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate Per Hour: 85% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$33.38

Effective Period: 1/1/2013 - 3/31/2013

Wage Rate Per Hour: 85% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$34.76

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 4/1/2013 - 6/30/2013  
Wage Rate Per Hour: 85% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$35.06

**Boilermaker (Fourth Year: 1st Six Months)**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$34.88

Effective Period: 1/1/2013 - 3/31/2013  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$36.34

Effective Period: 4/1/2013 - 6/30/2013  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$36.64

**Boilermaker (Fourth Year: 2nd Six Months)**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$36.38

Effective Period: 1/1/2013 - 3/31/2013  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$37.90

Effective Period: 4/1/2013 - 6/30/2013  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$38.20

(Local #5)

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**BRICKLAYER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

**Bricklayer (First 750 Hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Second 750 Hours)**

Effective Period: 7/1/2012 - 6/30/2013

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Third 750 Hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Fourth 750 Hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Fifth 750 Hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Sixth 750 Hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 95% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$16.60

(Bricklayer District Council)

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**CARPENTER**  
**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)**

**Carpenter (First Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$27.69

**Carpenter (Second Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$27.69

**Carpenter (Third Year)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$27.69

**Carpenter (Fourth Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$27.69

(Carpenters District Council)

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**CEMENT MASON**  
**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)**

**Cement Mason (First Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 50% of Journeyman's Rate

**Cement Mason (Second Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 60% of Journeyman's Rate

**Cement Mason (Third Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 70% of Journeyman's Rate

Effective Period: 7/1/2012 - 6/30/2013  
**(Local #780)**

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**CEMENT AND CONCRETE WORKER**  
**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)**

**Cement & Concrete Worker (0 - 500 hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$17.54

**Cement & Concrete Worker (501 - 1000 hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$18.37

**Cement & Concrete Worker (1001 - 2000 hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$23.75

**Cement & Concrete Worker (2001 - 4000 hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$24.57

(Cement Concrete Workers District Council)

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**DERRICKPERSON & RIGGER (STONE)**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)**

**Derrickperson & Rigger (stone) - First Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: 50% of Journeyman's rate

**Derrickperson & Rigger (stone) - Second Year: 1st Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: 75% of Journeyman's rate

**Derrickperson & Rigger (stone) - Second Year: 2nd Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: 75% of Journeyman's rate

**Derrickperson & Rigger (stone) - Third Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: 75% of Journeyman's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(Local #197)

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**DOCKBUILDER/PILE DRIVER**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)

**Dockbuilder/Pile Driver (First Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$27.69

**Dockbuilder/Pile Driver (Second Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$27.69

**Dockbuilder/Pile Driver (Third Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$27.69

**Dockbuilder/Pile Driver (Fourth Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$27.69

(Carpenters District Council)

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**ELECTRICIAN**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Electrician (First Year - Hired before 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$14.25  
Supplemental Benefit Rate per Hour: \$11.19  
Overtime Wage Rate Per Hour: \$21.38



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Overtime Supplemental Rate Per Hour: \$11.96

**Electrician (First Year - Hired on or After 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$11.50

Supplemental Benefit Rate per Hour: \$9.86

Overtime Wage Rate Per Hour: \$17.25

Overtime Supplemental Rate Per Hour: \$10.48

**Electrician (Second Year - Hired before 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$17.05

Supplemental Benefit Rate per Hour: \$12.54

Overtime Wage Rate Per Hour: \$25.58

Overtime Supplemental Rate Per Hour: \$13.47

**Electrician (Second Year - Hired on or After 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$13.50

Supplemental Benefit Rate per Hour: \$10.83

Overtime Wage Rate Per Hour: \$20.25

Overtime Supplemental Rate Per Hour: \$11.56

**Electrician (Third Year - Hired before 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$19.15

Supplemental Benefit Rate per Hour: \$13.56

Overtime Wage Rate Per Hour: \$28.73

Overtime Supplemental Rate Per Hour: \$14.60

**Electrician (Third Year - Hired on or After 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$15.50

Supplemental Benefit Rate per Hour: \$11.79

Overtime Wage Rate Per Hour: \$23.25

Overtime Supplemental Rate Per Hour: \$12.63

**Electrician (Fourth Year - Hired before 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$21.10

Supplemental Benefit Rate per Hour: \$14.50

Overtime Wage Rate Per Hour: \$31.65

Overtime Supplemental Rate Per Hour: \$15.65

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Electrician (Fourth Year - Hired on or After 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$17.50  
Supplemental Benefit Rate per Hour: \$12.76  
Overtime Wage Rate Per Hour: \$26.25  
Overtime Supplemental Rate Per Hour: \$13.71

**Electrician (Fifth Year - Hired before 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$25.30  
Supplemental Benefit Rate per Hour: \$17.52  
Overtime Wage Rate Per Hour: \$37.95  
Overtime Supplemental Rate Per Hour: \$18.85

**Electrician (Fifth Year - Hired on or After 5/10/07)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$21.50  
Supplemental Benefit Rate per Hour: \$15.71  
Overtime Wage Rate Per Hour: \$32.25  
Overtime Supplemental Rate Per Hour: \$16.84

**Overtime Description**

For "A" rated Apprentices (work in excess of 7 hours per day)  
For "M" rated Apprentices (work in excess of 8 hours per day)

(Local #3)

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**ELEVATOR CONSTRUCTOR**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)**

**Elevator (Constructor) - First Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$25.40  
Effective 3/17/2013 - Supplemental Rate Per Hour: \$26.87

**Elevator (Constructor) - Second Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Rate Per Hour: \$26.43  
Effective 3/17/2013 - Supplemental Rate Per Hour: \$27.92

**Elevator (Constructor) - Third Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Rate Per Hour: \$27.84  
Effective 3/17/2013 - Supplemental Rate Per Hour: \$29.38

**Elevator (Constructor) - Fourth Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Rate Per Hour: \$29.25  
Effective 3/17/2013 - Supplemental Benefit Per Hour: \$30.84

(Local #1)

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**ELEVATOR REPAIR & MAINTENANCE**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)

**Elevator Service/Modernization Mechanic (First Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Per Hour: \$25.33  
Effective 3/17/2013 - Supplemental Benefit Per Hour: \$26.79

**Elevator Service/Modernization Mechanic (Second Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Benefit Per Hour: \$25.65  
Effective 3/17/2013 - Supplemental Benefit Per Hour: \$27.12

**Elevator Service/Modernization Mechanic (Third Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Per Hour: \$26.92  
Effective 3/17/2013 - Supplemental Benefit Per Hour: \$28.43

**Elevator Service/Modernization Mechanic (Fourth Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Benefit Per Hour: \$28.19

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective 3/17/2013 - Supplemental Benefit Per Hour: \$29.74

(Local #1)

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**ENGINEER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

**Engineer - First Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$21.64

Supplemental Benefit Rate per Hour: \$20.07

**Engineer - Second Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$27.05

Supplemental Benefit Rate per Hour: \$20.07

**Engineer - Third Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$29.75

Supplemental Benefit Rate per Hour: \$20.07

**Engineer - Fourth Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$32.45

Supplemental Benefit Rate per Hour: \$20.07

(Local #15)

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**ENGINEER - OPERATING**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

**Operating Engineer - First Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour 40% of Journeyperson's Rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Per Hour: \$18.65

**Operating Engineer - Second Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's Rate  
Supplemental Benefit Per Hour: \$18.65

**Operating Engineer - Third Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 60% of Journeyman's Rate  
Supplemental Benefit Per Hour: \$18.65

(Local #14)

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**FLOOR COVERER**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Floor Coverer (First Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Rate Per Hour: \$25.75

**Floor Coverer (Second Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$25.75

**Floor Coverer (Third Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Rate Per Hour: \$25.75

**Floor Coverer (Fourth Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$25.75

(Carpenters District Council)

## **GLAZIER**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)**

### **Glazier (First Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Rate Per Hour: \$11.97

### **Glazier (Second Year)**

Effective Period: 7/1/2012 - 10/31/2012  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$21.01

Effective Period: 11/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$21.13

### **Glazier (Third Year)**

Effective Period: 7/1/2012 - 10/31/2012  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$23.38

Effective Period: 11/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$23.54

### **Glazier (Fourth Year)**

Effective Period: 7/1/2012 - 10/31/2012  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$28.14

Effective Period: 11/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$28.34

(Local #1281)

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## **HEAT & FROST INSULATOR**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)**

**Heat & Frost Insulator (First Year)**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

**Heat & Frost Insulator (Second Year)**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

**Heat & Frost Insulator (Third Year)**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

**Heat & Frost Insulator (Fourth Year)**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #12)

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**HOUSE WRECKER**

**(TOTAL DEMOLITION)**

**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)**

**House Wrecker - First Year**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$20.06

Supplemental Benefit Rate per Hour: \$15.45

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$20.21

Supplemental Benefit Rate per Hour: \$15.80

**House Wrecker - Second Year**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$21.06

Supplemental Benefit Rate per Hour: \$15.45

Effective Period: 1/1/2013 - 6/30/2013

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Wage Rate per Hour: \$21.26  
Supplemental Benefit Rate per Hour: \$15.80

**House Wrecker - Third Year**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$22.56  
Supplemental Benefit Rate per Hour: \$15.45

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$22.81  
Supplemental Benefit Rate per Hour: \$15.80

**House Wrecker - Fourth Year**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$25.06  
Supplemental Benefit Rate per Hour: \$15.45

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$25.36  
Supplemental Benefit Rate per Hour: \$15.80

**Iron Worker (First Year)**  
(Local #79)

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**IRON WORKER - ORNAMENTAL**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Iron Worker (Ornamental) - 1st Four Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$32.06

**Iron Worker (Ornamental) 5 - 10 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Rate Per Hour: \$32.89

**Iron Worker (Ornamental) 11 - 16 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Rate Per Hour: \$33.73



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Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Rate Per Hour: \$34.34

**Iron Worker (Ornamental) 17 - 22 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$35.39

**Iron Worker (Ornamental) 23 - 28 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 85% of Journeyman's rate  
Supplemental Rate Per Hour: \$36.22

**Iron Worker (Ornamental) 29 - 36 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 95% of Journeyman's rate  
Supplemental Rate Per Hour: \$37.89

**Iron Worker (Ornamental) - 1st Ten Months - Hired After 8/1/08**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$30.40

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$33.39

**Iron Worker (Ornamental) - 11 - 16 Months - Hired After 8/1/08**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Rate Per Hour: \$31.23

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Rate Per Hour: \$34.34

**Iron Worker (Ornamental) - 17 - 22 Months - Hired After 8/1/08**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$32.06

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$35.29

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**Iron Worker (Ornamental) - 23 - 28 Months - Hired After 8/1/08**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Rate Per Hour: \$33.73

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Rate Per Hour: \$37.19

**Iron Worker (Ornamental) - 29 - 36 Months - Hired After 8/1/08**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$35.39

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$39.09

(Local #580)

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**IRON WORKER - STRUCTURAL**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)

**Iron Worker (Structural) - 1st Six Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$23.62  
Supplemental Benefit Rate per Hour: \$41.21

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$24.10  
Supplemental Benefit Rate per Hour: \$43.12

**Iron Worker (Structural) - 7- 18 Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$24.22  
Supplemental Benefit Rate per Hour: \$41.21

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$24.70  
Supplemental Benefit Rate per Hour: \$43.12

**Iron Worker (Structural) - 19 - 36 months**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$24.82

Supplemental Benefit Rate per Hour: \$41.21

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$25.30

Supplemental Benefit Rate per Hour: \$43.12

(Local #40 and #361)

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**LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE LAYER & COMMON)**

(Ratio Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - First 1000 hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.75

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Second 1000 hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.75

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Third 1000 hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.75

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Fourth 1000 hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 90% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.75

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(Local #731)

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**MARBLE MECHANICS**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Cutters & Setters - First 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

**Cutters & Setters - Second 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 55% of Journeyman's rate

**Cutters & Setters - Third 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 65% of Journeyman's rate

**Cutters & Setters - Fourth 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 75% of Journeyman's rate

**Cutters & Setters - Fifth 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 85% of Journeyman's rate

**Cutters & Setters - Sixth 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 95% of Journeyman's rate

**Polishers & Finishers - First 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

**Polishers & Finishers - Second 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

**Polishers & Finishers - Third 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

**Polishers & Finishers - Fourth 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

(Local #7)

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**MASON TENDER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Mason Tender - First Year**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$20.33

Supplemental Benefit Rate per Hour: \$16.16

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$20.48

Supplemental Benefit Rate per Hour: \$16.51

**Mason Tender - Second Year**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$21.33

Supplemental Benefit Rate per Hour: \$16.16

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$21.53

Supplemental Benefit Rate per Hour: \$16.51

**Mason Tender - Third Year**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$22.83

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Supplemental Benefit Rate per Hour: \$16.16

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$23.08

Supplemental Benefit Rate per Hour: \$16.51

**Mason Tender - Fourth Year**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$25.33

Supplemental Benefit Rate per Hour: \$16.16

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$25.63

Supplemental Benefit Rate per Hour: \$16.51

(Local #79)

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**METALLIC LATHER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Metallic Lather (First Year -Called Prior to 6/29/11)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$27.91

Supplemental Benefit Rate per Hour: \$22.79

**Metallic Lather (Second Year - Called Prior to 6/29/11)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$32.51

Supplemental Benefit Rate per Hour: \$24.44

**Metallic Lather (Third Year - Called Prior to 6/29/11)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.57

Supplemental Benefit Rate per Hour: \$25.59

**Metallic Lather (First Year -Called On Or After 6/29/11)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$17.71

Supplemental Benefit Rate per Hour: \$19.85

**Metallic Lather (Second Year - Called On Or After 6/29/11)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$22.71  
Supplemental Benefit Rate per Hour: \$19.85

**Metallic Lather (Third Year - Called On Or After 6/29/11)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$27.71  
Supplemental Benefit Rate per Hour: \$19.85

(Local #46)

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**MILLWRIGHT**

**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)**

**Millwright (First Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$25.40  
Supplemental Benefit Rate per Hour: \$28.67

**Millwright (Second Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$30.02  
Supplemental Benefit Rate per Hour: \$31.87

**Millwright (Third Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$34.64  
Supplemental Benefit Rate per Hour: \$36.19

**Millwright (Fourth Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$43.88  
Supplemental Benefit Rate per Hour: \$41.50

(Local #740)

**PAVER AND ROADBUILDER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Paver and Roadbuilder - First Year (Minimum 1000 hours)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$25.72

Supplemental Benefit Rate per Hour: \$15.75

**Paver and Roadbuilder - Second Year (Minimum 1000 hours)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$27.29

Supplemental Benefit Rate per Hour: \$15.75

(Local #1010)

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**PAINTER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Painter - Brush & Roller - First Year**

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$14.20

Supplemental Benefit Rate per Hour: \$10.88

Effective Period: 11/1/2012 - 6/30/2013

Wage Rate per Hour: \$14.40

Supplemental Benefit Rate per Hour: \$10.88

**Painter - Brush & Roller - Second Year**

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$17.75

Supplemental Benefit Rate per Hour: \$14.73

Effective Period: 11/1/2012 - 6/30/2013

Wage Rate per Hour: \$18.00

Supplemental Benefit Rate per Hour: \$14.73



**Painter - Brush & Roller - Third Year**

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$21.30

Supplemental Benefit Rate per Hour: \$17.64

Effective Period: 11/1/2012 - 6/30/2013

Wage Rate per Hour: \$21.60

Supplemental Benefit Rate per Hour: \$17.64

**Painter - Brush & Roller - Fourth Year**

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$28.40

Supplemental Benefit Rate per Hour: \$23.02

Effective Period: 11/1/2012 - 6/30/2013

Wage Rate per Hour: \$28.80

Supplemental Benefit Rate per Hour: \$23.02

(District Council of Painters)

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**PAINTER - STRUCTURAL STEEL**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Painters - Structural Steel (First Year)**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

**Painters - Structural Steel (Second Year)**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

**Painters - Structural Steel (Third Year)**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #806)

## **PLASTERER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

### **Plasterer - First Year: 1st Six Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Rate Per Hour: \$14.61

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Rate Per Hour: \$15.36

### **Plasterer - First Year: 2nd Six Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 45% of Journeyman's rate  
Supplemental Rate Per Hour: \$15.09

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 45% of Journeyman's rate  
Supplemental Rate Per Hour: \$15.84

### **Plasterer - Second Year: 1st Six Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Rate Per Hour: \$17.06

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Rate Per Hour: \$17.81

### **Plasterer - Second Year: 2nd Six Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$18.14

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$18.89

### **Plasterer - Third Year: 1st Six Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Rate Per Hour: \$20.31

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Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Rate Per Hour: \$21.06

**Plasterer - Third Year: 2nd Six Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Rate Per Hour: \$21.39

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Rate Per Hour: \$22.14

(Local #530)

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**PLUMBER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Plumber - First Year: 1st Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$14.00  
Supplemental Benefit Rate per Hour: \$0.71

**Plumber - First Year: 2nd Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$14.00  
Supplemental Benefit Rate per Hour: \$2.96

**Plumber - Second Year**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$17.96  
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$18.26  
Supplemental Benefit Rate per Hour: \$16.32

**Plumber - Third Year**

Effective Period: 7/1/2012 - 12/31/2012

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Wage Rate per Hour: \$20.06  
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$20.36  
Supplemental Benefit Rate per Hour: \$16.32

**Plumber - Fourth Year**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$22.91  
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$23.21  
Supplemental Benefit Rate per Hour: \$16.32

**Plumber - Fifth Year: 1st Six Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$24.31  
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$24.61  
Supplemental Benefit Rate per Hour: \$16.32

**Plumber - Fifth Year: 2nd Six Months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$36.38  
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$36.68  
Supplemental Benefit Rate per Hour: \$16.32

(Plumbers Local #1)

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**POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION)**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Pointer - Waterproofer, Caulker Mechanic - First Year**

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Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$25.00  
Supplemental Benefit Rate per Hour: \$3.45

**Pointer - Waterproofer, Caulker Mechanic - Second Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$27.25  
Supplemental Benefit Rate per Hour: \$8.40

**Pointer - Waterproofer, Caulker Mechanic - Third Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$32.23  
Supplemental Benefit Rate per Hour: \$11.15

**Pointer - Waterproofer, Caulker Mechanic - Fourth Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$38.66  
Supplemental Benefit Rate per Hour: \$11.15

(Bricklayer District Council)

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**ROOFER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)

**Roofer - First Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 35% of Journeyman's Rate

**Roofer - Second Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 50% of Journeyman's Rate

**Roofer - Third Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 60% of Journeyman's Rate

**Roofer - Fourth Year**

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Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's Rate

(Local #8)

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**SHEET METAL WORKER**  
**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)**

**Sheet Metal Worker - First Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 30% of Journeyperson's rate

Supplemental Rate Per Hour: \$15.37

**Sheet Metal Worker - Second Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 35% of Journeyperson's rate

Supplemental Rate Per Hour: \$18.24

**Sheet Metal Worker - Third Year (1st Six Months)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$20.06

**Sheet Metal Worker - Third Year (2nd Six Months)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$21.87

**Sheet Metal Worker - Fourth Year (1st Six Months)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$23.69

**Sheet Metal Worker - Fourth Year (2nd Six Months)**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$25.33

**Sheet Metal Worker - Fifth Year (1st Six Months)**

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Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$27.47

**Sheet Metal Worker - Fifth Year(2nd Six Months)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Rate Per Hour: \$31.23

(Local #28)

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**SIGN ERECTOR**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Sign Erector - First Year: 1st Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 35% of Journeyman's rate  
Supplemental Rate Per Hour: \$5.96

**Sign Erector - First Year: 2nd Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Rate Per Hour: \$6.75

**Sign Erector - Second Year: 1st Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 45% of Journeyman's rate  
Supplemental Rate Per Hour: \$7.55

**Sign Erector - Second Year: 2nd Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$8.34

**Sign Erector - Third Year: 1st Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Rate Per Hour: \$9.13

**Sign Erector - Third Year: 2nd Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$9.92

**Sign Erector - Fourth Year: 1st Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$10.72

**Sign Erector - Fourth Year: 2nd Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$11.51

**Sign Erector - Fifth Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$12.30

**Sign Erector - Sixth Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$12.30

(Local #137) - 80% of Journeyperson's rate

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**STEAMFITTER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Steamfitter - First Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

**Steamfitter - Second Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.



**Steamfitter - Third Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate and Supplemental Rate per Hour: 65% of Journeyperson's rate.

**Steamfitter - Fourth Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate and Supplemental Rate Per Hour: 80% of Journeyperson's rate.

**Steamfitter - Fifth Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate and Supplemental Rate Per Hour: 85% of Journeyperson's rate.

(Local #638)

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**STONE MASON - SETTER**

(Ratio Apprentice of Journeyperson: 1 to 1, 1 to 2)

**Stone Mason - Setters - First 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Second 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013

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: 7/1/2012 - 6/30/2013

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: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Fifth 750 Hours**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Rate Per Hour: 50% of Journeyman's rate

**Stone Mason - Setters - Sixth 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 100% of Journeyman's rate  
Supplemental Rate Per Hour: 50% of Journeyman's rate

(Bricklayers District Council)

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**TAPER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Drywall Taper - First Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

**Drywall Taper - Second Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

**Drywall Taper - Third Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 80% of Journeyman's rate

(Local #1974)

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**TILE LAYER - SETTER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Tile Layer - Setter - First 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

**Tile Layer - Setter - Second 750 Hours**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

**Tile Layer - Setter - Third 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

**Tile Layer - Setter - Fourth 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

**Tile Layer - Setter - Fifth 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

**Tile Layer - Setter - Sixth 750 Hours**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

(Local #7)

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**TIMBERPERSON**  
**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)**

**Timberperson - First Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$27.49

**Timberperson - Second Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$27.49

**Timberperson - Third Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyperson's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Rate Per Hour: \$27.49

**Timberperson - Fourth Year**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour: 80% of Journeyman's rate

Supplemental Rate Per Hour: \$27.49

(Local #1536)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

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**NYC ADMINISTRATIVE CODE § 6-109 SCHEDULE OF "LIVING WAGES"**

Contractors who provide the following services to the City of New York must post a copy of this Living Wage Schedule at their work site(s) as required by New York City Administrative Code § 6-109:

- Building Services,
- Day Care Services,
- Food Services,
- Head Start Services,
- Homecare Services,
- Services to Persons with Cerebral Palsy, and
- Temporary Services.

In accordance with NYC Administrative Code § 6-109, the Comptroller of the City of New York promulgated this schedule of living wages for the above services on contracts for non-emergency work in excess of the small purchase limit set by the Procurement Policy Board; contracting agencies must annex this schedule to such contracts.

A city service contractor or subcontractor that provides homecare services, day care services, head start services or services to persons with cerebral palsy must pay its covered employees that directly render such services in performance of the city service contract or subcontract no less than the living wage and must provide its employees health benefits (supplemental benefits) or must supplement their hourly wage rate by an amount no less than the health benefits supplement rate. This requirement applies for each hour that the employee works performing the city service contract or subcontract.

A city service contractor or subcontractor that provides building services, food services or temporary services must pay its employees that are engaged in performing the city service contract or subcontract no less than the living wage or the prevailing wage, whichever is greater. Where the living wage is greater than the prevailing wage, the city service contractor or subcontractor must either provide its employees health benefits or must supplement their hourly wage rate by an amount no less than the health benefits supplement rate. Where the prevailing wage is greater than the living wage, the city service contractor or subcontractor must provide its employees the prevailing wage and supplements. These requirements apply for each hour that the employee works performing the city service contract or subcontract.

The appropriate schedule of living wages must be posted at all work sites pursuant to NYC Administrative Code 6-109.

The schedule is applicable for work performed during the effective period, unless otherwise noted. You will be notified of any changes to this schedule by addenda published on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov). Schedules for future one-year periods will be published annually in the City Record on or about July 1<sup>st</sup> of each succeeding year and on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov).

The living wage rate and the health benefit supplement rate are known through June 30 of each year and those rates are listed in this schedule.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

The living wage rates listed in this schedule may not include all hourly wage calculations for overtime, shift differential, Holiday, Saturday, Sunday or other premium time work. Similarly, this schedule does not set forth every living wage practice with which employers must comply.

Some of the rates in this schedule are based on collective bargaining agreements. These agreements are available for inspection by appointment. Requests for appointments may be made by calling (212) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

Answers to questions concerning prevailing wage practices may be obtained from the Classification Unit by calling (212) 669-7974. Please direct all other compliance issues to; Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

Contractors are solely responsible for maintaining original payroll records, which delineate, among other things, the hours each employee worked within a given classification. Contractors using rates and/or classifications not promulgated by the Comptroller do so at their own risk. Additionally, prior to bid, an agency's chief contracting officer must contact the Bureau of Labor Law to obtain a wage determination for a work classification not published in this schedule.

The information listed below is intended to assist you in meeting your living wage and prevailing wage obligation. Contractors are advised to review the Comptroller's Living Wage Schedule prior to submitting a bid for City work. Any wage rate error made by the contracting agency in the contract documents will not preclude a finding against the contractor for an underpayment of the applicable living wage or the applicable prevailing wage.

This schedule sets forth the living wage and benefit rates required to be annexed to and form part of the contract specifications for work covered by New York City Administrative Code § 6-109. Contractors performing such work are required to pay not less than the rates specified in this schedule for the applicable trade or occupation.

**Benefits are paid for EACH HOUR WORKED unless otherwise noted.**

Wasyl Kinach, P.E.  
Director of Classifications  
Bureau of Labor Law

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

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**BUILDING CLEANER AND MAINTAINER (OFFICE)**

**Office Building Class "A" Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director (Over 280,000 square feet gross area)**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$22.65

Supplemental Benefit Rate per Hour: \$9.13

Supplemental Note: for new employee 0-12 months of employment - \$6.64; for new employee 13-24 months of employment - \$8.81

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$22.97

Supplemental Benefit Rate per Hour: \$9.51

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

**NEW HIRE:** Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director may be paid 75% of the wage rate above for the first 21 months of employment, 85% of the wage rate above for the 22nd through 42nd months of employment, and upon the completion of 42 months of employment employee shall be paid the full wage rate. Note: New Hires hired before January 1, 2012 will continue to receive 80% of the wage rate above for the first 30 months, and upon the completion of 30 months of employment employee shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

**Office Building Class "B" Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director (Over 120,000 and less than 280,000 square feet gross area)**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$22.62

Supplemental Benefit Rate per Hour: \$9.13

Supplemental Note: for new employee 0-12 months of employment - \$6.64; for new employee 13-24 months of employment - \$8.81

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$22.94

Supplemental Benefit Rate per Hour: \$9.51

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

**NEW HIRE:** Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director may be paid 75% of the wage rate above for the first 21 months of employment, 85% of the wage rate above for the 22nd through 42nd months of employment, and upon the completion of 42 months of employment employee shall be paid the full wage rate. Note: New Hires hired before January 1, 2012 will continue to receive 80% of the wage rate above for the first 30 months, and upon the completion of 30 months of employment employee shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

**Office Building Class "C" Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director (Less than 120,000 square feet gross area)**

Effective Period: 7/1/2012 - 12/31/2012



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$22.57**

Supplemental Benefit Rate per Hour: **\$9.13**

Supplemental Note: for new employee 0-12 months of employment - \$6.64; for new employee 13-24 months of employment - \$8.81

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$22.90**

Supplemental Benefit Rate per Hour: **\$9.51**

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

**NEW HIRE:** Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director may be paid 75% of the wage rate above for the first 21 months of employment, 85% of the wage rate above for the 22nd through 42nd months of employment, and upon the completion of 42 months of employment employee shall be paid the full wage rate. Note: New Hires hired before January 1, 2012 will continue to receive 80% of the wage rate above for the first 30 months, and upon the completion of 30 months of employment employee shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for work on a holiday plus the day's pay.

Time and one half the regular hourly rate after 40 hours in any work week.

### Paid Holidays

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### Vacation

Less than 6 months of work.....no vacation

6 months of work.....three (3) days

1 year of work.....ten (10) days

5 years of work.....fifteen (15) days

15 years of work.....twenty (20) days

21 years of work.....twenty-one (21) days

22 years of work.....twenty-two (22) days

23 years of work.....twenty-three (23) days

24 years of work.....twenty-four (24) days

25 years or more of work.....twenty-five (25) days

Plus two Personal Days per year.

Sick Leave:

10 sick days per year.

Unused sick leave paid in the succeeding January, one full day pay for each unused sick day.

Local #32 B/J)

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## **BUILDING CLEANER AND MAINTAINER (RESIDENTIAL)**

### **Residential Building Class "A" Cleaner/Porter**

Residential Buildings Class "A": buildings where the assessed value of the land and building, based upon the 1935 assessment, divided by the number of rooms in the building, gives an assessed value of over \$4000.00 a room.

Effective Period: 7/1/2012 - 4/20/2013

Wage Rate per Hour: **\$20.77**

Supplemental Benefit Rate per Hour: **\$8.68**

Supplemental Note: for new employee 0-12 months of employment - \$6.37; for new employee 13-24 months of employment - \$8.43

Effective 1/1/2013 - \$9.43; for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

Effective Period: 4/21/2013 - 6/30/2013

Wage Rate per Hour: **\$21.34**

Supplemental Benefit Rate per Hour: **\$9.43**

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

**NEW HIRE:** Porter/Cleaner, may be paid a starting rate of 80% of the hourly rate published above. Upon completion of 30 months of employment, the new hire shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

### **Residential Building Class "B" Cleaner/Porter**

Residential Building Class "B": buildings where the assessed value of the land and building, based upon the 1935 assessment, divided by the number of rooms in the building, gives an assessed value of over \$2000.00 a room and not over \$4000.00 a room.

Effective Period: 7/1/2012 - 4/20/2013

Wage Rate per Hour: **\$20.71**

Supplemental Benefit Rate per Hour: **\$8.68**

Supplemental Note: for new employee 0-12 months of employment - \$6.37; for new employee 13-24 months of employment - \$8.43

Effective 1/1/2013 - \$9.43; for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

Effective Period: 4/21/2013 - 6/30/2013

Wage Rate per Hour: **\$21.28**

Supplemental Benefit Rate per Hour: **\$9.43**

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

**NEW HIRE:** Porter/Cleaner, may be paid a starting rate of 80% of the hourly rate published above. Upon completion of 30 months of employment, the new hire shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

**Residential Building Class "C" Cleaner/Porter**

Residential Building Class "C": buildings where the assessed value of the land and building, based upon the 1935 assessment, divided by the number of rooms in the building, gives an assessed value of \$2000.00 or less a room.

Effective Period: 7/1/2012 - 4/20/2013

Wage Rate per Hour: \$20.65

Supplemental Benefit Rate per Hour: \$8.68

Supplemental Note: for new employee 0-12 months of employment - \$6.37; for new employee 13-24 months of employment - \$8.43

Effective 1/1/2013 - \$9.43; for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

Effective Period: 4/21/2013 - 6/30/2013

Wage Rate per Hour: \$21.23

Supplemental Benefit Rate per Hour: \$9.43

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

NEW HIRE: Porter/Cleaner, may be paid a starting rate of 80% of the hourly rate published above. Upon completion of 30 months of employment, the new hire shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for work on a holiday plus the day's pay.

Time and one half the regular hourly rate after 40 hours in any work week.

**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

**Vacation**

6 months.....three (3) days

1 year.....ten (10) days

5 years.....fifteen (15) days

15 years.....twenty (20) days

21 years.....twenty-one (21) days

22 years.....twenty-two (22) days

23 years.....twenty-three (23) days

24 years.....twenty-four (24) days

25 years.....twenty-five (25) days

Plus two Personal Days per year.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

**SICK LEAVE**

After 1 year of service.....ten (10) days per year

(Local #32 B/J)

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**DAY CARE SERVICES**

**Day Care Services**

'Day Care Services' means provision of day care services through the city's center-based day care program administered under contract with the city's Administration for Children's Services. No other day care programs shall be covered, including family-based day care programs administered by city-contracted day care centers.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

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**CLEANER (PARKING GARAGE)**

**Garage Cleaner**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

**Overtime**

Time and one half the regular rate after an 8 hour day or after 40 hours in any work week.

(NYC Administrative Code §6-109)

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**FOOD SERVICE EMPLOYEES**

**Cook**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$15.40

Supplemental Benefit Rate per Hour: \$1.72

**Cafeteria Attendant**

Effective Period: 7/1/2012 - 6/30/2013

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$6-109 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$10.24

Supplemental Benefit Rate per Hour: \$1.72

**Counter Attendant**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$10.31

Supplemental Benefit Rate per Hour: \$1.72

**Kitchen Helper / Dishwasher**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$9.83

Supplemental Benefit Rate per Hour: \$1.72

**Overtime**

Time and one half the regular hourly rate after 40 hours in any work week.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

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**GARDENER**

**Gardener**

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$17.04

Supplemental Benefit Rate per Hour: \$1.72

**Overtime**

Time and one half the regular rate after an 8 hour day or after 40 hours in any work week.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

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**HEAD START SERVICES**

**Head Start Services**

'Head Start Services' means provision of head start services through the city's center-based head start program administered under contract with the city's Administration for Children's Services. No other head start programs shall be covered.

Effective Period: 7/1/2012 - 6/30/2013

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$10.00**

Supplemental Benefit Rate per Hour: **\$1.50**

(NYC Administrative Code §6-109)

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## HEMECARE SERVICES

### Home Care Services

'Homecare Services' means the provision of homecare services under the city's Medicaid Personal Care/Home Attendant or Housekeeping Programs, including but not limited to the In-Home Services for the Elderly Programs administered by the Department for the Aging.

For homecare services provided under the Personal Care Services program, the wage and supplemental benefit rate above shall apply only as long as the state and federal government maintain their combined aggregate proportionate share of funding and approved rates for homecare services in effect as of the date of the enactment of this section.

For contractors or subcontractors providing homecare services, the supplemental benefit rate may be waived by the terms of a bona fide collective bargaining agreement with respect to employees who have never worked a minimum of eighty (80) hours per month for two consecutive months for that covered employer, but such provision may not be waived for any employee once a minimum of eighty (80) hours for two consecutive months has been achieved.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$10.00**

Supplemental Benefit Rate per Hour: **\$1.50**

(NYC Administrative Code §6-109)

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## SECURITY GUARD (ARMED)

### Security Guard (Armed)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$27.75**

Supplemental Benefit Rate per Hour: **\$4.73**

Supplemental Note: for new employee 0-30 days of employment - \$4.09; for new employee 31-120 days of employment - \$4.26; for new employee 121 days - 2 years of employment - \$4.37

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$28.00**

Supplemental Benefit Rate per Hour: **\$4.90**

Supplemental Note: for new employee 0-30 days of employment - \$4.26; for new employee 31-120 days of employment - \$4.43; for new employee 121 days - 2 years of employment - \$4.54

Months of employment shall be defined as an Employee's length of service with the Employer or at the Facility, whichever is greater.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

### Overtime Description

A guard who works a holiday is paid the regular rate plus receives the paid holiday.  
Supplemental Benefits shall be paid for each hour paid, up to forty (40) paid hours per week.

### Overtime

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular hourly rate after 40 hours in any work week.

### Paid Holidays

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

### Vacation

Months on payroll	Vacation with Pay
6	3 days
12	5 days
24	10 days
60	15 days
180	20 days
300	25 days

### Sick Leave

Employees accrue paid sick leave at the rate of one (1) sick day for every six (6) months worked, up to a maximum of six (6) days a year.

(Local #32B/J)

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## SECURITY GUARD (UNARMED)

### Security Guard (Unarmed) 0 - 6 months

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$12.60

Supplemental Benefit Rate per Hour: \$4.37

Supplemental Note: for new employee 0-30 days of employment - \$4.09; for new employee 31-120 days of employment - \$4.26

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$12.85

Supplemental Benefit Rate per Hour: \$4.54

Supplemental Note: for new employee 0-30 days of employment - \$4.26; for new employee 31-120 days of employment - \$4.43

### Security Guard (Unarmed) 7 - 12 months

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$13.10  
Supplemental Benefit Rate per Hour: \$4.37

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$13.35  
Supplemental Benefit Rate per Hour: \$4.54

**Security Guard (Unarmed) 13 - 18 months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$13.60  
Supplemental Benefit Rate per Hour: \$4.37

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$13.85  
Supplemental Benefit Rate per Hour: \$4.54

**Security Guard (Unarmed) 19 - 24 months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$14.10  
Supplemental Benefit Rate per Hour: \$4.37

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$14.35  
Supplemental Benefit Rate per Hour: \$4.54

**Security Guard (Unarmed) 25 - 30 months**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$14.60  
Supplemental Benefit Rate per Hour: \$4.73

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$14.85  
Supplemental Benefit Rate per Hour: \$4.90

**Security Guard (Unarmed) 31 months or more**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$14.75  
Supplemental Benefit Rate per Hour: \$4.73

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$15.15  
Supplemental Benefit Rate per Hour: \$4.90

Months of employment shall be defined as an Employee's length of service with the Employer or at the Facility, whichever is greater.



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

### Overtime Description

A guard who works a holiday is paid the regular rate plus receives the paid holiday.  
Supplemental Benefits shall be paid for each hour paid, up to forty (40) paid hours per week.

### Overtime

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular hourly rate after 40 hours in any work week.

### Paid Holidays

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

### Vacation

Months on payroll	Vacation with Pay
6	3 days
12	5 days
24	10 days
60	15 days
180	20 days
300	25 days

### Sick Leave

Employees accrue paid sick leave at the rate of one (1) sick day for every six (6) months worked, up to a maximum of six (6) days a year.

(Local #32B/J)

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## SERVICES TO PERSONS WITH CEREBRAL PALSY

### Services To Person With Cerebral Palsy

'Services to Persons with Cerebral Palsy' means provision of services which enable persons with cerebral palsy and related disabilities to lead independent and productive lives through an agency that provides health care, education, employment, housing and technology resources to such persons under contract with the city or the department of education.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

**TEMPORARY OFFICE SERVICES**

**Administrative Assistant**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$31.02  
Supplemental Benefit Rate per Hour: None

**Cashier**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$11.50  
Supplemental Benefit Rate per Hour: None

**Clerk (various)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$14.60  
Supplemental Benefit Rate per Hour: None

**Computer Assistant**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$20.61  
Supplemental Benefit Rate per Hour: None

**Data Entry Operator**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$15.73  
Supplemental Benefit Rate per Hour: None

**Receptionist**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$14.71  
Supplemental Benefit Rate per Hour: None

**Secretary (various)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$18.72  
Supplemental Benefit Rate per Hour: None

**Word Processor**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: \$19.50  
Supplemental Benefit Rate per Hour: None

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

**Overtime**

Time and one half the regular rate after a 40 hour week.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics or NYC Administrative Code §6-109)

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**WINDOW CLEANER**

**Window Cleaner**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$26.12**

Supplemental Benefit Rate per Hour: **\$9.13**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$26.44**

Supplemental Benefit Rate per Hour: **\$9.51**

**Power Operated Scaffolds, Manual Scaffolds, and Boatswain Chairs**

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$28.37**

Supplemental Benefit Rate per Hour: **\$9.13**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$28.69**

Supplemental Benefit Rate per Hour: **\$9.51**

**Window Cleaner Apprentice (0 - 3 months)**

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$19.35**

Supplemental Benefit Rate per Hour: **\$0.00**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$19.59**

Supplemental Benefit Rate per Hour: **\$0.00**

**Window Cleaner Apprentice (4 - 7 months)**

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$20.92**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$9.13

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$21.18

Supplemental Benefit Rate per Hour: \$9.51

**Window Cleaner Apprentice (8 - 11 months)**

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$22.17

Supplemental Benefit Rate per Hour: \$9.13

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$22.44

Supplemental Benefit Rate per Hour: \$9.51

**Window Cleaner Apprentice (12 - 15 months)**

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$23.43

Supplemental Benefit Rate per Hour: \$9.13

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$23.72

Supplemental Benefit Rate per Hour: \$9.51

**Window Cleaner Apprentice (16 - 17 months)**

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$24.70

Supplemental Benefit Rate per Hour: \$9.13

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$25.01

Supplemental Benefit Rate per Hour: \$9.51

**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.

Time and one half the regular rate for work on a holiday plus the day's pay.

**Paid Holidays**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

New Year's Day  
Martin Luther King Jr. Day  
President's Birthday  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day  
Personal Day

**Vacation**

After 7 months but less than 1 year of service.....5 days  
1 year but less than 5 years of service.....10 days  
5 years of service but less than 15 years of service.....15 days  
15 years of service but less than 21 years of service.....20 days  
21 years.....21 days  
22 years.....22 days  
23 years.....23 days  
24 years.....24 days  
25 years or more of service.....25 days  
Plus 1 day per year for medical visit

**SICK LEAVE:**

10 days after one year worked. Unused sick days to be paid in cash.

(Local #32 B/J)

(NO TEXT ON THIS PAGE)



Leonard A. Mancusi  
SENIOR ASSISTANT COMPTROLLER

THE CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
1 CENTRE STREET ROOM 1120  
NEW YORK, N.Y. 10007-2341

TELEPHONE: (212) 669-362  
FAX NUMBER: (212) 669-849

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**







NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

**INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

**VOLUME 2 OF 3**

PROJECT ID: HWMBRT5A (MED-607B)

EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE

FROM FDR DRIVE TO LEXINGTON AVENUE

INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

MFM Contracting Corp

85013B01D7001 / 8502013HW0015L <sup>Contractor</sup>

Dated November 11, 2013

APPROVED AS TO FORM  
CERTIFIED AS TO LEGAL AUTHORITY

[Signature]

Acting Corporation Counsel

[Signature] 5/9/13

Dated May 9, 2013



**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE  
LONG ISLAND CITY, NEW YORK 11101-3045  
TELEPHONE (718) 391-1000  
WEBSITE [www.nyc.gov/buildnyc](http://www.nyc.gov/buildnyc)

**VOLUME 3 OF 3**

**SCHEDULE A  
ADDENDA NOS. 1 TO 7**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED  
FOR:

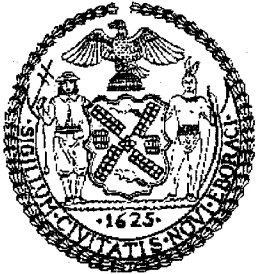
**PROJECT ID: HWMBRT5A (MED-607B)**

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Together With All Work Incidental Thereto  
**BOROUGH OF MANHATTAN  
CITY OF NEW YORK**



FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
*STV INCORPORATED*

**MARCH 15, 2013**

3-0511



## SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following NYC Department of Transportation reference documents are available on-line at:

[http://www.nyc.gov/html/ddc/html/pubs/pubs\\_infrastdts.shtml](http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml) or for purchase between 9:00 A.M. and 3:00 P.M. at 55 Water St., Ground Floor, NYC, N.Y. 10041. Contact: Ms Vivian Cruz, Tel. (212) 839-9434

1. New York City Standard Highway Specifications, November 1, 2010
2. New York City Standard Highway Details of Construction, July 1, 2010
3. New York City Division of Street Lighting Specifications
4. New York City Division of Street Lighting Standard Drawings
5. New York City Standard Specifications for Traffic Signals
6. New York City Standard Drawings for Traffic Signals

The following reference documents for Sewer Work are available on-line at:

[http://www.nyc.gov/html/ddc/html/pubs/pubs\\_infrastdts.shtml](http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml) or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101. Contact: Mr. William Patalano, Tel. (718) 391-2054

1. New York City DEP Standard Sewer Specifications, August 1, 2009
2. New York City DEP Instructions for Concrete Specifications, Jan. 92
3. New York City DEP General Specification 11-Concrete, November 1991
4. New York City DEP Sewer Design Standards, (September 2007) Revised January 2009

The following reference documents for Water Mains Work are available on-line at: [http://www.nyc.gov/html/ddc/html/pubs/pubs\\_infrastdts.shtml](http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml) or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101.

Contact: Mr. Robert Kuhlmann, Tel. (718) 391-2145

1. New York City Department of Environmental Protection, Standard Water Main Specifications, dated August 1, 2009
2. New York City Department of Environmental Protection Water Main Standard Drawings
3. Specifications for Trunk Main Work, dated February 2010

The water main work material specifications are available at the Department of Environmental Protection, 59-17 Junction Boulevard, 3rd Floor Low-Rise Building, Flushing, N.Y. 11373-5108.

Contact: Mr. Tarlock Sahansra, P.E., Tel. (718) 595-5302

E-mail: TSAHANSRA@DEP.NYC.GOV

Standard Specifications and Drawings for Fire Department Communications facilities of New York City are available at 87 Union Street, Engineering Office, Brooklyn, N.Y. 11231-1416.

Contact: Mr. Ed Durkin, Tel. (718) 624-3752

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>

## SPECIFICATIONS AND STANDARDS OF PRIVATE UTILITIES

The Following reference document for Private Utility Work is available for pick up between 8:30 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, First Floor Bid Procurement Room, L.I.C., N.Y. 11101.

1. CET SPECIFICATIONS AND SKETCHES dated November 2010

(NO TEXT ON THIS PAGE)

**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS OTHER THAN ARTICLE 22)**

<u>REFERENCE</u>	<u>ITEM</u>	<u>REQUIREMENTS</u>
Section 26 Information For Bidders	Bid Security	See Attachment 1 (page A-1 of the Bid Booklet)
	Performance Security Payment Security	See Attachment 1 (page A-1 of the Bid Booklet)
Article 14 Contract	Date for Substantial Completion	See Page SA-2
Article 15 Contract Add Section HW-900 In Addendum No. 4	Liquidated Damages	For Each Consecutive Calendar Day Over Completion Time: <u>\$8,000.00</u>
Article 17 Contract	Subcontracts	Not to Exceed <u>50%</u> of Contract Price
Article 77 Contract	M/WBE Program	See Subcontract Utilization Plan in the Bid Booklet
Section 6.40 Standard Highway Specifications	Liquidated Damages For Engineer's Field Office	For Each Calendar Day of Deficiency <u>\$250.00</u>  If the Contractor fails to satisfactorily provide the field office and all equipment specified in <b>Section 6.40 - Engineer's Field Office</b> , 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 in Schedule "A" for each subsequent calendar day or part thereof that a cited deficiency resulting in nonpayment, as described in <b>Section 6.40.5</b> , is not corrected.
Section 6.70 Standard Highway Specifications	Liquidated Damages For Maintenance And Protection Of Traffic	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: <u>\$250.00</u>  For each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation: <u>\$500.00</u>
Section 7.13 Standard Highway Specifications	Liquidated Damages For Maintenance Of Site	For Each Calendar Day, For Each Occurrence <u>\$250.00</u>  If the Contractor fails to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of <b>Section 7.13 - Maintenance Of Site</b> , 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.

**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS OTHER THAN ARTICLE 22)**

(Continued)

**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 910 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 the 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 the 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 required Storm Water Pollution Prevention Plan (SWPPP) does not conform to NYSDEC's recommended Standards, an additional 60-ccds shall be added to the above Final Contract Duration.



**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)**

**PART I. MINIMUM LIMITS AND SPECIAL CONDITIONS**

Insurance indicated by a blackened box (■) or by an X in a box (☒) 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
<input checked="" type="checkbox"/> Commercial General Liability      Art. 22.1.1	<p><u>\$3,000,000</u> per Occurrence</p> <p><u>\$6,000,000</u> Aggregate (applicable separately to this Project)</p> <p>Additional Insureds:            (1) <u>City of New York, including its officials and employees.</u></p> <p>(2) <u>The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Operation Authority (SIRTOA), Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies. The Contractor shall furnish two (2) certificates of insurance to and the policy shall be endorsed to provide thirty (30) days advance notice to the Director, Risk Management, MTA Risk and Insurance Management Standards, Enforcement and Claims Unit, 2 Broadway, 21<sup>st</sup> Floor, New York, NY 10004, of any material change and/or cancellation.</u></p> <p>(3) <u>Consolidated Edison Company Of New York</u></p>
<input checked="" type="checkbox"/> Workers' Compensation      Art. 22.1.2	<p>Workers' Compensation: Statutory per New York State law without regard to jurisdiction.</p> <p>Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction.</p> <p>Employers' Liability: <u>\$2,000,000</u> each Accident</p> <p>■ Additional Requirements:            (1) <u>Two (2) certificates of such insurance shall be furnished to the Director, Risk Management, MTA Risk and Insurance Management Standards, Enforcement and Claims Unit, 2 Broadway, 21<sup>st</sup> Floor, New York, NY 10004.</u></p> <p>(2)</p>
<input checked="" type="checkbox"/> Disability Benefits Insurance      Art. 22.1.2	
<input checked="" type="checkbox"/> Employers' Liability      Art. 22.1.3	
<input type="checkbox"/> Jones Act      Art. 22.1.4	
<input type="checkbox"/> U.S. Longshoremen's and Harbor Workers Compensation Act      Art. 22.1.4	

**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)**

**PART I (Continued)**

Insurance indicated by a blackened box (■) or by an X in a box (☒) 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
<input type="checkbox"/> Builders' Risk <span style="float: right;">Art. 22.1.5</span>	<u>          </u> % of Total Value of <b>Work</b> City of New York and the <b>Contractor</b> named as Loss Payee for the <b>Work</b> in order of precedence, as their interests may appear.
<input checked="" type="checkbox"/> Comprehensive Business Auto Coverage <span style="float: right;">Art. 22.1.6</span>	<u>\$2,000,000</u> per Accident If vehicles are used for transporting hazardous materials, the <b>Contractor</b> shall provide pollution liability broadened coverage for covered autos (endorsement CA 99 48) as well as proof of MCS 90.  Additional Insureds: (1) <u>City of New York, including its officials and employees.</u>  (2) <u>The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Operation Authority (SIRTOA), Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies.</u>  (3)
<input type="checkbox"/> Pollution/Environmental Liability <span style="float: right;">Art. 22.1.7</span>	\$ <u>          </u> per Occurrence  \$ <u>          </u> Aggregate  Additional Insureds: (1) <u>City of New York, including its officials and employees.</u>  (2)

**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)**

**PART I (Continued)**

**Insurance indicated by a blackened box (■) or by an X in a box (X) to left  
will be required under this contract.**

<u>TYPES OF INSURANCE</u> (per Article 22 in its entirety, including listed paragraph)	<u>MINIMUM LIMITS AND SPECIAL CONDITIONS</u>
<input type="checkbox"/> Marine Protection and Indemnity      Art. 22.1.8(a)	\$ _____ per Occurrence \$ _____ Aggregate Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)
<input type="checkbox"/> Ship Repairers Legal Liability      Art. 22.1.8(b)	\$ _____ each Occurrence [Contracting agency to fill in total value of City vessels involved]
<input type="checkbox"/> Collision Liability/Towers Liability      Art. 22.1.8(c)	\$ _____ per Occurrence \$ _____ Aggregate Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)
<input type="checkbox"/> Marine Pollution Liability      Art. 22.1.8(d)	\$ _____ each Occurrence Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)

**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)**

**PART I (Continued)**

Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.

<p align="center"><u>TYPES OF INSURANCE</u> (per Article 22 in its entirety, including listed paragraph)</p>	<p align="center"><u>MINIMUM LIMITS AND SPECIAL CONDITIONS</u></p>
<p>[OTHER] Art. 22.1.9</p> <p>■ Railroad Protection Liability Policy</p> <p>(ISO-RIMA or equivalent form) approved by Permitior 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.</p> <ul style="list-style-type: none"> <li>• Policy Endorsement CG 28 31 - Pollution Exclusion Amendment is required to be endorsed onto the policy when environmental-related work and/or exposures exist.</li> <li>• Indicate the Name and address of the Contractor to perform the work, the Contract No. and the name of the railroad property where the work is being performed and the Agency Permit.</li> <li>• Evidence of Railroad Protection Liability Insurance, must be provided in the form of the Original Policy. <u>A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within thirty (30) days of the Binder Approval.</u></li> </ul>	<p>\$2,000,000 per Occurrence</p> <p>\$6,000,000 Aggregate</p> <p>Named Insureds:                      (1) <u>The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Operation Authority (SIRTOA), Metropolitan Transit Authority (MTA) Capital Construction Company, Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner) and all other indemnified parties.</u></p> <p>(2)</p>

**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)**

**PART I (Continued)**

**Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.**

[OTHER]	Art. 22.1.9	
■ Professional Liability		
(A) The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of <u>\$1,000,000</u> 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. 22.1.9	
■ Engineer's Field Office  <b>Section 6.40, Standard Highway Specifications</b>		Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of <u>\$40,000</u> .
[OTHER]	Art. 22.1.9	
■ The Following Additional Insurance Must Be Provided:		
<u><b>Umbrella/Excess Liability Insurance</b> - 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.</u>		

**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)**

**PART II. BROKER'S CERTIFICATION**

[Pursuant to Article 22.3.1(a) of the **Contract**, every Certificate Of Insurance must be accompanied by either the following certification by the broker setting forth the following text and required information and signatures or complete copies of all policies referenced in the Certificate Of Insurance. In the absence of completed policies, binders are acceptable.]

**CERTIFICATION BY BROKER**

The undersigned insurance broker represents to the City of New York that the attached Certificate Of Insurance is accurate in all material respects, and that the described insurance is effective as of the date of this Certification.

\_\_\_\_\_  
[Name Of Broker (Typewritten)]

\_\_\_\_\_  
[Address Of Broker (Typewritten)]

\_\_\_\_\_  
[Signature Of Authorized Official Or Broker]

\_\_\_\_\_  
[Name And Title Of Authorized Official (Typewritten)]

Sworn to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 200\_\_

\_\_\_\_\_  
NOTARY PUBLIC

**SCHEDULE "A"**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)**

**PART III. 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 shall be sent to the address set forth below or, in the absence of such address, to the **Commissioner's** address as provided elsewhere in this **Contract**.

\_\_\_\_\_  
DDC Director, Insurance Risk Manager

\_\_\_\_\_  
30 - 30 Thomson Avenue, 4th Floor (IDCNY Building)

\_\_\_\_\_  
Long Island City, NY 11101

\_\_\_\_\_

**NO TEXT THIS PAGE**



ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HWMBRT5A (MED-607B)

EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE

FROM FDR DRIVE TO LEXINGTON AVENUE

INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 1

DATED: February 8, 2013

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

The New York City Department of Transportation Standard Highway Specifications, dated November 1, 2010, (which include, but are not limited to, "General Conditions", "Basic Materials of Construction", "Combined Materials of Construction", "Construction Methods", "Inspection and Testing of Materials, Adjustments for Deficiencies, and Maintenance", and "Supplemental Construction Methods"), as modified by addenda issued prior to the opening of bids, shall apply to and become a part of the contract.

All references contained herein are to the New York City Department of Transportation, Standard Highway Specifications, dated November 1, 2010. The said Specifications are hereby revised. Included hereunder are the following REVISIONS:

1. Amendments to Standard Highway Specifications, Volume I
2. Amendments to Standard Highway Specifications, Volume II, including Section 7.88 (Revised)
3. New Sections
4. Special Provisions

1. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME I

The following amendments to the Contract Requirements shall become a part of and apply to the contract:

**[Added 12-09-2010]**

1. Refer to Page 15, **Subsection 1.06.23.(C) CONFORMANCE WITH FEDERAL, STATE AND CITY AGENCIES;**

Add the following new paragraphs:

"The Contractor is notified that all vehicles that are owned, leased or operated by the Contractor or its subcontractors and used in connection with the Project shall comply with the following requirement:

Every truck, tractor, and tractor-trailer or semitrailer combination, having a gross vehicle weight rating of twenty-six thousand pounds or more, and a conventional cab configuration in which more than half of the engine length is forward of the foremost point of the windshield base, and the steering wheel hub is in the forward quarter of the vehicle length shall be equipped with a convex mirror on the front of such vehicle or combination of vehicles. Such convex mirror shall be adjusted so as to enable the operator of such vehicle or combination of vehicles to see all points on an imaginary horizontal line which is three feet above the road, is one foot directly forward from the midpoint of the front of such vehicle or combination of vehicles, and extends the full width of the front of such vehicle or combination of vehicles.

Any vehicle that does not comply with this provision may be prohibited from entering the Project site and/or supplying equipment or materials to the Project. The Contractor shall not be entitled to any damages as a result of such prohibition."

**[Added 01-09-2011]**

2. Refer to Page 240, **Subsection 4.16.5.(B) STUMP REMOVAL;**  
Delete **Subsection 4.16.5.(B) STUMP REMOVAL**, in its entirety:  
Substitute the following revised **Subsection 4.16.5.(B)**:

**"(B) STUMP REMOVAL**

1. Tree stumps designated to be removed and their roots shall be completely excavated to a minimum depth of three (3) feet below the existing grade. A portable stump cutter may be required in some locations. It may be necessary to remove concrete, asphalt, pavers, and/or other types of material surrounding the base of the stump. All excess debris, including chips from tree stumps, shall be removed and disposed of by the Contractor, away from the site prior to backfilling and the area shall be restored by completion of the workday, to the satisfaction of the Engineer. The disposal of tree stumps by burning in open fires will not be permitted.

2. All voids and excavations left after the removal of the stump and roots shall be backfilled to grade with clean earth fill. Fill shall be placed and compacted to a minimum of 95 percent of Standard Proctor Maximum Density by acceptable methods to the satisfaction of the Engineer. Where paving blocks exist, they are to be reset to the existing grade as directed.

3. Maximum safety and care must be used by Contractor during stump removal. The Contractor shall carefully protect against damage all existing trees, plants, curbs, sidewalks and utilities and other features to remain. The Contractor is responsible for locating and protecting underground utilities from damage during stump removal procedures. During stump grinding operations, plywood must be used to protect adjacent vehicles, real property, and pedestrians. If, when removing stumps, existing sidewalks or curbs are disturbed, the Contractor shall restore and/or reset these sidewalks and curbs, at no additional cost to the City. Restoration work shall be done to match the existing, to the satisfaction of the Engineer. All damaged trees, curbs, sidewalks, real property, vehicles and utilities must be addressed within three (3) days."

**[Added 04-18-2011]**

3. Refer to Pages 218 and 219, **Subsection 4.13.4.(H) PIGMENT**;  
Delete the first three (3) paragraphs on page 219:  
Substitute the following revised three (3) paragraphs:

"Where the color of the concrete is required to simulate the color of dark gray bluestone, the concrete shall be integrally pigmented to produce a gray color equivalent to: Davis Colors No. 884-3%; Lansco Color No. 437 "Strong Black" 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield "Cool Black No. 4"; Bayferrox Limestone 330, 2 lbs. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified.

Where the color of the concrete is required to simulate the color of light to medium gray granite, the concrete shall be integrally pigmented to produce a gray color equal to: Davis Colors No. 884-1%; Lansco Color No. 437 "Strong Black" 2.5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield "Cool Black No. 1"; Bayferrox Silver 330, 1 lb. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified.

Where the sidewalk is designated to have a saw cut joint finish the color of the concrete shall be integrally pigmented to produce a gray color equivalent to L.M. Scofield "Landmarks Grey" K-157-4; L.M. Scofield "Cool Black No. 4"; Davis Colors No. 884-3%; Lansco Color No. 437 "Strong Black" 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; Bayferrox NYC Landmark Commission Gray, 3.5 lbs. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified."

**[Added 07-01-2011]**

4. Refer to Page 14, **Subsection 1.06.23.(A) PERMITS**;  
Delete line (b) under the first paragraph;  
Substitute the following text:

"(b) Any planned work requiring a DOT Construction Permit that may potentially be within 100 feet of a bridge structure will be placed on a Bridge Hold. If any proposed work is within 100 feet of a bridge structure, permittees must submit a scaled drawing showing the work and exact location, along with the following:

- Plan layout of the project area.
- The scope of work.
- The contractor's means and methods.
- Indicate if work will be done of the bridge itself or its abutments, and the type of work.

If the work is more than 100 feet away from the bridge structure, permittees may send a certification by e-mail stating so. Either response must be sent to the Division of Bridges at [bridgeshold@dot.nyc.gov](mailto:bridgeshold@dot.nyc.gov) for review and release prior to commencing work. Emergency work will not be placed on hold and shall proceed in accordance with the New York City Highway Rules, section 2-11 (g);

(c) Permits from the Department of Sanitation for use of City landfills;"

**[Added 07-27-2011]**

5. Refer to Page 37, **Subsection 1.06.46.(A) 6. Sign Graphics;**  
Delete article "a." beginning with the words "All visual components of the sign are in an Adobe \*.pdf file, . . ." and ending with the words ". . . DDC to the Contractor (on a CD or via E-mail) for printing.", in its entirety;  
Substitute the following revised article "a":

"a. All visual components of the sign are in an Adobe \*.pdf file, which is provided by the Commissioner's representative. The file is not to be altered for composition, type font or image from the version provided by DDC. The Commissioner's representative shall provide a complete file with data and image. The digital file shall be provided by DDC to the Contractor (on a CD or via E-mail) for printing."

**[Added 09-27-2012]**

6. Refer to Page 36, **Subsection 1.06.46. Project Sign;**  
Delete the words "Unless otherwise specified in the Special Provisions of the contract, the following shall apply:";  
Substitute the following revised text:

"The Contractor is notified that he shall be required to furnish, install, maintain, and remove, when directed, Construction Project Information Signs (CPIS) as per Sec. 2-02(c)(4) and (5) of the NYC DOT Highway Rule and the cost shall be deemed included under all scheduled items of the contract. In addition, unless otherwise specified in the Special Provisions of the contract, the following Project Sign shall also apply:"

2. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME II

[Added 01-25-2012]

1. Refer to Pages 365 and 366, **Subsection 6.40.2.(C)(c)(1) Personal Computer(s) - Workstation Configuration**;  
Delete the text under **Subsections (a), (b), (c), (d), (h), (i), and (m)**, in their entirety;  
Substitute the following revised text:

- "(a) Make and Model: Dell; HP; Gateway; Acer; or, an approved equivalent. (Note: an approved equivalent requires written approval of the Assistant Commissioner of ITS.)
- (b) Processor: i5-2400 (6MB Cache, 3.1GHz) or faster computer - Single Processor.
- (c) System Ram: Minimum of 4GB (Gigabytes) Dual Channel DDR3 SDRAM at 1333MHz – 2 DIMMSs
- (d) Hard Disk Drive(s): 500 GB (Gigabytes) Serial ATA (7200RPM) w/DataBurst Cache, or larger."
- "(h) Video Display Card: HD Graphics (VGA, HDMI) with a minimum of 64 MB of RAM.
- (i) Monitor: 22" W, 23.0 Inch VIS, Widescreen, VGA/DVI LCD Monitor."
- "(m) Software Requirements: Microsoft Windows 7 Professional SP1, 64 bit; Microsoft Office Professional 2010; Microsoft Project 2010; Adobe Acrobat reader; Anti-Virus software package with 2 year updates subscription; and, either Auto Cad 2012 LT or Microsoft Visio 2010 Standard Edition, as directed by the Engineer."

~~2. Refer to Page 366, **Subsection 6.40.2.(C)(c)(2)(b)**;  
Delete the text under **Subsection (b)**, which begins with the words  
"(b) One (1) 600 DPI HP Laser Jet . . .", in its entirety;  
Substitute the following revised text:~~

- ~~"(b) One (1) 600 DPI HP Color Laser Jet all-in-one Printer/Scanner/Copier/Fax (twelve (12) pages per minute or faster) with one (1) Extra Paper Tray (Legal Size) networked to all office computers."~~

3. Refer to Page 367, Subsection 6.40.3. SPECIFIC REQUIREMENTS FOR ENGINEERS FIELD OFFICE (TYPE A, B, C, CU, D OR DU), first paragraph;  
 Delete the text in the first paragraph of Subsection 6.40.3., in its entirety;  
 Substitute the following revised text:

**6.40.3. SPECIFIC REQUIREMENTS FOR ENGINEER'S FIELD OFFICE (TYPE A, B, C, CU, D, OR DU).** In addition to the general requirements, each type of Field Office shall have the minimum floor area indicated in Table 6.40-I calculated based on usable area only, excluding any loss factors. Loss factors are defined as those areas such as lobby, sidewalk window ledge, elevator shafts and stairways. The Contractor shall provide and maintain furnishings for each type of Field Office in the quantity specified in Table 6.40-I. The furnishings shall be new or used equipment satisfactory to the Engineer:

4. Refer to Page 368, TABLE 6.40-I, ADDITIONAL REQUIREMENTS SPECIFIC REQUIREMENTS;  
 Delete the requirements for a Photocopy Machine shown in the 15th row of TABLE 6.40-I, in its entirety;  
 Substitute the following revised requirements:

Photocopying Machine – Stand-alone, heavy duty, electric, dry-process color photocopying type with a minimum production rate of 70 pages per minute and an adequate supply of copy paper, toner, etc. The machine shall be capable of duplex copying paper sizes of 8-1/2 x 11 inches, 8-1/2 x 14 inches and 11 x 17 inches, and have separate trays for each paper size. It shall have a document feeder, collator, stapler, and the capability to reduce/enlarge copies between each paper size. The supply of each size copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer. Make and model can be Minolta, Canon, IBM, Epson, or an approved equivalent, and shall be networked to the office computers.	1	1	1	1	1	1
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5. Refer to Page 368, TABLE 6.40-I, ADDITIONAL REQUIREMENTS SPECIFIC REQUIREMENTS;  
 Insert the following two additional requirements:

Heavy duty commercial grade diamond cut shredder with automatic start. The shredder shall be able to receive 8-1/2 inch wide paper and shred a minimum of 15 sheets simultaneously along with CDs and staples.	1	1	1	1	1	1
Projector – 1080p LCD with a min. of 2200 ANSI Lumens, 1920 x 1080, 16:9, 40,000:1 contrast ratio, HDMI, VGA, USB, and a 10 feet diagonal, 16:9 Projection Screen.	-	-	1	1	1	1

6. Refer to Page 496, Subsection **7.20.4. METHODS**, last paragraph beginning with the words "When directed by the Engineer, due to the original conditions . . .";  
Add the following sentence to the end of the last paragraph under **Subsection 7.20.4:**

"However, if the owner at his own expense supplies the replacement frame and doors or hatch covers the Contractor shall install the replacement frame and doors or hatch covers under this Item 7.20, as a basement access reset, in lieu of the steel safety closure plate."

**[Added 07-16-2012]**

7. Refer to Page 365, Subsection **6.40.2.(C)(c)(1) "Personal Computer(s) - Workstation Configuration"**;  
Delete the text under Subsections **(g) and (k)**, in their entirety;  
Substitute the following revised text:

- (g) I/O Ports: Must have at least one (1) Serial Port, one (1) Parallel Port, and three (3) USB Ports.
- (k) Network Interface: Integrated 10/100/1000 Ethernet card."

8. Refer to Page 366, Subsection **6.40.2.(C)(c)(2) "All field offices requiring computers shall be provided with the following:"**;  
Delete the text under Subsection **(a)**, in its entirety;  
Substitute the following revised text:

- "(a) One (1) broad-band internet service account. Wideband Internet connectivity at a minimum throughput of 15 Mbps download and 5 Mbps upload is required at each field office location with 1-5 staffers. For larger field offices see table below for minimum required upload speeds. Telephone service should be bundled together with Internet connectivity. Because of throughput requirements Verizon FIOS is the preferred connectivity provider where available.

Office Personnel #	Upload Speeds (Minimum)
1 - 5	5 Mbps
6 - 10	10 Mbps
11 - 15	15 Mbps
16 - 20 ...	20 Mbps

This account will be active for the life of the project. The e-mail name for the account shall be the DDC Field Office/project Id (e.g. FLD K HWK666 McGuinness@earthlink.com)."

[Added 08-09-2012]

9. Refer to Page 366, **Subsection 6.40.2.(C)(c)(2)(b)**, as amended by Article 2 on page A1-2 of this Addendum;  
Delete the text under **Subsection (b)**, in its entirety;  
Substitute the following words: "**(b) (No Text).**"

10. Refer to Page 368, TABLE 6.40-I, ADDITIONAL REQUIREMENTS SPECIFIC REQUIREMENTS;  
Delete the requirements for a Photocopy Machine shown in the 15th row of TABLE 6.40-I, as modified by Article 4 on page A1-2a of this Addendum, in its entirety;  
Substitute the following revised requirements:

Photocopying Machine – Stand-alone, heavy duty, electric, dry-process color photocopying type with color scan and send capability via e-mail, a minimum production rate of 70 pages per minute and an adequate supply of copy paper, toner, etc. The machine shall be capable of duplex copying paper sizes of 8-1/2 x 11 inches, 8-1/2 x 14 inches and 11 x 17 inches, and have separate trays for each paper size. It shall have a document feeder, collator, stapler, and the capability to reduce/enlarge copies between each paper size. The supply of each size copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer. Make and model can be Minolta, Canon, IBM, Epson, or an approved equivalent, and shall be networked to the office computers.	1	1	1	1	1	1
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[Added 11-26-2012]

11. Refer to Pages 504 through 508, **SECTION 7.88 - Rodent and Waterbug Pest Control**;  
Delete **Section 7.88**, in its entirety;  
Substitute SECTION 7.88 (Revised), as contained on the following pages A1-2d through A1-2i.

[Added 02-08-2013]

12. Refer to Page 394, Subsection 6.52.3. METHODS;  
Insert the following new sentence to the end of the third paragraph:

"However, on Federally Funded Projects all uniformed full-time flagpersons paid under this item, irrespective of where they are used in Examples #1 and #2, shall be deemed to be Laborers and shall not be paid less than the highest minimum hourly rate as set forth by Federal, State or City laws."



**SECTION 7.88 (Revised)**  
**Rodent and Waterbug Pest Control**

**7.88.1. DESCRIPTION.** The Contractor shall provide all labor, materials, plant and equipment, and incidentals required to survey and monitor rodent activity and control any infestation or outbreak of rodents and waterbugs (American cockroaches) within the project limit.

**7.88.2. MATERIALS.** All materials shall be approved by the New York State Department of Environmental Conservation and comply with the New York City Health Code for the intended usage.

Rodenticide weatherproof bait blocks shall be multiple dose anticoagulants such as Chlorophacinone or Dephacinone, or single feed rodenticides such as ContraMeal, ContractBait block, Quintox pellets or TalonG pellets, or an approved equivalent.

Tamper proof bait station boxes shall be designed to exclude other mammals and shall be used with poisoned bait to attract rats. Information on "tamper proof bait station boxes" is available from the NYC Bureau of Regulatory & Environmental Health Services, Pest Control Office (718-956-7103/4).

Live traps shall be of proper dimensions for trapping rats and shall not be used with poisoned bait.

Insecticide bait shall be a residual type such as phenol methyl carbamate (2%) bait or an approved equivalent.

(A) SUBMITTALS

Prior to commencement of construction activities the Contractor shall submit to the Engineer manufacturer's installation instructions for all materials required for rodent and waterbug pest control work and product data which shall include illustrations, catalog data, product characteristics, typical use, performance, and limitation criteria of all rodent and waterbug pest control materials required.

**7.88.3. PERSONNEL.** The Contractor shall employ two independent licensed exterminators: one to engage in survey and monitoring work to establish the level of infestation of rodents and insects and provide recommendations for specific Integrated Pest Management (IPM) actions, and one to execute the rodent and waterbug pest control work to deal with such infestations. All pest control personnel employed by each exterminator company must be supervised by an exterminator licensed in categories 7A & 8. The Contractor shall submit the names and license credentials of the two exterminator companies to the Engineer for approval prior to the commencement of any work under this section.

**7.88.4. METHODS.** Application and dosage of all materials shall be done in strict compliance with the manufacturer's recommendations. All surveying, monitoring, baiting, and/or live trapping work shall be performed in the presence of the Engineer, without which no payment will be made under this Section.

(A) GENERAL

The Contractor's construction activity is expected to disturb any established rodent and/or waterbug population that may exist within the project limits, possibly causing their dispersion. The Contractor shall take all appropriate action to eliminate and/or control these populations within the construction corridor: the construction corridor shall be defined as being the full width of streets under the contract and intersecting streets up to the limits of construction, from property line to property line, excluding buildings and under sidewalk building vaults.

Under the Maintenance of Site requirements for the contract, any unsanitary conditions, such as uncollected garbage or debris, resulting from the Contractor's activities which will provide food and shelter to the resident rodent population shall be corrected by the Contractor immediately after notification of such condition by the Engineer. Non-compliance shall be subject to the application of the "Nonconformance" provisions of the Item for Maintenance of Site, and no payment will be made for any additional application of rodenticide or insecticide needed to control resultant infestations.

(B) SURVEY AND MONITORING WORK

(1) Prior to Construction - The Contractor's designated survey and monitoring exterminator shall execute a survey of the project area and estimate the level of rodent (Norway rat, House mouse) infestation and the waterbug population within the construction corridor. An appropriate sample of utility manholes (sewer, electrical, telephone, etc.) and catch basins should be opened and surveyed to the satisfaction of the Engineer. Contractor shall maintain all survey records in the manner described in 7.88.6., Records and Reports.

(2) During Construction - The Contractor shall monitor the rodent activity through trapping (snap, glue traps or live traps), fecal count methods, and inspection of the conditions of all installed baits every week during construction activity or as otherwise directed by the Engineer. Contractor shall maintain all monitoring records in the manner described in 7.88.6., Records and Reports.

(C) RODENT CONTROL WORK

(1) Wetlands, Woodlands and Areas Within Seventy-five (75') feet of a Stream. In wetlands, woodlands and areas adjacent to a stream, special precautions must be taken to protect water quality and to ensure the safety of other wildlife. To prevent poisoned bait from entering streams, no poisoned bait shall be used in areas within seventy-five (75') feet of either streambank. Live traps must be used in these seventy-five (75') feet buffer zone areas and within wetland and woodland areas.

(2) Outside Wetland Areas, Woodland Areas and Beyond Seventy-five (75') feet of a Stream. In areas outside the seventy-five foot zone of protection adjacent to streams, and areas outside wetlands and woodlands, tamper proof bait stations with poisoned bait shall be established during the period of construction and any consumed or decomposed bait shall be replenished as directed.

Rodent control shall be achieved in two stages as follows:

Stage I. At least one month prior to initiation of the construction work, and periodically thereafter, live traps and/or rodenticide bait, as directed above, shall be placed at locations [e.g., burrows, utility manholes (sewer, electrical, phone, etc.), and catch basins] that are inaccessible to pets, human beings, children and other non-target species, particularly wildlife (e.g., birds) in the construction corridor. Locations of initial bait placement and quantities of bait shall be determined by the survey and monitoring exterminator's written report of his survey and monitoring results, or as otherwise directed by the Engineer.

Stage II. During Construction - Infested sites as determined by the survey and monitoring exterminator's monitoring report shall be baited and/or rebaited, and live traps shall be collected and replaced, the rates and quantities of which shall be determined by the written monitoring reports submitted weekly or as otherwise directed by the Engineer in consultation with the City's Office of Pest Control.

The baiting exterminator shall be responsible for collecting and disposing of all trapped and poisoned rodents found in live traps and tamper proof bait stations. The baiting exterminator shall also be responsible for posting and maintaining signs announcing the baiting of each particular location.

The Contractor, under his maintenance of site operations, shall be responsible for the immediate collection and disposal of any visible rodent remains found on streets or sidewalk within the project limits. Any visible remains shall be placed into double plastic bags. No more than five (5) carcasses shall be placed into each bag. Each bag shall be a minimum of 3 mils thick, black plastic. No additional payment will be made for this work.

It is anticipated that public complaints will be addressed to the Engineer's Field Office. The Contractor, where directed by the Engineer, shall take appropriate Integrated Pest Management (IPM) actions, such as baiting, trapping, proofing, etc., to remedy the source of a complaint within the next six (6) hours of normal working time, which is defined herein, for the purposes of this section, as 7 A.M. to 6 P.M. on Mondays through Saturdays.

(D) WATERBUG (AMERICAN COCKROACH) CONTROL

Infested sites (e.g., sewers) shall be baited at least 2 times per month with insecticides, or as directed by the Engineer in consultation with the exterminator monitoring the work and the City's Office of Pest Control.

**7.88.5. EDUCATION & TRAINING.** The Contractor shall post notices in all Construction Bulletin Boards advising workers, employees, and residents to call the Engineer's Field Office to report rodent and waterbug infestations. The Contractor shall provide and distribute literature pertaining to IPM techniques of rodent control to affected businesses and superintendents of nearby residential buildings to ensure their participation in maintaining their establishments free of unsanitary conditions, harborage removal and rodent proofing.

Prior to application of any chemicals, the Contractor shall furnish copies or sample labels for each pesticide, antidote information, and Material Data Safety Sheets (MSDS) for each chemical used.

#### **7.88.6. RECORDS AND REPORTS.**

##### **(A) GENERAL**

The Contractor shall be responsible for assigning within the construction corridor an identifying number to each manhole, catch basin, and other location where bait and/or live trap placement and/or waterbug control work is proposed by the survey and monitoring exterminator. The Contractor shall then provide that list of locations and corresponding reference numbers along with a drawing showing the locations, as a reference for the exterminator(s) performing the work, to indicate locations of bait placement and waterbug control work and rodent and waterbug activity (droppings, bait consumed, dead rodents, etc.).

##### **(B) SURVEY AND MONITORING WORK**

(1) Prior to Construction - Contractor shall submit to the Engineer, for approval, a written survey report including proposed IPM procedures, including specific materials, quantities, locations, methods, and time schedule for the implementation of the exterminating work. The written report shall also include a survey with a drawing (provided by the Contractor) marked with locations indicating all signs of rodent (Norway rat, House mouse) infestation and waterbug activity discovered during the execution of the survey indicating that rodent and waterbug pest control work is necessary.

(2) During Construction - Based on monitoring results, Contractor shall submit to the Engineer a weekly written monitoring report identifying all locations and conditions of installed bait and/or other rodent control work. The monitoring report shall also include any other recommended IPM techniques, such as baiting, trapping, proofing, etc., proposed for rodent and waterbug pest control.

The survey and monitoring exterminator shall keep a record of all rodent and waterbug infestation surveys s/he has conducted. The Contractor shall be required to submit a copy of all survey and monitoring reports to the Engineer each week, prior to payment.

##### **(C) RODENT AND WATERBUG CONTROL WORK**

The baiting exterminator shall maintain records of all locations baited along with the type and quantity of rodenticide and insecticide bait used. These records will be kept by the City Inspector. A weekly report shall be prepared, signed and certified by the approved licensed exterminator, and such reports shall be submitted to the Engineer each week, prior to payment.

**7.88.7. NONCONFORMANCE.** If the Contractor fails to perform as directed to control the rodent and/or waterbug population at any location within the project limits for a period of more than one week, the Engineer will correct the adverse conditions by any means he deems appropriate, including but not limited to, the use of "outside services" and shall deduct the cost of the corrective work from any monies due to the Contractor. The deducted cost of this work shall be in addition to the non-payment for rodent and waterbug pest control.

**7.88.8. MEASUREMENT.**

**(A) RODENT INFESTATION SURVEY AND MONITORING**

The quantity to be measured for payment under Item No. 7.88 AA, RODENT INFESTATION SURVEY AND MONITORING, shall be a Lump Sum measurement.

**(B) RODENT BAIT STATIONS**

The quantity to be measured for payment under Item No. 7.88 AB, RODENT BAIT STATIONS, shall be the number of tamper-proof rodent bait station boxes and/or live traps satisfactorily installed or reinstalled after inspection within the construction corridor, as approved by the Engineer. However, the initial baiting, and subsequent rebaiting as may be required, of any bait station will be paid for under Item 7.88 AC.

**(C) BAITING OF RODENT BAIT STATIONS**

The quantity to be measured for payment under Item No. 7.88 AC, BAITING OF RODENT BAIT STATIONS, shall be the number of tamper-proof rodent bait station boxes, utility manholes, catch basins, or other locations approved by the Engineer, satisfactorily baited or rebaited to replenish consumed or decomposed bait within the construction corridor, as approved by the Engineer.

**(D) WATERBUG BAIT APPLICATION**

The quantity to be measured for payment under Item No. 7.88 AD, WATERBUG BAIT APPLICATIONS, shall be the number of blocks satisfactorily treated with insecticide bait within the construction corridor, as approved by the Engineer. A block shall be defined as the area of street, measured between property lines, from intersection to intersection. Each rebaiting of any block shall be considered as a new block for measurement purposes.

**7.88.9. PRICES TO COVER.**

**(A) RODENT INFESTATION SURVEY AND MONITORING**

Payment will be made at the lump sum price bid for RODENT INFESTATION SURVEY AND MONITORING which shall include the cost of furnishing all the labor, materials, plant, equipment (traps, etc.), insurance, and other incidentals required, including but not limited to providing all required maintenance of traffic equipment, to perform a rodent infestation survey of the project area and then monitor the site each week for rodent activity, all in accordance with the specifications and the directions of the Engineer.

Ten (10%) percent of the lump sum price bid will be paid when the initial survey of the project area has been completed and the written survey report has been submitted to the satisfaction of the Engineer. The remainder will be paid in proportion to the percentage of contract completion.

(B) RODENT BAIT STATIONS

The Contract price bid for RODENT BAIT STATIONS shall be a unit price per each tamper proof bait station box and/ or live trap installed or reinstalled after inspection and shall cover the cost of furnishing all labor, materials, plant, equipment (bait stations, etc.), insurance, and other incidentals, including but not limited to providing all required maintenance of traffic equipment, required to control the rodent population found within the project limits in accordance with the specifications and the directions of the Engineer.

In addition to the payment for Rodent Bait Stations installed or reinstalled under this Item 7.88 AB, the Contractor will also be paid for each baiting or rebaiting, when required, of each bait station, under Item No. 7.88 AC.

(C) BAITING OF RODENT BAIT STATIONS

The Contract price bid for BAITING OF RODENT BAIT STATIONS shall be a unit price per each bait station, utility manhole, catch basin or other location approved by the Engineer satisfactorily baited or rebaited, when required, and shall cover the cost of furnishing all labor, materials, plant, equipment (bait), insurance, and other incidentals, in accordance with the specifications and directions of the Engineer. Installation or resetting of the bait station will be paid for under Item 7.88 AB.

(D) WATERBUG BAIT APPLICATION

The Contract price bid for WATERBUG BAIT APPLICATION shall be a unit price per block treated by the exterminator and shall include the cost of furnishing all the labor, materials, plant, equipment (bait, etc.), insurance, and other incidentals, including but not limited to providing all required maintenance of traffic equipment, necessary to control the waterbug population found within the project limits for the duration of the contract in accordance with the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
7.88 AA	RODENT INFESTATION SURVEY AND MONITORING	L.S.
7.88 AB	RODENT BAIT STATIONS	EACH
7.88 AC	BAITING OF RODENT BAIT STATIONS	EACH
7.88 AD	WATERBUG BAIT APPLICATION	BLOCK

3. NEW SECTIONS

**SECTION 4.02 I**  
**Asphalt Concrete Paving,**  
**Type I-1 and I-4**

**PART 1. GENERAL**

4.02I.1.01. SUMMARY.

- A. This Section specifies requirements for plant mix macadam base course, bottom course, top course, tack coat and overlay of existing pavement with performance graded asphalt specified in 4.02I.2.02.B.
- B. Except as in 4.02I.1.01.C. below, recycled asphalt concrete pavement (consisting of reclaimed asphalt pavement blended with new materials) may be used to the maximum percentages specified in 4.02I.1.04.C.2.b.
- C. Recycled asphalt concrete shall not be used in mixes where modified asphalts are used.

4.02I.1.02. REFERENCES. The following is a listing of the publications referenced in this Section:

American Association of State Highway and Transportation Officials (AASHTO)

- AASHTO M320 Performance Graded Asphalt Binder
- AASHTO R28 Practice for Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)
- AASHTO T313 Test Method for Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)
- AASHTO T315 Test Method for Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)
- AASHTO T48 Flash and Fire Points by Cleveland Open Cup
- AASHTO T240 Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin Film Oven Test)

American Society for Testing and Materials (ASTM)

- ASTM C 88 Test Method For Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
- ASTM C 117 Test Method for Materials Finer than 75-micrometres (No. 200) Sieve in Mineral Aggregates by Washing
- ASTM C 127 Test Method for Specific Gravity and Absorption of Coarse Aggregate
- ASTM C 128 Test Method for Specific Gravity and Absorption of Fine Aggregate
- ASTM C 131 Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
- ASTM C 136 Test Method for Sieve Analysis of Fine and Coarse Aggregates
- ASTM C 566 Test Method for Total Moisture Content of Aggregate by Drying

ASTM C 1252	Test Methods for Uncompacted Void Content of Fine Aggregate (as Influenced By Particle Shape, Surface Texture, and Grading)
ASTM D 75	Practice for Sampling Aggregates
ASTM D 242	Mineral Filler for Bituminous Paving Mixtures
ASTM D 692	Coarse Aggregate for Bituminous Paving Mixtures
ASTM D 979	Practice for Sampling Bituminous Paving Mixtures
ASTM D 995	Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures
ASTM D 1073	Fine Aggregate for Bituminous Paving Mixtures
ASTM D 2041	Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
ASTM D 2172	Test Methods for Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
ASTM D 2419	Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D 2726	Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
ASTM D 3203	Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D 3549	Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens
ASTM D 3666	Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials
ASTM D 4125	Test Methods for Asphalt Content of Bituminous Mixtures by the Nuclear Method
ASTM D 4318	Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D 4402	Method for Viscosity Determinations of Unfilled Asphalt Using the Brookfield Thermosel Apparatus
ASTM D 4791	Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
ASTM D 4867	Effect of Moisture on Asphalt Concrete Paving Mixtures
ASTM D 5444	Test Method for Mechanical Size Analysis of Extracted Aggregate
ASTM D 5821	Test Method for Determining the Percentage of Fractured Particles in Course Aggregate
ASTM D 5976	Type I Polymer Modified Asphalt Cement for Use in Pavement Construction
ASTM D 6084	Method for Elastic Recovery of Bituminous Materials by Ductilometer
ASTM D 6307	Test Method for Asphalt Content of Hot-Mix Asphalt by Ignition Method
ASTM D 6926	Test Method for Preparation of Bituminous Specimens Using Marshall Apparatus



- ASTM D 6927 Test Method for Marshall Stability and Flow of Bituminous Mixtures
- ASTM E 178 Practice for Dealing with Outlying Observations
- ASTM E 950 Test Method for Measuring the Longitudinal Profile of Traveled Surface with an Accelerometer Established Internal Profile Reference
- ASTM E 1274 Test Method for Measuring Pavement Roughness Using a Profilograph

Asphalt Institute - Manual Series

- MS-2 Mix Design Methods for Asphalt Concrete, and Other Hot-Mix Types
- MS-20 Asphalt Hot-Mix Recycling

Dept. of Transportation - Federal Aviation Administration (FAA)

Eastern Region Laboratory Procedures Manual (ERLPM) March, 1994

Standards for Specifying Construction of Airports

- P-401 Plant Mix Bituminous Pavements

4.02I.1.03. DESIGN AND PERFORMANCE REQUIREMENTS.

A. Job Conditions

1. Apply tack coat only when the base surface is dry and the ambient temperature in shade has not been below 32 degrees F for 12 hours immediately prior to application, unless otherwise approved by the Engineer.
2. Do not place asphalt concrete upon a wet or frozen surface.
3. The minimum laydown temperature shall be not less than 310°F, when the base temperature is below 50°F and not less than 275°F when the base temperature is 50°F or greater. The Engineer will measure the temperature of the asphalt concrete in the truck at the paver.
4. The minimum allowable base temperature for a lift thickness is shown in the following table:

<u>Nominal Lift thickness (inches)</u>	<u>Minimum Allowable Base Temperature (Degrees F)</u>
2 or greater	32
1-1/2 or greater, but less than 2	40
Less than 1-1/2	50

5. If nominal lift thickness is two inches or greater and the base temperature is below 32°F, the Engineer may approve paving operations if the Contractor can demonstrate, prior to commencing with paving, that density and mat texture uniformity can be achieved. All other requirements apply.
6. In case of sudden rain, the Engineer may at his sole discretion permit placing of mixture already in transit from the plant, provided the surface to be paved is free from pools of water and laydown temperatures conform to the above tabulation. Such permission, however, shall not be interpreted as a waiver of any of the quality requirements.

## B. Asphalt Concrete Mix Design

- Design asphalt concrete job mix formula based on the "Mix Design Table" specified in 4.02I.2.03.A and specimen compaction temperature specified in 4.02I.1.04.E.3
- Design top and bottom courses to the following target values:

Design Properties	Bottom Course	Top Course	
	Mix 1 <sup>1</sup>	Mix 2	Mix 3
Marshall Stability, lbs. @ 75 Blows (ASTM D 6927)	2150 min.	2150 min.	2150 min.
Flow Value, 0.01 inch gradation (ASTM D 6927)	8 - 16	8 - 16	8 - 16
Air Voids, Percent <sup>2</sup> (ASTM D 3203)	3.8 - 5.2	2.8 - 4.2	2.8 - 4.2
Percent Voids Filled With Bitumen	65 - 75	67 - 77	67 - 77
Voids in the Mineral Aggregate (VMA) Minimum %	12	13	14

- Plant mix macadam base course shall be a mixture designed within the gradation limits specified in 4.02I.2.03.A.
- The design job mix formula shall indicate definite percentages passing for each sieve fraction of aggregate and the asphalt content.
- Design new job mix formula for each asphalt plant used, whenever there is a change in material or when field conditions dictate a need for redesign.
- When required by the Engineer, determine the tensile strength ratio of specimens of the composite paving mixture by procedures specified in ASTM D 4867. The value shall be not less than 80 percent.

## C. Plant Production Requirements

- The asphalt concrete mixture or its components shall not be heated to a temperature outside the limits specified in 4.02I.3.02.A.
- Plant production tolerance limits for Marshall Stability and flow value are as follows:

Marshall Stability at 75 blows (ASTM D6927) – 1800 lbs. min.<sup>3</sup>

Flow Value, 0.01 inch gradation (ASTM D 6927) - 8 to 16.<sup>3</sup>

<sup>1</sup> For asphalt concrete mixes with five percent of the aggregate or greater retained on the 1" sieve, the Engineer may require the use of six inch molds to increase the repeatability of Marshall test results. For six inch molds Marshall stability shall be 4800 lbs. minimum at 113 blows with 22.5 lb. hammer and 18 inch drop and the flow value shall be within the 12 to 24 range.

<sup>2</sup> Determine by comparing bulk specific gravity (ASTM D 2726) to maximum specific gravity (ASTM D 2041).

<sup>3</sup> If six inch molds are required as set forth in 4.02I.1.03.B.2 Marshall stability shall be 4000 lbs. minimum at 113 blows with 22.5 lb. hammer, 18 inch drop and the flow value shall be within the 12 to 24 range.

Acceptance shall be on a lot basis as set forth in 4.02I.1.04.E.3. The acceptance of each lot shall be based on the Percent of Material Within Tolerance Limits (PWL), as set forth in 4.02I.4.03 B.5. If the PWL of the lot for either parameter is less than 90 percent, the Contractor shall take corrective actions as set forth in 4.02I.3.03.C.

3. Modified Asphalt Performance Grade

Modified asphalt shall meet the performance grade requirements set forth in 2.02 B, when tested in accordance with 4.02I.1.04.E.12. When material fails to meet the requirements, make corrections in accordance with 4.02I.3.03.E.

4. Marshall Air Voids

Targets for Marshall air voids are 4.5 percent for mix 1, and 3.5 percent for mixes 2 and 3. Acceptance shall be on a lot basis as specified in 4.02I.1.04.E.3. The acceptance of each lot shall be based on the Percent of Material Within Tolerance Limits (PWL) as set forth in 4.02I.4.03.B.5. Adjustment to contract compensation shall be made if the PWL of the lot is less than 90 percent as set forth in 4.02I.4.03.C. If the PWL of the lot equals or exceeds 90 percent and the PWL for pavement mat and joint densities for the lot equals or exceeds 90 percent, the percentage adjustment to compensation may be between 100 and 106 as set forth in 4.02I.4.03.C.

The tolerance limits for Mix 1 are 3.0 and 6.0 percent, and for Mixes 2 and 3 are 2 and 5 percent.

D. In-Place Pavement Requirements

1. Surface Smoothness

- a. Final surface shall be smooth and free from roller marks and irregularities greater than 1/4 inch when tested with a 16-foot straight edge. Testing and acceptance shall be on a lot basis as set forth in 4.02I.1.04.E.10.b. Make corrections for deficiencies in surface smoothness as set forth in 4.02I.3.03.A.
- b. Each surface shall conform to the lines and grades shown on the Contract Drawings within a tolerance of plus or minus 0.045 foot, except where closer tolerance is required for proper functioning of appurtenant structures and drainage. Surface grade shall be tested in accordance with 4.02I.1.04.D.8.

2. Density

a. In-Place Mat Density

The target for in-place mat density shall be 98 percent or better. Acceptance shall be on a lot basis as set forth in 4.02I.1.04.E.5. The acceptance of each lot will be based on the Percent of Material Within Tolerance Limits (PWL), as set forth in 4.02I.4.03.B.5. Adjustment to contract compensation will be made based on the PWL of the lot as set forth in 4.02I.4.03.C. The lower tolerance limit for pavement mat density is 96.3 percent.

b. In-Place Joint Density

The target for in-place joint density shall be 97 percent or better. Acceptance will be on a lot basis as set forth in 4.02I.1.04.E.6. The acceptance of each lot will be based on the Percent of Material Within Tolerance Limits (PWL), as set forth in 4.02I.4.03.B.5. Adjustment to contract compensation will be made based on the PWL of the lot for surface course only as set forth in 4.02I.4.03.F. The lower tolerance limit for pavement joint density is 94.3 percent.

- c. Plant mix macadam base course shall have stone thoroughly interlocked, interstices reduced to a minimum and creeping of mixture no longer visible and with no further increase in density achievable by additional rolling.

3. Thickness

The Engineer will test for thickness only after all corrections for surface smoothness and final surface grade have been completed.

Pavement courses shall conform to thicknesses shown on the Contract Drawings within the following tolerances:

Course or Combination of Courses	Tolerance (in inches) Plus or Minus <sup>4</sup>
Thickness of top course	1/4
Total thickness of top course and bottom course	1/4
Total thickness of plant mix macadam base course, bottom course, and top course	1/4
Overlay thickness shall be as required to meet the final surface grade tolerance	--

4. Final Surface Grade

The final surface shall conform to the finished grades shown on the Contract Drawings within a target tolerance of plus or minus 0.04 foot, except where closer tolerance is required for proper functioning of appurtenant structures and drainage. The final surface abutting existing pavements shall smoothly transition to the existing surface grades. The Engineer will test the final surface, which he will accept or reject on a lot basis as set forth in 4.02I.1.04.E.11. For areas within the runway or taxiway edge markings, the Engineer will adjust contract compensation based on the percentage of grade measurements exceeding the target tolerance as set forth in 4.02I.4.03.D. For all areas when 15% or more of the grade measurements exceed the target grade tolerance or any individual measurement exceeds a 0.06 foot grade tolerance, make corrections for deficiencies in final surface grade as set forth in 4.02I.3.03.D.

5. In-Place Air Voids

Asphalt concrete shall have in-place mat air voids between 2.0 percent and 8.0 percent (9.0 percent for bottom course). The Engineer will test in-place air voids in accordance with 4.02I.1.04.E.7. When material fails to meet the requirements, correct in accordance with 4.02I.3.03.B.

4.02I.1.04. QUALITY CONTROL/ASSURANCE.

A. General

- 1. Establish and maintain effective quality control procedures which shall ensure that the materials and completed construction submitted for acceptance conform to Contract requirements whether manufactured or processed by the Contractor or procured from subcontractors or vendors.

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<sup>4</sup> All measurements for this purpose shall be to the nearest 1/8th inch.

2. Pre-Pavement Construction Meeting

- a. A pre-paving meeting will be conducted at the construction site by the Engineer a minimum of 20 days prior to the first day of laydown to discuss Contractor (suppliers) mixes, plant quality control, field quality control, tack coat, control strip, requirements for mat and joint densities, equipment –(rollers, material transfer unit and paver), smoothness and grade control, segregation, workmanship, quality assurance testing, incentive and disincentive criteria, and any other pertinent specified requirements.

At no additional cost to the City, make arrangements for the project superintendent and a qualified Contractor's representative to be present at every segment of the paving operations, including but not limited to the following:

- (1) Asphalt Producer's Quality Control Manager
- (2) Contractor's representative for site quality control testing
- (3) Paving crew foreman
- (4) Smoothness testing personnel
- (5) Survey crew chief

- b. Record, type and distribute meeting minutes to all attendees of the meeting within 5 days of the date of the meeting.
- c. Do not schedule the pre-paving construction meeting until all submittals pertaining to the paving operation have been submitted and approved.

3. Provide the Engineer certification in writing stating that all of the testing equipment to be used is properly calibrated and will meet the specifications applicable for the specified test procedures. Upon Engineer's request, test samples to demonstrate an acceptable level of performance.
4. Perform quality control sampling, testing, and inspection during all phases of the work at rates sufficient to ensure that the work conforms to the contract requirements, and at minimum test frequencies required by 4.02I.1.04.D.

B. Quality Control Plan

1. Establish and maintain a Quality Control Plan (Plan) along with all the personnel, equipment, supplies and facilities necessary to obtain samples, perform and document tests and meet specification requirements. For Contracts requiring 5,000 tons of asphalt concrete or greater, the Plan is required. For Contracts requiring less than 5,000 tons of asphalt concrete, the Plan is optional.
2. Describe the Plan in a written document. Submit the written Plan to the Engineer for review and approval at least 28 calendar days prior to the start of paving operations.
3. In the absence of an approved Quality Control Plan the City will make no payments for materials which are subject to specific quality control.
4. The Plan may be carried out wholly or in part by the Contractor or by an independent organization but it shall in all cases remain the responsibility of the Contractor.
5. Plan Contents - The Plan shall be organized to address at least the following items:
  - a. Quality control organization chart.

- b. Area of responsibility and authority of each individual.
  - c. Names and qualifications of personnel as required by 4.021.1.04.B.7.d.
  - d. A listing of any outside organizations such as testing laboratories that will be employed by the Contractor and a description of the services they will provide.
  - e. A testing plan which lists the tests required to be performed by the Contractor, the frequency of testing, sampling locations and the location of the testing facilities.
  - f. Procedures for ensuring that tests are taken in accordance with the testing plan, that they are documented and that proper corrective actions are taken when necessary.
  - g. Procedures for ensuring that testing equipment is available, that it complies with specified standards and that it has been calibrated against certified standards.
  - h. Procedures for verifying that tests are taken in accordance with the appropriate AASHTO and ASTM standards.
  - i. Procedures for daily submittal of test results to the Engineer.
  - j. An action plan detailing procedures to be used to correct unsatisfactory production processes and construction practices, when tests indicate materials are failing to meet specification for the following:
    - (1) Aggregate gradation
    - (2) Mat and joint density
    - (3) Marshall air voids
    - (4) Surface smoothness
    - (5) Grades
6. Plan Elements. The Plan shall address all elements which affect the quality of the pavement including but not limited to:
- a. Mix Design
  - b. Aggregate Gradation
  - c. Quality of Materials
  - d. Stockpile Management
  - e. Proportioning/temperature control of mixture components
  - f. Mixing and Transportation
  - g. Placing and Finishing
  - h. Joints
  - i. Compaction
  - j. Surface smoothness and grades

## 7. Quality Control Organization

- a. Implement the Quality Control Plan by the establishment of a separate Quality Control Organization. Develop and submit an organization chart to show all quality control personnel integrated with other management, production and construction functions and personnel.
- b. The organization chart shall identify all quality control staff required to implement all elements of the quality control program, including inspection and testing functions for different items of work.
- c. If an outside organization or independent testing laboratory is used for implementation of all or part of the Plan, the personnel assigned will be subject to the qualification requirements of this 4.02I.1.04B.7.d. The organization chart shall indicate which personnel are contractor employees and which are provided by an outside organization.
- d. The Quality Control Organization shall consist of at least the following personnel:

## (1) Plan Administrator

The Plan Administrator shall be an employee of the Contractor. The Plan Administrator shall have prior quality control experience on a project of size and scope comparable to this Contract. In addition, the Plan Administrator shall meet one of the following requirements:

- (a.) A New York State Licensed Professional Engineer with one year of paving experience as approved by the Engineer.
- (b.) Engineer-in-Training with two years of airport paving experience as approved by the Engineer.
- (c.) An individual with three years of highway and/or airport paving experience as approved by the Engineer and with a Bachelor Degree in Civil Engineering, Civil Engineering Technology or Construction.
- (d.) Construction Materials Technician certified at Level III by the National Institute for Certification in Engineering Technologies (NICET).
- (e.) Highway Materials Technician certified at Level III by NICET.
- (f.) Highway Construction Technician certified at Level III by NICET.
- (g.) A NICET certified Engineering Technician in Civil Engineering Technology with 5 years of highway and/or airport paving experience as approved by the Engineer.

Certification at an equivalent level by a State or nationally recognized organization will be acceptable in lieu of NICET certification. The Plan Administrator shall have full authority to institute any and all actions necessary for the successful operation of the Plan to ensure compliance with the Specifications. The Plan Administrator shall report directly to a responsible officer in the Contractor's organization. The Administrator may supervise the Plan on more than one project provided that he can upon request be at the job site within one hour.

## (2) Quality Control Technicians

Provide a sufficient number of Quality Control Technicians to adequately implement the Plan. Quality Control Technicians shall be engineers, engineering technicians or experienced craftsmen holding a current certificate issued by the New Jersey Society of

Asphalt Technologists, Inc. (NJSAT) or other Engineer-approved certifying agency or organization. (Information regarding the certification procedure can be obtained by contacting NJSAT.)

The Quality Control Technicians shall report directly to the Plan Administrator and shall perform the following functions:

- (a.) Inspection of all plant equipment used in proportioning and mixing to ensure proper calibration and operating conditions.
- (b.) Performance of quality control tests necessary or desirable to adjust and control mix proportioning in accordance with the job mix formula.
- (c.) Inspection of all equipment used in placing, finishing and compacting material to ensure proper operating condition.
- (d.) Inspection during construction to ensure that placement, joint construction and compaction is in conformance with the specifications and will produce a finished product that meets specification requirements.
- (e.) Performance of all quality control testing as required by 4.02I.1.04.D, including density monitoring.

8. Testing Laboratory.

The Plan must provide for a fully equipped asphalt laboratory located at the plant or job site. It shall be available for joint use by the Contractor for quality control testing and by the Engineer for acceptance testing and must have adequate equipment for the performance of the tests required by these specifications. The Engineer shall have priority in use of the equipment necessary for acceptance testing.

The effective working area of the laboratory shall be a minimum of 250 square feet with a ceiling height of not less than 7.5 feet. Lighting shall be adequate to illuminate all working areas. It shall be equipped with heating and air conditioning units to maintain a temperature of 70°F + 5°F.

In addition to the equipment required for testing, the laboratory shall be equipped with a paper copier and facsimile machine to be utilized by the Engineer.

Keep laboratory facilities clean and maintain all equipment in proper working condition. Allow the Engineer unrestricted access to inspect the Contractor's laboratory facility and to witness quality control activities. The Engineer will advise the Contractor in writing of any noted deficiencies concerning the laboratory facility, equipment, supplies or testing personnel and procedures. When in the Engineer's opinion deficiencies may adversely affect test results, immediately suspend delivery and placement of asphalt materials and do not resume until the deficiencies are satisfactorily corrected.

9. Noncompliance.

In cases where quality control activities do not comply with either the Contractor's Quality Control Program or the Contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, the Engineer may:

- a. Order the Contractor to replace ineffective or unqualified quality control personnel.
- b. Carry out the functions and operations of the Contractor's approved Quality Control Program. Costs incurred by the Engineer to operate the Quality Control Program or to otherwise remedy the Contractor's non-compliance with quality related provisions of the Contract shall be deducted from the total amount due the Contractor.



## C. Source of Aggregate and Sampling

## 1. Virgin Aggregate

- a. Select sources of virgin aggregates well in advance of the time the materials are required for the construction. When the aggregates are obtained from a previously approved source, submit random hot bin samples, if requested by the DDC's Director of Quality Assurance & Construction Safety, a minimum of 14 calendar days prior to the start of production and if from a source not previously approved, submit random hot bin samples a minimum 45 calendar days prior to the start of production. Sampling of the hot bin materials for job mix formulation will be observed by the Engineer and identical samples will be obtained for verification of the job mix formulation by the Department's Quality Assurance Laboratory or their agents. The Engineer may require the proposed mix formulation to be batched at the asphalt plant and tested in the presence of the Engineer.
- b. Where previously used or concurrent job mix formulations are to be used, the taking of hot bin samples may be waived by the Engineer.

## 2. Reclaimed Asphalt Pavement

- a. Where reclaimed asphalt pavement material is permitted, it shall have 100 percent passing 1/2 inch sieve and shall be a mixture of only coarse aggregate, fine aggregate, and asphalt cement, free of solvents or other contaminating substances. The fine aggregate contained in the reclaimed asphalt pavement shall have a plasticity index of not greater than 4 when tested in accordance with ASTM D 4318.

Maintain stockpiles of reclaimed asphalt pavement in a manner to prevent contamination with other aggregates and keep covered in order to maintain a low moisture content of the reclaimed asphalt pavement.

- b. Unless otherwise shown on the Contract Drawings, a minimum of 10% to a maximum of 25% recycled asphalt pavement will be required in all asphalt mixes, other than the surface course. Asphalt mixes that contain recycled asphalt pavement will have a tolerance range for plant voids of 1.5-5.5%. Fifty percent of the asphalt cement content contained in the recycled asphalt pavement will be deducted from the optimum asphalt content for an asphalt mix design.
  - c. Contractor's reclaimed asphalt pavement will be considered for use provided that the Engineer is notified of the intended use and that he approves the reclaimed asphalt pavement. Take at least six representative samples, each at least 7 pounds, from each stockpile. Stockpiles shall not exceed 3000 tons. Sample in accordance with ASTM D 75. Sampling will be observed by the Engineer. Take duplicate samples and submit them with mix design for verification. Test samples in accordance with ASTM D 2172 to determine asphalt cement content; test re-covered aggregate in accordance with ASTM C 136 for gradation.
  - d. Once a reclaimed asphalt pavement stockpile has been approved for use, the stockpile shall be dedicated to the Contract and no reclaimed asphalt pavement may be added to the stockpile. If there is an insufficient amount of reclaimed asphalt pavement in the stockpile to complete the work, a new separate stockpile may be made and shall be tested for acceptance as aforementioned.
3. Locate stockpiles of reclaimed asphalt pavement and of new aggregate so as to prevent intermingling.
  4. When more than one asphalt plant is to be used to supply asphalt concrete to the construction site, each asphalt plant shall use a similar job mix formula, as approved by the Engineer.
  5. Locations and timing of random sampling shall be determined in accordance with Section 6 of FAA ERLPM.

## D. Contractor's Quality Control Tests

1. Perform all quality control tests necessary to control the production and construction processes. The testing program shall include, but not necessarily be limited to, tests for the control of asphalt content, aggregate gradation, Marshall properties and temperatures. Obtain samples at the direction of the Engineer for the purpose of quality control testing. Random sampling procedures specified in Section 6 of FAA ERLPM shall be used for determining the selection of samples as follows:

- a. Take four samples of freshly mixed material per each lot (one sample from each subplot) for top, bottom and base courses. Take samples in accordance with ASTM D 979 from material at the mixing plant.

A lot will be defined as one day's production for each mix. Production rates for each mix will be obtained by the Engineer from the asphalt plant at the start of each day's production. A subplot will be defined as a quarter of a lot based on the initial production forecast for the mix. Maximum lot size will be 2000 tons. If a day's production is forecast over 2000 tons, the forecast quantity shall be divided into two or more equal lots. Should actual production be greater than the initial forecast of production for a given mix, the additional production will be divided into the same subplot sizes as initially calculated. If one or two additional sublots are produced they will be added to that day's lot with n=5 or 6 for sublots. If three or more additional sublots are produced in a day, an additional lot will be established for that particular day.

If actual production is less than the initial forecast for a given mix but sufficient material was produced to constitute three sublots, a lot will be formed with three sublots (n=3). Should actual production constitute only one or two sublots, the sublots will be added either to the previous lot or the next production lot, whichever is closer in time. Each subplot shall contain a minimum of 75 tons of material.

Where more than one plant is simultaneously producing material for the job, the lot sizes shall apply separately for each plant.

- b. Test samples to determine asphalt content in accordance with ASTM D 2172, ASTM D 4125 or ASTM D 6307. Test recovered aggregate to determine gradation in accordance with ASTM D 5444. In addition, when automated recording plants are used, submit printouts of asphalt content to the Engineer.
- c. Prepare three plugs from each sample and test them in accordance with ASTM D 6926 using automatic compaction procedures. Marshall air voids shall be determined in accordance with ASTM D 3203. For each subplot, the maximum theoretical density shall be determined in accordance with ASTM D 2041.

Voids filled with asphalt, for each plant sample, shall be computed as follows:

- (1) Determine asphalt content in percentage by volume (I) using:

$$I = \frac{P_b \times G_{mb}}{G_b}$$

Where:

- I = Percentage by volume of asphalt  
 P<sub>b</sub> = Percentage by weight of asphalt  
 G<sub>mb</sub> = Bulk specific gravity of compacted mixture  
 G<sub>b</sub> = Specific gravity of asphalt

- (2) Determine percent voids filled with asphalt (VF) as follows:

$$VF = \frac{I \times 100}{I + P_a}$$

Where:

VF = Percent voids filled with asphalt  
 I = Percentage by volume of asphalt  
 P<sub>a</sub> = Percent Marshall air voids

Voids in the Mineral Aggregate (VMA) will be estimated by adding the asphalt content in percentage by volume to the percent of air voids. Bulk specific gravities will be used to calculate VMA.

- d. Take hot bin or feeder belt composite samples of top, bottom and base course aggregates for mixes at least twice daily and check gradation in accordance with ASTM C 136, including washing material passing No. 8 sieve in accordance with ASTM C 117.
- e. At least six times daily, check and record temperatures at necessary locations to determine the temperatures of:
- (1) aggregates and asphalt immediately before introduction to the pugmill or dryer drum;
  - (2) the mixture immediately after discharge from the pugmill or dryer drum;
  - (3) the mixture at the spreader on the construction site.
- f. Reclaimed Asphalt Pavement
- (1) Where reclaimed asphalt pavement is being used as a substitute for some of the virgin aggregate, take a sample of freshly mixed recycled asphalt concrete in accordance with ASTM D 979 and determine the moisture content at least twice daily. Moisture determinations shall be based on the weight loss by heating an approximately 4 pound sample of the freshly mixed materials for one hour in an oven at 280 plus or minus 5 degrees F. The moisture content of the freshly mixed recycled asphalt concrete shall not exceed 0.5 percent.
  - (2) Take a sample of reclaimed asphalt pavement from the approved stockpile at least once daily and test in accordance with ASTM D 2172 to determine asphalt content and gradation in accordance with ASTM D 5444. The resulting asphalt content and aggregate gradation shall be similar to the average test results of the reclaimed asphalt pavement submitted with Design Job Mix Formula. If there is a variation of plus or minus 1.0 percent in the asphalt content or plus or minus 10 percent in aggregate gradation on any sieve, a second sample shall be taken and tested in the same manner as the first sample. If the results are similar to that of the first sample, appropriate measures shall be taken to adjust the mixture to compensate for the variation in the reclaimed asphalt pavement.
- g. Moisture Content of Aggregate

For drum plants the moisture content of aggregate used for production shall be determined a minimum of once per lot in accordance with ASTM C 566.

## h. Moisture Content of Mixture

The moisture content of the mixture shall be determined once per lot in accordance with the procedure given in Section 4.02I.1.04.D.1.f. (1). The moisture content in the freshly mixed asphalt concrete shall not exceed 0.5%. If the moisture content is 0.5% or greater, stop production and adjust plant operation.

- i. Perform additional testing as required to ensure that mixtures produced meet the requirements of this Section.

## 2. Control Charts

Maintain linear control charts both for individual measurements and range (i.e., difference between highest and lowest measurements) for aggregate gradation and asphalt content. When test results exceed certain limiting values, take action to bring the asphalt concrete production process under tighter control. The Action Limit is the limiting value at which corrective actions shall be made while production may continue. The Suspension Limit is the limiting value at which production must be suspended while corrections are made. Production shall not resume until Contractor's corrections are approved by the Engineer.

Post control charts in a location satisfactory to the Engineer and keep charts current. As a minimum, the control charts shall identify the project number, the contract item number, the test number, each test parameter, the Action and Suspension Limits applicable to each test parameter and the Contractor's test results. Use the control charts as part of a process control system for identifying potential problems and assignable causes before they occur. If in the Engineer's opinion the Contractor's projected data during production indicates a problem and the Contractor is not taking satisfactory corrective action, the Engineer may suspend production or acceptance of the material.

## a. Individual Measurements

Establish control charts for individual measurements to maintain process control within tolerance for aggregate gradation and asphalt content. The control charts shall use the job mix formula target values as indicators of central tendency for the following test parameters with associated Action and Suspension Limits:

CONTROL CHART LIMITS FOR INDIVIDUAL MEASUREMENTS		
Sieve	Action Limit	Suspension Limit
1"	+6%	+9%
3/4"	+6%	+9%
1/2"	+6%	+9%
3/8"	+6%	+9%
No. 4	+6%	+9%
No. 8	+5%	+7.5%
No. 16	+5%	+7.5%
No. 30	+3%	+4.5%
No. 50	+3%	+4.5%
No. 100	+2%	+3%
No. 200	+2%	+3%
Asphalt content	0.45%	+0.7%

## b. Range.

Establish control charts for range to control process variability for the test parameters and Suspension Limits listed below. Compute the range for each lot as the difference between the two test results for each control parameter. The Suspension Limits specified below are based on a sample size of  $n = 2$ . Should the Contractor elect to perform more than two tests per lot, the Suspension Limits shall be adjusted by multiplying the Suspension Limit by 1.18 for  $n = 3$  and by 1.27 for  $n = 4$ .

CONTROL CHART LIMITS BASED ON RANGE	
(Based on $n = 2$ )	
Sieve	Suspension Limit
1"	11%
3/4"	11%
1/2"	11%
3/8"	11%
No. 4	11%
No. 8	9%
No. 16	9%
No. 30	6%
No. 50	6%
No. 100	3.5%
No. 200	3.5%
Asphalt Content	0.8%

## c. Corrective Action.

The Quality Control Plan shall provide for appropriate action to be taken when the asphalt concrete production process is out of control. The Plan shall contain sets of rules to gauge when a process is out of control and shall describe Contractor's actions to bring the process into control. A process shall be deemed out of control and production stopped and corrective action taken, if:

- (1) One point falls outside the Suspension Limit line for individual measurements or range; or,
  - (2) Two consecutive points fall outside the Action Limit line for individual measurements.
3. Document quality control efforts using copies of the sample forms contained in the FAA ERLPM, Appendix C, in its entirety, or other forms obtained from the Engineer. Make test results available to the Engineer daily.

4. If a storage silo is used (except where excluded in 4.02I.3.02.A.8):
  - a. Check the silo to see that it can properly store the asphalt concrete for the time involved.
  - b. Take samples of asphalt concrete as it is unloaded from the silo and check them for conformance to this Section. If the asphalt concrete appears segregated, stop using the storage silo until it is demonstrated to the Engineer that the condition has been corrected.
  - c. Silo storage time shall be governed by previous State DOT approval, not to exceed 24 hours.
5. Unless otherwise noted on the Contract Drawings, and subject to the approval of the Engineer, select an area to be called a Control Strip from the first day's production of each mix. Each Control Strip shall be a minimum of 100 feet long and two spreader widths wide and shall be constructed to meet the requirements of this Section and in the same manner as the remainder of the course it represents. Take three random samples at the plant and test them for stability, flow and air voids in accordance with ASTM D 6927 and 4.02I.1.04.D.1.c. Take three randomly selected cores from the pavement mat and three along the longitudinal pavement joint and test them to determine density in accordance with 4.02I.1.04.E.5 and E.6. Use the same means and methods which will be used to construct longitudinal and transverse joints as referred to in 4.02I.1.04.B.6.h and 4.02I.3.02.F.1 and 2.

The purpose of the Control Strip is to demonstrate that the completed pavement may be constructed using the proposed equipment and methods of operation and to obtain all quality requirements prior to the start of full production. Construct a new Control Strip whenever a change is made in equipment, methods of operation or type or source of material or whenever there is a change in the job mix formula. The Control Strip may become part of the completed pavement if it meets the requirements of this Section.

6. Include, as part of the quality control plan, the use of a nuclear density device to aid in meeting the specified target densities. Calibrate the nuclear density device with the control strip cores. If other than a nuclear density device is used it shall be calibrated with an additional set of pavement cores.
7. Surface Smoothness

Each lot shall be evaluated with a 16-foot straightedge provided by the Contractor and subject to approval by the Engineer. The lot size shall be 2,000 square yards. Measurements will be made perpendicular and parallel to the centerline of the paving strips at distances not to exceed 25 feet. When more than 15 percent of all measurements within a lot exceed the specified tolerance in 4.02I.1.03.D.1.b, the Contractor shall correct the deficiency in accordance with 4.02I.3.03.A. Written measurement results shall be submitted to the Engineer prior to payment. The Engineer shall perform the survey jointly with the Contractor.

8. Final Surface Grade.

The finished grade of each lot will be determined by running levels at intervals of 50 feet or less longitudinally and 25 feet or less transversely to determine the elevation of the completed pavement. The lot size shall be 2,000 square yards. When more than 15 percent of all the measurements within a lot are outside the specified tolerance, the Contractor shall correct the deficiency in accordance with 4.02I.3.03.A. Survey results shall be submitted to the Engineer prior to payment. The Engineer shall perform the survey jointly with the Contractor.

#### E. Engineer's Sampling and Testing

1. Produce asphalt concrete in approved automated plants equipped with interlocks and printouts meeting the requirements of ASTM D 995 and subject to the following:
  - a. Plant interlocks and printouts shall be in operation during production and two (2) copies of all printouts shall be furnished to the Engineer daily.

- b. Scales shall be certified by an approved agency at least every 180 calendar days and copies of certifications shall be submitted to the Engineer upon request.
- 2. Provide labor and equipment to take samples, except cores, to check thickness and density.
- 3. The Engineer will perform acceptance testing for Marshall air voids, stability and flow. Samples will be taken from trucks at the plant, in accordance with FAA ERLPM, Section 6. These samples will be from the sublots that were sampled in 4.02I.1.04.D.1.a. The Engineer will prepare three plugs from each sample and test them in accordance with ASTM D 6926 and ASTM D 6927 using automatic compaction procedures. The specimen compaction temperatures will be within the following range as measured within 1/2 inch from the outside edge:

<u>Performance Grade</u>	<u>Temperature Degrees F°</u>
PG 64-22, PG 70-22	275 – 295
PG 76-22	300 – 320
PG 82-22	305 - 325

Air voids, voids in mineral aggregate and voids filled with asphalt will be determined in accordance with ASTM D 3203 and 4.02I.1.04.D.1.c. The average test values obtained from each lot of top and bottom courses must conform to the parameters specified in 4.02I.1.03.C.

In lieu of sampling and testing in the field, the Engineer may sample and perform acceptance testing at the plant. The Contractor will be advised at the start of Work where the Engineer will sample and test.

- 4. For thickness determination, exclusive of overlay pavement, the Engineer will divide each course into area lots consisting of the area covered by the lot sampled as specified in 4.02I.1.04.D.1.a and he will further subdivide each lot into four equal sublots. The Engineer will take one 4-inch diameter core randomly in each subplot to check thickness of the top and bottom courses. One fourth of all such cores will continue through the plant mix macadam base course. Thickness will be determined in accordance with ASTM D 3549.
- 5. Mat Density
  - a. The Engineer will determine the in-place density of the control strip and subsequently placed pavements by taking cores at random locations as specified below.
  - b. Cores taken from the top and bottom course in place and any other specimens taken at the jobsite, sampled in accordance with the random sampling procedures as specified in 4.02I.1.04.D.1, will be tested by the Engineer for bulk specific gravity in accordance with ASTM D 2726. Cores shall not be taken closer than one foot from a transverse or longitudinal joint for pavement mat density determination. The in-place density of the pavement course will be the ratio of the in-place specific gravity to the laboratory Marshall bulk specific gravity expressed as a percentage.
  - c. Cores taken from courses containing more than 10 percent air voids will be tested by the Engineer for density (Bulk Specific Gravity) according to the following equation:

$$S.G. = \frac{W}{12.87 d^2h}$$

Where:

- W = Weight, Dry Specimen (grams)
- d = Measured Diameter<sup>5</sup> (inches)
- h = Measured Height<sup>5</sup> (inches)

Laboratory bulk specific gravity and computation of in-place density will be as specified in 4.02I.1.04.E.5.b above.

- d. The average in-place density determination, taken from the area covered by the lot sampled as specified in 4.02I.1.04.D.1.a, will be determined by the Engineer by summing up the subplot in-place density readings obtained from a lot and dividing the total by the number of sublots. The in-place density from each subplot will be obtained using a core reading taken from each subplot on a random basis and dividing by the Marshall bulk density (ASTM D 6926 and ASTM D 2726) taken for that subplot. Any core with a thickness less than twice the largest sieve size to retain more than 5 percent of any aggregate will be discarded and additional random cores will be taken as required to ensure representative readings.
  - e. The Engineer will repeat the procedure specified in a. through d. above whenever a change is made in the type or source of material or whenever a new job mix formula is approved for material from the same source.
6. Joint Density
- The Engineer will take one core from each subplot of all surface courses or from the underlying lifts as defined in 4.02I.1.04.D.1.a and will test it in accordance with 4.02I.1.04.E.5. For joint cores the lowest Marshall bulk density for sublots forming the joint will be used to compute the in-place density. The Engineer will take cores from directly over the longitudinal joint in line with the location of the random cores taken under 4.02I.1.04.E.5.b. When a paving lane has two longitudinal joints, both joints will be cored. The in-place joint density will be determined separately for each joint, and the joint producing the lowest in-place density will be used to determine payment. Based on site and placement conditions the Engineer may elect to core only one joint.
7. In-place Air Voids
- The Engineer will calculate the in-place mat air voids for each subplot in accordance with ASTM D3203, by comparing the bulk specific gravity (ASTM D 2726) of the cores taken as specified in 4.02I.1.04.E.5.b to the maximum laboratory specific gravity (ASTM D 2041).
- 8. The Contractor shall patch all areas where samples are taken with an approved asphalt concrete or Portland cement concrete properly tamped to fill all voids and struck off flush with the surface within 24 hours after sampling.
  - 9. The Engineer may at any time, notwithstanding previous plant approval, reject and require the Contractor to dispose of any batch of asphalt concrete mixture which is rendered unfit for use due to contamination, segregation or incomplete coating of aggregate. Such rejection may be based on only visual inspection. In the event of such rejection, the Contractor may take a representative sample of the rejected material in the presence of the Engineer and, if the Contractor can demonstrate in the laboratory, in the presence of and to the satisfaction of the Engineer, that such material was erroneously rejected, the Contractor will be compensated for the material.

<sup>5</sup> Average of 5 equally spaced measurements around the core.



## 10. Surface Smoothness

- a. A lot is defined as 2,000 SY of final paved surface. Where paving areas are not equally divisible into 2,000 square yard lots, odd sized lots between 1,000 and 3,000 square yards will be used. The odd sized lots will be used for the area remaining after the paved area is divided into 2,000 square yard lots.
- b. Each lot will be evaluated by the Engineer with a 16-foot rolling straightedge provide by the Contractor and subject to approval by the Engineer. Measurements will be made perpendicular to the centerline of the paving lanes at distances not to exceed 25 feet; longitudinal measurements will be made along the centerline of the paving lane. Designed breaks in grade shown on the Contract Drawings will not be included in the measurements. When more that 15 percent of all measurements within a lot exceed the tolerance specified in 4.02I.1.03.D.1.b, the Contractor shall correct the deficiency in accordance with 4.02I.3.03.A.

## 11. Final Surface Grade

The grades of the final surface of each lot will be measured at the finished grade locations shown on the Contract Drawings. Where paving lanes are 20 feet or greater in width, an additional line of grades, located at the center of the paving lane and spaced at 25 feet longitudinally, will be measured. A lot is defined as 2,000 square yards of final pavement surface. The transverse limit of the lot will be the transverse limit of paving. Where paving areas are not equally divisible into 2,000 square yard lots, odd sized lots between 1,000 and 3,000 square yards will be used. The odd sized lots will be used for the area remaining after the paved area is divided into 2,000 square yard lots. The Contractor shall perform the survey jointly with the Engineer.

12. The Engineer will perform acceptance testing of modified asphalt to determine if it meets the performance grade requirements set forth in 4.02I.2.02.B. Samples will be collected at the asphalt plant for each lot of asphalt concrete produced, as specified in 4.02I.1.04.D1.a. The Engineer will sample the liquid asphalt from the plant storage tanks which must be equipped with a sample valve.
13. The Engineer will measure the temperature of each load of asphalt concrete. Any load of asphalt concrete with temperature exceeding 350°F will be rejected.
14. Where there is a discrepancy between the Contractor's test results and the Engineer's, the Engineer's results shall govern.

4.02I.1.05. SUBMITTALS

- A. Submit to the Engineer, for approval, all Job Mix Formulae with Checklist (specified in 4.02I.2.03.B) for each type of asphalt concrete mix, from each plant and each type of asphalt concrete mix, from each plant and each new source of material at least 10 days prior to the start of production.
- B. Submit certified test data, location of each type aggregate to be used and quantities to be obtained from each location and make arrangements for the Director of NYCDDC's Quality Assurance Unit to obtain samples from each such location for checking against the samples submitted. Take all samples in accordance with requirements of ASTM D 75 and ASTM D 242.
- C. If requested, submit to the Director of NYCDDC's Quality Assurance Unit samples of each type aggregate to be used and from each source with proper identification as to source, type of aggregate and Contract number. Submit in clean, sturdy bags and in the following amounts for each sample when requested:

Reclaimed Asphalt Pavement (when used)	50 lbs.
Coarse Aggregate	25 lbs.
Fine Aggregate	25 lbs.
Mineral Filler	5 lbs.

D. Submit to the Director of NYCDDC's Quality Assurance Unit, for approval, four one-quart samples of the asphalt cement and two one-quart samples of the liquid latex (if applicable) proposed for use together with the following data:

1. The name of the supplier(s).
2. An analysis of such asphalts by the supplier, certifying that the results of tests comply with the requirements of AASHTO M320 and this Section.

A certificate, from the liquid latex supplier, identifying and stating the physical properties of the latex components. Percentages of solids and water shall be included.

Resubmit the above data each time an asphalt or liquid latex from a different source is proposed.

- E. Where asphalt cement is to be combined at the plant with an asphalt modifier, submit the asphalt cement in accordance with 4.02I.1.05.D above and submit a 10-pound sample of the asphalt modifier together with a certificate from the modifier supplier identifying and stating the physical properties of the modifier.
- F. Submit quality control plan and control charts to the Director of NYCDDC's Quality Assurance Unit, for approval, at least 5 days prior to the start of production.
- G. Submit to Director of NYCDDC's Quality Assurance Unit, the name of the supplier and an analysis of the asphalt tack coat to be used on the project.
- H. Submit smoothness measurements and surface grade survey results to the Engineer prior to application for payment.

## PART 2. PRODUCTS

### 4.02I.2.01. MANUFACTURERS

- A. Manufacturer of asphalt cement shall be approved by the New York State Department (NYSDOT) of Transportation.
- B. Modified Asphalt shall be one of the following. No Substitution is permitted.
  1. Stylink - Koch Materials; Gloucester, NJ
  2. Vestoplast "S" Modifier - Creanova, Inc.; Sommerset, NJ
  3. Kraton - Shell Chemical Co.; Houston, TX
  4. Citgoflex SP - Citgo Asphalt Refining Co.; Paulsboro, NJ
  5. Polykote - Suite - Kote Corp.; Cortland, NY
  6. Elvaloy RET - E.I. DuPont Co.; Wilmington, DE

4.02I.2.02. MATERIALS

## A. Aggregates

1. If the tensile strength ratio of the specimens of composite mixture is less than 80 percent, as specified in 4.02I.1.03.B.6, the aggregates will be rejected unless the Contractor treats the asphalt with an approved anti-stripping agent. The amount of anti-stripping agent added to the asphalt shall be sufficient to produce a tensile strength ratio of not less than 80 percent.
2. Coarse Aggregate - Material retained on the No. 8 sieve.
  - a. Except for use in the top lift of the top course within the roadway pavement edge markings as shown on the Contract Drawings, coarse aggregate shall conform to ASTM D 692, except as follows: use broken stone or crushed gravel having not less than 75 percent by weight of pieces with two or more fractured faces and 85 percent by weight having at least one fractured face (ASTM D 5821), with a maximum of 8 percent of flat or elongated pieces (ASTM D 4791), with a maximum percentage of wear (ASTM C 131) of 40 percent and with a magnesium sulfate loss (ASTM C 88) of not more than 12 percent for a five-cycle test period.
  - b. For the top lift of the top course within the roadway pavement edge markings as shown on the Contract Drawings, coarse aggregate shall conform to ASTM D 692 except as follows: use broken stone which shall be trap rock or gneiss of uniform quality obtained from a source approved by the New York State Department of Transportation (NYSDOT) for use in asphalt concrete. The aggregate shall have not less than 75 percent by weight of pieces with two or more fractured faces, with a maximum of 8 percent of flat or elongated pieces (ASTM D 4791), with a maximum percentage of wear (ASTM C 131) of 30 percent and with a magnesium sulfate loss (ASTM C 88) of not more than 12 percent for a five-cycle test period.
  - c. A flat particle is one having a ratio of width to thickness greater than five; an elongated particle is one having a ratio of length to width greater than five.
3. Fine Aggregate - Material passing the No. 8 sieve and retained on the No. 200 sieve.

Fine aggregate shall be a blend of washed, textured sand and stone screenings conforming to ASTM D 1073, with a maximum percentage of wear (ASTM C 131) of 30 percent and with a magnesium sulfate loss (ASTM C 88) of not more than 18 percent for a five-cycle test period, a plasticity index of not more than 6 and a liquid limit of not more than 25 when tested in accordance with ASTM D 4318. When tested in accordance with ASTM D 2419, the sand equivalent value shall be 35 or greater.

Textured sand shall be defined as a sand which when tested in accordance with ASTM C1252, Method A, results in uncompacted voids greater than 45.0 percent. Sand that has a low texture value and slag shall not be used.

4. Mineral filler shall conform to ASTM D 242 and have a ratio to asphalt by weight not exceeding 1.2.

## B. Asphalt

Asphalt shall be one of the following conforming to the requirements of AASHTO M320 and as specified within table entitled "Requirements for Performance Graded Asphalts" for the Performance Grade (PG) as shown on the Contract Drawings:

1. Asphalt Cement

Asphalt cement shall meet the requirements for PG 64-22, unless otherwise shown on Contract Drawings.

2. Modified Asphalt

Modified Asphalt shall be one of the following. No Substitution is permitted.

- a. "Stylink", "Kraton (SEBS)", "Polykoto", "Elvaloy RET", or "Citgoflex SP" meeting the requirements for PG 76-22 as shown on the Contract Drawings.
- b. Asphalt cement modified with "Vestoplast 'S'", may be used where PG 76-22 is specified and subject to the following:
  - (1) Add Vestoplast "S" to the asphalt concrete mixture at a rate of 7 percent by weight of asphalt cement, by substitution.
  - (2) Arrange for the manufacturer to provide a representative at the plant at all times during production to verify that the proper quantity of Vestoplast "S" was added to the asphalt concrete.

C. Tack Coat

Unless otherwise shown on Contract Drawings, asphalt cement shall be as specified in 4.02I.2.02.B.1 above.

D. Resultant Asphalt Cement

Resultant asphalt cement shall be a mixture of new asphalt cement as specified in 4.02I.2.02.B.1 above, asphalt cement extracted from the reclaimed asphalt pavement and recycling agents if required.

## REQUIREMENTS FOR PERFORMANCE GRADED ASPHALTS

<u>PERFORMANCE GRADE (PG)</u>	<u>64-22</u>	<u>70-22</u>	<u>76-22</u>	<u>82-22</u>
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## These Tests Performed on Original Binder:

Flash Point Temperature (AASHTO T48): Minimum, Degrees Celsius.	230	230		230	230
Dynamic Shear (AASHTO T315):	64	70	76	82	
G*/SIN DELTA, Minimum, 1.00 kPa, Test Temperature At 10 Rad/s, Degrees Celsius.					
Rotational Viscosity (ASTM D 4402): Maximum, 3 Pa-s, Test Temperature, Degrees Celsius.	135	135	135	135	
Separation Test – R&B (ASTM D 5976): Percent Difference Maximum Degree Celsius.	--	--	4.5	4.5	

## These Tests Performed on Rolling Thin Film Oven Test (RTFOT) Residue:

Mass Loss (AASHTO T240): Maximum Percent.	1.00	1.00	1.00	1.00	
Dynamic Shear (AASHTO T315): G*/SIN DELTA, Minimum, 2.20 kPa, Test Temperature at 10 Rad/s, Degrees Celsius.	64	70	76	82	
Elastic Recovery (ASTM D 6084) 25 Degrees Celsius, 5 cm/minute Elongation, 60 Minutes, Minimum Percent.	--	--	50	75	

## These Tests Performed on Pressure Aging Vessel (PAV) Residue:

PAV Aging Temperature (AASHTO R28): Degrees Celsius.	100	100	100	100	
Dynamic Shear (AASHTO T315): G*/SIN DELTA, Maximum, 5000 kPa, Test Temperature at 10 Rad/s, Degrees Celsius.	25	28	31	34	
Creep Stiffness (AASHTO T313): S, Maximum, 300 MPa m-Value, Minimum 0.300, Test Temperature at 60 Seconds, Degrees Celsius	-12	-12	-12	-12	

4.02I.2.03 MIXES.

## A. Mix Design Table

<b>Mix Designation and Percentage by Weight Passing Sieves</b>				
Sieve Size	Plant Mix Macadam Base Course	Bottom Course Mix 1	Top Course Mix 2	Top Course Mix 3
1-1/4"	100	100	---	---
1"	90 - 100	90 - 100	---	---
3/4"	60 - 80	70 - 84	78 - 98	100
1/2"	---	54 - 68	64 - 77	72 - 98
3/8"	15 - 40	44 - 54	52 - 67	60 - 82
No. 4	0 - 10	28 - 36	33 - 46	40 - 56
No. 8	---	17 - 25	23 - 32	28 - 39
No. 16	---	12 - 20	16 - 20	19 - 24
No. 30	---	7 - 15	12 - 16	13 - 19
No. 50	---	5 - 11	8 - 12	8 - 16
No. 100	---	3 - 9	6 - 10	5 - 10
No. 200	---	1 - 5	3 - 6	3 - 6
<b>Asphalt, Weight by Percent of Total Mixture</b>				
	2.5 - 3.1	3.5 - 4.5	4.4 - 5.2	5.2 - 6.2

Note No. 1 - Material passing the No. 200 sieve may consist of fine particles of the aggregate, mineral filler or both. Material passing the No. 30 sieve shall be non-plastic when tested in accordance with the requirements of ASTM D 4318.

Note No. 2 - Lift Thickness shall be no less than two times the nominal maximum size of the aggregate (See Note No. 6).

Note No. 3 - If the aggregate does not satisfy tensile strength ratio requirements, add an approved antistripping agent (See 4.02I.2.02.A.1)

Note No. 4 - Job Mix Formula shall follow a smooth curve within the specified limits for all sieve sizes of the Mix Design Table, but should not fall on the maximum density line and should not cross the maximum density line below the No. 4 sieve. The maximum density line will be determined by plotting the gradations on a 0.45 power graph paper, and drawing a straight line between the amount passing the No. 200 sieve and the amount which is retained on the largest sieve.

Note No. 5 - Notify the Engineer if a satisfactory Job Mix formula using the Mix Design Table cannot be obtained.

Note No. 6 - Nominal maximum size is one sieve size larger than the first sieve to retain more than 10 percent of the aggregate, based on the Contractor's job mix formula.

## B. Job Mix Formula and Checklist

1. The laboratory used to develop the job mix formula shall meet the requirements of ASTM D 3666. Before construction starts, submit to the Engineer a certification signed by the manager of the laboratory stating that it meets these requirements. The certification shall contain as a minimum:
  - a. Qualifications of personnel: laboratory manager, supervising technician and testing technicians.
  - b. A listing of equipment to be used in developing the job mix.
  - c. A copy of the laboratory's quality control system.
2. Develop Job Mix Formula using procedures contained in Chapter V, "Marshall Method of Mix Design" of the Asphalt Institute's Manual Series No. 2 (MS-2) and where applicable, "Asphalt Hot-Mix Recycling", Manual Series No. 20 (MS-20) and provide information for the following checklist:
  - a. General
    - (1) Contractor and Contract number
    - (2) Type of bituminous mixture
    - (3) Type and source of aggregates
    - (4) Type and source of asphalt
  - b. Aggregates
    - (1) Sieve analysis of each aggregate to be used in mixture in accordance with ASTM C 136. The minus 200 fraction shall be tested in accordance with ASTM C 117.
    - (2) Physical test of aggregates - soundness, wear, percent fractured faces and percent flat or elongated particles.
    - (3) Bulk specific gravity and absorption in accordance with ASTM C 127 for coarse aggregate and ASTM C 128 for fine aggregate. The aggregate shall be sampled from the plant hot bins or feeder belt.
    - (4) Proportion used of each type aggregate.
    - (5) Theoretical gradation of combined proportions of aggregates.
  - c. Asphalt
    - (1) Type and grade
    - (2) Specific gravity
    - (3) Type of antistripping agent (if required)
  - d. Optimum Asphalt Content Determination in accordance with ASTM D 6926 and ASTM D 6927
    - (1) Compactive effort (75 or 113 blows applied to specimen, each face, as appropriate)
    - (2) Actual specific gravity and unit weight of each specimen
    - (3) Percentage of asphalt in each specimen

- (4) Theoretical specific gravity of each specimen calculated
  - (5) Graph of stabilities vs. asphalt content
  - (6) Graph of flow values vs. asphalt content
  - (7) Graph of voids filled with asphalt vs. asphalt content
  - (8) Graph of Marshall air voids vs. asphalt content
  - (9) Graph of voids in the mineral aggregate vs. asphalt content.
  - (10) Graph of unit weight vs. asphalt content
  - (11) Visual description of specimens at optimum asphalt content (i.e., dry, flushing, etc.)
  - (12) Graph of Temperature vs. Viscosity of Asphalt
- e. Summation of Established Job Mix Formula
- (1) Combined gradation of aggregates
  - (2) Optimum asphalt content from above graphs
  - (3) Specified job mix tolerance range
  - (4) Mixing Temperature
  - (5) Temperature of mix at point of discharge into haul units
  - (6) Compaction Temperature
- f. Summation of the Characteristics of the Mixture at Optimum Asphalt Content
- (1) Stability, pounds
  - (2) Flow value, hundredths of an inch
  - (3) Actual specific gravity of laboratory compacted mixture
  - (4) Maximum specific gravity of paving mix at optimum asphalt content in accordance with ASTM D 2041
  - (5) Total voids (air), percent, in laboratory compacted mixture
  - (6) Voids filled with asphalt, percent, in laboratory compacted mixture
  - (7) Voids in the mineral aggregate, percent, in laboratory compacted mixture.
  - (8) Actual unit weight, lbs./cu. ft. of laboratory compacted mixture
  - (9) Tensile Strength Ratio - ASTM D 4867



## g. Verification of Job Mix Formula Characteristics

Where the asphalt content for the proposed Job Mix Formula does not coincide with the asphalt content used in the trial specimens, prepare an additional set of specimens for the proposed Job Mix Formula asphalt content to verify that actual Marshall results duplicate those anticipated from the curves.

**PART 3. EXECUTION**4.02I.3.01 PREPARATION.

- A. Clean all underlying pavement surfaces and previous courses of all loose and foreign material by sweeping with hand brooms, power sweepers or blowers as directed by the Engineer.
- B. Verify that required grade and density tolerances of previous courses have been obtained before placing asphalt concrete.
- C. Construct keyways for overlay pavements as shown on the Contract Drawings by using longitudinal or transverse cuts into the existing pavement, and removing the necessary amount of pavement to provide a smooth transition from the new to existing asphalt concrete surfaces.
- D. Verify in-pavement castings are set to finished grade.
- E. Remove pavement markings.
- F. Tack Coat
  - 1. Apply tack coat by brush on edges of all previously placed or existing pavement and surfaces of manholes and other structures that will be in contact with pavement course to be placed.
  - 2. Apply tack coat by pressure distributor to existing pavement surface to receive new pavement course or where a course is not placed within 24 hours for roadway areas after placement of the underlying course, except as specified in 4.02I.3.02.E.7 and F.2. However, if the underlying pavement course has not been exposed to traffic and, in the opinion of the Engineer, is kept clean, tack coat shall not be required when a course is placed beyond the time frame mentioned above.
  - 3. Unless otherwise shown on the Contract Drawings, apply tack coat at a rate of 0.05 to 0.10 gallons per square yard on asphalt concrete pavement surfaces and 0.10 to 0.15 gallons per square yard on Portland Cement Concrete pavement surfaces. Apply tack coat at a temperature between 275 to 350 degrees F.
  - 4. Protect structures such as manhole frames and covers, joints and steel faced curbs within areas to be tack coated, prior to tack coating, by masking them with tar paper, polyethylene film or other approved materials.
  - 5. After the application of tack coat, follow immediately with placement of asphalt concrete pavement course. Take precautions necessary to maintain and protect the tack coated surface from damage until the next course is placed, including placement and removal of sand as necessary to blot up excess material.
  - 6. Pave and protect all tack coated surfaces prior to opening the area to traffic.
- G. Mixing Plant Requirements for Recycled Asphalt Concrete
  - 1. Batch Plants shall have an appropriately located metering device for adding the reclaimed asphalt pavement to the heated new aggregate and shall provide an accurate method for proportioning the reclaimed asphalt pavement into the mixture.

2. The batch plant's dryer may have to be operated at temperatures higher than with all new materials. If necessary, modify the dryer and the dust collection system to prevent damage.
3. Drum-mix plants shall have an appropriately located metering device for adding the reclaimed asphalt concrete to the dryer-mixer in a manner that does not damage the asphalt in the reclaimed material. Ensure that an accurate method for proportioning the reclaimed asphalt concrete into the mixture is provided. Make provisions for compensating for moisture in reclaimed asphalt concrete.
4. The mixing for a drum-mix plant shall be such as to achieve an intimate blending of new and reclaimed materials and a complete coating of all aggregate particles.
5. The batch or drum-mix plant may be equipped with a surge-storage bin at the mixture discharge point.

4.02I.3.02. APPLICATION.

A. Mixing in Plant

1. Place aggregate through a dryer and heat to temperature not exceeding 350 degrees F.
2. Screen aggregate to appropriate fractions and place each fraction in a storage bin over mixer unit.
3. Use equipment conforming to ASTM D 995 for preparation of paving mixtures, except provide one bin for fine aggregate, three for coarse aggregate and one for reclaimed asphalt pavement (if applicable).
4. Introduce aggregate into mixer at between 250 and 350 degrees F and dry mix for minimum of 5 seconds (7 seconds for mixtures containing Vestoplast "S") before adding asphalt. Where reclaimed asphalt pavement or Vestoplast "S" is used, add to mixer after dry mixing and before asphalt cement.
5. Heat asphalt to a temperature not exceeding 325 degrees F (350 degrees F for modified asphalt) and introduce it into mixer at a temperature of not less than 275 degrees F (300 degrees F for modified asphalt).
6. Mix as long as necessary, but not less than 30 seconds after introduction of asphalt cement, to completely and uniformly coat aggregate particles.
7. Regulate temperature of mixture according to outdoor temperature and as necessary to meet minimum laydown temperatures specified in 4.02I.1.03.A.3. However, asphalt concrete mix production temperatures leaving the plant shall be as follows:

Type of Asphalt	Temperature Degrees F
Asphalt Cement	275 - 325
Modified Asphalt- PG 76-22	305 - 335
Modified Asphalt - PG 82-22	310 - 340

Any deviation from these temperatures must be as approved by the Engineer.

8. Use of storage silos will be permitted provided such silos are approved as specified in 4.02I.1.04.D.4.

## B. Delivery, Placing and Spreading

1. Trucks used for hauling asphalt concrete mixtures shall have tight, clean, and smooth metal beds free from kerosene and other solvents. To prevent the mixture from adhering to them, the truck beds shall be lightly coated with a minimum amount of paraffin oil, lime solution, or other approved material. Each truck shall have a suitable cover to protect the mixture from adverse weather. When necessary, to ensure that the mixture will be delivered to the site at the specified temperature, truck beds shall be insulated or heated and covers shall be securely fastened.
2. Load trucks using a minimum of three drops. About 40 percent of the total weight of the mix to be hauled shall be loaded into the center of the front half of the truck. The truck shall then be pulled forward so that the next 40 percent or so of the total load can be deposited into the center of the back half of the bed, near the tailgate. The vehicle shall then be moved backward so that the remaining 20 percent of the mix can be dropped into the center of the bed, between the first two piles.
3. Deliveries shall be scheduled so that placing and compacting of mixture is uniform without stopping and starting of the paver. Hauling over freshly placed material shall not be permitted until the material has been compacted, as specified herein, and allowed to cool to ambient temperature.
4. Spread evenly, screed and finish each course to tolerances and requirements specified in this Section.
5. Asphalt concrete pavers shall be self-propelled, with an activated screed, heated as necessary, and shall be capable of spreading and finishing courses of asphalt concrete which will meet the specified thickness, smoothness, and grade. The paver shall have sufficient power to propel itself and the hauling equipment without adversely affecting the finished surface.

The paver shall have a receiving hopper of sufficient capacity to permit a uniform spreading operation. The hopper shall be equipped with a distribution system to place the mixture uniformly in front of the screed without segregation. The screed shall effectively produce a finished surface of the required smoothness and texture without tearing, shoving, or gouging the mixture.

6. An automatic screed control system shall be used which is capable of automatically maintaining the specified screed elevation and transverse slope. The control system shall be automatically actuated from a reference system by a sensors.

The control system shall be capable of working in conjunction with any of the following reference systems:

- a. Ski-type device 40 to 60 feet in length.
- b. Taut stringline (wire) set to grade.
- c. Laser beam set to grade.

Automatic controls will not be required where the Contractor can demonstrate to the satisfaction of the Engineer that it can not be used effectively.

7. Before commencing each day's paving, clean the paver of any material left from previous paving operations.
8. Place in minimum of 10-foot wide strips, except that the last strip may be a lesser width if necessary. The length of paving strip shall be estimated by the following guide: 10 times the ambient temperature (degrees F) plus 100 feet. The Engineer will determine the final length.
9. Begin along high sides of areas and proceed towards low side of areas with a one directional slope. Start on centerline and work both ways for crowned pavements.

10. The longitudinal joint in one lift shall offset the longitudinal joint in the lift immediately below by at least 1 foot; however, the longitudinal joint in the surface lift shall be at the centerline of the pavement. Transverse joints in one lift shall be offset by at least 10 feet from transverse joints in the previous lift. Within the same lift, transverse joints in adjacent lanes shall be offset a minimum of 10 feet.
11. When starting paving operations at transverse joints, provide four starting block strips under full length of paver screed. Blocks should be of a thickness appropriate for the lift being placed.
12. The paver's hopper shall be kept half full throughout the paving day. The wings shall not be emptied until the end of the paving day. Residual material shall be disposed of off the site.
13. No raked asphalt concrete material shall be broadcast back onto the pavement mat. Raked material shall be placed back in the paver hopper or disposed of.
14. Use hand placing and finishing methods, as approved by the Engineer, in small areas where use of power equipment is impractical. Lutes shall be used for hand spreading.
15. Provide paving irons and heating equipment for use during paving operations and where necessary to improve the surface conditions, as approved by the Engineer.

C. Grade Control

1. Remove grade stakes just prior to rolling of the plant mix macadam base course.
2. The Engineer will provide bench marks and alignment controls adjacent to each area of construction, which shall be checked and maintained by the Contractor.
3. When placing overlays where automatic grade controls are not required, the thickness of each lift to be placed shall be marked on the pavement adjacent to each side of the paving machine at each location where final pavement grades are shown on the Contract Drawings.
4. Perform Contractor's quality control surveys immediately after top course has been rolled to check final surface grades, in accordance with 4.02I.1.04.D.8.
5. Establish and maintain required lines and grades, including crown and cross slope, for each course during paving operations.
6. Use only qualified surveyors licensed in the State in which Work is being performed.

D. Compaction Equipment

1. Use power rollers weighing not less than 10 tons, having wheel loads of at least 250 lbs./linear inch of combined static and dynamic force and equipped with adjustable scrapers to keep wheel surfaces clean and with efficient means of keeping them wet to prevent the mixture from sticking to the roller.
2. Use types and quantities of equipment as necessary to meet all quality and production requirements of this Section.
3. Do not use steel rollers with pits, flat spots or grooves worn into rolling surface. Roller shall be capable of reversing without backlash.
4. Keep roller on asphalt concrete to avoid contamination of pavement with foreign material.

E. Rolling

1. Commence as soon as material will sustain roller without undue displacement, cracking or shoving.

2. The speed of the roller shall at all times be sufficiently slow to avoid displacement of the hot mixture and be effective in compaction. Any displacement occurring as a result of reversing the direction of the roller, or from any other cause, shall be immediately corrected by the Contractor.
3. The sequence of rolling operations shall be at the discretion of the Contractor.
4. Perform rolling with types and quantity of rollers as may be necessary to satisfy all of the pavement quality requirements specified herein.
5. Do not re-roll cold in-place asphalt concrete with a steel wheel or vibratory roller to attempt to increase density. A pneumatic tire roller may be used, subject to approval by the Engineer.
6. At end of each day's operations or when paving is interrupted sufficiently to allow mixture to cool, make a stop by means of tapering the course and form a transverse joint.
7. When resuming operations, cut back joint to expose a granular surface for full depth of the course, paint exposed edge with tack coat, place fresh mixture against joint, tamp and roll.
8. Any mixture that becomes loose and broken or mixed with dirt, develops check-cracking, or is in any way defective shall be removed and replaced with fresh hot mixture and immediately compacted to conform to the surrounding area. This work shall be done at no cost to the City. Skin patching shall not be allowed.

F. Joints

1. Form all joints in such a manner as to ensure a continuous bond between the courses and to obtain the required density, as demonstrate, tested and approved in the control strip. All joints shall have the same texture as other sections of the course and shall meet the requirements for density, smoothness and grade. Minimize raking of joints. Any mix raked from joint shall be discarded and not broadcast back onto the mat.
2. For transverse joints, the roller shall not pass over the unprotected end of the freshly laid mixture except when necessary to form a temporary stop. After a temporary stop and prior to the continuation of paving, the tapered edge shall be cut back to its full depth and width on a straight line to expose a vertical face before placing the adjacent pavement. Apply tack coat on all newly exposed contact surfaces before placing any fresh mixture against the joint.

G. Feather-Edge

1. When required by the Contract Drawings, the course shall be feather-edged following the "feather-edge" lines shown on the Contract Drawings.
2. The feather-edging shall be accomplished by decreasing the full thickness of the top course in order to maintain the required profile until the course thickness is approximately 1/2 inch.
3. The remainder of the course shall be placed by broadcasting the mix for purpose of segregating the large aggregate which shall be promptly removed. This shall be immediately followed by the rolling operation.

4.02I.3.03. CORRECTIONS OF DEFICIENCIES.

A. Deficiencies in Surface Smoothness and Grade Tolerance of Top Course.

1. In the event surface smoothness and surface grades fail to comply with the "In-Place Pavement Requirements", specified in 4.02I.1.03.D.1 when measured in accordance with 4.02I.1.04.D.7 and D.8, make corrections as specified below at no additional cost to the City.

2. The area of deficiencies in surface smoothness and/or surface grade tolerance shall be defined as the area enclosed by a line of points half way between the grade in excess of the specified tolerance and the next finished grade shown on the Contract Drawings that meets the specified tolerance, both longitudinally and transversely. The area will be determined by the Engineer from the field survey specified in 4.02I.1.04.D.7 and D.8.
3. Replace pavement deficient in surface smoothness and surface grade tolerance requirements or, at the option of the Engineer, add overlays where required to correct deficiencies in accordance with all applicable requirements of the Contract Drawings and this Section, at times approved by the Engineer, so as not to interfere with operations of the City or others using the area. A minimum thickness of 1-1/2 inches shall be placed as an overlay. Existing pavement shall be removed as necessary to provide square joints for the full depth of the overlay.
4. Where the deficiency in surface grade tolerance is in excess of 0.045 foot above or below the grade shown on the Contract Drawings but where a contour pattern satisfying riding quality and drainage as shown on the Contract Drawings has been established to the satisfaction of the Engineer, pavement may be left in place, subject to the requirements of 4.02I.4.01.C. and 4.02I.4.03.B.

B. Deficiencies in In-Place Air Voids of Top and Bottom Courses.

1. Any pavement subplot with in-place air voids less than 2.0 percent or greater than 8.0 percent (9.0 percent for bottom course) shall be removed and replaced at no additional cost to the City. For paving lifts other than the top lift of asphalt concrete the Engineer may elect to accept deficient material subject to an adjustment to Contract compensation. Adjustments to contract compensation will be made as set forth in 4.02I.4.01.G.
2. In-place air voids will be calculated in accordance with ASTM D 3203 by comparing bulk specific gravity (ASTM D2726) to maximum specific gravity (ASTM D2041).

C. Deficiency in Marshall Stability and Flow

In accordance with 4.02I.1.03.C.2 for Marshall stability and flow, if the Percentage of Material Within Tolerance Limits (PWL) of a lot for either parameter as set forth in 4.02I.4.03.B.5 equals or exceeds 90 percent, the lot shall be acceptable. If the PWL for either parameter is less than 90 percent, determine the reason and take corrective action immediately. If the PWL is below 80 percent for either parameter, stop production and make adjustments to the mix.

D. Deficiency in Final Surface Grade

1. When more than 15 percent of all measurements within a lot exceed the grade tolerance, measured in accordance with 4.02I.1.04.E.11, remove and replace or diamond grind the entire lot in accordance with 4.02I.3.03.A.
2. When any individual measurement exceeds a grade tolerance of plus or minus 0.06 foot, remove and replace the surfact of the area exceeding the tolerance in accordance with 4.02I.3.03.A.
3. Following the correction of deficiencies, the Engineer will retest the final surface of the asphalt concrete. In the event grade tolerance is exceeded, make additional corrections at no cost to the City.

E. Deficiencies in the Performance Grade Requirements of Modified Asphalt

Remove and replace the deficient material on a lot basis, unless the Engineer elects to accept the deficient material subject to an adjustment to Contract compensation. Adjustments to Contract compensation will be made as set forth in 4.02I.4.01.G.

**PART 4. ADJUSTMENTS TO CONTRACT COMPENSATION**

4.02I.4.01. GENERAL.

- A. Where the Contract requires less than 500 tons of asphalt concrete, no adjustments to Contract compensation will be made as specified herein.
- B. Where the Contract requires more than 500 tons of asphalt concrete, adjustments to Contract compensation, if made, will be made as specified in 4.02I.4.03.A, B, C, D, and E.
- C. Notwithstanding other adjustments to Contract compensation or corrections specified herein for various deficiencies, no payment will be made for material placed above the allowable tolerance above required grade as specified in 4.02I.1.03.D.4, or for material that must be removed to correct deficiencies, or for that material placed in excess of the plus tolerance for the total thickness of each course as specified in 4.02I.1.03.D.3.
- D. The computations for adjustments to Contract compensation may require conversion between tons and square yards. Such conversion will be made using the actual computed weight per square yard per inch of thickness determined from the lot's average bulk specific gravity for each type of course times the density of water at 70 degrees F.
- E. Adjustments to Contract compensation for in-place mat densities, in-place joint densities for surface courses and Marshall air voids shall be determined by applying percentages, calculated as specified in 4.02I.4.03.B, to the assigned unit price of sixty dollars (\$60.00) per ton of asphalt concrete; or in the case of Classified Work, by applying such percentages to the actual Contract Unit Price bid for the appropriate asphalt concrete item in the Schedule of Unit Prices For Classified Work, but in no case less than sixty dollars (\$60.00) per ton of asphalt concrete.
- F. The percentage adjustment to the unit price specified in 4.02I.4.01.E for Marshall air voids, mat density and joint density of the surface course shall be as follows, except as set forth in 4.02I.4.01.G:
  - When all values calculated in accordance with 4.02I.4.03.B are 100 percent or greater, the highest value will be used to adjust Contract compensation.
  - When all values calculated in accordance with 4.02I.4.03.B are less than 100 percent, the lowest value will be used to adjust Contract compensation.
  - When values calculated in accordance with 4.02I.4.03.B are both greater and less than 100 percent, the product of the highest and lowest value will be used to adjust Contract compensation.
- G. When the Engineer elects to adjust Contract compensation in lieu of removal and replacement of material with deficient in-place mat air voids in shoulder and in-field area pavements or deficiencies in the modified asphalt performance grade, the percentage adjustment to the unit price specified in 4.02I.4.01.E will be set at 50 percent. No further adjustment will be made for Marshall air voids, mat density or joint density of the surface course.
- H. Adjustments for surface smoothness and final surface grade will be based on the final test results, which will be determined after the correction of deficiencies. Reductions in payment will be determined by the following:

$$R = A \times D \times F \times 0.01938$$

Where:

R = Reduction in payment per lot for surface smoothness or final surface grade, dollars

A = Area of lot, square feet

D = Price per ton of asphalt concrete, assigned unit price or contract unit price as set forth in 4.02I.4.01.E.

F = Contract Unit Price Adjustment Factor specified in 4.02I.4.03.D and 4.02I.4.03.E.

Reductions in payment for failure to meet surface smoothness and final surface grades will be calculated separately for the entire pavement or overlay surface. Deductions from Contract compensation will be made for the requirement (surface smoothness or final surface grade) which results in the greatest payment reduction. Reductions for surface smoothness or final surface grade will be in addition to all other adjustments to Contract compensation.

- I. When the Engineer elects to adjust Contract compensation in lieu of correcting areas with deficiencies in surface smoothness, the Contract Unit Price Adjustment Factor specified in 4.02I.4.01.H will set at 0.10.

4.02I.4.02. ADJUSTMENT TO CONTRACT COMPENSATION FOR THICKNESS DEFICIENCY IN PLANT MIX MACADAM BASE COURSE.

- A. Where the deficiency of a plant mix macadam base course core exceeds the allowable minus tolerance in plant mix macadam base course thickness, one additional core will be taken by the Engineer in each of the other three sublots adjacent to the core taken in accordance with 4.02I.1.04.E.4. Plant mix thickness for the area of entire lot will be the average of the four cores<sup>6</sup>. Where there is a deficiency in the average of the four cores in excess of the allowable minus tolerance, the total thickness of succeeding courses in the area of entire lot shall be increased by the amount by which the deficiency exceeds the allowable tolerance.
- B. For each additional lot resampled in accordance with 4.02I.4.02.A above, there will be deducted from the Contract compensation, in addition to adjustments for deficiencies as hereinafter specified, an amount of One Thousand Dollars (\$1,000.00).

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<sup>6</sup> In determining average thickness, if any core exceeds required thickness by more than 1/2 inch, the thickness of that core will be assumed to be 1/2 inch in excess of required thickness.



4.02I.4.03. ADJUSTMENT TO CONTRACT COMPENSATION FOR DEFICIENCIES IN TOP AND BOTTOM COURSES.

A. Deficiency in Thickness

Thickness of each course, excluding overlay, will be the average of the four cores in the lot for each course<sup>7</sup>. Deductions from Contract compensation for deficiencies in thickness of top course or total of top and bottom courses, modified as may be required by 4.02I.4.02.A, will be the following amounts (deducted per square yard) for the entire area lot:

Amount of Minus Deficiency (inches)	Amount of Payment Deduction (Dollars per Square Yard)
Greater than 1/4 and up to 1/2	1.00
Greater than 1/2 and up to 3/4	2.00

For minus deficiencies in excess of 3/4 inch either in average of four cores or in any individual core, at the Engineer's option, remove and replace deficient pavement or place an overlay that will satisfy all requirements of this Section.

B. Deficiency in In-Place Mat Density, In-Place Joint Densities and Marshall Air Voids

1. Top and bottom courses will be evaluated on a lot basis with each lot coinciding with that defined in 4.02I.1.04.D.1.a.
2. Density
  - a. In-place mat density specified in 4.02I.1.03.D.2.a will be evaluated for Section compliance using the average of the random subplot in-place density determinations from cores of the area covered by the lot specified in 4.02I.1.04.D.1.a.
  - b. In-place joint density specified in 4.02I.1.03.D.2.b will be evaluated for Section compliance using the average of random subplot in place joint density determinations from cores of the area covered by the lot specified in 4.02I.1.04.D.1.a.
3. Marshall air voids will be evaluated for Section compliance using the average of the random subplot void determinations from hot mix samples from the lot specified in 4.02I.1.04.D.1.a.
4. The Engineer will check each lot for in-place mat densities, in-place joint densities for surface courses only, and Marshall air voids with adjustments to Contract compensation based on the Percentage of Material Within Tolerance Limits (PWL) as determined by 4.02I.4.03.B.5 below and by the "Table For Estimating Percent of Lot Within Tolerance Limits-PWL (Standard Deviation Method)". No deficient lot will be approved without an adjustment to Contract compensation made in accordance with the tables entitled "Adjustments to Contract Compensation For In-Place Mat Density and Marshall Air Voids", and "Adjustments to Contract Compensation for In-Place Joint Density".

<sup>7</sup> In determining average thickness, if any core exceeds required thickness by more than 1/4 inch, the thickness of that core will be assumed to be 1/4 inch in excess of required thickness.

## 5. Method of estimating Percentage of Material within Tolerance Limits (PWL):

- a. Locate sampling positions on the lot by use of random sampling procedures specified in FAA ERLPM, Section 6.
- b. Make a measurement at each location, or take a test portion and make the measurement on the test portion in accordance with 4.02I.1.04.D and E.
- c. Determine the average value of all samples ( $\bar{X}$ )
- d. Find the standard deviation ( $S_n$ ) by use of the following formula:

$$S_n = \sqrt{d_1^2 + d_2^2 + d_3^2 + \dots + d_n^2/n-1}$$

Where

$S_n$  = standard deviation of the number in the set

$d_1, d_2, \dots$  = deviation of the individual sample values  $X_1, X_2, \dots$  from the average value that is,

$$d_1 = (X_1 - \bar{X}), d_2 = (X_2 - \bar{X}), d_n = (X_n - \bar{X})$$

$n$  = number of sublots

- e. Find the Lower Quality Index ( $Q_L$ ) by subtracting the lower tolerance limit ( $L$ ) from the average values ( $\bar{X}$ ) and dividing the result by standard deviation ( $S_n$ ).

$$Q_L = \frac{\bar{X} - L}{S_n}$$

- f. Find the Upper Quality Index ( $Q_U$ ) by subtracting the average value ( $\bar{X}$ ) from the upper tolerance limit ( $U$ ) and dividing the result by standard deviation ( $S_n$ ).

$$Q_U = \frac{U - \bar{X}}{S_n}$$

- g. The percentage of material above lower tolerance limit ( $P_L$ ) and the percentage of material below upper tolerance limit ( $P_U$ ) will be found by entering the "Table For Estimating Percent of Lot Within Tolerance Limits - PWL (Standard Deviation Method)" with  $Q_L$  and  $Q_U$ , using the column appropriate to the total number ( $n$ ) of sublots and reading the number under the column headed "Percent Within Tolerance Limits (PWL)". If the values fall between values shown on the table, use the next higher value for  $P_L$  or  $P_U$ .
- h. For asphalt concrete properties with only a lower tolerance limit (stability, mat density, joint density), the Percentage of Material Within Tolerance Limits (PWL) equals  $P_L$ . For asphalt properties with upper and lower tolerance limits (air voids and flow) determine PWL using the following formula:

$$PWL = (P_U + P_L) - 100$$

- i. If the tests within a lot include a very large or a very small value which appears to be outside the limits of variation, the Engineer will check for an outlier in accordance with ASTM E 178, at a significance level of 5 percent, to determine if this value will be discarded when computing Percentage of Material Within Tolerance Limits (PWL).

- C. Adjustment to Contract compensation for each lot will be made in accordance with the formula contained in the table entitled "Adjustment to Contract Compensation For In Place Mat Density and Marshall Air Voids" by entering the appropriate row with the value of PWL and performing the calculation indicated for that PWL to determine the percentage adjustment of the unit price (specified in 4.02I.4.01.E).

ADJUSTMENT TO CONTRACT COMPENSATION FOR IN-PLACE MAT DENSITY AND MARSHALL AIR VOIDS	
Percentage of Material Within Tolerance Limits (PWL)	Percentage Adjustment of the Unit Price (specified in 4.01 E and 4.01 F)
96-100	106
90-96	PWL + 10
80-90	0.5 (PWL) + 55
65-80	2.0 (PWL) - 65
Below 65	8

- D. Deficiency in Final Surface Grade Tolerance

Adjustment to Contract Compensation for each lot will be made using the table entitled "Adjustment to Contract Compensation for Exceeding Final Surface Grade Tolerance" by entering the appropriate row with the percentage of all measurements within a lot which exceed the grade tolerance, measured in accordance with 4.02I.1.04.E.11, and reading the number under the column headed "Contract Unit Price Adjustment Factor".

ADJUSTMENT TO CONTRACT COMPENSATION FOR EXCEEDING FINAL SURFACE GRADE TOLERANCE	
Measurements Exceeding Grade Tolerance (Percent)	Contract Unit Price Adjustment Factor
0.0 – 5.0	0
5.1 – 10.0	0.05
10.1 – 15.0	0.25
15.1 and up	Corrective Work Required as specified in 4.02I.3.03.D.

The Contract Unit Price Adjustment Factor is used to calculate adjustments to Contract Compensation as Specified in 4.02I.4.01.H.

<sup>8</sup> Remove and replace the lot to meet Section requirements as ordered by the Engineer. In lieu thereof, and subject to the provisions in 4.02I.3.03.B for mandatory removal and replacement, the Contractor and the Engineer may agree in writing that, for purposes of practicality, the deficient lot shall not be removed and adjustment to Contract compensation shall be made at 50 percent of the unit price specified in 4.02I.4.01.E.

E. Deficiency in Surface Smoothness

Adjustment to Contract Compensation for each lot will be made using the table entitled "Adjustment to Contract Compensation for Surface Smoothness", by entering the appropriate row with the Profile Index, measured and calculated in accordance with 4.02I.1.04.E.10., and reading the number under the column headed "Contract Unit Price Adjustment Factor".

ADJUSTMENT TO CONTRACT COMPENSATION FOR SURFACE SMOOTHNESS	
Average Profile Index (inches per mile)	Contract Unit Price Adjustment Factor
0.0 - 15.0	0.00
15.1 - 16.0	.02
16.1 - 17.0	.04
17.1 - 18.0	.06
18.1 - 20.0	.08
20.1 - 22.0	.10
22.1 and up	corrective work required as specified in 4.02I.3.03.A

The Contract Unit Price Adjustment Factor is used to calculate adjustments to Contract Compensation as Specified in 4.02I.4.01.H.

F. Adjustment to Contract compensation for each lot will be made in accordance with the formula contained in the table entitled "Adjustment to Contract Compensation for In-Place Joint Density" by entering the appropriate row with the value of PWL and performing the calculation indicated for that PWL to determine the percentage adjustment of the unit price (specified in 4.02I.4.01.E.).

ADJUSTMENT TO CONTRACT COMPENSATION FOR IN-PLACE JOINT DENSITY	
Percentage of Material Within Tolerance Limits (PWL)	Percentage Adjustment of the Unit Price (specified in 4.02I.4.01.E and 4.01.F)
96 - 100	106
90 - 96	PWL + 10
80 - 90	0.25 x PWL + 77.5
65 - 80	PWL + 17.5
Below 65	9

<sup>9</sup> Remove and replace the lot to meet Section requirements as ordered by the Engineer. In lieu thereof, and subject to the provisions in 4.02I.3.03.B for mandatory removal and replacement, the Contractor and the Engineer may agree in writing that, for purposes of practicality, the deficient lot shall not be removed and adjustment to Contract compensation shall be made at 75 percent of the unit price specified in 4.02I.4.01.E.

TABLE FOR ESTIMATING PERCENT OF LOT WITHIN TOLERANCE LIMITS - PWL  
(STANDARD DEVIATION METHOD)

Percent Within Tolerance Limits (PWL)	Positive Values of $Q_L$ or $Q_U$ (n=Number of Sublots)					
	<u>n=3</u>	<u>n=4</u>	<u>n=5</u>	<u>n=6</u>	<u>n=7</u>	<u>n=8</u>
99	1.1541	1.4700	1.6714	1.8008	1.8888	1.9520
98	1.1524	1.4400	1.6016	1.6982	1.7612	1.8053
97	1.1496	1.4100	1.5427	1.6181	1.6661	1.6993
96	1.1456	1.3800	1.4897	1.5497	1.5871	1.6127
95	1.1405	1.3500	1.4407	1.4887	1.5181	1.5381
94	1.1342	1.3200	1.3946	1.4329	1.4561	1.4716
93	1.1269	1.2900	1.3508	1.3810	1.3991	1.4112
92	1.1184	1.2600	1.3088	1.3323	1.3461	1.3554
91	1.1089	1.2300	1.2683	1.2860	1.2964	1.3032
90	1.0982	1.2000	1.2290	1.2419	1.2492	1.2541
89	1.0864	1.1700	1.1909	1.1995	1.2043	1.2075
88	1.0736	1.1400	1.1537	1.1587	1.1613	1.1630
87	1.0597	1.1100	1.1173	1.1191	1.1199	1.1204
86	1.0448	1.0800	1.0817	1.0808	1.0800	1.0794
85	1.0288	1.0500	1.0467	1.0435	1.0413	1.0399
84	1.0119	1.0200	1.0124	1.0071	1.0037	1.0015
83	0.9939	0.9900	0.9785	0.9715	0.9672	0.9643
82	0.9749	0.9600	0.9452	0.9367	0.9325	0.9281
81	0.9550	0.9300	0.9123	0.9025	0.8966	0.8928
80	0.9342	0.9000	0.8799	0.8690	0.8625	0.8583
79	0.9124	0.8700	0.8478	0.8360	0.8291	0.8245
78	0.8897	0.8400	0.8160	0.8036	0.7962	0.7915
77	0.8662	0.8100	0.7846	0.7716	0.7640	0.7590
76	0.8417	0.7800	0.7535	0.7401	0.7322	0.7271
75	0.8165	0.7500	0.7226	0.7089	0.7009	0.6958

TABLE FOR ESTIMATING PERCENT OF LOT WITHIN TOLERANCE LIMITS - PWL  
(STANDARD DEVIATION METHOD)

Percent Within Tolerance Limits (PWL)	Positive Values of $Q_L$ or $Q_U$ (n=Number of Sublots)					
	<u>n=3</u>	<u>n=4</u>	<u>n=5</u>	<u>n=6</u>	<u>n=7</u>	<u>n=8</u>
74	0.7904	0.7200	0.6921	0.6781	0.6701	0.6649
73	0.7636	0.6900	0.6617	0.6477	0.6396	0.6344
72	0.7360	0.6600	0.6316	0.6176	0.6095	0.6044
71	0.7077	0.6300	0.6016	0.5878	0.5798	0.5747
70	0.6787	0.6000	0.5719	0.5583	0.5504	0.5454
69	0.6490	0.5700	0.5423	0.5290	0.5213	0.5164
68	0.6187	0.5400	0.5129	0.4999	0.4924	0.4877
67	0.5878	0.5100	0.4836	0.4710	0.4638	0.4592
66	0.5563	0.4800	0.4545	0.4424	0.4354	0.4310
65	0.5242	0.4500	0.4255	0.4139	0.4073	0.4031
64	0.4916	0.4200	0.3967	0.3856	0.3793	0.3753
63	0.4586	0.3900	0.3679	0.3575	0.3515	0.3477
62	0.4251	0.3600	0.3392	0.3295	0.3239	0.3203
61	0.3911	0.3300	0.3107	0.3016	0.2964	0.2931
60	0.3568	0.3000	0.2822	0.2738	0.2691	0.2660
59	0.3222	0.2700	0.2537	0.2461	0.2418	0.2391
58	0.2872	0.2400	0.2254	0.2186	0.2147	0.2122
57	0.2519	0.2100	0.1971	0.1911	0.1877	0.1855
56	0.2164	0.1800	0.1688	0.1636	0.1613	0.1592
55	0.1806	0.1500	0.1408	0.1363	0.1338	0.1322
54	0.1447	0.1200	0.1125	0.1090	0.1070	0.1057
53	0.1087	0.0900	0.0843	0.0817	0.0802	0.0792
52	0.0725	0.0600	0.0562	0.0544	0.0534	0.0528
51	0.0363	0.0300	0.0281	0.0272	0.0267	0.0264
50	0.0	0.0	0.0	0.0	0.0	0.0

## G. Additional Tests

1. In the event the Contractor elects to question the original density test results obtained from a particular lot for either the mat density or joint density, the Contractor may request additional testing of that lot in writing within 48 hours of receipt of the written test results from the Engineer. Upon written request received from the Contractor for such additional testing, the Engineer will test one additional sample from each subplot from randomly selected locations in the pavement where the lot was placed. The redefined test will consist of the Engineer's original samples and the additional Contractor's requested samples. The "Percent of Material Within Tolerance Limits - PWL" will be determined in accordance with 4.02I.4.03.B.5. The value will be used to determine any adjustment to Contract compensation. Only one resampling per lot will be permitted.
2. Additional tests requested by the Contractor shall be paid for by the Contractor to the City at a cost of One Thousand Dollars (\$1,000) per lot tested.

**PART 5. MEASUREMENT AND PAYMENT**

4.02I.5.01. MEASUREMENT. In determining the area of wearing course or Macadam base course to be paid for, the areas of the spaces occupied by rails, bases of columns, manhole heads, gate boxes, roadway boxes and similar structures will be deducted when they measure more than one (1) square foot and will not be deducted when they measure one (1) square foot or less.

The measured quantity of wearing courses, laid to a specified thickness on an area basis, will be adjusted for deficiencies in accordance with Subsection 4.02I.4.01.

4.02I.6.01. PRICES TO COVER. The unit price bid for

- (A) Asphaltic Concrete Wearing Course, Type I-4, per square yard
- (B) Asphaltic Macadam Base, Type I-1, per square yard

shall cover the cost of all labor, materials and equipment required to furnish and lay the wearing course or Macadam base course, of the Type specified, complete, in full compliance with the requirements of the specifications, to furnish and lay test strips, to furnish such samples for testing, to take core samples for testing, to perform quality control testing in compliance with these specifications, and to provide such testing equipment, laboratory space and facilities as may be required and to maintain the courses or mixtures, as laid, in good condition as specified in Subsection 1.05.5 of the Standard Specifications.

No separate payment will be made for the cost of furnishing and applying of tack coat as directed under Subsection 4.02I.3.01.(F) above.

*Payment will be made under:*

Item No.	Item	Pay Unit
4.02 I4-2	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 2" THICK	S.Y.
4.02 I4-3	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 3" THICK	S.Y.
4.02 I1-4	ASPHALTIC MACADAM BASE COURSE, TYPE I-1 MIX, 4" THICK	S.Y.
4.02 I1-6	ASPHALTIC MACADAM BASE COURSE, TYPE I-1 MIX, 6" THICK	S.Y.

**SECTION 4.04 MM  
(NOT A PAY ITEM)  
PROCEDURE FOR ESTIMATING CONCRETE STRENGTH  
BY THE MATURITY METHOD**

**4.04MM.1. DESCRIPTION.** The Maturity Method is a non-destructive procedure for estimating concrete strength and shall be used to determine when to open the concreted area to traffic. The requirements of this Section shall apply to all concrete placed under Item No. 6.97 A and 4.05 AXP.

The Maturity Method will not be used by the Department for accepting the strength of a concrete. Strength testing by destructive means will still be used by the Department for strength acceptance.

Maturity will not be used to decrease curing times.

**4.04MM.2. PROCEDURE FOR DEVELOPING A MATURITY CURVE.** For each proposed mix design develop the maturity curve in accordance with ASTM C 1074. Make 6" x 12" cylinders and base the curve on compressive strength.

- (A) Make all specimens from the same batch of concrete. Batch size shall be at least 3 cubic yards. Mix using the same materials, mix design and mixing technique that will be used for concrete on the project. Use the same mixing equipment when possible. Mix at the maximum w/c ratio of the design. Mix at or within 0.5% of the maximum air content of the design. Additional maturity curves similar to the curves shown on Suggested Mix Design pages attached to the end of Section 6.97 A, but limited to 28 days, can be made from different batches using the same mix design at lower w/c ratios and air contents, and these additional maturity curves can be used for interpolating concrete strength estimations if it can be shown that the concrete delivered to the project was at a lower w/c or lower air content.
- (B) Determine the plastic properties of the batch by performing slump, air content, unit weight, and concrete temperature before making specimens. Determine slump in accordance with ASTM C 143, air content in accordance with ASTM C 231 or ASTM C 173, unit weight in accordance with ASTM C 139, and temperature in accordance with ASTM C 1064.
- (C) Make a minimum of seventeen (17) specimens in accordance with ASTM C 192. Embed sensors in the center of two (2) of the specimens. Moist cure all specimens in a water bath or in a moist room meeting the requirements of ASTM C 511. Test cylinders in accordance with ASTM C 39. Do not test cylinders with sensors embedded in them. For high early strength concrete and for extra high early strength concrete, test when strengths are approximately equal to 30%, 60%, 75%, 85%, and



100% of the design strength. Additional specimens can be made and tested at other ages as well as unused specimens to help define the maturity curve.

- (D) At a minimum, personnel making cylinders and performing slump, air content, unit weight, and concrete temperature shall be ACI certified as Concrete Field Testing Technicians, Grade I, and personnel testing cylinders for compressive strength shall be ACI certified as Concrete Strength Testing Technicians.
- (E) Use digital data-loggers in conjunction with a commercial maturity instrument that automatically computes and displays maturity. Develop the curve using the temperature-time factor maturity function. Use a value of 32° F (0° C) for  $T_0$  (datum temperature) unless a more accurate value is determined in accordance with Annex A1 of ASTM C 1074.

**4.04MM.3. ACCEPTANCE OF A MATURITY CURVE BY THE DEPARTMENT.** For each mix design submit the maturity curve, mix design, material sources, plastic test results, strength test results, data, calculations and method used for monitoring maturity in the laboratory to the Engineer. The Department will require 30 days to evaluate the results for acceptance.

**4.04MM.4. USING CONCRETE MATURITY IN THE FIELD.** Estimating concrete strength by maturity is acceptable when the concrete is batched using the same materials (including admixtures), material proportions, mix design, and mixing technique as that of the batch used to develop the maturity curve. The curve can be used on the project to estimate concrete strength if the w/c ratio of the concrete used on the project is less than or equal to the w/c ratio used to develop the curve.

- (A) Use digital data-loggers in conjunction with a commercial maturity instrument that automatically computes and displays maturity to monitor field placed concrete. Use the time-temperature maturity function. Use the same value for  $T_0$  (datum temperature) that was used to develop the maturity curve.
- (B) Install at least one (1) sensor for every 3,600 square yards of concrete base (or fraction thereof) with the sensor representing the last 3,600 square yards of concrete pavement (or fraction thereof) installed in the last load of concrete mixed and placed that day. Install at least one (1) additional sensor each day in concrete that is placed within the last four (4) hours of work that day where maturity gain is expected to be the slowest. Maturity gain typically is expected to be the slowest in the thinnest section of pavement. If all sections of pavement have the same dimensions and no section is expected to gain maturity slower, place the additional sensor in any section of pavement constructed from the second to last load of concrete mixed and placed that day.

- (C) Install additional sensors when necessary for accurately determining the maturity of a concrete or as directed by the Engineer.
- (D) Provide one (1) sensor to the Engineer for random placement at the Department's discretion for every ten (10) sensors the Contractor is required to install. If the number of sensors installed by the Contractor exceeds the minimum required by this specification, the number of sensors above the minimum will not be counted as required sensors.
- (E) When installing sensors, use a placement strategy that targets areas where the concrete is expected to gain maturity the slowest. Place sensors near the fringes, in thinner sections, or in shaded areas where the concrete will be cooler. Do not place sensors in the center of the pour where the concrete will be the hottest. Typical sensor placement should be 1' from an edge or corner and 6" below the surface, but try to maintain at least 6" of cover in each direction. At a minimum, install sensors with at least 3" of cover in each direction. Use traditional methods in lieu of maturity if the least dimension of a concrete is less than 6" (i.e. if 3" of cover cannot be maintained in each direction) because ambient conditions may affect the sensor causing maturity readings from that sensor to be inaccurate.
- (F) Provide the Engineer with one (1) set of the same maturity monitoring equipment that the Contractor will be using on the project so that DDC can independently monitor concrete maturity. Provide DDC personnel training on how to operate the equipment. The monitoring equipment will be returned at the completion of the project.
- (G) Maintain a separate log for each sensor which includes a unique ID; location; date and time of installation; date and time that the sensor began monitoring maturity; dates and times of all readings taken from the sensor; the corresponding temperature, maturity, and concrete age at each reading; and the date when readings were discontinued. Notify the Engineer immediately with problems or discrepancies with readings or if any sensors are found to be damaged or operating improperly, and document on the log the date and time this determination was made, what the problem is, and the steps taken to correct it. Have the log available for viewing by DDC project personnel at all times and provide an updated copy of the log to DDC project personnel on a weekly basis if the sensor is still in use.

**4.04MM.5. VERIFICATION OF THE MATURITY CURVE.** Maturity curve verification consists of making test specimens, monitoring the maturity of the specimens, testing the specimens by destructive means to determine the actual strength, and comparing the actual strength

determined by destructive testing with the strength estimated by maturity. If the actual strength is the same or greater than the strength estimated by maturity, the curve is verified. If the actual strength is less than the strength estimate by maturity, the curve is not verified. If a curve cannot be verified, it may be an indication of changes or alterations in the mix design, batching procedures, material proportions, or properties in the materials being used, or that the maturity curve being used was not developed correctly.

Perform maturity curve verification weekly to determine if the strength of the concrete being supplied to the project is equal to or greater than the strength estimated by maturity. If four (4) consecutive weekly maturity curve verifications determine that the maturity curve being used is verified, reduce the frequency to once every two (2) weeks.

If maturity curve verification testing does not verify a maturity curve, immediately notify the Engineer, immediately discontinue using maturity for estimating strength, perform an investigation as to why maturity was not able to be verified, and provide the Engineer with a written report detailing why the curve was not verified and what actions will be taken to ensure that maturity will not be compromised in the future. If the Engineer is satisfied with the report and that the problem has been resolved, maturity can be used again on the project with maturity curve verification being performed as directed by the Engineer, but in no case, less than once a week. If future maturity curve verifications determine that the curve is verified, the frequency of maturity curve verification can be decreased at the City's discretion.

Maturity curve verification consists of the following:

- (A) Sample concrete from a load or batch being used on the project. If the maturity curve is based on compressive strength, make five (5) 6" x 12" cylinders for test specimens. Sample in accordance with ASTM C 172. Make and cure test specimens in accordance with ASTM C 31. At a minimum, personnel sampling and making specimens in the field will be ACI certified as Concrete Field Testing Technicians, Grade I.
- (B) Place a sensor in the center of one of the test specimens and monitor maturity.
- (C) Test the specimens in pairs and average the results to determine strength. Test the first pair of specimens when maturity readings indicate that the specimens have achieved strength between 50% and 70% of the design strength, and test the remaining pair when maturity readings indicate that the specimens have achieved strength between 85% and 100% of the design strength. Test cylinders in accordance with ASTM C 39. Do not test the specimen with the sensor embedded in it. At a minimum, personnel testing

cylinders for compressive strength will be ACI certified as Concrete Strength Testing Technicians.

- (D) Compare the actual strength determined by destructive testing with the estimated strength determined by maturity to see if the curve is verified or not. If the actual strength is less than the estimated strength, the curve is not verified.

**4.04MM.6. MATURITY CURVE LIFE.** A maturity curve will be valid for two (2) years from the date the batch used to develop the maturity curve was made provided that the use of the Maturity Method is verified as per **Section 4.04MM.05** of this specification. The validity of a maturity curve can be renewed a maximum of two (2) times. Each renewal extends the validity of the curve for one (1) year.

The renewal of a maturity curve requires submission of a written request for renewal in advance of the maturity curve expiration date, submission of all verification data from **Section 4.04MM.05**, and acceptance of the data by the Department. Send the renewal request and verification data to DDC's Quality Assurance Bureau.

**4.04MM.7. MEASUREMENT AND PAYMENT**

No additional payment will be made for compliance with the provisions of this section.

**SECTION 4.05 AXP**  
**High Early Strength Reinforced Concrete Pavement (Bus Stops) (Pigmented)**

**4.05AXP.1 INTENT.**

This section describes construction of Concrete Pavement.

**4.05AXP.2 DESCRIPTION.**

(A) Concrete Pavement shall be of High Early Strength Reinforced.

Pavements shall consist of a concrete surface course laid on a concrete base course while the base course is still plastic, of the thickness shown on the Contract Drawings, with reinforcement placed between the surface and base courses.

(B) Concrete Pavement shall be of the type, thickness and finish specified, and shall be colored when specified.

**4.05AXP.3 MATERIALS, EQUIPMENT AND METHODS.** All materials and methods shall comply with the requirements of Item No. 4.05AX, as appropriate, in Section 4.05 of the Standard Highway Specifications, with the following modifications and additions:

**PIGMENTING**

Where pigmentation is specified, the concrete bus pads shall be pigmented with an admixture complying with the requirements of Section 2.19 of the Standard Highway Specifications:

Where the color of the concrete is required to simulate the color of Terracotta of the Pavement Overlay Red (item 6.44 POR), the concrete shall be integrally pigmented to produce a Terra Cotta color equivalent to: Federal Standard 595 Color FS 30109, Davis Colors Terra Cotta No. 10134; Direct Color Terra Cotta Plain No. 560; LM Scofield SG 134 Terra Cotta, 3 lbs. per 94 lbs Light Grey Portland Cement and 3 parts sand; or an approved equivalent, unless otherwise specified.

Prior to Commencement of Work, the Contractor shall submit the name of its proposed roadway installer upon which his bid is based, along with their respective work history experience in placing pigmented concrete. The installer shall have documented experience in working with pigmented concrete.

Prior to making any field samples and the placing of any pigmented concrete, the Contractor, its concrete supplier, installer, cement producer, laboratory, the pigmented admixture's representative, and the Engineer shall meet and agree on the specifications and methods of handling the pigmented concrete.

All pigmented concrete at different locations shall be identical, unless otherwise directed. Variations in color/tint/hue will not be acceptable. Therefore, the same brand and type of cement and the same source and type of aggregate shall be used throughout the project.

Prior to the mix design being made, the cement intended for use shall be checked to determine that its lightness/darkness is similar to the cement used in the original approved sample. The Pigmented Admixture shall be added in the standard proportion specified by the manufacturer. No fly ash or other admixtures (including, but not limited to, calcium chloride) shall be used except an air-entraining agent complying with ASTM Designation C 260, when directed by the Engineer.

Prior to commencing the placement of concrete, but after acceptance and approval of the pre-construction field sample, the Contractor shall submit properly labeled and identified samples of materials.

These samples shall be stored where directed by the Engineer and shall constitute material standards for the project. During construction, one (1) pint of cement from each load of cement delivered to the plant to be used in this specific job shall be retained and, after comparison with retained master sample, dated and stored with other retained samples. Aggregate source shall also be checked periodically, as directed by the Engineer, and compared with retained samples.

**4.05AXP.4 TRAFFIC.** No traffic of any kind will be allowed on the new concrete pavement until the concrete has been cured as specified, and until permitted by the Engineer.

**4.05AXP.5 DEFECTIVE PAVEMENTS.** Such portions of the completed pavement as are defective in finish, compression, composition, or that does not comply with the requirements of these specifications, shall be taken up, removed and replaced with suitable materials, properly laid in accordance with these specifications.

**4.05AXP.6 MEASUREMENT.** The quantity to be measured for payment shall be the number of cubic yards of each type of Concrete Pavement constructed, measured in place, adjusted for thickness and strength deficiencies in accordance with Section 5.04 of the Standard Highway Specifications.

In determining the quantity of pavement to be paid for, the areas occupied by bases of columns, manhole heads, gate boxes, road boxes, and similar structures will be deducted when they measure more than one (1) square foot and will not be deducted when they measure one (1) square foot or less.

**4.05AXP.7 PRICE TO COVER.** The contract price bid per cubic yard for each type of concrete pavement shall cover the cost of all labor, materials, pigments, equipment, insurance, and incidentals required to furnish and lay the pavement complete in place in full compliance with the requirements of the specifications, including, but not limited to: furnishing and installing steel reinforcement, dowel bars and all other steel bars required; preparation and submission of shop drawings and concrete mix design criteria; supports, forms, joint filler and joint sealer; curing; repairs to and replacement of damaged and defective pavement; saw cutting joints; damping of the subgrade; snow fencing; etc.; to furnish such samples and cores for testing and to maintain the pavement in good condition as specified in Section 5.05 of the Standard Highway Specifications; of the Standard Highway Specifications and completing the work in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
4.05 AXP	HIGH EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS) (PIGMENTED)	C.Y.

## SECTION 4.07 SBS – Granite Curb, Bus Bulbs

**4.07SBS.1. INTENT.** This section describes construction of Granite Curb at bus bulbs.

**4.07SBS.2. DESCRIPTION.** Curb shall be granite, as specified, and with concrete cradle, unless otherwise specified or shown on the Contract Drawings. Curb shall be new as specified.

**4.07SBS.3. MATERIALS.**

### (A) CURB

Curb shall comply with the requirements of **Section 2.12** of the Standard Highway Specifications, **Curbs and Headers, Granite and Bluestone**, for the type and corresponding class specified or shown on the Contract Drawings. Unless otherwise specified or shown on the Contract Drawings, Granite Curb shall be Type 1, Class A, cut and dressed as shown on the Contract Drawings and the approved shop drawings to be submitted by the Contractor. The required shop drawings shall show his proposed straight and curved curb, curb details for use at bus bulb locations, and all special non-standard shaped curb cuts, for the approval of the Engineer. Corner curb, measured from PC to PT, shall include the cost of all depressed and transitional curb required for pedestrian ramps at corner quadrants or as shown on the plans.

Granite curbs shall be Black in color equal to "Peribonka" granite with a thermal finish as supplied by one of the following or an approved equivalent:

1. Furlong and Lee Stone Sales, 51 east 42<sup>nd</sup> Street, New York, NY 10007 (212) 986-3828.
2. Granicor , 33 Perseverance Path, Plymouth, MA 02360, (774) 454-3670.
3. Polycor, 139, St-Pierre Street, Quebec City (Quebec), Canada, G1K 8B9, (418) 692-4695.

### (B) CONCRETE CRADLE

Concrete cradle for curb shall comply only with proportion and strength requirements of **Section 3.05** of the Standard Highway Specifications, Class B-32, Type IA. The requirements for air entrainment shall not apply.

Coarse aggregate shall comply with the requirements of **Section 2.02** of the Standard Highway Specifications, Size No. 57; Type 1, Grade B, or Type 2.

Fine aggregate shall comply with the requirements of **Section 2.21** of the Standard Highway Specifications, Type 1A.

**4.07SBS.4. METHODS.**

### (A) GENERAL

The Contractor shall complete all curb construction before commencing any roadway grading operation; stripping, removing or placing any pavement; or commencing sidewalk work unless otherwise permitted by the Engineer, in writing. The Contractor will be permitted to encroach



upon the area immediately adjacent to the curb only to the extent essential for curb construction.

Excavation for curb shall be safeguarded and protected in accordance with the requirements of **Sections 1.06.44** and **6.70** of the Standard Highway Specifications.

Existing concrete sidewalks, adjacent to or abutting new curb or curbs to be reset and interfering with the setting or resetting of said curbs shall be cut off to a line two (2') feet back of the curb line and parallel thereto, unless otherwise provided or directed by the Engineer. Cutting shall be done by means of an approved power driven cutting machine with a carborundum cutting wheel. Full depth cuts shall be made through the existing sidewalk pavement. The space between the curb and sidewalk shall be filled with concrete sidewalk pigmented to match that of the adjacent walk.

No concrete sidewalk shall be cut off or otherwise disturbed until the same has been examined by the Engineer.

#### (B) EXCAVATION

Excavation shall be made to dimensions sufficient to permit the construction of cradle and setting of curbstones. It shall be made to a depth of six (6") inches below the specified depth of curb and to a width of not less than eighteen (18") inches or width of curb plus twelve (12") inches, whichever is greater. The trench shall be open to its full width and depth for a distance of not less than twenty (20') feet in advance of the setting of the curb.

#### (C) UNDERLYING MATERIAL

The material underlying the curb cradle shall be satisfactorily and thoroughly compacted. If unsatisfactory, it shall be removed and replaced with acceptable material, thoroughly compacted.

#### (D) CONCRETE CRADLE

The cradle shall be composed of stiff concrete, thoroughly tamped in place. The cradle shall be not less than eighteen (18") inches wide or width of curb plus twelve (12") inches, whichever is greater, and extend six (6") inches below the specified depth of curb. The concrete shall be brought up six (6") inches in front of the curb to the bottom of pavement base and in back of the curb concrete shall be brought up to either: the bottom of proposed sidewalk foundation material; to within six (6") inches of the top of the curb where sidewalk adjacent to curb is not required; or, as otherwise shown on the Contract Drawings. The concrete shall be laid not more than twenty (20') feet in advance of setting the curb. The portions of the concrete cradle in front and at back of curb shall be placed and thoroughly compacted as soon as the curb is brought to line and grade and before the concrete under the curb has set.

#### (E) SETTING

Curbstones shall be set centrally on the concrete cradle, with tops at grade outside of driveways, and below grade in driveways, as directed. Front faces shall be set in a true smooth surface having a batter of one (1) in eight (8), unless otherwise specified, with joints not less than one-eighth (1/8") inch and not more than one-quarter (1/4") inch for ten (10") inches below grade.

(F) BACKFILLING

Backfilling shall be of clean earth or other approved material, satisfactorily compacted.

**4.07SBS.5. MEASUREMENT.** The quantity to be measured for payment shall be the number of linear feet of each type of granite curb constructed, complete, as required, measured in place along the top of the exposed face of curb, and adjusted in accordance with **Section 5.04** of the Standard Highway Specifications.

Curved granite curb will be measured as straight curb when the radius is greater than 100 feet and as corner curb when the radius is 100 feet or less. Corner curb will be measured only from PC to PT. Depressed and transitional granite curb will be measured for payment in driveways only.

**4.07SBS.6. PRICES TO COVER.** The contract prices bid per linear foot of each type of new curb with concrete cradle shall cover the cost of all labor, materials, equipment, insurance, and incidentals required to construct the curb complete in place, including, but not limited to, excavation (other than rock excavation) and backfilling, in full compliance with the requirements of the specifications, to furnish such samples for testing and to provide such testing equipment, laboratory space and facilities as may be required, and to maintain the curb in good condition as required in **Section 5.05** of the Standard Highway Specifications.

*Payment will be made under:*

Item No.	Item	Pay Unit
4.07 SBS-CB	NEW BUS BULBS GRANITE CURB, STRAIGHT	L.F.
4.07 SBS-CC	NEW BUS BULBS GRANITE CURB, CORNER	L.F.

**SECTION 4.13 DSBS**  
**Embedded Precast Concrete Detectable Warning Pavers for SBS Stations**

**4.13 DSBS.1. DESCRIPTION.** This work shall consist of furnishing and installing embedded precast concrete detectable warning pavers along the edge of SBS station platforms as indicated on the plans or elsewhere in the contract documents. The SBS platforms within two (2') feet of the curb shall be finished with a detectable warning pavers as specified herein.

**4.13 DSBS.2. MANUFACTURERS.**

Precast Concrete Detectable Warning Pavers furnished by the following manufacturers, or approved equivalent, are acceptable for use in this contract:

- A. Wausau Tile, Inc., PO Box 1520, Wausau, WI 54402-1520, (800) 388-8728
- B. Hanover Architectural Products, 5000 Hanover Rd, Hanover, PA 17331, (800) 426-4242
- C. Unilock, 301 East Sullivan Road, Aurora, IL 60505, (800) 864-5625

**4.13 DSBS.3. MATERIALS.**

A. **GENERAL REQUIREMENTS:** The Contractor shall supply the Manufacturer's certification that the detectable warning surface material meets the requirements of these specifications, at least 30 calendar days prior to proposed installation. The detectable warning surface material shall:

- Be precast concrete pavers, conforming to the requirements of ASTM C936 and ASTM C67.
- Be 12"x12"x2" deep or 24"x24"x2" deep, nominal dimensions for straight runs of detectable warnings. At locations, as shown on the plans, where detectable warnings are to be placed at radial turns, the contractor shall follow the recommendation of the manufacturer.
- Be ADA compliant precast concrete pavers matching "ADA-2 U3008" pavers as manufactured by Wausau Tile, Inc., or approved equal. The color shall be "Black" matching the "ADA-2 U3008" or Federal Standard Color #37056, unless otherwise specified.
- Shall comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) Specifications.
- Be uniform in color and texture.
- Have a good appearance, free of cracks or other defects.
- Have clean-cut and well-defined edges.
- Where applicable, the units shall adhere to Hot Mix Asphalt (HMA) or Portland cement concrete (PCC) surfaces at a minimum air temperature of 60°F (16°C), and a minimum substrate temperature of 70°F (21°C).
- Be weather resistant and durable to normal pedestrian wear and maintenance activities.
- Show no appreciable fading, lifting, or shrinkage.

- Have friction characteristics similar to a broomed Portland cement concrete sidewalk surface as determined by the Engineer.

Setting bed material and/or surface preparation materials for installation of detectable warning pavers shall be in accordance with the manufacturer's recommendations.

**B. PHYSICAL PROPERTIES:**

<u>PROPERTY</u>	<u>REQUIREMENTS</u>
Compressive Strength, Min., 28 days	8 ksi (55 Mpa) Minimum
Freeze-thaw Loss (25 Cycles, one per day, 10% NaCl solution)	1.0% Maximum
Absorption Rate	5.0% Maximum

- C. PACKAGING AND SHIPMENT:** Embedded detectable warning units shall be shipped in accordance with commercially accepted standards. The following information shall be marked on each package or on the shipping invoice: the name of the product, the name and address of the manufacturer, and the quantity of material.

- D. BASIS OF MATERIALS ACCEPTANCE:** Acceptance of materials shall be based upon it meeting the criteria listed here in these specifications and being listed in the most current New York State Department of Transportation's Approved List of Embedded Detectable Warning Units.

**4.13 DSBS.4. CONSTRUCTION DETAILS.** Precast concrete, embedded detectable warning pavers shall be installed in accordance with the manufacturer's specifications and recommendations.

- A. The Contractor shall be required to follow all applicable manufacturer's requirements for environmental conditions, surface preparations, installation procedures, curing procedures, and materials compatibility.
- B. Precast concrete detectable warning pavers (excluding their raised truncated domes) shall be set flush with a top surface elevation tolerance of 1/16" between adjacent units but not more than ±1/32" at perimeters between pavers and adjacent curb or sidewalk surfaces.
- C. Lay out pavers to minimize the number of less-than-half-size pieces of tiles installed. Lay out special cut pavers per shop drawings to confirm fit and to also minimize the number of less-than-half-size pieces of pavers installed. Position saw-cut edges of tiles to be least conspicuous. Neatly cut units with a carborundum or diamond saw blade and control dust with water spray. The backs of any tile having white or colored markings left from the factory shall have this residue removed by wire brushing and rinsing with water.
- D. The pavers shall be installed in accordance with Tile Council of America Method F112 for latex Portland cement mortar and as recommended by the manufacturer.
- E. The existing concrete substrate shall be thoroughly cleaned and be free from dirt or dust followed by an application of bond coat. Mortar shall be applied using the flat side of a trowel, or other approved means, to scrape the substrate and work the material into good contact with the substrate. The paver shall be back buttered with a trowel and then

pressed into the fresh mortar to provide 100% full bedding.

- F. Maintain accurate joint alignment and spacing. The Contractor shall use a four-foot leveling board to insure pavers are perfectly flush with adjacent pavers, top of curb and sidewalk. Remove excessive mortar that fills more than 1/3 of the grout joint depth to permit a minimum of 2/3 of joint depth to remain open for grouting. Insert temporary fillers in shallow control joints to prevent the grooves from filling with grout.
- G. As large an area as can be covered with pavers before the mortar has reached its initial set shall be placed in one operation. When more setting mortar has been spread then can be thus covered, the unfinished portion shall be cut back to a clean beveled edge and removed.
- H. Just after setting pavers into place, the Contractor, in the presence of the Engineer, shall lift one paver for each 80 square feet of paver laid, a minimum of two per each bus bulb location. Should the bond coat/ mortar coverage on the test paver exceed 95% of the paver surface, then the setting procedure is correct. Coverage less than 95% indicates the coverage and setting procedure is inadequate and the Contractor shall check and modify his means and methods to provide proper setting procedure. Pavers with inadequate bond coat / mortar coverage shall be replaced by the Contractor at his own expense. Test pavers with adequate bond coat coverage can be carefully reset by removing the existing bond coat/ mortar and re-installing the paver with the correct coverage.

**4.13 DSBS.5. MEASUREMENT.** The quantity of Embedded Precast Concrete Detectable Warning Pavers to be measured for payment shall be the number of square feet, measured to the nearest tenth (0.1) of a square foot, installed to the satisfaction of the Engineer.

**4.13 DSBS.6. PRICE TO COVER.** The unit price bid per square foot shall include all labor, material, equipment, insurance, and incidentals necessary to complete the work, including but not limited to bedding material, job site sample(s), repairs, and clean up.

Payment for this item, Embedded Precast Concrete Detectable Warning Pavers, shall be in addition to payment for the concrete sidewalk or platform pavement item on which the preformed detectable warning unit is installed.

In addition no adjustment in payment shall be made for concrete removed to accommodate embedded units.

*Payment will be made under:*

Item No.	Item	Pay Unit
4.13 DSBS	EMBEDDED PRECAST CONCRETE DETECTABLE WARNING PAVERS FOR SBS STATIONS	S.F.

SECTION 6.28 ME

Lighted Timber Fencing for use in Lower Manhattan Project

6.28ME.1. INTENT. This section describes the work to be done in connection with Lighted Timber Fencing.

6.28ME.2. DESCRIPTION. The Contractor shall furnish, install, and maintain and remove, when directed, Lighted Timber Fencing at locations shown on the Contract Drawings, as specified herein and where directed by the Engineer.

6.28ME.3. MATERIALS.

Timber and lumber shall be dense, structural grade Douglas Fir or Southern Yellow Pine, conforming to the requirements of Section 2.40 of the Standard Highway Specifications.

Reflectorizing materials shall conform to the requirements of ASTM Designation B 589 "Standard Specification of Refined Palladium."

Battery operated flashing units shall be as approved by the Engineer.

For additional details about materials see the sketch for timber fencing.

All other unspecified materials shall be as approved by the Engineer.

6.28ME.4. METHODS. All locations of mass excavation being performed shall be surrounded by lighted timber fencing as shown on the attached sketch. This requirement shall be in addition to providing all other traffic control devices as deemed necessary for the maintenance and protection of vehicular and pedestrian traffic.

Said work shall include the furnishing and incorporation, as required, of all timber, lumber, fastenings, anchors, reflectorizing materials, battery operated flashers and other warning devices; paint and painting; netting; and the furnishing of all labor, materials, plant, equipment, insurance, and necessary incidentals required and completing the work.

Lighted Timber Fencing shall be furnished, installed, and maintained as shown in the attached sketch and as directed by the Engineer.

At the completion of the work or when directed by the Engineer, fencing shall be removed and disposed of away from the work site.

Fencing at all times shall be maintained in a condition satisfactory to the Engineer. Maintenance shall consist of the

replacement of all damaged or worn out components; repainting, as required or directed; replacement of reflectorizing materials, netting and flashers; and general rehabilitation to keep barricades in good condition during the life of the contract.

6.28ME.5. MEASUREMENT AND PAYMENT. The quantity to be measured for payment shall be the number of linear feet of lighted timber fencing installed in the work, complete, based on the summation of the lengths of individual units, measured along the center line on the face of the top rail between the ends of each unit.

Payment will be made for lighted timber fencing only for the initial installation at any location. Whenever fences 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. Minor movement of the fencing from one side of the roadway to the other side or rearrangement within a work area will not be considered as a movement to a new location and will not entitle the Contractor to additional payment.

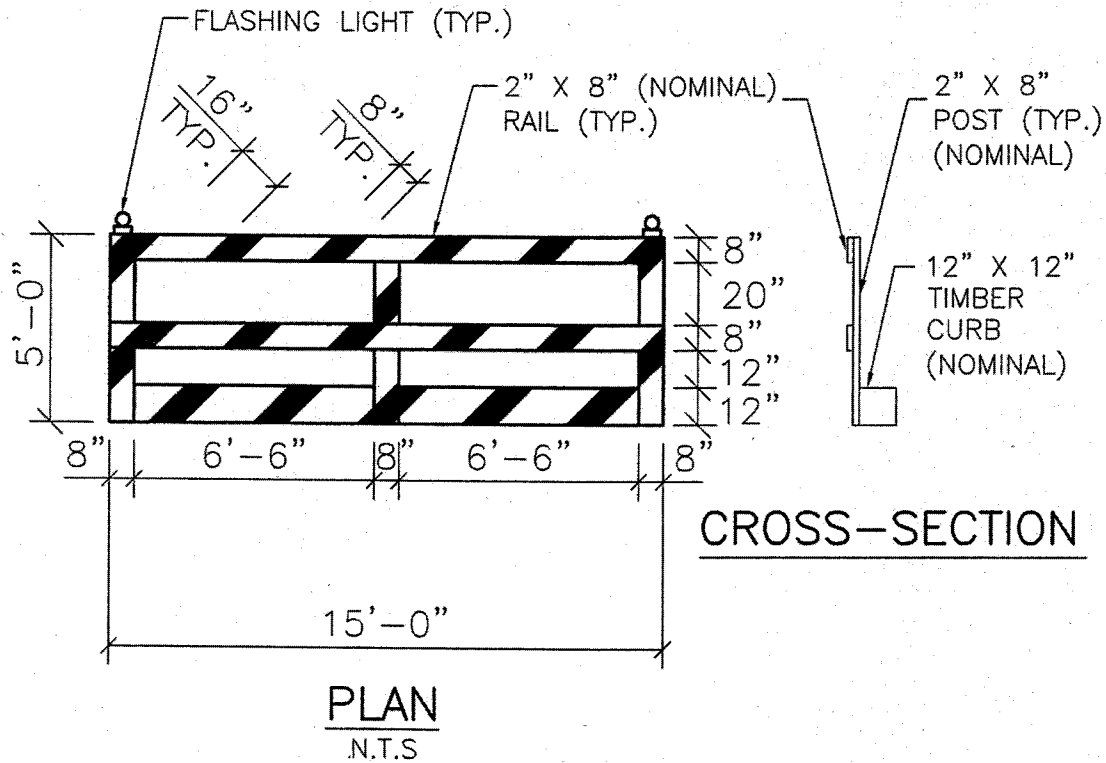
No payment will be made: for movements of fencing made for the Contractor's convenience; for movement of fencing at a given location at the end of a work period and subsequent replacement at the same location at the beginning of the next work period; for movement of fencing at a given location during a work period and subsequent replacement at the same location during the same work period; or for the interchanging of fencing between initial installations.

6.28ME.6. PRICE TO COVER. The contract price bid per linear foot for lighted fencing shall cover the cost of furnishing all labor, materials, plant, equipment, insurance, and necessary incidentals required and completing the work in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.28 ME	LIGHTED TIMBER FENCING FOR USE IN LOWER MANHATTAN PROJECT	L.F.

# LIGHTED TIMBER FENCING FOR USE IN LOWER MANHATTAN PROJECTS



**DETAILS:**

- 1) LUMBER -DOUGLAS FIR OR SOUTHERN YELLOW PINE.  
-ALL SIZES SHOWN ARE "NOMINAL".  
-ALL CONNECTIONS FOR TIMBER RAILS, POSTS & CURBS TO BE NAILED.
- 2) PAINT -TWO COATS APPROVED ORANGE & STAIN RESISTANT REFLECTORIZED WHITE.  
-STRIPES TO BE 45° WITH 8" ORANGE & 16" WHITE.
- 3) LIGHTS -BATTERY OPERATED OR SOLAR POWERED FLASHING DOT APPROVED TYPE.  
-MAXIMUM SPACING 15' CENTER TO CENTER.
- 4) NETTING -TYPE SHALL BE POLYETHYLENE KNITTED MESH, 3.5 OZ PER SQUARE YARD, ORANGE COLOR, 5'-6" HEIGHT WITH REINFORCED EDGE, OR APPROVED EQUAL.  
-NETTING TO BE FASTENED TO FENCE EXTERIOR OVER THE ENTIRE 5'-0" HEIGHT.



## SECTION 6.29 TTM - Temporary Tubular Markers

**6.29TTM.1. INTENT.** This section describes the work of furnishing, installing, maintaining, and removing Temporary Tubular Markers.

**6.29TTM.2. DESCRIPTION.** Under this section, the Contractor shall furnish, install, maintain, relocate, and remove, when directed, Temporary Tubular Markers as indicated on the contract drawings and as directed by the Engineer. Tubular markers shall be defined by the National Cooperative Highway Research Program (NCHRP) Report 350 as a Category I device.

**6.29TTM.3. MATERIALS.** Tubular Markers shall conform to the specifications set forth in the National Manual on Uniform Traffic Control Devices for Streets and Highways (National MUTCD) plus the New York State Supplemental (NYS Supplement) and shall be NCHRP 350 approved. Tubular markers shall be orange, with a minimum height of 36" (900-mm) and a minimum outside diameter of 2" (50-mm). Tubular Markers shall be circular or elliptical in cross section and shall have a maximum weight of 13-lb (6-kg), not including a mounting base.

Tubular Markers shall have two horizontal circumferential stripes of white reflective sheeting a minimum of 3" (75-mm) wide. The top edge of the upper band shall be a maximum of 2" (50-mm) from the top of the marker. The space stripes between shall not exceed 6" (150-mm).

Reflective sheeting shall conform to NYSDOT Standard Highway Specification Section 730-05 *Reflective Sheeting* ASTM D4956 Type I or Type III. The sheeting shall be bonded to the post with a precoated, pressure-sensitive adhesive or a tack-free, heat activated adhesive. Mechanical fasteners to bond reflective sheeting to the post will not be allowed.

For free-standing tubular Temporary Tubular Markers, the base and/or any nonflexible portion of the marker shall not be more than 2" (50-mm) in height.

For tubular Temporary Tubular Markers fastened to pavement, the bonding system used shall be a fast-setting chemical compound, mastic-type material, or mechanical fastener capable of fixing the tubular marker to either concrete or asphalt pavement. The bonding system shall not present a hazard to traffic if the tubular marker or base unit becomes unfixed from the pavement.

Acceptance of materials will be based on the manufacturer's name and type of tubular marker appearing on the most current New York State Department of Transportation's Approved List Delineators titled "Tubular Markers."

**6.29TTM.4. METHODS.** The Contractor shall install Temporary Tubular Markers in accordance with the contract documents or as directed by the Engineer. The Contractor shall attach the tubular markers to the pavement in a manner that prevents them from being moved or dislodged by traffic. Tubular markers shall be installed on pavement that has been cleaned to remove pavement markings, oil, dirt, or other debris or substances that may interfere with a proper bond. Attachment to the pavement shall be by mechanical fastener or by adhesive, in accordance with the manufacturer's recommendations. Bonding agents shall be of sufficient amount or size to ensure proper bonding of the base to the pavement.

All temporary tubular markers shall be maintained upright, at proper spacing, in proper alignment and orientation, kept clean, and replaced as required during the various stages of construction.

Temporary tubular markers removed or damaged by the Contractor's operations or by traffic shall be replaced immediately, so that positive separation is maintained between opposing lanes of traffic at all times. Damaged reflective sheeting on interim tubular markers shall be replaced before nightfall as necessary to maintain adequate visibility of the markers. In cases where only isolated individual markers are lost or damaged, and adequate visibility is maintained by the remaining markers,

replacement will not be required until more than one (1) consecutive markers have been damaged or lost.

At the completion of the work or when directed by the Engineer, the temporary tubular markers shall be removed and disposed of away from the work site.

**6.29TTM.5. MEASUREMENT.** The quantity to be measured for payment shall be the actual number of Temporary Tubular Markers placed in the work, to the satisfaction of the Engineer.

Payment will be made only for the initial installation at any location. Whenever Temporary Tubular Markers 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. However, only tubular markers that are in satisfactory conditions may be relocated to a new location. Minor movement of the Temporary Tubular Markers from one side of the roadway to the other side, or rearrangement within a work area will not be considered as a movement to a new location and will not entitle the Contractor to additional payment.

No payment will be made for movements of Temporary Tubular Markers made for the Contractor's convenience; for movement of Temporary Tubular Markers 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 Temporary Tubular Markers 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 Temporary Tubular Markers between initial installations.

**6.29TTM.6. PRICE TO COVER.** The contract price bid per each for Item No. 6.29 TTM - TEMPORARY TUBULAR MARKERS, shall cover the cost of furnishing all labor, materials, equipment, insurance, and necessary incidentals required to complete the work of furnishing, installing, maintaining, relocating, and removing tubular markers, all in accordance with the contract drawings, the specifications and the directions of the Engineer. No additional payment will be made for replacing damaged markers.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.29 TTM	TEMPORARY TUBULAR MARKERS	EACH

## SECTION 6.34 A

## Temporary Chain Link Fence, 6'-0" High

6.34A.1. DESCRIPTION. Under this section, the Contractor shall furnish, erect, maintain, and remove, when directed, each type of Temporary Chain Link Fence as shown on the Contract Drawings and directed by the Engineer.

6.34A.2. MATERIALS AND METHODS. All materials and methods shall be as specified in Section 6.34 of the Standard Highway Specifications, with the following modifications and additions:

Temporary Chain Link Fence to be furnished under Item 6.34 ACT, shall consist of chain link fence fabric, top and bottom tension wires, gates, posts to be embedded in the pavement, and all necessary incidental in accordance with the Contract Drawings and the directions of the Engineer.

Temporary Chain Link Fence to be furnished under Item 6.34 ACTP, shall consist of chain link fence fabric, top and bottom rails for mounting a decorative mesh (to be furnished under another item), gates, and posts. Posts shall be mounted on two (2') feet square plates with a vertical pin not less than two (2') feet high welded to the center of the plate, all as approved by the Engineer. The Contractor shall also be required to secure the fence with sand bags to hold fence in place, and all necessary incidentals in accordance with the Contract Drawings and the directions of the Engineer.

When directed by the Engineer, the Contractor shall remove and dispose of the temporary chain link fence to the satisfaction of the Engineer. The Contractor shall then fill any holes left in the pavement with compacted clean sand to grade.

6.34A.3. MEASUREMENT. The quantities of Temporary Chain Link Fence to be measured for payment shall be the number of linear feet of each type satisfactorily installed, complete, measured in place, from center to center of end posts.

Payment will be made for each type of Temporary Chain Link Fence only for the initial installation at any location. Whenever temporary chain link fence are moved to a new location, as required by the Plans or directed by the Engineer, payment will be made in the same manner as if it were an initial installation. Minor movement of temporary chain link fence from one side of the roadway to the other side, or rearrangement within a work area will not be considered as a movement to a new location and will not entitle the Contractor to additional payment.

No payment will be made: for movements of each type of temporary chain link fence made for the Contractor's convenience; for movement of temporary chain link fence 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 temporary chain link fence 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 temporary chain link fence between initial installations.

6.34A.4. PRICES TO COVER. The prices bid for each type of Temporary Chain Link Fence shall be a unit price per linear foot and shall cover the cost of all labor, materials, plant, equipment, insurance, and necessary incidentals required to furnish, install, maintain, and remove temporary chain link fence; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer. Temporary chain link fence shall also include, but not limited to, any gates as may be required.

Payment will be made under:

Item No.	Item	Pay Unit
6.34 ACT	TEMPORARY CHAIN LINK FENCE, 6'-0" HIGH	L.F.
6.34 ACTP	TEMPORARY CHAIN LINK FENCE, 6'-0" HIGH, (WITH TOP AND BOTTOM RAILS AND POSTS MOUNTED ON STEEL PLATES)	L.F.

SECTION 6.44 POR  
Red Bus Lane Pavement Overlay

6.44POR.1. DESCRIPTION. This section describes the furnishing and application of an approved Brick-Red Asphalt Pavement Color Scheme along designated Select Bus Service (SBS) lanes as indicated in the contract plans or as directed by the Engineer.

6.44POR.2. REFERENCES.

- A. ASTM D-4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Tester.
- B. ASTM D-4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abrasion.
- C. ASTM D-522-93A Standard Test Method for Mandrel Bend Test of Attached Organic Coatings.
- D. ASTM G-155 QUV Accelerated Weathering Environment. Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials.
- E. ASTM D-2486 MEK rub test for chemical resistance.
- F. ASTM D-570 Standard Test Method for water absorption of plastics.
- G. ASTM E-303 British Pendulum test for friction.
- H. EPA 24 ASTM D3960-05 Volatile Organic Compounds.

6.44POR.3. SUBMITTALS.

- A. A copy of the current year accreditation certificate available from the Contractor or subcontractor who will be performing this work, or written verification from the coating supplier that the Contractor or subcontractor is qualified to perform this Work.
- B. Written and published specification for the application of the selected asphalt pavement coating.
- C. Confirmation of coating color.
- D. Proof of coating performance through a Certificate of Analysis or equivalent document as provided by the Contractor or the coating supplier.

6.44POR.4. MATERIALS.

The following table outlines minimum performance properties of a typical asphalt pavement coating.

Characteristic	Test Specification	Measured result
Durability: Taber Abrasion resistance	ASTM D-4060 7 day cure, H-10 wheel (wet test)	< 5.0 g/1000
Water sensitivity	ASTM D-570 Water absorption after 9 days: Remaining absorption after 1 hour of recovery:	< 10% < 1.0%
Color stability	ASTM G-155 QUV 2,000 hours (CIE units)	Brick color $\Delta E < 1.5$
Flexibility: Mandrel Bend	ASTM D-522-93A Flexibility as measured by Mandrel bend 0.5mm thick sample passes 10 mm at 21°C 0.5mm thick sample passes 125mm at -18°C	
Chemical resistance	ASTM D-2486 Modified MEK scrubs 16 dry mils, number of scrubs until 50% substrate exposed	>5000
Adhesion to Asphalt	ASTM D-4541	Substrate Failure
Friction Wet	ASTM E-303 British Pendulum Tester	>55
Environmental Sensitivity	EPA 24 ASTM D-3960-05 Volatile Organic Compounds	VOC < 150

These properties shall be evidenced by Certificates of Analysis produced by an independent qualified testing facility.

Red Bus Lane Pavement Overlay furnished by the following manufacturers, or approved equivalent, are acceptable for use in this contract:

Ennis Paint, Inc.  
1509 S. Kaufman Street  
Ennis, TX 75119

Integrated Pavement Concepts, Inc.  
102-17957 55th Avenue  
Surrey, BC Canada V3S 6C4

Crafco, Inc.  
420 N. Roosevelt Avenue  
Chandler, AZ 85226

6.44POR.5. METHODS. The asphalt pavement coating system shall be applied to the pavement in accordance with the manufacturer's specification. In its hardened state the color shall be as specified, and as approved by the Engineer. The material shall present a marking whose color and chemical resistance will not degrade under normal exposure to calcium chloride, sodium chloride or automotive oils and fuels. Color pigments used shall remain stable under exposure to ultra violet light. A minimum of four (4) layers of coating material shall be applied to the pavement surface.

The Contractor shall be required to use the proper equipment in the application of the asphalt pavement coating, as per the recommendation of the coating supplier, and as approved by the Engineer.

Asphalt pavement must be stable, well compacted and generally in excellent condition for the application of the asphalt pavement coating to be successful. The Engineer shall make the final determination as to the suitability of the existing asphalt pavement.

The asphalt pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.

The asphalt pavement coating shall only be applied in the correct environmental conditions as instructed by the coating supplier, and as approved by the Engineer.

Refer to the instructions provided by the coating supplier regarding when the Bus Lane may be opened to traffic. Wait time is typically a function of the dry rate of the coating and climate conditions.

The Engineer may, at his discretion, require the Contractor to remove all extraneous marks on the pavement made by the agents or employees of the Contractor, or made by others due to improper control or protection of the work area by the Contractor, his agents or employees. Any installation which, in the opinion of the Engineer, is not acceptable, whether by reason of poor workmanship, poor appearance, poor performance, poor materials, improper width, or improper alignment, shall be reworked by the Contractor at no cost to the City. The Contractor shall replace rejected installation as directed by the Engineer, within fifteen (15) days after receiving written notification of the rejection of such completed work.

6.44POR.6. MEASUREMENT. The quantity to be measured for payment shall be the number of square yards of Red Bus Lane Pavement Overlay placed as specified, to the satisfaction of the Engineer.

6.44POR.7. PRICE TO COVER. The contract bid price per square yard of Red Bus Lane Pavement Overlay shall cover the cost of all labor, materials, plant, equipment, insurance, and necessary

incidentals required including, but not limited to, testing, cleaning, preparation of surfaces, and application of bus lane pavement overlay materials, all in accordance with the contract plans and specifications, and as directed by the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.44 POR	RED BUS LANE PAVEMENT OVERLAY	S.Y.



**SECTION 6.94 TFD**  
**Thru-Flow Trench Drain**

**6.94TFD.1. Intent.** This section describes furnishing and installation of open ended trench drains to allow continuous thru-flow of storm-water run-off.

**6.94TFD.2. Description.** The trench drain shall be a surface drainage system that is installed so that both ends are open to allow for continuous thru-flow of storm water with a nominal clear opening of 4" wide. The system shall include a precast polymer concrete body, stainless steel edge rail, stainless steel grate cover and locking mechanism. All components of the trench drain system shall be provided from the same manufacturer, unless written approval from the Engineer is provided for any substitutions provided.

The trench drain system shall be based on the drawings, these specifications, and the manufacturer's details, specifications and installation instructions for the trench drain system selected.

**6.94TFD.3. Manufacturers.**

1. ACO Polymer Products Inc., P.O. Box 245, Chardon, OH 44024, (800)-543-4764
  - a. Trench Drain Body: KlasskDrain KS100S
  - b. Grate Cover: ACO Type 445/446 ADA Heelguard Stainless Steel Grate
  - c. Locking Mechanism: "QuikLok" integral locking mechanism
2. ABT, Inc., P.O. Box 837, 259 Murdock Rd, Troutman, NC 28166, (800)-438-6057
  - a. Trench Drain Body: PolyDrain precast trench drain
  - b. Grate Cover: #2452 Stainless Steel Perforated Heel proof Grate
  - c. Locking Mechanism: #840A stainless steel bolt and toggle bar system
3. Jay R. Smith MFG. Co., P.O. Box 3237, 2781 Gunter Park Dr. E., Montgomery, AL 36109, (334) -277-8520
  - a. Trench Drain Body: 9818 6" wide channel drain system w/ integral stainless steel metal rail
  - b. Grate Cover: 9870-465-SSP Class C Stainless Steel Perforated Heel Proof Grate
  - c. Locking Mechanism: "QuickLock" Stainless Steel system
4. Approved Equal

**6.94TFD.4. Materials.**

1. Trench Body: The trench drain system body shall be manufactured from polyester polymer concrete with minimum properties as follows:
  - a. Compressive Strength: 14,000 psi
  - b. Flexural Strength: 4,000 psi
  - c. Water Absorption: 0.07%
  - d. Frost Proof
  - e. Salt Proof
  - f. Dilute acid and alkali resistant
  - g. Minimum Wall Thickness: 0.50"

The body shall have a nominal clear opening of 4" wide with an overall minimum width of 5.10". The pre-cast body units shall be manufactured with a full radius trench bottom consisting of a neutral invert slope or an invert slope of 0.6%

The body shall have male to female interconnecting end profiles and cast in anchoring features on the outside wall to ensure maximum mechanical bond to the surrounding bedding and pavements surface.

2. Edge rails: The edge rails shall be manufactured from Type 304 stainless steel with a minimum thickness of 1/8". The edge rails shall be integrally cast into the body by the manufacturer to ensure maximum homogeneity between polymer concrete body and edge rail.
3. Grates: The grates shall be manufactured from Type 304 stainless steel by the same manufacturer as the trench body and edge rails with the following minimum properties:
  - a. Independently certified to meet Load Class A to DIN 19580 – 3,500 lbs – 70psi.
  - b. 11 gage
  - c. Slotted openings with a maximum size of 0.20" (in the direction of travel) by 0.82" (perpendicular to the direction of travel).
  - d. Width as per manufacturer specifications to fit trench drain system selected.
  - e. Length as per manufacturer specifications.
  - f. Complies with all related sections of the 2010 ADA guidelines.
  - g. Complies with ASME: A112.6.3 – 2001: Section 7.12 Heel Resistant Strainers and grates.
  - h. Bicycle Tire Penetration Resistant to AS3996-2006.
4. Locking Mechanisms: The locking mechanism shall be manufactured from Type 304 stainless steel and shall be an integral component of the trench drain system.

**6.94TFD.5. Methods.** The Contractor shall be responsible for all coordination of components (cast-in-place concrete and trench drain system components) in order to install the trench drain system so that the grate cover is flush with the surrounding surface and the sides of the trench drain body are flush with the sides of the cast-in-place concrete ramp or other structure. The Contractor shall be required to:

1. Submit manufacturer's product data for approval.
2. Submit composite shop drawings, showing sizes, dimensions, finishes, installation and coordination details to minimize field preparation such as cutting and ensure proper drainage will be achieved.
3. Install trench drains at locations indicated on the drawings and in accordance with the manufacturer's instructions.
4. The trench drain system shall be installed in accordance with the manufacturer's installation instructions and recommendations.

**6.94TFD.6. Measurement.** The quantity to be measured for payment shall be the linear feet of installed trench drain system actually incorporated into the work to the satisfaction of the Engineer.

**6.94TFD.7. Price to Cover.** The contract price bid per linear foot of trench drain system shall cover the cost of furnishing all labor, materials, plant, equipment, insurance, and necessary incidentals required to furnish and install the complete trench drain system, including, but not limited to, the trench body, edge rails, grate cover and locking mechanism, and all shop and field painting and other necessary incidentals, in accordance with the plans, the specifications and the directions of the Engineer.

*Payments will be made under:*

<u>Item #</u>	<u>Item</u>	<u>Pay Unit</u>
6.94 TFD	THRU-FLOW TRENCH DRAIN	L.F.

**SECTION 6.97 A**  
**Extra-High-Early Strength Concrete Base**

**6.97A.1. DESCRIPTION.** This section describes the construction of an extra-high-early strength concrete base for pavement.

In intersections where the street must be fully opened to traffic by the end of each work period, in accordance with the contract drawings, the specifications, the traffic stipulations, and the directions of the Engineer, the concrete base shall be laid with an extra-high-early strength concrete base.

The Contractor will be subject, under **Section 6.70** of the Standard Highway Specifications, to liquidated damages in the amount shown on Schedule "A" for each and every hour, or any part thereof, that the entire width of pavement designated to be reconstructed with extra-high-early strength concrete base is not available to traffic one (1) hour after the end of each work period.

**6.97A.2. MATERIALS AND METHODS.** All materials and methods for the concrete base shall comply with the requirements specified for Item 4.04 H, except for the following modifications and additions:

- (A) Concrete shall be extra-high-early strength capable of obtaining a minimum compressive strength of 2,800-psi in six (6) hours, a minimum compressive strength of at least 3,200-psi at 3-days, and a sufficient size work crew and working time before its initial set to allow for proper placement of the concrete. Modification of concrete shall be with either an increased cement factor (10-bag mix of Portland cement), a reduced water content, superplasticizer, and accelerator or an approved Type IP hydraulic cement complying with the requirements of ASTM C595 modified with additives meeting the requirements of ASTM C688.
- (B) A suggested mix design and test results are attached at the end of this section. Should the Contractor propose to use this mix design the Contractor shall be required to verify that the Contractor's mix agrees with the first 28-days of the attached test results. Otherwise, if the Contractor chooses to use another mix design, the Contractor shall be required to document the Contractor's proposed mix design for 28-days in the same manner as shown on suggested mix design and test results which are part of the eleven (11) pages of attachments (Suggested Mix Design For Extra-High-Early Strength Concrete Base) to the end of this **Section 6.97 A**.
- (C) The laboratory used to verify that the Contractor's mix agrees with the mix design proved herein, or document another proposed mix design, shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and shall be in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the

preconstruction meeting or from the Engineer. The minimum requirement for approval is that the laboratory must have the current AMRL/AASHTO R-18 accreditation in the category of service proposed, it must be currently licensed by the NYC Department of Buildings (DOB), and it must have documented experience estimating concrete strength by the use of Maturity Meters. In addition, all testing requirement to verify that the Contractor's mix agrees with the mix design proved herein, or document another proposed mix design, shall be witnessed by a representative of DDC's QACS Bureau.

- (D) Prior to all work under this contract, the Contractor shall file with the Engineer Age-Strength data sheets of the job mix formulas for each type of concrete the Contractor proposes to use, for various ambient temperatures anticipated during the work period. These data sheets shall be used in determining the curing periods of the concrete used. Data sheets are to be presented in both tabular and graphical forms for various ambient temperatures with a maximum setting period of six (6) hours.
- (E) All materials and equipment to be used by the Contractor shall be as approved by the Engineer.
- (F) The earth subgrade, immediately before the concrete base is laid, shall be thoroughly compacted by an approved method, to the satisfaction of the Engineer. It shall be smooth, finished to the bottom elevation of the adjacent concrete base pavement, and be dampened with water sufficient only to be absorbed by the subgrade. The subgrade shall not be in a muddy or frozen condition and unsuitable material shall be removed and replaced with acceptable material, thoroughly compacted.
- (G) All constituents of concrete shall be delivered to the project site each work period as required. The Contractor shall supply concrete at a rate consistent with placement operations as determined by the Engineer. Concrete must be batched in sufficient quantity to prevent cold joints from being formed during placement. The Engineer may discontinue the use of any type of concrete mixing or transporting units when unsatisfactory results are obtained.
- (H) All concrete shall be discharged from the discharge openings directly into the forms or into approved conveyance equipment while fresh and before there is evidence of initial set. Concrete shall be deposited before the initial set has taken place, in as nearly a continuous operation as practical, and with approved tools which will prevent segregation. Concrete shall not be deposited in standing water and shall be thoroughly compacted by use of external vibration (poker nose of screed). No retampering of the concrete will be permitted. Retampering is defined as the addition of water after the mix has attained its desired initial slump.

- (I) Concrete cylinders shall be taken at each location of work, as directed by the Engineer, to be tested the same day by the City.
- (J) No traffic is to be permitted on newly placed concrete base until it has obtained the minimum 2,800-psi compressive strength specified.

**6.97A.3. MEASUREMENT.** The quantity to be measured for payment under this item shall be the volume, in cubic yards, of extra-high-early strength concrete laid where directed by the Engineer, measured in place, and adjusted for strength deficiencies in accordance with **Section 5.04** of the NYCDOT Standard Highway Specifications.

In determining the volume of concrete to be paid for, the spaces occupied by bases of columns, manhole heads, gate boxes, road boxes, and similar structures will be deducted when their superficial areas measure more than one (1) square foot and will not be deducted when they measure one (1) square foot or less.

**6.97A.4. PRICE TO COVER.** The contract price per cubic yard of extra-high-early strength concrete shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to furnish, lay and cure the concrete, complete in place, in full compliance with the requirements of the specifications, to furnish such samples and cores for testing and to provide such testing equipment, laboratory space and facilities as may be required, to maintain the concrete base in good condition as specified in **Section 5.05** of the NYCDOT Standard Highway Specifications, and completing the work in accordance with the contract drawings, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.97 A	EXTRA-HIGH-EARLY STRENGTH CONCRETE	C.Y.

**SUGGESTED MIX DESIGN**

**FOR**

**EXTRA-HIGH-EARLY STRENGTH**

**CONCRETE BASE**



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 www.materials-testing.com

**Client:** Dept of Design & Construction **Report #:** 09DDC-95100 **Page 1 of 2**  
 30-30 Thompson Ave. **Date:** 01/26/09  
 Long Island City, N.Y. 11101 **Mix #:** 37  
**Concrete Class:** HE SuperPave **Cementitious:** 940 Type II

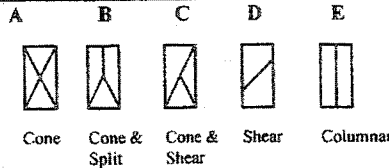
**CONCRETE FIELD DATA (ASTM C192)**

Cement lbs/ yd <sup>3</sup>	Sand lbs/ yd <sup>3</sup>	Stone lbs/ yd <sup>3</sup>	Water lbs/ yd <sup>3</sup>	Air Cont., %	Initial Slump in	Final Slump in	Concrete Temp, °F	Unit Wt. lbs/ yd <sup>3</sup>	Ambient Temp °F	Water Temp °F
940	1035	1750	253.3	5.8	0	10.50	85	148.0	60	183

Supplier: CASA Ready Mix  
 Sand: Roanoke-Washed / Specific Gravity: 2.63 – ASTM C33.  
 Stone: Tilcon Clinton Point / Specific Gravity: 2.81 – ASTM C33 #57  
 Type I/II Cement: LaFarge – ASTM C150.  
 Air: MBVR E90 65.8 oz/cu yd  
 Plast: BASF 1390 112.8 oz/cu yd  
 Accelerator: MBNC 534 846

**COMPRESSIVE STRENGTH OF CONCRETE TEST CYLINDERS (ASTM C39) (4" D x 8" H)**

cid #	Date Cast	Date Tested	Age, Days	Cross-Sect. Area, (sq. in.)	Total Load (Lbs.)	Fracture Type	Strength (PSI)	°C Hrs Mat.	Cyl Temp °F	Complies
1	01/26/09	01/26/09	2h	12.57	765	B	61	65	89	
2	01/26/09	01/26/09	3h	12.57	4020	B	320	100	90	
3	01/26/09	01/26/09	3.5h	12.57	6725	B	535	114	104	
4	01/26/09	01/26/09	4h	12.57	12760	B	1015	138	109	
5	01/26/09	01/26/09	4h	12.57	15410	B	1226	140	109	
6	01/26/09	01/26/09	4 ½h	12.57	18640	D	1483	159	111	
7	01/26/09	01/26/09	5	12.57	24300	D	1933	182	114	
8	01/26/09	01/26/09	5 ½h	12.57	32495	D	2585	205	114	
9	01/26/09	01/26/09	6h	12.57	40475	D	3220	228	114	Y
10	01/26/09	01/26/09	6h	12.57	36520	D	2910	228	114	Y
11	01/26/09	01/26/09	7h	12.57	45400	D	3612	275	116	Y
12	01/26/09	01/27/09	7h	12.57	91780	D	7302	881	77	Y
13	01/26/09	01/27/09	7h	12.57	94510	D	7519	881	77	Y
14	01/26/09	01/28/09	2	12.57	107670	D	8565	1303	62	Y



Submitted By: Materials Testing Lab



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 www.materials-testing.com

**Client:** Dept of Design & Construction  
 30-30 Thompson Ave.  
 Long Island City, N.Y. 11101

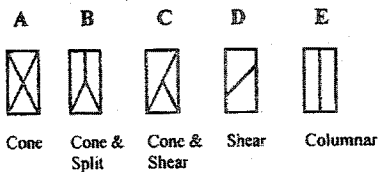
**Report #:** 09DDC-95100  
**Date:** 01/26/09  
**Mix #:** 37

**Concrete Class:** HE SuperPave  
**Cementitious:** 940 Type II

Page 2 of 2

**COMPRESSIVE STRENGTH OF CONCRETE TEST CYLINDERS (ASTM C39) (4" D x 8" H)**

Field #	Date Cast	Date Tested	Age, Days	Cross-Sect. Area, (sq. in.)	Total Load (Lbs.)	Fracture Type	Strength (PSI)	°C Hrs Mat.	Cyl Temp °F	Complies
15	01/26/09	01/28/09	2	12.57	102555	D	8160	1303	62	Y
16	01/26/09	01/29/09	3	12.57	108270	D	8610	1779	68	Y
17	01/26/09	01/29/09	3	12.57	101095	D	8040	1779	68	Y
18	01/26/09	01/30/09	4	12.57	115610	D	9200	2247	68	Y
19	01/26/09	01/30/09	4	12.57	112340	D	8940	2247	68	Y
20	01/26/09	02/02/09	7	12.57	110965	D	8830	3738	71	Y
21	01/26/09	02/02/09	7	12.57	114050	D	9070	3738	71	Y
22	01/26/09	02/02/09	7	12.57	108760	D	8650	3738	71	Y
23	01/26/09	02/09/09	14	12.57	124850	D	9930	7232	69	Y
24	01/26/09	02/09/09	14	12.57	121170	D	9640	7232	69	Y
25	01/26/09	02/09/09	14	12.57	121010	D	9630	7232	69	Y
26	01/26/09	02/23/09	28	12.57	132110	D	10510	14381	68	Y
27	01/26/09	02/23/09	28	12.57	130760	D	10400	14381	68	Y
28	01/26/09	02/23/09	28	12.57	127590	D	10150	14381	68	Y
29	01/26/09	03/23/09	56	12.57	144830	D	11520	-	-	Y
30	01/26/09	04/21/09	84	12.57	150210	D	11950	-	-	Y
31	01/26/09	04/21/09	84	12.57	147520	D	11740	-	-	Y



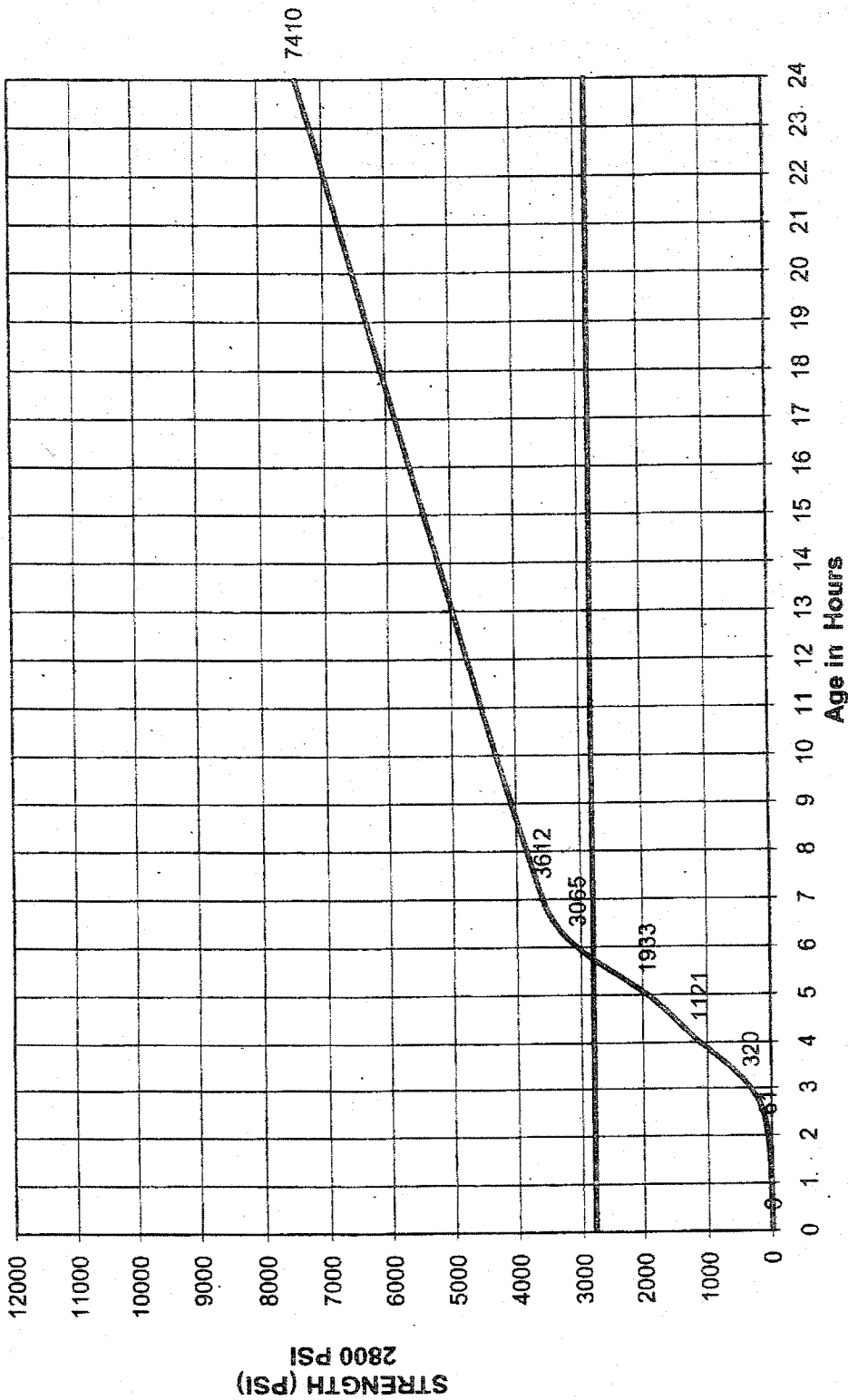
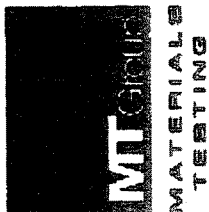
Submitted By: Materials Testing Lab



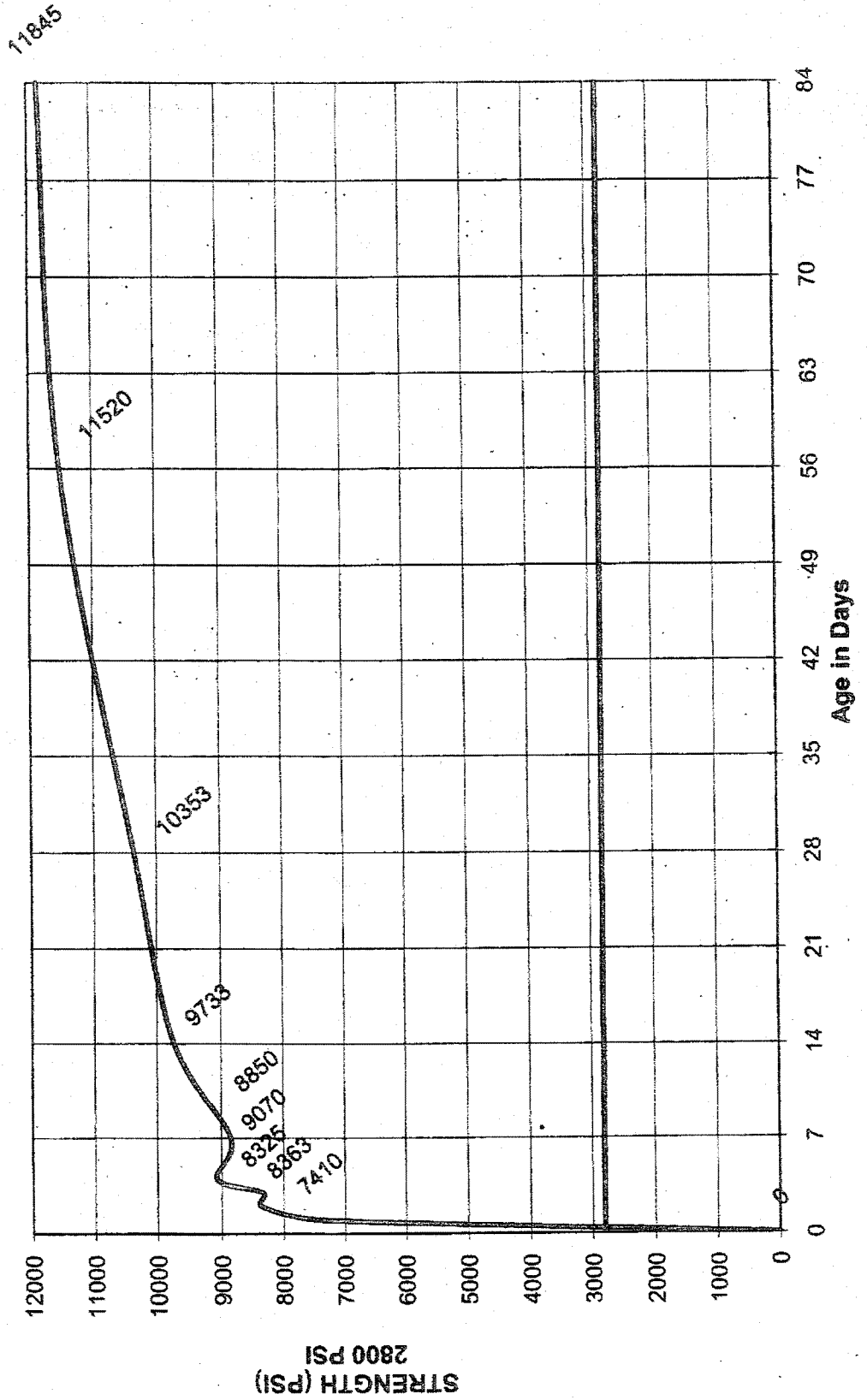
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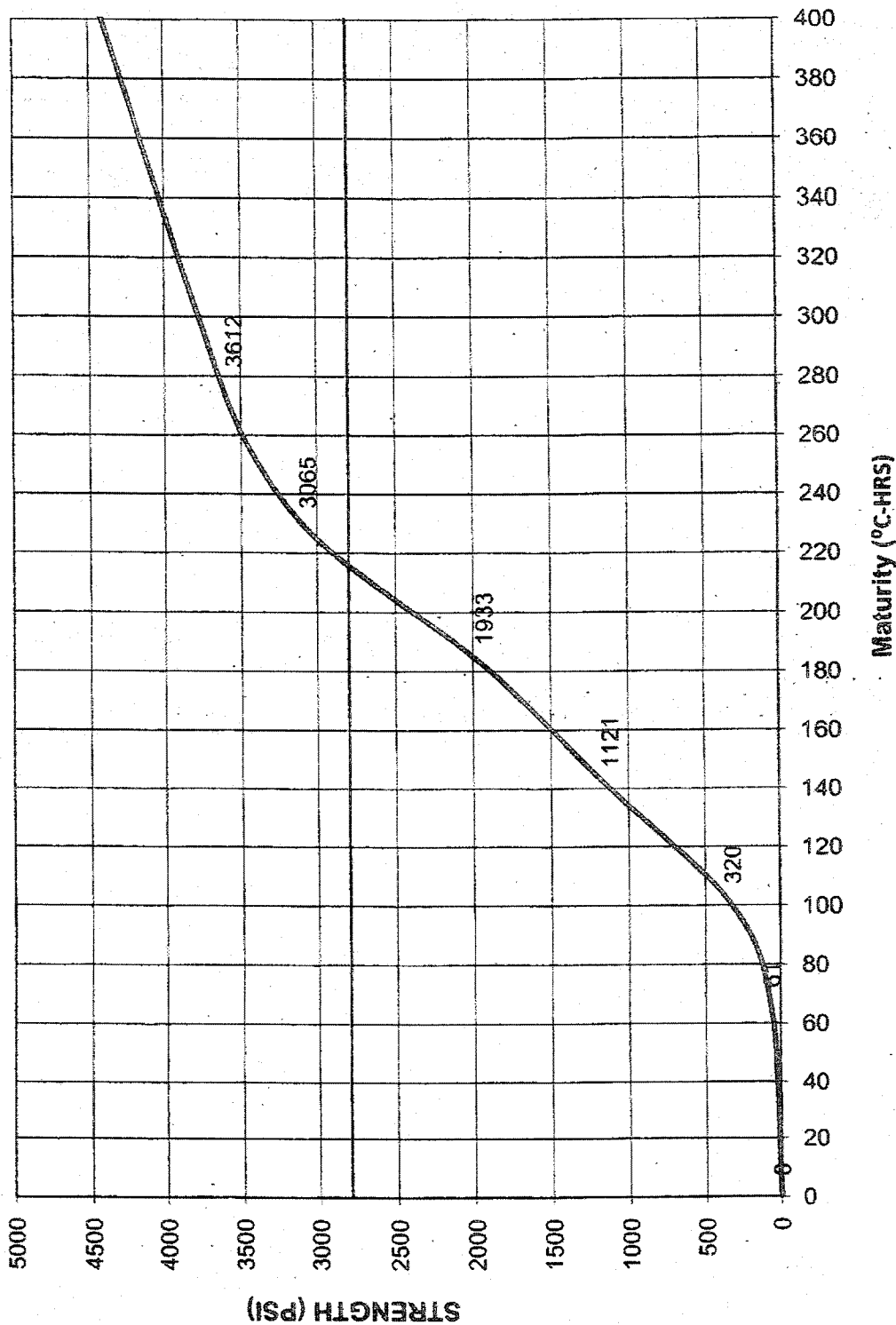
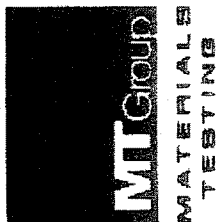
**DDC MIX DESIGNS**  
**Strength Gain over Time**  
**SUPER HE SUPERPAVE**  
**Cementitious 940 Type II**  
**MIX # 37**



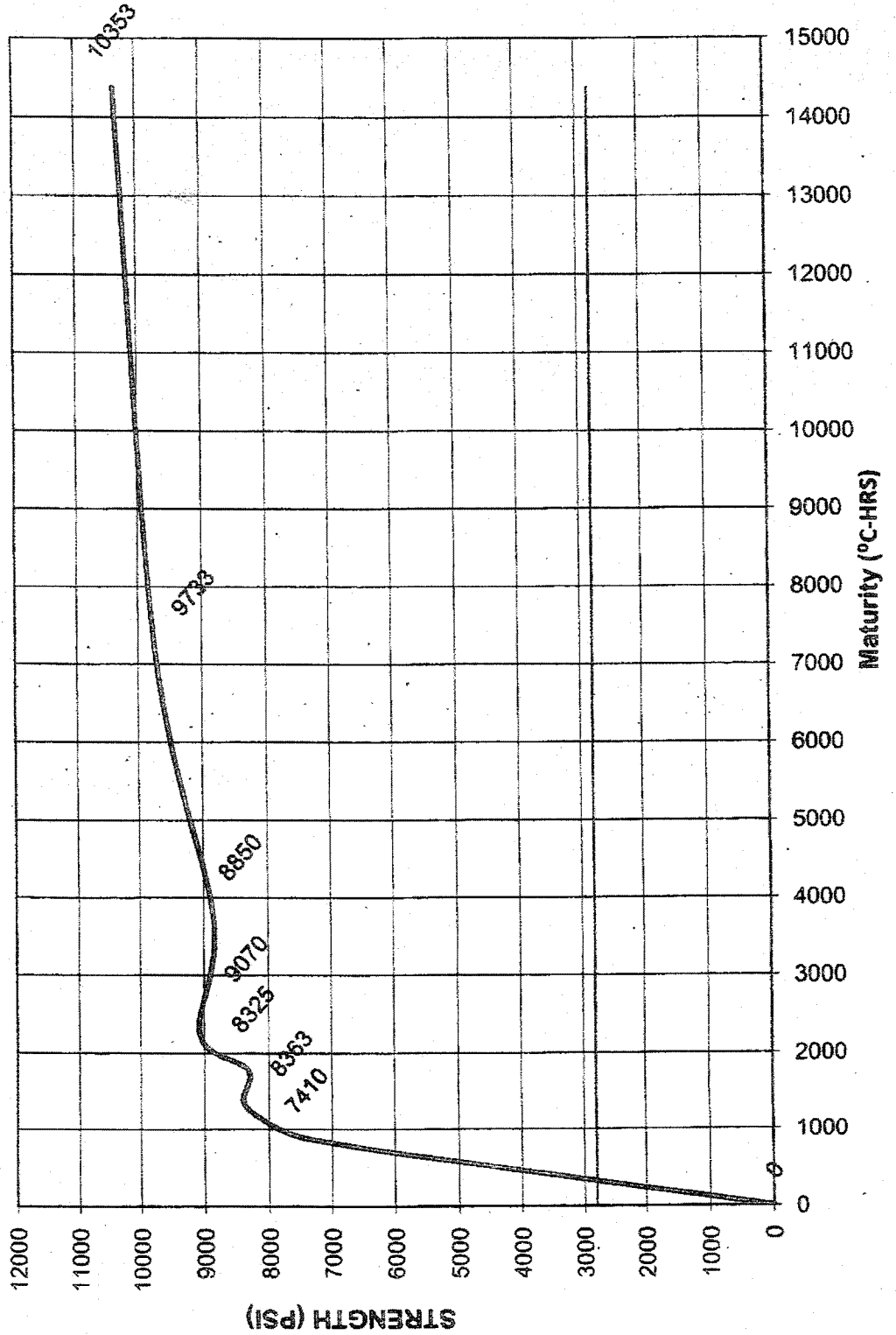
**DDC MIX DESIGNS**  
**Strength Gain over Time**  
**SUPER HE SUPERPAVE**  
**Cementitious 940 Type II**  
**MIX # 37**



**DDC MIX DESIGNS**  
**Strength Maturity Relationship**  
**SUPER HE SUPERPAVE**  
**Cementitious 940 Type II**  
**MIX # 37**



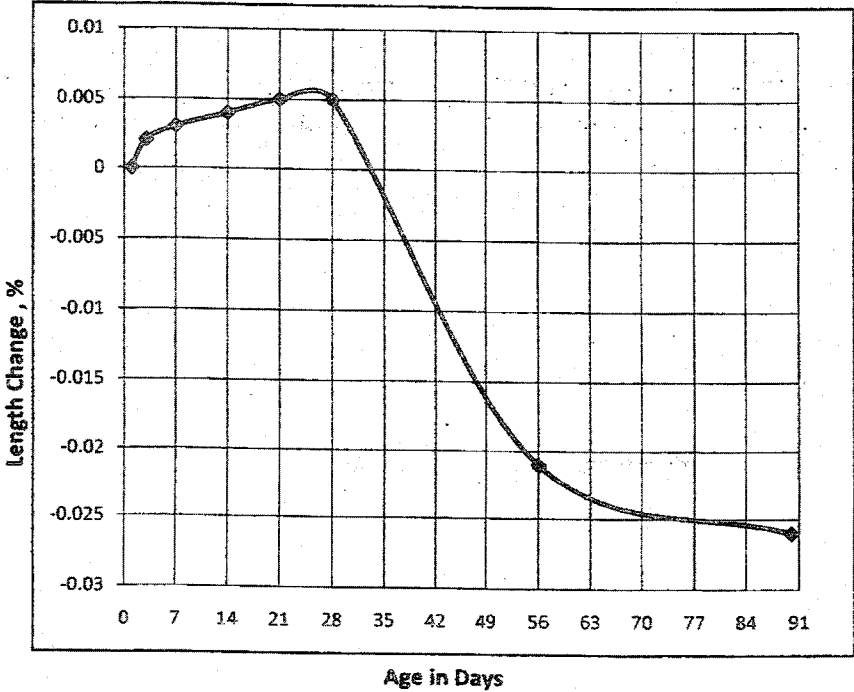
**DDC MIX DESIGNS**  
**Strength Maturity Relationship**  
**SUPER HE SUPERPAVE**  
**Cementitious 940 Type II**  
**MIX # 37**



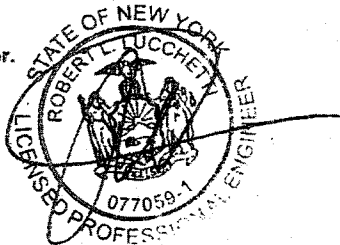


Client: NYC DDC  
Green Concrete Design Mixes  
Procedure: ASTM C 157-06  
4" x 4" x 10" Concrete Prism  
MIX # 37 - Super HE Superpave - Cementitious 940 Type II

Days	Length Change, %
1	0
3	0.002
7	0.003
14	0.004
21	0.005
28	0.005
56	-0.021
90	-0.026



Remarks: For the 28 day result, the sample was immersed in lime saturated water.  
For the 56 & 90 day results, the sample was air-dried.





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Client: NYC Dept. of Design & Construction Report #: 09DDC-767 Page 18 of 19  
 30-30 Thomson Avenue Date: 05/06/09  
 Long Island City, NY 11101 Lab#: 9273  
 Project: DDC Green Concrete Design Mixes  
 Test: Standard Test Method for Resistance of Concrete Cores to Freezing & Thawing.  
 Method: NYSDOT Method 502-3P  
 Sampled By: MTL

**Test Procedure**

The concrete samples were tested in accordance with NYSDOT Method 502-3P. The samples were completely surrounded in 3% NaCl solution at all times while being subjected to 25 freezing and thawing cycles.

**Required - Material shall not exhibit a weight loss greater than 3 %.**

**Test Results**

Mix #	Cementitious lb/cy	% Fly Ash	Weight Loss %	Complies
37	940	-	0.0	Yes

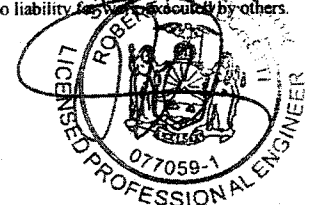
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**Reported To:**

**Submitted By:**

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Simon Sauberman  
 Materials Testing Lab, Inc.





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**Client:** NYC Dept. of Design & Construction **Report Date:** 11/07/08 **Page 1 of 2**  
 30-30 Thomson Avenue **Material:** Natural Sand  
 Long Island City, NY 11101 **Supplier:** CASA

**Project:** DDC Green Concrete Design Mixes  
**Test:** Gradation, #200 Wash, Specific Gravity and Absorption of Fine Aggregate  
**Method:** ASTM C117, ASTM C136, ASTM C128  
**Sampled By:** MTL **On** 11/06/08 **Delivered By:** Materials Testing Lab

**Gradation, #200 Wash**

Sieve Size	% Passing #1	ASTM C33 Specification
3/8"	100.0	100
#4	99.6	95-100
#8	94.0	80-100
#16	83.1	50-85
#30	58.0	25-60
#50	19.0	10-30
#100	4.4	2-10

**Specific Gravity and Absorption of Fine Aggregate**

Specific Gravity (OD):	2.629
Specific Gravity (SSD):	2.653
Apparent Specific Gravity:	2.694
Absorption, %:	0.92

**Location:** Ronoke Sand - Washed

**Complies:**  Y

**Remarks:**  
 Lab # 9064

**Reported To:** --  
**Submitted By:** Materials Testing Lab



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**Client:** NYC Dept. of Design & Construction      **Report Date:** 11/07/08      **Page 2 of 2**  
 30-30 Thomson Avenue      **Material:** Crushed Stone  
 Long Island City, NY 11101      **Supplier:** CASA

**Project:** DDC Green Concrete Design Mixes  
**Test:** Gradation, #200 Wash, Specific Gravity and Absorption of Coarse Aggregate  
**Method:** ASTM C117, ASTM C136, ASTM C127  
**Sampled By:** MTL      **On** 11/06/08      **Delivered By:** Materials Testing Lab

**Gradation, #200 Wash**

Sieve Size	% Passing #1	ASTM C33 Size #57 Specification
1 1/2"	100.0	100
1"	100.0	95-100
3/4"	91.6	-
1/2"	43.8	25-60
3/8"	20.0	-
#4	5.8	0-10
#8	3.7	0-5
#200	2.2	0-3

**Specific Gravity and Absorption of Coarse Aggregate**

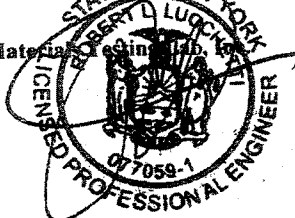
Specific Gravity (OD):	2.807
Specific Gravity (SSD):	2.825
Apparent Specific Gravity:	2.857
Absorption, %:	0.62

**Location:** Ticon Clinton Point

**Complies:**  Y

**Remarks:**  
 Lab # 9064

**Reported To:** --  
**Submitted By:** Materials Testing Lab



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SECTION 9.06 HW  
Allowance for Decorative Mesh Fabric

9.06HW.1. DESCRIPTION. Under this Section, the Contractor will be paid to furnish and install panels of breathable mesh fabric upon which art work is printed in a maximum of 4-colors, as directed by the Engineer. Each panel shall also contain metal grommets installed at a 1' maximum spacing around the perimeter of the fabric for mounting on the temporary chain link fence, 6'-0" high, (with top and bottom rails and posts mounted on steel plates) (Item No. 6.34 ACTP), unless an alternate method of mounting the fabric is proposed by the Contractor and approved by the Engineer. All art work to be printed on the fabric will be provided to the Contractor by the City.

At the completion of the work the panels shall remain the property of the City and shall be delivered to the Engineer, unless otherwise directed.

The lump sum payment made under this item shall be equal to the sum total of all invoices submitted by the Contractor, as approved by the Engineer, for furnishing and installing decorative mesh fabric materials, to the satisfaction of the Engineer, plus an allowance of 10% overhead and 10% profit.

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. No guarantee is given that the actual lump sum cost for this item will in fact be the "fixed sum" amount. The "fixed sum" amount is included in the bid solely to insure that sufficient monies will be available to pay the Contractor for this work, which may be more or less than the fixed amount. This "fixed sum" amount shall be included with the other amounts bid by the Contractor for all the other items under this contract.

The unit price shall 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
9.06 HW	ALLOWANCE FOR DECORATIVE MESH FABRIC	F.S.

## SECTION BMP-GI-4.15ES - ENGINEERED SOIL

### BMP-GI-4.15ES.1 DESCRIPTION

Under this section the contractor shall provide all labor, materials, equipment, insurance, and incidentals required for furnishing, amending (if required), placing and preparing the Engineered Soil for seeding and/or plant material as shown on the Contract Drawings and/or as directed by the Engineer.

### BMP-GI-4.15ES.2 MATERIALS

- A. Engineered Soil is an integral part of the Green Infrastructure System; as such, certification of its material properties is subject to the testing protocols of the Contractor's Quality Control (QC) plan and quality assurance testing by DDC's Quality Assurance and Construction Safety (QACS) Bureau. The QC requirements relative to Engineered Soil are detailed below. **The Contractor shall strictly comply with all requirements of his QC plan.** Sufficient lead time is required to develop an appropriate plan for mixing methodologies and ratios that will provide reliable results to meet the parameters listed below.
- B. Engineered Soil shall be a loamy sand (70-85% sand) as classified by the U.S. Department of Agriculture (USDA). Based on test results, a determination will be made to ensure that the sand fraction analysis results are capable of supporting proposed vegetation. Engineered Soil shall be free of refuse, hard clods, woody vegetation, stiff clay, construction debris (of any kind), boulders, stones larger than 1-1/2 inches, chemicals, or other deleterious material toxic to any vegetation used on this project.
- C. Engineered Soil shall have a minimum organic content of 3.0 percent and a maximum of 6.0 percent. If the source soil requires amendment to meet the Engineered Soil organic content requirement, leaf compost will be the only approved admixture. No soil mixing shall be permitted during or after Engineered Soil placement. Engineered Soil shall be tested for compliance with Contract specifications and submitted for approval prior to delivery to the site.
- D. The organic content of soils shall be determined by a laboratory using the loss on ignition method as described in the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.*
- E. The gradation of Engineered Soil shall be determined by a laboratory using the methods of the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0; November 2004.* The gradation of the Engineered Soil as determined by USDA classifications shall be within the following ranges:

Ranges:	<u>0-08% gravel</u>
	<u>70-85% sand</u>
	<u>10-15% silt</u>
	<u>5- 15% clay</u>

Classification/sieve size:	<u>2" to 2.0 mm</u>	<u>gravel</u>
	<u>2.0 mm to 0.05 mm</u>	<u>sand</u>
	<u>0.05 mm to 0.002 mm</u>	<u>silt</u>
	<u>&lt;0.002 mm</u>	<u>clay</u>

In addition to the above gradation the Contractor shall provide the percentage of particle sizes corresponding to U.S.D.A. classifications:

- Very coarse sand (2.0 mm to 1.0 mm)
- Coarse sand (1.0 to 0.5 mm)
- Medium sand (0.5 mm to 0.25 mm)
- Fine sand (0.25 to 0.1 mm)
- Very fine sand (0.1 to 0.05 mm)
- Silt (0.05 to 0.002 mm) Clay (<0.002 mm)

- F. The pH value of Engineered Soil shall be (5-7.0) as determined by an approved laboratory using soil pH (Water (1:1. V:V)) procedures as described in the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004*. Amendment of soil to lower pH to meet Contract requirements is not permitted.
- G. The soluble salt value of the Engineered Soil shall be (0-4mmhos cm<sup>-1</sup>) as determined by an approved laboratory using the soluble salt (1:2(V:V)) procedures as described in the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest*.
- H. The value for Kjeldahl Nitrogen shall be as outlined below as determined by an approved laboratory using the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.,, November 2004*.
 

Kjeldahl N	Acceptable range is 0.06% to 0.25% (with nitrate (NO-3) form of nitrogen not to exceed 20 ppm)
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- I. The value for Macro (P, K) and Micro Nutrients (Mg, Ca, Mn, Zn, Cu and B) shall be as outlined below as determined by an approved laboratory using the procedures as described in the "Recommended Soil Testing Procedures for The Northeastern United States, 3<sup>rd</sup> Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest".

P	Acceptable range is 80 lbs/acre to 100 lbs/acre
K	Acceptable range is 100 lbs/acre to 300 lbs/acre
Ca	Acceptable range is 900 lbs/acre to 2,800 lbs/acre
Mg	Acceptable range is 300 lbs/acre to 600 lbs/acre
K+Ca+Mg	not greater than 3,700 lbs./acre*
Mn	Acceptable range is 2 ppm to 20 ppm
B	Acceptable range is 0.8 ppm to 3 ppm
Cu	Acceptable range is 0.1 ppm to 4.0 ppm
Z	Acceptable range is 1 ppm to 12 ppm
% Organic	3.0% to 6% (loss on ignition)

- J. An acid-producing soil test is required to determine the potential for decreases in soil pH after oxidation. The pH value of the solution shall be greater than 4.5 as determined by the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004*.
- K. Engineered Soil shall not contain any traces of hydrocarbons, petroleum products, chemically prohibited substances or any other elements considered to be toxic to any vegetation used on this Project. The Engineered Soil shall not smell of petroleum or give off other unnatural or toxic odors. Regardless of prior acceptance of sample material should the Engineered Soil delivered to the site seem suspicious in any way; the Resident Engineer shall reject the material. Should the Contractor strongly disagreed with the Resident Engineers' Determination, the Contractor may appeal. According to the following APPEAL PROCESS:

**APPEAL PROCESS:** The Engineer shall check for discoloration and evidence of unacceptable contents. If the Engineer and/or Project Manager suspects that the fill possesses hazardous or contaminated characteristics, it will be rejected. Should the Contractor contest the Engineer's or Project Manager's determination, then samplings of the rejected soil will be sent to a Laboratory which is certified by the NYSDOH Environmental Laboratory Accreditation Program (E.L.A.P.) for the selected analytical method.

Environmental Analysis shall include, but not be limited to, U.S.E.P.A. Standard Test Methods for determination of Contaminant Concentrations and the Toxicity Characteristic Leaching Procedure (T.C.L.P.) for determination of Leachability of at least 39 Components. The extraction portion of the T.C.L.P. Test shall be performed according to E.P.A.-SW846 Method 1311. Analysis of the extract shall be performed by E.P.A. Methods SW846; 8021 for Volatiles, 8270 for Semi-Volatiles and 6010 for Priority Pollutant Metals (P.P.L.), including lead. Other characteristic tests may include those for ignitability, corrosivity, and reactivity, as deemed required by the Engineer and/or Project Manager.

The Test Results shall be compared with Guidance Values developed by the NYSDEC Division of Spills Management, known as "Spill Technology And Remediation Series" (S.T.A.R.S.) dated 8/92 (Reprinted 7/93), which contains criteria for determining whether petroleum-contaminated soil meets beneficial reuse conditions.

For analyses which are not included in the S.T.A.R.S. guidance, the Test Results shall be compared with Guidance Values developed by the New York State Department of Environmental Conservation (NYSDEC), Bureau of Program Management, Technology Section, for the Division of Hazardous Waste Remediation.

These N.Y.S. D.E.C. Guidance Values are known as "Recommended Soil Cleanup Objectives" or "Appendix A" (Revised 1/24/94), and consist of Table 1 for V.O.C.'s, Table 2 for Semi-V.O.C.s, Table 3 for Organic Pesticides/Herbicides and P.C.B.'s, and Table 4 for Heavy Metal. Final values shall be determined by either a health-based level, or a concentration necessary to protect groundwater quality, whichever is lower. If the soil fails, then the Contractor shall be responsible for:

- 1) Payment of fees for services of the N.Y. State certified lab,
- 2) Removal and legal disposal of Fill,
- 3) Replacement with acceptable fill and
- 4) All other expenses, as well as potential fines that may be incurred.

**BMP-GI-4.15ES.3 METHODS**

- A. **REFERENCE STANDARDS:** Recommended Soil Testing Procedures for The Northeastern United States, 3<sup>rd</sup> Edition, Northeast Regional Publication, Agricultural Experiment Station - University of Delaware - Bulletin #493, Revised October 2009 or latest. As well as the USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004.
- B. **SUBMITTALS:** Prior to the procurement of Engineered Soil, the following information and samples are required for review and approval for each source:
1. Proposed material source and vendor.
  2. A sample of the proposed material, taken with a representative of the Department, indicating the method of sampling and location of the sample.
  3. The Contractor shall submit to the Engineer the name and location of the borrow (source) or stockpile site(s) and the estimated quantity of material available. The Contractor shall provide a notarized letter from the owner(s) of the proposed borrow site and/or stockpile site(s) indicating ownership of the proposed site(s) and a commitment to supply a specified minimum quantity of material for this project. Additionally, the supplier shall provide a certificate of clean fill and/or source materials for topsoil, signed by a NYS licensed PE/RLA or RA. To avoid delays in planting and seeding, the Contractor shall immediately begin to secure and test Engineered Soil at least one month in advance of the material actually being needed on site. This will allow sufficient time to blend the specified soil mix and make all the necessary adjustments in the mixing process.
  4. Results of the organic content analyses conducted in accordance with the above referenced standard, *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.*
  5. Results of the USDA soil texture gradation (sand, silt and clay) analyses and sand sieve analyses, with full reporting of all information in USDA sieve sizes, in accordance with the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004.*
  6. Results of the pH tests conducted in accordance with the above referenced standard, *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004.*
  7. Results of the soluble salts test conducted in accordance with the above referenced standard, *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.*
  8. Results of the Nutrient analyses test conducted in accordance with the above referenced standard, *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.*

9. Results of the Inorganic nitrogen and total Kjeldahl nitrogen tests conducted in accordance with the above referenced standard, *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004*.
10. Results of the acid-producing (iron sulfide) test conducted in accordance with the methodologies utilized by the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004*.

NOTE: Due to the agricultural nature of some of the Quality Control testing the Contractor is notified that both Rutgers University and Cornell University can perform nearly all agricultural testing required, one exception may be the acid-producing test. Turn around times for results may vary from standard soils testing. However, all agricultural testing procedures must be performed in accordance with the above referenced standards and the *USDA Soil Survey Laboratory Methods Manual (No. 42, November 2004)* and the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest*. If another lab is proposed, the Contractor can submit written certification from the proposed lab certifying that the lab will utilize the same methodologies for soil testing as outlined in these specifications.

C. **ADDITIONAL TESTING:** As delivery of Engineered Soil to the site progresses, the following additional testing shall be conducted by the Contractor on the Engineered Soil brought to the site. Frequency of testing is one for every 50 CY delivered. Results of tests shall be submitted to Engineer for review and approval.

1. Organic Content Testing in accordance with the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest*.
2. pH testing in accordance with *the USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004*.
3. Soluble Salts testing in accordance with the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest*.
4. Results of the Nutrient analyses test conducted in accordance with the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest*.
5. Results of the Inorganic nitrogen and total Kjeldahl nitrogen tests conducted in accordance with the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004*.
6. Results of the USDA soil texture gradation (sand, silt and clay) analyses and sand sieve analyses, with full reporting of all information in USDA sieve sizes, in accordance with the with *the USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004*.

7. Results of the acid-producing (iron sulfide) test conducted in accordance with the methodologies utilized by the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0; November 2004.*
- D. The Contractor shall submit to Engineer the materials and procedures for amending soil, if appropriate. Amendment of soil is only permitted to meet the nutrient and organic requirements of the specifications. Nutrient modifications are only permitted through the use of the approved contract specified organic fertilizer and the organic amendment permitted is leaf compost, no other organic amendment is permitted.
- E. The Contractor shall submit quantity records on a weekly basis to Engineer.
- F. Material failing the frequency testing shall not be incorporated into the work and shall be removed from the site at the Contractor expense.

G. EXECUTION

1. Prior to procurement of Engineered Soil and starting delivery of soil, all approvals for those items required in Section entitled "SUBMITTALS" must have been given in writing to and accepted by the Engineer.
2. Prior to the placement of Engineered Soil, the subgrade must be accepted by the Engineer.
3. Engineered Soil shall be evenly placed to the thickness and configuration as directed by the Engineer or as shown on the plans. Engineered Soil shall not be placed when the subgrade or Engineered Soil is frozen, excessively wet, extremely dry, or in a condition otherwise detrimental to the proposed seeding, planting or soil structure.
4. The material delivered to the site shall be visually and continuously inspected by the Engineer during construction to ensure that it is consistently the same material previously approved and delivered to the site. If any foreign or off odors are detected, the Engineers reserves the right to refuse the material. If changes in material occur, soil delivery shall cease immediately, the Contractor shall not incorporate the new material into the work until the material meets these specifications. The Contractor shall test the new material as a new source and submit his results to the Engineer for his approval. If Engineer rejects the material, the Contractor shall immediately remove the material off the project site at no additional cost to the City. [See BMP-GI-4.15ES.2 MATERIALS, Subsection "K"].
5. Placement of Engineered Soil shall be performed only when it can be followed within five (5) days by planting or seeding. After Engineered Soil placement and final grading, no heavy equipment, pickup trucks, or other construction vehicles shall be permitted to travel on these completed areas. The Contractor shall, through mechanical raking and hand grading with rakes and shovels, grade all areas around fences, pipes and other structures in preparation for seeding or planting.
6. The Contractor shall, as part of the Engineered Soil spreading operation, mechanically rake and clean all undesirable materials from the Engineered Soil prior to planting operations.
7. The Contractor shall dispose of all undesirable materials raked from the Engineered Soil, in accordance with the Specific Provisions.



8. The Contractor shall pay all costs, fees, etc. to rectify any deficiencies in placement of the Engineered Soil layer, to the acceptance of the Engineer.

**BMP-GI-4.15ES.4 MEASUREMENT**

The quantity of Engineered Soil to be measured for payment under this item shall be the number of cubic yards of Engineered Soil actually incorporated in the finished work, measured in trucks used for delivery at the proposed site(s), in accordance with the plans and specifications, and to the satisfaction of the Engineer.

**BMP-GI-4.15ES.5 PRICE TO COVER**

The unit price bid per cubic yard of Engineered Soil shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals required to furnish and incorporate the Engineered Soil in full compliance with the requirements of the specifications and shall include, but not limited to, testing of materials and furnishing such samples for testing as may be required; all in accordance with the plans, the specifications, and directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
BMP-GI-4.15ES	ENGINEERED SOIL	C.Y.

**SECTION BMP-GI-4.16BS  
PLANTING TREES IN BIOSWALE**

**BMP-GI-4.16BS.1 DESCRIPTION**

Provide all labor, materials, equipment, insurance, and incidentals required for the furnishing and planting of trees, and maintenance, as specified, including all incidental and appurtenant work required for a complete job.

**BMP-GI-4.16BS.2 SUBMITTALS**

- A. Soil amendments shall be thoroughly mixed by approved methods. The soil around each plant shall be thoroughly saturated with water upon planting. Subsequent watering and weeding shall be provided under the requirements of Section BMP-GI-4.20WW at no additional cost.
- B. Submit a complete materials list (e.g., trees, mulch, cedar stakes, shrubs, etc.) of items to be provided under this section, for review by the Engineer or representative before the purchase or use of any such material. Before digging the pits, the Contractor shall submit, for approval, his method of soil preparation and planting to perform the work shown on the plans
- C. Method of Work: Submit a list of proposed methods of execution of work under this section for review by the Engineer when proposed methods are different from, or supplementary to, those specified herein.
- D. The Contractor must submit the following information to the Engineer immediately following the Notice to Proceed:
  - 1. Subcontractor(s): The name of a Landscaping Contractor, acceptable to the Engineer, who will be performing all landscaping work (seeding and woody plant material). The proposed subcontractor will be evaluated on the following criteria:
    - a. Prior satisfactory experience in the installation of Green Infrastructure Systems.
    - b. Demonstrated capacity to accomplish the work in the time allotted. Qualifications of the Contractor's arborist, certified by the International Society of Arboriculture (ISA), who shall be required to be present on site while landscaping work is in progress.
    - c. Landscaping experience with other agencies, such as the Department of Environmental Protection (DEP) and the New York City Department of Parks and Recreation. Provide references and a specific contact person.
    - d. Membership with appropriate ecological restoration organizations.
    - e. Other references or experience deemed appropriate to obtaining approval.
    - f. The following is required prior to the start of landscaping work:
      - 1) List of all materials and certificates specified within this item.
      - 2) Schedule/Methods of Operation/Maintenance Plan (which is up to the end of maintenance period as mentioned in the Section 5.05(C) of the Standard Highway Specifications).
      - 3) List of all equipment to be used.

**BMP-GI-4.16BS.3 REFERENCE STANDARDS**

- A. American Association of Nurserymen, Inc. (American National Standards Institute) Nursery Stock (ANSIZ60. 1-latest edition)
- B. Manual of Vascular Plants of the Northeast United States and Canada, Gleason and Cronquist, 1991
- C. A Checklist of New York State Plants, Contributions to a Flora of New York State, Checklist III, Bull. # 458, Richard S. Mitchell, State Botanist, New York State Museum, 1986.

**BMP-GI-4.16BS.4 QUALITY CONTROL:**

A. SOURCES

- 1. Primary Source. All trees shall be nursery grown and shall have been grown under the same climate conditions as those occurring in New York City for at least two (2) years prior to date of contract. The Contractor shall submit written verification from the nurseries on their letterhead (submittals on contractor letterhead will be rejected), certifying the collection location of plant specie seed sources and cuttings (when applicable) for all plant material used on this project. However, a reasonable effort shall be made to obtain sources of plants as close to the planting site as possible. In addition, all plants must have been grown within the 6a to 7a, inclusive, USDA Plant Hardiness Zones as that of the planting site. No substitutions of specified plants will be accepted without the written permission of Engineer.
- 2. Ship landscape materials with certificates of inspection when required by governmental authorities. Comply with governing regulations applicable to landscape materials.
- 3. Nurseries that collect plants from the wild will be rejected.
- 4. If specified landscape material is not obtainable, submit proof of non-availability, with written proposal for use of equivalent material to Engineer.
- 5. The Contractor shall provide trees of quantity, size, genus, species shown and scheduled for landscape work and complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock" as referenced above (e.g., container size, plant height, number of stems, etc.). The Contractor shall provide healthy, vigorous stock, grown by a professional nursery in accordance with good horticultural practices and free of diseases, insects, eggs, larvae and defects including, but not limited to, knots, sun-scald, injuries, abrasions, or disfigurement.
- 6. All plants furnished under this Item shall be true to name. Plant names shall agree with the nomenclature of "Manual of Vascular Plants of the Northeast United States and Canada," Gleason and Cronquist, 1991. Size and grading shall conform to those of the American Association of Nurserymen.

B. INSPECTION OF PLANT MATERIAL AT NURSERY

1. The Engineer or his representative shall inspect all plant material used on this project at the place of growth before planting, for compliance with requirements for genus, species, variety, size and quality. The Contractor shall be responsible for all inspection costs beyond a 50-mile radius from the planting Site.
2. The Engineer or his representative retains the right to further inspect all plant material for size and condition of root system, insects, injuries and latent defects, and to reject unsatisfactory or defective material anytime during the progress of work. The Contractor shall remove rejected plant material from the project site immediately upon notification without compensation.
3. Only tagged samples of plant material shall be delivered to the site and planted in locations approved by the Engineer or representative.
4. The Contractor shall be responsible for all certificates of inspection of plant materials that may be required by Federal, State or other authorities to accompany each shipment of plants and on arrival, the certificates shall be filed with the Engineer.

**BMP-GI-4.16BS.5 PLANT MATERIALS**

- A. Plant material shall be as shown on the Tree Planting Schedule as shown on the Contract Drawings. Where applicable, the Contractor shall provide freshly dug plant material. Cold storage or previously dug plants will not be acceptable. The Contractor shall not prune prior to delivery unless otherwise directed and approved by the Engineer or representative. Plants that are pruned without authorization from the Engineer will be rejected. Plant material shall be delivered to the site in such a manner as to not damage the bark, break branches, or destroy the natural shape of the plant. To protect plant material from desiccation, the Contractor shall when deemed appropriate and only on appropriate plant material, apply an approved anti-desiccant 48 hours prior to transporting and fully cover plant material during transportation to the planting site. Plant material shall not be dropped or in any way be mishandled during unloading. Plants damaged during transportation to the site will be immediately rejected. Unacceptable conditions shall include, but not be limited to, the following: loose burlap or rope, soil spilling from B&B or containers, plants that move independently of root ball or container, soil missing from B&B or containers, and irregularly shaped root balls.

- B. **ASIAN LONGHORNED BEETLE QUARANTINE ZONE REGULATIONS:** Due to current Federal, State and NYC DPR policy, the following host species may not be planted in the quarantine zone. Host species are as follows: Acer-Maple, Aesculus-Horsechestnut/Buckeye, Salix-Willow, Betula-Birch, Populus-Poplar, Ulmus-Elm, Albiza-Mimosa/Silk Tree, Celtis-Hackberry, Fraxinus-Ash, Platanus-London Planetree, Sycamore, Sorbus-Mountain Ash.

In addition, Nurseries located within the quarantine zone shall comply with State and Federal Law and all Contractors and/or Subcontractors shall be Certified by the New York State Department of Agriculture and Markets to perform work within the Quarantine Zone. For additional information, including the extent of the quarantine zone, see the NYC Department of Transportation, Standard Highway Specifications, General Conditions, Subsection 1.06.23.(R), "PLANT PEST CONTROL REQUIREMENTS".

**BMP-GA-4.16BS.6****METHODS**

- A. Plants shall be delivered only when preparations for planting have been completed and plants can immediately be installed. If planting is delayed for more than six hours after delivery, set plant material in shade, protect from mechanical damage and keep roots moist by covering with mulch, burlap or other acceptable means of retaining moisture, watering as necessary.
- B. All plants shall be subject to inspection and approval by the Engineer. Plants required for the work will be inspected and tagged at the place of growth before being dug. The Contractor shall be responsible for all costs related to inspection of plant material by the Engineer beyond a radius of 50 miles from New York City. Selection and/or tagging of material shall cover the type and quality of the plant only, but shall not constitute final acceptance nor preclude the right of rejecting plants not fully meeting the requirements of the specifications. No plant material shall be accepted without prior nomenclature labeling at the nursery of origin. The nursery label must display the full botanical name of the plant.
- C. Cultivars or varieties are not acceptable and written verification from the nurseries certifying this requirement will be required on all plant material. The Contractor should only consider straight species when ordering plant material.
- D. Each shipment of plants must be declared and certified free of diseases of any kind with such necessary inspection certificates accompanying each shipment.
- E. All nursery stock furnished by the Contractor shall be subject to inspection within 48-hours after delivery of said stock. The plants shall also be subject to such inspection during the life of the Contract, and infestations occurring on the stock as a result of conditions existing prior to the receipt of the plants on the project shall be cause for rejection.

**F. TIME OF PLANTING AND TRANSPLANTING**

- 1. The time of planting is subject to the type and size of the material, method of planting and approved planting schedule. The Contractor shall furnish a certification from the nursery regarding the date of digging for all applicable plant material.
- 2. Unless otherwise directed by the Engineer in writing, evergreen plant material shall be planted and transplanted from April 1 to May 15 and September 1 to October 15. Deciduous plant material shall be planted and transplanted from March 1 to May 1 and from October 15 to December 1. Perform actual planting only when weather and soil conditions are suitable for optimal benefit to the plant. No plant material shall be planted when the ground is frozen or in excessively moist condition. Notify the Engineer at least three days (excluding weekends) in advance before proceeding with any planting operations.
  - a. No shipment of plant materials shall be unloaded or planted by the Contractor until such materials have been inspected and accepted by the Engineer, and inspection certificates, if any, have been delivered.
  - b. The Contractor shall proceed with and complete work expeditiously, working within the seasonal limitations for each kind of landscape work required.
  - c. Determine location of underground utilities and perform work in a way that shall avoid possible damage. Hand excavate, as required. The Contractor assumes responsibility for damage to underground utilities when excavating and is required to call "One Call" @ 800-272-4480 a service that marks underground facilities on the surface, prior to excavation. Maintain grade stakes set by others until removal is approved by Engineer.

However, the Contractor is advised that the provisions of 16 NYCRR Part 753 ("One Call") do not apply to City owned utilities. It shall be the Contractor's responsibility to determine the location of the City owned underground distribution systems. The Contractor shall make his own field observations and research the City's records to determine the location of such facilities before the commencement of excavation.

- d. When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions or obstructions, notify Engineer before planting.
- e. The Contractor shall furnish a certification from the nursery regarding the date of digging. All appropriate plant material shall be sprayed in the nursery within 48 hours prior to digging with an approved anti-desiccant.

**G. EXCAVATION AND PLANTING PITS**

- 1. Sizes of planting pits shall be as proposed in the Contractors approved shop drawing submittals.

**H. PLANTING OF NEW TREES**

- 1. No planting shall be done except in the presence of the Engineer. While trees with exposed roots are being distributed in planting beds or are awaiting planting after distribution, the Contractor shall protect the roots from drying out; the means employed shall be satisfactory to the Engineer. All trees shall stand, after settlement, at the same level at which they have grown. Care shall be exercised in setting the plants plumb. All ropes, stones, etc., shall be removed from the pit before backfilling. Soil for backfilling shall be loose and friable.

Planting Schedule

Deciduous	March 1 to May 1 and	October 15 to December 1
Evergreen	April 1 to May 15	September 1 to October 15

- 2. Approval of new plantings in each Bioswale will not occur until all landscaping work has been completed. The Contractor shall be responsible for maintaining all new planted trees, in accordance with the requirements of the Subsection BMP-GI-4.16BS.14.

**I. WATERING**

- 1. All plant material shall be thoroughly watered immediately after installation. Planting will not be permitted unless a water truck is on site and made available whenever the Contractor is installing plant material.

See also: SECTION BMP-GI-4.20WW

## J. ANTI-DESICCANT

1. Anti-desiccant spraying - Unless otherwise directed all trees shall be sprayed with an approved anti-desiccant (Wilt Pruf NFC or approved equivalent) using a power sprayer to apply adequate coverage, according to manufacturer's directions, over trunks, branches, twigs and foliage as directed by and in the presence of the Engineer. The Contractor is to read the product label carefully as some plant material can be injured from the application of an anti-transpirant. The material to be used shall be emulsions or other materials that will provide a protective film over plant surfaces, yet permeable enough to permit transpiration. The time of spraying shall be as follows, unless otherwise directed by the Engineer:

Deciduous: Spring planting - Apply when leaves have reached seventy-five percent (75%) of mature size.

## K. PLANT STAKING

All staking shall be done during planting operation and shall be maintained throughout the first year of the two year guarantee period. Stakes shall be of white cedar or similar wood approved by the Engineer with or without bark attached and shall show no sign of cracking or decay. Each pair of stakes used for a single tree shall consist of identical material. They shall have a maximum allowable deflection of ten percent (10%). All trees shall be supported by two (2) stakes, they shall be eight (8) feet long; the diameter at the middle shall be not less than (2) inches nor more than two and three quarters (2-3/4) inches and the diameter at the butt shall not exceed three (3) inches. Stakes shall be placed a minimum distance of fourteen (14) inches away from the trunk of the tree, taking care to stay clear of the roots, driven thirty (30) inches into the ground, and shall be fastened to the tree with a suitable length of 3/4" wide, flat, woven polypropylene material that is twisted at least three times, knotted and nailed to the stakes with 1" galvanized roofing nails as directed by the site Engineer. Unless otherwise directed, trees shall be staked as shown on the plans and in accordance with these specifications. Stakes shall be set parallel to curbs and be cut to the same height if necessary. Trees shall stand plumb after staking. Stakes, and woven polypropylene material, shall be removed at the end of the first year of the two year guarantee period, unless directed otherwise by the Project Manager. At the time the stakes are removed any holes left by the stake shall be filled with topsoil of the same quality as that specified in section BMP-GI-4.15ES.

## L. LANDSCAPE GUARANTEE AND REPLACEMENTS

1. All landscaping work shall have upon planting or transplanting a maintenance period as mentioned in the Section 5.05(C) of the Standard Highway Specifications. Contractor shall request in writing an inspection of all landscaping work when completed to begin the maintenance and guarantee period.
2. Plant material found to be unsatisfactory or in poor condition at the inspection shall be removed and replaced at the appropriate planting season for that type of plant material. No payment will be made for plant material found to be unacceptable during this inspection.
3. The Contractor shall submit, in writing, any conditions or species which he feels may be questionable prior to ordering said plants. If he is agreeable, the Engineer will substitute recommended species or address the conditions deemed unsuitable. However, upon ordering a plant and installing it, the Contractor accepts the responsibility for guaranteeing the plant's survival. There shall be no exception.

4. During the guarantee period, any plant material that is dead or not showing satisfactory growth, as determined by the Engineer, shall be promptly removed and replaced by the Contractor during the appropriate planting season for that type of plant material as determined by these specifications. The replacement shall be of the same variety, size and character as specified for the original planting and continue to be under the same maintenance and guarantee. That is, they shall be subject to replacement again up to the end of the maintenance period (as mentioned in the Section 5.05(C) of the Standard Highway Specifications) of this project from date of planting or transplanting of each plant. The Engineer or representative shall be the sole judge as to the condition of the plants. The guarantee and maintenance applies to all planted areas.
5. Unless a written waiver of this clause is issued, under the terms of the guarantee, replacement plants shall be chosen only by the Engineer.

#### **M. MAINTENANCE**

1. The Contractor for the remaining period of the project shall thoroughly remove all weeds from planted areas, spray (with approved Fungicide, Insecticide and Herbicide) for diseases, insects and weeds as directed, prune dead wood from all trees and shrubs as directed, and any other recognized beneficial horticultural practice, to the satisfaction of the Engineer and as is required to properly establish the newly planted material.
2. Removal of competing weeds will be required as directed by the Engineer and will be strictly enforced. Removal of weeds may be done chemically (e.g. Round-Up, or Rodeo) only when applied by a New York State licensed applicator, at the most effective eradication time for the target weed species and when spraying will not injure contract specified vegetation. Adjacent areas could contain a high weed content and may also need to be sprayed or hand removed to prevent colonization of planted areas.
3. The Contractor shall submit for review, a detailed written landscape maintenance schedule covering maintenance period remaining of this project, prior to the start of work. Planting shall not proceed until this schedule has been reviewed and approved by the Engineer.

#### **BMP-GI-4.16BS.12 MEASUREMENT**

Only plants found to be in compliance with the Specifications will be considered for payment. No extra payment will be made for tree sitting, excavation of planting holes, staking materials, or installation, mulch, or initial watering during the planting operation.

#### **BMP-GI-4.16BS.13 PRICE TO COVER**

The unit price bid for PLANTING NEW TREES (IN BIOSWALE) shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to plant new trees, and shall include, but not limited to,



maintenance required, in full compliance with the requirements of the specifications; all in accordance with the plans, the specifications and directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
BMP-GI-4.16BS	PLANTING NEW TREES (IN BIOSWALE)	EACH

**SECTION BMP-GI-4.20WW - (NOT A PAY ITEM)  
 MAINTENANCE OF RIGHT OF WAY BIOSWALES AND OTHER GREEN  
 INFRASTRUCTURE WITH PLANTING BEDS**

A. DESCRIPTION OF WORK

Maintenance Period:

The Contractor shall provide all labor, material, insurance, tools, and equipment necessary to maintain and cultivate the healthy growth of all plantings in the planted area after installation, in accordance with the specifications and contract drawings during the maintenance period of the project. For the purposes of this item, the maintenance period shall begin after the completion of planting, and terminate at the completion of the maintenance period. No separate payment will be made for watering, weeding and upkeep during the maintenance period, and such work will be deemed included in the bid for Plant Material item herein Sections BMP-GI-4.16BS, and BMP-GI-PK35-54.

B. REQUIREMENTS

The Contractor's responsibilities under this section consists of watering, weeding and general upkeep of the Green Infrastructure after installation as required to maintain installed plant material in a healthy and vigorous condition free of trash and other debris as well as maintaining intended water flows in the specified Engineered Soil, in accordance with the specifications and Contract Drawings.

Watering shall take place at one-week intervals from May 1 through October 31, for a total of twenty-seven (27) waterings per year or a total of fifty-four (54) waterings for the 2-year guarantee period. Each week, the individual plants shall receive the following volume of water:

PLANT SIZE	VOLUME OF WATER (gallons)
# 1 container	2
# 2 container	2.5
# 3 container	3
# 7 container	6
1" - 2" caliper	18
2" - 3" caliper	30

This is the maximum amount of water to be applied each week. The Engineer may order less watering based on weather and soil conditions.

Watering shall not be done for any given week if soil is saturated from recent rains or snowmelt. During extended dry periods, the Engineer may order more frequent watering than scheduled or during non-scheduled periods. However, the total number of 54 watering cycles will not be exceeded.

Watering shall be applied in such a manner as to not damage plants or remove wood chip mulch and stakes. Watering shall not cause the uprooting or the exposure of plant roots. Damage resulting from improper watering shall be immediately repaired at the Contractor's expense.

The Contractor's Landscape Subcontractor shall submit a watering and weeding plan and maintenance schedule prior to the installation of plant material, to be approved by the Engineer.

The plan shall include proposed methods of watering and weeding, including but not limited to the use of tree gators (bags), sprinklers, drip hoses, irrigation, tanker vehicles and hand watering, etc., as well as manual weeding and weeding tools.

The approved plan and schedule do not relieve the Contractor in any way from any aspect of the replacement of dead plant material. The Contractor's Landscape Subcontractor may alter the maintenance schedule based on weather and field conditions.

Horticultural Maintenance shall consist of the weeding, removal of litter and general maintenance and replacement of plant material.

Green Infrastructural Maintenance shall consist of cleaning out and disposing of sediment from inlet and outlet structures and weep holes (if any) as necessary to allow water to move freely in and out of the site. Layers of mulch (if any) and stone in or around the inlet, storm water flow path and ponding areas may require removal and replacement as deemed necessary by the Engineer, just prior to the end of the contract maintenance period. This work should be performed during a time when the soil is dry, using a flat-bottomed shovel.

Maintenance should occur at a minimum of once per month and as needed following significant rainfall events. Visually inspect the site for erosion, including inlet and outlet structures, embankments, and side slopes. Symptoms of erosion can include erosive gullies or areas of bare soil. Remove any litter directly covering and immediately upstream or downstream of inlets and outlets so that the drainage path is clear. The top of the mulch (if any) should be at least two inches below the lowest point of the inlet/outlet to minimize blockage.

C. MEASUREMENT AND PAYMENT

NO SEPARATE PAYMENT will be made for watering and weeding during the maintenance periods. Such work will be deemed included in the planting bid items.

## SECTION BMP-GI-59.28V - HDPE BARRIER

### BMP-GI-59.28V.1. DESCRIPTION

Under this section, the Contractor shall furnish and install a HDPE BARRIER consisting of High Density Polyethylene (HDPE) Geomembrane sheets not less than 60 mil thickness, meeting or exceeding Geosynthetic Research Institute (GRI) Test Method GM13. The purpose of the HDPE Barrier is to provide an impermeable layer which does not allow water to pass through it. The HDPE barrier shall be installed where required, as shown on drawings and in accordance with the specifications and the directions of the Engineer.

### BMP-GI-59.28V.2. MATERIALS

HDPE Geomembrane sheets supplied for the project shall meet or exceed all required physical characteristics as defined below:

- i. HDPE Geomembrane  
High quality, high density polyethylene (HDPE) geomembrane specially formulated with virgin formulated polyethylene.
- ii. Thickness  
Thickness shall not be less than (minimum average) 60 mil, measured in accordance with ASTM D5199.
- iii. Density  
The Density shall not be less than 59 lb/ft<sup>3</sup>, measured in accordance with ASTM D1505.
- iv. Tear resistance  
Tear resistance shall not be less than 40 lb., measured in accordance with ASTM D1004.
- v. Puncture Resistance  
Puncture Resistance shall not be less than 100 lb., measured in accordance with ASTM D4833.
- vi. The HDPE Barrier shall be strong enough to resist both rot and insects.

### BMP-GI-59.28V.3. SUBMITTALS

The Contractor, prior to the start of work, shall submit to the Engineer for approval samples of the geomembrane in accordance with the requirements of Section 1.06.31, in the NYCDOT Standard Highway Specifications:

#### Test Reports

Certified material test reports showing that the geomembrane meet the specified requirements shall be submitted for each shipment and identified with specific lots prior to installing materials. Material test reports shall meet the requirements of ASTM and GRI test method GRI GM 13.

The manufacturer shall submit certified test data to cover each shipment of the material.

**BMP-GI-59.28V.4 METHOD.**

(A) Delivery, Storage and Handling:

1. Delivery: Deliver materials to site in manufacturer's original, unopened packaging, with labels clearly identifying product name and manufacturer.
2. Storage: Store materials in clean, dry area in accordance with manufacturer's instructions.
3. Handling: Protect materials during handling and installation to prevent damage.

(B) Excavation:

1. Prior to the installation of the HDPE Barrier, the Contractor shall excavate the Bioswale area under the appropriately scheduled items, to the satisfaction of the Engineer.

(C) Installation:

1. Install HDPE Barrier at locations indicated on the Drawings.
2. The HDPE Barrier shall be placed in one piece directly on the vertical face of the excavation. No splicing will be permitted.
3. No equipment, materials or machinery shall be placed on or be transported over exposed HDPE Barrier.
4. HDPE Barrier shall be placed as shown on the plans and as directed by the Engineer. Care shall be taken in the placement of backfill under other items so as to prevent dislocation of the HDPE Barrier. If the HDPE Barrier is ruptured during installation, the rupture shall be covered with a patch of new HDPE Barrier that will overlap the undamaged area by at least six (6") inches in all directions. No additional payment will be made for the repair.

**BMP-GI-59.28V.5. MEASUREMENT.** The quantity to be measured for payment shall be the number of square feet of HDPE Barrier installed to the satisfaction of the Engineer. Measurement shall be made to the nearest square foot installed at each bioswale.

**BMP-GI-59.28V.6. PRICE TO COVER.** The contract price for HDPE Barrier shall be a unit price bid per square foot and shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to furnish, handle, store, and install HDPE Barrier sheets, including but not limited to cutting holes in the sheets for utilities; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
BMP-GI-59.28V	HDPE BARRIER	S.F

## SECTION BMP-GI-6.18TG - STEEL TREE PIT GUARDS

### BMP-GI-6.18TG.1 DESCRIPTION

Under these items, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals necessary to furnish and erect STEEL TREE PIT GUARDS of the types and sizes shown on the Contract Drawings; all in accordance with the plans, the specifications, and directions of the Engineer.

### BMP-GI-6.18TG.2 MATERIALS

#### A. MATERIAL

Steel Tree Pit Guards shall be constructed of bars, posts, and rails of the sizes shown on the plans. All material shall conform to Specifications C1015 of the A.I.S.I.

#### B. FABRICATION

Steel Tree Pit Guards shall be fabricated in strict accordance with the plans and approved shop drawings. Posts, pickets, bars, and rails shall be formed into panels of the shapes shown on the Contract Drawings. Joints shall be completely welded with welds of proper size and shape. All welds shall be ground smooth to a neat finish. Connections shall be provided as indicated on the plans. Welding shall conform to current industry requirements for this type of application.

Posts and pickets shall, in all cases, be truly vertical. Rails and bars shall be parallel to grade as shown on the Contract Drawings. Panels shall be curved as required by the work. Dimensions of individual tree pit guards may vary as required by existing site conditions, in accordance with the directions of the Engineer.

#### C. PAINTING

Steel tree pit guards shall receive three (3) shop applied coats of paint. A field applied touch-up coat shall be applied at the discretion of the Engineer. Immediately prior to painting, all surfaces of framework shall be thoroughly cleaned free of debris. All surfaces that are rust free shall be treated in accordance with SP-1, Solvent Cleaning. Treatment shall be performed with a solvent such as mineral spirits, xylol, or turpentine to remove all dirt, grease, and foreign matter. Surfaces that show evidence of scale and rust shall be cleaned in accordance with SP-2, Hand Tool Cleaning, a method generally confined to wire brushes, sandpaper, hand scrapers, or hand impact tools or SP-3, Power Tool Cleaning, a method generally confined to power wire brushes, impact tools, power sanders, and grinders in order to achieve a sound substrate. After the steel tree pit guards have been cleaned and prepared, they shall be painted as follows:

First Coat (Shop Applied): Sherwin Williams # E41N1 Metal Primer, Brown, or approved equivalent. Primer is an alkyd oil, flat finish coating having a dry film thickness of 3 to 4 mils. Paint requires twenty four (24) hours drying time before recoating. Performance shall meet or exceed the standards of Federal Specification TT-P-86H.

Second Coat (Shop Applied): Sherwin Williams High Solids Alkyd Metal Primer, B50 Series, Reddish Brown, or approved equivalent. Primer is an alkyd, low luster coating having a dry film thickness of 3-5 mils. Paint requires four (4) hours drying time before recoating (with alkyds)

Third Coat (Shop Applied): Sherwin Williams Silicone Alkyd Low VOC B56Z Black, or approved equivalent. Topcoat is a silicon alkyd, high gloss coating having a dry film thickness of 2 -4 mils. Paint requires sixteen (16) hours drying time @ 45° F; eight (8) hours @ 77° F. (tack free)

Alternative paint manufacturers shall be Devoe and Reynolds, Co.; Pratt and Lambert, Inc.; Pittsburgh Plate Glass Company; Sapolin; or an approved equivalent. All paints used shall be compatible and the product of the same manufacturer.

All paints shall be applied when ambient air temperature is forty-five (45) degrees F. and rising and when surfaces to be painted are moisture free. No painting will be allowed below the minimum ambient air temperature. In addition, no painting will be allowed below the temperature at which moisture will condense on surfaces. Refer to the Dew Point Chart at the end of this section to find the minimum allowed moisture free temperature.

a. Paint Substitution: A written request for paint substitution must be submitted to the Engineer for approval. Contractor shall submit this request, along with manufacturer's data sheets for approval, a minimum of two weeks prior to the intended date of paint application. All paint substitutes must be approved in writing prior to use.

**DEW POINT CALCULATION CHART (FAHRENHEIT)**  
AT 30 HG BAROMETRIC PRESSURE

		Ambient Air Temperature °F										
		20	30	40	50	60	70	80	90	100	110	120
% Relative Humidity	90	18	28	37	47	57	67	77	87	97	107	117
	85	17	26	36	45	55	65	75	84	95	104	113
	80	16	25	34	44	54	63	73	82	93	102	110
	75	15	24	33	42	52	62	71	80	91	100	108
	70	13	22	31	40	50	60	68	78	88	96	105
	65	12	20	29	38	47	57	66	76	85	93	103
	60	11	19	27	36	45	55	64	73	83	92	101
	55	9	17	25	34	43	53	61	70	80	89	98
	50	6	15	23	31	40	50	59	67	77	86	94
	45	4	13	21	29	37	47	56	64	73	82	91
	40	1	11	18	26	35	43	52	61	69	78	87
	35	-2	8	16	23	31	40	48	57	65	74	83
	30	-6	4	13	20	28	36	44	52	61	69	77

**DewPoint:** The temperature at which moisture will condense on the surface. No coatings should be applied unless the surface temperature is a minimum of 5°F above this point. Temperature must be maintained during curing.

**Example:** If air temperature is 70°F and relative humidity is 65%, the dewpoint is 57°F. No coating should be applied unless the surface temperature is 62°F minimum.

D. SUBMITTALS

The Contractor shall submit for the approval of the Engineer finished samples of parts of the tree pit guards. The workmanship and finish of the final product shall be equal to the approved samples. Also, the Contractor shall submit detailed shop drawings of tree pit guards for the approval of the Engineer.

**BMP-GI-6.18TG.3 EXECUTION**

The tree pit guards shall be erected in soil only, inside the tree pits. The posts shall be set in place and properly supported to hold them to line and grade. The lowest portion of the steel band at the bottom of all side rails set 1" above the finished grade of the sidewalk. Any guards not set plumb and true to line and grade shall be removed and replaced at the Contractor's expense.

**BMP-GI-6.18TG.4 MEASUREMENT AND PAYMENT**

The quantity of each type of STEEL TREE PIT GUARD to be measured for payment shall be the number of LINEAR FEET of tree pit guards erected, complete, in place to the satisfaction of the Engineer.

The unit price bid per LINEAR FOOT of each type of STEEL TREE PIT GUARD shall include the cost of all labor, material, equipment, insurance, and incidentals required to fabricate, furnish and erect tree pit guards including, but not limited to, painting; all in accordance with the plans, the specifications and as directed by the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
BMP-GI-6.18TG-4	STEEL TREE PIT GUARD – TYPE "A"	L.F.
BMP-GI-6.18TG-4	STEEL TREE PIT GUARD – TYPE "B"	L.F.
BMP-GI-6.18TG-4	STEEL TREE PIT GUARD – TYPE "C"	L.F.
BMP-GI-6.18TG-4	STEEL TREE PIT GUARD – TYPE "D"	L.F.



**SECTION BMP-GI-6.46S - STONE STRIP BED**  
(Not a bid item)

A. DESCRIPTION OF WORK

The Contractor shall furnish and install Stone Strip Beds consisting of Crushed Stone with edging as specified herein, shown on the Contract Drawings or required.

B. MATERIALS

Crushed stone shall conform to the NYCDOT Standard Specification Section 2.02, Type 1-Broken Stone, Grade B, and shall be washed and conform to the following gradation.

<u>Sieve Size</u>	<u>Percentage of Dry Weight</u> <u>Passing Designated Sieve Size</u>
1 1/2"	100
1"	25-50
1/2"	0-10

Edging shall consist of L shaped PVC or aluminum edge restraint product, a minimum of six (6) inches high by five (5) inches wide, in up to ten (10) foot lengths. The thickness of the material shall be a minimum of 0.15 inches. Drainage holes flush with the bottom edge shall be present on both the sides of the L shaped edging. Nine (9) inch minimum length stakes shall be installed a minimum of every two (2) feet on center. The color of the edging shall be black. Edging shall be Teco-Edg Specialty Edge Restraint manufactured by Oly Ola Edgings, Inc. in Villa Park, IL; GeoEdge Aluminum Green Building Edging manufactured by permaloc Corporation in Holland, MI; or approved equal. Submit product cut sheets as shop drawings for Engineer's approval prior to ordering the product.

C. CONSTRUCTION METHODS

Crushed stone shall be installed as per the Contract Drawings and as directed by the Engineer.

D. MEASUREMENT AND PAYMENT

No separate payments will be made for compliance with this Section. Any work required to comply with this section shall be deemed included in the unit price bid for all electrical items.

**SECTION BMP-GI-PK28 - BARK CHIP MULCH****BMP-GI-6.02.1. DESCRIPTION**

Under this item the Contractor shall furnish and place bark chip mulch in accordance with the plans, specifications, and directions of the Engineer.

**BMP-GI-6.02.2. MATERIALS**

Bark Chip Mulch shall be natural forest product of ninety eight percent (98%) bark containing less than two percent (2%) wood or other debris. It shall be of White or Red Fir and/or Pine bark of a uniform grade with no additives or any other treatment. Bark shall be shredded. The pH factor should range from 5.8 to 6.2.

The Contractor shall furnish a sample of the mulch, (two - one pound zip-lock bags labeled with Contractor's name and contract number), before starting work for approval by the Engineer. No mulch shall be delivered until the approval of samples by the Engineer, but such approval shall not constitute final acceptance. The Engineer reserves the right to reject on or after delivery any materials which do not, in his opinion, meet these specifications.

**BMP-GI-6.02.3. METHOD**

Bark Chip Mulch shall be applied as a ground cover to the surface of all beds and tree pits after the planting is completed. Mulch shall be applied to a uniform depth and shall be so distributed as to create a smooth, level cover. Mulch shall not be placed within two (2) inches of tree and shrub stems. Plants shall not be covered.

**BMP-GI-6.02.4. MEASUREMENT**

The quantity of BARK CHIP MULCH to be paid for under this item shall be the number of SQUARE YARDS actually installed at the site to the satisfaction of the Engineer.

**BMP-GI-6.02.5. PRICES TO COVER**

The price bid for BARK CHIP MULCH shall be per **SQUARE YARD** and shall include the cost of all labor, materials, equipment, insurance, and incidentals necessary to complete the work; all in accordance with the plans, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
BMP-GI-PK28	BARK CHIP MULCH	S.Y.

**SECTION BMP-GI-PK35-54  
WOODY AND HERBACEOUS BIOSWALE PLANT MATERIAL**

**A. WORK:** Under these items, the Contractor shall do all work necessary to plant the material specified in the following plant schedule in the planting beds in accordance with the plans and specifications, or as directed by the Engineer.

Work to be completed under these items shall include, but not be limited to, furnishing, planting, watering, maintaining, and replacing, as may be required, new plant material of the types and sizes designated in the following plant schedule as indicated on the Contract Drawings and on lists and all incidental work shall be completed under these items.

The Contractor shall be liable for any damages to property caused by planting operations, and all areas and construction disturbed shall be restored to their original conditions, to the satisfaction of the Engineer.

**B. NAMES:** Plant names, size, and grading standards shall conform to those prepared by the American Association of Nurserymen Horticultural Standards, 1998 Edition, unless otherwise specified. No substitution shall be permitted, except with the written permission of the Engineer in consultation with the NYC Department of Parks and Recreation's Chief of Forestry & Horticulture.

**C. ASIAN LONGHORNED BEETLE QUARANTINE ZONE REGULATIONS:** Due to current Federal, State and NYC DPR policy, the following host species may not be planted in the quarantine zone. Host species are as follows: Acer-Maple, Aesculus-Horsechestnut/Buckeye, Salix-Willow, Betula-Birch, Populus-Poplar, Ulmus-Elm, Albiza-Mimosa/Silk Tree, Celtis-Hackberry, Fraxinus-Ash, Platanus-London Planetree, Sycamore, Sorbus-Mountain Ash.

In addition, Nurseries located within the quarantine zone shall comply with State and Federal Law and all Contractors and/or Subcontractors shall be Certified by the New York State Department of Agriculture and Markets to perform work within the Quarantine Zone. For additional information, including the extent of the quarantine zone, see the NYC Department of Transportation, Standard Highway Specifications, General Conditions, Subsection 1.06.23.(R), "PLANT PEST CONTROL REQUIREMENTS".

**D. QUALITY:** All plants shall be typical of their species or variety. They shall have normal, well-developed branches and vigorous fibrous root systems. They shall be sound, healthy, vigorous plants free from defects, disfiguring knots, sun scald injuries, dead or broken branches, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation and weeds. All plant material shall be tagged by the Department of Parks and Recreation's Central Forestry, Horticulture & Natural Resources staff or the Engineer shall reject all plant materials not meeting the above specifications.

All plants shall be nursery-grown, unless otherwise stated. All shrubs shall have been growing under similar climatic conditions as the locations of this project for at least two (2) years prior to the date of the contract. Plants held in storage will be rejected if they show signs of growth during storage. Collected plants shall be taken from a subgrade favorable to good root development. All collected material shall be clean sound stock, free from decaying stumps.

Herbaceous plants, vines, and groundcover shall be vigorous healthy plants, a minimum two (2) years old, from cuttings, seed, or division, with well-developed root systems and crowns, as specified in the Plant Schedule. Bulbs, corms, tubers and rhizomes shall be firm, non-desiccated, and certified free of disease and viral infection, of the sizes, grades, and varieties indicated in the Plant Schedule.

**E. PLANT SOURCES FOR NATIVE PLANTS ONLY, WHERE APPLICABLE:** Native plant stock must be used when specified on designs and should be used whenever possible and appropriate. Native plant material must be derived from the local genotypes of the native plants specified. For purposes of this native plant material paragraph, "local" shall mean from the same climate conditions as the planting site. However, a reasonable effort shall be made to obtain sources of plant material as close to the planting site as possible. All plants must have been grown in a hardiness zone no warmer than Zone 7 or colder than Zone 5 as determined by the USDA Agricultural Research Service, Plant Hardiness Zone

Map. Plant quality shall be typical of their species. Plant material should exhibit the range of variation typical of local genotypes of the species as determined by the Engineer. They shall have normal branching and vigorous fibrous root systems. They shall be sound, healthy plants, free from sunscald injuries, or other mechanical injury, plant diseases, insect eggs, borers and all forms of infestations. All plants shall be nursery grown unless otherwise stated. Collected material will not be accepted. Except as may otherwise be specified in this native plant material paragraph, all other sections of this Plant Material specification shall also apply to the Native Plants. The native plant material, subject to availability and adherence to the requirements of this paragraph, may be purchased from the following nurseries or approved equal nurseries:

Greenbelt Native Plant Center, Staten Island, NY: 781-370-9044.

Pineland's Nursery, Columbus, NJ

Wild Earth, Freehold, NJ

Sylva Native, New Freedom, PA

**F. ORDERING PLANT MATERIALS:** The Contractor shall notify the Engineer of the unavailability of any tree, shrub, herbaceous plant, or bulb species designated in the contract, as well as provide confirmation to the Engineer of all orders from all sources of supply. Any request for species substitution due to unavailability must be submitted in writing to the Engineer, within fifteen (15) days of the award of contract. The Contractor must include the names and addresses of at least ten (10) nurseries they have contacted in an effort to locate these species, and the list shall be submitted to the Engineer. All nurseries supplying material shall be required to have a registration certificate from the Department of Agriculture and Markets, Division of Plant Industry, New York, or any other state where plant material is obtained, certifying that plant material is apparently free of injurious insects and diseases.

**G. DIMENSIONS:** A plant shall be dimensioned as it stands in its natural position. Trees up to and including four (4) inch caliper size shall be measured six (6) inches above ground level. Trees over four (4) inches in caliper size shall be measured twelve (12) inches above ground level. Stock furnished shall be a fair average of the minimum and maximum sizes specified. Larger plants cut back to sizes specified will not be accepted. Shrub sizes shall be as indicated. Rootball or container sizes shall correspond to A.A.N. Standards for the corresponding shrub height. Heavy root system, all shrubs shall be well branched to the ground. Sizes shall be as indicated. VINES, GROUNDCOVER, AND Herbaceous Plant container size shall be as indicated on the plans. All plants shall have vigorous root systems and have grown in the container for at least one year prior to planting.

Container grown herbaceous plants, groundcover, and vines shall be well rooted in the container size indicated on the Plant Schedule, grown in the container at least one year prior to planting. Bulbs, corms, tubers and rhizomes shall be Top Size, or as indicated on the Plant Schedule. Annual flowering plants shall be vigorous, well rooted, with no indications of disease or stress.

**H. PREPARATION OF PLANTS:** All precautions customary in good trade practice shall be taken in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. All plants shall be dug immediately before moving unless otherwise specified. All plants shall be dug to retain as many fibrous roots as possible. Balled and burlapped and balled and platformed plants shall have a solid ball of earth of minimum specified size, securely held in place by burlap and stout rope or twine. Oversized or exceptionally heavy plants are acceptable if the size of the ball or spread of roots is proportionately increased, to the satisfaction of the Engineer. Loose, broken, or manufactured balls will be rejected. Bare root plants shall be puddled immediately after digging by immersing the roots in a hydrogel slurry, so as to completely coat the roots.

**I. DELIVERY:** Plants shall be packed, transported, and handled with utmost care to insure adequate protection against injury. When transported in closed vehicles, plants shall receive adequate ventilation to prevent sweating. When transported in open vehicles, plants shall be protected by

taraulins or other suitable cover material. All bare root plants shall be adequately protected from drying out and immediately after inspection shall be heeled in moist soil. Balled and burlapped plants shall be set on the ground and the ball covered with soil. Until planted, all material shall be properly maintained and kept adequately moist, to the satisfaction of the Engineer.

**J. INSPECTION:** Inspection may be made before digging if the Engineer directs, but no plant material shall be planted by the Contractor until inspected by the Engineer at the site of the work. Plant material will be rejected if delivered with broken or damaged root balls, or if damaged on site by rough handling. All rejected material shall be immediately removed from the site and replaced with acceptable material at no additional cost. Final inspection shall be made upon completion of the contract.

**K. PLANT SCHEDULE**

**ABBREVIATIONS**

B & B Indicates tree or shrub to be balled and burlapped.  
 B.R. Indicates a tree or shrub to be delivered "bare root".  
 O.C. Indicates "on center" or spacing between plants in all directions.  
 Ht. Indicates overall height of tree.

Plant item numbers are listed by estimated size and / or shared similarities; they include—but shall not be limited to—the genus and species listed beneath each item.

**ITEM # BMP-GI-PK38 MEDIUM EVERGREEN SHRUB— CLASS A [24"- 30" H., #5 can]**

*Prunus laurocerasus* 'Otto Luyken', Dwarf Cherry Laurel

**ITEM # BMP-GI-PK42 MEDIUM DECIDUOUS SHRUBS – CLASS B [24"-36" H., #3 can]**

*Aronia melanocarpa* - Black Chokeberry: heavy well-branched tops

*Callicarpa americana* - Beautyberry: heavy well-branched tops

*Clethra alnifolia* 'Hummingbird', 'Sixteen Candles'- Summersweet Clethra: heavy well branched tops with at least 8 canes 24" and up.

*Cornus sericea* 'Kelsey', 'Farrow (Artic Fire)- Red Twig Dogwood : heavy, well-branched tops

*Fothergilla gardenia specia* or 'Mt. Airy' - Dwarf Fothergilla Winterberry

*Ilex verticallata* 'Southern Gentleman'(M) 'Cacapon'(F) – Winterberry: well-branched top with at least 4 canes.

*Itea virginica* 'Henry's Garnet', 'Little Henry' - Sweetspire: well-branched top with at least 4 canes.

*Rhus aromatica* 'Gro-Low' - Fragrant Sumac: well branched

*Viburnum dentatum* 'Blue Muffin', 'Little Joe'- Arrowwood Viburnum

**ITEM # BMP-GI-PK44 SMALL DECIDUOUS SHRUBS [18"-24", #3 Can]**

*Potentilla suffruticosa* 'Abbotswood', 'Goldfinger' - Shrubby Cinquefoil: spread of top 18", must have at least 4 canes 12" and up.

*Spirea japonica* 'Gold Mound' - Japanese Spirea: well-branched top with at least 4 canes 18" and up.

*Spirea nipponica* 'Snowmound', Snowmound Nippon Spirea: well-branched top with at least 4 canes 18" and up.

**ITEM # BMP-GI-PK46 PERENNIALS #1 can**

**ITEM # BMP-GI-PK47 PERENNIALS #2 can**

Agastache 'Blue Fortune - Hummingbird Mint  
 Asclepias incarnata - Swamp Milkweed  
 Aster 'Wood's Blue', Wood's Pink' - Hardy Aster  
 Aster novae-angliae 'Barr's Pink' - New England Aster  
 Astilbe arendsii 'Bridal Veil', 'Fanal' - Astilbe  
 Astilbe chinensis 'Visions in Pink, Red, White' - Chinese Astilbe  
 Astilbe japonica 'Deutschland' - Astilbe  
 Chelone glabra - Swamp Turtlehead  
 Echinacea purpurea 'Bright Star', 'Kim's Knee High', 'Kim's Mophead', 'Ruby Giant', 'White Swan' - Coneflower  
 Epimedium gradiflorum *species* or 'Lilafee' - Bishop's Hat  
 Epimedium x youngianum 'Niveum' - White Young's Barrenwort  
 Eupatorium dubium 'Baby Joe', 'Little Joe' - Joe Pye Weed  
 Gaura lindheimeri 'Whirling Butterflies', 'Blushing Butterflies', 'Siskiyou Pink' - Wand Flower  
 Geranium sanguineum 'Album', Max Frei', New Hampshire Purple' - Cranesbill  
 Geranium macrorrhizum *species* or 'Bevan's Variety', 'Ingwerson's Variety' - Bigroot Geranium  
 Hemerocallis 'Happy Returns', 'Pardon Me', 'Prarie Wildfire', 'Stella de Oro' - Daylilly  
 Hibiscus moscheutos 'Luna (series)' - Rosemallow  
 Iris versicolor- Northern Blue Flag  
 Liriope muscari 'Big Blue', 'Variegata' - Lily Turf  
 Liriope spicata - Lilyturf  
 Lobelia cardinalis - Cardinal Flower  
 Monarda 'Fireball', 'Petite Delight' - Bee Balm  
 Nepeta faassenii 'Blue Wonder', 'Walker's Low' - Catmint  
 Rudbeckia fulgida 'Goldsturm'- Black Eyed Susan  
 Solidago rugosa 'Fireworks' - Goldenrod  
 Vernonia fasciculata - Ironweed

ITEM # BMP-GI-PK50	<u>GRASSES #1 can</u>
ITEM # BMP-GI-PK51	<u>GRASSES #2 can</u>
ITEM # BMP-GI-PK52	<u>GRASSES #3 can</u>

Acorus calamus 'Variegatus' - Sweet Flag  
 Andropogon virginicus - Broomsedge  
 Carex elata 'Aurea' - Bowles Golden Sedge  
 Carex glauca (flacca) *species* or 'Blue Ziner'- Blue sedge  
 Carex morrowii 'Ice Dance', 'Ice Ballet', 'Silver Sceptre' - Sedge  
 Carex pennsylvanica - Pennsylvania sedge  
 Chasmanthium latifolium - Sea Oats  
 Deschampsia cespitosa - Tufted Hair Grass

**Juncus effusus** - Soft Rush

**Panicum virgatum 'Heavy Metal', 'Shenandoah'** - Switchgrass

**Pennisetum alopecuroides 'Hameln', 'Little Bunny'**- Dwarf Fountain Grass

**ITEM # BMP-GI-PK54 GROUNDCOVERS #1 can**

**Liriope muscari**, Liriope: #1 can; must have well-rounded leafing pattern. 'Big Blue', 'Variegata'

**Liriope spicata**, Liriope: #1 can; vigorous specimens, well-established in pot.

**M. PLANTING OPERATIONS:**

1. **TIME OF PLANTING:** Unless otherwise directed by the Engineer, herbaceous plant material shall be planted and transplanted from April 15 to May 15 and from August 15 to September 15; deciduous material shall be planted from March 15<sup>th</sup> to May 15<sup>th</sup> or to when weather permits and from October 15th to December 15<sup>th</sup> or to when weather permits. Evergreen material shall be planted from April 1st to May 15th and from September 15<sup>th</sup> to October 31<sup>st</sup> or as weather permits. In case the planting season is missed for any reason, the Contractor shall cover the soil with at least 3" thick of mulch. Bark Chip Mulch shall comply with the requirements of Section BMP-GI-PK28 and the cost of this mulch shall be paid under Item No. BMP-GI-PK-28.
  
2. **PLANTING:** Planting shall be performed by an approved Contractor. No planting shall be done except in the presence of the Engineer. All material shall be inspected by the Engineer as it is removed from the truck, prior to placing in an approved storage area or the designated planting site. All rejected material shall be removed from the site and replaced with acceptable material at no additional cost to the City.

Bare root material shall be adequately protected from drying out and immediately heeled in after inspection. The bundles of heeled-in plants shall be set upright on the ground, covered with mulch, and kept adequately moist until the time of installation. Until the time of planting, all plant material shall be stored in an approved location, securely fenced and maintained, to the satisfaction of the Engineer, at no additional cost to the City. All plants not planted immediately shall be watered as necessary to maintain optimal health until planting.

For each plant, dig a hole to correct depth for the placement of the plant material. Place balled and burlapped material in the prepared planting pit by lifting, and carry it by the rootball. Set the tree or shrub straight and in the center of the pit, with the most desirable side facing toward the predominant view. All material shall set, after settlement, at the same level at which they have grown in the nursery. Care shall be exercised in setting the plants plumb. All ropes, stones, etc. shall be removed from the pit before backfilling. Soil for backfilling shall be loose and friable and not frozen or solid.

Cut and remove rope or wire from the top fifty (50) percent of the rootball and pull the burlap back to the edge of the ball. Remove as much woven product and twine as possible. All plastic or synthetic fabric must be removed from the ball at the time of planting. Any wire basket enclosed root ball will need to have at least two-thirds (2/3) of the wire basket cut away from the sides and top of the ball and removed. Remaining lateral wires must be cut to prevent future root interference. Wire must not be galvanized or aluminum wire.

Balled and burlapped plants shall be handled so that the ball will not be loosened. After the soil has been thoroughly firmed under and around the ball, the burlap shall be cut away from the upper half of the ball, and the remaining burlap adjusted to prevent the formation of air pockets. Where directed by the Engineer, the burlap shall be entirely removed. Soil shall be firmed at six (6) to eight (8) inch intervals and thoroughly settled with water. Plants with exposed roots shall be placed in the proper position in the center of the pit after the soil in the bottom of the pit has been firmed. Roots shall be arranged in their natural position and existing soil worked in among them, firmed at intervals and thoroughly settled with water. Care shall be taken to avoid bruising or breaking the roots when tamping the soil. All large and fleshy roots which are bruised or broken shall be pruned, making a clean cut before planting.

Groundcover plants shall be carefully removed from the containers or flats immediately prior to planting and set to the same depths as they were grown in the nursery bed or container, to the correct spacing indicated on the plans. Roots shall be arranged in their natural position and Engineered Soil worked in among them, taking care to avoid bruising or damaging the roots. No later than one (1) hour after planting, all plants shall be thoroughly settled with water.

3. **Mycorrhizal Fungi Inoculant:** Shall be applied by means of a three ounce (3 oz.) premeasured dry formulation packet, such as Mycor Tree Saver Transplant®, as manufactured by Plant Health Care, Inc., Pittsburgh, Pa., Rhizanova TreeTransplant, as manufactured by Becker Underwood, Inc., or approved equal. Packets shall contain, as a minimum: one thousand (1000) live spores of Vesicular-Arbuscular fungi, including: *Entrophosphora columbiana*, *Glomus clarum*, *Glomus etunicatum*, and *Glomus sp.*; seventeen million five hundred thousand (17,500,000) live spores of Ectomycorrhizal fungi (*Pisolithus tinctorius*); Biostimulant ingredients including *Yucca schidigera* extract; soluble sea kelp extract derived from *Ascophylum nodosum*; humic acids; and acrylamide copolymer gel as a water absorbent medium. Mycorrhizal fungi inoculant shall be added to the top six to eight inches (6-8") of backfill soil in each planting pit and thoroughly mixed to distribute the inoculant. The material shall be applied according to the following chart:

<u>Size of rootball or container</u>	<u>Ounces per plant</u>
1 gallon	1
2 gal.	2
#3 can.	3
5 gal.	3
7 gal.	3
10 gal.	3
15 gal.	3
20" B&B	6
24" B&B	9
30" B&B	9
36" B&B	12
12" B&B	12

4. **Fertilizer Tablets:** Shall be Healthy Start Macro Tablets®, as manufactured by Plant Health Care, Inc., Old Westbury, N.Y., or approved equal. The tablets shall have a nutrient analysis of 12-8-8 and contain a minimum twelve percent (12%) humic acid by weight, as well as biostimulants derived from sea kelp, amino acids, and a wetting agent derived from *Yucca schidigera*. Tablets shall contain a minimum 695,000 each of the following beneficial bacteria: nitrogen fixing, phosphorus solubilizing, and growth promoting. Twenty one gram (21 gm.) twenty four month (24 mo.) release tablets shall be added to the top four inches (4") of backfilled soil in the rates indicated on the following chart:



<u>Size of rootball or container</u>	<u>Tablets per plant</u>
1 gallon	1
2 gal.	2
#3 can.	2
5 gal.	3
7 gal.	3
10 gal.	4
15 gal.	5
20-24" B&B	5
30-36" B&B	6
42-48" B&B	7

5. **FINISHING SURFACE AFTER BACKFILLING:** The Contractor shall cultivate and rake over finished planting areas and shall leave the site in an orderly condition. On level ground or slight slopes, a shallow basin a little larger than the diameter of the plant pit shall be left around each plant, as shown on the plans, or as directed by the Engineer. On steep slopes, the soil on the lower side of the plant shall be graded in such a manner that it will catch and hold water, as shown on the plans, or as directed by the Engineer.

Upon completion of planting, all debris and waste material resulting from the planting operation shall be removed from the project area, and the affected area raked and cleaned as necessary.

All work done in preparing shallow basins or grading of plant pits on steep slopes and regrading and reseeding of plant saucers shall be deemed included in the unit price per plant. All berms raised for shallow basins in level or gently sloping grass areas shall be removed at the end of the guarantee period. This Engineered Soil shall be cast even over the surrounding grass areas and grass seed sown over the removed berms.

6. **PRUNING:** Broken or badly bruised branches shall be removed with a clean cut. Do not cut leaders or use wound paint or dressing to treat cut areas. Crossed branches shall be pruned with a sharp tool in such a manner as to preserve and encourage the plant's natural growth form. The crowns of young trees should not be cut back to compensate for root loss.
7. **EDGING OF PLANTING AREAS:** The Contractor shall establish a neat edge where planting areas meet grass areas, as shown on the plan or as directed by the Engineer. Edging shall be done by competent mechanics in a workmanlike manner with a spade or edging tool immediately after all planting is completed.

Particular care shall be exercised in edging to establish good flowing curves as shown on the plan or as directed by the Engineer. Edging shall be maintained by the Contractor until final acceptance of the contract.

8. **WATERING:** At the time of planting, the entire planting bed shall be saturated to a depth of one (1) foot with twenty (20) gallons being distributed to each tree. Water shall be free from oil, have a pH not less than 6.0 nor greater than 8.0 and shall be free from impurities injurious to vegetation. Unless otherwise directed, water may be drawn from mains owned by or supplying water to the City of New York.

Watering shall also take place throughout the guarantee period, as per Section BMP-GI-4.20WW at approximately two week intervals from May 1 to October 31. Not less than once a week if it has not rained during that period. The Engineer may order less watering based on weather conditions, resulting soil water content or other factors. If drought conditions warrant, the Engineer may order more frequent watering than scheduled or

during non-scheduled periods. A watering schedule shall be submitted to the Engineer each week.

Water shall not be applied in a manner which damages plants, plant saucers, stakes or adjacent areas. Each plant saucer shall be carefully filled with water in a manner which does not erode the soil or the plant saucer. Watering shall not cause uprooting or exposure of plant's roots to the air. Damages resulting from these operations shall be immediately repaired at the Contractor's expense.

Where water is supplied from City hydrants, the Contractor shall obtain a free hydrant permit from the Department of Environmental Protection. Permits are issued for a 30-day period, and the Contractor is responsible for keeping the permits current. The permits are available from each borough office. To obtain a permit, the Contractor should bring a copy of their contract, indicating exemption from the permit fee, with a general description of the hydrant location (s) they propose to access.

During dry conditions as defined by the Engineer, the Contractor will add to water a wetting agent product that is meant to aerate soil and allow for more water to penetrate such as Yuccah® Wetting Agent, or DIEHARD™ Soluble Yucca Extract as manufactured by Plant Health Care, or Horticultural Alliance, Inc., or an approved equal. An anti-desiccant to help prevent loss of water through transpiration shall also be used when directed by the Engineer. The anti-desiccant product, approved by the Engineer, must be mixed into water at appropriate ratios (Contractor must follow product instructions).

- N. REPLACEMENT:** The Contractor shall replace, in accordance with the contract plans and specifications, any planted shrub, groundcover plant, perennial or grass that is dead or, in the opinion of the Engineer, is in an unhealthy or unsightly condition, and/or has lost its natural shape due to dead branches, excessive pruning, inadequate or improper maintenance, or other causes including vandalism, prior to final acceptance, in the next planting season. There shall be a guarantee on shrubs, groundcover plants, perennials and grasses after planting for the remaining period of the project. When instructed by the Engineer, the Contractor shall replace shrubs, groundcover plants, perennials or grasses that have died after final acceptance in the next appropriate planting season even when the next planting season falls outside the remaining period of the project. Shrubs, groundcover plants, perennials or grasses that die within the guarantee period shall be replaced as many times as necessary so that there is a live shrub, groundcover plant, perennial or grasses at each location at the end of the guarantee period (which is the remaining period of the project). The cost of replacement(s) shall be included in the unit price bid for the various furnished items of the contract.

Where vandalism or related causes are agreed upon by the Engineer as the cause for shrub, groundcover plant, perennial or grasses replacement, the Contractor shall be responsible for replacement for one time during the guarantee period after final acceptance.

Where dead shrubs, groundcover plants, perennials or grasses have been identified, whether due to natural causes or vandalism, the Contractor shall remove the dead material, including stakes, and wire **within three (3) weeks of notification**. The Contractor shall add Engineered Soil, grass seed or appropriate paving material at the direction of the Engineer to the pit to eliminate potential tripping hazards at the time of removal.

Failure to replace shrubs, groundcover plants, perennials or grasses in the next appropriate planting season will result in the assessment of liquidated damages in the amount of eighty (80) dollars per shrub or per group of groundcover plants, perennials or grasses. The assessment of said liquidated damages shall not absolve the Contractor of its responsibility to replace the plant material.

- O. MEASUREMENT AND PAYMENT:** The quantities of **PLANT MATERIAL** to be paid for under these items shall be the number of shrubs, groundcover plants, perennials and grasses of each

size planted and maintained, in accordance with the plans and specifications, and to the satisfaction of the Engineer.

Engineered Soil, compost, and bark chip mulch, where called for in the plans or details, will be paid under their respective items.

The price of water, regardless of source, is deemed included in the unit price bid. No extra payment will be made for water coming from the Contractor's own source.

*Payment will be made under:*

Item No.	Item	Pay Unit
BMP-GI-PK38	MEDIUM EVERGREEN SHRUBS – 24"-30" H, #5 Can	EACH
BMP-GI-PK42	MEDIUM DECIDUOUS SHRUBS – 24"-36" H, #3 Can	EACH
BMP-GI-PK44	SMALL DECIDUOUS SHRUBS – 18"-24" H, #3 Can	EACH
BMP-GI-PK46	PERENNIALS #1 can	EACH
BMP-GI-PK47	PERENNIALS #2 can	EACH
BMP-GI-PK50	GRASSES #1 can	EACH
BMP-GI-PK51	GRASSES #2 can	EACH
BMP-GI-PK52	GRASSES #3 can	EACH
BMP-GI-PK54	GROUNDCOVERS #1 can	EACH

## SECTION T-60000B

### Cable spec. for 120 volt power supply

#### Cable Name

This cable shall be called 2c-10 B (breakdown 2c-10 B= 2 number 10awg conductors with a third wire for grounding.)

#### Intended use

This cable is to be used for 120 volt power systems in NYC.

The cable shall be rated for 600 Volts and have a polyethylene -insulated, jacketed cable for use in underground conduit or for aerial use (must have strain relief's built in for aerial use without a messenger cable). The outer jacket shall be a black in color and be UV resistant and made to endure extreme outdoor usage unprotected without deterioration of insulation or outer jacket fading. This cable shall be rated for direct burial without conduit covering or other protection.

#### Construction

The conductors shall be round annealed copper conforming to ASTM designation b-3.

This cable shall be a 3 conductor type with two number ten AWG wire size conductors one white solid wire and one black solid wire with the third conductor number 8 AWG bare stranded wire.

#### Insulation

The insulation shall be a heat-stabilized polyethylene conforming to the requirements of ASTM designation D 1248 for type 1 category 5 grade E4 materials. This insulation shall be concentrically applied about the conductor. This installation shall meet the following requirements when tested in accordance with the procedures of ASTM designation D 2633 and D 1351.

This cable shall meet all other requirements as listed in the NYC DOT traffic specifications 3/95.

*Payment will be made under:*

Item No.	Item	Pay Unit
T-60000B	FURNISH 2 c #10B (BREAKDOWN=2#10 WITH 3 <sup>RD</sup> WIRE FOR GROUNDING)	L.F.

**SECTION T-93000  
FURNISH AND INSTALL COMPLETE DOME CCTV  
CAMERA SYSTEM ON CITY-OWNED UTILITY POLE**

**1. Description**

**1.1. General**

Under this Section the Contactor shall be required to furnish and install complete Dome Network IP Camera (s) systems on City-owned utility poles.

The Contractor shall provide a complete, turn-key installation, testing and maintenance for the duration of the contract, including all required electronic devices for the System, all associated mounting hardware, and all associated cabling and integrate those devices into the City's Traffic Management Center. The Contractor shall also furnish and install the associated conduit, cabling, transformers, power supplies, over-current protection devices, uninterruptible power supplies, cabinets, enclosures, mounting racks and other supporting infrastructure elements for all System equipment provided by the Contractor in accordance with the criteria described herein and in other parts of the Contract. The Contractor shall provide design, furnish, install, integrate, start up, test, and maintain all materials, equipment, hardware, software, firmware and all associated training.

**1.2. Work Included**

The work includes the furnishing and installing of all materials as specified in the attached Sections **65001. "Furnished Dome Camera Specifications"** and **7.87 "Installation"**.

The Contractor shall verify all dimensions and details shown on any Contract Drawings provided by NYCDOT, Quantities, or any other data received from NYCDOT and shall notify the Engineer in writing of all omissions, conflicts, and discrepancies found therein. Notice of such errors shall be given before the Contractor proceeds with the work.

In order to complete the work within the prescribed schedule and to minimize the inconvenience to the motorist, pedestrians, and the public, the Contractor shall adhere to the procedures and as specified in the Contract Documents.

The Contractor shall be required to maintain and protect traffic and furnish all safeguards for the protection of persons and property during the installation of the dome camera system.

**1.3. Post-Bid Submittals**

The successful low bidder shall be required to submit the following within 30 days of award:

- Evidence of meeting the qualifications described in these specifications.
- A list of manufacturers, equipment model numbers, catalog cut sheets, and other descriptive materials for all equipment and components proposed by the Contractor. This information shall, in sufficient detail, demonstrate that the Contractor or Subcontractor who will be performing this work fully understands the equipment requirements and nature of the work to be performed under this contract. All submissions made by the Contractor will be subject to review and approval by the Engineer.

**1.4. Time of Completion**

The Contractor must complete the work under this Section prior to the start of any other work under this project which may restrict the flow of traffic, unless otherwise permitted by the Engineer.

### **1.5. Interpretation of Apparent Omissions**

The apparent silence of the NYCDOT Standard Specifications and these Detail Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only the best material and workmanship is to be used. Interpretations of the specifications shall be made upon that basis.

### **1.6. Conflict**

Should any conflict occur in or between the Contract Drawings and NYCDOT Standard Specifications, the Contractor shall be deemed to have estimated on the more expensive way of doing the work, unless he or she shall have asked for and obtained a decision in writing from NYCDOT before the submission of bid as to what shall govern.

### **1.7. Omission of Details**

All work called for in the Specifications but not shown in the Contract Drawings in their present form, or vice versa, and work not specified in either the Contract Drawings or in the Specification but involved in carrying out their intent or in the complete and proper execution of the work, is required, and shall be performed by the Contractor as though it were specifically delineated or described.

### **1.8. Adherence to Laws, Rules & Regulation**

All work performed under this contract shall comply with the New York City Highway Rules 34 RCNY Ch. 2 of the New York City Department Of Transportation. The Contractor shall also adhere to all other applicable laws, rules and regulations including the following:

- Sidewalk flags must be fully restored where excavated for the installation of conduit or a foundation.
- On non-protected streets trenches of, or less than, 12" in final restoration require a cut back of 6" of the wearing course on both sides of the trench, so that the cut is a minimum of 18" wide.

### **1.9. Method of Measurement**

The quantity to be measured for payment shall be the number of Dome Camera Systems installed, to the satisfaction of the Engineer.

### **1.10. Price to Cover**

The contract unit price bid per each Complete Dome CCTV Camera System furnished and installed on a City-owned utility pole shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to complete the work under this Section, in accordance with the plans, the specifications and the directions of the Engineer. The unit price also includes the cost of maintenance of the CCTV Camera System throughout the duration of the project.

### **1.11. Method of Payment**

Progress payments for the Dome Network Camera system will be made as follows:

- Upon the complete purchase and field installation, the Contractor shall be paid 50% of the amount bid for each camera satisfactorily installed.
- Upon the complete field inspection and system integration at the Traffic Management Center (TMC), 28-11 Queens Plaza North, and verifying that the system is completely operational, the Contractor shall be paid 20% of the amount bid for each camera.

- Upon completion of the project and successful acceptance, the Contractor shall be paid the remaining 30% of the unit price bid for each camera.

*Payment will be made under:*

Item No.	Item	Pay Unit
T-93000	FURNISH AND INSTALL COMPLETE DOME CCTV CAMERA SYSTEM ON CITY-OWNED UTILITY POLE.	EACH

**65001. Furnished Dome Camera Specifications**

The following detailed specifications for materials, method of measurement, and basis of payment are provided for work to be performed under this contract.

**65001.1. Abbreviations & Definition of Terms**

- **Abbreviations**

AASHTO	American Association of State Highway and Transportation Officials
AC	Area Computer
ANSI	American National Standards Institute
ASTC	Advanced Solid State Traffic Controller
ASTM	American Society for Testing and Materials
CPU	Central Processing Unit
DCE	Data Communications Equipment
EMI	Electromagnetic Interference
FCC	Federal Communications Commission
FTP	File Transfer Protocol
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronic Engineers
ITE	Institute of Transportation Engineers
LAN	Local Area Network
LED	Light Emitting Diode
MCBF	Mean Counts Between Failures
MTBF	Mean Time Between Failures
MTRR	Mean Time To Repair
MURK	NYSDOT's Manual of Uniform Record Keeping
MUTCD	Manual on Uniform Traffic Control Devices
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NTCIP	National Transportation Communications for ITS Protocol
NYCDOT	New York City Department of Transportation
NYSDOT	New York State Department of Transportation
OSHA	Occupational Safety and Health Administration
PVC	Polyvinyl Chloride
TCP/IP	Transmission Control Protocol/Internet Protocol
TMC	Traffic Management Center
UCC	Uniform Construction Code
UID	Universal Identification Number
UL	Underwriters' Laboratories
VTCS	Vehicular Traffic Control System
WAN	Wide Area Network

The publications, specifications, test methods and standards of any organizations listed above to which referral or mention is made shall be the latest edition of such publication and any interim modifications in effect on the date the Contract Documents are made available, unless otherwise noted.

**65001.2. INSTRUCTIONS & GUARANTEES**

**65001.2.1** One set of complete schematics and operations/maintenance manuals of the each component of the camera assembly shall be supplied with each five assemblies furnished. Maintenance manuals shall include complete sub-component parts listing.



**65001.2.2** No changes or substitutions in these requirements will be acceptable unless authorized in writing. Inquiries regarding this specification shall be addressed to 34-02 Queens Blvd. / 2<sup>nd</sup> Floor, long island city, NY 11101.

**65001.2.3** The complete camera assembly shall carry a one-year guarantee from the date of acceptance against any imperfections in workmanship or materials. The contractor shall be responsible for the monthly maintenance charges and operating cost of the communication from service provider until the warranty is over.

**65001.2.4** The manufacturer agrees upon the request of the Engineer-in-Charge (E.I.C) to deliver to the Office, a sample of the complete camera assembly to be supplied in compliance with these specifications for inspection and test before acceptance.

**65001.2.5** The supplier shall furnish any and all equipment which they deem necessary for safe and reliable field operation of the camera equipment as part of the quoted price for the specified equipment.

**65001.2.6** All camera components furnished under this specification must be current production equipment and of recent manufacturer, identical models of which are in field operation in not less than one hundred (100) locations in the United States or Canada. Untried or prototype units shall not be considered for acceptance.

**65001.2.7** All major components shall be identified with a metal plate containing the serial number with bar code identification.

**65001.2.8** Any repairs made by a manufacturer or representative shall be documented and returned with units when warranty repaired. This documentation shall include an explanation of the exact repairs made and identification of parts replaced by part number and circuit number. All warranty repairs must be completed within thirty (30) days of delivery of the equipment to the designated repair depot.

**65001.2.9**

The video signals shall be transmitted to the NYCDOT Traffic Management Center; The Contractor shall furnish protocol for communication between the Operations Center and all field equipment installed under this contract. All cameras shall interface with New York City flow map chart and the New York City DOT web site so that the operator at the Traffic Management Center shall have the capability to control the cameras through the transuite system.

**65001.3. NTCIP**

To ensure compatibility and interchangeability with equipment furnished in previous and future contracts, the Dome Network (IP) Camera Assembly shall be compliant with the latest version of the NTCIP Standards, as defined by AASHTO, ITE, and NEMA. Including the following:

- An optional NTCIP board that converts control signals from NTCIP controllers shall also be available.
- New York State NTCIP specification item number "683.1014 11- DOME TYPE CCTV CAMERA ASSEMBLY", excluding the requirement to provide warranties and guarantees to the State of New York Department of Transportation and both the "METHOD OF MEASUREMENT" and "BASIS OF PAYMENT" provisions of Item No. 683.1014 11.

#### **65001.4. General**

##### **65001.4.1 Components**

The outdoor Dome Network IP camera system shall be a discreet, pendant Network IP camera dome system consisting of a dome drive with a variable speed/high speed pan/tilt drive unit with continuous 360° rotation; 1/4-inch high resolution color CCD camera; motorized zoom lens with optical and digital zoom; auto focus; and an enclosure consisting of a back box, lower dome, and a quick-install mounting. The Dome Network Camera shall support High Power over Ethernet.

The Contractor is responsible to deliver a working system any device major or minor not listed below that is needed for proper operation shall be supplied.

##### **65001.4.2 Environmental**

All CCTV components, while housed in their associated environmental enclosures, shall operate in the ambient temperature range of -60°F to 140°F and shall meet NEMA 4 weatherproof standards.

#### **65001.5. Pendant Dome Network IP Camera**

##### **65001.5.1 Configuration**

The Camera shall be blemish-free, designed to minimize or eliminate transfer smear and insure acceptable operation during minimal lighting conditions. The camera shall be capable of unattended, continuous 24 hour per day operation in an outside plant environment.

The camera shall be fully integrated with the zoom lens described under Section 65001.6 of this specification. The camera shall accept standard C or CS zoom or fixed lenses and shall be equipped with an auto-iris lens connector with manual override compatible with the zoom lens supplied. The unit shall produce NTSC compatible video utilizing a 1 volt Peak to Peak composite @ 75ohms output, and an input voltage between 22 to 27 VDC. The camera must be fully compliant with all aspects of the NTSC specification.

##### **65001.5.2 Resolution & Sensitivity**

At least 470 horizontal TVL lines must be produced by the camera and 724 horizontal x 494 vertical active pixels must be produced by the assembly.

The night sensitivity of the camera is a key concern in that the unit may have to operate in areas with no primary lighting system.

A full video shall be obtainable using an f/1.6 lens and with a minimum illumination of .08 lux at 1/2 sec. Video signal to noise ratio shall exceed 50 decibels. The camera shall be equipped with AGC (Automatic Gain Control). The AGC feature shall be switch selectable (On/Off) and be equipped with a variable peak average control.

##### **65001.5.3 Synchronization & automatic Control**

Synchronization shall be via AC line frequency line-lock with phase adjust using a remote control. Line-lock synchronization utilizes the AC power frequency for the vertical sync reference. An internal Isolation transformer shall be provided to reduce ground loop potential and allow multiple cameras to be powered from a single power supply.

A variable speed electronic shutter shall also be provided. The automatic shutter speeds shall be adjustable from 1/2 to 1/30 000 in 1-stop increments.

The camera shall have continuous automatic (through the lens) white balance control with manual override and black light compensation circuitry to adjust the picture dynamically in response to the varying light conditions encountered in outside environments. In this regard, pictures with an appropriate color balance shall be obtainable within all specified illumination conditions.

## **65001.6. Zoom Lens**

### **65001.6.1 Basic Configuration**

A fully motorized zoom lens fully compatible with the camera specified in Section 65001 is to be supplied. The zoom lens shall be capable of supplying magnification of at least 35x optical and 12x digital zoom with autofocus, providing crisp, clear and rich detail of both zoomed in and zoomed out image. The lens must have an auto-iris capability compatible with the camera and a wide dynamic range of at least 80X.

### **65001.6.2 Field of View**

The camera and associated zoom lens with an Automatic with manual override shall produce the following minimum field of view in the required magnification range of 54° at 3.6 mm wide zoom.

### **65001.6.3 Remote Control**

The zoom magnification shall be fully controllable via the remote PTZ mechanism. The motors controlling the Iris, Zoom, and Focus shall be slip clutch protected to prevent damage due to overload.

## **65001.7. Environmental Enclosure**

### **65001.7.1 Basic Configuration**

The environmental enclosure shall be designed to protect the camera and zoom lens from the outdoor environment which the assembly must be designed to function in. The assembly must be supplied with an integral sun shield.

The housing shall be constructed of aluminum and be finished with white or beige, weatherproof, heat-reflecting paint. The enclosure shall protect the camera and zoom lens from harsh outdoor weather conditions. It shall provide a sealed, marine climate resistant, protective environment meeting NEMA-4 (IP65) weatherproof standards.

### **65001.7.2 Zoom Lens Clearances**

The camera and zoom lens shall be mounted to insure that the enclosure will not obstruct the field of view of the camera. Sufficient clearance between the zoom lens extended to its furthest point of travel and the enclosure face plate shall be provided to insure that mirroring on the window will not be obtained.

### **65001.7.3 Heater**

The enclosure shall be equipped with a heater controlled by a thermostat. The heater shall engage when temperature within the enclosure falls below 41°F. The heater shall disengage when temperatures exceed 50°F. The heater shall minimize internal fogging of the face plate when the assembly is operated in cold weather.

### **65001.7.4 Cable Entry**

Cable entry shall be through 1.5" NPT pendant mount. Sufficient cable lengths shall be provided to reach the Control Receiver Junction Box.

### **65001.7.5 Mounting to PTZ Mechanism**

The mounting assembly of the environmental enclosure shall be attached to the PTZ base assembly by stainless steel circular clamps. Each circular clamp shall be torqued to 13.6 kilograms.

### **65001.7.6 Lower Dome**

Special care shall be taken when installing the lower dome bubble to ensure that an optimal optical relationship between the lens and bubble was achieved, providing crystal clear video at long focal lengths.

## **65001.8. Dome Drive**

### **Dome Drive Features**

- 400°/ second Pan Preset Speed and 220°/ second Tilt Preset Speed.
- 256 presets,  $\pm 1^\circ$  Preset Accuracy.
- 10 alarm inputs.
- Continuously decreases Pan/Tilt speeds in proportion to depth of zoom.
- Pan motion allows 0.1-150°/sec Pan Speed.
- Digital Position, zoom control and feedback.
- Rotating Discreet Liner with Sealed Fixed Bubble.
- Multiple Park and Power-Up Action.
- Programmable Zoom Speeds.

### **65001.9. Dome Network IP Camera and Built-in encoder**

#### **65001.9.1 General Requirements and System integration**

The Dome Network IP Camera shall

- Support Pan/Tilt/Zoom functionalities including Guard tour, tour recording, control queue capability that allow a user with a higher PTZ priority can take control before other users in the queue, on-screen directional indicator
- Be IP66- and NEMA 4x-rated metal casing (aluminum)
- Support and include High Power over Ethernet (PoE) port
- Be equipped with network interface of 10BASE-T/100BASE-TX PoE using standard RJ-45 connectors
- Be equipped with local storage SD/SDHC memory card slot
- Supported by an Open API (Application Programming Interface) for software integration of functionality into a third party applications
- Support intelligent Video motion detection, autotracking, Active Gatekeeper
- Support overlay
- Be equipped with an alarm events feature that can configure up to 10 events type that can be configured via the web interface to trigger actions:

Alarm events can be triggered by:

- Motion Detection
- An upload application
- Autotracking
- Pan Tilt Zoom preset
- Temperature
- Memory card full
- Fan malfunction
- System events such as system boot

Alarm events actions include:

- File upload to an event server via FTP, HTTP and email
- Notification via email, HTTP and TCP
- Go to PTZ preset
- Run Guard Tour
- Run autotracking
- Record to local storage
- Pre-and post-alarm video buffering

- The video shall not require any additional software to operate and the video shall be able to be accessed from web browser:
  - Camera live view
  - Video recording to file (ASF)
  - Customizable HTML pages
  - Windows 7, Windows Vista, Windows XP, Windows Server 2008, Windows Server 2003

- DirectX 9c or higher
- Network Security:
  - Multiple users access level control with password protection,
  - Support IP address filtering,
  - Supports encrypted browsing using HTTPS encryption
  - IEEE 802.1X network access control authentication
  - Digest authentication,
  - User access log

**65001.9.2 Certifications and standards**

The Dome Network IP video camera shall carry the following approvals:

- EN55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, EN55024
- FCC Part 15 - Subpart B Class B
- ICES-003 Class B
- VCCI Class B
- C-tick AS/NZS CISPR 22
- KCC Class A
- EN 60950-22
- IEC 60529 IP66
- NEMA 250 Type 4X
- IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-78, IEC 60068-2-14, IEC 60068-2-30,
- IEC 60068-2-6, IEC 60068-2-27, IEC 60068-2-60
- ISO 4892-2
- Midspan: GS, UL, cUL, UL-AR, CE, VCCI, CB, KCC

**65001.9.3 Video**

- Compression
  - The built-in video encoder shall provide simultaneous support for H.264 (MPEG-4 Part 10/AVC) and Motion JPEG
  - The H.264 and Motion JPEG implementation shall include support for both constant Bit Rate (CBR) and Variable Bit Rate (VBR), and shall support both unicast over RTP, unicast over RTP over RTSP, unicast over RTP over RTSP over HTTP as well as multicast over RTP.
  - The built-in video encoder shall provide at least 11 different compression levels.
  - The built-in video encoder shall be capable of providing bit rates between 1kbps and 12 Mbps per video stream.
- Video Resolutions
 

The camera should be able to provide an HDTV 1080p 1920x1080 to 320x180 and an HDTV 720p 1280x720 to 320x180
- Frame Rate
  - The H.264 video compression should be able to provide up to 30 fps in 1080p and 60 fps in 720p
  - The Motion JPEG compression should be able to provide up to 25 fps in 1080p and 50 fps in 720p
- Image enhancement: The built-in video encoder shall contain an embedded de-interlacing filter.

**65001.9.4 Functionality**

Web encoder:

- The Network IP camera shall contain a built-in web encoder making video and configuration available in a standard browser environment using HTTP, without the need for additional software.
- When accessed from a browser, the web encoder shall provide users with online, context-sensitive help.

- The Network IP camera shall not require any additional software to operate, and shall support full functionality when operating in the following environment:
  - Operating Systems: Windows 2000, Windows XP
  - Browsers: MS Explorer 6.x and higher
- Components such as Active X downloaded from the built-in video encoder shall be signed by an organization providing digital trust services, such as VeriSign, Inc.
- The built-in video encoder's web encoder shall support up to twenty (20) simultaneous unicast clients and unlimited number of clients using multicast MPEG-4.
- The built-in video encoder's integral web encoder shall provide support for defining usernames and passwords for a minimum of three (3) different types of users.

IP addresses:

- The built-in video encoder shall support both fixed IP addresses and dynamically assigned IP addresses provided by a Dynamic Host Control Protocol (DHCP) encoder.
- The built-in video encoder shall allow for automatic detection of the unit based on UPnP and Bonjour when using a PC with an operating system supporting this feature.
- The built-in video encoder shall provide support for both IPv4 and IPv6.

Bandwidth management: The built-in video encoder shall

- Provide the ability to control network traffic by limiting the maximum bandwidth to a selected value.
- Provide the capability to limit the frame rate per viewer to a selected value, as well as the duration of each viewing session.
- Support Quality of Service (QoS) to be able to prioritize traffic.

PTZ functionality: The built-in video encoder shall

- Provide the ability to control PTZ devices from third party manufacturer.
- Provide at least one hundred (100) preset positions.
- Provide a guard tour functionality which allow the PTZ device to automatically move between selected presets using an individual speed and viewing time for each preset.

Event functionality:

- The built-in video encoder shall be equipped with an integrated event functionality, which can be triggered by:
  - External input
  - Video Motion Detection
  - Video loss
  - Schedule
- Response to triggers shall include:
  - Notification, using TCP, SMTP or HTTP
  - Image upload, using FTP, SMTP or HTTP
  - Preset call up
  - Activating external output
- Event functions shall be configurable via the web interface.

Protocol support:

The built-in video encoder shall incorporate support for at least IPv4/v6, HTTP, HTTPS, SSL/TLS, TCP, QoS, SNMPv1/v2c/v3 (MIB-II), RTSP, RTP, UDP, IGMP, RTCP, SMTP, FTP, ICMP DHCP, UPnP, Bonjour, ARP, DNS, DynDNS, SOCKS, IEEE802.1X.

Text overlay:

The video encoder shall

- Provide embedded on-screen text in the video, with support for date & time, and a customer-specific text, camera name, of at least 45 ASCII characters. To ensure accuracy, the video encoder shall accept external time synchronization from an NTP (Network Time Protocol) encoder.
- Provide the ability to apply a privacy mask to the image.
- Allow for the overlay of a graphical image, such as a logotype, into the image.

**Security:**

Multiple user access levels with password protection, IP address filtering, HTTPS encryption, IEEE 802.1X authentication.

**API support:**

The built-in video encoder shall be fully supported by an open and published API (Application Programmers Interface), which shall provide necessary information for integration of functionality into third party applications.

**Maintenance:**

The built-in video encoder shall

- Be supplied with Windows-based management software which allows the assignment of IP addresses, upgrade of firmware and backup of the video encoders' configuration.
- Support the use of SNMP-based management tools according to SNMP v1, 2c & 3 / MIB-2.
- Allow updates of the software (firmware) over the network, using FTP or HTTP.

Customer-specific settings, including statically assigned IP address, the local time & date, event functionality and video configuration, shall be stored in a non-volatile memory and shall not be lost during power cuts or soft reset.

**65001.9.5 Power requirements:** 7-20 VDC, max 8 W.

**65001.9.6 Environmental:** The Dome network camera built-in video encoder and accessories shall

- Operate in a temperature range of -40°F to 122°F.
- Operate in a humidity range of 20 to 80% RH (non-condensing).

**65001.9.7 Installation**

- The Contractor shall carefully follow instructions in documentation provided by the manufacturer to insure all steps have been taken to provide a reliable, easy-to-operate system.
- All equipment shall be tested and configured in accordance with instructions provided by the manufacturer prior to installation.
- All firmware found in products shall be the latest and most up-to-date provided by the manufacturer, or of a version as specified by the provider of the Video Management Application (VMA) or Network Video Recorder (NVR).
- All equipment requiring users to log on using a password shall be configured with user/site-specific password/passwords. No system/product default passwords shall be allowed.

**65001.10. Cabinet**

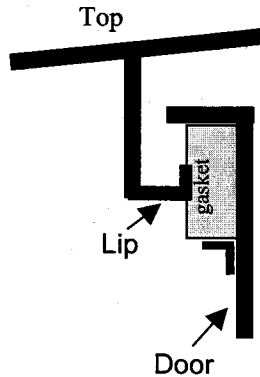
**65001.10.1 Cabinet housing**

- The cabinet housing shall be weatherproof and rainproof with the top of the enclosure either crowned or sloped to prevent standing water. The cabinet shall be constructed to shield the top of the cabinet door to prevent water from entering between the top door gasket and the cabinet.
- The cabinet housing shall have a single front door, equipped with a three-point latch and lock. The cabinet shall be fabricated for side of pole mounting and shall be suitably re-enforced for both pole mounting.
- All exterior seams and the cabinet as a whole shall meet the requirements for Type 3R enclosures according to NEMA Standards Publication 250-1991.
- The cabinet shall be clean-cut in design and appearance. The maximum exterior dimensions, including the cabinet door (but not including the removable handle) shall be as follows:

23" High x 20" Wide x 15" Deep

**65001.10.2 Material**

The cabinet housing, doors, and gasket channels shall be fabricated of 0.1875" minimum thickness sheet aluminum, using Grade 5052-H32 aluminum alloy. The sheet aluminum shall be adequately reinforced as necessary. If necessary, reinforcing supports shall be welded to the inside of the door to prevent the warping or twisting of the door. (A minor deviation was allowed for the current cabinet in the form of a lip using 0.125" material at the top of the door to improve water management over the door opening – see figure down). This deviation to the 0.1875" thickness requirement will be allowed providing all seams for this lip are continuously welded and only the top lip of the door opening is so modified. (Such a deviation must be submitted for approval by the ENGINEER.)



#### 65001.10.3 Construction

- All construction shall be free of dents, scratches, weld burn through and abrasions harmful to the strength and general appearance. All exterior seams for the cabinet housing and door shall be continuously welded and shall be smooth and free of impurities. All exterior corners shall be rounded.
- There shall be no sharp edges or protrusions on the cabinet whether open or closed which might pose a risk of personnel cuts or injury. All sharp edges shall be sanded and deburred before painting.

#### 65001.10.4 Exterior Surfaces

The exterior surface of the controller cabinet shall be powder coated, using medium green to match Federal Specification 595B Color 14062.

#### 65001.10.5 Gasketing

- The housing shall have a door, securely gasket, which shall include substantially the full area of the front of the cabinet. Gasketing shall be provided on all door openings and shall be of dust-tight permanent type that will not peel off or deteriorate. Gaskets shall be 0.25" minimum thickness closed cell neoprene and shall be installed with contact cement for a permanent bond. The mating surface shall be sprayed or otherwise coated with a silicon lubricant to prevent sticking to the mating metal surface.
- The gasket material shall not be damaged by normal cabinet cleaning agents and solvents normally used to remove graffiti from the exterior of the cabinet.
- Gasket material shall be UV resistant.
- The design of the door and gasket shall be such that the integrity of the gasket material shall not be required to ensure that the internal cabinet assemblies are protected from water damage under adverse environmental conditions. Cabinet door assemblies shall be designed in such a way that damaged gaskets do not allow water to enter the cabinet.

Gasket material shall be continuous along the entire top of the cabinet door with no seams or joints in this section.

#### 65001.10.6 Cabinet Door



- The cabinet door shall be hinged on the right side when facing the cabinet. The door hinge shall be continuous and bolted (piano) to the cabinet and door utilizing  $\frac{1}{4}$  - 20 stainless steel carriage bolts and NY lock nuts. The hinge shall be made of 0.075" stainless steel and shall have a 3" open width with a 0.250" diameter stainless steel carriage hinge pin. The hinge pin shall be capped top and bottom by weld to render it tamper proof. The hinge leaves shall not be surface mounted on the outside of the cabinet. They shall be mounted between the door and the cabinet. The cabinet door hinges shall be bolted to the cabinet housing in a manner that prevents unauthorized personnel from removing the door with commonly available tools.
- The cabinet shall be equipped with an automatic, self-engaging catch to hold the door open at  $135^\circ (\pm 25^\circ)$ . The catch shall be capable of holding the door open in a 140 Mi/Hr wind coming at an incidence angle of 90 degrees referenced to the plane of the door. A means shall be provided to minimize the accidental release of the doorstop. The catch shall also be easily and reliably disengaged when closing the door so that the door and catch are not damaged.
- The door shall be furnished with a three-point latching mechanism. The latching mechanism shall be a three-point draw roller type. Push rods shall be turned edgewise at the outward supports and shall be 0.250" by 0.750" stainless steel, minimum. Rollers shall have a minimum diameter of 0.875 inch and shall be made of nylon. The center catch shall be fabricated from 0.134" stainless steel minimum. Stainless steel compensating wear guards shall be used at contact point for the three point latching; these shall be pop or blind riveted to the cabinet.
- The three-point locking mechanism shall be fabricated so that it may be actuated by rotating a removable  $\frac{5}{8}$ " hex key door handle. The hex socket and locking cam shall rotate on a 0.5" minimum diameter shaft. The socket, shaft and hex key shall be fabricated from stainless steel, grade 2011P3 aluminum, or other material plated to prevent corrosion. The socket and shaft shall be field-replaceable with common tools. The socket head shall be protected from being rotated with a pipe wrench or similar tool. Designs shall be subject to approval by NYC DOT prior to fabrication. One (1) hex wrench shall be provided with each cabinet.

#### **65001.10.7 Water Management**

- The cabinet shall be constructed such that defective, aged, and damaged gasket material shall not allow water to enter the cabinet in any areas that might cause damage to the equipment or wiring mounted inside or the operation of the signals.
- The cabinet shall properly manage any condensation which may occur internally such that moisture cannot damage any of the internal cabinet assemblies, subassemblies, wiring or devices.
- There shall be no holes, seams, or attachments to the top of the cabinet that might cause water to leak for any reason.
- Weep holes approximately  $\frac{3}{16}$ " in diameter shall be drilled in the bottom floor of the cabinet such that water does not accumulate in the cabinet.

#### **65001.10.8 Door Lock**

- The lock for the cabinet door shall be of the self-locking, heavy duty, pin tumbler, cylinder rim type. It shall be the Corbin No. 1548RS 7/8, keyed for a DT-9 key, with dust cover. Two DT-9 keys, constructed of brass or stainless steel are to be furnished with each cabinet. When the door is closed and latched, with the key removed, the door shall lock.
- During the installation of the lock, good grade of commercial silicone will be put around the cylinder to form a weather barrier between the front of the lock and the inside of the cabinet door. A stainless steel lock protector plate shall be installed over the rear of the lock to prevent the rear of the lock from being punched out from the front of the cabinet.

#### **65001.10.9 Cabinet Ventilation**

- Each cabinet shall be provided with louvered vents in the cabinet door for fresh air. The vents shall be screened against the entrance to remove dust and foreign matter, with a removable and replaceable air filter 16" x 6" x 1" deep to filter incoming air. The filter shall be *Eco Air* type disposable filter or equivalent [reference: Eco-Air Products, Inc., San Diego, CA 92126, 619-271-8111] which is currently used and stocked by the City. The filter shall be a UL classified air filter-Class 2 644N.

- The filter shall overlap the vents by at least 1 inch and shall be held firmly in place with bottom and side brackets and a spring-loaded upper clamp. Provisions shall be made in the design of the vents to prevent snow and rain from being blown through the vents into the cabinet.
- The bottom filter bracket shall be formed into a waterproof sump with drain holes to the outside. The louvered vents shall be designed and constructed so that a stream of water from a pressure head, such as a *Rainbird* sprinkler or other type of water spray test, will not enter the cabinet. The louvered area shall be less than the filtered area.

#### **65001.10.10 Cabinet Mounting**

- The cabinet shall be mounted on the side of a pole.
- The mounting area shall include reinforcement angle or other stiffening techniques to prevent the back of the cabinet from deforming when attached to the pole.

#### **65001.10.11 Labeling**

- The cabinet shall be furnished with a metal plate embossed with the following two (2) lines of text:

TRAFFIC CONTROL  
NEW YORK CITY

Alternatively, the information noted above may be permanently etched or embossed into the cabinet door in such a manner as to be clearly visible on the exterior of the cabinet.

- If a plate is used, it shall be 11" in length and 5" tall and welded the outside of the front door with the center of the plate located at the vertical centerline and midway between the top and the middle of the door. This plate shall be painted with the same green paint as the exterior of the cabinet. The text shall have letters that are 0.875" in height; the information noted above shall be embossed in a manner which allows this information to be read even after several coats of paint have been added to the cabinet. The welding for this plate shall be neat in appearance.
- The controller cabinet shall also be identified by model number, a serial number, and NYC DOT on a metal plate visible on the inside of the cabinet. Consecutive serial numbers shall also be stamped on the metal name identification plate and fastened to the inside of the cabinet by rivets which shall not protrude or otherwise be visible on the exterior of the cabinet.
- NYCDOT requires that each separate procurement contract or construction contract have serial numbers which are unique and identifiable. The Contractor shall work with the City to establish a numbering scheme that allows the City and its maintenance contractors to quickly identify the specific contract which provided the controllers. This requirement shall be true for all subassemblies as well so that the City can identify the origin of the part and determine which contractor is responsible for its maintenance.

### **65001.11. Modem**

#### **65001.11.1 General**

The modem shall be used for field communications to Traffic control devices that include Microwave sensors, Variable message signs, cameras, traffic controllers and other intelligent transportation applications within the City of New York. This unit will be used in outdoor applications subject to extreme temperature and humidity housed in a NEMA type 3 R enclosures. The unit shall form the field end of a communications system including all components necessary to establish communications with our Traffic management center including components not addressed in this document.

#### **65001.11.2 Features**

- High speed data transfer rate.
- Compatible with the cell service carrier as directed by the Engineer.
- Compact size.
- Remotely manageable and upgradeable.

**65001.11.3 Environmental**

- Operating ranges: -22°F to 158°F
- Humidity: 5%-95% Non-condensing

**65001.11.4 Design**

- The modem shall have an input voltage from 9DC to 28DC, and shall also be able to operate from a furnished 110AC power supply that can be plugged directly into a standard power receptacle.
- The modem shall support available data service with dual-band receive diversity with a keep-alive function to ensure persistent connectivity.

**65001.11.5 Communications**

- The modem shall include an Ethernet or RS-232 ports to be determined by field devise that will interface with the modem or as directed by the Engineer.
- The modem shall be capable of wireless remote management, reconfiguration and firmware and PRL update.
- The modem shall be configurable as an SNMP agent for remote network management and have a software application able to create and save configuration templates and the ability to remotely monitor, update and report statistical data on user defined modem groups.
- Data rates:
  - Downlink-3.1 Mbps max; 450-850 kbps typical
  - Uplink- 1.8 Mbps max; 300-400 kbps typical
- The modem shall have a static IP address.

**65001.11.6 Additional Equipment**

- A 3db low profile outdoor antenna with a mobile thru sheet metal type of mounting system. The antenna shall be of such a design to be tamper and damage resistance. The unit shall be furnished with all connectors and cabling needed for installation.
- The modem shall be housed in a suitable enclosure meeting NEMA 3R standards for weather resistant enclosures and be of such a construction that it is resistant to corrosion and have provisions for locking with a padlock.
- The modem shall be supplied with all necessary power cables and adapters for either low voltage DC or 110v AC operation.
- The modem shall be warranted for a period of 1 year from the date of acceptance.
- The modem shall be provisioned, programmed and tested prior to shipping.

## 7.87 Installation

### 1.87.1 Contractor Responsibilities

- The Contractor is responsible for carrying out the provisions of the contract at all times. Any work or item that is, at any time, found to be in non-conformance with Specifications or not in compliance with the Contract Drawings shall be subject to such corrective measures as directed in writing by the Engineer.
- The Contractor shall designate a duly authorized superintendent whose sole responsibility shall be managing and coordinating the Contract. The superintendent shall give constant personal attention to the work while it is in progress. The superintendent shall be a competent and reliable superintendent who can communicate technically, and have authority to act for the Contractor. It shall be the Engineer's option to require the replacement of the superintendent if that individual is unreliable or does not adequately progress the work. The Contractor shall, at all times, employ labor and equipment, which shall be sufficient and adequate to prosecute the work in a complete and timely manner. All workers must have sufficient skill and experience to properly perform the work assigned to them. The Engineer shall have the ability to have the Contractor remove from this project any person creating a disturbance to the project or deemed by the Engineer unfit to perform the work.
- Under the Contract, the Contractor shall be required to do all work enumerated under the different items of the contract and, in addition to this, shall be required to protect all properties, all utilities and existing facilities within and adjacent to the work and to repair or replace any such properties, utilities and facilities damaged or destroyed by the Contractor's construction operations.
- The Contractor shall be responsible for the coordination of the work of his various subcontractors. Their respective operation shall be arranged and conducted so that delays and conflicts will be avoided. The Contractor shall ultimately bear the responsibility to progress all of the work in an efficient, continuous and workmanlike manner.
- In order to insure compatibility between the components, the camera, environmental enclosure, zoom lens, PTZ mounting, and Receiver Junction Box electronics, must all be integrated by an experienced video system engineering firm.
- The integrator must have at least five (5) full time factory-trained and certified technicians and/or engineers who are rated for the components to be utilized. The video supplier shall be able to provide on-site service anywhere in New York within eight (8) hours notice. The video supplier shall accept full warranty responsibility and regular support service for the complete CCTV package.
- The Contractor shall be responsible for installation of the required system components and communication equipments in the field and on Traffic Management Center (TMC) to provide a fully operational system.

### 7.87.2 Supplementary Drawings

When, in the opinion of the City's Engineer, it becomes necessary to more fully explain the work to be done, or to illustrate the work further, or to show any changes which may be required, drawings known as supplementary drawings and specifications known as supplementary specifications will be prepared by the Engineer. Four (4) prints of each of these drawings and four sets of these specifications will be furnished to the Contractor. These supplementary drawings and specifications shall be binding upon the Contractor with the same forces as the contract drawings and specifications.

### **7.87.3 Specifications/Drawings**

The following NYCDOT documents are hereby made a part of this contract:

The City of New York, Department of Transportation, Division of Traffic Operations, Street Lighting Section, Specifications - 1992 Edition.

The City of New York, Department of Transportation, Division of Traffic Operations, the Chief Transportation Officer Traffic Engineering Section, Specifications - March 1995 Edition. [Also referred to as "Division of Traffic Operations and Signals Standard Specifications ("Traffic Blue Book") which details all the bid items in the contract.]

The City of New York, Department of Transportation, Division of Traffic Operations, Street Lighting Section, Standard Drawings - 1992 Edition.

The City of New York, Department of Transportation, Bureau of Highways, Roadway Design, Standard Specifications of Construction - August 1988 Fifth Edition.

All other specifications and drawings to be provided by the NYCDOT.

At the end of the project and after the final field inspection and for each mounted location, the contractor shall provide as-built drawings for the use of the city of New York.

### **7.87.4 Item Quantities**

The item quantities indicated in the Distribution of Quantities and the bid schedule are estimates only, subject to final verification by Engineer.

### **7.87.5 Contractor to Verify Dimensions**

The Contractor shall verify all dimensions and details shown on the Contract Drawings or other data received from NYCDOT and shall notify the Engineer in writing of all omissions, conflicts, and discrepancies found therein. Notice of such errors shall be given before the Contractor proceeds with the work.

### **7.87.6 Record of Work Done**

The Contractor shall maintain an accurate record of the work as actually performed during the progress thereof. Before final payment, the contractor shall furnish to the engineer, within thirty (30) consecutive calendar days after completion of the work at each intersection, subject to his approval, one (1) complete set of drawings in ink on tracing cloth showing all of the work and locations thereof as actually installed, except that if signs are installed, the engineer may expect at his discretion tabulation's showing the location and type of mountings of each sign. Record drawings shall be the same size as the contract drawings.

The Contractor may avail himself of the opportunity of securing at his own expense a set of photographic reproductions on cloth made from the tracings of the contract drawings, upon which he shall indicate all changes and corrections occurring in the work as actually completed, supplemented by such other drawings made with ink on tracing cloth as may be necessary to indicate all work and locations thereof in detail as actually completed. The Contractor's attention is particularly directed to the necessity of keeping accurate records of all subsurface and concealed work so that the record drawings may contain this information in exact detail and location.

### **7.87.7 Changed Conditions**

If, during the progress of the work, conditions are discovered which make it impossible to produce work in accordance with the best general practice, or shall cause any change in the work from that specified, the Contractor shall refer the matter to the Engineer before proceeding with the work. If the

Contractor fails to make such reference to the Engineer the Contractor may proceed at his own risk, and shall such work not be satisfactory to the Engineer the Contractor shall remove and replace it without additional cost to the City.

The City of New York has the right to change the number of locations by up to 10% as needed.

#### **7.87.8 Notice Required for Inspection**

The Contractor shall inform the Engineer seventy-two (72) hours in advance of the time and place at which he intends to do work in order that proper arrangement may be made for inspection. The Contractor shall also notify the Director by FAX daily (before 8 am) of the location where crews plan to work.

Monthly meetings with an officer or officers of the company will be set up by the Project Director in order to resolve problems and the scheduling of work, change orders, and equipment deliveries.

#### **7.87.9 Permits**

The Contractor shall procure all the necessary permits in the name of NYCDOT for opening sidewalks and pavements. There will be no permit fees charged to the Contractor.

The Contractor at his own expense and in his own name shall obtain all other permits required for this work.

#### **7.87.10 Existing Structures & Utilities**

Before doing any work over, under, or near duct lines, vaults, subways, or other subsurface structures, the Contractor shall, at his own expense, make such arrangements for properly removing or protecting such structures during the progress of the work as shall be satisfactory to the owners of the structures. Any damage to such structures shall be immediately reported to the owner and to the Engineer and shall be repaired by the Contractor at his expense to the satisfaction of the owner of the structures.

Location of utilities, public and/or private, indicated as existing and/or to be constructed as shown on the Contract Drawings are approximate only. Their exact location shall be determined in the field. Additional utility lines, whether abandoned or in service, may exist and it shall be the Contractor's responsibility to conduct his operations and take the necessary precautions to prevent interference with or damage to these or other facilities during the course of construction.

In the event the Contractor damages an existing utility service causing an interruption in said service the Contractor shall immediately notify the owner and commence work to restore service and may not cease his work operation until service is restored. All corrective work shall be at the expense of the Contractor and shall be acceptable to the Engineer and the subject utility owner.

It will be the Contractor's responsibility to contact all utility companies that have subsurface installations in the area of work for this contract and direct them to have their facilities marked out prior to commencing excavation.

#### **7.87.11 City Monuments & Marks**

The Contractor shall not disturb or excavate within three (3) feet of any City monuments which may be within the limits of, or be disturbed by the work, but shall cease operations at such places until the said monuments have been referenced and reset or otherwise disposed of, except upon special permit from NYCDOT. After permission has been given to remove the monument, the Contractor shall take up and preserve such monuments, and if required, remove same to a point designated by the Engineer.

#### **7.87.12 Cleaning Up**

Upon the completion of the work at each location the Contractor shall remove all remaining material and shall leave the area that may have been affected by his operation in a neat condition.

#### **7.87.13 Maintenance of Traffic**

The Contractor shall work closely with the Engineer and with City agencies in scheduling construction and equipment installation so as to minimize intersection downtime, uncoordinated traffic signal controller operation, and the attendant inconveniences to both pedestrians and the motoring public. Special permits may be required to be procured by the Contractor that may restrict the times and days that certain work may be performed.

It is incumbent upon the Contractor to schedule his work accordingly. Arrangements shall be made by the Contractor for safe and effective traffic control during the periods that he or she must interrupt normal traffic control provided by the devices installed for that purpose prior to the beginning of his work at a particular intersection.

The Contractor shall use at a minimum, stop signs (furnished by Contractor), traffic enforcement officers (as directed by Engineer and furnished by city) or temporary controllers and or signals (furnished by contractor) where such action is necessary to maintain safe operation for both pedestrian and vehicular traffic.

The Contractor shall be responsible for obtaining these services. The Contractor shall also be responsible for obtaining from the appropriate City agencies the permission to use these services, and for notifying the agencies about when they will be used.

All city streets used for hauling of materials shall be kept clear of debris and maintained at all times and left in a condition satisfactory to the Engineer. All hauling on city streets shall be subject to the rules and regulations of the CITY.

The Contractor shall also submit to the Engineer for approval at least two (2) weeks prior to performing the work at the intersection, his plan for maintenance and protection of traffic, including the schedule for downtime of control equipment. Closing sidewalk or travel lanes of the roadway shall be performed by acceptable standard methods compatible with the examples given in the Federal and New York State Manual on Uniform Traffic Control Devices. In preparing the Maintenance and Protection of Traffic plan, the Contractor shall familiarize himself with and shall adhere to all of the rules set forth in the NYCDOT standards, specifications, and other stipulations that may be required by NYCDOT in the performance of this work. The cost of providing maintenance and protection of traffic shall be included in the prices for the individual bid items.

If the Contractor fails over a period of twenty-four (24) hours in adequate maintenance and protection of traffic, the Engineer may order the correction of the adverse conditions by another agency, using hired equipment and personnel for the Contractor's account. These costs shall be deducted from monies due the Contractor on this Contract.

#### **7.87.14 Pole Mount**

##### **7.87.14.1 General**

- The Contractor shall provide all incidental components, mounting brackets, and cabling required to achieve a fully functional assembly as illustrated in the contract drawings and in conformance with NYCDOT standards.
- All equipment and materials used shall be standard components, regularly manufactured, regularly utilized in the manufacturer's system.
- All systems and components shall have been thoroughly tested and proven in actual use.
- All systems and components shall be provided with an explicit manufacturer warranty.

##### **7.87.14.2 Requirements**

- The pole mount shall be an outdoor unit.

- It shall have a sufficient load rating to support the camera dome system.
- It shall have a cable access hole and be provided with a liquid tight fitting.
- The wall mount shall have a standard 1-1/2 in. NPT-F pipe thread.

**7.87.14.3 Mechanical specifications**

- Dimensions:
  - Height: < 12".
  - Depth: < 15".
- Weight: < 5lb.
- Construction: Cast aluminum.
- Color: white polyurethane.

**7.87.15 Cables**

**7.87.15.1 Cable Name**

This cable shall be called 2c-10 B (breakdown 2c-10 B = 2 number 10-AWG conductors with a third wire for bonding.)

**7.87.15.2 Intended use**

This cable is to be used for 120 volt power systems in NYC.

The cable shall be rated for 600 volts and have a polyethylene – insulated, jacketed cable for use in under ground conduit or for aerial use(must have strain relief's built in for aerial use without a messenger cable). The outer jacket shall be a black in color and be UV resistant and made to endure extreme outdoor usage unprotected without deterioration of insulation or outer jacket fading. This cable shall be rated for direct burial with out conduit covering or other protection.

**7.87.15.3 Construction**

The conductors shall be round annealed copper conforming to ASTM designation B3.

This cable shall be a three (3) conductor type with two (2) number ten (10) AWG wire size conductors one (1) white solid wire and one (1) black solid wire with the third conductor number eight (8) AWG bare stranded wire.

**7.87.15.4 Insulation**

The insulation shall be a heat-stabilized polyethylene conforming to the requirements of ASTM designation D 1248 for type 1 category 5 grade E4 materials. This insulation shall be concentrically applied about the conductor. This installation shall meet the following requirements when tested in accordance with the procedures of ASTM designation D 2633 and D 1351.

This cable shall meet all other requirements as listed in the NYC DOT traffic specifications 3/95.

**7.87.16 Testing**

All CCTV assemblies shall be subject to factory and prototype testing as subsequently described. The CCTV factory test shall be held at a facility in New York which is fully equipped to operate under various lighting levels. The facility shall be equipped with measurement devices which can be utilized to verify that the assembly is compliant with the specifications. The indoor test shall verify that the camera, zoom lens, environmental enclosure, and PT mounting are fully operational and compliant. The PC based diagnostic facility shall be utilized to fully exercise the remote capability of the system. In addition, the test shall simulate various lighting conditions and demonstrate that the assembly is operable at the minimum lux levels required by the specifications. The factory test shall also demonstrate or provide confirmation that all of the equipment operates over the specified environmental range for each component.

The second part of the test shall exercise the camera in an outdoor environment in close proximity to a busy highway. The test shall be conducted in daylight and nighttime conditions. The supplier shall be responsible for submitting a test plan which has been designed to exercise and monitor the equipment for the purpose of determining compliance with the specifications.

**7.87.17 System Description**



#### **7.87.17.1 General**

- The IP video management system shall consist of an advanced suite of network appliances and software designed to provide high quality delivery and processing of IP based video, control and sensor data using standard Ethernet based networks.
- The IP video surveillance system shall be a proven, successful product line with an installed and operating base of systems as applied to Traffic Management Center applications.
- A suite of intuitive graphical user interface software shall manage all IP based video matrix switching and camera control functions, alarm monitoring and control, as well as recording and archive/retrieval management.
- The system design shall include all necessary, high-performance, dual-stream MPEG2/MPEG4 video codecs.
- All camera site signals shall be efficiently compressed and encoded, and delivered onto the network for processing and control by the IP video management software suite.
- The camera system units shall be ruggedly built, and designed for extreme adverse environments, meeting NEMA TS-2 environmental standards.
- The encoder/decoder combinations shall place video and data into one network stream that can be managed from multiple workstations on the users LAN or WAN.
- All system interconnect cables, workstation PC's, PTZ joysticks, and network intermediate devices shall be supplied as required by this system design.
- The video signals shall be transmitted to traffic management center; all cameras shall interface with New York City flow map chart so that the operator at the traffic management center shall have the capability to control the cameras through the transuite system.
- The encoders are connected to an Ethernet switch that is also connected to one of the servers thereby making all the digitized images available to these servers.
- Upon integration of all cameras at TMC, the operators shall have a full control over the operating system.

#### **7.87.17.2 Minimum System Requirement**

Major functions which the IP video surveillance system shall support as a minimum include:

- IP video stream routing and display management. Software and hardware decoding is required.
- IP video recording, playback, and event search/retrieval management
- Provide ability for encoder to decoder persistent connection, allowing point to point connections to be established.
- Manual and automatic camera site PTZ control with camera site programming/setup.
- Alarm device I/O monitoring, event logging, and device state control with programmable alarm event actions.
- Allow USB based CCTV control panel/joystick capability.
- Integrate with video processing applications such as facial recognition, video detection, object tracking, etc.
- Provide a comprehensive system device configuration utility application.
- Allow for a centralized or distributed system database.

The full suite of software applications shall include:

- Configuration application, for system devices configuration, database management, and device testing. Included shall be a desktop player for viewing video while testing.
- Graphical User Application, for full system control and operator management. This application shall allow maps and icons to be present for operator interface and control of all system devices, including alarms, relays, video, NAS recording and serial data connection and management.
- Viewer Application shall provide limited control and operator management. This application shall be used for basic operator viewing, PTZ control functions and local recording.

#### **7.87.17.3 Product Specifications**

Control Software Requirements:

- Allow user to select any video source to any video destination for routing and display,
  - Allow connection of any video stream for software decoding on any PC video window with an installed application.
  - Allow connection of any video stream for hardware decoding thru selected video decoder.
- Multiple video decoders shall provide simultaneous decoding of any connected video streams.
- The software shall offer live viewing, storing and retrieving of video sequences.
- Provide group video switching of pre-defined video streams routed to any pre-defined video window(s) and decoders with single command.
- Allow automatic group switching sequences to be performed.

#### 4. SPECIAL PROVISIONS

The following shall become a part of and apply to the Contract:

A. **LINES AND GRADES.** The Contractor shall furnish lines and grades in accordance with Section 1.06.27 of the Standard Highway Specifications, except that survey controls established for this project may no longer exist and the Contractor shall be required to re-establish the survey control information using official Borough Survey Control Monuments and Bench Marks, where they exist. The Contractor shall 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 shall 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, 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 shall be final.

C. **HOLIDAY CONSTRUCTION EMBARGO.** A special Holiday Construction Embargo shall 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

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\* 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>

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.

D. SPECIAL EVENTS. The Contractor will be precluded from proceeding with work at locations where the Contractor cannot complete such work three (3) days prior to the date of the scheduled UN General Assembly Embargo as published by the Bureau of Permit Management and Construction Control, and the Holiday Embargo restrictions under Article C, above, shall apply.

No extension of time due to the shutdown period will be granted to the Contractor for completion of the work.

However, where the Contractor is notified by the Engineer 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 thereof for City work, if required, for those Special Unscheduled Event periods will be paid for under Item No. HW-900H and the Contractor will be granted an extension of time for the completion of the work, equal to the duration of the ordered shut-down.

E. DISPOSAL OF EXCESS EXCAVATED MATERIAL. All excess excavated material, with the exception of contaminated material, shall become the property of the Contractor and shall be properly disposed of away from the site, at the Contractor's expense. Contaminated material shall be disposed of separately in accordance with contract requirements.

F. CONTRACT ITEMS THAT INCLUDE BACKFILL AS A PART OF THEIR WORK. The following shall pertain to all contract items that have backfill as a part of their work: Backfilling shall 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.

G. N.Y.C. TRANSIT INSURANCE. The Contractor (Permittee) shall indemnify and save harmless the City of New York and the New York City Transit (Permitter) in accordance with the following "Insurance Requirements" and proof that the necessary insurance is in effect will be required before work can commence:

NYCT "OUTSIDE CONTRACT" INSURANCE REQUIREMENTS

1. The Permittee at its sole cost and expense shall carry or cause to be carried and shall maintain at all times during the period of performance under this Agreement policies of insurance as herein below set forth below:

- (A) Workers' Compensation Insurance (including Employer's Liability Insurance) with limits as specified in Schedule A, which limit may be met by a combination of primary and excess insurance meeting the statutory limits of New York State. The policy shall be endorsed to include Longshoreman's and Harbor Workers' Compensation Act/Maritime Coverage Endorsement and/or Jones Act Endorsement when applicable.
- (B) Commercial General Liability Insurance (I.S.O. 2001 Form or equivalent) approved by Permitter in the Permittee's name with limits of liability as specified in Schedule A for each occurrence on a combined single limit basis for injuries to persons (including death) and damages to property. The limits may be provided in the form of a primary policy or combination of primary and umbrella/excess policy. When the minimum contract amounts can only be met when applying the umbrella/excess policy; the Umbrella/Excess Policy must follow form of the underlying policy and be extended to "drop down" to become primary in the event primary limits are reduced or aggregate limits are exhausted. Such insurance shall be primary and non-contributory to any other valid and collectable insurance and must be exhausted before implicating any Permitter/MTA policy available.

Such policy should be written on an occurrence form; and shall include:

- Contractual coverage for liability assumed by the Permittee under this agreement;
- Personal and Advertising Injury Coverage;
- Products-Completed. Operations;

- Independent Contractors Coverage;
- "XCU" coverage (Explosion, Collapse, and Underground Hazards) where necessary;
- Contractual Liability Exclusion, applicable to construction or demolition operations to be performed within 50 feet of railroad tracks, must be voided, where necessary; and,
- Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04 version or equivalent) approved the Permittor naming:

New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operating Authority (MaBSTOA), the Staten Island Rapid Transit Operating Authority (SlRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner).

- (C) Business Automobile Liability Insurance Policy - (I.S.O. Form CA 00 01 10 01 or equivalent) approved by the Permittor is required if Permittee's vehicle enters Permittor property. The insurance must be in the name of the Permittee or its contractor entering the Permittor property with limits of liability in the amount specified in Scheule "A" for claims for bodily injuries (including death) to persons and for damage to property arising out of the ownership, maintenance or use of any owned, hired or non-owned motor vehicle.
- (D) Railroad Protective Liability Insurance policy shall be required as specified in Schedule A.
- (E) Environmental/Pollution Exposures

In the event environmental or pollution exposures exist, the Permittee shall require the environmental contractor or subcontractor to provide the applicable insurance covering such exposure. The limits and type of insurance provided shall be satisfactory to the Permittor and will be confirmed to the parties prior to the start of the work.

## 2. General Requirements Applicable to Insurance Policies

- a) All of the insurance required by this Article shall be with Companies licensed or authorized to do business in the State of New York with an A.M. Best Company rating of not less than A-/VII or better and reasonably approved by the Permittor/MTA and shall deliver evidence of such policies.
- b) Except for Workers Compensation, all references to forms and

coverages referred to above shall be the most recent used by the Insurance Services Office, Inc. (ISO") or equivalent forms approved by the Insurance Department of the State of New York, provided, however, that excess coverages may be written on forms reasonably acceptable to Permittor containing provisions other than those contained in ISO forms but otherwise conforming in substance to the requirements of this Article.

- c) The Permittee or its Contractor performing the work shall furnish evidence of all policies before any work is started to the permittor:

For NYCT Contract Inspection  
C/O Mr. John Malvasio  
Director, MOW Engineering  
130 Livingston Street, Room 8044F  
Brooklyn, NY 11201  
Telephone: (718) 694-1358

These policies must: (i) be written in accordance with the requirements of the paragraphs above, as applicable; (ii) be endorsed in form acceptable to include a provision that the policy will not be canceled, materially changed, or not renewed, unless otherwise indicated herein, at least thirty (30) days prior written notice to the Permittor c/o MTA Risk and Insurance Management (MTA RIM) Department - Standards, Enforcement & Claims Unit, 2 Broadway - 21st floor, New York, NY 10004; and (iii) state or be endorsed to provide that the coverage afforded under the contractor's policies shall apply on a primary and not on an excess or contributing basis with any policies which may be available to the Permittor/MTA, and also that the contractor's policies, primary and excess, must be exhausted before implicating any Permittor/MTA policy available. (iv) In addition, contractor's policies shall state or be endorsed to provide that, if a subcontractor's policy contains any provision that may adversely affect whether contractor's policies are primary and must be exhausted before implicating any Permittor/MTA policy available, contractor's and subcontractor's policies shall nevertheless be primary and must be exhausted before implicating any Permittor/MTA policy available. Except for Professional Liability, policies written on claims made basis are not acceptable. At least two (2) weeks prior to the expiration of the policies, contractor shall endeavor to provide evidence of renewal or replacement policies of insurance, with terms and limits no less favorable than the expiring policies. Except as otherwise indicated in the detailed coverage paragraphs below, self insured retentions and policy deductibles shall not exceed \$100,000, unless such increased deductible or retention is approved by Permittor/MTA. The Permittee shall be responsible for all claim expense and loss payments

within the deductible or self-insured retention. The insurance monetary limits required herein may be met through the combined use of the insured's primary and umbrella/excess policies.

- d) Certificates of Insurance may be supplied as evidence of policies of the above policies, except for Policy (D) Railroad Protective Liability Insurance Policy. However, if requested by the Permitter, the Permittee shall deliver to the Authority, within forty-five (45) days of be request, a copy of such policies, certified by the insurance carrier as being true and complete. The Railroad Protective Liability Insurance Policy must be provided in the form of the Original Policy. A detailed Insurance Binder may be provided, ACORD or Manuscript Form, pending issuance of the Original Policy. The Original Policy must be submitted to MTA RIM within 30 days of the Binder Approval.
- e) If a Certificate of Insurance is submitted, it must: (1) be provided on the Permitter Certificate of Insurance Form or MTA Certificate of Insurance Form for Joint Agency Agreements; (2) be signed by an authorized representative of the insurance carrier or producer and notarized; (3) disclose any deductible, self-insured retention, sub-limit, aggregate limit or any exclusions to the policy that materially change the coverage; (4) indicate the Additional Insureds and Named Insureds as required herein, along with a physical copy of the Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04 version or equivalent), as applicable and the endorsement(s) must include policy number(s); (5) reference the Contract by number on the face of the certificate; and (6) expressly reference the inclusion of all required endorsements.
- f) The minimum amounts of insurance required in the detail description of policies (A), (B), (C), and (D) above shall not be construed to limit the extent of the Permittee's liability under this Agreement.
- g) If, at any time during the period of this Agreement, insurance as required is not in effect, or proof thereof is not provided to the Permitter, the Permitter shall have the options to: (1) direct the Permittee to suspend work or operation with no additional cost or extension of time due on account thereof; or (ii) treat such failure as an Event of Default.

H. SCHEDULING PRESENTATION. The Contractor shall submit construction schedule in the form of a bar chart using "Microsoft Project 2010" or latest version, or in an approved equivalent program which shall be directly and fully translatable into Microsoft Project 2010 format, within seven days of the initial Pre-Construction Meeting. Each bar in the chart shall show dates the



Contractor plans to start and complete each construction activity after the initial Pre-Construction Meeting. Bar chart shall show the order and interdependence of all activities necessary to complete the work and the sequence in which activity is to be accomplished as planned by the Contractor and in accordance with all subcontractors or suppliers whose work shall be shown on the bar chart. The Contractor shall submit the bar chart for the Engineer's review and revise it, if required, until approved by the Engineer.

The Contractor shall submit weekly progress status update reports or as otherwise directed by the Engineer. The Contractor shall submit updated bar chart every month. The revised bar chart shall be made in the same form and detail as the original submittal and shall be accompanied by an explanation of the reasons for the revisions all of which shall be subject to approval by the Engineer.

I. VEHICLES. The Contractor shall be required to furnish one (1) vehicle to be used by Department of Design and Construction (DDC) personnel as assigned by the Deputy Commissioner of the Department, during the life of the Contract. No direct payment will be made for the vehicle(s), or associated costs. All costs shall be deemed to be included in all scheduled items

The Contracted vehicle shall be a new small SUV hybrid vehicle as approved by DDC's Director of Fleet Administration; and shall be equipped with a standard equipment package, and meet the following minimum specification:

1. Engine: Manufacturer's Standard 4 cylinder.
2. Transmission: Automatic.
3. Drive: Manufacturer's Standard 4 wheel drive.
4. Steering: Power.
5. Air Conditioning.
6. Body: 4 Doors.
7. Color: Manufacturer's Standard White.
8. Mirror: Left and Right.
9. Radio: AM/FM.
10. Electric Rear Defogger.
11. Brakes: Anti-Lock.
12. Air Bag: Dual
13. Anti-theft device (optional).
14. Power Windows and Locks.
15. Two sets of keys.
16. GPS navigation.
17. Hands-free telecommunication technology.
18. Fire Extinguisher.
19. First Aid Kit.
20. Any additional equipment will not be accepted by DDC.

The Contractor shall provide fuel, oil, proper maintenance, tires and replacement parts, to keep the vehicle in a safe operating condition, and shall undertake all repairs, including repairs arising from vandalism, accidents, or other damages. A Gas Company

Card shall be furnished with each vehicle for fueling purposes. In the event that any vehicle requires maintenance or repairs which cannot be completed the same day, a comparable replacement vehicle shall be provided while the vehicle is out of service. If the vehicle is lost or stolen, the Contractor shall replace the vehicle within 5 business days with a comparable vehicle.

The vehicle(s) shall be provided for the entire duration of this Contract, and shall be returned to the Contractor within thirty days after final acceptance of work or twelve months after substantial completion, whichever comes first. Contractor owned/leased vehicle(s) provided pursuant to this Contract shall remain the property of the Contractor/ Leaser throughout the Contract period; shall be registered in the City's name. If leased vehicles are provided, the Contractor shall obtain from the leasing company the necessary documents allowing the vehicle to be registered as an official City of New York vehicle. The Contractor shall provide insurance for vehicle as set forth in Schedule A.

Within five (5) business days of receipt of notice to provide specified vehicle, the Contractor shall make the vehicle available for inspection by Fleet Administration. Upon determination by Fleet Administration that the vehicle satisfies requirements, the Contractor shall make arrangements through DDC's Fleet Administration for delivery to the DDC. The Contractor shall submit to Fleet Administration a signed MV-82 Part 10 authorizing registration in the City's name together with, in the case of a previously unregistered vehicle, the manufacturer's certification of origin or, in the case of a currently registered vehicle, a copy of the title.

All required transmittals to Fleet Administration shall be made as follows:

Agency Fleet Administrator  
NYC Department of Design and Construction  
30 - 30 Thomson Avenue, 4<sup>th</sup> Floor  
Long Island City, New York 11101  
Telephone No.: (718) 391-1852

When the vehicle is no longer required under this contract, it shall be de-registered by the City and immediately returned to the Contractor.

J. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES.  
Contractor shall plan and/or stage his/her work schedule using all hours/days available. Contractor is advised that all applicable unit prices shall 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 shall be permitted to accelerate this project, to combine stages and/or work sequences. Any such changes shall be shown in the construction schedule, to be furnished in accordance with the General Provisions of the Standard Specifications and the above "SCHEDULING PRESENTATION" Article, and shall be submitted for approval of the Engineer.

K. 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.

L. DUST CONTROL. During the progress of the work under this contract, the Contractor shall be required to furnish and apply water and/or calcium chloride for the purpose of allaying dust conditions. Materials to be used, area to be covered, and time and rate of application shall be as directed by the Engineer.

M. NOISE CONTROL. The Contractor is directed to Title 24, Chapter 2 of the Administration Code of the City of New York, known as the "New York City Noise Code" by the Department of Environmental Protection. The provisions of this code and its most recent additions and revisions shall apply to this contract. In the event of a conflict between the requirements of the New York City Noise Code and the requirements of Noise Control contained in these special notes, the more stringent of the two shall apply.

The Contractor shall plan and carry out work on this Project to ensure that the noise from construction equipment and activities does not exceed the limits specified herein. The noise abatement operations and conditions specified shall be carried out by the Contractor to limit noise in project and adjacent areas. The Contractor shall conduct a continuous educational effort for the workers on the site to ensure that they are aware of their roles in minimizing noise propagating from the site.

In order to monitor noise abatement operations the Contractor shall employ services of "Noise Control Specialist" for the duration of construction activity. The contractor shall submit qualifications and experience of the prospective specialist/firm to the Engineer for prior approval. The specialist/firm must satisfy the eligibility requirements of qualifications and work experience as required by the N.Y.C.D.E.P.

The monitoring protocol shall be as follows:

- (a) There shall be one outdoor and one indoor monitoring station for each work area or 1,000 ft. of street length whichever is less.
- (b) Monitoring of noise level shall be done prior to start of construction and during construction for each station at the

same work hours specified in the contract.

- (c) Locations of monitoring stations shall be recommended by the noise control specialist for approval of the Engineer.
- (d) Engineer shall provide indoor station locations to the contractor after ascertaining availability of the said station from the Community Board.

Should the Contractor fail to carry out the noise abatement operations and conditions specified herein, the Engineer shall have the authority to suspend all work until such time as the Engineer deems that the Contractor has complied with the requirements.

The following additional requirements for noise control shall apply to this contract:

1. Noise Level Requirements for Construction Equipment

- (a) The Contractor shall ensure that all Contractor and Subcontractor equipment, of the types listed in Table A to be used on-site for a total duration greater than 5 days, shall be tested for compliance with the stated noise emission limits during the first day of use on the construction site or at an alternative site acceptable to the Engineer.
- (b) All equipment as described in (a) above shall be re-tested at 6 month intervals while in use on site.
- (c) All compliance tests shall be performed by the Contractor.
- (d) For each piece of equipment tested, the Contractor shall provide a noise report to the Engineer as shown in Figure A.
- (e) Equipment of the types listed in Table A, as described above, shall not be used on-site without valid certificates of noise compliance.
- (f) The Contractor shall provide to the Engineer two noise meters meeting the requirements of Section 2(d) herein. Two acoustic calibrators of the type recommended by the meter manufacturer shall also be provided.

TABLE A

CONSTRUCTION EQUIPMENT NOISE EMISSION LIMITS:  
MEASURED AT 50 FEET FROM CONSTRUCTION EQUIPMENT

<u>Equipment Category</u>	<u>Noise Level, dBA(SLOW)</u>
Auger	83
Backhoe	80
Bar Bender	80
Cherry Picker	80
Chain Saw	86
Compactor	80
Compressor	70
Concrete Mixer	86
Concrete Pump	82
Concrete or Diamond Saw	90
Crane	86
Crawler Miller	90
Dozer	86
Front End Loader	80
Generator	82
Gradall	86
Grader	86
Jackhammer	88
Man Lift	80
Mounted Impact Hammer	95
Paver	86
Pneumatic Tools	86
Roller	80
Scraper	86
Shotcrete Liner (tire-mounted)	79
Striper (walk-behind)	80
Tractor	84
Traffic Line Remover	80
Truck (including truck-mounted equipment)	84
Vibrator	80
Vibratory Pile Driver	95
All Other Equipment with Engines Larger than 3750W	86
Impact Pile Driver	105 dBC (FAST)

FIGURE A

CERTIFICATE OF EQUIPMENT NOISE COMPLIANCE

Contractor Name: \_\_\_\_\_  
Contract Name & Number: \_\_\_\_\_

Equipment Type: \_\_\_\_\_  
Manufacturer & Model Number: \_\_\_\_\_  
Identification Number: \_\_\_\_\_  
Rated Power & Capacity: \_\_\_\_\_  
Operating Condition During Test: \_\_\_\_\_

Measured Sound Levels at 6 to 15 meters:

Measured Values and Distance:

Engine-Powered or Concrete-Breaking Equipment:

Right Side: \_\_\_\_\_ dBA (SLOW), at \_\_\_\_\_ meters  
Left Side: \_\_\_\_\_ dBA (SLOW), at \_\_\_\_\_ meters

Impact Pile Driving Equipment:

Right Side: \_\_\_\_\_ dBC (FAST), at \_\_\_\_\_ meters  
Left Side: \_\_\_\_\_ dBC (FAST), at \_\_\_\_\_ meters

Equivalent Values at 50 Feet Distance:

Engine-Powered or Concrete-Breaking Equipment:

Right Side: \_\_\_\_\_ dBA (SLOW).  
Left Side: \_\_\_\_\_ dBA (SLOW).

Impact Pile Driving Equipment:

Right Side: \_\_\_\_\_ dBC (FAST).  
Left Side: \_\_\_\_\_ dBC (FAST).

Maximum Values Allowed for this Equipment: \_\_\_\_\_ dBA (SLOW) at 15  
meters  
\_\_\_\_\_ dBC (FAST) at 15  
meters

If equipment sound level exceeds maximum value allowed, indicate  
action taken to achieve compliance:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name, Work Address & Phone No. \_\_\_\_\_  
of NYSDOT Inspector \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

CONTRACTOR'S ACCEPTANCE: \_\_\_\_\_ Date: \_\_\_\_\_

2. Noise Level Test Procedures of Construction Equipment

- (a) All engine-powered equipment shall be operated by the Contractor or Contractor's representative at high idle (maximum governed rpm) under full load conditions during the tests.
- (b) Portable and mounted impact hammers, such as hoe rams and jackhammers to be used to concrete breaking, shall be tested during the first day of actual operation at the construction site under maximum load conditions as rated by the equipment manufacturer.
- (c) Pile driving equipment shall be tested at the construction site under maximum load conditions as rated by the manufacturer.
- (d) All noise certification measurements shall be performed with an instrument that is in compliance with the criteria for a Type 1 (Precision) or Type 2 (General Purpose) Sound Level Meter as defined in the current revision of ANSI Standard S1.4. An acoustic calibrator of the type recommended by the sound level meter manufacturer shall be used prior to all measurements.
- (e) If possible, measurements shall be made at 50 feet ( $\pm 1.5$  feet) from the right and left sides of the equipment casing, at a height of 5 feet above ground level, with the equipment operating as indicated in items (a), (b) or (c) above for a minimum period of 1 minute. Measurements made at less than 50 feet, because of space limitations at the test site, shall be reduced by the values given in Table B to estimate the 50-foot sound level.

TABLE B

ADJUSTMENTS FOR CLOSE-IN EQUIPMENT NOISE MEASUREMENTS

Measurement Values to be Subtracted from Measured Sound Level  
Distance (Feet)      to Estimate Sound Level at 50 Feet (dBA)

20 to under 21	8
21 to under 23	7
23 to under 26	6
26 to under 29	5
29 to under 33	4
33 to under 37	3
37 to under 41	2
41 to under 47	1
47 to under 50	0

3. Compliance with Equipment Noise Level Requirements

- (a) The Engineer shall retain a copy of the noise report from the Contractor with each piece of equipment used on the project of the types listed in Table A. The report shall be on the form shown in Figure A with certification by the noise control specialist hired by the contractor that equipment noise emissions do not exceed those prescribed.
- (b) If the noise levels obtained during the tests exceed those specified in Table A the Contractor shall promptly modify or alter such equipment and retest, or substitute other equipment to meet the noise level requirements.
- (c) Upon compliance, (including the certification date and equipment identification number) the Engineer will keep the noise reports readily available on file in the Construction field office for inspection upon request.
- (d) The Certification of Noise Compliance will remain valid for a period of 6 months only. Delays caused by certification refusal or by time lost in improving the rejected equipment or finding alternate acceptable equipment shall not be a basis for any monetary or time delay claims or for avoidance of late completion penalties.
- (e) All equipment shall be subject to spot noise level testing by the Engineer at his discretion as necessary to determine that the equipment in use meets the requirements specified in Table A. For this purpose, the Contractor shall furnish noise-measurement instrumentation that complies with the standards specified in paragraph 2. (d). If such tests are requested by the Engineer, the Contractor shall locate and operate the equipment as directed by the Engineer so as to facilitate the measurements. The Engineer shall provide the Contractor with a copy of the results of the measurements. If such tests demonstrate that any equipment does not comply with the requirements specified in Table A, its Certificate of Noise Compliance shall be revoke and equipment shall be taken out of use until compliance is achieved. A new Certificate of Noise Compliance will then be issued.

4. Construction Noise Level Exposure Limits

- (a) In no case shall the public be exposed to construction noise levels exceeding 100 dBA (SLOW) or to impulsive noise levels exceeding 125 dBC (FAST).
- (b) Construction activities shall be conducted in such a manner that the equivalent noise level (Leq) over any one-hour period does not exceed 85 dBA at any noise-sensitive locations (e.g. residence and hotels).



5. Construction Noise Level Exposure Test Procedures

- (a) All noise exposure measurements will be performed with an integrating sound level meter. An acoustic calibrator will be used prior to all measurements.
- (b) The measurement microphone of the sound level meter shall be fitted with an appropriate windscreen, and will be located 1.5 meters above the ground and at least 5 feet away from the nearest sound-reflective surface for the tests.
- (c) Noise exposure measurements will be taken at noise-sensitive locations closest to the construction activities at least once each week and as dictated by construction activities. Measurement periods at each location shall be a minimum of one hour.
- (d) Construction noise exposure measurements will coincide with periods of maximum noise-generating construction activity, and will be performed during the construction phase or activity that the greatest potential to create annoyance or to exceed the noise exposure limits.

6. Compliance with Construction Noise Level Exposure Limits

- (a) Construction noise exposure data will be collected by the Contractor on a weekly basis. The noise report will include (1) a sketch indicating the locations of the measurements and of all nearby construction equipment operating during the measurement period, (2) the measured maximum A-weighted noise level at each location, in terms of dBA (SLOW), (3) the measured maximum C-weighted noise level, in terms of dBC (FAST) and (4) the measured one-hour Leq (in dBA).
- (b) In the event that the measured noise levels exceed the limits specified in paragraph 4 above, the Engineer will immediately notify the Contractor and the Contractor shall implement corrective actions as directed by the Engineer.
- (c) All construction activities will be subject to spot noise level testing by the Engineer at his discretion as necessary to determine that the noise levels meet the exposure limits specified in paragraph 4 above. If such tests demonstrate that the noise levels exceed the specified limits, the Contractor shall implement corrective actions as directed by the Engineer.

7. General Requirements for Construction Equipment Noise Control

- (a) The Contractor shall minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams. Where possible, concrete crushers or pavement saws shall be used rather than hoe rams for tasks such as grillage removal and pavement demolition.
- (b) All pneumatic impact tools and equipment used at the construction site shall have intake and exhaust mufflers recommended by the manufacturers thereof, to meet relevant noise ordinance limitations.
- (c) All impact devices (i.e. jackhammers and pavement breakers) shall be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof, to meet relevant noise ordinance limitations.
- (d) Hoppers, conveyors transfer points, storage bins, and chutes shall be lined or covered with sound-deadening material.
- (e) The Contractor shall minimize the use of air or gasoline-driven hand tools.
- (f) All other equipment, including internal combustion engines, shall have mufflers and shield paneling recommended by the manufacturers thereof.

8. General Operational Requirements for Construction Noise Control

- (a) The Contractor shall operate equipment so as to minimize banging, clattering, buzzing, and other annoying types of noises, especially near noise-sensitive locations.
- (b) The Contractor, to the extent feasible, shall configure the construction site in a manner that keeps noisier equipment and activities as far as possible from noise-sensitive locations and nearby buildings.
- (c) The Contractor shall minimize noise from the use of backup alarms near residential buildings by using self-adjusting, ambient noise-sensitive backup alarms that meet OSHA regulations.
- (d) In no case shall the above restrictions limit the Contractor's responsibility for compliance with all applicable Federal, state and local safety ordinances and regulations and other sections of these construction specifications.

9. Acoustic Shed Requirements

- (a) All noise-generating mechanical equipment that is operated by the Contractor at any time other than weekdays between the hours of 7:00 a.m. and 6:00 p.m. shall be enclosed within an acoustic shed. Such equipment includes, but is not limited to, generators for traffic sign boards and lighting.
- (b) Acoustic sheds shall consist of three-sided, closed-top enclosures, oriented such that the open end of the shed faces away from residential or hotel buildings.
- (c) The shed shall be constructed of 0.5 inch plywood sheeting, or other acceptable material weighing at least 1.5 pounds per square foot, on timber framing with no gaps at joints or corners. Gaps between the bottom edge of the shed panels and the ground shall not exceed 1 inch in width and shall be closed off with solid strips of rubber, neoprene or other suitably dense material.
- (d) The inside of the shed shall be lined with glass fiber or mineral wool type sound-absorbing material at least 2 inches thick, protected by wire mesh or perforated sheets that have at least 30 percent open area.

10. Cost of Work

- (a) The cost of all labor, materials, equipment, insurance necessary for noise abatement measures as described in this section, any necessary modifications of construction methods or equipment and any delays to construction due to work suspension due to non-compliance with noise control requirements or due to necessary modifications to construction methods for compliance with the noise control requirements is deemed included in the prices bid for the items of work for which the equipment is used.

Equipment used shall be capable of a uniform application over the surface to be covered. There will be no separate measurement or payment for this work but the cost thereof is deemed to be included in the other various items of work.

N. THE CONTRACTOR IS NOTIFIED that in addition to the DCC Safety Requirements contained in the Information for Bidders and Section 6.70 of the NYCDOT Standard Highway Specifications, the Contractor shall:

1. Maintain a comprehensive list of safety items which documents type, date and time of safety incidents, and status (open or closed and date closed);
2. Establish as part of its Safety Plan a process for resolving open items;

3. Established process to ensure and verify that all employees are adhering to Safety Plan, and;
4. Include the safety responsibility of personnel listed within the organization chart.

O. START OF CONTRACT WORK. The Contractor is notified that it is the intent of this Agency to commence work promptly after registration of the contract and to order the Contractor to commence work within two (2) months after registration.

P. 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.



## Department of Transportation

JANETTE SADIK-KHAN, Commissioner

### OCMC TRAFFIC STIPULATIONS

December 14, 2012

**OCMC FILE NO:** MEC-12-186  
**CONTRACT NO:** HWMBRT5A / MED6078  
**PROJECT:** TRUNK WATER MAIN IN EAST 34<sup>TH</sup> STREET, SHAFT 32B

**LOCATION(S):** EAST 34<sup>TH</sup> STREET BETWEEN FDR DRIVE AND LEXINGTON AVENUE  
 1<sup>ST</sup> AVENUE BETWEEN EAST 33<sup>RD</sup> STREET AND EAST 35<sup>TH</sup> STREET  
 2<sup>ND</sup> AVENUE BETWEEN EAST 33<sup>RD</sup> STREET AND EAST 35<sup>TH</sup> STREET  
 3<sup>RD</sup> AVENUE BETWEEN EAST 33<sup>RD</sup> STREET AND EAST 35<sup>TH</sup> STREET

PERMISSION IS HEREBY GRANTED TO THE **NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION** AND ITS DULY AUTHORIZED AGENT, TO ENTER UPON AND RESTRICT THE FLOW OF TRAFFIC AT THE ABOVE LOCATION AND ITS LOCAL ADJACENT STREETS FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOTED PROJECT, SUBJECT TO THE STIPULATIONS, AS NOTED BELOW:

#### A. SPECIAL STIPULATIONS

1. **EMBARGOES** – A CONSTRUCTION EMBARGO WILL APPLY TO THOSE LOCATIONS BELOW WHICH FALL WITHIN THE **HOLIDAY EMBARGO** OR ANY OTHER SPECIAL EVENT EMBARGOES SUCH AS THE **UN GENERAL ASSEMBLY EMBARGO** AS PUBLISHED BY THE BUREAU OF PERMIT MANAGEMENT AND CONSTRUCTION CONTROL.
2. **STIPULATION CHANGES** – REQUESTS FOR CHANGES TO THE BELOW TRAFFIC STIPULATIONS WILL BE CONSIDERED WHEN ACCOMPANIED BY DETAILED TRAFFIC ANALYSIS, SIMULATIONS AND/OR STUDIES. FINAL DETERMINATION WILL BE MADE WHEN THE TRAFFIC ANALYSIS, SIMULATIONS AND/OR STUDIES ARE VALIDATED BY CONSULTANT.
3. **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 PERMITEE SHALL BE REQUIRED TO OBTAIN SEPARATE PERMITS RELATED TO TEST PITS.
4. **TEMPORARY PARKING REGULATIONS/PAVEMENT MARKINGS** – THE PERMITEE IS REQUIRED TO INSTALL, MAINTAIN AND REMOVE ALL NECESSARY TEMPORARY PARKING AND REGULATORY SIGNS AND PAVEMENT MARKINGS, AND RESTORE THEIR ORIGINAL CONDITION PER NYCDOT STANDARDS, PRIOR TO EXPIRATION OF THEIR PERMITS. PERMITEE MUST NOTIFY NYPD/TRAFFIC MANAGEMENT CENTER A MINIMUM OF 48 HOURS PRIOR TO CHANGING ANY SIGNS/MARKINGS. THE PERMITEE 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.
5. **BIKE LANES** – IF WORK IS IN OR AFFECTING A BIKE LANE, THE CONTRACTOR 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).
6. **ACCESS TO ABUTTING PROPERTIES** – THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH ABUTTING PROPERTY OWNERS TO ENSURE ACCESS IS PROVIDED TO/FROM ENTRANCES/DRIVEWAYS AT ALL TIMES.
7. **NOTIFICATION** – THE CONTRACTOR 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.
8. **PROJECT COORDINATION**
  - a. **QUEENS-MIDTOWN TUNNEL** – A SPECIAL PRESENTATION SHALL BE MADE DURING THE DESIGN STAGE BY DDC/DOT TO QUEENS-MIDTOWN TUNNEL FACILITY MANAGEMENT, AND INCLUDING OCMC, TO IDENTIFY POTENTIAL PROJECT COORDINATION ISSUES. ALL WORK IMPACTING ON THE QUEENS-MIDTOWN TUNNEL ENTRANCE AND EXIT RAMP MUST BE COORDINATED WITH THE MTA QUEENS-MIDTOWN TUNNEL FACILITY MANAGER PRIOR TO WORK.
  - b. **NEW YORK UNIVERSITY MEDICAL CENTER COORDINATION** – ALL WORK SHALL BE COORDINATED WITH NEW YORK UNIVERSITY MEDICAL CENTER AND THEIR ONGOING BUILDING CONSTRUCTION PROJECT.
  - c. **RED BUS LANES** – ALL WORK IMPACTING ON EXISTING RED BUS LANES SHALL BE COORDINATED WITH THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION'S PLANNING AND SUSTAINABILITY UNIT PRIOR TO WORK.

NYC Department of Transportation  
 Bureau of Permit Management and Construction Control  
 55 Water Street - 7<sup>th</sup> Floor, New York, NY 10041  
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OCMC FILE NO: MEC-12-186  
 CONTRACT NO: HWMBRT5A / MED607B  
 PROJECT: TRUNK WATER MAIN IN EAST 34<sup>TH</sup> STREET

December 14, 2012  
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**A. SPECIAL STIPULATIONS (CONTINUED)**

- d. **BIKE LANE / PEDESTRIAN REFUGE ISLANDS** - ALL WORK IMPACTING ON EXISTING BIKE LANE OR CONCRETE PEDESTRIAN REFUGE ISLANDS MUST BE COORDINATED WITH THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION'S OFFICE OF BICYCLE AND PEDESTRIAN PROGRAMS UNIT PRIOR TO WORK.
- e. **BUS STOPS** - THE CONTRACTOR 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.
- f. **PARKING METERS** - THE CONTRACTOR MAY NOT REMOVE OR RELOCATE PARKING METERS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT PARKING METER DIVISION AT 718-894-8651.
- g. **AUTHORIZED PARKING** - PRIOR TO PERFORMING WORK WHICH IMPACTS AUTHORIZED PARKING, THE CONTRACTOR 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.
9. **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/HTML/PERMITS/STPERMIT.SHTML#INFO\\_SIGNS.](http://www.nyc.gov/html/dot/html/permits/stpermit.shtml#info_signs)

**10. ENHANCED MITIGATIONS**

- o **NYPD TRAFFIC AGENTS** ARE REQUIRED FOR THIS PROJECT ONCE STREET EXCAVATION COMMENCES. A TOTAL OF 14 POSTS PLUS RELIEF MONDAY TO FRIDAY ON POST FROM 7:00AM TO 7:00PM, AND SATURDAY AND SUNDAY ON POST FROM 8:00AM TO 10:00PM.

SIX (6) TEAS SHALL BE POSTED AT THE FOLLOWING LOCATIONS:

- |  |  |
|--|--|
| - EAST 34 <sup>TH</sup> STREET AT FDR DRIVE (1)                      | - EAST 34 <sup>TH</sup> STREET AT 2 <sup>ND</sup> AVENUE (1)     |
| - EAST 34 <sup>TH</sup> STREET AT 1 <sup>ST</sup> AVENUE (1)         | - EAST 34 <sup>TH</sup> STREET AT QUEENS-MIDTOWN TUNNEL EXIT (1) |
| - EAST 34 <sup>TH</sup> STREET AT QUEENS-MIDTOWN TUNNEL ENTRANCE (1) | - EAST 34 <sup>TH</sup> STREET AT 3 <sup>RD</sup> AVENUE (1)     |

AN ADDITIONAL EIGHT (8) TEAS SHALL BE POSTED AT THE FOLLOWING LOCATIONS AS WORK PROGRESSES ON THE AVENUES NOTED BELOW OR THROUGH THE CORRESPONDING INTERSECTIONS:

- |  |  |
|--|--|
| - 3 <sup>RD</sup> AVENUE AT EAST 33 <sup>RD</sup> STREET | - 2 <sup>ND</sup> AVENUE AT EAST 35 <sup>TH</sup> STREET |
| - 3 <sup>RD</sup> AVENUE AT EAST 35 <sup>TH</sup> STREET | - 2 <sup>ND</sup> AVENUE AT EAST 33 <sup>RD</sup> STREET |
| - 2 <sup>ND</sup> AVENUE AT EAST 37 <sup>TH</sup> STREET | - 1 <sup>ST</sup> AVENUE AT EAST 33 <sup>RD</sup> STREET |
| - 2 <sup>ND</sup> AVENUE AT EAST 36 <sup>TH</sup> STREET | - 1 <sup>ST</sup> AVENUE AT EAST 35 <sup>TH</sup> STREET |

- o **TURN RESTRICTIONS SHALL BE IMPLEMENTED AS FOLLOWS: RESTRICT ALL NORTHBOUND LEFT TURNS FROM 1<sup>ST</sup> AVENUE ONTO WESTBOUND EAST 34<sup>TH</sup> STREET; RESTRICT ALL NORTHBOUND RIGHT TURNS FROM 3<sup>RD</sup> AVENUE ONTO EASTBOUND EAST 34<sup>TH</sup> STREET; RESTRICT ALL SOUTHBOUND RIGHT TURNS (EXCEPT BUSES) FROM 2<sup>ND</sup> AVENUE ONTO WESTBOUND EAST 34<sup>TH</sup> STREET; RESTRICT ALL WESTBOUND RIGHT TURNS (EXCEPT BUSES) FROM EAST 34<sup>TH</sup> STREET ONTO NORTHBOUND 3<sup>RD</sup> AVENUE. PRIOR TO IMPLEMENTING THESE TURN RESTRICTIONS, THE NYCDDC AND THE PERMITTEE SHALL CONTACT OCMC IN WRITING TO COORDINATE OUTREACH EFFORTS TO NOTIFY THE COMMUNITY OF THE CHANGES.**

- o **CLOSED-CIRCUIT TELEVISION (CCTV) CAMERAS** MUST BE PLACED CLOSE TO AND WITHIN THE WORKSITE PROJECT LIMITS TO CAPTURE PEDESTRIAN AND VEHICULAR TRAFFIC FLOW. **A TOTAL OF THREE (3) CCTV SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS: INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 3<sup>RD</sup> AVENUE, INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 2<sup>ND</sup> AVENUE, INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 1<sup>ST</sup> AVENUE.** INSTALLATION OF THESE CAMERAS MUST BE COORDINATED WITH THE NYCDOT TRAFFIC MANAGEMENT CENTER.

- o **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.

- o **VARIABLE MESSAGE SIGNS (VMS)** SHALL BE PROVIDED FOR THIS PROJECT. **A TOTAL OF FOUR (4) VMS SHALL BE PLACED FOR THIS CONTRACT.** THE LOCATIONS AND MESSAGES SHALL BE RECOMMENDED BY NYCDDC AND THEIR CONTRACTOR A MINIMUM OF TWO (2) WEEKS PRIOR TO WORK COMMENCING, FOR OCMC REVIEW AND APPROVAL.

- o **COMMUNITY OUTREACH** SHALL BE PROVIDED FOR THE DURATION OF THE PROJECT.

- o **"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.

OCMC FILE NO: MEC-12-186  
 CONTRACT NO: HWMBRT5A / MED607B  
 PROJECT: TRUNK WATER MAIN IN EAST 34<sup>TH</sup> STREET

December 14, 2012  
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## B. MAINTENANCE AND PROTECTION OF TRAFFIC

### 1. SEWER AND WATER MAIN WORK

#### a) EAST 34<sup>TH</sup> STREET BETWEEN FDR DRIVE AND 1<sup>ST</sup> AVENUE

- All work shall be coordinated with New York University Medical Center and their ongoing building construction project.
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During work hours, the permittee shall maintain a minimum of 1-11 foot lane for westbound traffic. Eastbound traffic shall remain unaffected.
- After work hours, the permittee shall restore the roadway to its full width.

#### b) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 1<sup>ST</sup> AVENUE

- All work shall be coordinated with New York University Medical Center and their ongoing building construction project.
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During work hours, the permittee shall maintain a minimum of three (3) lanes for traffic on 1<sup>st</sup> Avenue, and three (3) lanes for traffic (1-11 foot lane and 1-10 foot lane eastbound, and 1-11 foot lane westbound on East 34<sup>th</sup> Street. The permittee shall also maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.
- After work hours, the permittee shall restore the roadway and sidewalk to their full widths.

#### c) EAST 34<sup>TH</sup> STREET BETWEEN 1<sup>ST</sup> AVENUE AND QUEENS-MIDTOWN TUNNEL ENTRANCE

- Any work impacting on the entrance ramp to the Queens-Midtown Tunnel shall be coordinated with and approval obtained from the MTA Queens-Midtown Tunnel Facility Manager.
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During installation of the 72-inch R.C.P. Class III combined sewer, the permittee shall maintain a minimum of three (3) lanes for traffic (1-11 foot lane and 1-10 foot lane eastbound, and 1-11 foot lane westbound) while also maintaining a minimum five (5) foot clear sidewalk for pedestrian access. After working hours, the permittee shall maintain a minimum of four (4) lanes for traffic (1-11 foot lane and 1-10 foot lane in each direction).
  - The permittee shall install "No Stopping Anytime-Temporary Construction Regulation" signs on both sides of East 34<sup>th</sup> Street to facilitate the maintenance of the required four (4) lanes of traffic.
  - Whenever traffic cannot be maintained on the correct side of the existing double yellow center line, the permittee shall off-set the existing double yellow center line by installing lane delineators and temporary pavement markings in order to maintain the required number of lanes for traffic.
- During water main work, the permittee shall maintain a minimum of four (4) lanes for traffic (1-11 foot lane and 1-10 foot lane in each direction) while also maintaining a minimum five (5) foot clear sidewalk for pedestrian access.
  - The permittee shall off-set the existing double yellow center line by installing lane delineators and temporary pavement markings in order to maintain the required number of lanes for traffic.
  - Whenever traffic cannot be maintained on the correct side of the existing double yellow center line, the permittee shall off-set the existing double yellow center line by installing lane delineators and temporary pavement markings in order to maintain the required number of lanes for traffic.
  - After work hours, the permittee shall remove any/all temporary lane delineators and restore the roadway and sidewalk to their full widths.

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**B. MAINTENANCE AND PROTECTION OF TRAFFIC (CONTINUED)**

**d) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND QUEENS-MIDTOWN TUNNEL ENTRANCE**

- Any work impacting on the entrance ramp to the Queens-Midtown Tunnel shall be coordinated with and approval obtained from the MTA Queens-Midtown Tunnel Facility Manager.
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During work hours, the permittee shall maintain a minimum of four (4) lanes for traffic (1-11 foot lane and 1-10 foot lane in each direction) on East 34<sup>th</sup> Street. The permittee shall also maintain a minimum five (5) foot clear sidewalk for pedestrian access. After work hours, the permittee shall restore the roadway and sidewalk to their full widths.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.
- Access to the Queens-Midtown Tunnel shall be maintained at all times.

**e) EAST 34<sup>TH</sup> STREET BETWEEN QUEENS-MIDTOWN TUNNEL ENTRANCE AND 2<sup>ND</sup> AVENUE**

- Any work impacting on the entrance ramp to the Queens-Midtown Tunnel shall be coordinated with and approval obtained from the MTA Queens-Midtown Tunnel Facility Manager.
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- The permittee shall work on one side of the street at a time.
- While installing the new 20-inch water main on the south side of the roadway, the permittee shall maintain a minimum of four (4) lanes for traffic (1-11 foot lane and 1-10 foot lane in each direction).
- While installing the new 12-inch water main on the north side of the roadway, the permittee shall maintain a minimum of three (3) lanes for traffic (1-11 foot lane and 1-10 foot lane eastbound, and 1-11 foot lane westbound).
- Whenever traffic cannot be maintained on the correct side of the existing double yellow center line, the permittee shall off-set the existing double yellow center line by installing lane delineators and temporary pavement markings in order to maintain the required number of lanes for traffic.
- During working hours, the permittee shall maintain a minimum of five (5) foot clear sidewalk for pedestrian access.
- After work hours, the permittee shall remove any/all temporary lane delineators and restore the roadway and sidewalk to their full widths.

**f) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 2<sup>ND</sup> AVENUE**

- Work hours shall be as follows: 8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During work hours, the permittee shall maintain a minimum of three (3) lanes for traffic (1-11 foot lane and 1-10 foot lane eastbound, and 1-11 foot lane westbound) on East 34<sup>th</sup> Street.
- During working hours, the permittee shall maintain a minimum of four (4) lanes for traffic approaching the intersection, and three (3) lanes for traffic exiting the intersection, on 2<sup>nd</sup> Avenue.
- The permittee shall maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.
- After work hours, the permittee shall restore the roadway and sidewalk to their full widths.

**g) EAST 34<sup>TH</sup> STREET BETWEEN 2<sup>ND</sup> AVENUE AND QUEENS-MIDTOWN TUNNEL EXIT**

- Any work impacting on the exit ramp from the Queens-Midtown Tunnel shall be coordinated with and approval obtained from the MTA Queens-Midtown Tunnel Facility Manager.
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- The permittee shall work on one side of the street at a time.
- While installing the new 20-inch water main on the south side of the roadway, and the new 12-inch water main on the north side of the roadway, the permittee shall maintain a minimum of four (4) lanes for traffic (1-11 foot lane and 1-10 foot lane in each direction).



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**B. MAINTENANCE AND PROTECTION OF TRAFFIC (CONTINUED)**

- Whenever traffic cannot be maintained on the correct side of the existing double yellow center line, the permittee shall off-set the existing double yellow center line by installing lane delineators and temporary pavement markings in order to maintain the required number of lanes for traffic.
- During working hours, the permittee shall maintain a minimum of five (5) foot clear sidewalk for pedestrian access.
- After work hours, the permittee shall remove any/all temporary lane delineators and restore the roadway and sidewalk to their full widths.

**h) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND QUEENS-MIDTOWN TUNNEL EXIT**

- **Any work impacting on the exit ramp from the Queens-Midtown Tunnel shall be coordinated with and approval obtained from the MTA Queens-Midtown Tunnel Facility Manager.**
- Work hours shall be as follows: North side work: 8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).  
 South side work: 7:00AM to 3:00PM, Monday to Friday  
 8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- The permittee shall work on one side of the street at a time.
- While installing the new 20-inch water main on the south side of the intersection, the permittee shall maintain a minimum of four (4) lanes for traffic (1-11 foot lane and 1-10 foot lane in each direction) on East 34<sup>th</sup> Street.
- While installing the new 12-inch water main on the north side of the intersection, the permittee shall maintain a minimum of three (3) lanes for traffic (1-11 foot lane and 1-10 foot lane eastbound, and 1-11 foot lane westbound) on East 34<sup>th</sup> Street.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.
- Access from the Queens-Midtown Tunnel shall be maintained at all times.
- After work hours, the permittee shall restore the roadway and sidewalk to their full widths.

**i) EAST 34<sup>TH</sup> STREET BETWEEN QUEENS-MIDTOWN TUNNEL EXIT AND 3<sup>RD</sup> AVENUE**

- **Any work impacting on the exit ramp from the Queens-Midtown Tunnel shall be coordinated with and approval obtained from the MTA Queens-Midtown Tunnel Facility Manager.**
- Work hours shall be as follows: North side work: 8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).  
 South side work: 7:00AM to 3:00PM, Monday to Friday  
 8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- The permittee shall work on one side of the street at a time.
- While installing the new 20-inch water main on the south side of the roadway, the permittee shall maintain a minimum of four (4) lanes for traffic (1-11 foot lane and 1-10 foot lane in each direction).
- While installing the new 12-inch water main on the north side of the roadway, the permittee shall maintain a minimum of three (3) lanes for traffic (1-11 foot lane and 1-10 foot lane eastbound, and 1-11 foot lane westbound).
- Whenever traffic cannot be maintained on the correct side of the existing double yellow center line, the permittee shall off-set the existing double yellow center line by installing lane delineators and temporary pavement markings in order to maintain the required number of lanes for traffic.
- During working hours, the permittee shall maintain a minimum of five (5) foot clear sidewalk for pedestrian access.
- After work hours, the permittee shall remove any/all temporary lane delineators and restore the roadway and sidewalk to their full widths.

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**B. MAINTENANCE AND PROTECTION OF TRAFFIC (CONTINUED)**

**J) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 3<sup>RD</sup> AVENUE**

- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During working hours, the permittee shall maintain a minimum of three (3) lanes for traffic (1-11 foot lane and 1-10 foot lane eastbound, and 1-10 foot lane westbound) on East 34<sup>th</sup> Street, and a minimum of three (3) lanes for traffic on 3<sup>rd</sup> Avenue.
- During working hours, the permittee shall maintain a minimum of five (5) foot clear sidewalk for pedestrian access.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.
- After work hours, the permittee shall restore the roadway and sidewalk to their full widths.

**K) EAST 34<sup>TH</sup> STREET BETWEEN 3<sup>RD</sup> AVENUE AND LEXINGTON AVENUE**

- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During working hours, the permittee shall maintain a minimum of three (3) lanes for traffic (1-11 foot lane and 1-10 foot lane eastbound, and 1-10 foot lane westbound).
- Whenever traffic cannot be maintained on the correct side of the existing double yellow center line, the permittee shall off-set the existing double yellow center line by installing lane delineators and temporary pavement markings in order to maintain the required number of lanes for traffic.
- After work hours, the permittee shall remove any/all temporary lane delineators and restore the roadway and sidewalk to their full widths.

**L) 1<sup>ST</sup> AVENUE BETWEEN EAST 33<sup>RD</sup> STREET AND EAST 34<sup>TH</sup> STREET**

- Work shall not occur on 1<sup>st</sup> Avenue while work is also occurring on 3<sup>rd</sup> Avenue.
- All work shall be coordinated with New York University Medical Center and their ongoing building construction project.
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During work hours, the permittee shall maintain a minimum of three (3) lanes for traffic (1 left turn lane, and 1 thru lane, plus the existing bike lane on the west side of the work zone, and 1 lane on the east side of the work zone). The permittee shall also maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- After work hours, the permittee shall maintain a minimum of four (4) lanes for traffic (1 left turn lane, and 1 thru lane, plus the existing bike lane on the west side of the work zone, and 2 lanes lane on the east side of the work zone).

**m) 1<sup>ST</sup> AVENUE BETWEEN EAST 34<sup>TH</sup> STREET AND EAST 35<sup>TH</sup> STREET**

- Work shall not occur on 1<sup>st</sup> Avenue while work is also occurring on 3<sup>rd</sup> Avenue.
- All work shall be coordinated with New York University Medical Center and their ongoing building construction project.
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During work hours, the permittee shall maintain a minimum of three (3) lanes for traffic. The permittee shall also maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- After work hours, the permittee shall maintain a minimum of four (4) lanes for traffic.

**n) 2<sup>ND</sup> AVENUE BETWEEN EAST 33<sup>RD</sup> STREET AND EAST 34<sup>TH</sup> STREET**

- Work hours shall be as follows: 8:00AM to 4:00PM, Saturday and Sunday
- During work hours, the permittee shall maintain a minimum of three (3) lanes for traffic and a shared bike lane. The permittee shall also maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- After work hours, the permittee shall restore the roadway to its full width.

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## B. MAINTENANCE AND PROTECTION OF TRAFFIC (CONTINUED)

### o) 2<sup>ND</sup> AVENUE BETWEEN EAST 34<sup>TH</sup> STREET AND EAST 35<sup>TH</sup> STREET

- Work hours shall be as follows: 8:00AM to 4:00PM, Saturday and Sunday
- During work hours, the permittee shall maintain a minimum of four (4) lanes for traffic. The permittee shall also maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- After work hours, the permittee shall restore the roadway to its full width.

### p) 3<sup>RD</sup> AVENUE BETWEEN EAST 33<sup>RD</sup> STREET AND EAST 34<sup>TH</sup> STREET

- **Work shall not occur on 3<sup>rd</sup> Avenue while work is also occurring on 1<sup>st</sup> Avenue.**
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During work hours, the permittee shall maintain a minimum of three (3) lanes for traffic. The permittee shall also maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- After work hours, the permittee shall restore the roadway to its full width.

### q) 3<sup>RD</sup> AVENUE BETWEEN EAST 34<sup>TH</sup> STREET AND EAST 35<sup>TH</sup> STREET

- **Work shall not occur on 3<sup>rd</sup> Avenue while work is also occurring on 1<sup>st</sup> Avenue.**
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 10:00PM, Saturday and Sunday (Lane closure may remain from 8:00AM Saturday through 10:00PM Sunday).
- During work hours, the permittee shall maintain a minimum of three (3) lanes for traffic. The permittee shall also maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- After work hours, the permittee shall restore the roadway to its full width.

## 2. ROADWAY REALIGNMENT/NECKDOWNS

**SPECIAL NOTE: ROADWAY REALIGNMENT/NECKDOWN WORK AT THE BELOW LOCATIONS SHALL NOT COMMENCE UNTIL ALL SEWER AND WATER MAIN WORK HAS BEEN COMPLETED.**

### a) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 1<sup>ST</sup> AVENUE (NORTHWEST QUADRANT)

#### b) EAST 34<sup>TH</sup> STREET (NORTH SIDE) BETWEEN 1<sup>ST</sup> AVENUE AND QUEENS-MIDTOWN TUNNEL ENTRANCE

- **All work shall be coordinated with New York University Medical Center and their ongoing building construction project.**
- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 4:00PM, Saturday and Sunday
- During working hours, the permittee shall occupy a maximum of eight (8) feet adjacent to the west curb on 1<sup>st</sup> Avenue. After work hours, the permittee shall relocate barriers adjacent to the work zone and restore the remainder of 1<sup>st</sup> Avenue to traffic.
- During working hours, the permittee shall maintain a minimum of 1-11 foot lane for westbound traffic and 3-10 foot lanes for eastbound traffic on East 34<sup>th</sup> Street. After work hours, the permittee shall maintain a minimum of 2-10 foot lanes for westbound traffic and 3-10 foot lanes for eastbound traffic.
- The permittee shall maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.

### c) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 2<sup>ND</sup> AVENUE (NORTHEAST QUADRANT)

#### d) EAST 34<sup>TH</sup> STREET (NORTH SIDE) BETWEEN QUEENS-MIDTOWN TUNNEL ENTRANCE AND 2<sup>ND</sup> AVENUE

- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 4:00PM, Saturday and Sunday
- **Working hours for work in the intersection of East 34<sup>th</sup> Street and 2<sup>nd</sup> Avenue shall be confined to 8:00AM to 4:00PM, Saturday and Sunday only.**
- During work hours, the permittee shall occupy a maximum of eight (8) feet adjacent to the east curb on 2<sup>nd</sup> Avenue. After work hours, the permittee shall relocate barriers adjacent to the work zone and restore the remainder of 2<sup>nd</sup> Avenue to traffic.
- During work hours, the permittee shall maintain a minimum of 1-11 foot lane for westbound traffic and 3-10 foot lanes for eastbound traffic on East 34<sup>th</sup> Street. After work hours, the permittee shall maintain a minimum of 2-10 foot lanes for westbound traffic and 3-10 foot lanes for eastbound traffic.
- The permittee shall maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.

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### 2. MAINTENANCE AND PROTECTION OF TRAFFIC (CONTINUED)

#### e) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 2<sup>ND</sup> AVENUE (NORTHWEST QUADRANT)

#### f) EAST 34<sup>TH</sup> STREET (NORTH SIDE) BETWEEN 2<sup>ND</sup> AVENUE AND QUEENS-MIDTOWN TUNNEL EXIT

- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 4:00PM, Saturday and Sunday
- **Working hours for work in the intersection of East 34<sup>th</sup> Street and 2<sup>nd</sup> Avenue shall be confined to 8:00AM to 4:00PM, Saturday and Sunday only.**
- During work hours, the permittee shall occupy a maximum of eight (8) feet adjacent to the west curb on 2<sup>nd</sup> Avenue. After work hours, the permittee shall relocate barriers adjacent to the work zone and restore the remainder of 2<sup>nd</sup> Avenue to traffic.
- During work hours, the permittee shall maintain a minimum of 1-11 foot lane for westbound traffic and 3-10 foot lanes for eastbound traffic on East 34<sup>th</sup> Street. After work hours, the permittee shall maintain a minimum of 2-10 foot lanes for westbound traffic and 3-10 foot lanes for eastbound traffic.
- The permittee shall maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.

#### g) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 3<sup>RD</sup> AVENUE (SOUTHEAST QUADRANT)

#### h) EAST 34<sup>TH</sup> STREET (SOUTH SIDE) BETWEEN QUEENS-MIDTOWN TUNNEL EXIT AND 3<sup>RD</sup> AVENUE

- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 4:00PM, Saturday and Sunday
- During work hours, the permittee shall occupy a maximum of eight (8) feet adjacent to the east curb on 3<sup>rd</sup> Avenue. After work hours, the permittee shall relocate barriers adjacent to the work zone and restore the remainder of 3<sup>rd</sup> Avenue to traffic.
- The permittee shall maintain a minimum of 4-10 foot lanes for traffic (2-10 foot lanes for traffic in each direction) on East 34<sup>th</sup> Street at all times.
- The permittee shall maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.

#### i) INTERSECTION OF EAST 34<sup>TH</sup> STREET AND 3<sup>RD</sup> AVENUE (SOUTHWEST QUADRANT)

#### j) EAST 34<sup>TH</sup> STREET (SOUTH SIDE) BETWEEN 3<sup>RD</sup> AVENUE AND LEXINGTON AVENUE

- Work hours shall be as follows: 7:00AM to 3:00PM, Monday to Friday  
8:00AM to 4:00PM, Saturday and Sunday
- During work hours, the permittee shall occupy a maximum of ten (10) feet adjacent to the west curb on 3<sup>rd</sup> Avenue. After work hours, the permittee shall relocate barriers adjacent to the work zone and restore the remainder of 3<sup>rd</sup> Avenue to traffic.
- The permittee shall maintain a minimum of 4-10 foot lanes for traffic (2-10 foot lanes for traffic in each direction) on East 34<sup>th</sup> Street at all times.
- The permittee shall maintain a minimum five (5) foot clear sidewalk for pedestrian access.
- The permittee may fully close a maximum of one (1) crosswalk at a time, while maintaining all other crosswalks for pedestrian use.

### 3. CONCRETE POURING/CURING

**SPECIAL NOTE: ROADWAY REALIGNMENT/NECKDOWN WORK AT THE BELOW LOCATIONS SHALL NOT COMMENCE UNTIL ALL SEWER AND WATER MAIN WORK HAS BEEN COMPLETED.**

#### a) CONCRETE POURING FOR BUS PADS

- Work hours shall be as follows: 10:00PM Friday to 10:00AM Saturday
- During concrete pouring operations, the permittee shall maintain a minimum of 1-11 foot lane on the work zone side of East 34<sup>th</sup> Street, and 2-10 foot lanes on the opposite side of the roadway.

#### b) CURING OF CONCRETE BUS PADS

- NYPD Traffic Enforcement Agents (TEAs) are required from 10:00AM to Midnight, Saturday and Sunday.
- Concrete curing shall occur from 10:00AM Saturday through 6:00AM Monday (44 hours)

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**B. MAINTENANCE AND PROTECTION OF TRAFFIC (CONTINUED)**

- During concrete curing of bus pads on the north side of East 34<sup>th</sup> Street, the permittee shall maintain four (4) lanes for traffic (1-11 foot lane for westbound traffic and 3-10 foot lanes for eastbound traffic) on East 34<sup>th</sup> Street.
- During concrete curing of bus pads on the south side of East 34<sup>th</sup> Street, the permittee shall maintain three (3) lanes for traffic (1-11 foot lane for eastbound traffic and 2-10 foot lanes for westbound traffic) on East 34<sup>th</sup> Street.
- The permittee shall restore all travel lanes by 6:00AM Monday morning.

**C. GENERAL NOTES**

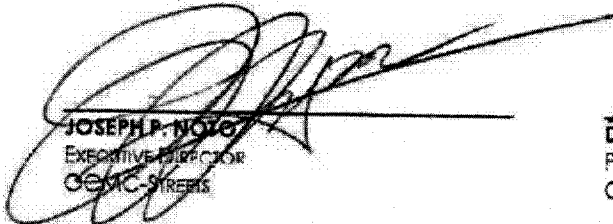
1. **THIS IS NOT A PERMIT.** THIS STIPULATION SHEET MUST BE SUBMITTED WITH ALL REQUESTS FOR PERMITS PERTAINING TO THE ABOVE CONTRACT AND PRESENT AT THE WORK SITE ALONG WITH ALL ACTIVE CONSTRUCTION PERMITS WHEN THE APPROVED WORK IS BEING PERFORMED.
2. THE CONTRACTOR MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.
3. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE NYCDOT SPECIAL EVENTS UNIT AS IDENTIFIED BELOW:
  - A. 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 CONTRACTOR 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.
  - B. 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 CONTRACTOR 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.
  - C. 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 CONTRACTOR 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. 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 CONTRACTOR 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. ALL RELOCATION WORK BY THE UTILITIES SUCH AS; CON EDISON, TELEPHONE, GAS AND CABLE COMPANIES SHALL PRECEDE THE CONTRACTORS' START OF WORK ON ALL AFFECTED ROADWAYS IN THE IMPACTED CONTRACT AREA.
5. THE CONTRACTOR 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.
6. 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.
7. 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.

OCMC FILE NO: MEC-12-186  
CONTRACT NO: HWMBRT5A / MED607B  
PROJECT: TRUNK WATER MAIN IN EAST 34<sup>TH</sup> STREET

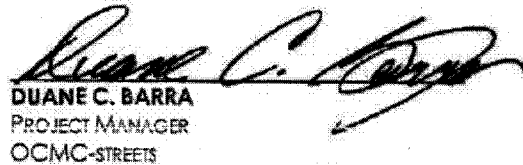
December 14, 2012  
Page 10 of 10

**C. GENERAL NOTES (CONTINUED)**

8. 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.
9. FOR THIS PROJECT THE CONTRACTOR 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.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING HIS CONSTRUCTION SIGNAGE. THE IDENTIFICATION SHALL INCLUDE THE CONTRACTOR'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.
11. FOR ANY CONSTRUCTION ACTIVITY RESULTING IN THE FULL CLOSURE OF A ROADWAY FOR MORE THAN 180 CONSECUTIVE CALENDAR DAYS, THE CONTRACTOR 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.
12. 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.



JOSEPH P. NOTO  
EXECUTIVE DIRECTOR  
OCMC-STREETS



DUANE C. BARRA  
PROJECT MANAGER  
OCMC-STREETS

JPN/db



## THE CITY OF NEW YORK Department of Sanitation

S. ELIZABETH SEARLE  
Assistant Commissioner  
for Legal Affairs

Department of Sanitation Rules and Regulations Governing  
Non-Putrescible Solid Waste Transfer Stations

Bureau of Legal Affairs  
44 Beaver Street  
New York, NY 10004  
Telephone (212) 837-8110  
FAX (212) 837-8243

### INTERPRETIVE MEMORANDUM # 2 February 14, 1995

*Subject: Temporary Storage and Processing of Construction and Demolition Debris  
by New York City Agency Contractors*

Contractors performing construction work for New York City agencies may be required to excavate dirt, concrete, rock, gravel and similar materials ("construction materials") from a contract site or to remove from a contract site construction materials resulting from construction, demolition, alteration, repair or renovation of structures, streets or buildings. On street construction projects, construction materials required to be excavated or removed may also include asphalt. The purpose of this Interpretive Memorandum is to (a) define the circumstances under which the Department of Sanitation (the "Department") will not deem its Rules and Regulations Governing Non-Putrescible Solid Waste Transfer Stations (the "Rules") to apply to the temporary storage, processing and/or stockpiling (collectively, "stockpiling") of such construction materials and (b) the procedure for ensuring such exemption. It is the responsibility of the contracting agency to oversee its contractors' compliance with the Rules and with this Interpretive Memorandum.

1. When No Transfer Station Permit is Required

Where a City contractor has:

- (a) set aside an area of a contract site for stockpiling construction materials excavated from and/or intended for that site; or
- (b) received written approval from the contracting agency for an off-site stockpiling location,

the Department will not deem such stockpiling location a transfer station and will not require the contractor to obtain a transfer station permit so long as:

- (c) no construction materials or debris from off the contract site are received at the designated location for subsequent transfer to another location (other than the contract site); and
- (d) the temporary stockpiling location is clearly described as such in the contract or clearly approved by the construction agency and designated as such in writing to the Department by the agency; and
- (e) the construction agency represents in writing to the Department that such agency will monitor the temporary stockpiling location and ensure its clean-up and restoration pursuant to the procedures set out in this memorandum.



Help Reduce  
New York's Waste.





*Example: Street Construction Projects*

As part of a contract for street construction, the contractor may be working at one end of a street and using an area at the other end of the street for the temporary stockpiling of construction materials. Both ends of the street are part of the construction contract site. In addition, the contractor may have leased an off-site location for temporary stockpiling of materials, which, following processing, will be reincorporated into the contract site, with some portion of the remainder designated for delivery to a Department disposal facility. Neither location will be regulated by the Department as a transfer station so long as the procedures set out in this memorandum are followed.

2. Procedure for Exception.

Upon a City construction agency's approval of any location to be designated as a temporary processing, storage or stockpiling area, that agency must determine that (a) its contract with the contractor provides for clean-up and restoration of such area by, for example, the contractor's posting of a restoration bond and/or by contractual set-off and (b) the agency has adequate procedures for monitoring the designated area to ensure that it does not violate the provisions set forth in this memorandum and that such location is cleaned up and restored at the completion of the contract work.

The City construction agency must submit an official letter to the Department acknowledging compliance with both (a) and (b) immediately above and representing that the agency will ensure the contractor's compliance. The letter to be submitted must be in substantially the following form, addressed to the Director, Bureau of Waste Disposal, Department of Sanitation, 125 Worth Street, Room 726, New York, NY 10013:

"The New York City Department of \_\_\_\_\_ (the "Agency")  
has awarded a construction contract to \_\_\_\_\_ (Contractor)  
\_\_\_\_\_ (the "Contractor") for work to be performed at \_\_\_\_\_ (Contract  
Site) \_\_\_\_\_.

a. This Agency has approved the following locations to be used by the Contractor for the temporary storage, processing and/or stockpiling of construction materials (the "Stockpiling Locations") excavated from the construction site or intended for the construction site:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. The terms of the contract require the Contractor to clean up and restore the Stockpiling Locations, whether on or off the contract site, at or before the completion of the contract work.

c. This Agency assumes responsibility for the monitoring of Stockpiling Locations to ensure that only materials received from and/or intended for the construction site are stockpiled at such locations and we will enforce clean-up and restoration of such Locations at the end of their use for temporary stockpiling or at the termination of the contract, whichever occurs earlier, through restoration



bonding requirements and/or contractual set-off provisions such that the costs of clean-up and restoration will not become a charge to the Department or the City. "

3. When a Transfer Station Permit is Required

A transfer station permit will be required under any circumstances other than those outlined above. Except in the specifically defined circumstances set forth in this memorandum, any operator of a location or facility which receives, processes, stores or stockpiles construction and demolition debris or fill material for purposes of transfer to another location, including to a New York City Department of Sanitation facility, and whether or not under contract to the Department for the delivery of such materials, will be fully subject to the Department's transfer station rules and liable for enforcement for violations.

(NO TEXT ON THIS PAGE)

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HWMBRT5A (MED-607B)

EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE

FROM FDR DRIVE TO LEXINGTON AVENUE

INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 2

DATED: January 25, 2013

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Any substantial modification of the Contract shall be subject to approval by the State Commissioner of Transportation and the Federal Transit Administration, in addition to the City agencies involved.
2. The Contractor shall be responsible for compliance with all the provisions of the following Federal Transit Administration (FTA) Contract Clauses, Standard Clauses for all New York State Contracts, and Exhibits which are hereby made a part of the original contract documents and are annexed hereto:

FEDERAL TRANSIT ADMINISTRATION (FTA) CONTRACT CLAUSES

- Appendix A - BUY AMERICA CERTIFICATION
- Appendix A1 - DISCLOSURE OF LOBBYING ACTIVITIES
- Appendix A2 - CERTIFICATION OF A CONTRACTOR REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS
- Appendix A3 - CERTIFICATION OF A SUBCONTRACTOR/SUPPLIER REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS
- Appendix B - REQUIRED CONTRACT PROVISIONS DBE Program
- Appendix C - DETERMINING GOOD FAITH EFFORTS
- Appendix D - PROMPT PAYMENT AFFIDAVIT
- Appendix E - SAMPLE PRIME CONTRACTOR AWARD LETTER
- Appendix F - MINORITY OWNED FINANCIAL INSTITUTIONS
- Appendix G - PREVAILING WAGE RATES, CURRENT DAVIS-BACON PREVAILING WAGE RATES

STANDARD CLAUSES FOR ALL NEW YORK STATE CONTRACTS

DBE FORMS:

- AAP 15                    DESIGNATION OF AFFIRMATIVE ACTION REPRESENTATIVES BY CONTRACTORS/SUBCONTRACTORS
- SUBCONTRACTOR/CONSULTANT PROFILE FORM
- AAP10                    D / M /WBE SOLICITATIONS LOG
- AAP 19 FTA                DISADVANTAGED BUSINESS ENTERPRISE SCHEDULE OF UTILIZATION
- AAPHC 89 FTA             DBE UTILIZATION WORKSHEET
- INITIAL LIST OF SUBCONTRACTORS
- AAPHC 89-1 FTA          DBE UTILIZATION WORKSHEET AMENDMENT
- AAP 21LL                 CONTRACTOR REPORT OF CONTRACT PAYMENTS
- SUBCONTRACTOR/SUBCONSULTANT MONTHLY PAYMENT REPORT
- AGENCY CHIEF CONTRACTING OFFICE, CIVIL RIGHTS COMPLAINT FORM
- AAP 23LL                 PRE-AWARD DBE TRUCKING COMMITMENT INFORMATION
- ANNUAL LIST OF SUBCONTRACTORS

In addition to compliance with the above FTA requirements, the Contractor shall also be required to comply with all City requirements as depicted in the Information for Bidders and Standard Construction Contract herein. Wherever a conflict may exist, the FTA Regulations shall take precedence.

3. All references to M/WBE within the Bid Documents shall be deleted and the Disadvantaged Business Enterprise (DBE) requirements with a goal of 12% shall be substituted.
4. Amendments to Information for Bidders:
  - a) Refer to Page 6, SECTION 20. Low Tie Bids;  
Delete Article 20 in its entirety and substitute the words  
"20. (NO TEXT).
  - b) Refer to Pages 12 and 13, SECTION 37. Locally Based Enterprise Requirements (LBE);  
Delete the SECTION, in its entirety. See FEDERAL TRANSIT ADMINISTRATION (FTA) CONTRACT CLAUSES attachment, Article 29. Disadvantaged Business Enterprise (DBE) (49 CFR Part 26) and Appendices B, C, D, and E.
5. Amendments to Standard Construction Contract:
  - a) Refer to Page 22, ARTICLE 21. RETAINED PERCENTAGE;  
Delete Article 21, in its entirety;  
Substitute the following:  

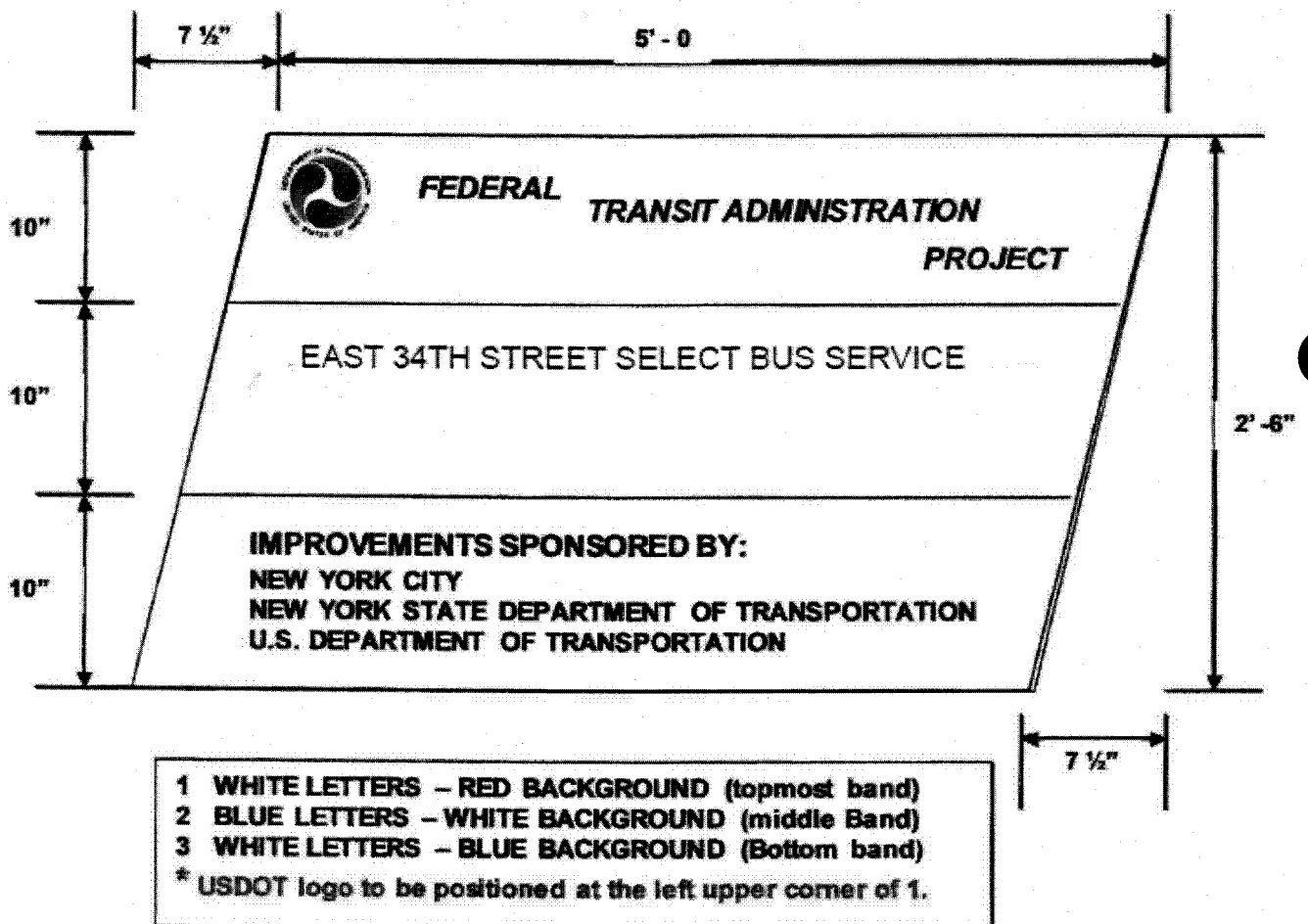
**"ARTICLE 21. (NO TEXT)"**
  - b) Refer to Page 63, ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM;  
Delete Article 67, in its entirety. See FEDERAL TRANSIT ADMINISTRATION (FTA) CONTRACT CLAUSES attachment, Article 29. Disadvantaged Business Enterprise (DBE) (49 CFR Part 26) and Appendices B, C, D, and E.
6. Amendments to the NYC Department of Transportation Standard Highway Specifications, Volume I, General Conditions:
  - a) Refer to Pages 36 through 38, Article 1.06.46. Project Sign;  
Add the following text to the end of Article 1.06.46:

"(B) ADDITIONAL FTA PROJECT SIGN

In addition to the Project Sign specified in Subsection 1.06.46.(A), above, the Contractor shall also be required to furnish and install an FTA Project Sign as shown on the attached drawing. The FTA Project Sign shall be posted and maintained upon the site at a point and in a prominent position where directed by the Commissioner. The Contractor shall protect and repair the sign from damage during the continuance of work under the

Contract. In addition, the requirements for Sign Quality, Schedule, and Removal as specified under Subsection 1.06.46.(A)2, 3, and 4 shall also apply to the FTA Project Sign and the sign panel material shall be the same as that used for the Project Sign required under Subsection 1.06.46.(A), but with the dimensions of the sign as shown on the attached drawing."

## FTA PROJECT SIGN



**FEDERAL TRANSIT ADMINISTRATION  
(FTA)  
THIRD PARTY REQUIREMENTS**

February 2012

**This contract is subject to the Federal Transit Administration (FTA) requirements for implementing the U.S. Department of Transportation (USDOT) regulations for the following areas:**

**1. FLY AMERICA (49 U.S.C. § 40118, 41 CFR Part 301-10)**

The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10.131 through 301-10.143, which provide that the New York City Department of Design and Construction (NYCDDC) and its contractors when using Federal funds are required to use U.S. Flag air carriers for U.S. Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

**2. BUY AMERICA (49 U.S.C. 5323 (j) 49 CFR Part 661)**

For contracts greater than \$100,000 the Contractor agrees to comply with 49 U.S.C. 5323(j) and 49 CFR Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 CFR 661.7 and include microprocessors, computers, microcomputers, software, or other such devices which are used solely for the purpose of processing data.

Separate requirements for rolling stock are listed in 49 CFR 661. Rolling stock must be assembled in the United States and have a minimum of 60 percent domestic content.

A bidder or offeror must submit to NYCDDC the appropriate Buy America certifications with all bids on FTA-funded contracts.

**3. CHARTER BUS REQUIREMENTS (49 U.S.C. 5323(d) 49 CFR Part 604)**

**Charter Service Operations** - The contractor agrees to comply with 49 U.S.C. 5323(d) and 49 CFR Part 604, which provides that recipients and subrecipients of FTA assistance are prohibited from providing charter service using federally funded equipment or facilities if there is at least one private charter operator willing and able to provide the service, except under one of the exceptions at 49 CFR 604.9. Any charter service provided under one of the exceptions must be "incidental," i.e., it must not interfere with or detract from the provision of mass transportation.

**4. SCHOOL BUS REQUIREMENTS (49 U.S.C. 5323(F) 49 CFR Part 605)**

**School Bus Operations** - Pursuant to 49 U.S.C. 5323(f) and 49 CFR Part 605, recipients and subrecipients of FTA assistance may not engage in school bus operations exclusively for the transportation of students and school personnel in competition with private school bus operators unless qualified under specified exemptions. When operating exclusive school bus service under an allowable exemption, recipients and subrecipients may not use federally funded equipment, vehicles, or facilities.



## **5. CARGO PREFERENCE (46 U.S.C. § 55305, 46 CFR Part 381)**

The Contractor agrees: (a.) to use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; (b.) to furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to NYCDDC (through the Contractor in the case of a Subcontractor's bill-of-lading) (c.) to include these requirements in all subcontracts issued pursuant to this contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

## **6. SEISMIC SAFETY REQUIREMENTS (42 U.S.C. 7701 et seq., 49 CFR Part 41)**

The Contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations 49 CFR Part 41 and will certify to compliance to the extent required by the regulation. The Contractor also agrees to ensure that all work performed under this contract including work performed by a Subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.

## **7. ENERGY CONSERVATION (42 U.S.C. §§ 6321 et seq., 49 CFR 18)**

The Contractor agrees to comply with mandatory energy standards and policies of the State energy conservation plan under the Energy Policy and Conservation Act, as amended.

## **8. CLEAN WATER (33 U.S.C. §§ 1251)**

(1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. The Contractor agrees to report each violation to NYCDDC and understands and agrees that NYCDDC will, in turn, report each violation as required to assure notification to NYCDOT, FTA, and the appropriate EPA Regional Office.

(2) The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

## **9. BUS TESTING (49 U.S.C. 5323(c), 49 CFR Part 665)**

The Contractor agrees to comply with 49 USC 5318 (e) and FTA's implementing regulation at 49 CFR Part 665 and shall perform the following:

- 1) A manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the recipient at a point in the procurement process specified by the recipient which will be prior to the recipient's final acceptance of the first vehicle.
- 2) A manufacturer who releases a report under paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public.
- 3) If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the recipient prior to recipient's final acceptance of the first vehicle. If the configuration or components are

not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.

4) If the manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

#### **10. PRE-AWARD AND POST DELIVERY AUDITS OF ROLLING STOCK REQUIREMENTS (49 CFR Part 663)**

The Contractor agrees to comply with 49 U S C 5323 and FTA's implementing regulation 49 CFR Part 663 and to submit the following certifications for pre-award and post delivery audit requirements for all purchases of rolling stock:

(1) Buy America Requirements: The contractor shall complete and submit a declaration certifying either compliance or non-compliance with Buy America. If the bidder/offeror certifies compliance with Buy America, it shall submit documentation which lists a) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and b) the location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.

(2) Solicitation Specification Requirements: The Contractor shall submit evidence that it will be capable of meeting the bid specifications.

(3) Federal Motor Vehicle Safety Standards (FMVSS): the Contractor shall submit 1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or 2) a manufacturer's certified statement that the contracted buses will not be subject to FMVSS regulations. It is acceptable that the Contractor use one certification of FMVSS compliance as long as the certifications cover both audits.

#### **11. LOBBYING (31 USC 1352, 49 CFR Parts 19 and 20)**

The Contractor who apply or bid for an award of \$100,000 or more shall file the certification required by 49 CFR Parts 19 and 20, "New Restrictions on Lobbying". Each tier of Contractor certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other federal award covered. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 USC 1352. Such disclosures are forwarded from tier to tier up to NYCDDC and NYCDOT.

#### **12. ACCESS TO RECORDS AND REPORTS (49 CFR 5325, 49 CFR 18.36(i), 49 CFR 633.17)**

The Contractor shall comply with the following access to records requirements:

1. In accordance with 49 CFR 18.36(i), the Contractor agrees to provide NYCDDC, NYCDOT, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C. F. R. 633.17 to provide the FTA Administrator or his/her authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a) 1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.

2. Where NYCDDC, in accordance with 49 U.S.C. 5325(a) enters into a contract for a capital project or improvement (defined in 49 U.S.C. 5302(a) (1) through other than competitive bidding, the Contractor shall make available records related to the contract to NYCDDC, NYCDOT, the Secretary of Transportation and the Comptroller General or any authorized officer or employee of any of them for the purposes of conducting an audit and inspection.

3. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

4. The Contractor agrees to maintain all books, records, accounts, reports and other related documents required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until NYCDDC, NYCDOT, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. (Reference 49 CFR 18.39 (i)(11).

5. FTA does not require the inclusion of these requirements in subcontracts.

### **13. FEDERAL CHANGES (49 CFR Part 18)**

The Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreements (<http://www.fta.dot.gov/documents/18-Master.pdf>) between NYCDOT and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

### **14. BONDING**

For those construction or facility improvement contracts or subcontracts exceeding \$100,000, FTA may accept the bonding policy and requirements of NYCDDC, provided that they meet the minimum requirements for construction contracts as follows:

a. A bid guarantee from each bidder equivalent to five (5) percent of the bid price. The "bid guarantees" shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

b. A performance bond on the part to the Contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the Contractor's obligations under such contract.

c. A payment bond on the part of the Contractor for 100 percent of the contract price. A "payment bond" is one executed in connection with a contract to assure payment, as required by law, of all persons supplying labor and material in the execution of the work provided for in the contract. Payment bond amounts required from Contractors are as follows:

(1) 50% of the contract price if the contract price is not more than \$1 million;

(2) 40% of the contract price if the contract price is more than \$1 million but not more than \$5 million; or

(3) \$2.5 million if the contract price is more than \$5 million.

d. A cash deposit, certified check or other negotiable instrument may be accepted by a grantee in lieu of performance and payment bonds, provided the grantee has established a procedure to assure that the interest of FTA is adequately protected. An irrevocable letter of credit would also satisfy the requirement for a bond.

### **Bid Bond Requirements (Construction)**

#### **(a) Bid Security**

A Bid Bond must be issued by a fully qualified surety company acceptable to NYCDDC and listed as a company currently authorized under 31 CFR, Part 223 as possessing a Certificate of Authority as described thereunder.

#### **(b) Rights Reserved**

In submitting this Bid, it is understood and agreed by bidder that the right is reserved by NYCDDC to reject any and all bids, or part of any bid, and it is agreed that the Bid may not be withdrawn for a period of [ninety (90)] days subsequent to the opening of bids, without the written consent of NYCDDC.

It is also understood and agreed that if the undersigned bidder should withdraw any part or all of his bid within [ninety (90)] days after the bid opening without the written consent of NYCDDC, shall refuse or be unable to enter into this Contract, as provided above, or refuse or be unable to furnish adequate and acceptable Performance Bonds and Labor and Material Payments Bonds, as provided above, or refuse or be unable to furnish adequate and acceptable insurance, as provided above, he shall forfeit his bid security to the extent of NYCDDC's damages occasioned by such withdrawal, or refusal, or inability to enter into an agreement, or provide adequate security therefore.

It is further understood and agreed that to the extent the defaulting bidder's Bid Bond, Certified Check, Cashier's Check, Treasurer's Check, and/or Official Bank Check (excluding any income generated thereby which has been retained by NYCDDC as provided in [Item x "Bid Security" of the Instructions to Bidders]) shall prove inadequate to fully recompense NYCDDC for the damages occasioned by default, then the undersigned bidder agrees to indemnify NYCDDC and pay over to NYCDDC the difference between the bid security and NYCDDC's total damages, so as to make NYCDDC whole.

The undersigned understands that any material alteration of any of the above or any of the material contained on this form, other than that requested will render the bid unresponsive.

### **Performance and Payment Bonding Requirements (Construction)**

The Contractor shall be required to obtain performance and payment bonds as follows:

#### **(a) Performance bonds**

1. The penal amount of performance bonds shall be 100 percent of the original contract price, unless the NYCDDC determines that a lesser amount would be adequate for the protection of NYCDDC.
2. The NYCDDC may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price. NYCDDC may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

#### **(b) Payment bonds**

1. The penal amount of the payment bonds shall equal:

(i) Fifty percent of the contract price if the contract price is not more than \$1 million.

(ii) Forty percent of the contract price if the contract price is more than \$1 million but not more than \$5 million; or

(iii) Two and one half million if the contract price is more than \$5 million.

2. If the original contract price is \$5 million or less, (NYCDDC) may require additional protection as required by subparagraph 1 if the contract price is increased.

**Performance and Payment Bonding Requirements (Non-Construction)**

The Contractor is required to obtain performance and payment bonds when necessary to protect NYCDDC's interest. The FTA requirements apply to first tier subcontractors as well as the Contractor.

(a) The following situations may warrant a performance bond:

1. NYCDDC's property or funds are to be provided to the Contractor for use in performing the contract or as partial compensation (as in retention of salvaged material).

2. The Contractor sells assets to or merges with another concern and NYCDDC after recognizing the latter concern as the successor in interest, desires assurance that it is financially capable.

3. Substantial progress payments are made before delivery of end items starts.

4. Contracts are for dismantling, demolition, or removal of improvements.

(b) When it is determined that a performance bond is required, the Contractor shall be required to obtain performance bonds as follows:

1. The penal amount of performance bonds shall be 100% of the original contract price, unless NYCDDC determines that a lesser amount would be adequate for the protection of NYCDDC.

2. NYCDDC may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100% of the increase in contract price. NYCDDC may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) A payment bond is required only when a performance bond is required, and if the use of payment bond is in NYCDDC's interest.

(d) When it is determined that a payment bond is required, the Contractor shall be required to obtain payment bonds as follows:

1. The penal amount of payment bonds shall equal:

(i) Fifty percent of the contract price if the contract price is not more than \$1 million;

(ii) Forty percent of the contract price if the contract price is more than \$1 million but not more than \$5 million; or

(iii) Two and one half million if the contract price is increased.

#### **Advance Payment Bonding Requirements**

The Contractor is required to obtain an advance payment bond if the contract contains an advance payment provision and a performance bond is not furnished. NYCDDC shall determine the amount of the advance payment bond necessary to protect NYCDDC.

#### **Patent Infringement Bonding Requirements (Patent Indemnity)**

The Contractor is required to obtain a patent indemnity bond if a performance bond is not furnished and the financial responsibility of the Contractor is unknown or doubtful. NYCDDC shall determine the amount of the patent indemnity to protect NYCDDC.

#### **Warranty of the Work and Maintenance Bonds**

1. The Contractor warrants to NYCDDC, the Architect and/or Engineer that all materials and equipment furnished under this contract will be of highest quality and new unless otherwise specified by NYCDDC, free from faults and defects and in conformance with the contract documents. All work not so conforming to these standards shall be considered defective. If required by the Project Manager, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
2. The Work furnished must be of first quality and the workmanship must be the best obtainable in the various trades. The Work must be of safe, substantial and durable construction in all respects. The Contractor hereby guarantees the Work against defective materials or faulty workmanship for a minimum period of one (1) year after Final Payment by NYCDDC and shall replace or repair any defective materials or equipment or faulty workmanship during the period of the guarantee at no cost to NYCDDC. As additional security for these guarantees, the Contractor shall, prior to the release of Final Payment, furnish separate Maintenance (or Guarantee) Bonds in form acceptable to NYCDDC written by the same corporate surety that provides the Performance Bond and Labor and Material Payment Bond for this contract. These bonds shall secure the Contractor's obligation to replace or repair defective materials and faulty workmanship for a minimum period of one (1) year after Final Payment and shall be written in an amount equal to ONE HUNDRED PERCENT (100%) of the CONTRACT SUM, as adjusted (if at all).

#### **15. CLEAN AIR( 42 U.S.C. §§ 7401 et seq, 40 CFR 15.61, 49 CFR Part 18)**

(1) The Contractor shall agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq. The Contractor shall agree to report each violation to NYCDDC and understands and agrees that NYCDDC will, in turn, report each violation as required to assure notification to NYCDOT, FTA, and the appropriate EPA Regional Office.

(2) The Contractor shall also agree to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

#### **16. RECYCLED PRODUCTS (42 U.S.C. 6962, 40 CFR Part 247, Executive Order 12873)**

The Contractor shall agree to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

**17. DAVIS-BACON AND COPELAND ANTI-KICKBACK ACTS 40 U.S.C. 3141, et seq. and 18 U.S.C. 874, 29 CFR 5.5 (a)**

1) **Minimum wages** - (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The Contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) Except with respect to helpers as defined as 29 CFR 5.2(n)(4), the work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) With respect to helpers as defined in 29 CFR 5.2(n)(4), such a classification prevails in the area in which the work is performed.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their

representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(v)(A) The Contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination with 30 days of receipt and so advise the Contracting officer or will notify the Contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(v) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.



2) **Withholding** - NYCDDC shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the NYCDDC may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3) **Payrolls and basic records** - (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the NYCDDC for transmission to NYCDOT and the Federal Transit Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The

prime contractor is responsible for the submission of copies of payrolls by all Subcontractors.

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or Subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5 and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or

cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The Contractor or Subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Federal Transit Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) **Apprentices and trainees** - (i) Apprentices - Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually

registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or Subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division of the U.S. Department of Labor determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees - Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every

trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity - The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

(5) **Compliance with Copeland Act requirements** - The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

(6) **Subcontracts** - The Contractor or Subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Federal Transit Administration may by appropriate instructions require, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any Subcontractor or lower tier Subcontractor with all the contract clauses in 29 CFR 5.5.

(7) **Contract termination: debarment** - A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a Subcontractor as provided in 29 CFR 5.12.

(8) **Compliance with Davis-Bacon and Related Act requirements** - All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) **Disputes concerning labor standards** - Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its Subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) **Certification of eligibility** - (i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

## **18. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

(1) **Overtime requirements** - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages** - In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) **Withholding for unpaid wages and liquidated damages** - NYCDDC shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) **Subcontracts** - The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any Subcontractor or lower tier Subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

## **19. NO GOVERNMENT OBLIGATION TO THIRD PARTIES**

### **No Obligation by the Federal Government**

(1) NYCDOT, NYCDDC, and the Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to NYCDOT, NYCDDC, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.

(2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the Subcontractor who will be subject to its provisions.

## **20. FRAUD OR FRAUDULENT STATEMENTS OR CLAIMS – CIVIL AND CRIMINAL FRAUD (31 U.S.C. 3801 et seq, 49 CFR Part 31, 18 U.S.C. 1001, 49 U.S.C. 5307)**

The Contractor acknowledges and agrees that:

(1) **Civil Fraud**. The Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. §§ 3801 *et seq.*, and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions in

connection with the Project. Upon execution of the Grant Agreement or Cooperative Agreement for the Project, the Contractor certifies or affirms the truthfulness and accuracy of each statement it has made, it makes, or it may make in connection with the Project. In addition to other penalties that may apply, the Contractor also acknowledges that if it makes a false, fictitious, or fraudulent claim, statement, submission, certification, assurance, or representation to the Federal Government, the Federal Government reserves the right to impose on the Contractor the penalties of the Program Fraud Civil Remedies Act of 1986, as amended, to the extent the Federal Government deems appropriate.

(2) **Criminal Fraud.** If the Contractor makes a false, fictitious, or fraudulent claim, statement, submission, certification, assurance, or representation to the Federal Government or includes a false, fictitious, or fraudulent statement or representation in any agreement with the Federal Government in connection with a Project authorized under 49 U.S.C. chapter 53 or any other Federal law, the Federal Government reserves the right to impose on the Contractor the penalties of 49 U.S.C. § 5323(l), 18 U.S.C. § 1001 or other applicable Federal law to the extent the Federal Government deems appropriate.

## **21. TERMINATION (49 U.S.C. Part 18, FTA Circular 4220.1F)**

The Contractor agrees to include these provisions in all subcontracts in excess of \$10,000.

**a. Termination for Convenience (General Provision)** NYCDDC may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the Government's best interest. The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to NYCDDC to be paid to the Contractor. If the Contractor has any property in its possession belonging to NYCDDC, the Contractor will account for the same, and dispose of it in the manner NYCDDC directs.

**b. Termination for Default [Breach or Cause] (General Provision)** If the Contractor does not deliver supplies in accordance with the contract delivery schedule, or, if the contract is for services, the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, NYCDDC may terminate this contract for default. Termination shall be effected by serving a notice of termination on the contractor setting forth the manner in which the Contractor is in default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

If it is later determined by NYCDDC that the Contractor had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of the Contractor, NYCDDC, after setting up a new delivery of performance schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

**c. Opportunity to Cure (General Provision)** NYCDDC, in its sole discretion may, in the case of a termination for breach or default, allow the Contractor [an appropriately short period of time] in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions.

If Contractor fails to remedy to NYCDDC's satisfaction the breach or default or any of the terms, covenants, or conditions of this Contract within the period of time specified by NYCDDC after receipt by Contractor or written notice from NYCDDC setting forth the nature of said breach or default, NYCDDC shall have the right to terminate the Contract without any further obligation to Contractor. Any such termination for default shall not in any way operate to preclude NYCDDC from also pursuing all available remedies against Contractor and its sureties for said breach or default.

**d. Waiver of Remedies for any Breach** In the event that NYCDDC elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by NYCDDC shall not limit

NYCDDC's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.

**e. Termination for Default (Supplies and Service)** If the Contractor fails to deliver supplies or to perform the services within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, NYCDDC may terminate this contract for default. NYCDDC shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner or performance set forth in this contract.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of NYCDDC.

**f. Termination for Default (Construction)** If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Contractor fails to comply with any other provisions of this contract, NYCDDC may terminate this contract for default. NYCDDC shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. In this event, NYCDDC may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to NYCDDC resulting from the Contractor's refusal or failure to complete the work within specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by NYCDDC in completing the work.

The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause if:

1. the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include: acts of God, acts of NYCDDC, acts of another Contractor in the performance of a contract with NYCDDC, epidemics, quarantine restrictions, strikes, freight embargoes; and

2. the Contractor, within [10] days from the beginning of any delay, notifies NYCDDC in writing of the causes of delay. If in the judgment of NYCDDC, the delay is excusable, the time for completing the work shall be extended. The judgment of NYCDDC shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses.

If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of NYCDDC.

**g. Termination for Convenience of Default (Cost-Type Contracts)** NYCDDC may terminate this contract, or any portion of it, by serving a notice of termination to the Contractor. The notice shall state whether the termination is for convenience of NYCDDC or for the default of the Contractor. If the termination is for default, the notice shall state the manner in which the contractor has failed to perform the requirements of the contract. The Contractor shall account for any property in its possession paid for from funds received from NYCDDC, or property supplied to the Contractor by NYCDDC. If the termination is for default, NYCDDC may fix the fee, if the contract provides for a fee, to be paid the contractor in proportion to the value, if any, of work performed up to the time of termination. The Contractor shall promptly submit its termination claim to NYCDDC and the parties shall negotiate the termination settlement to be paid the Contractor.

If the termination is for the convenience of NYCDDC, the Contractor shall be paid its contract close-out costs, and a fee, if the contract provided for payment of a fee, in proportion to the work performed up to the time of termination.

If, after serving a notice of termination for default, NYCDDC determines that the Contractor has an excusable reason for not performing, such as strike, fire, flood, events which are not the fault of and are beyond the control of the contractor, NYCDDC, after setting up a new work schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

**22. GOVERNMENT-WIDE DEBARMENT AND SUSPENSION (NON-PROCUREMENT)  
(49 CFR 29.220(b), 49 CFR 29.940 and 49 CFR 29.945, Executive Orders 12549/12689)**

Executive Orders 12549/12689, as implemented by 49 CFR Part 29, prohibits NYCDOT, NYCDDC, and sub-grantees from contracting for goods and services from organizations that have been suspended or debarred from receiving Federally-assisted contracts. As part of their applications each year, NYCDOT is required to submit a certification to the effect that NYCDOT nor NYCDDC will not enter into contracts over \$25,000 with suspended or debarred contractors and that they will require the Contractors (and subcontractors) to make the same certification to them. The Contractor agrees to include these provisions in its subcontracts over \$25,000.

The certification in this requirement is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, NYCDOT and/or NYCDDC may pursue available remedies, including suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Excluded Parties List - All contractors and sub-contractors are required to provide the printout from the Excluded Parties list website at <http://www.epls.gov/> showing their exclusion from this list.

**23. PRIVACY ACT (5 U.S.C. 552)**

The following requirements apply to the Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract:

(1) The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. § 552a. Among other things, the Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.

(2) The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

**24. CIVIL RIGHTS REQUIREMENTS (29 U.S.C. § 623, 42 U.S.C. § 2000, 42 U.S.C. § 6102, 42 U.S.C. § 12112, 42 U.S.C. § 12132, 49 U.S.C. § 5332, 29 CFR Part 1630, 41 CFR Part 60 et seq.)**

(1) Nondiscrimination - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor

agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

(2) Equal Employment Opportunity – The following equal employment opportunity requirements apply to the underlying contract:

(a) Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 *et seq.*, (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(b) Age - In accordance with Section 4 of the Age Discrimination in Employment Act, as amended, 29 U.S.C. § §621 through 634 and 29 CFR Part 1625, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(c) Disabilities – In accordance with 49 U.S.C. § 5301(d), which states the Federal policy that elderly individuals and individuals with disabilities have the same right as other individuals to use public transportation services and facilities, and that special efforts shall be made in planning and designing those services and facilities to implement transportation accessibility rights for elderly individuals and individuals with disabilities. The Contractor shall also agree to comply with all applicable provisions of Section 504 of the Rehabilitation Act of 1973, as amended, with 29 U.S.C. § 794, which prohibits discrimination on the basis of disability; with the Americans with Disabilities Act of 1990 (ADA), as amended, 42 U.S.C. §§ 12101 *et seq.*, which requires that accessible facilities and services be made available to individuals with disabilities; and with the Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151 *et seq.*, which requires that buildings and public accommodations be accessible to individuals with disabilities, and any subsequent amendments to these laws or other laws pertaining to access for individuals with disabilities to the extent applicable. In addition, the Contractor agrees to comply with applicable implementing Federal regulations and directives and any subsequent amendments that the FTA may issue.

(d) Limited English Proficiency (LEP) - Executive Order No. 13166, "Improving Access to Services for Persons with Limited English Proficiency," August 11, 2000, 42 U.S.C. Section 2000d-1 note, and USDOT/FTA, "Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons," December 14, 2005. Contractors will comply, based on in receipt of Federal funding through NYCDOT/NYCDDC and assisting NYCDOT/NYCDDC in fulfilling their responsibilities to LEP persons, pursuant to Title VI of the Civil Rights Act of 1964 and implementing regulations in accordance to FTA Circular 4702.1.

(e) The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

## **25. BREACHES AND DISPUTE RESOLUTION (49 CFR Part 18, FTA Circular 4220.1F)**



All contracts in excess of \$100,000 shall contain provisions or conditions which will allow for administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. FTA will not substitute its judgment for that of NYCDDC unless the matter is primarily a federal authority having proper jurisdiction.

**Disputes** - Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of NYCDDC. This decision shall be final and conclusive unless within ten (10) days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the [title of employee]. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the [title of employee] shall be binding upon the Contractor and the Contractor shall abide by the decision.

**Performance During Dispute** - Unless otherwise directed by NYCDDC, Contractor shall continue performance under this Contract while matters in dispute are being resolved.

**Claims for Damages** - Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of his employees, agents or others for whose acts he is legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury of damage.

**Remedies** - Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between NYCDDC and the Contractor arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State in which NYCDDC is located.

**Rights and Remedies** - The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by NYCDDC or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach there under, except as may be specifically agreed in writing.

## **26. PATENT AND RIGHTS IN DATA (37 CFR Part 401 49 CFR Parts 18 and 19 A.)**

**A. Rights in Data** - The following requirements apply to each contract involving experimental, developmental or research work:

(1) The term "subject data" used in this clause means recorded information, whether or not copyrighted, that is delivered or specified to be delivered under the contract. The term includes graphic or pictorial delineation in media such as drawings or photographs; text in specifications or related performance or design-type documents; machine forms such as punched cards, magnetic tape, or computer memory printouts; and information retained in computer memory. Examples include, but are not limited to: computer software, engineering drawings and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identifications, and related information. The term "subject data" does not include financial reports, cost analyses, and similar information incidental to contract administration.

(2) The following restrictions apply to all subject data first produced in the performance of the contract to which this Attachment has been added:

(a) Except for its own internal use, the Purchaser or Contractor may not publish or reproduce subject data in whole or in part, or in any manner or form, nor may the Purchaser or Contractor authorize others to do so, without the written consent of the Federal Government, until such time as the Federal Government may have

either released or approved the release of such data to the public; this restriction on publication, however, does not apply to any contract with an academic institution.

(b) In accordance with 49 C.F.R. § 18.34 and 49 C.F.R. § 19.36, the Federal Government reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, for "Federal Government purposes," any subject data or copyright described in subsections (2)(b)1 and (2)(b)2 of this clause below. As used in the previous sentence, "for Federal Government purposes," means use only for the direct purposes of the Federal Government. Without the copyright owner's consent, the Federal Government may not extend its Federal license to any other party.

1. Any subject data developed under that contract, whether or not a copyright has been obtained; and
2. Any rights of copyright purchased by the Purchaser or Contractor using Federal assistance in whole or in part provided by FTA.

(c) When FTA awards Federal assistance for experimental, developmental, or research work, it is FTA's general intention to increase transportation knowledge available to the public, rather than to restrict the benefits resulting from the work to participants in that work. Therefore, unless FTA determines otherwise, the Purchaser and the Contractor performing experimental, developmental, or research work required by the underlying contract to which this Attachment is added agrees to permit FTA to make available to the public, either FTA's license in the copyright to any subject data developed in the course of that contract, or a copy of the subject data first produced under the contract for which a copyright has not been obtained. If the experimental, developmental, or research work, which is the subject of the underlying contract, is not completed for any reason whatsoever, all data developed under that contract shall become subject data as defined in subsection (a) of this clause and shall be delivered as the Federal Government may direct. This subsection (c), however, does not apply to adaptations of automatic data processing equipment or programs for the Purchaser or Contractor's use whose costs are financed in whole or in part with Federal assistance provided by FTA for transportation capital projects.

(d) Unless prohibited by state law, upon request by the Federal Government, the Purchaser and the Contractor agree to indemnify, save, and hold harmless the Federal Government, its officers, agents, and employees acting within the scope of their official duties against any liability, including costs and expenses, resulting from any willful or intentional violation by the Purchaser or Contractor of proprietary rights, copyrights, or right of privacy, arising out of the publication, translation, reproduction, delivery, use, or disposition of any data furnished under that contract. Neither the Purchaser nor the Contractor shall be required to indemnify the Federal Government for any such liability arising out of the wrongful act of any employee, official, or agents of the Federal Government.

(e) Nothing contained in this clause on rights in data shall imply a license to the Federal Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Federal Government under any patent.

(f) Data developed by the Purchaser or Contractor and financed entirely without using Federal assistance provided by the Federal Government that has been incorporated into work required by the underlying contract to which this Attachment has been added is exempt from the requirements of subsections (b), (c), and (d) of this clause, provided that the Purchaser or Contractor identifies that data in writing at the time of delivery of the contract work.

(g) Unless FTA determines otherwise, the Contractor agrees to include these requirements in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.

(3) Unless the Federal Government later makes a contrary determination in writing, irrespective of the Contractor's status (i.e., a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual, etc.), the Purchaser and the Contractor agree to take the necessary actions to provide, through FTA, those rights in that invention due the Federal Government as described in

U.S. Department of Commerce regulations, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," 37 C.F.R. Part 401.

(4) The Contractor also agrees to include these requirements in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.

**B. Patent Rights** - The following requirements apply to each contract involving experimental, developmental, or research work:

(1) General - If any invention, improvement, or discovery is conceived or first actually reduced to practice in the course of or under the contract to which this Attachment has been added, and that invention, improvement, or discovery is patentable under the laws of the United States of America or any foreign country, the Purchaser and Contractor agree to take actions necessary to provide immediate notice and a detailed report to the party at a higher tier until FTA is ultimately notified.

(2) Unless the Federal Government later makes a contrary determination in writing, irrespective of the Contractor's status (a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual), the Purchaser and the Contractor agree to take the necessary actions to provide, through FTA, those rights in that invention due the Federal Government as described in U.S. Department of Commerce regulations, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," 37 C.F.R. Part 401.

(3) The Contractor also agrees to include the requirements of this clause in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.

**27. TRANSIT EMPLOYEE PROTECTIVE AGREEMENTS 49 U.S.C. § 5310, § 5311, and § 5333; 29 CFR Part 215**

(a) General Transit Employee Protective Requirements - To the extent that FTA determines that transit operations are involved, the Contractor agrees to carry out the transit operations work on the underlying contract in compliance with terms and conditions determined by the U.S. Secretary of Labor to be fair and equitable to protect the interests of employees employed under this contract and to meet the employee protective requirements of 49 U.S.C. A 5333(b), and U.S. DOL guidelines at 29 C.F.R. Part 215, and any amendments thereto. These terms and conditions are identified in the letter of certification from the U.S. DOL to FTA applicable to the FTA Recipient's project from which Federal assistance is provided to support work on the underlying contract. The Contractor agrees to carry out that work in compliance with the conditions stated in that U.S. DOL letter. The requirements of this subsection (1), however, do not apply to any contract financed with Federal assistance provided by FTA either for projects for elderly individuals and individuals with disabilities authorized by 49 U.S.C. § 5310(a)(2), or for projects for nonurbanized areas authorized by 49 U.S.C. § 5311. Alternate provisions for those projects are set forth in subsections (b) and (c) of this clause.

**28. PRE-EMPTION OF STATE, TERRITORIAL, AND LOCAL LAW**

If a Federal law pre-empts a State, territorial, or local law, regulation, or ordinance:

- (a) The Subrecipient or Contractor must comply with Federal law and regulations.
- (b) This Agreement, however, does not require the Subrecipient or Contractor to take any action that would violate State, territorial, or local law, regulations, or ordinances.
- (c) If compliance with any provision of Federal law or regulations or this Agreement violates or would require the Subrecipient or Contractor to violate any State, territorial, or local law, regulation, or ordinance, the Subrecipient or Contractor agrees to:
  - (1) Notify NYCDDC immediately in writing, and
  - (2) Make appropriate arrangements with NYCDDC to:
    - a Proceed with the Project or,
    - b Terminate the Project expeditiously, if necessary.

**29. DISADVANTAGED BUSINESS ENTERPRISE (DBE) (49 CFR Part 26)**

In accordance to the requirements of Title 49, Code of Federal Regulations, Part 26, participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. The NYCDOT's overall goal for DBE participation is 11.4%. The FTA DBE goal for architectural, engineering and design services is 10% and construction contracts is 12%. The DBE goal is 2% for marine contracts. Additionally, the DBE program dictates payment terms and conditions applicable to all subcontractors regardless of whether they are DBE firms or not. NYCDDC will not hold retainage on FTA funded contracts.

The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which will result in the termination of this contract or such other remedy as NYCDOT and NYCDDC deem appropriate. Within each subcontract, the Contractor signs with a Subcontractor must

Include the assurance in this paragraph (see 49 CFR 26.13(b)).

Bidders/Offerors are required to document sufficient DBE participation to meet these goals or, alternatively, document adequate good faith efforts to do so, as provided for in 49 CFR 26. Award of this contract is conditioned on submission of the following:

1. The names and addresses of DBE firms that will participate in this contract;
2. A description of the work each DBE will perform;
3. The dollar amount of the participation of each DBE firm participating;
4. Written documentation of the bidder/offeror's commitment to use a DBE subcontractor whose participation it submits to meet the contract goal;
5. Written confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment;

6. If the contract goal is not met, evidence of good faith efforts should be provided to NYCDOT and NYCDDC. The successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance;

7. The Contractor is required to pay its Subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the Contractor's receipt of payment for that work from the NYCDDC. In addition, the Contractor may not hold retainage from its Subcontractors. The Contractor is required to return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this contract is satisfactorily completed. The Contractor is required to return any retainage payments to those Subcontractors within 30 days after incremental acceptance of the Subcontractor's work by the NYCDDC and Contractor's receipt of the partial retainage payment related to the Subcontractor's work; and

8. The Contractor must promptly notify NYCDOT and NYCDDC, whenever a DBE Subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE Subcontractor to perform at least the same amount of work. The Contractor may not terminate any DBE Subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of NYCDOT.

### **30. INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS**

The provisions in this document include, in part, certain Standard Terms and Conditions required by USDOT, whether or not expressly set forth in the contract provisions in this document. All contractual provisions required by USDOT, as set forth in FTA Circular 4220.1F are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any of NYCDOT's or NYCDDC's requests which would cause NYCDOT or NYCDDC to be in violation of the FTA terms and conditions.

### **31. DRUG AND ALCOHOL TESTING (49 U.S.C. § 5331, 49 CFR Parts 653 and 654)**

FTA's drug and alcohol rules, 49 CFR 653 and 654, respectively, are unique among the regulations issued by FTA. First, they require that NYCDDC ensures that any entity performing a safety-sensitive function on NYCDDC's behalf (usually Contractor and/or Contractors) implement a complex drug and alcohol testing program that complies with Parts 653 and 654. Second, the rules condition the receipt of certain kinds of FTA funding on NYCDDC's compliance with the rules; thus, NYCDDC is not in compliance with the rules unless every entity that performs a safety-sensitive function on NYCDDC's behalf is in compliance with the rules. Third, the rules do not specify how NYCDDC ensures that its Contractors comply with them.

How NYCDDC does so depends on several factors, including whether the Contractor is covered independently by the drug and alcohol rules of another Department of Transportation operating administration, the nature of the relationship that NYCDDC has with the Contractor, and the financial resources available to NYCDDC to oversee the Contractor's drug and alcohol testing program. In short, there are a variety of ways that NYCDDC can ensure that its Contractor and/or contractors comply with the rules.

The Contractor agrees to establish and implement a drug and alcohol testing program that complies with 49 CFR Parts 653 and 654, produce any documentation necessary to establish its compliance with Parts 653 and 654, and permit any authorized representative of the United States Department of Transportation or its operating administrations, the State Oversight Agency of New York, NYCDOT, or NYCDDC to inspect the facilities and records associated with the implementation of the drug and alcohol testing program as required under 49 CFR Parts 653 and 654 and review the testing process. The Contractor agrees further to certify annually its compliance with Parts 653 and 654 before January 30<sup>th</sup> and to submit the Management Information System (MIS) reports

before March 15<sup>th</sup> to NYCDOT and NYCDDC or designee. To certify compliance, the Contractor shall use the "Substance Abuse Certifications" in the "Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements," which is published annually in the Federal Register.

The Contractor agrees further to [Select a, b, or c] (a) submit upon request a copy of the Policy Statement developed to implement its drug and alcohol testing program; OR (b) adopt NYCDOT's policy statement as required under 49 CFR 653 and 654; OR (c) submit for review and approval to NYCDOT and NYCDDC, a copy of its Policy Statement developed to implement its drug and alcohol testing program. In addition, the Contractor agrees to: (to be determined by NYCDOT, but may address areas such as: the selection of the certified laboratory, substance abuse professional, or Medical Review Officer, or the use of a consortium).

### **32. INTELLIGENT TRANSPORTATION SYSTEM (ITS)**

Intelligent transportation system property and services must comply with the National ITS Architecture and Standards to the extent required by Section 5307(c) of SAFETEA-LU, FTA Notice, "FTA National ITS Architecture Policy on Transit Projects," 66 FR 1455 *et seq.*, January 8, 2001, and later published policies or implementing directives FTA may issue.

### **33. AMERICANS WITH DISABILITIES ACT (ADA)**

a. **Facilities.** Facilities to be used in public transportation service must comply with 42 U.S.C. Sections 12101 *et seq.* and US DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 CFR Part 37; and Joint ATBCB/DOT regulations, "Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 CFR Part 1192 and 49 CFR Part 38. Notably, US DOT incorporated by reference the ATBCB's "Americans with Disabilities Act Accessibility Guidelines" (ADAAG), revised July 2004, which include accessibility guidelines for buildings and facilities, and are incorporated into Appendix A to 49 CFR Part 37. US DOT also added specific provisions to Appendix A modifying the ADAAG, with the result that buildings and facilities must comply with both the ADAAG and amendments thereto in Appendix A to 49 CFR Part 37.

b. **Rolling stock.** Rolling stock must comply with the accessibility requirements of DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 CFR Part 37, and Joint ATBCB/DOT regulations, "Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 CFR Part 1192 and 49 CFR Part 38. Private entities must comply with the requirements of 49 CFR Part 37 applicable to public entities with which they contract to provide public transportation services. NYCDOT advise third party contractors operating public transportation services to review the requirements for public entities in this context.

### **34. TRAFFICKING IN PERSONS**

Pursuant to 2 CFR Part 175 and Section 3(g) of the FTA Master Agreement, all subrecipients and contractors are required to comply with the Trafficking Victims Protection Act of 2000 (TVPA) whereby parties under this award may not—

1. Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
2. Procure a commercial sex act during the period of time that the award is in effect; or
3. Use forced labor in the performance of the award or subawards under the award.

### **35. SAFE OPERATION OF MOTOR VEHICLES**

a. Seat Belt Use. Pursuant to Executive Order No. 13043 and Section 36 of the FTA Master Agreement, subrecipients and contractors are highly encouraged to adopt and promote on-the-job seat belt use policies and programs for their employees and other personnel that operate:

- a) Company-owned vehicles,
- b) Company-rented vehicles, or
- c) Personally operated vehicles

b. Distracted Driving, Including Text Messaging While Driving. Pursuant to Executive Order No. 13513, DOT Order 3902.10, and Section 36 of the FTA Master Agreement, subrecipients and contractors are highly encouraged to adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers, including policies to ban text messaging while:

1. Using an employer supplied electronic device, and
2. Driving:
  - a) a vehicle you own or rent,
  - b) a vehicle the Government owns, leases or rents,
  - c) a privately-owned vehicle when on official Project-related business or when performing any work for or on behalf of the Project, or
  - d) any vehicle, on or off duty.

Subrecipients and contractors are also highly encouraged to conduct workplace safety initiatives in a manner commensurate with their size, such as establishing:

1. New rules and programs or re-evaluating existing programs to prohibit text messaging while driving, and
2. Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

Subrecipients and contractors are required to include the language of this part in each third party subagreement at each tier financed with Federal funds.

Definitions as used in this part:

1. "Driving":
  - a) Means operating a motor vehicle on a roadway, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.
  - b) Does not include being in your vehicle (with or without the motor running) in a location off the roadway where it is safe and legal to remain stationary.
2. "Text Messaging":
  - a) Means reading from or entering data into any handheld or other electronic device, including a device for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication.
  - b) Does not include the use of a cell phone or other electronic device for the limited purpose of entering a telephone number to make an outgoing call or answering an incoming call, unless the practice is prohibited by State or local law.

### **36. US OMB SPECIAL REPORTING PROVISIONS**

Subrecipients agree to comply with the special US OMB reporting provisions contained in Section 8 of the FTA Master Agreement and outlined below.

a. Data Universal Numbering System (DUNS) Numbers. The subrecipient must provide its DUNS numbers to NYCDOT prior to receiving a subaward from NYCDOT. The DUNS number is the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. You may obtain a DUNS number from D&B by telephone (currently at 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>).

b. Reporting Total Compensation of Subrecipient Executives. Prior to receiving a subaward from NYCDOT, the subrecipient agrees to report the names and total compensation of its five most highly compensated executives for the subrecipient's preceding completed fiscal year, if:

(a) The subrecipient received in its preceding fiscal year:

(i) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal funds subject to the Transparency Act, as defined in 2 C.F.R. § 170.320 (and subawards), and

(ii) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial funds subject to the Transparency Act (and subawards), and

(b) The public does not have access to information about the compensation of the subrecipient's executives through periodic reports filed under:

(i) Section 13(a) of the Securities Exchange Act of 1934, 15 U.S.C. § 78m(a),

(ii) Section 15(d) of the Securities Exchange Act of 1934, 15 U.S.C. § 78o(d), or

(iii) Section 6104 of the Internal Revenue Code of 1986.

To determine if the public has access to the compensation information, see the U.S. Securities and Exchange Commission total compensation filings at <http://www.sec.gov/answers/excomp.htm>.

Reporting Total Compensation of Subrecipient Executives. Prior to receiving a subaward from NYCDOT, the subrecipient agrees to report the names and total compensation of its five most a To FTA and elsewhere as may be determined by the Government.

b By the end of the month following the month during which the Recipient makes the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), the Recipient must report any required compensation information of the subrecipient by November 30 of that year.

c. Definitions. For purposes of this Section 35:

(1) Entity means all of the following (as defined in 2 C.F.R. Part 25, Subpart C):

a A Governmental organization that is a State, local government, or Indian Tribe,

b A foreign public entity,

c A domestic or foreign nonprofit organization,

d A domestic or foreign for-profit organization, and



e A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

(2) Executive means officers, managing partners, or any other employees in management positions.

(3) Subaward:

(a) Means a legal instrument to provide support for the performance of any portion of the Project or Program for which NYCDOT awards to an eligible subrecipient.

(b) Does not include the NYCDOT's procurement of property and services necessary to carry out its Project or Program.

(c) May be provided through any legal agreement, including an agreement that the Recipient considers a contract.

(4) Subrecipient means an entity that:

(a) Receives a subaward from NYCDOT, and

(b) Is accountable to NYCDOT for the use of the Federal funds provided by the subaward.

(5) Total compensation means the cash and noncash dollar value earned by the executive during the subrecipient's preceding fiscal year and includes the following:

(a) Salary,

(b) Bonus,

(c) Awards of stock, stock options, and stock appreciation rights (use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year as provided in the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments),

(d) Earnings for services under non-equity incentive plans (this does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees),

(e) Change in pension value (this is the change in present value of defined benefit and actuarial pension plans),

(f) Above-market earnings on deferred compensation which is not tax-qualified, and

(g) Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

For more information, see 17 C.F.R. § 229.402(c)(2).

Appendix A

**BUY AMERICA CERTIFICATION**

**Certification requirement for procurement of steel, iron, or manufactured products.**

*Certificate of Compliance with 49 U.S.C. 5323(j)(1)*

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 CFR Part 661.

Date \_\_\_\_\_

Signature \_\_\_\_\_

Company Name \_\_\_\_\_

Title \_\_\_\_\_

*Certificate of Non-Compliance with 49 U.S.C. 5323(j)(1)*

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1), but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(B) or (j)(2)(D) and the regulations in 49 CFR 661.7.

Date \_\_\_\_\_

Signature \_\_\_\_\_

Company Name \_\_\_\_\_

Title \_\_\_\_\_

**Certification requirement for procurement of buses, other rolling stock and associated equipment.**

*Certificate of Compliance with 49 U.S.C. 5323(j)(2)(C).*

The bidder or offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and the regulations at 49 CFR Part 661.

Date \_\_\_\_\_

Signature \_\_\_\_\_

Company Name \_\_\_\_\_

Title \_\_\_\_\_

*Certificate of Non-Compliance with 49 U.S.C. 5323(j)(2)(C)*

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(2)(C), but may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(B) or (j)(2)(D) and the regulations in 49 CFR 661.7.

Date \_\_\_\_\_

Signature \_\_\_\_\_

Company Name \_\_\_\_\_

Title \_\_\_\_\_

Appendix A1

DISCLOSURE OF LOBBYING ACTIVITIES

I \_\_\_\_\_ hereby certifies on behalf of \_\_\_\_\_  
name and title of company representative name of company

that will file the certification required by 49 CFR Part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

The Contractor certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96).

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.

The Contractor, \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, apply to this certification and disclosure, if any.

\_\_\_\_\_ Signature of Contractor's Authorized Official

\_\_\_\_\_ Name and Title of Contractor's Authorized Official

\_\_\_\_\_ Date

Appendix A2

**CERTIFICATION OF A CONTRACTOR REGARDING DEBARMENT, SUSPENSION AND  
OTHER RESPONSIBILITY MATTERS**

The Contractor \_\_\_\_\_, certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this proposal or bid had one or more public transactions (Federal, State or Local) terminated for cause or default.
5. The Contractor agrees to provide NYCDOT and NYCDDC with immediate written notice if, at any time, it learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. Each Subcontractor or Vendor for the Contractor shall provide the same updated notice to the Contractor and the Contractor shall be solely responsible for collecting, updating and submitting updated information to NYCDOT and NYCDDC.

NOTE: If for any reason the Contractor is unable to certify to any of the statements in this certification, the Contractor shall attach an explanation to this certification.

THE CONTRACTOR, \_\_\_\_\_ CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

\_\_\_\_\_  
Signature and Title of Authorized Official

\_\_\_\_\_  
Date

Appendix A3

**CERTIFICATION OF A SUBCONTRACTOR/SUPPLIER REGARDING DEBARMENT,  
SUSPENSION AND OTHER RESPONSIBILITY MATTERS**

The Subcontractor/Supplier \_\_\_\_\_, certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this proposal or bid had one or more public transactions (Federal, State or Local) terminated for cause or default.
5. The Subcontractor agrees to provide the Contractor with immediate written notice if, at any time, it learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. Each Subcontractor or Vendor for the Contractor shall provide the same updated notice to the Contractor and the Contractor shall be solely responsible for collecting, updating and submitting updated information to NYCDDC and NYCDOT.

NOTE: If for any reason the Subcontractor/Supplier is unable to certify to any of the statements in this certification, the Contractor shall attach an explanation to this certification.

THE SUBCONTRACTOR/SUPPLIER, \_\_\_\_\_ CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

\_\_\_\_\_  
Signature and Title of Authorized Official

\_\_\_\_\_  
Date

**Contractor Note:**

**Contractor must require all Subcontractors/Suppliers to complete this certification and Contractor shall submit the certifications to NYCDDC and NYCDOT as they are received.**

## Appendix B

### REQUIRED CONTRACT PROVISIONS

#### DBE Program

FTA assisted contracts that NYCDDC lets will include, as appropriate, the model contract provisions that are included as Appendix B and incorporated herein. NYCDOT shall have discretion to modify the provisions for particular contracts as needed. These required contract provisions consist of:

1. Notice of DBE Contract Requirements in the Invitation for Bids and/or Request For Proposals
2. General Conditions
  - a. Assurances
  - b. DBE Policy
  - c. DBE Obligation
  - d. Prompt Payment to Subcontractors
  - e. Legal and Contract Remedies
  - f. Contractor Reporting Requirements
  - g. Retainage Policy

#### **1. Notice of DBE Contract Requirements in the Invitation for Bids**

This contract is subject to the Federal Transit Administration (FTA) requirements for implementing the U.S. Department of Transportation (USDOT) regulations for the following areas:

##### Disadvantaged Business Enterprise (DBE) Requirements

The successful Proposer/Bidder will be required to meet a NYCDOT Disadvantaged Business Enterprise (DBE) goal. For Engineering Services and Construction a goal of 11% is currently in effect, for Marine work a DBE goal of 2% goal is in effect. The goal is based on the total value of the contract, which should be subcontracted to a DBE firm or firms. To be qualified as a DBE, a firm should be certified in the NYSUCP, in accordance with Federal Regulation 49 CFR Part 26. Application for certification can be obtained at:

**MTA - New York City Transit, Office of Business Programs**, 2 Broadway- 16<sup>th</sup> Floor, New York, NY 10004 Telephone (646) 252-1378

**New York State DOT, Office of Equal Opportunity Development & Compliance**, 50 Wolf Road 1<sup>st</sup> Floor, Albany, New York 12232 Telephone (518) 457-1129

**Port Authority of NY & NJ, Office of Business & Job Opportunity**  
233 Park Avenue South, 4<sup>th</sup> Floor, New York, NY 10003-1604 Telephone (212) 435-7821

**Niagara Frontier Transportation Authority**  
181 Ellicott Street, Buffalo, New York 14203 Telephone (716) 855-7300

Disadvantaged Business Enterprise (DBE) Certification

Only firms certified by the NYS Unified Certification Program (NYSUCP) as DBEs are eligible to be used by the contractor in order to meet the DBE participation goal set on a NYCDOT/NYCDDC Federally funded contract.

The NYSUCP Directory can be found at: <http://www.nysucp.net>

## **General Conditions**

All applicants and recipients shall agree to abide by the statements in paragraphs (a) through(e) listed below:

### **a. Assurances – Section 26.13**

Each **financial assistance agreement** signed with a NYCDOT operation administration (of a primary recipient) must include the following assurance:

*The recipient shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT- assisted contract or in the administration of its DBE program or the requirements of 49 CFR Part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT- assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801 et. seq.).*

Each **prime contractor signed with a subcontractor and/or each subcontractor signed to a contractor** must include the following assurance:

*The contractor, sub -recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT- assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.*

### **b. Policy**

It is the policy of USDOT that DBEs as defined in 49 CFR Part 26 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently, the DBE requirements of 49 CFR Part 26 apply to this agreement."

### **c. Obligation**

The recipient or its contractor agrees to ensure that DBEs as defined in 49 CFR Part 26 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, all contractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that DBEs have the maximum opportunity to compete for and perform contracts. Recipients and their contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of US DOT assisted contracts.



Because this is a federally funded project with its own DBE requirement no separate NYC M/WBE program condition will apply to this contract. Further information or questions can be directed to:

New York City Department of Transportation  
ACCO Office of Contract and Compliance  
55 Water Street  
8<sup>th</sup> Floor  
New York, New York 10041  
Telephone 212-839-9411  
Email: [cbartolotta@dot.nyc.gov](mailto:cbartolotta@dot.nyc.gov)

Attn: Charles Bartolotta, DBE Contract Compliance Officer

**d. Prompt Payment to Subcontractors**

In accordance with NYCDOT's DBE Program, the Contractor shall pay all Subcontractors for work that has been satisfactorily performed no later than thirty (30) days from the date of the Contractor's receipt of progress payments by NYCDDC. Within thirty (30) days of satisfactory completion of all work payment is required to be paid to the Subcontractor. Contractor shall release any retainage payments withheld to the Subcontractor at the time of satisfactory acceptance of work

**e. Legal and Contract Remedies**

The DBE Compliance Unit shall monitor and track the actual DBE participation through contractor and subcontractor reports of payments, and other appropriate monitoring, as further described in this Program Plan. The DBE Representative shall ensure that DBE participation is counted toward contract goals and the overall annual goal in accordance with the Regulations. In accordance with 49 CFR Part 26, prime contractors may not terminate sub-contractors for convenience. When DBE contractors are terminated, prime contractors will be required to substitute DBE sub-contractors in order to meet its DBE commitment.

NYCDOT and NYCDDC will monitor compliance of Contractors on FTA assisted contracts within the requirements of the Regulations and the DBE Program. NYCDOT and/or NYCDDC may impose such contract remedies as are available under federal, state and local law and regulations for non-compliance. Such remedies may include, but are not limited to, withholding of progress payments and contract retentions, imposition of liquidated damages, and termination of the contract in whole or in part.

**f. Contractor Reporting Requirements**

All sub-recipients of FTA funds are required to utilize the NYCDOT DBE Program Plan and comply with USDOT regulations 49 CFR Part 26.

Sub-recipients, contractors and subcontractors are subject to contract compliance reviews to ensure that DBE requirements are being met. They are expected to cooperate with the NYCDOT and/or NYCDDC DBE Representative during desk audits and / or on-site reviews. NYCDOT has a Field Representative responsible for project oversight to ensure that contract work is being performed by designated DBE sub-contractors and that the NYCDOT Project Accountant tracks payments to ensure that project goals, when applicable, are followed. The Compliance Officer, and Field Representative also reports work and payment progress to the Project Accountant who then tracks DBE utilization with the DBE Representative. The DBE Compliance Officer and

DBE Representative ensure that sub-contractor DBE participation is credited to overall goals after the DBE has received payments.

**A sample of our DBE Commitment Letter specifying the Prime Contractors DBE Responsibilities is attached as Appendix E.**

**g. Retainage**

DOT has made a determination that it will NO LONGER HOLD retainage ON FTA FUNDED CONTRACTS.

Sub-recipients must ensure prompt and full payment of retainage from the prime contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. You must use one of the following methods to comply with this requirement:

(1) You may decline to hold retainage from prime contractors and prohibit prime contractors from holding retainage from subcontractors.

(2) You may decline to hold retainage from prime contractors and require a contract clause obligating prime contractors to make prompt and full payment of any retainage kept by prime contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed.

(3) You may hold retainage from prime contractors and provide for prompt and regular incremental acceptances of portions of the prime contract, pay retainage to prime contractors based on these acceptances, and require a contract clause obligating the prime contractor to pay all retainage owed to the subcontractor for satisfactory completion of the accepted work within 30 days after your payment to the prime contractor.

(c) For purposes of this section, a subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the recipient. When a recipient has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

## Appendix C

### DETERMINING GOOD FAITH EFFORTS

To determine whether a bidder that has failed to meet the DBE contract goal(s) may receive the contract, the Department will decide whether the efforts the Bidder made to obtain DBE participation were "good faith efforts" to meet the goal(s). Efforts that are merely pro forma are not good faith efforts to meet the goal(s). Efforts to obtain DBE participation are not good faith efforts to meet the goal(s), even if they are sincerely motivated, if, given all relevant circumstances, they could not reasonably be expected to produce a level of DBE participation sufficient to meet the goal(s).

In order to evaluate the Bidder's conformance to this subsection, the Department will consider the quality, quantity, and intensity of the different kinds of efforts that the Bidder has made. The following is a list of the types of actions which the Department will consider as part of the Bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exhaustive or exclusive. Other factors or types of efforts may be relevant in appropriate cases.

The following is a list of the kinds of efforts that the Department will evaluate to determine if the Bidder has demonstrated a good faith effort:

1. Efforts to secure participation by certified DBE firms for work that they are listed to perform that is in the contract. Only DBEs certified by the NYSUCP shall be used to fulfill the established goal on Federal-Aid contracts.
2. Soliciting through all reasonable and available means (e.g., attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The Bidder shall solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The Bidder shall determine with certainty if the DBEs are interested by taking appropriate steps to follow up on initial solicitations.
3.
  - a. The Bidder shall, at a minimum, seek certified DBEs in the same geographic region where the contract is located. This is defined as a one hundred (100) kilometer radius around the city, town or borough where the contract is located as identified in the contract proposal. For specialty work such as pavement markings, guide rail, etc. (as defined in the contract proposal) the Bidder shall, at a minimum, solicit on an upstate or downstate basis, depending upon the location of the contract.
  - b. The Department has facilitated identification of upstate, downstate and areas within a 100 km radius through its NYSUCP website, which is accessible on the Internet at [www.nysucp.net](http://www.nysucp.net) For more information contact the NYCDOT at (212) 839-9411. For bidders who do not have internet capability, a hard copy solicitation report for a specific contract can be requested by contacting the Office of Contract and Compliance Unit at (212) 839-9411.
4. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goal(s) will be achieved. This includes, where appropriate, either breaking down operations within the contract or combining like or related operations in the contract into logistically and economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.

5. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
6. a. Negotiating in good faith with interested DBEs. It is the Bidder's responsibility to make a portion of the work available to DBE's Subcontractors and material suppliers and to select those portions of the work or material needs consistent with the available DBE's Subcontractors and material suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.  
b. The fact that there may be some additional cost involved in finding and using DBEs is not itself sufficient reason for a bidder's failure to meet contract DBE goal(s), as long as such cost are reasonable. The ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the Bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
7. Not rejecting DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities.
8. Making efforts to assist interested DBEs in obtaining bonding, lines of credit or insurance as required by the Department.
9. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance.
10. Effectively using the services of available disadvantaged business focused media, trade associations, and contractors' groups; local, state, and Federal disadvantaged business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
11. All bidders shall keep records of efforts to solicit and negotiate with DBEs, using the Solicitation Log as a continuing record of pre- and post-letting solicitation activity. When submitting a DBE Schedule of Utilization to the Department, the Apparent Low Bidder will attach the log, together with the supplemental information specified in the instructions for the Solicitation Log as evidence of good-faith efforts when the established DBE goal(s) for the contract have not been met utilizing certified DBEs. Such supplemental efforts shall include at least the following:
  - a. All envelopes of solicitation inquires that were returned as undeliverable; and
  - b. Any quotations submitted by DBEs that are not included in the DBE Schedule of Utilization with an explanation for the Bidder's action in case.
12. Promptly executing an agreement with DBE Subcontracts/vendors.

The DBE Compliance Officer will review the data submitted under this section to determine whether the DBE requirements have been satisfied through good faith efforts.

Appendix D

**PROMPT PAYMENT AFFIDAVIT**

**(SAMPLE PRIME CONTRACTOR PROMPT PAYMENT AFFIDAVIT)**

Contractor will place a check in the appropriate box below that applies to this payment request.

Re: Payment Request No. \_\_\_\_\_

I, \_\_\_\_\_ (Name), the \_\_\_\_\_  
(Title - e.g., President, Vice President, etc.) of \_\_\_\_\_  
("Company"), do state the following with regard to payments made under Contract No.  
\_\_\_\_\_ ("Contract"):

1. \_\_\_ Subcontractors, at the first tier, both DBE and non-DBE, who completed work and were listed for payment on the prior Payment Request No. \_\_\_\_\_, were paid no later than thirty (30) business days after Company received payment from NYCDDC.
2. \_\_\_ Copies of invoices and cancelled checks for subcontractors at the first tier who were paid under the prior payment request have been delivered or mailed to the DBE Department. In addition, Company has attached to the current Payment Request all lien waivers for prior subcontractor payments and any other documentation required by NYCDOT or NYCDDC. **(Failure to attach all required documentation to the Payment Request or forward cancelled checks and invoices to the NYCDOT DBE Department may cause the Payment Request to be rejected by NYCDDC).**
3. \_\_\_ There was no delay in or postponement of any payment owed to a DBE subcontractor, whether periodic payment or retainage amount, except for good cause and after receipt of prior written approval from the NYCDOT

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

Date: \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_.

\_\_\_\_\_  
Notary Public

Appendix E

**SAMPLE PRIME CONTRACTOR AWARD LETTER**

Date

Prime Contractor Winner, Inc.  
Attn: Mr. Buck Stops Here, President  
1111 Bottom Line Street  
Anywhere, New York 10000

Re: Contract Name and/or Description

Dear Mr. John Doe:

Your Company was awarded and recently executed the above listed contract with NYCDDC. Part of the consideration in awarding the contract was the Disadvantaged Business Enterprise (DBE) participation that you listed in the bid/proposal document.

Please be advised that you will be required to meet your Disadvantaged Business Enterprise Goals of 11%

You have listed the following DBE firm(s) and the dollar amounts of their subcontracts:

ABC Electrical Co.	Electrical Contracting	\$xx,xxx
DEF Plumbing	Plumbing Contracting	\$xx,xxx
GHI Roofing	Roofing Contracting	\$xx,xxx
JKL Printing Co.	Printing	\$xx,xxx

The DBE firm(s) listed above represent(s) your commitment to NYCDOT's DBE program and each respective DBE firm.

To ensure the integrity of the DBE program, NYCDOT has developed DBE compliance procedures that should be followed during this contract. NYCDOT's DBE Department and Contract Administrator should be notified in writing prior to any material changes from the above commitments. Also, any changes should be for real and substantial reasons. Frivolous and/or unsubstantiated changes are unacceptable.

Please provide to the DBE Department, within 3 calendar days of execution, a copy of your executed subcontract with each DBE firm. A letter of commitment signed by both an authorized representative of your firm and the DBE firm may be submitted instead of signed subcontracts. The letter should verify the subcontract dollar amount, the general work scope, **and affirm the absence of subcontract restrictions or requirements that are unfair, burdensome, outside of normal business practices, unjustly punitive, etc.** There should be a letter for each DBE firm.

Also, you **must** attach NYCDOT's **DBE Expenditure Report** (see contract compliance manual) with **each** invoice/payment request that you submit to NYCDOT's Contract Administrator. This report is designed to provide an accounting of monthly and year-to-date payments made to the DBE firm(s) that you have subcontracted with above.

The DBE Expenditure Report reflects the dollars that **will be paid** to each DBE firm from your **submitted invoice/payment request**. Evidence of payments (i.e. copy of canceled checks, copy of check register, etc.) may be periodically requested. NYCDDC **may not** authorize payment unless the DBE Expenditure Report accompanies your invoice/payment request.

Finally, please submit a DBE projected work schedule (i.e. a breakdown by month of expected DBE activity). Updates of the projected work schedule should be submitted as needed over the life of the contract.

Failure to comply may result in breach of contract and it may jeopardize future contracts with NYCDDC.

If you have any questions you may contact NYCDOT's Contract Compliance Unit at (212) 839-9411 or email us at [accomail@dot.nyc.gov](mailto:accomail@dot.nyc.gov).

Thank you for your continued commitment and cooperation.

Cordially,

DBE Administrator

cc: Every DBE Firm Listed Above  
Appropriate Project Managers, NYCDOT and NYCDDC  
Contracts Administrator, NYCDOT and NYCDDC  
Purchasing Administrator, NYCDOT and NYCDDC  
DBE File, NYCDOT and NYCDDC  
Others As Needed

**Appendix F**

**MINORITY OWNED FINANCIAL INSTITUTIONS**

All contractors are encouraged to use Minority Owned Financial Institutions. A list can be found at <http://www.federalreserve.gov/releases/mob/>.



**Appendix G**

**PREVAILING WAGE RATES**

**CURRENT DAVIS-BACON PREVAILING WAGE RATES**

Bidders and the selected Contractor, if any, shall be responsible for confirming and adhering to the actual Davis-Bacon Wage Rates in effect at any time after the issuance of this IFB including, without limitation, during the Contract Term. Federal Davis-Bacon Wage Rates may be accessed through the U.S. Department of Labor's Website at: <http://www.wdol.gov/wdol/scafiles/davisbacon/ny.html>.

(NO TEXT ON THIS PAGE)

General Decision Number: NY130003 03/22/2013 NY3

Superseded General Decision Number: NY20120003

State: New York

Construction Types: Building, Heavy, Highway and Residential

Counties: Bronx, Kings, New York, Queens and Richmond  
Counties in New York.

BUILDING & RESIDENTIAL CONSTRUCTION PROJECTS (includes single family homes and apartments up to and including 4 stories),  
HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/04/2013
1	01/11/2013
2	01/18/2013
3	02/08/2013
4	03/22/2013

ASBE0012-001 01/02/2012

	Rates	Fringes
Asbestos Workers/Insulator Includes application of all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.....	\$ 61.08	26.59
HAZARDOUS MATERIAL HANDLER.....	\$ 30.00	9.10

BOIL0005-001 01/01/2012

	Rates	Fringes
BOILERMAKER.....	\$ 47.98	32%+21.75+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Thanksgiving Day, Memorial Day, Independence Day, Labor Day and Good Friday, Friday after Thanksgiving, Christmas Eve Day and New Year's Eve

BRNY0001-001 07/01/2012

	Rates	Fringes
BRICKLAYER.....	\$ 49.09	22.93
MASON - STONE.....	\$ 25.65	15.43

BRNY0001-002 07/01/2012

Rates	Fringes
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Pointer, cleaner and caulker.....\$ 42.69 21.74

-----  
BRNY0004-001 07/01/2012

Rates Fringes

MARBLE MASON.....\$ 54.19 28.3

-----  
BRNY0007-001 01/01/2011

Rates Fringes

TERRAZZO FINISHER.....\$ 42.86 28.55

TERRAZZO WORKER/SETTER.....\$ 44.39 28.55

-----  
BRNY0020-001 07/01/2012

Rates Fringes

MARBLE FINISHER.....\$ 43.60 27.10

-----  
BRNY0024-001 07/01/2012

Rates Fringes

BRICKLAYER

MARBLE POLISHERS.....\$ 38.03 20.90

-----  
BRNY0052-001 06/04/2012

Rates Fringes

Tile Layer.....\$ 50.25 27.66

-----  
BRNY0088-001 06/04/2012

Rates Fringes

TILE FINISHER.....\$ 39.67 24.16

-----  
CARP0001-009 07/01/2008

Rates Fringes

Carpenters:

Carpenters & Soft floor  
layers.....\$ 43.02 35.96

-----  
CARP0740-001 07/01/2010

Rates Fringes

MILLWRIGHT.....\$ 46.19 44.93

-----  
CARP1456-004 01/01/2011

Rates Fringes

Dock Builder & Piledrivermen

DOCKBUILDERS.....\$ 46.21 38.36

CARP1456-005 01/01/2011

	Rates	Fringes
Diver Tender.....	\$ 41.16	38.46
Diver.....	\$ 58.01	38.46

CARP1536-001 10/01/2010

	Rates	Fringes
Carpenters:		
TIMBERMEN.....	\$ 42.63	31.32

ELEC0003-001 11/09/2011

	Rates	Fringes
ELECTRICIAN		
Electricians.....	\$ 51.00	23.672
Jobbing, and maintenance and repair work.....	\$ 25.30	15.13+a

PAID HOLIDAYS:

- a. New Years Day, Martin Luther King, Jr.'s Birthday,  
Washington's Birthday, Memorial Day, Independence Day,  
Labor Day, Columbus Day, Election Day, Thanksgiving Day,  
the day after Thanksgiving Day, and Christmas Day

ELEC1049-001 04/01/2012

QUEENS COUNTY

	Rates	Fringes
Line Construction (Substation and Switching structures pipe type cable installation and maintenance jobs or projects; Railroad electrical distribution/transmission systems maintenance (when work is not performed by railroad employees) Overhead and Underground transmission/distribution line work. Fiber optic, telephone cable and equipment)		
Groundman.....	\$ 28.28	28.5%+9.75
Heavy Equipment Operator....	\$ 37.70	28.5%+9.75
Lineman and Cable Splicer...	\$ 47.13	28.5%+9.75
Tree Trimmer.....	\$ 23.06	28.5%+9.75

\* ELEV0001-002 03/17/2013

Rates	Fringes
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ELEVATOR MECHANIC

Elevator Constructor.....	\$ 57.01	27.605+a+b
Modernization and Repair....	\$ 45.14	27.455+a+b

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Good Friday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

b. PAID VACATION: An employee who has worked less than 5 years shall receive vacation pay credit on the basis of 4% of his hourly rate for all hours worked; an employee who has worked 5 to 15 years shall receive vacation pay credit on the basis of 6% of his hourly rate for all hours worked; an employee who has worked 15 or more years shall receive vacation pay credit on the basis of 8% of his hourly rate for all hours worked.

-----  
 ENGI0014-001 07/01/2012

	Rates	Fringes
Pavement equipment operator		
Asphalt Plants.....	\$ 51.32	25.88+a
Asphalt roller.....	\$ 60.85	25.88+a
Asphalt spreader.....	\$ 62.51	25.88+a
Power Equipment Operator (HEAVY & HIGHWAY)		
GROUP 1.....	\$ 81.09	25.88
GROUP 10.....	\$ 58.43	25.88
GROUP 11.....	\$ 54.50	25.88
GROUP 12.....	\$ 55.73	25.88
GROUP 13.....	\$ 56.19	25.88
GROUP 14.....	\$ 42.11	25.88
GROUP 15.....	\$ 39.03	25.88
GROUP 2.....	\$ 66.70	25.88
GROUP 3.....	\$ 68.86	25.88
GROUP 4.....	\$ 67.21	25.88
GROUP 5.....	\$ 65.86	25.88
GROUP 6.....	\$ 63.18	25.88
GROUP 7.....	\$ 64.38	25.88
GROUP 8.....	\$ 62.51	25.88
GROUP 9.....	\$ 61.14	25.88
Steel erector		
Compressors, Welding Machines.....		
	\$ 39.86	24.15
Cranes, Hydraulic Cranes, 2 drum derricks,		
Forklifts, Boom Trucks.....	\$ 67.71	24.15
Three drum derricks.....	\$ 70.50	24.15
Utility Laborer		
Horizontal Boring Rig.....	\$ 56.24	24.15
Off shift compressors.....	\$ 46.38	24.15
Utility Compressors.....	\$ 36.37	24.15

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Tower crane

GROUP 2: Backhoes, power shovel, Hydraulic clam shells, moles and machines of a similar type

GROUP 3: Mine hoists and crane, etc. used as mine hoists

GROUP 4: Gradalls, keystones, cranes (with digging buckets), bridge cranes, trenching machines, vermeer cutter and machines of a similar nature

GROUP 5: Piledrivers, derrick boats, tunnel shovels

GROUP 6: All drills, and machines of a similar nature

GROUP 7: Back filling machines, cranes, mucking machines, dual drum pavers

GROUP 8: Mixers (concrete w/loading attachments), concrete pavers, cableways, land derricks, power house (low pressure units), concrete pumps

GROUP 9: Concrete plants, well drilling machines, stone crushers double drum hoist, power house (other than above)

GROUP 10: Concrete mixers

GROUP 11: Elevators

GROUP 12: Concrete breaking machine, Hoists (single drum), load masters, locomotive and dinkies over 10 tons

GROUP 13: Vibratory console

GROUP 14: Compressors (portable 3 or more in battery), tugger machine (caissons), well point pumps, chum drill

GROUP 15: Boilers, (high pressure, compressors (portable, single, or 2 in battery, not over 100' apart), pumps (river cofferdam and welding machines (except where arc is operated by members of local 15) push button machines, all engines irrespective of power (power pac) used to drive auxilliary equipment, air, hydraulic etc.

PREMIUMS ON CRANES (Crawler or Truck):

100' to 149' boom - add .50  
 150' to 249' boom - add .75  
 250' to 349' boom - add 1.00  
 350' to 450' boom - add 1.50

Premiums for Cranes on Steel Erection:

100' to 149' boom - add 1.75  
 150' to 249' boom - add 2.00  
 250' to 349' boom - add 2.25  
 350' to 450' boom - add 2.75  
 Tower crane - add 2.00

FOOTNOTE:

a. Paid Holidays: New Year's Day; Lincoln's Birthday; Washington's Birthday; Memorial Day; Independence Day; Labor Day; Veterans Day; Columbus Day; Election Day;

Thanksgiving Day; and Christmas Day; provided the employee works one day the payroll week in which the holiday occurs.

-----  
 ENGI0014-002 07/01/2012

	Rates	Fringes
Power Equipment Operator		
BUILDING & RESIDENTIAL		
GROUP 1.....	\$ 58.57	24.15
GROUP 2.....	\$ 62.15	24.15
GROUP 3.....	\$ 61.06	24.15
GROUP 4.....	\$ 55.46	24.15
GROUP 5.....	\$ 41.32	24.15

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Double drum

GROUP 2: Stone derrick, cranes, hydraulic cranes, boom trucks

GROUP 3: 4 pole Hoist, Single Drum Hoists

GROUP 4: Fork lift, house cars, plaster (platform machine), plaster bucket, concrete pump and all other equipment used for hoisting material

GROUP 5: Compressors, welding machines (cutting concrete work), paint spraying, sand blasting, pumps (with the exclusion of concrete pumps), house car (settlement basis only), all engines irrespective of power (power pac) used to drive auxiliary equipment, air, hydraulic, etc., boilers

Premiums for Cranes:  
 100'-149' boom - add 1.75  
 150'-249' boom - add 2.00  
 250'-349' boom - add 2.25  
 350'-450' boom - add 2.75  
 Tower cranes add 2.00

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Columbus Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day in the payroll week in which the holiday occurs

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 IRON0040-002 01/01/2013

BRONX, NEW YORK, RICHMOND

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 46.00	50.23

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 IRON0046-003 07/01/2011

	Rates	Fringes
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IRONWORKER  
 METALLIC LATHERS AND  
 REINFORCING IRONWORKERS.....\$ 40.00 24.97

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 \* IRON0197-001 01/01/2013

Rates Fringes

IRONWORKER  
 STONE DERRICKMAN.....\$ 41.00 36.57

-----  
 IRON0361-002 01/01/2013

KINGS, QUEENS

Rates Fringes

Ironworkers:  
 (STRUCTURAL).....\$ 46.00 50.23

-----  
 IRON0580-001 07/01/2012

Rates Fringes

IRONWORKER, ORNAMENTAL.....\$ 41.50 40.62

-----  
 LABO0006-001 07/01/2011

Rates Fringes

Laborers:  
 BUILDING CONSTRUCTION  
 CEMENT AND CONCRETE  
 WORKERS.....\$ 38.98 26.08

-----  
 LABO0029-001 07/01/2012

Rates Fringes

Laborers:  
 Heavy  
 Blasters (hydraulic trac  
 drill).....\$ 41.30 29.25  
 Blasters.....\$ 40.55 29.25  
 Hydraulic Trac Drill.....\$ 29.92 29.25  
 Jackhammers, Chippers,  
 Spaders, Concrete  
 Breakers, All Other  
 Pneumatic Tools, Walk  
 Behind Self-Propelled  
 Hydraulic Asphalt and  
 Concrete Breaker.....\$ 34.64 29.25  
 Powder Carriers.....\$ 31.08 29.25  
 Wagon; Airtrac; Quarry  
 Bar Drill Runners.....\$ 35.07 28.00

-----  
 LABO0078-001 12/01/2011

Rates Fringes

LABORERS

BUILDING CONSTRUCTION	
ASBESTOS (Removal, Abatement, Encapsulation or Decontamination of asbestos); LEAD; & HAZARDOUS WASTE LABORERS (Hazardous Waste, Hazardous Materials, Biochemical and Mold Remediation, HVAC, Duct Cleaning, Re-spray Fireproofing, etc).....\$ 35.10	
	14.85

LABO0079-001 01/01/2013

	Rates	Fringes
Laborers Building Construction		
Demolition Laborers		
Tier A.....	\$ 35.21	22.59
Tier B.....	\$ 24.75	16.65
Mason Tenders.....	\$ 34.50	23.05

CLASSIFICATIONS

TIER A: Responsible for the removal of all interior petitions and structural petitions that can consist of sheet rock, block or masonry. Also, all structural slab openings for ducts, mechanical, shafts, elevators, slab openings and exterior walls where the building is not being completely demolished.

TIER B: Responsible for shoveling of debris into containers, pushing containers from the inside to the outside of the building.

LABO0147-001 07/01/2012

	Rates	Fringes
LABORERS (FREE AIR & TUNNEL).....	\$ 58.30	27.20

Maintenance Men, Inside Muck Lock Tenders, Pump Men, Electricians, Cement Finishers, Caulkers, Hydraulic Men, Shield Men, Monorail Operators, Motor Men, Conveyor Men, Powder Carriers, Pan Men, Riggers, Chuck Tenders, Track Men Painters, Nippers, Brakemen, Cable Men, Hose Men, Grout Men, Gravel Men, Form Workers, Concrete Workers, Tunnel Laborers, Mole Nipper (one (1) Mole Sipper per Working Shaft per Shift for up to and including Two (2) Moles

LABO0731-001 07/01/2011

	Rates	Fringes
Laborers:		
Building, Heavy and Residential Construction		
UNSKILLED.....	\$ 38.20	30.27

UTILITY LABORER.....	\$ 38.05	30.27
Heavy & Highway Construction LABORER/EXCAVATION {Asbestos, Lead, Hazardous Waste Removal (including soil).....	\$ 36.64	26.21

Paid Holidays: Labor Day and Thanksgiving Day

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LABO1010-001 07/01/2011

	Rates	Fringes
Laborers:		
HIGHWAY CONSTRUCTION		
Fence Installer & Repairer.....	\$ 38.34	30.25
FORMSETTERS.....	\$ 42.21	30.25
LABORERS.....	\$ 38.34	30.25
Landscape Planting & Maintenance.....	\$ 38.34	30.25
Maintenance Safety Surface.....	\$ 38.34	30.25
Slurry/Sealcoater/Play Equipment Installer.....	\$ 38.34	30.25
Small Equipment Operator (Not Operating Engineer).....	\$ 28.94	15.55+a
Small Equipment Operator (Not Operating Engineer)....	\$ 38.34	30.25
Small Power Tools Operator.....	\$ 38.34	30.25

FOOTNOTES:

a. PAID HOLIDAYS: Memorial Day, Fourth of July, Labor Day, Columbus Day, Election Day and Thanksgiving Day, provided the employee has worked one (1) day in the calendar week in which the said holiday occurs.

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LABO1010-002 07/01/2011

	Rates	Fringes
Laborers-Asphalt Construction:		
Micro Paver.....	\$ 44.86	30.25
Raker.....	\$ 44.37	30.25
Screedperson.....	\$ 44.86	30.25
Shoveler (Production Paving Only).....	\$ 41.08	30.25
Small Equipment Operator (Asphalt).....	\$ 41.08	30.25

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PAIN0009-001 11/01/2012

	Rates	Fringes
GLAZIER.....	\$ 40.00	32.89
Painters:		
Painters, Drywall Finishers, Lead Abatement Worker.....	\$ 36.00	20.87

Spray, Scaffold and Sandblasting.....	\$ 39.00	20.87
-----		
PAIN0806-001 10/01/2012		
	Rates	Fringes
Painters:		
Structural Steel and Bridge.	\$ 47.00	32.08
-----		
PAIN1974-001 12/26/2012		
	Rates	Fringes
Painters:		
Drywall Tapers/Pointers.....	\$ 43.82	22.01
-----		
PLAS0262-001 02/01/2012		
	Rates	Fringes
PLASTERER.....	\$ 40.78	26.80
-----		
PLAS0262-002 02/01/2012		
KINGS AND QUEENS COUNTIES		
	Rates	Fringes
PLASTERER.....	\$ 40.78	26.80
-----		
PLAS0780-001 07/01/2012		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER....	\$ 44.63	38.95
-----		
PLUM0001-001 01/01/2013		
	Rates	Fringes
PLUMBER		
MECHANICAL EQUIPMENT AND SERVICE		
Any repair and/or replacement of the present plumbing system that does not change the existing roughing.....	\$ 33.21	16.05
PLUMBERS:.....	\$ 52.86	36.21
-----		
PLUM0638-001 06/27/2012		
	Rates	Fringes
PLUMBER		
SERVICE FITTERS.....	\$ 26.30	2.55
SPRINKLER FITTERS, STEAMFITTERS.....	\$ 51.25	49.54

Service Fitter work shall consist of all repair, service and maintenance work on domestic, commercial and industrial refrigeration, air conditioning and air cooling, stoker and oil burner apparatus and heating apparatus etc., including but not exclusively the charging, evacuation, leak testing and assembling for all machines for domestic, commercial and industrial refrigeration, air conditioning and heating apparatus. Also, work shall include adjusting, including capacity adjustments, checking and repairing or replacement of all controls and start up of all machines and repairing all defects that may develop on any system for domestic, commercial and industrial refrigeration and all air conditioning, air cooling, stoker and oil burner apparatus and heating apparatus regardless of size or type.

-----  
 ROOF0008-003 07/01/2012

	Rates	Fringes
ROOFER.....	\$ 39.00	27.35

-----  
 SHEE0028-002 09/15/2011

	Rates	Fringes
SHEET METAL WORKER		
BUILDING CONSTRUCTION.....	\$ 48.90	36.00
RESIDENTIAL CONSTRUCTION....	\$ 27.22	16.48

-----  
 TEAM0282-001 07/01/2012

	Rates	Fringes
Truck drivers:		
TRUCK DRIVERS:		
Asphalt.....	\$ 37.47	38.5525+a
Euclids & Turnapulls.....	\$ 37.57	38.5525+a
High Rise.....	\$ 42.00	36.9125+a

FOOTNOTES:

PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Veterans' Day (Armistice Day), Thanksgiving Day, Day after Thanksgiving and Christmas Day. Employees working two (2) days in the calendar week in which a holiday falls are to be paid for such holiday, provided that they shape each remaining workday during such calendar week.

-----  
 WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.  
 =====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

#### Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters, PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

#### Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can

be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
 Wage and Hour Division  
 U.S. Department of Labor  
 200 Constitution Avenue, N.W.  
 Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
 U.S. Department of Labor  
 200 Constitution Avenue, N.W.  
 Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
 U.S. Department of Labor  
 200 Constitution Avenue, N.W.  
 Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

(NO TEXT ON THIS PAGE)



## STANDARD CLAUSES FOR ALL NEW YORK STATE CONTRACTS

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licensor, licensee, lessor, lessee or any other party):

1. **EXECUTORY CLAUSE.** In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.
2. **NON-ASSIGNMENT CLAUSE.** In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the previous consent, in writing, of the State and any attempts to assign the contract without the State's written consent are null and void. The Contractor may, however, assign its right to receive payment without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.
3. **COMPTROLLER'S APPROVAL.** In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds \$15,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds \$10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed \$30,000 (State Finance Law Section 163.6.a).
4. **WORKERS' COMPENSATION BENEFITS.** In accordance with Section 142 of the State Finance Law, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.
5. **NON-DISCRIMINATION REQUIREMENTS.** To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its Subcontractors shall, by reason of race, creed, color, disability, sex or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its Subcontractors shall, by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

**6. WAGE AND HOURS PROVISIONS.** If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its Subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its Subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

**7. NON-COLLUSIVE BIDDING REQUIREMENT.** In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor warrants, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further warrants that at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

**8. INTERNATIONAL BOYCOTT PROHIBITION.** In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the Federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2 NYCRR 105.4).

**9. SET-OFF RIGHTS.** The State shall have all of its common law, equitable and statutory rights of setoff. These rights shall include, but not be limited to, the State's option to withhold for the purposes of setoff any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

**10. RECORDS.** The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter or three (3) years after final payment, whichever is later. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contractor within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

## **11. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION:**

**(A) Federal Employer Identification Number And/or Federal Social Security Number.** All invoices or New York State standard vouchers submitted for payment for the sale of goods or services or the lease of real or personal property to a New York State agency must include the payee's identification number, i.e., the seller's or lessor's identification number. The number is either the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. Failure to include this number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on his invoice or New York State standard voucher, must give the reason or reasons why the payee does not have such number or numbers.

**(B) Privacy Notification.** (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law. (2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in New York State's Central Accounting System by the Director of State Accounts, Office of the State Comptroller, 110 State Street, Albany, New York 12236.

**12. EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN.** In accordance with Section 312 of the Executive Law, if this contract is: (i) a written Agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written Agreement in excess of \$100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written Agreement in excess of \$100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then:

- (a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, or termination and rate of pay or other forms of compensation;
- (b) At the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other Agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein; and
- (c) The Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "a", "b" and "c", above, in every subcontract over \$25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State; or (iii) banking services, insurance policies or the sale of securities. The State shall consider compliance by a Contractor or Subcontractor with the requirements of any Federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such Federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the NYS Department of Economic Development's Division of Minority- and Women-Owned Business Development pertaining hereto.

**13. CONFLICTING TERMS.** In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this subsection, the terms of this subsection shall control.

**14. GOVERNING LAW.** This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

**15. LATE PAYMENT.** Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article XI-A of the State Finance Law to the extent required by law.

**16. NO ARBITRATION.** Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized) but must, instead, be heard in a court of competent jurisdiction of the State of New York.

**17. SERVICE OF PROCESS.** In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United State Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

**18. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS.** The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not limited to, the specifications and provisions of State Finance Law Section 165. (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any Subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the Subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in Section 165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

**19. PURCHASES OF APPAREL.** In accordance with State Finance Law §162 (4-a), the State shall not purchase any apparel from any vendor unable or unwilling to certify that: (i) such apparel was manufactured in compliance

with all applicable labor and occupational safety laws, including, but not limited to, child labor laws, wage and hours laws and workplace safety laws, and (ii) vendor will supply, with its bid (or, if not a bid situation, prior to or at the time of signing a contract with the State), if known, the names and addresses of each Subcontractor and a list of all manufacturing plants to be utilized by the bidder.

**20. CONTRACT TERMINATION PROVISION.** The State reserves the right to terminate this contract in the event it is found that the certification filed by the Contractor in accordance with the requirements contained in State Finance Laws §139j and §139k was intentionally false or intentionally incomplete. Upon such finding, the State may exercise its termination right by providing written notification to the Contractor in accordance with the written notification terms of the contract.

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### DESIGNATION OF AFFIRMATIVE ACTION REPRESENTATIVES BY CONTRACTORS/SUBCONTRACTORS

In accordance with Equal Employment Opportunity (EEO) and Disadvantaged/Minority/ Women's Business Enterprise (D/M/WBE) Utilization participation requirements of the New York City Department of Transportation contract identified below, the following information shall be furnished by the contractor and all subcontractors prior to approval to work.

1. **Contract No.** \_\_\_\_\_ 2. **County** \_\_\_\_\_

3. **Contractor:**  or **Subcontractor:**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_

4. **Equal Employment Opportunity Officer:**

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_  
Telephone (\_\_\_\_) \_\_\_\_\_

5. **Contract Site Equal Employment Opportunity Representative:**

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_  
Telephone (\_\_\_\_) \_\_\_\_\_

6. **Disadvantaged/ Minority/Women's Business Enterprise (D/M/WBE) Officer:**

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_  
Telephone (\_\_\_\_) \_\_\_\_\_

7. **Designation Submission:**  Initial  Revised

(NO TEXT ON THIS PAGE)



New York City Department of Transportation  
SUBCONTRACTOR/ CONSULTANT PROFILE FORM

Initial  Revised  Final

DOT Project Manager: \_\_\_\_\_

**CONTRACT INFO**

Type:  Construction  Professional Services  Standard Services

Funding:  FHWA  FTA  STATE  CITY

Unit/ Division: \_\_\_\_\_

Contract No.: \_\_\_\_\_

Contract Reg. No.: \_\_\_\_\_

Procurement Id No. (PIN): \_\_\_\_\_

Contract Value: \_\_\_\_\_

Over All Minority Goal: \_\_\_\_\_ % MWBE \_\_\_\_\_ % DBE

**Contract Description:**

\_\_\_\_\_

**PRIME INFO**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

EIN: \_\_\_\_\_

E-Mail: \_\_\_\_\_

\_\_\_\_\_ % MBE (NYS) \_\_\_\_\_ % WBE (NYS)

**SUBCONTRACTOR INFO**

Subcontractor  Subconsultant  Material Supplier  Trucking Services  Fabricator  Standard Services

Yes  No Has a Registered Apprenticeship Program. If Yes, Please attached supporting documentation.

Yes  No Has Required Licenses. If Yes, Please attached supporting documentation.

Subcontract Value: \_\_\_\_\_

Start Date: \_\_\_\_\_ End Date: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

EIN: \_\_\_\_\_

E-Mail: \_\_\_\_\_

**CERTIFIED AS**

MBE (NYC)  WBE (NYC)  MBE (NYS)  WBE (NYS)

DBE  LBE  Non-Profit

**CHECK APPROPRIATE BOX** (\*Only if one of the above has been selected)

Black\*  Hispanic\*  Asian/Pacific Islander\*

Asian/Pacific American\*  Native American Indian\*

Subcont. Asian American\*  Alaskan Native\*

Non-Minority  Other\* (Explain) \_\_\_\_\_

**Subcontract Description:**

\_\_\_\_\_

**Prime Contractor Certification**

I hereby affirm that the information supplied is true and correct.

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Submit Completed Form To: NYC-DOT/ Contract Compliance Unit/ 55 Water Street - Rm: 825, New York, NY 10041-0004

Attn: Charles Bartolotta/ cbartolotta@dot.nyc.gov

**Agency - CCU Director Preliminary Review**

Completed By: \_\_\_\_\_

Date: \_\_\_\_\_

1. Apprenticeship

2. Licenses

**Agency - VRU Director Preliminary Review**

Completed By: \_\_\_\_\_

Date: \_\_\_\_\_

3. Vendex

4. Employment

5. References

**Final Agency Approval**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

APPROVED

NOT APPROVED

\* VRU DO NOT FORWARD SUPPLIERS/ TRUCKING PROFILE FORMS TO CMU.

**FMS - Contract Management Unit**

**FMS Entered By:**

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## INSTRUCTIONS

- Prime Contractor must complete this form.
- A Subcontractor Profile Form must be completed for EACH Subcontractor that will perform work or supply material on the contract. Make additional copies of this form as needed.
- Please indicate if the form is the Initial, Revised or Final submission.
- Please indicate the name of the DOT Project Manager for this contract.

### Contract Info:

**Type:** Indicate industry type as one of the following: Construction, Professional Services or Standard Services.

**Funding:** Indicate contract funding: FHWA, FTA, State, or City (MWBE and Non-MWBE).

**Unit/ Division:** Specify unit or division letting this contract. i.e. Bridges/ Traffic/ Ferries, etc.

**Contract No.:** Enter New York City Contract No. as appropriate. (Example: BRC100)

**Contract Registration No.:** If known, enter the Registration No. assigned to this contract.

**Procurement Id No. (PIN):** Enter New York City PIN No. as appropriate. (Example: 84109MBSA000)

**Contract Value:** Enter the Total Agreed Amount of the Proposed Contract Agreement between the Prime Contractor and the Agency for this project.

**Over All Minority Goal:** Enter minority percentage goal required for this contract.

**MWBE / DBE:** Enter minority requirement on this contract.

**Contract Description:** Enter project description.

### Prime Info:

**CONTRACTOR:** "Contractor" means a person, including a vendor, who is a party or a proposed party to a contract with a contracting agency, first-level subcontractors of supply and service contractors, and all levels of subcontractors of construction.

**Name:** Enter the legal name of the Prime's firm.

**Address:** Enter current business address.

**Phone:** Enter current business phone number or a number where business representatives can be located.

**Fax:** Enter business fax number.

**EIN:** Enter legal Employer Identification Number (EIN).

**E-mail:** Enter e-mail address, if any.

### Subcontractor Info:

Describe utilization as one of the following: **Subcontractor, Sub consultant, Material Supplier, Trucking Services, Fabricator or Standard Services.**

**Registered Apprenticeship Program:** Prime Contractor must indicate if Subcontractor has a Registered Apprenticeship Program. A Subcontractor in the Construction field with a contract exceeding 1M must have a Registered Apprenticeship Program in place. Subcontractors must get a letter from the Union indicating that they are signatory contractors to their unions for the trades that they intend to use on this project and that they have a Registered Apprenticeship Program with NYS DOL.

**Licenses:** Prime Contractor must indicate whether or not a License is required for work of Subcontractor. If so, document that the Subcontractor has all required Licenses. Please attached License Certificate.

**Subcontract Value:** Enter the Total Agreed Amount of the Proposed Contract Agreement between the Prime Contractor and the Subcontractor for this project.

**Start Date:** Enter estimated date on which subcontractor work will begin.

**End Date:** Enter estimated date on which subcontractor work will be completed.

**Name:** Enter the legal name of the Subcontractor's firm.

**Address:** Enter current business address.

**Phone:** Enter current business phone number or a number where business representatives can be located.

**Fax:** Enter business fax number.

**EIN:** Enter legal Employer Identification Number (EIN) number.

**E-mail:** enter e-mail address, if any.

**Certified As:** Indicate what type of Minority Certification and Ethnic Group Designation the Subcontractor has, if any.

**Check Appropriate Box:** Ethnicity requirements apply only to minority subcontractors, subconsultants, material suppliers and trucking firms for reporting purposes to the NYC Small Business Services, Mayors Office of Contract Services and the Federal-Aid Construction Programs Contract Compliance Monitoring and Reporting.

**Subcontract Description:** Describe work to be perform by Subcontractor/ Subconsultant.

i.e. ( Fencing, Painting, Construction or Construction Management Services, Trucking, Towing Services, Tree Pruning/Planting)

### Prime Contractor Certification:

Enter Name, Title, Signature, and Date of completion of this form by the Company Official.

### Submit Completed Form To:

NYC-DOT/ Contract Compliance Unit

55 Water Street - 8th Floor

New York, NY 10041-0004

Attn: Charles Bartolotta

cbartolotta@dot.nyc.gov

**D / M / WBE SOLICITATION LOG**

Contract No. \_\_\_\_\_ County \_\_\_\_\_ Letting Date \_\_\_/\_\_\_/#### Date Submitted \_\_\_/\_\_\_/#### Page ### of ###

Contractor Name & Address \_\_\_\_\_ Contract Name: \_\_\_\_\_

E-Mail: \_\_\_\_\_ Telephone No: ( )###-####

	Firm Name Contact	Program	Telephone No. E-Mail Address ( )###-####	NYSDOT Work Code(s)	Date of Contact	Method(s) of Contact	D/M/WBE Response Code(s)	Bidder Action Code(s)
1		Select One			##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		
2		Select One	( ) -		##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		
3		Select One	( ) -		##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		
4		Select One	(###)###-		##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		
5		Select One	( ) -		##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		
6		Select One	( ) -		##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		
7		Select One	( ) -		##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		
8		Select One	( ) -		##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		
9		Select One	( ) -		##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		
10		Select One	( ) -		##/##/	Select One		
					##/##/	Select One		
					##/##/	Select One		

D/M/WBE Response Codes 11- Submitted Written Quote 12- Submitted Verbal Quote 13 - Negotiating with prime 14- Developing Quote 21- Not Certified for items(s) 22- Location Unacceptable 23- No Price Agreement 24- No Time for Bid 25- Schedule Unacceptable 26- Other 31- Selected 32- Unavailable 33- No Longer in Business 34- Undeliverable 35- Unreachable 36- Unresponsive 37- Not Selected

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**NEW YORK CITY  
DEPARTMENT OF TRANSPORTATION  
DBE UTILIZATION WORKSHEET**

<b>CONTRACT No.</b>	<b>COUNTY</b>	<b>F. A. PROJECT No.</b>	<b>PAGE No.</b> OF	<b>DATE SUBMITTED</b>
<b>CONTRACTOR</b>		<b>SUBCONTRACTOR</b>		
NAME _____		NAME _____		
ADDRESS _____		ADDRESS _____		
PHONE _____		PHONE _____		
FED. ID No. _____		FED. ID No. _____		

The Contractor shall inform the Engineer in Charge the dates when the Subcontractor starts and completes all work under the subcontract. When work performed by the Subcontractor is included in an estimate for payment, labor affidavits, copies of payrolls, etc. are to be submitted in the same manner and number as required of the Prime Contractor.

<b>EST. BEGINNING DATE</b> (Mo & Yr) ____/____/____	<b>EST. COMPLETION DATE</b> (Mo & Yr) ____/____/____
--	---

This approval may be rescinded at any time in the progress of the work if work of the Subcontractor is determined unsatisfactory.

No Work may be assigned by the Subcontractor to a second tier Subcontractor. No work may be performed by a Subcontractor other than that specifically approved by the Regional Director. The signators below agree that violations of the foregoing may result in no payment by the City for the related work.

No work shall be started by the Subcontractor prior to filing the required insurances. The contractor and Subcontractor hereby certify that the subcontract is in writing, and contains all the pertinent provisions of the prime contract in regard to Federal, State, and City Laws and Regulations.

<b>Contractor's Signature</b> _____	<b>Date</b> _____	<b>Subcontractor's Signature</b> _____	<b>Date</b> _____
-------------------------------------	-------------------	--	-------------------

	ITEM No.	ITEM NAME	< 100 %	BID AMOUNT		AGREED AMOUNT \$	% to CNT
				\$ SPECIALTY	\$ NON-SPECIALTY		
1							
2							
3							
4							
5							
6							
7							
8							
9							
<b>TOTALS:\$</b>				\$	\$	\$	

The Subcontractor named above is approved for utilization under the DBE General Provisions. Approval of this worksheet conveys only the Department's concurrence in the use of the named subcontractor for the items specified, and application of the DBE Agreed Amount to the participation goals of the contract. Regional approval of an Approval to Subcontract form AAPHC 89 is required prior to subletting or otherwise assigning any part of the contract.

<b>APPROVED FOR OFFICE OF EQUAL OPPORTUNITY DEVELOPMENT AND COMPLIANCE BY:</b> _____	<b>DATE APPROVED</b> ____/____/____
--	--

NEW YORK CITY  
DEPARTMENT OF TRANSPORTATION  
**DBE UTILIZATION WORKSHEET**

New York City Department of Transportation DBE General Provisions requires that prior to contract award, Prime Contractors must obtain written consent of the Department to a utilization plan that identifies certified disadvantaged owned business enterprises that have committed to perform work on a proposed contract. Authority for approval of utilization has been delegated to the Contract Compliance Unit (CCU). The DBE Utilization Worksheet is used to describe in item detail the utilization plan for each proposed subcontractor.

DBE Provisions require Prime Contractors to obtain written consent of the Department prior to subletting or otherwise assigning any part of the contract. Authority for approval to subcontract has been delegated to the Contract Compliance Unit.

The DBE Utilization Worksheet has been designated for use as form AAPHC 89. When submitting forms for firms included in the Contractor's Utilization Plan, prepare a signed copy as described below. All DBE Utilization Worksheets are to be submitted directly to CCU as attachments to a revised Utilization Plan, form AAP 19.

**CONTRACT No.:** Enter New York City contract number. (Example: BRC100)

**COUNTY:** Enter name of county or counties of this project. (Example: Bronx)

**F.A. Project No.:** Enter only for Federal Aid Projects. (Example: I-87-3(177))

**PAGE No.:** Enter 1 of 1, 1 of 2, or 2 of 2 etc. Use additional forms as needed.

**DATE SUBMITTED:** Enter date completed forms are submitted to OCC (MM/DD/YY)

**CONTRACTOR AND SUBCONTRACTOR DATA:** Enter names, and addresses (including ZIP code), telephone numbers (including area codes) and Federal Identification Numbers for both the Contractor and Subcontractor.

**EST. BEGINNING DATE:** Enter estimated month and year in which subcontractor work will begin.

**EST. COMPLETION DATE:** Enter estimated month and year in which subcontractor work will completed.

**SIGNATURES:** Authorized representatives of both the prime and subcontractor sign and date.

**ITEM No. AND ITEM NAME:** Enter each item or specification number and name. If only part of an item is to be subcontracted check the "less than 100%" box and attach a description of the specific work to be performed.

**BID AMOUNT:** Enter the prime contractor total bid price for items of work being subcontracted, item by item, under appropriate heading of "Specialty" or "Non-Specialty" and enter totals for each "Specialty" items, if any, are designated in the contract proposal. If only part of an item is to be subcontracted enter the amount of the prime contractor bid amount that represents the portion of the item that is being subcontracted: For other than subcontract work, i.e. material supplier and off-site trucking or other services no entry is required under "Specialty" or "Non-Specialty" headings.

**DBE ONLY AGREED AMOUNT:** In addition to completing the appropriate bid amount columns as described above on the utilization worksheet enter the agreed amount for each item of work to be performed by a certified DBE. Indicate if the contractor's Utilization Plan whether subcontractor, material supplier, trucker or provider of other services

**TOTALS:** Enter the sum of all Bid Amounts and DBE Agreed Amounts, if any.

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Subcontractor Approvals and Approval Amendments will be sequentially numbered for each prime contract in the order that may be approved. An approved copy will be provided to the prime contractor and the Engineer-in-Charge of the contract in each instance.

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**CITY OF NEW YORK  
INITIAL LIST OF SUBCONTRACTORS ("INITIAL LOS")**

Page 1 of     

**Directions:** For all contracts for which a utilization plan has been submitted pursuant to Local Law 129 of 2005, the contractor must use this form to indicate a list of persons to which it intends to award subcontracts to within the first 12 months following receipt of the Notice to Proceed ("NTP"). The contractor is required to submit this form within 30 days of the contracting agency's issuance of the NTP. Each page should be signed and certified. Attach additional pages (copies of this page), as needed.

**PRIME CONTRACT INFORMATION**

Agency:	Unit/Division:
FMS Contract No.:	PIN:
Contract Value: \$	Registration Date:
Contract Description:	

**PRIME CONTRACTOR IDENTIFICATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	

**SUBCONTRACTOR #1 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> DBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**SUBCONTRACTOR #2 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> DBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**SUBCONTRACTOR #3 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/ZIP:
EIN/SSN:	E-Mail:	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> DBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**Prime Contractor Certification:** I hereby affirm that the information supplied is true and correct.

Signature:	Title:
Print Name:	Date:

**CITY OF NEW YORK  
INITIAL LIST OF SUBCONTRACTORS ("INITIAL LOS")**

Page 2 of \_\_

**Directions:** For all contracts for which a utilization plan has been submitted pursuant to Local Law 129 of 2005, the contractor must use this form to indicate a list of persons to which it intends to award subcontracts to within the first 12 months following receipt of the Notice to Proceed ("NTP"). The contractor is required to submit this form within 30 days of the contracting agency's issuance of the NTP. Each page should be signed and certified.

**PRIME CONTRACT INFORMATION**

Agency:	Unit/Division:
FMS Contract No.:	PIN:
Contract Value: \$	Registration Date:
Contract Description:	

**PRIME CONTRACTOR IDENTIFICATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	

**SUBCONTRACTOR #4 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> DBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**SUBCONTRACTOR #5 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> DBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**SUBCONTRACTOR #6 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/ZIP:
EIN/SSN:	E-Mail	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> DBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**Prime Contractor Certification:** I hereby affirm that the information supplied is true and correct.

Signature:	Title:
Print Name:	Date:

**NEW YORK CITY  
DEPARTMENT OF TRANSPORTATION  
DBE UTILIZATION WORKSHEET AMENDMENT**

<b>CONTRACT No.</b>	<b>COUNTY</b>	<b>F. A. PROJECT No.</b>	<b>PAGE No. OF</b>	<b>DATE SUBMITTED</b>
---------------------	---------------	--------------------------	------------------------	-----------------------

<b>CONTRACTOR</b>		<b>SUBCONTRACTOR</b>		
<b>NAME</b> _____	_____	<b>NAME</b> _____	_____	_____
<b>ADDRESS</b> _____	_____	<b>ADDRESS</b> _____	_____	_____
<b>PHONE</b> _____	_____	<b>PHONE</b> _____	_____	_____
<b>FED. ID No.</b> _____	_____	<b>FED. ID No.</b> _____	_____	_____

The Contractor shall inform the Engineer in Charge the dates when the Subcontractor starts and completes all work under the subcontract. When work performed by the Subcontractor is included in an estimate for payment, labor affidavits, copies of payrolls, etc. are to be submitted in the same manner and number as required of the Prime Contractor.

<b>EST. BEGINNING DATE</b>	<b>EST. COMPLETION DATE</b>
(Mo & Yr) ____ / ____	(Mo & Yr) ____ / ____

This approval may be rescinded at any time in the progress of the work if work of the Subcontractor is determined unsatisfactory.

No work may be assigned by the Subcontractor to a second tier Subcontractor. No work may be performed by a Subcontractor other than that specifically approved by the Regional Director. The signatories below agree that violations of the foregoing may result in no payment by the City for the related work.

No work shall be started by the Subcontractor prior to filing the required insurances. The contractor and Subcontractor hereby certify that the subcontract is in writing, and contains all the pertinent provisions of the prime contract in regard to Federal, State, and City Laws and Regulations.

<b>Contractor's Signature</b> _____	<b>Date</b> _____	<b>Subcontractor's Signature</b> _____	<b>Date</b> _____
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**ONLY LIST ITEMS TO BE ADDED, DELETED, INCREASED OR DECREASED: See Instructions.**

ITEM No.	ITEM NAME	Previous or New Entry	< 100%	BID AMOUNT		AGREED AMOUNT \$	% to CNT
				\$ SPECIALTY	\$ NON-SPECIALTY		
1		PREV					
		NEW					
2		PREV					
		NEW					
3		PREV					
		NEW					
4		PREV					
		NEW					
5		PREV					
		NEW					
Total all PREV Bid Amounts & D/M/WBE Agreed Amounts:							
Total all NEW Bid Amounts & D/M/WBE Agreed Amounts:							
<b>NET TOTAL AMENDMENTS:</b>				<b>\$</b>	<b>\$</b>	<b>\$</b>	

The Subcontractor named above is approved for utilization under the DBE General Provisions. Approval of this worksheet conveys only the Department's concurrence in the use of the named subcontractor for the items specified, and application of the DBE Agreed Amount to the participation goals of the contract. Regional approval of an Approval to Subcontract (Amended) form AAPHC 89-1 is required prior to subletting or otherwise assigning any new work shown on this worksheet.

<b>APPROVED FOR OFFICE OF EQUAL OPPORTUNITY DEVELOPMENT AND COMPLIANCE BY:</b> _____	<b>DATE APPROVED</b> / /
--	-----------------------------

**INSTRUCTIONS FOR COMPLETING FORM AAPHC 89-1  
DBE UTILIZATION WORKSHEET AMENDMENT**

New York City Department of Transportation DBE Provisions requires that prior to contract award; Prime Contractors must obtain written consent of the Department to a utilization plan that identifies certified disadvantaged owned business enterprises that have committed to perform work on a proposed contract. Authority for approval of utilization has been delegated to the Contract Compliance Unit (CCU). The DBE Utilization Worksheet is used to describe in item detail the utilization plan for each proposed subcontractor. The DBE Utilization Worksheet Amendment is used to describe in item detail any change (addition, subtraction, increase and/or decrease) to a previously approved worksheet.

DBE Provisions require Prime Contractors to obtain written consent of the Department prior to subletting or otherwise assigning any part of the contract. Authority for approval to subcontract has been delegated to the Contract Compliance Unit.

The DBE Utilization Worksheet Amendment has been designed for use as form AAPHC 89-1, when submitting forms for firms included in the Contractor's Utilization Plan, prepare a signed copy as described below. All DBE Utilization Worksheet Amendments are to be submitted directly to OCC as attachments to a revised Utilization Plan, form AAP 19.

Approval of the Utilization Worksheet Amendment conveys only the Department's concurrence in the use of the named subcontractor for the items specified, and application of the DBE Agreed Amount to the participation goals of the contract.

Only one DBE Utilization Worksheet is to be submitted for each subcontractor on this prime contract. DO NOT submit amendments to the item(s) or amount(s) of work proposed for a subcontractor on another form AAPHC 89. After initial forms have been filed for a given subcontractor, any amendments to the item(s) or amount(s) of work to be performed by this subcontractor will be submitted on form AAPHC 89-1.

Examples: (1) To add or delete items of work and/or increase or decrease the value of an item of work on a previously approved Utilization Worksheet: complete form AAPHC 89-1.

(2) To transfer part of a previously approved Utilization Worksheet from one subcontractor to another previously approved subcontractor: complete two sets of forms AAPHC 89-1. On the first request approval to decrease previously approved value(s) and on the second request approval to increase previously approved value(s).

(3) To transfer part of a previously approved Utilization Worksheet from one subcontractor to a new, not previously approved subcontractor: complete form AAPHC 89-1 and one form AAPHC 89. On the form AAPHC 89-1, request approval to decrease the value of a previously approved subcontract; on the form AAPHC 89, request approval to execute an entirely new subcontract with a new subcontractor.

**AN AMENDMENT THAT REDUCES THE UTILIZATION OF AN APPROVED DBE MUST BE ACCOMPANIED BY SUPPORTING DOCUMENTATION (i.e.. a letter of unavailability from the DBE).**

**CONTRACT NO.:** Enter NYC contract number. Example: BRC100

**COUNTY:** Enter name of county or counties. Example: Manhattan & Brooklyn

**F.A. PROJECT No.:** Enter only for Federal-Aid projects. Example: I-87-3(177)

**NYC Department of Transportation  
Contractor Report of Contract Payments**

<b>Final Report</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>PIN &amp; Contract #</b> _____ _____	<b>County</b> _____	<b>Report Date</b> _____						
<b>Contractor Name and Address</b> _____ _____		<b>Subcontractor/Vendor Name and Address</b> _____ <input type="checkbox"/> Check if firm is CERTIFIED D/M/WBE							
<b>Contractor Federal Identification Number</b> _____		<b>Subcontractor/Vendor Federal Identification Number</b> _____							
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:40%; text-align: right;">Total Payments Due to Date:</td> <td>_____</td> </tr> <tr> <td style="text-align: right;">- Withholding to Date:</td> <td>_____</td> </tr> <tr> <td style="text-align: right;">= Total Payments to Date:</td> <td>_____</td> </tr> </table>				Total Payments Due to Date:	_____	- Withholding to Date:	_____	= Total Payments to Date:	_____
Total Payments Due to Date:	_____								
- Withholding to Date:	_____								
= Total Payments to Date:	_____								
<b>Comments:</b> _____ _____									
<b>Certification</b>									
<small>Section 139-f of the State Finance Law requires the contractor to pay each of its subcontractors and/or materialmen the proceeds from the payment representing the value of work performed and/or materials furnished by the subcontractor and/or materialmen within 7 calendar days of the receipt of any payment from the public owner.</small>									
<p>As an officer or the Contractor identified above, and based on my personal knowledge, I certify that payment has been made by the Contractor to the Subcontractor/Vendor in the amount herein pursuant to the last AAP HC-89-LL on file with the Department and that said work/services/product was performed/supplied by said Subcontractor/Vendor and that there were no rebates, refunds, or offsets applied to any payments except as noted under "Comments" above and a copy of this form has been sent to the Subcontractor/Vendor.</p> <p>Signed: _____</p> <p>Title: _____ (For Contractor)</p>	<p align="center"><b>PAYMENT CERTIFICATION</b></p> <p>As an officer of the Subcontractor/Vendor identified above, and based on my personal knowledge, I certify that payment has been received in the amount stated herein pursuant to the last AAP HC-89-LL on file and that said work/services/product was performed/supplied and supervised solely by the Subcontractor/Vendor and that there were no rebates, refunds, or offsets applied to any payments except as noted under "Comments" above.</p> <p>Signed: _____</p> <p>Title: _____ (For Subcontractor/Vendor)</p>								
<b>Notarization</b>									
<p>Print Name: _____ (For Contractor)</p> <p>Name of Organization: _____ (For Contractor)</p>	<p>Print Name: _____ (For Subcontractor/Vendor)</p> <p>Name of Organization: _____ (For Subcontractor/Vendor)</p>								
<small>Any person who makes a false or fraudulent statement in connection with participation of a DBE on any assisted program or otherwise violated applicable State and/or Federal statutes may be referred for prosecution under applicable State and/or Federal law.</small>									
<small>Note to Subcontractor: If the Contractor has not paid your firm for the work completed and accepted by the Project Sponsor in accordance with the terms specified on this form please contact the Engineer in Charge for the contract.</small>									

AAP 21LL Form Instructions:

**Final Report:** Check YES or NO, as appropriate, to indicate whether this will be the Final Report submitted for this vendor.

**Contract No:** Enter NYC DOT PIN (Project Identification Number) and Local Project contract number.

**County:** Enter the name of the county or counties this project is located in.

**Report Date:** Enter date (Month/Day/Year) through which payments due and made are reflective of.

**Contractor and Vendor Data:** Enter names, and addresses (including zip code), Telephone numbers (including area codes) and Federal Identification Numbers for both the Contractor and Vendor.

**Total Payments Due to Date:** Enter total of payments due to the vendor to date.

**Withholding to Date:** Enter amount due vendor that has not been paid. Any withholding must be explained in the Comments section.

**Total Payment to Date:** Value of payments due to date less withholding.

**Comments:** Amounts recorded as withholding must be accompanied by a brief description of the circumstances necessitating the withholding along with item numbers involved (if any).

**Signatures:** Authorized representatives of both the Prime Contractor and Subcontractor/Vendor sign and date.

**Notarization:** The signatures must be notarized by a duly registered Notary Public.

The AAP 21LL is a cumulative to-date report of the total payments due a vendor, total retainage or other withholdings, and total payments made to the vendor. The AAP 21LL is to be submitted by the 15th day of the following month to the Regional Local Project Liaison (RLPL) for each vendor due payment during the previous month or when requested by the Project Sponsor or the NYC Department of Transportation. The dollar values on this report should be accurate through the last day of the previous month. The Final AAP 21LL must be completed by both parties. The Final AAP 21LL should be submitted as soon as possible after the vendor has completed/supplied all of the work/service/products for which it was utilized, but not later than 30 days after the vendor has completed its commitment.

The Prime Contractor shall submit a copy of the AAP 21LL signed by an authorized representative of their firm, to the Sponsor and to each vendor due payment on the project.

The Prime Contractor shall inform the Vendor of its responsibility to review the form for accuracy, to sign and return the form to the Sponsor, and to have the Vendor's signature on the AAP 21LL.

This report is a written instrument within the meaning of Section 175.00 of the Penal law. I am fully aware that it will be filed with the New York City Department of Transportation and become a part of the records thereof and that entering any false information hereon constitutes the crime of Offering a False instrument for filing in the first degree, which is a Class E Felony. (Penal Law, Section 175.35)

**New York City Department of Transportation  
SUBCONTRACTOR / SUBCONSULTANT  
MONTHLY PAYMENT REPORT**

**CONTRACT No./ PIN No.:** \_\_\_\_\_

**Page No.:** \_\_\_\_\_ **of** \_\_\_\_\_

**REGISTRATION No.:** \_\_\_\_\_

**MONTH:** \_\_\_\_\_

**PRIME CONTRACTOR:** \_\_\_\_\_

**Work Completed  
To Date:** \_\_\_\_\_ %

SUBCONTRACTOR'S NAME / SUBCONSULTANT'S NAME	Certification (DBE, MBE, WBE, LBE, None)	Contract Value	Total Payments This Month	Total Payments To Date
<b>TOTAL:</b>				

**REMARKS:**

**FALSIFICATION OF THIS STATEMENT IS A PUNISHABLE OFFENSE**

*I certify that the total payments above reflect the value of the work done by the subcontractors/subconsultants that payments have been made by the Contractor and received by the Subcontractor /Subconsultant as specified above; that there were no Rebates, Refunds or Offsets applied to any payments unless the same is noted above; and that it is known to me to be true of my knowledge.*

_____	_____
<b>PRIME CONTRACTOR'S / CONSULTANT'S NAME</b>	<b>DATE</b>
_____	_____
<b>PRINT NAME</b>	<b>TITLE</b>

**INSTRUCTIONS FOR PREPARING AND SUBMITTAL OF  
SUBCONTRACTOR / SUBCONSULTANT PAYMENT REPORTS**

*New York City Department of Transportation requires Prime Contractors / Consultants to report payments made to ALL SUBCONTRACTORS / SUBCONSULTANT that are utilized on city contracts. Prime Contractor/ Consultant report of payments to ALL SUBCONTRACTORS / SUBCONSULTANTS is required on a **monthly basis** or when requested by the Department. Failure by the Prime Contractor / Consultant to submit this report to the Department's Project Engineer-In-Charge or directly to Contract Compliance Office as directed and in accordance with the above may result in the withholding of payments.*

**Prepare one report per contract and list ALL subcontractors / subconsultants employed on this project regardless of payments.**

**PAGE No.:** Enter 1 of 1; 1 of 2; 2 of 2; etc. Use additional forms as needed.

**CONTRACT No.:** Enter New York City Contract No. or PIN No. as appropriate.  
(Example: BRC100 or 84109MBSA000)

**REGISTRATION No.:** Enter the Registration No. assigned to this contract. This may be obtained from the "Notice of Award" and/ or the "Order to Commence Work" letters.

**MONTH:** Enter month to which payment amounts refer.

**PRIME CONTRACTOR / CONSULTANT:** Enter the legal name of the Prime's firm.

**WORK COMPLETED TO DATE:** Enter the percentage of work **completed to date** in relation to the life of the contract.

**SUBCONTRACTOR:** Enter names of ALL Subcontractors employed by your firm that utilized on this project.

**SUBCONSULTANT:** Enter names of ALL Sub consultants employed by your firm that utilized on this project.

**CERTIFICATION:** Indicate what type of minority certification the Subcontractor/ Subconsultant has if any. Otherwise indicate "None". Do not leave it blank.

**CONTRACT VALUE:** For each Subcontractor / Subconsultant enter the Total Agreed Amount of the Proposed Contract Agreement between the Prime Contractor and the Subcontractor for this project.

**TOTAL PAYMENTS THIS MONTH:** Enter total Payments made to Subcontractor / Subconsultant for the indicated month.

**TOTAL PAYMENTS TO DATE:** Total Value of **Actual** Payments to Date, amount shown will be Total Payments Due less Retainage or Other Withholding, if any.

**REMARKS:** Prime Contractor / Consultant must indicate any monies under dispute or the subject of exceptions or withholdings; and a brief description of the circumstances leading to the dispute or exception.

**SIGNATURE:** Authorized representative of the Prime Contractor / Consultant must sign and date form.





AGENCY CHIEF CONTRACTING OFFICE  
CIVIL RIGHTS COMPLAINT FORM

Today's Date: 2/28/2012

**COMPLAINANT**

Name	Telephone # - Home <input type="checkbox"/> Office <input type="checkbox"/> Mobile <input type="checkbox"/>
Address	Email
City/State/Zip	Complaint received through <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> letter <input type="checkbox"/> In-Person

**COMPLAINT AGAINST**

Name	Telephone # - Home <input type="checkbox"/> Office <input type="checkbox"/> Mobile <input type="checkbox"/>
Address	PIN
City/State/Zip	Registration #
Relationship to Complainant	

**DESCRIPTION OF COMPLAINT**

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(Over)

**NATURE OF COMPLAINT** *(check all that apply)*

- Harassment     Intimidation     Threats     Coercion     Other \_\_\_\_\_  
*(explain)*

If you have checked any of the above, please indicate the basis of the civil rights violation below.

- Race     Disability     Age     Ethnicity     Sexual Orientation     Retaliation for Filing a Complaint  
 Gender     National Origin     Religion     Title VI – Refer to Title VI Officer  
 Other: \_\_\_\_\_  
*(explain)*

INTAKE	
Name	Title
Signature	Date

**RESOLUTION**

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**ATTACHMENTS**

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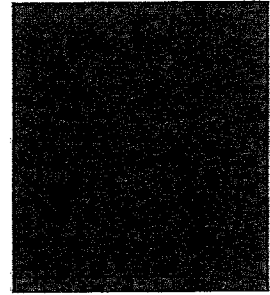
**PRE-AWARD DBE TRUCKING COMMITMENT INFORMATION**

<b>Contract No.</b>	<b>PIN</b>

<b>Project Sponsor</b>	<b>County</b>

**Supervisor of the day-to-day DBE trucking operation is:**

--



<b>DBE Trucking Firm:</b>			
	<b>Owned</b>	<b>Leased</b>	<b>Total</b>
<b>No. of Trucks</b>			0

<b>Number of Trucks Performing Work</b>	<b>Rate (\$)</b>	<b>Per</b>	<b>Duration/No.</b>	<b>Commitment (\$)</b>
On-Site				\$0.00
Off-Site				\$0.00
<b>TOTAL</b>				<b>\$0.00</b>

<b>DBE Trucking Firm:</b>			
	<b>Owned</b>	<b>Leased</b>	<b>Total</b>
<b>No. of Trucks</b>			0

<b>Number of Trucks Performing Work</b>	<b>Rate (\$)</b>	<b>Per</b>	<b>Duration/No.</b>	<b>Commitment (\$)</b>
On-Site				\$0.00
Off-Site				\$0.00
<b>TOTAL</b>				<b>\$0.00</b>

<b>DBE Trucking Firm:</b>			
	<b>Owned</b>	<b>Leased</b>	<b>Total</b>
<b>No. of Trucks</b>			0

<b>Number of Trucks Performing Work</b>	<b>Rate (\$)</b>	<b>Per</b>	<b>Duration/No.</b>	<b>Commitment (\$)</b>
On-Site				\$0.00
Off-Site				\$0.00
<b>TOTAL</b>				<b>\$0.00</b>

NOTE: A Low Bidder that submits a DBE Utilization Pre-Award Package that includes amount(s) for trucking, must complete this form to show how the commitment amount was estimated. For any long-term leased truck, submit a copy of the lease agreement. Rate should be stated as \$/day, \$/hour, \$/load, etc. and estimated duration/number of loads. (i.e., 1 truck @ \$400/day for 3 weeks = \$6,000)

(NO TEXT ON THIS PAGE)

**CITY OF NEW YORK  
ANNUAL LIST OF SUBCONTRACTORS ("ANNUAL LOS")**

Page 1 of \_\_\_

**Directions:** For all multi-year contracts for which a utilization plan has been submitted pursuant to Local Law 129 of 2005, the contractor must use this form annually to indicate a list of persons to which it intends to award subcontracts to during each twelve month period following the initial year of the contract term. Each page should be signed and certified. Attach additional pages (copies of this page), as needed.

**PRIME CONTRACT INFORMATION**

Agency:	Unit/Division:
FMS Contract No.:	PIN:
Contract Value: \$	Registration Date:
Contract Description:	

**PRIME CONTRACTOR IDENTIFICATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	

**SUBCONTRACTOR #1 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**SUBCONTRACTOR #2 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**SUBCONTRACTOR #3 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/ZIP:
EIN/SSN:	E-Mail	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**Prime Contractor Certification:** I hereby affirm that the information supplied is true and correct.

Signature:	Title:
Print Name:	Date:

**CITY OF NEW YORK  
ANNUAL LIST OF SUBCONTRACTORS ("ANNUAL LOS")**

Page 2 of \_\_\_\_\_

**Directions:** For all multi-year contracts for which a utilization plan has been submitted pursuant to Local Law 129 of 2005, the contractor must use this form annually to indicate a list of persons to which it intends to award subcontracts to during each twelve month period following the initial year of the contract term. Each page should be signed and certified. Attach additional pages (copies of this page), as needed.

**PRIME CONTRACT INFORMATION**

Agency:	Unit/Division:
FMS Contract No.:	PIN:
Contract Value: \$	Registration Date:
Contract Description:	

**PRIME CONTRACTOR IDENTIFICATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	

**SUBCONTRACTOR #4 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**SUBCONTRACTOR #5 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/Zip:
EIN/SSN:	E-Mail:	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**SUBCONTRACTOR #6 INFORMATION**

Name:		
Phone:	Fax:	
Address:	City	State/ZIP:
EIN/SSN:	E-Mail	
Subcontract Description:		
Approximate Subcontract Value: \$	Approx. Start Date:	Approx. End Date:
Contractor is DSBS-certified as: M/WBE <input type="checkbox"/> EBE <input type="checkbox"/> LBE <input type="checkbox"/> (check all that apply and note status) N/A <input type="checkbox"/>		

**Prime Contractor Certification:** I hereby affirm that the information supplied is true and correct.

Signature:	Title:
Print Name:	Date:

**ATTACH TO CONTRACT DOCUMENTS**

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

**PROJECT ID: HWMBRT5A (MED-607B)**

**EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE**

**FROM FDR DRIVE TO LEXINGTON AVENUE**

**INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK**

**Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

**ADDENDUM NO. 3**

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**DATED: March 23, 2009**

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**This Addendum is issued for the purpose of amending the requirements of the Contract Documents and is hereby made part of said Contract Documents to the same extent as if it was originally included therein.**

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**GAS COST SHARING (EP-7) STANDARD SPECIFICATIONS**

# EP-7 GAS COST SHARING STANDARD SPECIFICATIONS

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## **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 include bid items, specifications and estimated quantities designed to fully compensate him/her for the incremental costs of supporting, protecting, provide accommodations and, avoid 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. Overruns not paid by City shall be negotiated and paid to Contractor by gas facility operator who then shall 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:

This item 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, of 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 excavation 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 defined above 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 6.07 - 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 direction of 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.

**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

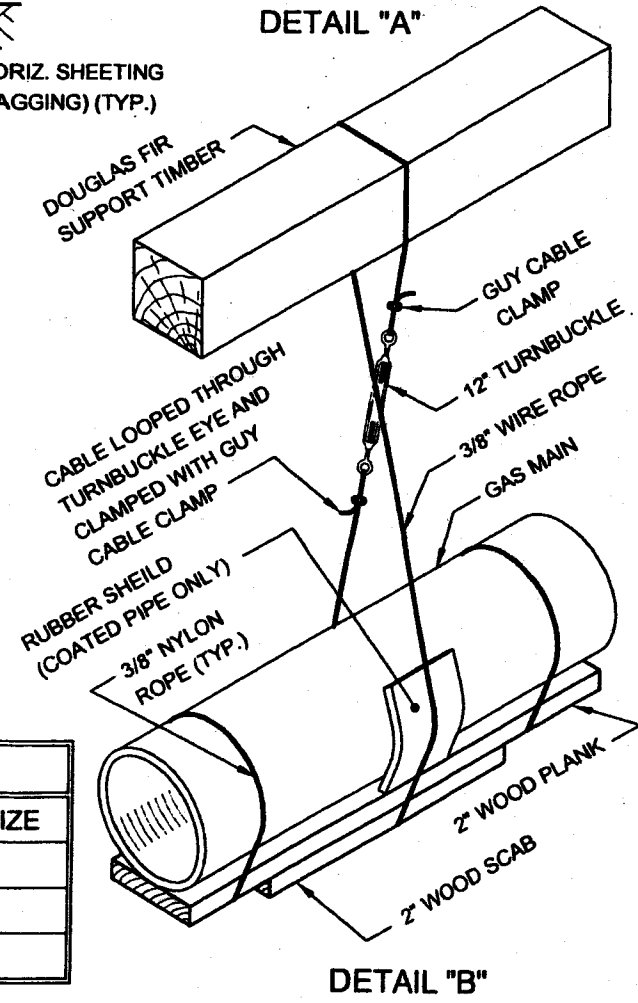
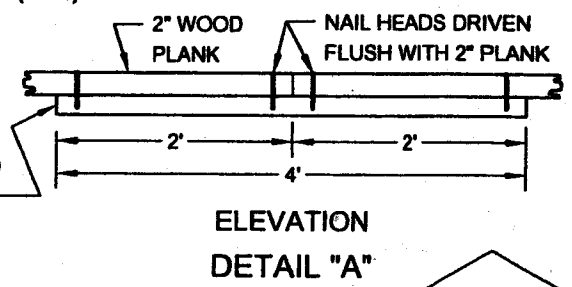
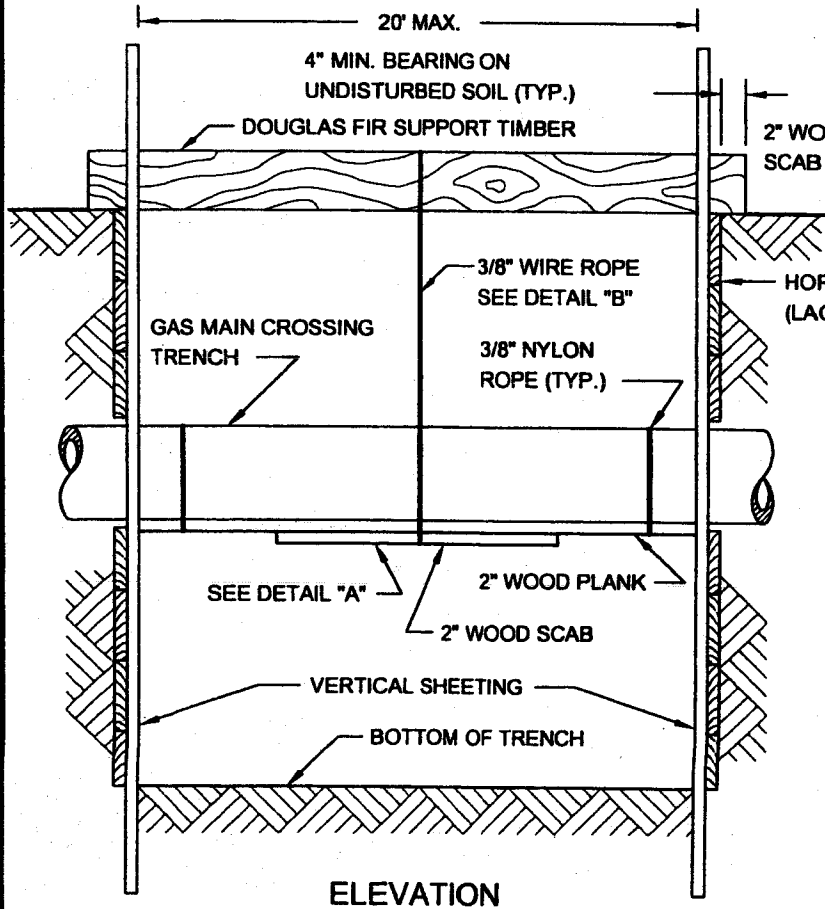
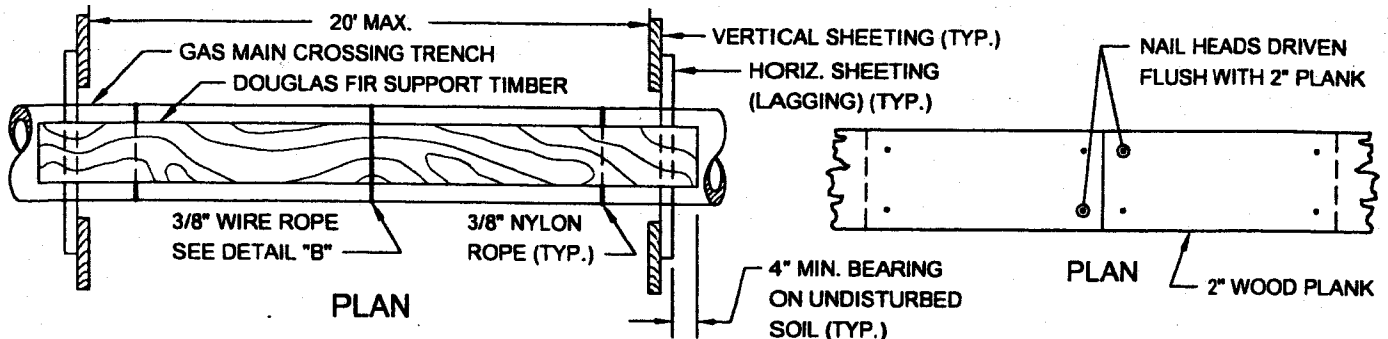
#### **IV - STANDARD SKETCHES; GAS COST SHARING WORK**

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 AND SERVICES CROSSING EXCAVATION GREATER THAN 4'-0" WIDE AT ANY ANGLE

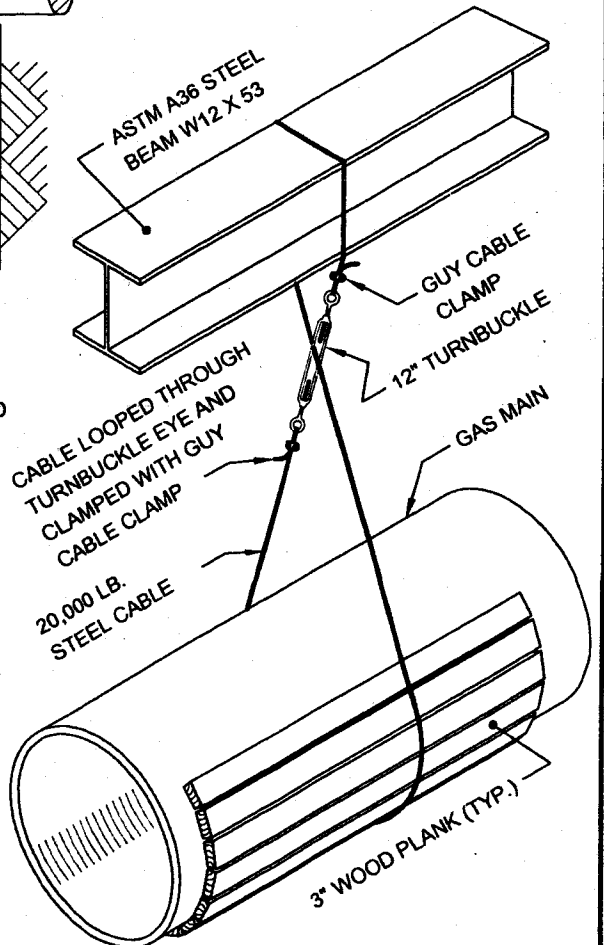
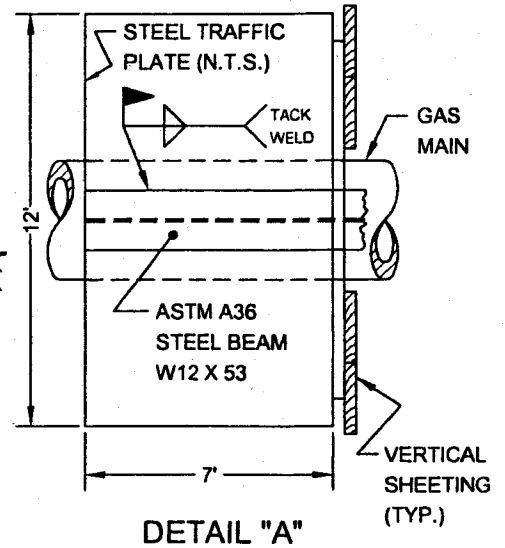
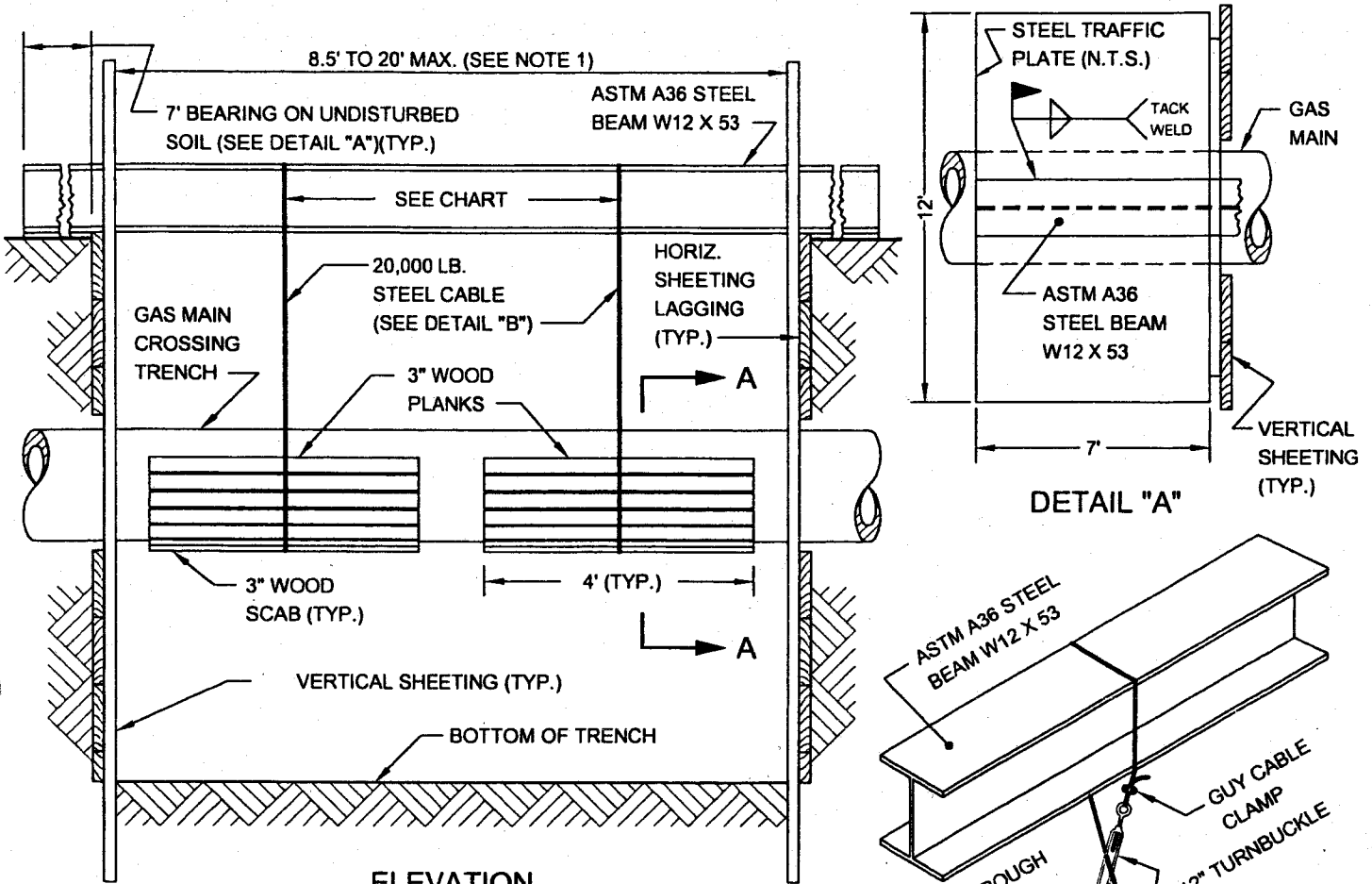


CABLE SUPPORT		TIMBER SUPPORT	
MAIN TYPE	SPACING	MAIN SIZE	TIMBER SIZE
CAST IRON	4' O.C. MAX.	UP TO 6"	6" X 6"
STEEL	10' O.C. MAX.	8" TO 10"	8" X 8"
PLASTIC	10' O.C. MAX.	12" TO 16"	10" X 10"

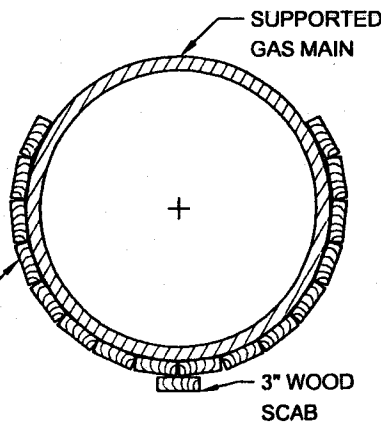
REVISED OCT. 2004 - L. ADRIEN  
REVISED JUNE 1988 - J. WONG/W. PATALANOP/BOY

# GAS COST SHARING WORK (SKETCH NO. 1A)

SUPPORT REQUIREMENTS FOR GAS MAINS OVER 16" DIAMETER UP TO AND INCLUDING 48" DIAMETER CROSSING EXCAVATION AT ANY ANGLE



CABLE SUPPORT	
MAIN TYPE	SPACING
CAST IRON	4' O.C. MAX.
STEEL	10' O.C. MAX.



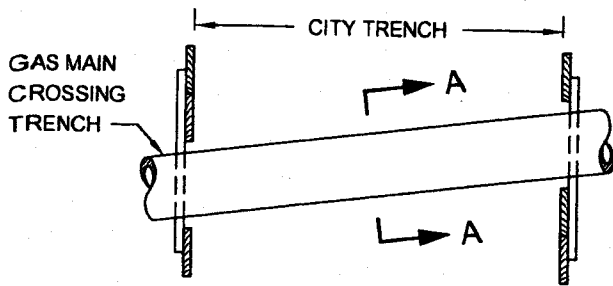
**NOTES:**

- (1) NO SUPPORT IS REQUIRED FOR GAS MAINS OVER 16" DIA. UP TO AND INCLUDING 48" DIA. CROSSING TRENCHES LESS THAN 8.5' WIDE.
- (2) UNDERMINE A MAXIMUM OF 8.5 L.F. OF CAST IRON GAS MAIN AT A TIME.
- (3) SET STEEL CABLE OVER 3" WOOD PROTECTIVE PLANKS AND PLACE AN ADDITIONAL 3" SCAB ON THE BOTTOM OF THE GAS MAIN.
- (4) ADJUST STEEL CABLE UNTIL DEAD WEIGHT OF THE UNDERMINED GAS MAIN HAS BEEN TAKEN UP BY THE OVERHEAD STEEL BEAM SUPPORT.
- (5) ALL SUPPORTS AND STEEL CABLES CAN BE REMOVED ONLY AFTER THE REQUIRED BACKFILL (AROUND AND BELOW GAS MAIN) HAS BEEN COMPACTED IN ACCORDANCE WITH NEW YORK CITY STANDARDS AND AT THE DIRECTIONS OF THE ENGINEER.

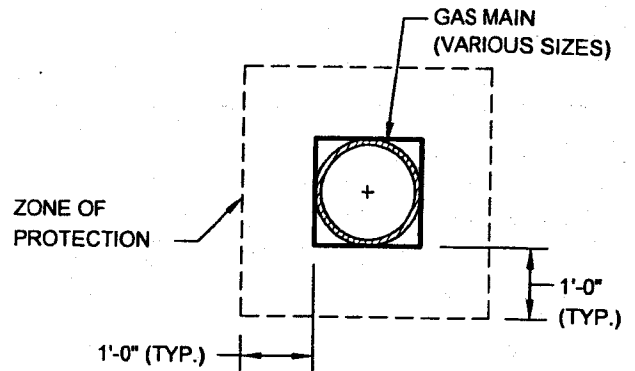
REVISED OCT. 2003 BY BRIEN  
REVISED JUNE 1998 - J. WONG/W. PATALANOFF, MOY

# GAS COST SHARING WORK (SKETCH NO. 2)

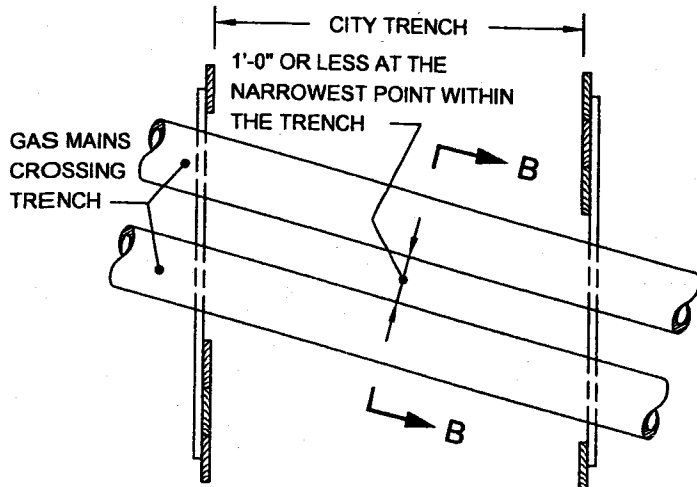
## TYPICAL METHODS OF MEASUREMENT FOR GAS CROSSINGS



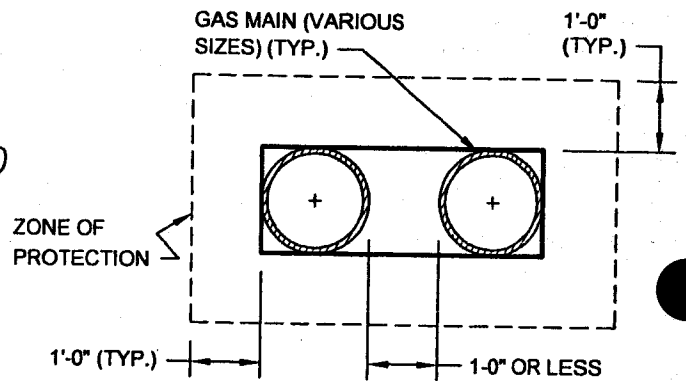
**SINGLE FACILITY CROSSING**



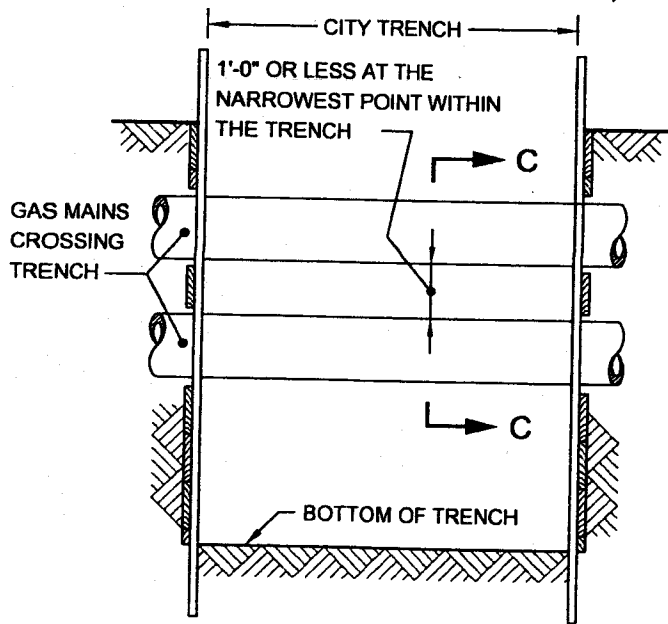
**SECTION A-A**



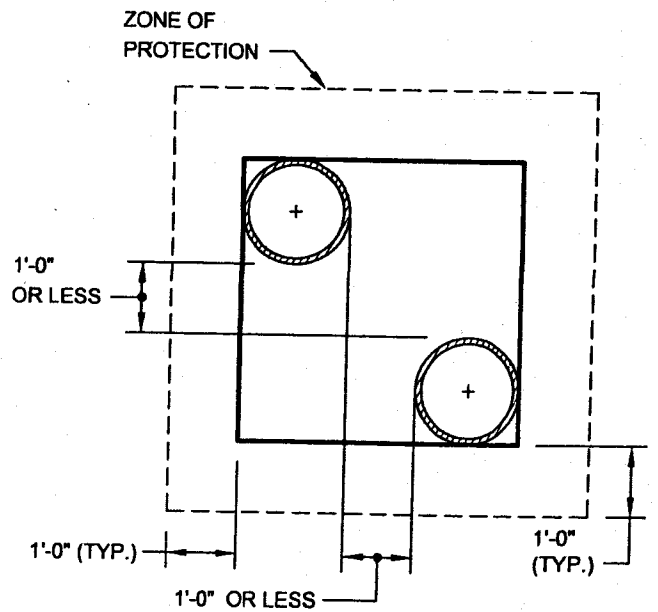
**MULTIPLE FACILITIES  
(GAS MAINS AT SAME ELEVATION)**



**SECTION B-B**



**MULTIPLE FACILITIES  
(ONE CROSSING AT DIFFERENT ELEVATIONS)**



**SECTION C-C**

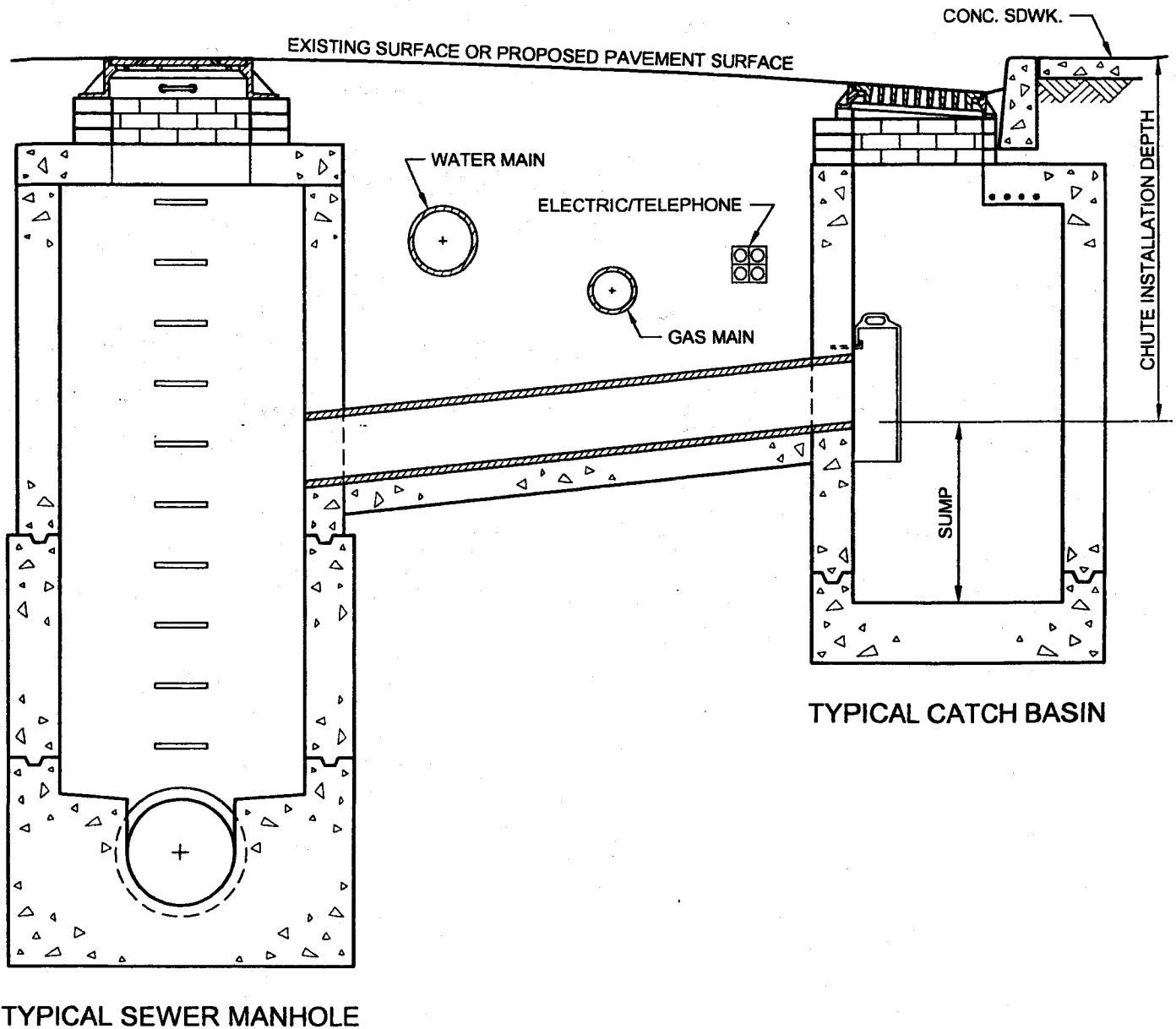
**NOTE:**

GAS MAINS MAY OR MAY NOT BE PARALLEL TO EACH OTHER.

REVISED SEPT. 2004 - J. ADRIEN  
 REVISED SEPT. 2004 - J. WONG/W. PATALANO/P. MOY

# GAS COST SHARING WORK (SKETCH NO. 3)

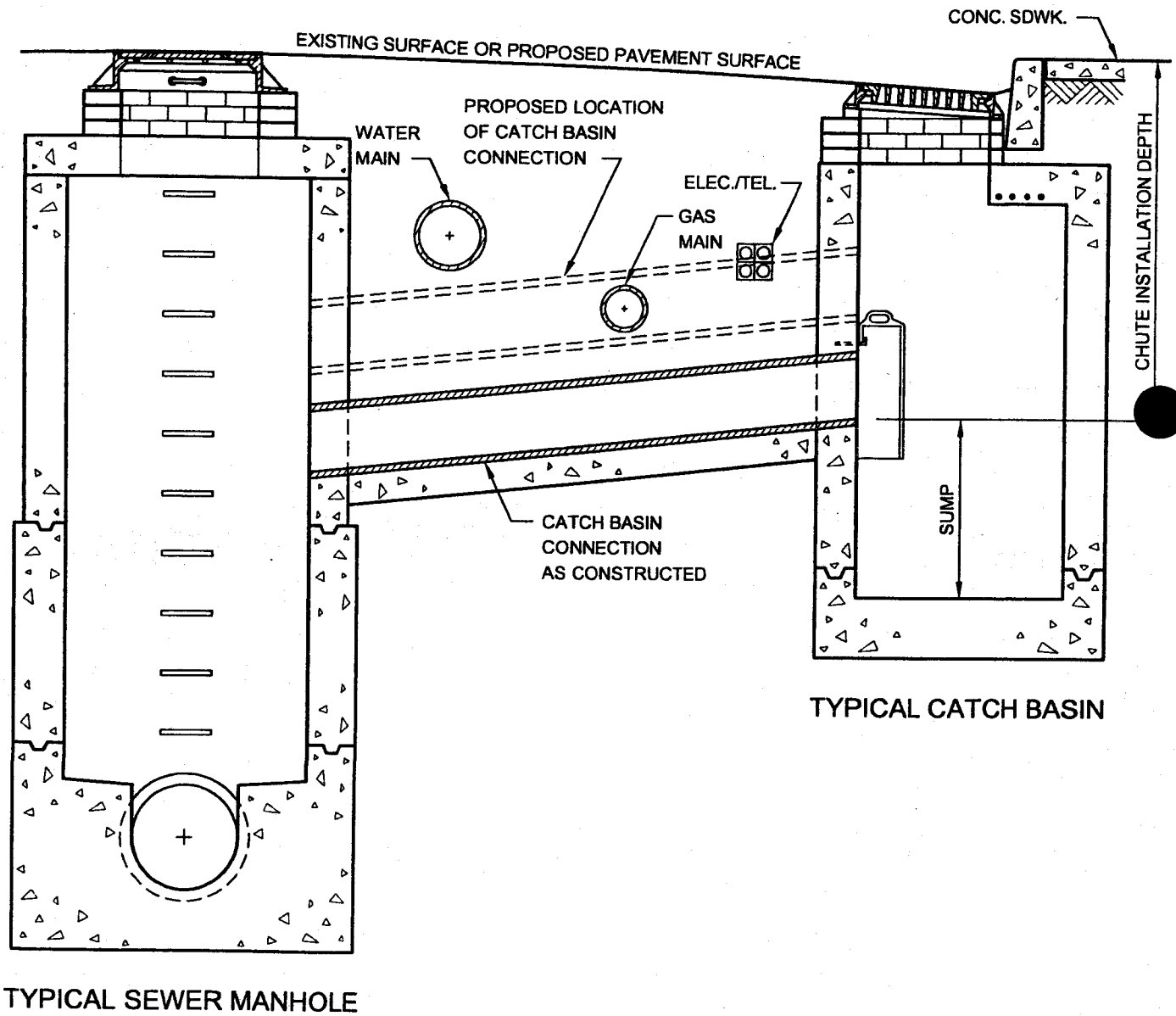
## UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION



REVISED OCT. 2003 BY ADRIEN  
REVISED OCT. 1988 - J. WONGAW, PATALANOP, MOY

# GAS COST SHARING WORK (SKETCH NO. 4)

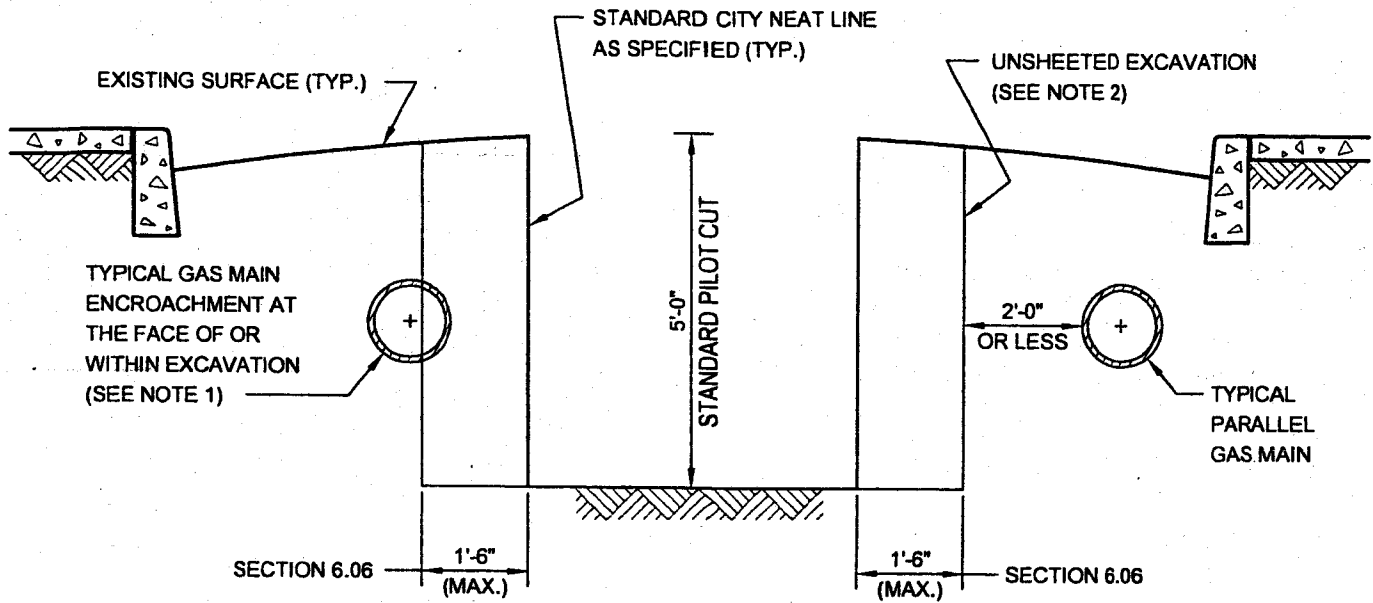
## UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION (EXTRA DEPTH)



REVISED OCT. 2004 - L. ADRIEN  
REVISED OCT. 1998 - J. WONGW. PATALANOP. 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.

**V - PRELIMINARY GAS WORK TO BE PERFORMED BY  
FACILITY OPERATOR.**

APPLICABLE TO ALL GAS DRAWINGS:

- ALL RELOCATION WORK SHOWN IN THIS ADDENDUM 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:

Don Soldiviero  
Consolidated Edison Company  
4 Irving Place Rm. 275S  
NY, NY 10003  
(212) 460-4834

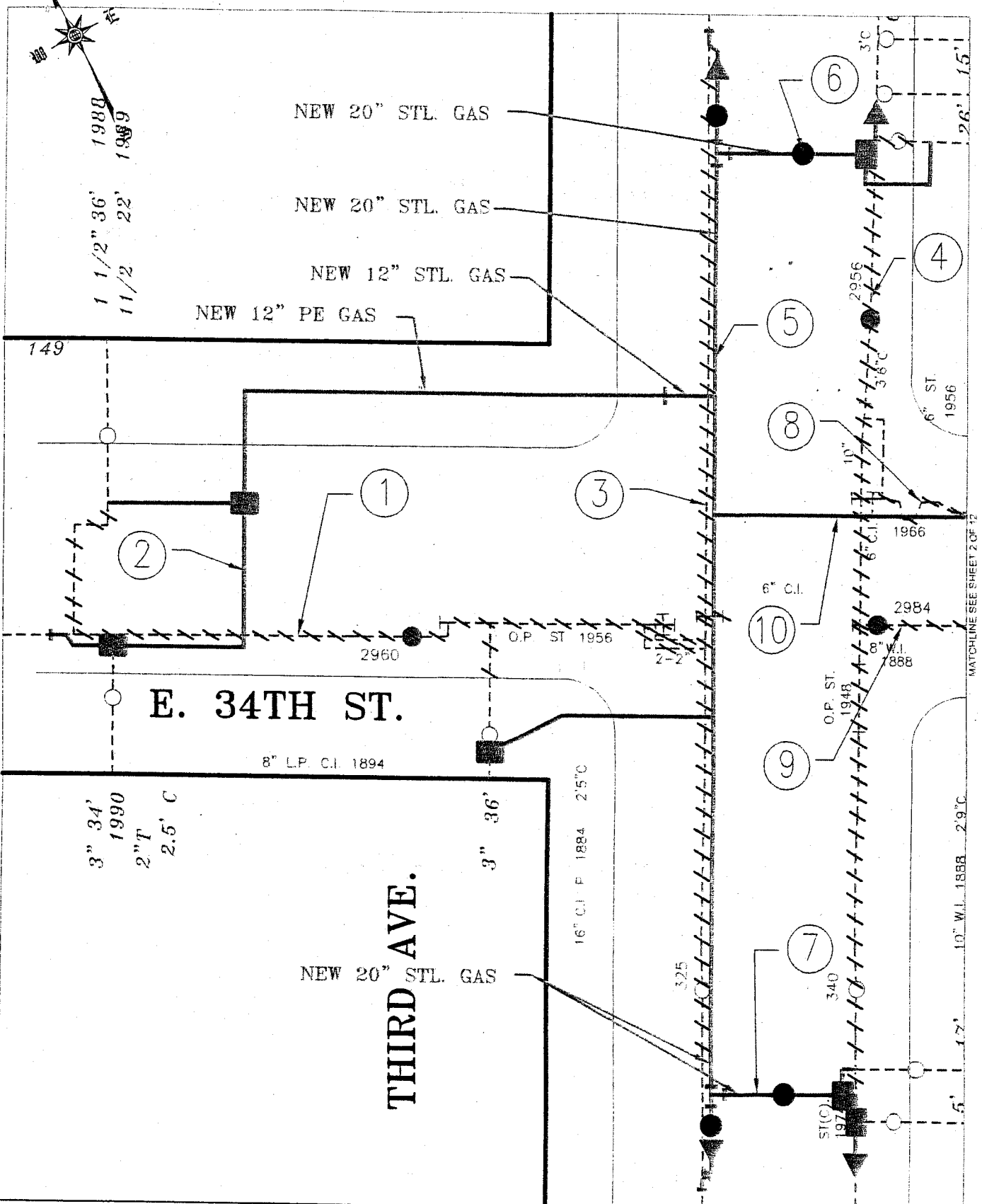
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GAS FACILITY COST ALLOCATION AGREEMENT  
 PROJECT NO. HWMBRT5A (MED-607B) 34TH STREET TRANSITWAY  
 CAPITAL GAS MAIN INSTALLATION

SHEET #	LOC.	ON STREET	FROM	TO	ITEM	SIZE	TYPE	LENGTH	REIMB LENGTH	REMARKS	REMARKS	
7,8,9	15	2ND AVENUE	E. 35TH STREET	E. 33RD STREET						RET.	12"	1895
7,8,9	15	"	"	"						RET.	12"	1999
8,10	16	E. 34TH STREET	2ND AVENUE	1ST AVENUE						RET.	4"	1917
8,10	16	"	"	"						RET.	6"	1884
8,10	16	"	"	"						RET.	6"	2005
8,10	16	"	"	"						RET.	6"	1960
8,10	16	"	"	"						RET.	6"	1999
5,8,10,11,12	17	"	"	"	80n	20"	STL	200' +/-	200' +/-	RET.		
5,8,10,11,12	17	"	"	"	80n	20"	STL	585' +/-	585' +/-	RET.		
8	18	"	"	"						RET.	4"	1974
11	19	"	"	"						RET.	4"	1999
11,12	20	E. 34TH STREET	W/O 1ST AVENUE							RET.	6"	1884
11,12	20	"	"	"						RET.	6"	1929
12	21	1ST AVENUE	INT. OF E. 34TH STREET							RET.	20"	1895
12	21	"	"	"	80n	20"	STL	145' +/-	145' +/-	RET.	20"	1932
12	22	"	"	"						RET.		
12	23	"	"	"						RET.		
12	24	"	"	"	81m	16"	HP STL	90' +/-	90' +/-	RET.	16"	1973

A3-22-2



1988  
1989  
1 1/2" 36'  
11/2 22'

149

E. 34TH ST.

THIRD AVE.

MATCHLINE SEE SHEET 2 OF 12

AUGUST 2012  
SCALE = 1 : 30  
SHEET 1 OF 12

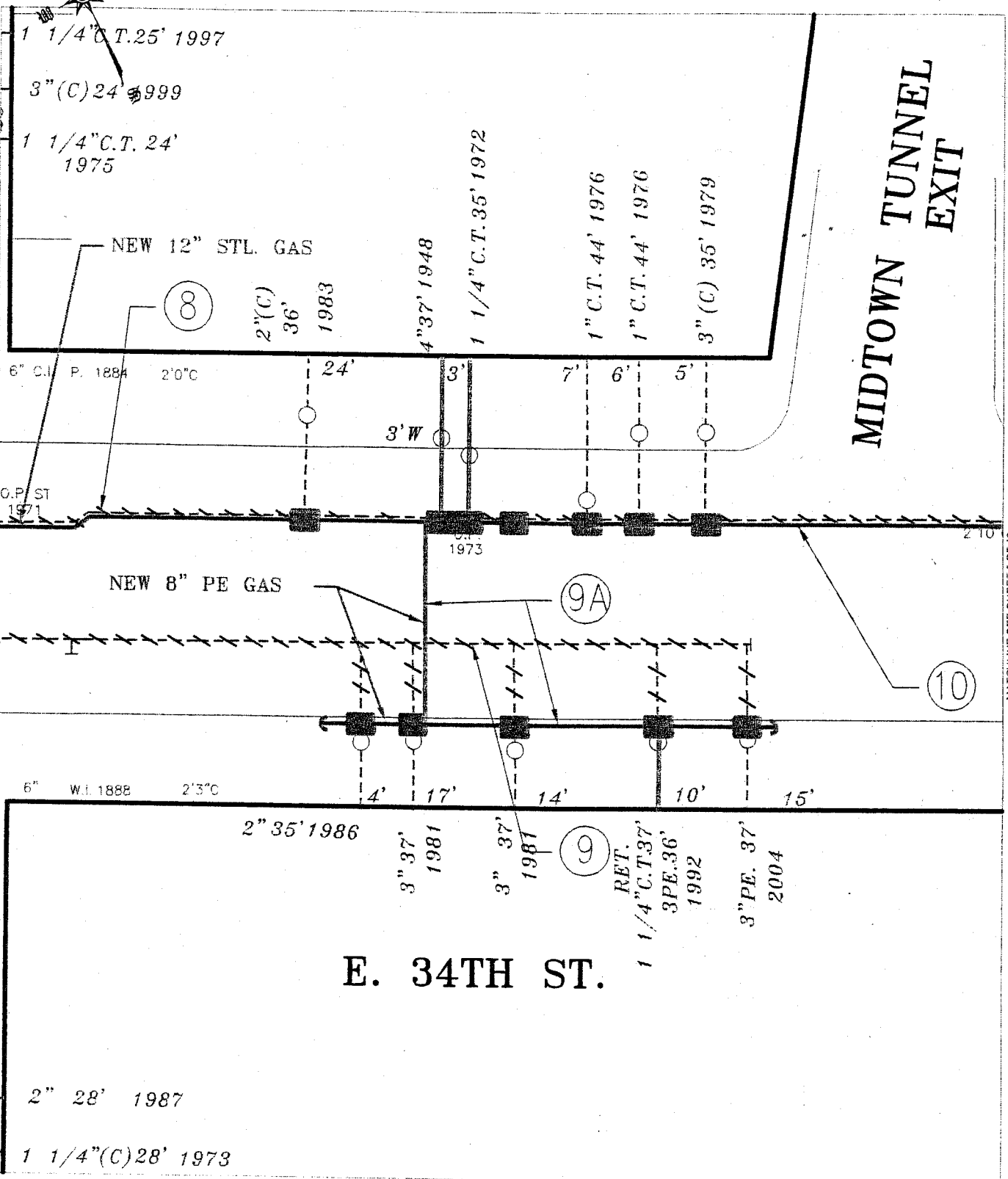


Consolidated Edison Company of New York, Inc.  
CAPITAL PROJECT: HWMBRT5A (MED-607B)  
34TH STREET TRANSITWAY  
BOROUGH OF MANHATTAN

A3-22-3



MIDTOWN TUNNEL EXIT



MATCHLINE SEE SHEET 1 OF 12

MATCHLINE SEE SHEET 3 OF 12

AUGUST 2012
SCALE = 1 : 30
SHEET 2 OF 12



Consolidated Edison Company of New York, Inc.  
 CAPITAL PROJECT: HWMBRT5A (MED-607B)  
 34TH STREET TRANSITWAY  
 BOROUGH OF MANHATTAN

A3-22-4



NEW 12" PE GAS

8" PE. 63' 2006

3" ST(C) 271981

2" 34' 1972

48'

3'0" C

17'

15'

8

O.P.  
1975  
ST(C).

4408

12" PE  
2006

10

12" PE. 2002

335' urwc

12" PE.  
2002 24'

E. 34TH ST.

MATCHLINE SEE SHEET 2 OF 12

MATCHLINE SEE SHEET 5 OF 12

AUGUST 2012

SCALE = 1 : 30

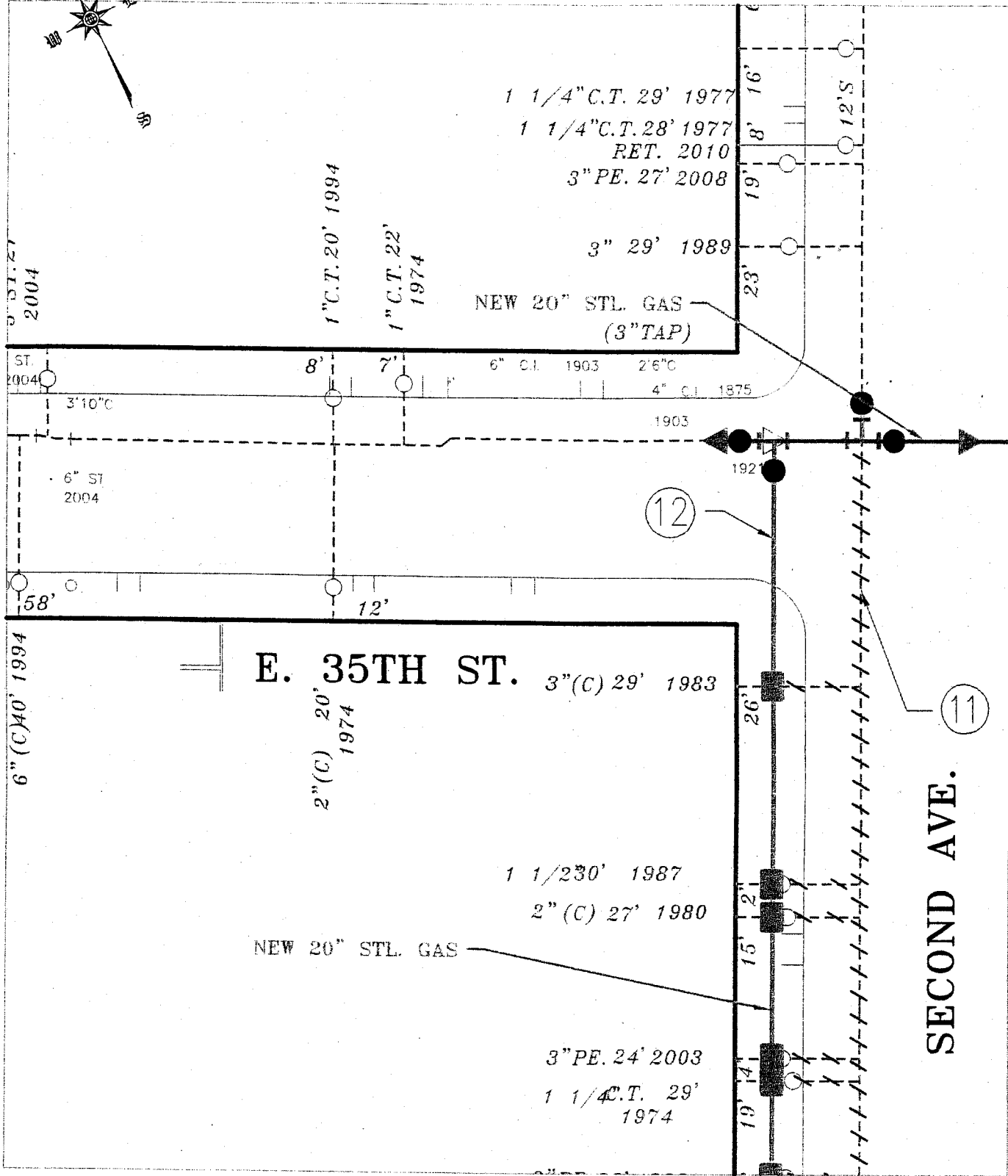
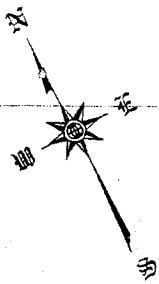
SHEET 3 OF 12



conEdison  
a consolidated inc. company

Consolidated Edison Company of New York, Inc.  
CAPITAL PROJECT: HWMBRT5A (MED-607B)  
34TH STREET TRANSITWAY  
BOROUGH OF MANHATTAN

A3-22-5



MATCHLINE SEE SHEET 5 OF 12

MATCHLINE SEE SHEET 7 OF 12

AUGUST 2012
SCALE = 1 : 30
SHEET 4 OF 12



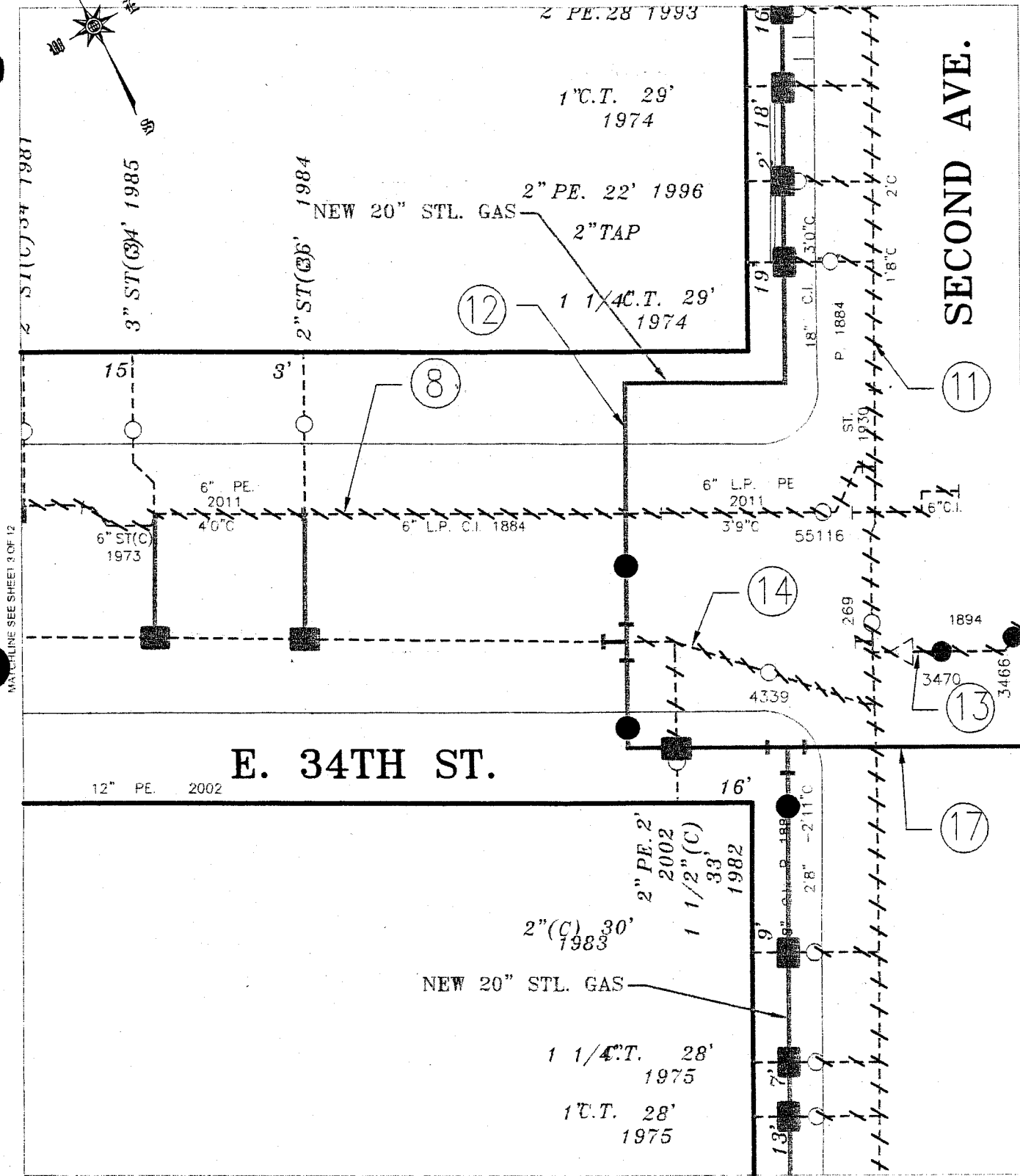
conEdison  
a Consolidated Edison Company

Consolidated Edison Company of New York, Inc  
 CAPITAL PROJECT: HWMBRT5A (MED-607B)  
 34TH STREET TRANSITWAY  
 BOROUGH OF MANHATTAN

A3-22-6



MATCHLINE SEE SHEET 4 OF 12



MATCHLINE SEE SHEET 6 OF 12

AUGUST 2012

SCALE = 1 : 30

SHEET 5 OF 12



conEdison  
a conEdison, Inc. company

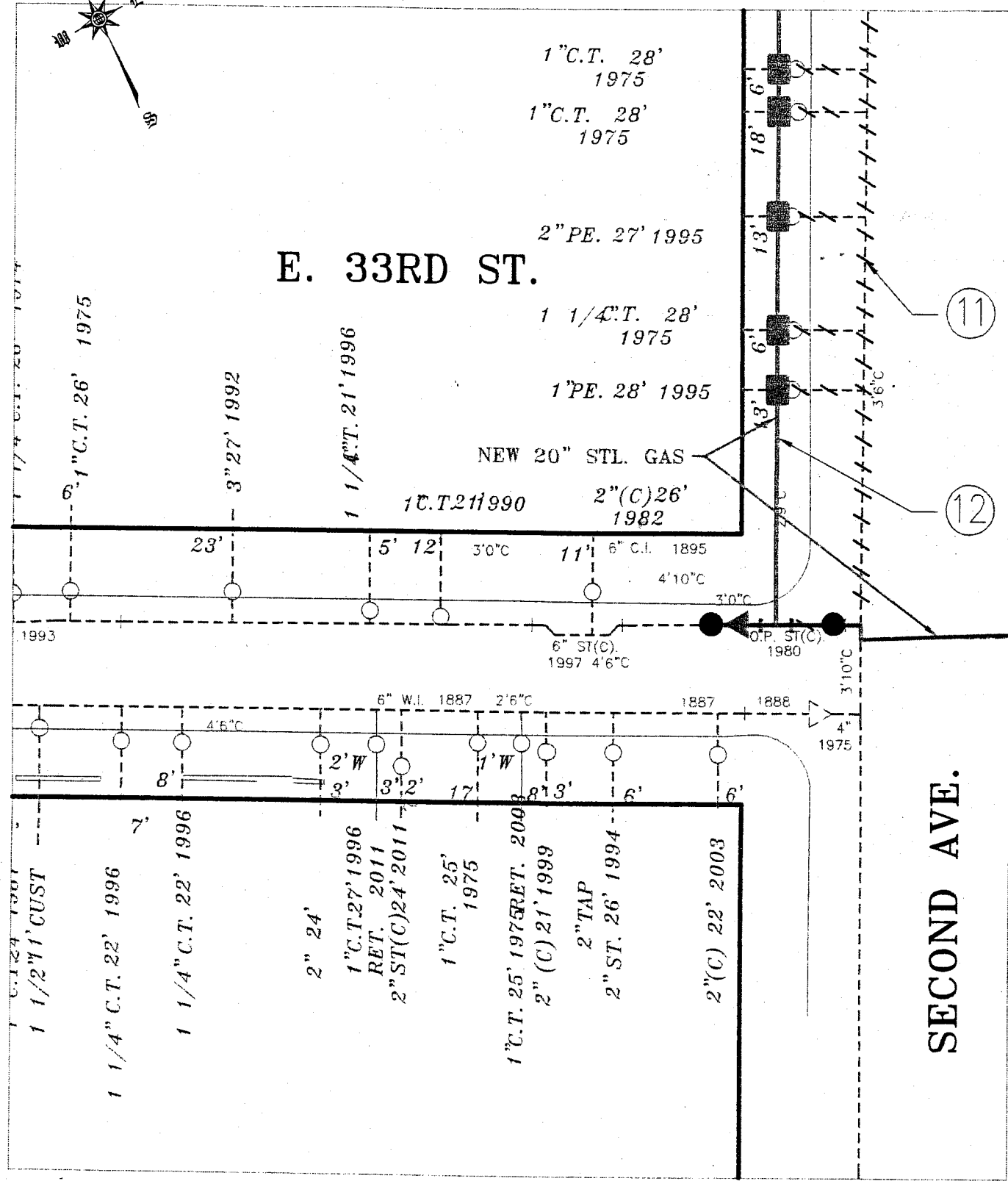
Consolidated Edison Company of New York, Inc.  
CAPITAL PROJECT: HWMBRT5A (MED-607B)  
34TH STREET TRANSITWAY  
BOROUGH OF MANHATTAN

A3-22-7



# E. 33RD ST.

# SECOND AVE.



MATCHLINE SEE SHEET 9 OF 12

AUGUST 2012
SCALE = 1 : 30
SHEET 6 OF 12

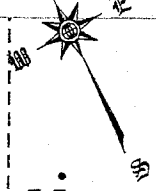
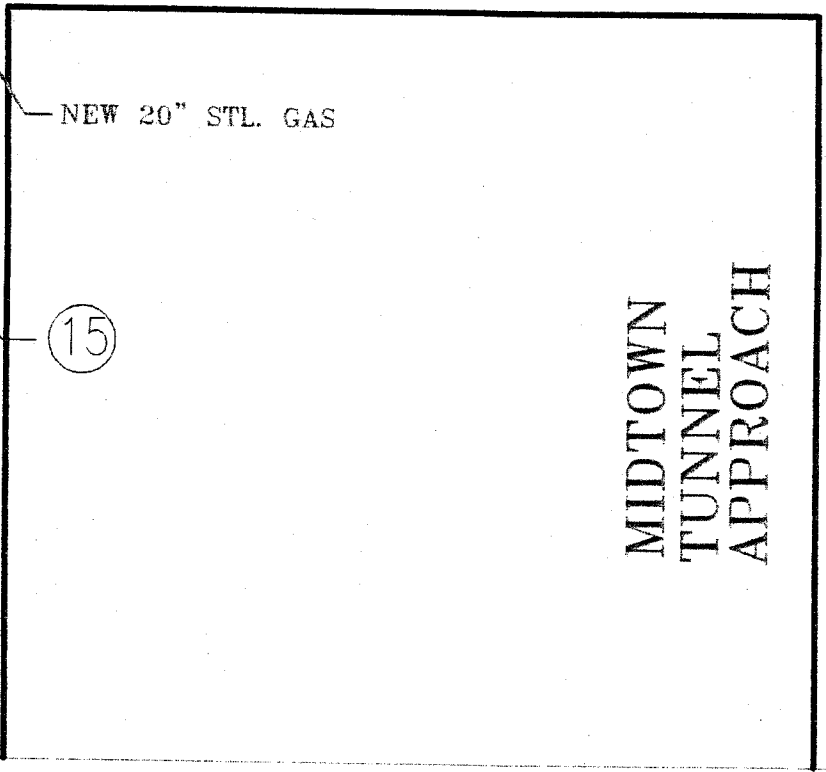
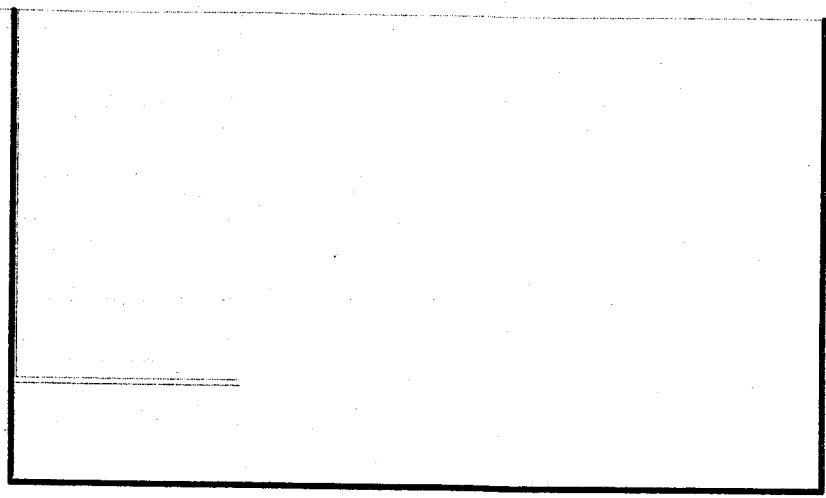


Consolidated Edison Company of New York, Inc.  
 CAPITAL PROJECT: HWMBRT5A (MED-607B)  
 34TH STREET TRANSITWAY  
 BOROUGH OF MANHATTAN

A3-22-8

SECOND AVE.

E. 35TH ST.



MATCHLINE SEE SHEET 4 OF 12

MATCHLINE SEE SHEET 8 OF 12

AUGUST 2012

SCALE = 1 : 30

SHEET 7 OF 12

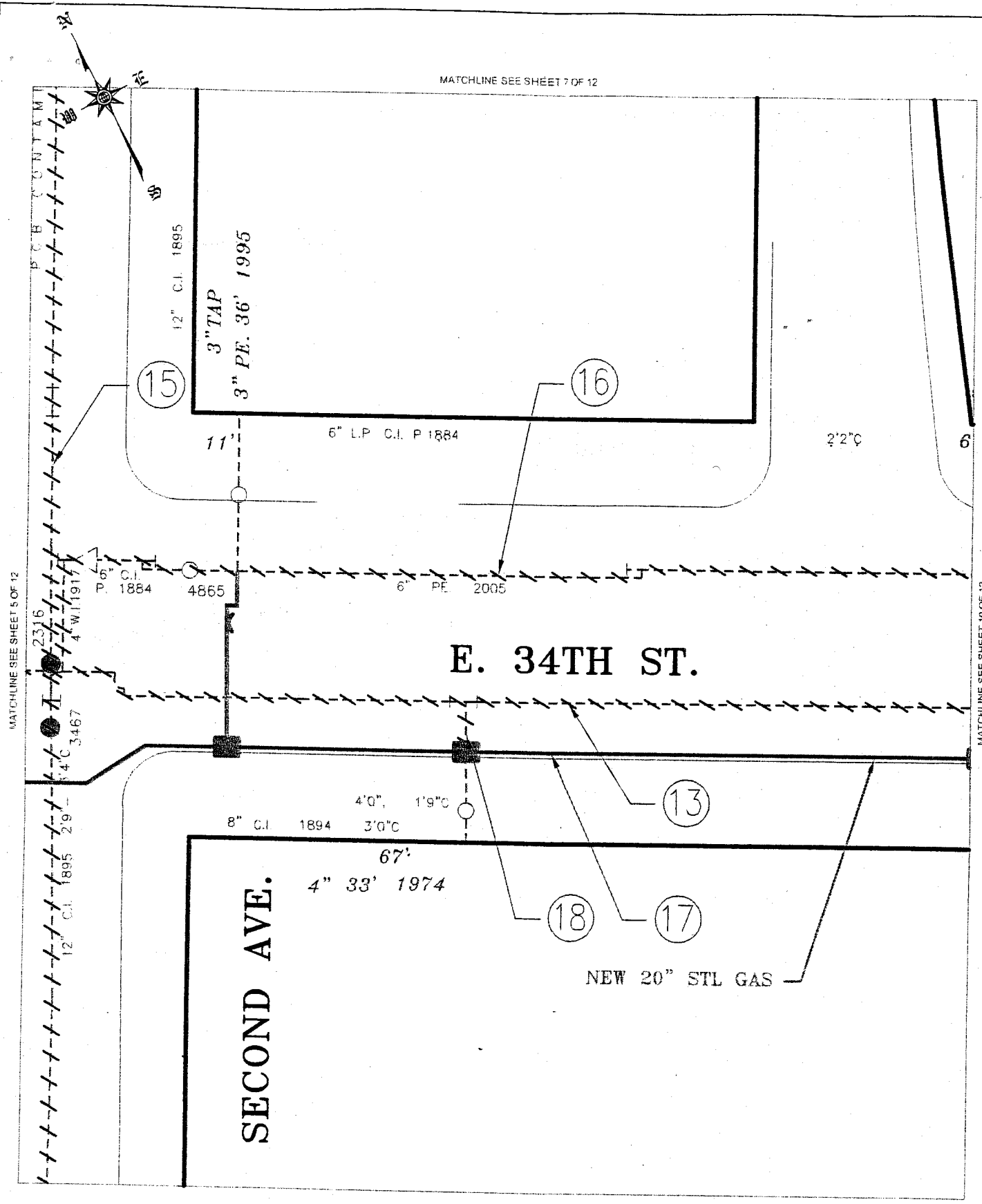


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CAPITAL PROJECT: HWMBRT5A (MED-607B)  
34TH STREET TRANSITWAY  
BOROUGH OF MANHATTAN

A3-22-9

MATCHLINE SEE SHEET 7 OF 12



MATCHLINE SEE SHEET 9 OF 12

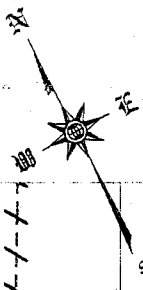
AUGUST 2012
SCALE = 1" : 30'
SHEET 8 OF 12



Consolidated Edison Company of New York, Inc.  
 CAPITAL PROJECT: HWMBRT5A (MED-607B)  
 34TH STREET TRANSITWAY  
 BOROUGH OF MANHATTAN

A3-22-10

MATCHLINE SEE SHEET 8 OF 12



MATCHLINE SEE SHEET 6 OF 12

SECOND AVE.

NEW 20" STL. GAS

E. 33RD ST.

15

12" C.I. 1895 3'9" C

6" ST(C) 1980

6" ST(C) 32' 2009

1" C.T. 23' 1975

5' 4' W

12' 2'6" C

AUGUST 2012

SCALE = 1" = 30'

SHEET 9 OF 12

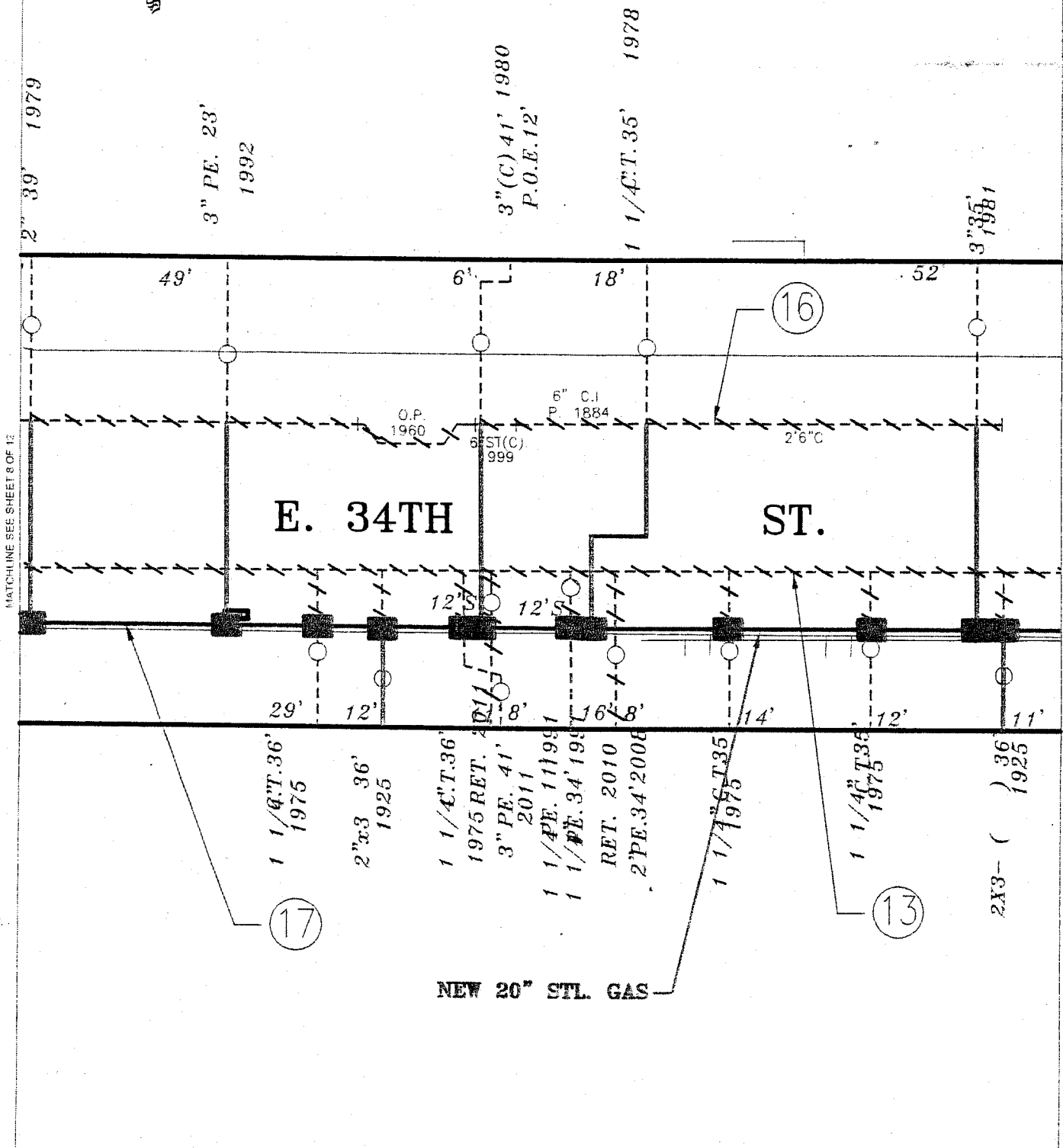


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Consolidated Edison Company of New York, Inc.  
CAPITAL PROJECT: HWMBRT5A (MED-607B)  
34TH STREET TRANSITWAY

BOROUGH OF MANHATTAN

A3-22-11



MATCHLINE SEE SHEET 8 OF 12

MATCHLINE SEE SHEET 11 OF 12

AUGUST 2012

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SCALE = 1 : 30

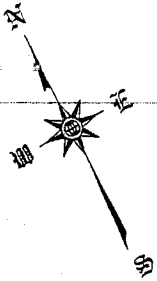
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SHEET 10 OF 12



Consolidated Edison Company of New York, Inc.  
 CAPITAL PROJECT: HWMBRT5A (MED-607B)  
 34TH STREET TRANSITWAY  
 BOROUGH OF MANHATTAN

A3-22-12



3" ST. 27

1884 2'6" C

20

# E. 34TH ST.

MATCHLINE SEE SHEET 10 OF 12

MATCHLINE SEE SHEET 12 OF 12

4'0" C

4' C

8" C.I. 1894

8" ST(C). 2003

VAULT

58'

1 1/4" 27'  
C.T. 32  
1987

19

13

1 1/4" 36'  
C.T. 36

NEW 20" STL. GAS

17

4" (C) 33' 1999

2" (C) 19

2" ST(C) 28' 2005

2" ST. 29' 2

AUGUST 2012

SCALE = 1 : 30

SHEET 11 OF 12

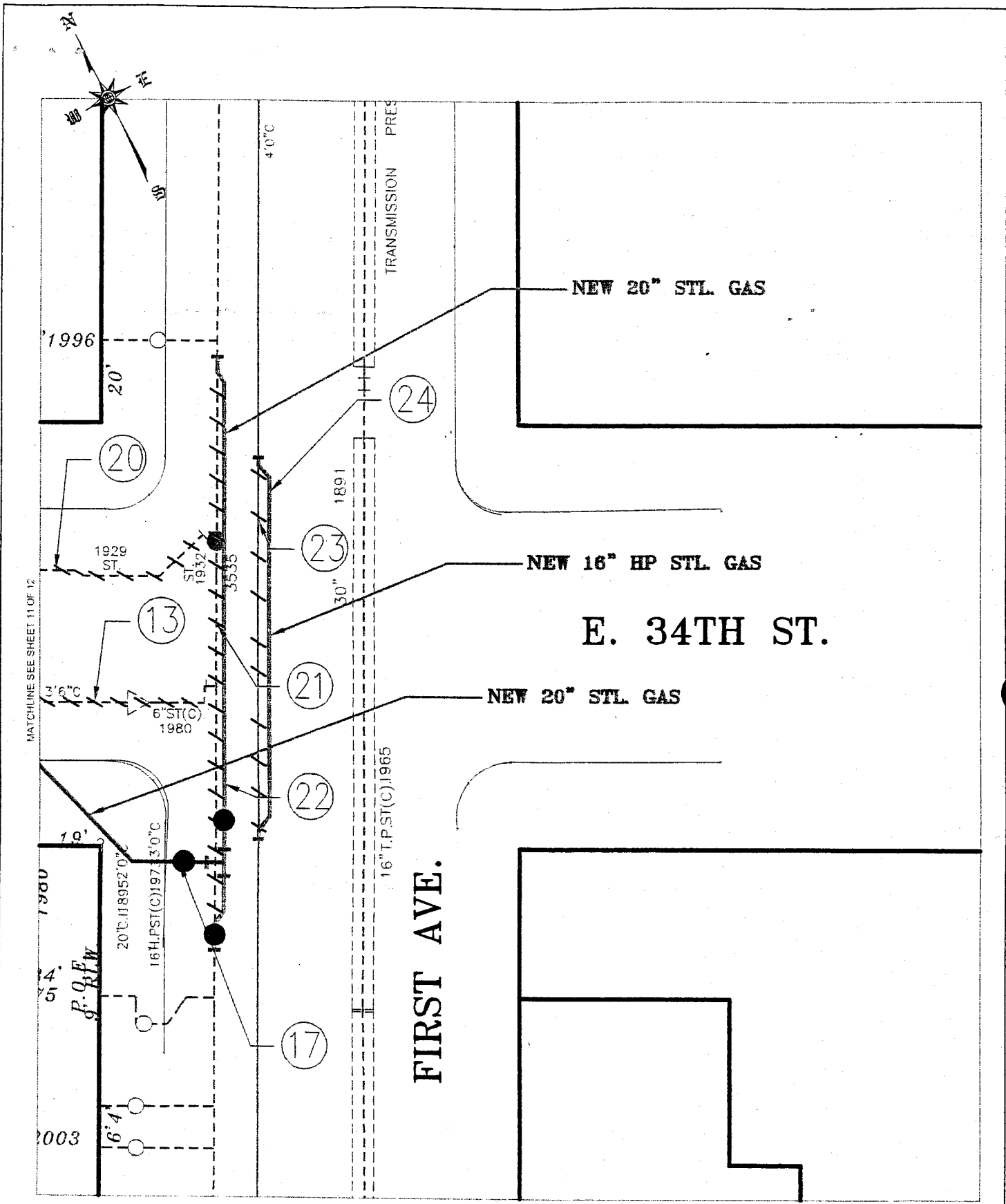


conEdison  
a CONSOLIDATED EDISON COMPANY

Consolidated Edison Company of New York, Inc.  
CAPITAL PROJECT: HWMBRT5A (MED-607B)  
34TH STREET TRANSITWAY

BOROUGH OF MANHATTAN

A3-22-13



AUGUST 2012

SCALE = 1 : 30

SHEET 12 OF 12



Consolidated Edison Company of New York, Inc.

CAPITAL PROJECT: HWMBRT5A (MED-607B)

34TH STREET TRANSITWAY

BOROUGH OF MANHATTAN

A3-22-14



**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 HWMBRT5A / MED607B**

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 - Support & Protect Gas Main Crossing Sewer Up To 24" In Diameter (Ea.)**

1 Int. of E 34<sup>th</sup> Street and 1<sup>st</sup> Avenue

**6.01.6M - Support & Protect Gas Main Crossing Sewer 5'-6"W x 4'-0"H F.T.R.C. (Ea.)**

2 Int. of E 34<sup>th</sup> Street and 1<sup>st</sup> Avenue

**6.01.8 - Support & Protect Gas Services Crossing Trenches and/or Excavations (Ea.)**

25 in Various Locations As Required

**6.01.9 - Support & Protect Gas Main Crossing Water Main Up To 20" In Diameter (Ea.)**

5 Int. of E 34<sup>th</sup> Street and 3<sup>rd</sup> Avenue  
4 in E 34<sup>th</sup> Street bet. 3<sup>rd</sup> Avenue and 2<sup>nd</sup> Avenue  
2 Int. of E 34<sup>th</sup> Street and 2<sup>nd</sup> Avenue

**6.01.10 - Support & Protect Gas Main Crossing Water Main 24" Thru 30" In Diameter (Ea.)**

2 Int. of E 34<sup>th</sup> Street and 3<sup>rd</sup> Avenue

**6.01.11 - Support & Protect Gas Main Crossing Water Main 36" Thru 42" In Diameter (Ea.)**

1 Int. of E 34<sup>th</sup> Street and 3<sup>rd</sup> Avenue

**6.01.12 - Support & Protect Gas Main Crossing Water Main 48" Thru 54" In Diameter (Ea.)**

2 Int. of E 34<sup>th</sup> Street and 2<sup>nd</sup> Avenue

**6.02 - Extra Excavation For the Installation of Catch Basin Sewer Drain Pipes with gas interferences (Ea.)**

5 in Various Locations As Required

**6.03 - Removal Of Abandoned Gas Facilities. All Sizes (L.F.)**

4,000 in Various Locations As Required

**SCOPE OF WORK  
SUPPORT AND PROTECTION  
FOR CONTRACT NUMBER HWMBRT5A / MED607B**

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.

**6.03.1A - Removal Of Abandoned Gas facilities with Possible Coal Tar Wrap. All sizes. (L.F.)  
(For ConEd work only)**

700 in Various Locations As Required

**6.04 - Adjust Hardware to Grade Using Spacer Rings/Adaptors (Street repaving) (Ea.)**

10 in Various Locations As Required

**6.05 - Adjust Hardware to Grade by Resetting (Road Reconstruction) (Ea.)**

20 in Various Locations As Required

**6.06 - Special Care Excavation & Backfilling (C.Y.)**

1000 in various locations, as required, including but not limited to all gas services crossing unsheeted water main trenches.

**6.07 - Test Pits For Gas Facilities (C.Y.)**

100 in Various Locations As Required

**6.08A - Pier and / or Plate Method of Protection for Ductile Iron Water Main with less than 24" cover (Ea.)**

2 in Various Locations As Required

**6.09 - Trench Excavation And Backfill For New Gas Mains & Services (To be performed by City Contractor). (C.Y.)**

2,630 in locations as shown in the attached list & drawings

**SECTION 6.08A – Pier and/or Plate Method of Protection for Ductile Iron Water main with less than 24" Cover**

A. Description:

Under this item, 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 gas facilities of various sizes. The work shall be performed in accordance with the contract plans, specifications and at the direction of the facility operator(s), upon approval from the Resident Engineer.

B. Materials:

The Contractor shall supply all materials (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 plate components. The Contractor shall be solely and totally responsible for the disturbances and/or any damages to such facilities.

D. Method of Measurement:

The quantity to be measured for payment shall be each (EA.) location wherein an additional area of square foot (S.F.) of steel plate is required to be installed to protect ductile iron water mains with a cover of 24 inches or less crossing over gas facilities of various sizes, as directed by the Facility Operator(s) upon approval from the Resident Engineer. The additional area of square foot (S.F.) of steel plate shall be in accordance with BWS Standard Drawing No. 46464-Z.

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, sheeting, maintenance of traffic, traffic plates, and to furnish and install additional backfill and pavement restoration. This item does not cover the costs for special care excavation around gas facilities that are covered under separate items.

F. References:

1. BWS Standard Drawing No. 46464-Z.

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**SECTION 6.09 - Trench Excavation and Backfill for New Gas Mains and Services**  
**(To be performed by City Contractor)**

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.5, General Specification for Backfilling of Trench and Small Openings, which is included in this contract.

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

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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 drawing EP-7 SECT. 6.09 GAS SPECIALTY CONTRACTOR WORK (Sheet EP7-1 and EP7-2), or as encountered based on existing field conditions.

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## 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.

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HWMBRT5A (MED607-B) - E. 34TH STREET TRANSITWAY  
 Item 6.09 - Trench Excavation/ Backfill Calculation

SHEET	CAPITAL ITEMS	Trench Dimensions			Item 6.09 (CY)
		L	W	D	
	<b>INSTALL 12" LP STL MAIN</b>				
	E. 34TH STREET W/O 3RD AVENUE	15.00	3.00	4.50	7.50
	E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE	70.00	3.00	4.50	35.00
	<b>INSTALL 16" LP STL MAIN</b>				
	3RD AVENUE I/O E. 34TH STREET	20.00	3.33	4.83	11.91
	<b>INSTALL 16" HP STL MAIN</b>				
	1ST AVENUE I/O E. 34TH STREET	90.00	3.33	4.83	53.61
	<b>INSTALL 20" LP STL MAIN</b>				
	3RD AVENUE I/O E. 34TH STREET	355.00	3.67	5.17	249.47
	2ND AVENUE BTW E. 35TH STREET AND E. 33RD STREET	820.00	3.67	5.17	576.24
	1ST AVENUE I/O E. 34TH STREET	145.00	3.67	5.17	101.90
	E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE	785.00	3.67	5.17	551.65
	<b>INSTALL 8" LP PE MAIN</b>				
	E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE	150.00	2.67	4.25	63.04
	<b>INSTALL 12" LP PE MAIN</b>				
	E. 34TH STREET W/O 3RD AVENUE	215.00	3.00	4.50	107.50
	E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE	315.00	3.00	4.50	157.50

(A)	Gas trench volume	1915.33
(B)	Tie in pits volume	173.15
	20 ea.	
(C)	Test Pits for gas services	103.11
	58 ea.	
(A)+(B)+(C)		2191.59
	add 20%	438.32
	<b>Total</b>	<b>2629.91</b>
	<b>say 2,630 CY</b>	

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conEdison

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.  
4 IRVING PLACE  
NEW YORK, NY 10003

DISTRIBUTION ENGINEERING  
DISTRIBUTION EQUIPMENT

SPECIFICATION EO-1181  
REVISION 5  
OCTOBER 2008

EFFECTIVE DATE  
OCTOBER 1, 2008

GENERAL SPECIFICATION FOR BACKFILLING  
OF TRENCH AND SMALL OPENINGS

FILE: CONSTRUCTION STANDARDS MANUAL NO. 3, SECTION 37

TARGET AUDIENCE	REGIONAL CONSTRUCTION
NESC REFERENCE	NONE

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EO-1181	5	10/01/2008	10/01/2008	2007-2008 Consolidated Edison Co. of New York, Inc.	2/7
Filing Information		Construction Standards		Manual No. 3, Section 37	

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## 1.0 PURPOSE

This specification details the procedures to be followed in backfilling all Con Edison street openings for electric, gas and steam facilities.

## 2.0 APPLICATION

This specification applies to all Con Edison Customer Service Areas.

## 3.0 REFERENCE SPECIFICATION AND DEFINITIONS

- 3.1 The term "Engineer" used in this specification refers to the Distribution Equipment Engineer or his authorized representative.
- 3.2 The term Construction Representative shall mean the Construction Manager, Contract Construction Manager, or his authorized representative.
- 3.3 The terms "Type 3/8", "Type I" and "Type II" shall be as defined in EO-8085.
- 3.4 The term "small opening" shall refer to street opening which are 6' x 5' or smaller.
- 3.5 The term "suitable backfill" shall refer to in-place material excavated from the trench or opening which satisfies the following requirements:
- 3.5.1 The excavated material shall be free of all broken asphalt pavement, broken concrete, brick, all organic material, and all debris.
- 3.5.2 The excavated material shall be substantially sandy soil gritty and granular in texture and have a small amount of rocks compared to the total volume of soil. It shall have no rocks greater than 2 inches in size.
- 3.5.3 The excavated material shall be substantially free of clay like or clayey soil. Clayey soil shall be determined as soil that is powder like in texture when dry and capable of being molded when wet.

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EO-1181	5	10/01/2008	10/01/2008	2007-2008 Consolidated Edison Co. of New York, Inc.	3/7
Filing Information		Construction Standards		Manual No. 3, Section 37	

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- 3.5.4 Frozen backfill material shall either be removed or broken into small particles before being compacted. Excessively wet material shall be mixed with dry material to reduce moisture content before backfilling.
- 3.5.5 Fill materials, known as "Stone Dust", or "Pond Fill", containing crystalline silica shall not be used as backfill material.
- 3.5.6 If there are any questions as to suitability of the excavated material, the Engineer shall be consulted.
- 3.6 The term "mechanical compaction" shall mean the use of equipment, either impact or plate vibratory, which is designed specifically for soil compaction. The term "hand tamping" shall mean compaction of backfill by means of a plate tamper, which will impart sufficient Force to compact the backfill material.
- 3.7 The term "wetted backfill" shall mean backfill material containing sufficient moisture so that when molded by hand it will form a firm shape. If the specimen crumbles it lacks sufficient moisture. If water is squeezed from the specimen it contains too much moisture.

#### 4.0 REQUIREMENTS

##### 4.1 Compaction

- 4.1.1 The term "compacted", for both "mechanical compaction" and "hand tamping", shall mean a minimum level of compaction of 95% of the maximum dry density of the backfill material used as determined by a Standard Proctor Test (ASTM D-693). In lieu of a Standard Proctor Test a "one point" test shall be done by taking a sample of the soil and compacting it using a Standard Proctor mold procedure and determining the maximum in field density that can be obtained and 95% of this value should be used as a comparison to the actual compaction achieved.
- 4.1.2 In lieu of the above, when using "suitable backfill", compaction will be considered adequate if density readings of the compacted fill equal 95% of the readings of the in-place material (i.e. density readings must be taken at the time of excavation to use as reference for compaction). For this type of "before and after" comparison, devices such as the nuclear density tester may be used.

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EO-1181	5	10/01/2008	10/01/2008	2007-2008 Consolidated Edison Co. of New York, Inc.	4/7
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## 4.2 Density Testing

- 4.2.1 The sand-cone test, ASTM D1556- or Nuclear Density tester may be used for all in place density tests. Other methods may be used upon approval of the Engineer.
- 4.2.2 The Construction Representative or Engineer may order as many in-place density tests as he deems necessary to insure proper compaction. If an in-place density test indicates insufficient compaction, the Contractor shall re-compact the area in question until the backfill is compacted to the requirements set forth in paragraph 4.1.1. The Contractor may elect to take additional tests 5 feet on both sides of the test which failed, and average the values of the three readings. If the average value of the three tests meets the compaction requirements, the area in question will be considered sufficiently compacted and no additional compaction will be required. If the average value does not meet the compaction requirements, the Contractor will be required to pay for the two additional in-place density test and recompact the area, which has been determined to be insufficiently compacted.

## 4.3 Procedure For Electric Duct Backfill

- 4.3.1 The following backfill procedure shall be used for concrete duct, asbestos cement, plastic and fibre conduit.
- 4.3.2 Bedding - Where the ducts are in a rock area, a minimum 4" bed of Type 3/8" backfill shall be placed. It shall be wetted and mechanically compacted to form a firm base for the support of the ducts. Suitable backfill may be used if it is free of stones larger than 2 inches.
- 4.3.3 For concrete conduit, asbestos cement conduit, plastic and fibre conduit encased in concrete, the trench shall be filled with suitable backfill as defined in paragraph 3.5 or Type II material in 12 inch wetted lifts. Each lift shall be mechanically compacted.
- 4.3.4 For direct buried asbestos cement, plastic and fibre conduit, the trench shall be filled with Type 3/8 material to a level of 12 inches above the ducts. It shall be compacted by hand in a no more than
- 4.3.5 12 inch wetted lifts. The remaining trench shall be backfilled with suitable backfill or Type II material in 12 inch wetted lifts mechanically compacted.

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<b>Filing Information</b>		Construction Standards		Manual No. 3, Section 37	

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#### 4.4 Procedure For 138kv Cable Pipe Installation

4.4.1 All installation of 133KV and 345KV cable pipe type feeders shall comply with the requirements set forth in EO-1104 and EO-1171 respectively.

4.4.2 The requirement for the use of excavated material as "suitable backfill" shall follow the requirements of paragraph 3.5.

#### 4.5 Procedure For Backfilling Gas Trenches & Small Openings

##### 4.5.1 Coated Steel & Plastic Gas Pipe Trenches

- a. A smooth surface shall be excavated in the bottom of the trench and the pipes laid to grade. Where the trench is in a rock area, a minimum of 4 inches of Type 3/8 material shall be placed, wetted and mechanically compacted to form a firm base for the gas pipes.
- b. The trench shall be backfilled with Type 3/8 material to a height of 12 inches above the pipe in a maximum of 12 inch wetted lifts which shall be hand compacted.
- c. The remaining trench shall be backfilled with Type 3/8, Type I, Type II or suitable existing backfill in a maximum of 12 inch wetted lifts, which shall be mechanically compacted.
- d. The density of the compacted backfill shall be tested and accepted or rejected in accordance with paragraph 4.2.2.

##### 4.5.2 Cast Iron, Plastic & Steel Gas Pipe In Small Openings

- a. Backfill material shall be Type 3/8, or suitable existing backfill, which has been segregated to remove all rocks, which may damage the pipe coating.
- b. Openings shall be backfilled to a height of 12 inches above the pipe in a maximum of 12 inch wetted lifts, which shall be hand, compacted. The remainder of the openings shall be backfilled in 12 inch wetted lifts with Type I or Type II or "suitable backfilled" as per paragraph 7 which shall be mechanically compacted.

Specification	Revision	Rev Date	Effective Date	Copyright Information	Page
EO-1181	5	10/01/2008	10/01/2008	2007-2008 Consolidated Edison Co. of New York, Inc.	6/7
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- c. The density of the compacted backfill shall be tested and accepted or rejected in accordance with paragraph 4.2.2.

**4.6 Backfilling Concrete Coated & Steel Jacketed Steam Main Trenches**

4.6.1 Bedding - A smooth surface shall be established in the bottom of the trench and the pipes leveled and laid on a firm base. Where the trench is in a rock area, a minimum of 4 inches of Type I material shall be placed, wetted and mechanically compacted to form a firm base.

4.6.2 The trench shall be backfilled with Type I, or Type II or suitable backfill material in 12 inch wetted lifts, which shall be mechanically compacted.

4.6.3 The backfill shall be tested and accepted or rejected in accordance with paragraph 4.2.2.

**5.0 PRECAUTIONS**

If a work site is found to contain existing fill material that contains or comprised of "Stone Dust" or "pond Fill", the contractor shall cover the material with a 3" layer of sand. If this material is found to be stockpile at a work site, it shall be covered with a tarpaulin or removed from the work site.

Edward A. Bertolini ( Signature on File)  
 Joseph Somma  
 Department Manager  
 Distribution Substation and Equipment  
 Distribution Engineering Department

Jay Sun

<b><u>REVISION No. 5</u></b>	<b><u>FILE:</u></b>
Updated Format	Construction Standards Manual 3 Section 237 - Subway

Specification	Revision	Rev Date	Effective Date	Copyright Information	Page
EO-1181	5	10/01/2008	10/01/2008	2007-2008 Consolidated Edison Co. of New York, Inc.	77
<b>Filing Information</b>		Construction Standards		Manual No. 3, Section 37	

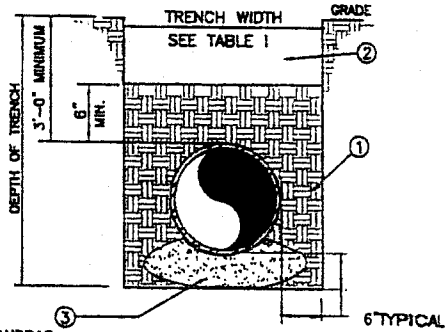
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A3-23N

309495

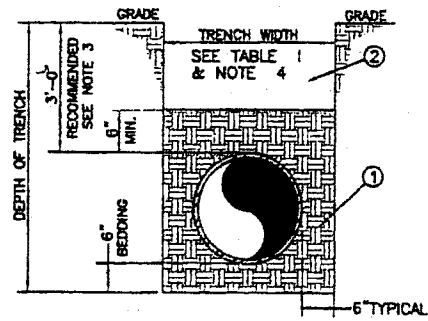
**REVISIONS**

R. GROGAN	7/21/88	0
M. BALDWIN	2/02/06	1
REVISED TRENCH WIDTH FOR 4" THRU 12" MAINS IN TABLE 1 REMOVED REQUIREMENT FOR SANDBAGS FOR STEEL DISTRIBUTION MAIN.		
RAJ.	2/1/06	
M. BALDWIN	4/04/06	2
ADDED REQUIREMENTS OF SAND BAGS FOR STEEL DISTRIBUTION MAIN.		
RAJ.	4/4/06	
M. BALDWIN	3/12/08	3
REVISED TRENCH WIDTH OF 16" AND GREATER SIZE MAINS IN TABLE 1.		
P.L.S.	1/28/08	

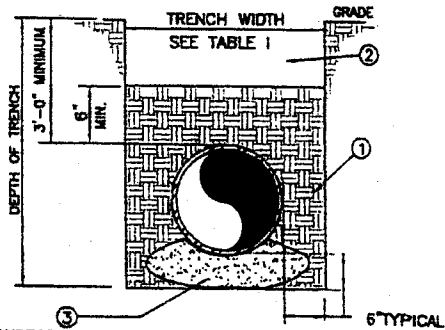


SANDBAG  
CLASS & STOCK # 000-0075

**STEEL MAIN  
(DISTRIBUTION)**



**PLASTIC MAIN  
(DISTRIBUTION)**



SANDBAG  
CLASS & STOCK # 000-0075

**STEEL MAIN  
(TRANSMISSION)**

ITEM NO.	DESCRIPTION	SPEC. OR DWG. NO.
1	3/8" SAND/CLEAN FILL/ RECYCLED BACKFILL	EO-8085
2	SUITABLE BACKFILL	EO-1181
3	SANDBAG	ASTM C-33

SIZE OF MAINS	TRENCH WIDTH	DEPTH OF TRENCH
1 1/4"	1'-4"	3'-8"
2"	1'-4"	3'-9"
3"	1'-4"	3'-10"
4"	1'-4"	3'-11"
6"	1'-6"	4'-1"
8"	1'-8"	4'-3"
10"	1'-10"	4'-5"
12"	2'-0"	4'-6"
12"	2'-2"	4'-6"
16"	2'-4"	4'-10"
20"	2'-6"	5'-2"
24"	3'-0"	5'-6"
30"	3'-6"	6'-0"
36"	4'-0"	6'-6"

**GENERAL NOTES:**

- VARIATIONS IN COVER MAY BE REQUIRED BECAUSE OF SUBSURFACE CONDITIONS INCLUDING DEPTH OF EXISTING FACILITIES. WHEN COVER IS LESS THAN 2'-0" FOR DISTRIBUTION MAINS OR LESS THAN 3'-0" FOR TRANSMISSION MAINS, THE PIPE SHALL BE PROTECTED AS PER DWG. EO-6799-C.
- WHEN SHEETING IS USED, THE "TRENCH WIDTH" DIMENSION SHALL BE MEASURED FROM THE INSIDE OF THE SHEETING.
- DISTRIBUTION MAINS SHOULD BE INSTALLED WITH 3'-0" OF COVER SO AS TO ALLOW THE COVER ON THE SERVICE PIPING TO BE A MINIMUM OF 2'-0".
- WHEN INSTALLING COILED PLASTIC PIPE, THE TRENCH WIDTH CAN BE LESS THAN SHOWN.
- INSTALL A SANDBAG AT 10' INTERVALS

**REFERENCE DWGS & SPECS:**

GAS MAINS INSTALLATION	G-8005
SHEETING	EO-16954-B
	EO-16965-B
PROTECTIVE COVER	EO-6799-C
BACKFILLING	EO-1181
	EO-8085

THIS DWG. SUPERSEDES ----- EO-7922

EFFECTIVE DATE 8/21/98

**TRENCH EXCAVATION FOR  
GAS MAINS UP TO 350 PSIG**

CONSOLIDATED EDISON COMPANY OF N.Y., INC.  
GAS OPERATIONS DEPT.

DATE 7/21/06  
LAST REV. 3/12/06

DWG. NO. **309495** REV. 3

GAS OPERATIONS  
CONSTRUCTION STDS.  
VOLUME 2  
SECTION 5

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**END OF ADDENDUM NO. 3**

**This Addendum Consists of Fifty Nine (59) Pages**

(NO TEXT ON THIS PAGE)

**ATTACH TO CONTRACT DOCUMENTS**

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

**PROJECT ID: HWMBRT5A (MED-607B)**

**EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE FROM FDR DRIVE TO LEXINGTON AVENUE**

**INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK, REPLACEMENT OF SEWER,  
WATER MAINS, RESURFACING, STREET LIGHTING, AND TRAFFIC SIGNAL WORK**

**Together With All Work Incidental Thereto**

**BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

**ADDENDUM NO. 4**

**DATED: March 15, 2013**

---

**This Addendum is issued for the purpose of amending the requirements of the contract documents and is hereby made part of said contract documents to the same extent as if it was originally included therein.**

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The Standard Sewer Specifications of the Department of Environmental Protection (dated August 1, 2009), Sewer Design Standards of the Department of Environmental Protection (dated (September 2007) Revised January 2009), Standard Water Main Specifications of the Department of Environmental Protection (dated August 1, 2009), Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), and the Standard Highway Specifications (Volumes I and II) of the Department of Transportation (dated November 1, 2010) of The City of New York, shall 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. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS
- C. AMENDMENTS TO THE STANDARD SEWER SPECIFICATIONS
- D. AMENDMENTS TO THE STANDARD WATER MAIN SPECIFICATIONS

**A. NOTICE TO BIDDERS**

- (1) (A) The Contractor is advised that copies of the Standard Sewer Specifications (dated August 1, 2009), Sewer Design Standards (dated (September 2007) Revised January 2009), Standard Water Main Specifications (dated August 1, 2009), Specifications For Trunk Main Work (dated March 2012) and Water Main Standard Drawings (latest revisions) are available to all prospective bidders at no cost upon presentation of receipt of purchase of Bid Package at the following location:

Department of Design and Construction  
Division of Infrastructure  
Design Services, Specifications, 3<sup>rd</sup> Floor  
30-30 Thomson Avenue  
Long Island City, NY 11101

- (B) The Contractor is advised that copies of the Standard Highway Specifications (Volume I and II) (dated November 1, 2010), Standard Highway Details of Construction (latest revisions), Division of Street Lighting Specifications (latest revisions), Division of Street Lighting Standard Drawings (latest revisions), Standard Specifications for Traffic Signals (latest revisions), and Standard Drawings for Traffic Signals (latest revisions) are available to all prospective bidders for a fee at the following location:

Department of Transportation  
55 Water Street, Ground Floor  
New York City, NY 10041

- (2) The Contractor is notified that it is the intent of this Agency to commence work promptly after registration of the contract and to order the Contractor to commence work within two (2) months after registration.
- (3) The Contractor shall furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers shall be Type B, unless otherwise directed by the Engineer, and shall 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.
- (4) 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.
- (5) All existing house connections shall be maintained and supported during construction. The Contractor shall 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.
- (6) 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 shall be replaced in kind and as directed by the Engineer. The cost of such work shall be deemed included in the prices bid for all items of work under this contract.
- (7) 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 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, shall be replaced with Bolted Split-Sleeve Restrained Coupling.
- (8) The Contractor is responsible for any damage to the existing street 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 shall be performed according to NYCDOT Bureau of Traffic's Standard Drawings and Specifications 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 Mr. Michael R. LeFosse of New York City Department of Transportation at (718) 786-2236.

- (9) (A) The Contractor is informed that under this contract certain appurtenances (expansion joints) shall be "delivered and installed" only. The Contractor shall pick-up the "delivered and installed" items from the New York City Department of Environmental Protection (DEP) Third Ward Yard and deliver them to the site and install them. The Contractor's attention is directed to **Section 5.07B** that is made part of this addendum.

(B) The Contractor is advised that under this contract payment for deliver and install together with pick-up at the DEP designated storage yard of the Expansion Joints of the specified diameters shall be made under the following items:

- (a) Item No. 61.23EJB48 - DELIVERING AND INSTALLING 48-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET

- (10) **"As-Built" Drawings For Water Mains And Appurtenances 24-Inches (600-mm.) And Larger:**

Upon the completion of the work and as a condition precedent to obtaining the certificate for substantial completion for the project under **Article 44** of the Contract, the Contractor shall furnish "As-Built" drawings for water mains and appurtenances 24-inches and larger to the City. The Contractor shall prepare and submit the "As-Built" record drawings to the Engineer for approval. Approved "As-Built" drawings shall 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:

(A) The Contractor shall prepare the "As-Built" drawings on AutoCAD and shall 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 shall 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 shall be 3-mil in thickness.

(B) The "As-Built" drawings shall include but not be limited to the following guidelines summarized below:

- (1) Drawings shall consist of the same legend and layout of title boxes shown on the contract drawings.
- (2) Each plotted Mylar drawing shall contain the signature and stamp of the Contractor's NYS Professional Engineer/Registered Architect.
- (3) The drawings shall include:
  - (a) street name and crossing street(s) or distance from;
  - (b) north arrow;
  - (c) property lines and widths;
  - (d) legal and existing street widths, street alignment and grades;
  - (e) "new" curb lines and widths;
  - (f) water main center line measured off the "new" curb line;
  - (g) 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;
  - (h) alignment and appurtenance location stationing, and deflection angles;
  - (i) cover and elevations (Datum used shall be that of the Borough where work is located);
  - (j) location of pipe joints;
  - (k) profile of all piping;
  - (l) complete details of all outlet piping roundabouts;
  - (m) complete details of all blow-off connections to the sewer;

- (n) complete details of all air cocks;
- (o) location of taps and access manholes;
- (p) location of all cathodic protection stations;
- (q) Venturi sensing lines plans and profiles;
- (r) all appropriate notes.

(C) The cost of preparing and submitting "**As-Built**" approved drawings shall 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.

## B. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS

- (1) Refer to Standard Highway Specifications Volume II (November 1, 2010), Page 549:  
Add the following new **Section HW-900**:

### SECTION HW-900 - Allowance For Maximum Incentive For Early Completion/Liquidated Damages

#### HW-900.1. GENERAL.

Since project HWMBRT5A (MED-607B) is critical and TIME IS OF THE ESSENCE, the City is making available to the Contractor certain incentive payments. The incentive payment amount will be tied to a scheduled substantial completion deadline for this Capital Project. To earn an incentive payment amount, the Contractor shall have to meet the Contractual scheduled substantial completion deadline for this Capital Project. Please be advised that the Contractual scheduled substantial completion deadline for this Capital Project may be extended by the Commissioner in accordance with **Article 13 "Extension Of Time For Performance"** of the Standard Construction Contract.

Any dispute, negotiation and/or any other cause resulting in a delay, whether caused by the City, the Utilities, or any other party, which results in the Contractor's failure to meet the scheduled substantial completion deadline for the incentive as set forth in **Subsection HW-900.2.**, will result in no payment of the entire incentive and the Contractor agrees that it shall not bring a claim against the City for the incentive payment. (See below for more details.)

The Contractor is a sophisticated business entity involved in the construction industry with access to legal representation and understands that by entering into this Contract with the City that the Contractor hereby waives any and all claims it may have against the City or any of its officers, employees or agencies for the Contractor failing to meet the scheduled substantial completion deadline and, thus not receiving any incentive payment available for this Capital Project. This includes any portion of the incentive payment, which the Contractor forfeits by failing to meet the scheduled substantial completion deadline. As a sophisticated business entity involved in the construction industry, the Contractor understands that it is possible that it may not receive any incentive under this Contract and that it cannot bring any claim or lawsuit in any jurisdiction against the City if it does not meet the scheduled substantial completion deadline for any reason and does not earn the incentive payment. The City's goal is that the Contractor will meet the scheduled substantial completion deadline for this Capital Project and to pay the Contractor the incentive payment.

Furthermore, if the City does not pay any incentive for this Capital Project because the Contractor did not meet the scheduled substantial completion deadline and the Contractor's failure to meet such scheduled substantial completion deadline may be due to a delay by the City or any City agency, any Utilities or any other cause whatsoever, shall not give rise to a claim by the Contractor against the City for a compensable delay under the Damages for Delay Pilot Program, which is included as a part of this Contract, or any other claim against the City. The early completion incentive is separate and distinct from the City's damages for delay pilot program and the Contractor agrees and understands that the incentive payment cannot be claimed under the damages for delay pilot.

Moreover, the Contractor hereby waives any and all rights (and hereby understands what it is waiving as described herein) the Contractor may have or thinks it has in law (contract law or torts law) or in this Contract to bring any kind of claim against the City, if the City, based on this Contract, does not pay the incentive amount for this Capital Project for any reason.

#### HW-900.2. INCENTIVE/LIQUIDATED DAMAGES.

Timely completion of all work, excluding tree planting, is essential to this project. In order to insure such timely completion the City is providing incentive payment or, in the event that the Contractor fails to meet the scheduled substantial completion date, liquidated damage assessment for this contract, as set forth below.

The Contractor shall be assessed liquidated damages, per **Article 15** of the Standard Construction Contract and as shown in Schedule "A", in the event the Contractor fails to substantially complete all work excluding tree planting, within the times fixed for such completion in Schedule "A".

(1) General Provisions:

- (a) Two (2) types of incentive payment amounts are available to the Contractor under this **Subsection HW-900.2**. The amounts are set forth below in **Paragraph (4)** of this **Subsection HW-900.2**.
- (b) An incentive payment will be authorized to the Contractor only if all work of the contract including, but not limited to, all change order work for the contract, receives a determination of substantial completion, as defined in **Paragraph (6)** of this **Subsection HW-900.2**, below, prior to or at the scheduled substantial completion date, as defined in **Paragraph (2)** of this **Subsection HW-900.2**, below.
- (c) No incentive will be authorized for the early completion of the contract in the event that substantial completion of the work of the contract occurs after the scheduled substantial completion date, regardless of delays, including delays attributable to the City. Examples of delays that may cause the Contractor to miss the completion date and not earn the available incentive payment amounts include, without limitation, delays resulting from subsurface conditions at the site materially differing from any shown on the contract drawings or indicated in the specifications, delays resulting from such subsurface conditions as could not reasonably have been anticipated by the Contractor and were not anticipated by the City, and delays due to private utilities, which conditions will materially affect the cost of the work to be done under the contract. Notwithstanding the above, the Commissioner may grant an extension of time in accordance with **Article 13** of the Standard Construction Contract for any or all of such delays.
- (d) Liquidated damages will be assessed by the City against the Contractor if substantial completion of the work of the contract does not occur by the scheduled substantial completion date, plus authorized time extensions pursuant to **Article 13** of the Standard Construction Contract.
- (e) The determination of incentive payment or liquidated damage assessment will be made solely by the Commissioner, and the Commissioner's decision with respect thereto shall be accepted as final, binding, and conclusive.

- (2) Scheduled Substantial Completion Date: Both the scheduled commencement date and the scheduled substantial completion date, excluding tree planting, is to be set forth in the written Notice to Commence Work to be issued by the Commissioner in accordance with **Article 8** of the Standard Construction Contract. The number of consecutive calendar days for determining the scheduled substantial completion date is set forth in Schedule "A".

(3) (A) Incentive Payments:

- (i) Potential Incentive Payment No. 1: If the work of the contract including, but not limited to, all change order work, receives a determination of substantial completion, as defined in **Paragraph (6)** of this **Subsection HW-900.2**, below, prior to or at the scheduled substantial completion date set for the contract, as defined in **Paragraph (2)** of this **Subsection HW-900.2**, above, plus authorized time extensions under **Article 13** of the Standard Construction Contract, then the City will authorize Incentive Payment No. 1 to the Contractor in accordance with **Paragraph (4)** of this **Subsection HW-900.2**, below, less any and all deductions authorized by this contract or by law; and,
- (ii) Potential Incentive Payment No. 2: If the work of the contract including, but not limited to, all change order work, receives a determination of substantial completion, as defined in



**Paragraph (6)** of this **Subsection HW-900.2.**, below, prior to the scheduled substantial completion date set for the contract, as defined in **Paragraph (2)** of this **Subsection HW-900.2.**, above, plus authorized time extensions under **Article 13** of the Standard Construction Contract, then the City, will authorize Incentive Payment No. 2 to the Contractor in accordance with **Paragraph (4)** of this **Subsection HW-900.2.**, below, less any and all deductions authorized by this contract or by law.

- (B) Liquidated Damages: Should substantial completion of the work of the contract, as defined in **Paragraph (6)** of this **Subsection HW-900.2.**, below, occur after the scheduled substantial completion date set for the contract, as defined in **Paragraph (2)** of this **Subsection HW-900.2.**, above, plus authorized time extensions pursuant to **Article 13** of the Standard Construction Contract, or, if the Contractor, in the sole determination of the Commissioner, should abandon the work, the City will assess liquidated damages against the Contractor in an amount determined as follows: the liquidated damage amount for the contract as stated in **Paragraph (4)** of this **Subsection HW-900.2.**, below, multiplied by the number of calendar days in which substantial completion of the work occurs after the scheduled substantial completion date set for the contract, plus authorized extensions; which said sum, in view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of delay in the 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 shall also apply to the Contractor if it is defaulted pursuant to **Chapter X** of this Standard Construction 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.
- (C) Calculation: For the purposes of calculating the number of calendar days for incentive payment, such calculation shall include the day on which the substantial completion of the contract occurs.

For the purposes of calculating the number of calendar days for liquidated damage assessment, such calculation shall not include the day of scheduled substantial completion of the contract.

(4) Incentive/Liquidated Damage Amounts:

Incentive for Construction :

- Potential Incentive Payment No. 1: For substantial completion of the contract as scheduled, the incentive payment is equal to \$260,000.
- Potential Incentive Payment No. 2: For early completion the additional incentive payment is equal to \$8,000 per day for a maximum of thirty (30) days (\$240,000 maximum additional incentive).

Liquidated Damages:

- \$8,000 per day for the contract.

(5) Maximum Incentive/Liquidated Damage Amounts For Construction :

Maximum Incentive Payment: The maximum incentive amounts payable to the Contractor shall equal the incentive amounts indicated in **Paragraph (4)** of this **Subsection HW-900.2.**, above, as follows:

$$\$260,000 + (\$8,000/\text{day} \times 30\text{-days or } \$240,000) = \$500,000.$$

Liquidated Damage: There shall be no limit to the amount of liquidated damages assessed.

- (6) Substantial Completion: Construction within the contract shall be substantially complete when, in the sole determination of the Commissioner, all Sewer and Water Main work, together with any appurtenances and all change order work, have been completely installed, tested, made operational, and accepted by both the Engineer and the Department of Environmental Protection

(DEP), and all bus bulbs, bus pads, curbs, sidewalks, street lighting work, traffic signal work and all pavement restoration and private utility work has been completed, exclusive of tree planting and punch list work.

**HW-900.3. BASIS OF PAYMENT.**

Payment for any incentives earned by the Contractor under this Capital Projects shall be made in accordance with the applicable **Subsection HW-900.2.(3)(A)** above.

The total estimated cost of this item is the "fixed sum" amount shown for this item in the Bid Schedule. No guarantee is given that the actual lump sum cost for this item will in fact be the "fixed sum" amount. The "fixed sum" amount is included in the total bid solely to insure that sufficient monies will be available to pay any incentives earned by the Contractor.

The "fixed sum" is for bidding purposes only and shall not be varied in the bid. The Contractor will be paid for the actual amount of any incentives earned, less any and all deductions authorized by this contract or by law, regardless of the fixed sum.

*Payment will be made under:*

Item No.	Item Description	Pay Unit
HW-900	ALLOWANCE FOR MAXIMUM INCENTIVE FOR EARLY COMPLETION	F.S.

- (2) **Refer** to Standard Highway Specifications Volume II (November 1, 2010), Page 568: **Add** the following new **Section HW-900H**:

**SECTION HW-900H - Allowance For City Work Acceleration**

Under this section, the Contractor will be paid for City work deemed necessary by DDC's Assistant Commissioner of Construction 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. Non-scheduled work hours are those hours of work outside the permissible hours stated in the original contract OCMC Traffic Stipulations.
- (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.

Such accelerated City work shall be paid for under this item in accordance with the requirements of **Article 26** of the Standard Construction Contract.

Payment made under this Fixed Sum item shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to accelerate the City work as ordered by DDC's Assistant Commissioner of Construction.

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 Assistant Commissioner of Construction.

*Payment will be made under:*

Item No.	Item Description	Pay Unit
HW-900H	ALLOWANCE FOR CITY WORK ACCELERATION	F.S.

### C. AMENDMENTS TO THE STANDARD SEWER SPECIFICATIONS

(1) **Refer** to Subsection 1.06.3 - Hours Of Work, Page I-4:

**Add** the following to Subsection 1.06.3:

- (A) **HOLIDAY CONSTRUCTION EMBARGO** - A special Holiday Construction Embargo shall 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 (13) 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>

(2) **Refer** to Subsection 1.06.27 - Salvageable Materials, Page I-14:

**Delete** the paragraph starting with the words, "No salvageable material...", and ending with the words, "...from the site.", in its entirety:

**Substitute** the following:

Except as specified below, no salvageable material shall be returned to the New York City Department of Environmental Protection regardless of condition. It shall become the property of the Contractor for removal and disposal, by the Contractor, away from the site.

The Contractor shall salvage and deliver to a designated NYCDEP yard all Metropolitan Valves (6" thru 20") removed during construction of the contract.

- (3) **Refer** to **Subsection 1.06.29 - Contractor To Provide For Traffic**, Page I-15:  
**Add** the following to **Subsection 1.06.29**:

See amended Standard Water Main Specifications (August 1, 2009) **Subsection 1.06.29 - Contractor To Provide For Traffic** of this addendum.

- (4) **Refer** to **Section 1.08 - Miscellaneous Provisions**, Page I-19:  
**Delete** **Subsection 1.08.2 - Vendors** in its entirety:  
**Substitute** the following new **Subsection 1.08.2**:

#### 1.08.2 VENDORS

Prior to starting work, the Contractor shall submit in writing to the Engineer the names of all vendors and manufacturers the Contractor intends to use. Unless otherwise specified in the contract documents or a written exception is granted by NYCDDC, the Contractor shall submit only one (1) vendor or manufacturer for each product that is to be incorporated in the contract. The use of multiple vendors or manufacturers to supply the same product will be prohibited, unless otherwise specified in the contract documents or a written exception is granted by NYCDDC. If the vendor or manufacturer is not approved, the Contractor will be notified to either submit another vendor or manufacturer, or have their proposed vendor or manufacturer submit a request for approval from NYCDDC. The Contractor will be prohibited from using the vendor or manufacturer until approval of the vendor or manufacturer has been acquired from NYCDDC.

- (5) **Refer** to **Section 1.08 - Miscellaneous Provisions**, Page I-20:  
**Add** the following new **Subsection 1.08.7**:

#### 1.08.7 SUBMITTAL OF SCHEDULE LOG

The Contractor's attention is directed to **Article 9 - Progress Schedule** of the Contract. The Contractor shall submit along with the proposed progress schedule the following: A schedule log in Excel Format (tied to the proposed progress schedule) indicating a description of and the schedule submission dates for all required submittals, shop drawings, approval requests, design mixes, reports, samples, etc., as required by the specifications and the terms of the contract.

- (6) **Refer** to **Section 2.05 - Precast Reinforced Concrete Pipe**, **Subsection 2.05.4 - Materials, Workmanship And Finish**, Page II-10:

**Delete** from **Subsection 2.05.4**, paragraph (A) CONCRETE in its entirety:  
**Substitute** the following:

(A) CONCRETE - The Concrete shall comply with the requirements of **General Specification 11 - Concrete, as modified in Section 2.15**, and be a homogeneous mixture of such proportions and quality that the pipe will conform to the design and test requirements of these specifications.

- (7) **Refer** to **Section 2.15 - Concrete**, **Subsection 2.15.3 - Modifications**, Page II-23:  
**Delete** from **Subsection 2.15.3**, **Reference Number D 3.2.1** together with its paragraphs in their entirety:  
**Substitute** the following:

D 3.2.1 **DELETE** 3.2.1 to 3.2.9 of GS11 and **SUBSTITUTE** the following:

All concrete mix designs shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN,

LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the preconstruction meeting or from the Engineer. Before the Contractor begins to manufacture concrete, the Contractor shall secure DDC's QACS approval of the mix design the Contractor proposes to use.

The Contractor shall submit for this purpose a statement, in writing, of the sources of all ingredient materials, the type and brand of the cement and the number of pounds of each of the materials in a saturated surface-dry condition making up one (1) cubic yard of concrete. The range of water-cement ratios within which the concrete will be manufactured and the method of mixing to be employed shall also be stated. The mix design submittal shall include gradation of aggregates, specific gravities of ingredients, unit weight, mix proportion for each batch (a minimum of four (4) batches except in case of precast plants where one specific mix may be proposed), compressive strength test results for each mix at 7-days, 28-days (high-early strength mixes may require 6-hours, 24-hours, 3-days and shrinkage test as per the requirements), and graphical representation of strength vs. W/C projected in hours/days.

The Contractor may submit for approval concrete mixes that (within one (1) year of the contract) have been previously approved and used on other jobs with any Bureau of the Department of Environmental Protection or the Department of Design and Construction. Such submittals shall contain evidence that the concrete mix was approved within one (1) year of this contract and shall show that the concrete will be produced at the same mix plant, that the cement and admixtures are the same type (though not necessarily the same brand), that the water/cement ratio is the same and that adjustments have been made in the mix for air content, specific gravity and gradation of the aggregates.

If the Contractor elects to submit a concrete mix that was not previously approved, the Contractor shall submit the new concrete mix in accordance with Chapters 2 and 3 of General Specification 11 as modified herein.

- (8) **Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-26:**  
**Add to Subsection 2.15.3, before Reference Number D 8.2 the following:**

D 7.3.3 **ADD** the following to Subsection 7.3.3 of GS11:

Each Portland cement concrete batching plant shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the preconstruction meeting or from the Engineer. The minimum requirement for approval is that the proposed Portland cement concrete batching plant must be on the New York State Department of Transportation (NYSDOT) approved list for the current construction season.

The minimum requirement for approval of a precast concrete plant is that the proposed plant must be on the NYSDOT approved list. A waiver for this requirement may be granted by the DDC's Quality Assurance and Construction Safety (QACS) Director for special products that no NYSDOT approved plant is capable of producing.

Each Portland cement concrete batching plant shall also be subject to auditing and approval of the DDC's Director of Quality Assurance and Construction Safety (QACS). The Director of QACS may at any time discontinue the use of any previously approved equipment if nonconformance with the specifications results during the progress of the work. When the Director of QACS discontinues the use of the plant, production will not be acceptable for Department work until corrective measures satisfactory to the Director are carried out.

(9) Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-26:

Delete from Subsection 2.15.3, Reference Number D 16.3 together with its paragraphs in their entirety:

Substitute the following:

D 16.3 Testing Service - ADD the following:

The Contractor shall retain the services of an independent testing laboratory to provide for the services outlined in 16.3.1.4 to 16.3.1.11 of GS11, with the exception of those tests specified herein to be performed by the Engineer and the City Retained Laboratory.

All laboratories shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the pre-construction meeting or from the Engineer. The minimum requirement for approval is that the laboratory must have the current AMRL/AASHTO R-18 accreditation in the category of service proposed and must be currently licensed by the NYC Department of Buildings (DOB).

(10) Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-26:

Delete from Subsection 2.15.3, Reference Number D 16.8 together with its paragraphs in their entirety:

Substitute the following:

D 16.8 Responsibilities and Duties of Contractor - ADD the following:

The Contractor may, if the Contractor so desires, take cylinders corresponding to those taken by the Engineer for the City Retained Laboratory. However, determination of payment will be based solely on the cylinders taken by the Engineer for the City Retained Laboratory.

#### CONCRETE TEST CYLINDERS

The Contractor will be responsible for safe delivery of concrete cylinders to the Department of Design and Construction Laboratory, within two (2) days after molding, where they will be properly stored and cured until the date of test, and tested by others, upon removal from the curing room. The Department of Design and Construction testing laboratory will provide the services for the curing and breaking of the test cylinders.

The Contractor shall provide empty cylinder molds and facilities for the proper care of these cylinders while on the site, and shall safeguard them against injury and protect them from the elements.

The Engineer will be responsible for the preparation, documentation and labeling of the cylinders and for notifying the Contractor, at least twenty-four (24) hours in advance, when a shipment of cylinders is ready for delivery, so that cylinders can be tested for the standard twenty-eight (28) day and seven (7) day tests. Cylinders are to be delivered by the Contractor to a designated area near 30-30 Thomson Avenue, Long Island City, New York, or where otherwise directed within the City of New York.

The Contractor shall make arrangements to protect all cylinders from damage during loading, transport to, and unloading at a Department of Design and Construction designated testing laboratory, and shall obtain a receipt for delivered cylinders, which shall be submitted to the Engineer.

- (11) **Refer** to **Subsection 4.05.6 - Design Criteria, Paragraph (G) - Decking, Subparagraph (1), Page IV-15:**

**Delete Subparagraph (1)** in its entirety:

**Substitute** the following:

(1) Unless otherwise specified in the contract documents or approved in writing by the Engineer the minimum live load on decking shall be thirty-five (35) percent more than AASHTO HS20-44 or Contractor's equipment or heaviest truck loading (i.e. concrete truck) whichever is greater plus an impact factor of thirty-three (33) percent.

- (12) **Refer** to **Section 4.06 - Backfilling, Subsection 4.06.3 - Method Of Depositing All Backfill, Page IV-18:**

(A) **Add** the following paragraph to beginning of **Subsection 4.06.3:**

At the preconstruction meeting, the Contractor shall submit for approval a full description of the Contractor's proposed methods to be used for all backfilling operations including, but not limited to, equipment, backfill material, depth of compaction layers, and trench locations where each is to be employed. In the field, the Contractor shall be required to demonstrate that the Contractor's methods of backfilling and compaction shall obtain a minimum of ninety-five (95) percent of Standard Proctor Maximum Dry Density.

(B) **Delete** from **Subsection 4.06.3**, the fourth paragraph in its entirety:

**Substitute** the following:

Unless otherwise approved in writing by the Engineer, backfilling of the remainder of the trenches and excavations from a point not less than two (2) feet above the top of the sewer conduit (i.e. sewer pipes on cradles or encasements, reinforced concrete sewers, basin and house connections, culverts, etc.) to the underside of the pavement shall be progressively deposited in uniform and successive horizontal layers not exceeding twelve (12) inches in depth for the entire width of the trench or excavation and each successive layer shall be solidly compacted by mechanical tamping or other approved means so as to achieve the required density. In deep trenches defined as those requiring sheeting, the Contractor may submit to the Engineer, for approval, an alternate backfill method (i.e. jetting, deeper deposited layers not exceeding twenty-four (24) inches, etc.) for depositing and compacting the backfill from two (2) feet above the top of the sewer conduit to a plane five (5) feet below final surface elevation. However, approval of any alternate backfill method shall not relieve the Contractor from obtaining a minimum of ninety-five (95) percent of Standard Proctor Maximum Dry Density. Should the Engineer determine that the specified density is not being obtained, the area must be re-excavated and backfilled at the Contractor's own cost until the required compaction density is achieved.

(C) **Delete** from **Subsection 4.06.3**, the seventh paragraph in its entirety:

**Substitute** the following:

Backfill shall proceed simultaneously with the withdrawal of sheeting but at no time shall the withdrawal of sheeting exceed a height of six (6) inches above the deposited backfill. Withdrawal of sheeting below levels previously backfilled and compacted is prohibited.

- (13) **Refer** to **Section 5.01 - Reinforced Concrete Sewers, Subsection 5.01.4 - Precast Reinforced Concrete Sewer, Paragraph (C) - Details, second paragraph, first line, Page V-4:**

**Change** the words "C789 or C850 (as required)", to "C1433":

- (14) **Refer** to **Section 5.05C - Reconstruction Of Existing Sewers Using D.E.P. Approved Cured-In-Place-Pipe (CIPP) Lining Method, Subsection 5.05C.6 - Separate Payment, third paragraph, second line, Page V-49**



Change the word, "nine", to "eleven":

(15) Refer to **Section 5.11 - Outfall Structures, Subsection 5.11.2 - Materials**, Page V-95:

Delete from **Subsection 5.11.1**, paragraph (A) in its entirety:

Substitute the following:

(A) Concrete used for outfall structure (including headwalls, reinforced concrete sewer outfalls, cradles and encasements, chambers, manholes and catch basins) shall comply with the requirements of **General Specification 11 - Concrete, as modified in Section 2.15**; and, shall contain entrained air of six percent (6%), and a corrosion inhibitor. The corrosion inhibitor shall consist of a calcium nitrite solution, containing 30 ±2% calcium nitrite solids by weight and having a specific gravity of 1.27 ±0.02. The corrosion inhibitor when used in the manufacturing process shall not produce a significant amount of chloride ions in the final product (less than 1,000-ppm). The ph shall be greater than 8. The admixture shall not contain chemicals that produce a condition injurious to the quality and durability of the concrete or reinforcing steel. Calcium nitrite, which acts as an accelerator, may be used in conjunction with compatible retarding admixtures to control setting time and workability of the concrete, consult the manufacturer of the product. The corrosion inhibitor must be added to the mix immediately after air entraining and retarding admixtures have been introduced into the batch. Acceptance of calcium nitrite based corrosion inhibitor shall be based upon it being listed in the most current New York State Department of Transportation's "Approved List Of Calcium Nitrite Based Corrosion Inhibitors".

(16) Refer to **Section 5.18A - Sewer Cleaning, Subsection 5.18A.3 - Disposal**, Page V-124:

Delete from **Subsection 5.18A.3**, the first paragraph in its entirety:

Substitute the following:

All material removed from the sewers and sewer portions through the manholes under this contract shall become the property of the Contractor and shall be properly disposed of away from the site, at the Contractor's expense.

(17) Refer to Standard Sewer Specifications (August 1, 2009), Page V-161:

Add the following new **Section 5.22D**:

#### **SECTION 5.22D**

#### **INCREMENTAL COST OF (DIFFERENT TYPE) PILES IN LIEU OF (TYPE) PILES**

##### **5.22D.1 DESCRIPTION**

Where the substitution of a different type of pile installation is ordered by the Engineer to replace a type pile that was originally shown or specified to be installed, payment for this substitution shall be made as specified herein.

The Contractor shall include only the incremental cost of all labor, materials, plant, equipment and incidentals necessary to furnish and install a different type of pile in place of a type pile in the respective "INCREMENTAL COST OF (DIFFERENT TYPE) PILES IN LIEU OF (TYPE) PILES" item.

Included in this incremental cost shall be the load test cost difference for different type piles ordered installed in place of the load test cost for type piles originally shown or specified to be installed. No separate or addition payment shall be made for these increased load test costs.

##### **5.22D.2 MATERIALS AND CONSTRUCTION METHODS**

Materials and construction methods for different type piles ordered installed in place of type piles originally shown or specified to be installed shall comply with all requirements of **Section 5.22A - Continuous Flight Auger (CFA) Piles** and **Section 5.22B - Mini-Piles (Grouted)**.

5.22D.3 PAYMENT

Payment for each vertical foot of different type pile directed to be installed by the Engineer in place of vertical foot of type pile originally shown or specified to be installed shall be made under the unit price bid per vertical foot for type pile originally shown or specified to be installed (i.e. TIMBER PILES (TREATED) OR (UNTREATED), STRUCTURAL STEEL H PILES, CONCRETE FILLED STEEL PIPE PILES) item, plus the unit price bid for the respective "INCREMENTAL COST OF (DIFFERENT TYPE) PILES IN LIEU OF (TYPE) PILES" item.

*Payment for Incremental Cost Of (Different Type) Piles In Lieu Of (Type) Piles will be made under the Item Numbers as calculated below:*

The Item Numbers for Incremental Cost Of (Different Type) Piles In Lieu Of (Type) Piles have twelve characters. (The decimal point is considered a character, the third character.)

(1) The first five characters shall define Incremental Cost Of (Different Type) Piles In Lieu Of (Type) Piles:

70.19

(2) The sixth and seventh characters shall define the kind of (Type) Pile to be replaced with a (Different Type) Pile:

- TT - Timber Piles (Treated)
- TU - Timber Piles (Untreated)
- SH - Structural Steel H Piles
- CS - Concrete Filled Steel Pipe Piles

(3) The eighth, ninth, tenth, eleventh and twelfth characters shall define the (Different Type) Pile replacement:

- AN000 - Continuous Flight Auger (CFA) Piles
- MN000 - Mini-Piles (Grouted)
- MN080 - Mini-Caissons (80-Kps Compressive Capacity) (Grouted)
- MN270 - Mini-Caissons (270-Kps Compressive Capacity) (Grouted)

(4) Examples of Item Numbers together with Description and Pay Unit as provided in the Bid Schedule are provided below:

Item No.	Description	Pay Unit
70.19TTAN000	INCREMENTAL COST OF CONTINUOUS FLIGHT AUGER (CFA) PILES IN LIEU OF TIMBER PILES (TREATED)	V.F.
70.19TUAN000	INCREMENTAL COST OF CONTINUOUS FLIGHT AUGER (CFA) PILES IN LIEU OF TIMBER PILES (UNTREATED)	V.F.
70.19CSAN000	INCREMENTAL COST OF CONTINUOUS FLIGHT AUGER (CFA) PILES IN LIEU OF CONCRETE FILLED STEEL PIPE PILES	V.F.
70.19TTMN000	INCREMENTAL COST OF MINI-PILES (GROUTED) IN LIEU OF TIMBER PILES (TREATED)	V.F.
70.19TUMN000	INCREMENTAL COST OF MINI-PILES (GROUTED) IN LIEU OF TIMBER PILES (UNTREATED)	V.F.
70.19CSMN000	INCREMENTAL COST OF MINI-PILES (GROUTED) IN LIEU OF CONCRETE FILLED STEEL PIPE PILES	V.F.
70.19SHMN080	INCREMENTAL COST OF MINI-CAISSONS (80-KPS COMPRESSIVE CAPACITY) (GROUTED) IN LIEU OF STRUCTURAL STEEL H PILES	V.F.
70.19SHMN270	INCREMENTAL COST OF MINI-CAISSONS (270-KPS COMPRESSIVE CAPACITY) (GROUTED) IN LIEU OF STRUCTURAL STEEL H PILES	V.F.

(18) Refer to Section 5.23 - Decking, Subsection 5.23.1 - Description, Page V-161:

**Delete** from **Subsection 5.23.1**, the third paragraph in its entirety:

**Substitute** the following:

Steel plates that are resting on pavement, that are not part of a decking system, and are used to temporarily span trenches and excavations for vehicular traffic and for pedestrian crossings and walkways shall not be included for payment under this decking section. The cost of all labor, materials, equipment, insurance and incidentals necessary to furnish, place, anchor and ramp these temporary steel plates, when and where directed, in order to comply with the requirements of the NYCDOT Office of Construction Mitigation and Coordination (OCMC) traffic stipulations, the directions of the Engineer, and the Contractor's construction operations shall be deemed included in the prices bid for all contract items of work.

(19) **Refer** to **Section 5.23 - Decking, Subsection 5.23.4 - Design Criteria**, Page V-162:

**Add** the following to **Subsection 5.23.4**:

(C) The Contractor may substitute skid resistant steel plates (Non-Skid Textured Plates) for timber mats, subject to approval in accordance with **Subsection 4.05.5**. These steel plates shall be placed flush with the existing roadway and shall be installed in compliance with the requirements of **Subsection 4.05.6(G)**.

(20) **Refer** to **Section 5.32 - Final Restoration Of Pavements**, Page V-183:

**Add** the following to **Subsection 5.32.4 - Specific Pavement Restoration Provisions**:

See amended Standard Water Main Specifications (August 1, 2009) **Subsection 5.32.4 - Specific Pavement Restoration Provisions** of this addendum.

(21) **Refer** to **Section 5.36 - Additional Earth Excavation Including Test Pits, Subsection 5.36.4 - Price To Cover**, Paragraph (3), fifth line, Page V-195:

**Change** 16", to 16'.

## D. AMENDMENTS TO THE STANDARD WATER MAIN SPECIFICATIONS

(1) **Refer** to Subsection 1.06.3 - Hours Of Work, Page I-4:

**Add** the following to Subsection 1.06.3:

- (A) **HOLIDAY CONSTRUCTION EMBARGO** - A special Holiday Construction Embargo shall 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 (13) 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>

(2) **Refer** to Subsection 1.06.14 - Notice To Utility Companies, Etc., To Remove Structures Occupying Place Of Sewers, Water Mains Or Appurtenances, Page I-10:

**Add** the following to Subsection 1.06.14:

- (1) CONSOLIDATED EDISON COMPANY OF NEW YORK (CON EDISON)

There are CON EDISON facilities in the area of construction. The Contractor shall notify CON EDISON at least seventy-two (72) hours prior to the start of construction by contacting Mr. Donald Soldiviero at (212) 460-4834.

- (2) EMPIRE CITY SUBWAY/VERIZON

There are EMPIRE CITY SUBWAY/VERIZON facilities in the area of construction. The Contractor shall notify EMPIRE CITY SUBWAY/VERIZON at least seventy-two (72) hours prior to the start of construction by contacting Ms. Aubrey Makhanlall at (718) 977-8165.

(3) TIME WARNER CABLE OF NEW YORK CITY

There are TIME WARNER CABLE facilities in the area of construction. The Contractor shall notify TIME WARNER CABLE at least seventy-two (72) hours prior to the start of construction by contacting Mr. John Piazza at (718) 888-4261.

(3) **Refer** to **Subsection 1.06.20 - Contractor To Notify City Departments**, Page I-12:  
**Add** the following to **Subsection 1.06.20**:

(1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor shall notify Mr. James Garin, P.E., Assistant Commissioner, Engineering at the Department of Environmental Protection, 59-17 Junction Blvd., 3rd floor low rise, Corona N.Y. 11368, at least thirty (30) days prior to the start of construction.

(2) NEW YORK CITY FIRE DEPARTMENT

The Contractor shall notify the Bureau of Fire Communications at least thirty (30) days prior to the start of construction by contacting Mr. Ed Durkin at (718) 624-3752.

(3) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor shall notify Mr. Steve Galgano, P.E., Chief of Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (718) 786-3550, at least seventy-two (72) hours prior to the start of construction.

The Contractor shall notify Mr. Joseph Noto, P.E., Director, NYCDOT, 55 Water Street, 7<sup>th</sup> Floor, New York, NY 10041 at (212) 839-9621, at least seventy-two (72) hours prior to the start of construction.

(4) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor shall notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. John Matumbo at (212) 860-1845.

(4) **Refer** to **Subsection 1.06.27 - Salvageable Materials**, Page I-14:

**Delete** the paragraph starting with the words, "No salvageable material...", and ending with the words, "...from the site.", in its entirety:

**Substitute** the following:

Except as specified below, no salvageable material shall be returned to the New York City Department of Environmental Protection regardless of condition. It shall become the property of the Contractor for removal and disposal, by the Contractor, away from the site.

The Contractor shall salvage and deliver to a designated NYCDEP yard all Metropolitan Valves (6" thru 20") removed during construction of the contract.

(5) **Refer** to **Subsection 1.06.29 - Contractor To Provide For Traffic**, Page I-15:

**Add** the following to **Subsection 1.06.29**:

(1) Traffic Stipulations:

The Contractor shall refer to Traffic Stipulations identified in the maintenance of traffic requirements under Highway Contract No. HWMBRT5A (MED-607B).

- (6) **Refer** to **Section 1.08 - Miscellaneous Provisions**, Page I-19:

**Delete** **Subsection 1.08.2 - Vendors** in its entirety:

**Substitute** the following new **Subsection 1.08.2**:

#### 1.08.2 VENDORS

Prior to starting work, the Contractor shall submit in writing to the Engineer the names of all vendors and manufacturers the Contractor intends to use. Unless otherwise specified in the contract documents or a written exception is granted by NYCDDC, the Contractor shall submit only one (1) vendor or manufacturer for each product that is to be incorporated in the contract. The use of multiple vendors or manufacturers to supply the same product will be prohibited, unless otherwise specified in the contract documents or a written exception is granted by NYCDDC. If the vendor or manufacturer is not approved, the Contractor will be notified to either submit another vendor or manufacturer, or have their proposed vendor or manufacturer submit a request for approval from NYCDDC. The Contractor will be prohibited from using the vendor or manufacturer until approval of the vendor or manufacturer has been acquired from NYCDDC.

- (7) **Refer** to **Section 1.08 - Miscellaneous Provisions**, Page I-20:

**Add** the following new **Subsection 1.08.7**:

#### 1.08.7 SUBMITTAL OF SCHEDULE LOG

The Contractor's attention is directed to **Article 9 - Progress Schedule** of the Contract. The Contractor shall submit along with the proposed progress schedule the following: A schedule log in Excel Format (tied to the proposed progress schedule) indicating a description of and the schedule submission dates for all required submittals, shop drawings, approval requests, design mixes, reports, samples, etc., as required by the specifications and the terms of the contract.

- (8) **Refer** to **Section 2.15 - Concrete, Subsection 2.15.3 - Modifications**, Page II-11:

**Delete** from **Subsection 2.15.3, Reference Number D 3.2.1** together with its paragraphs in their entirety:

**Substitute** the following:

D 3.2.1 **DELETE** 3.2.1 to 3.2.9 of GS11 and **SUBSTITUTE** the following:

All concrete mix designs shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the preconstruction meeting or from the Engineer. Before the Contractor begins to manufacture concrete, the Contractor shall secure DDC's QACS approval of the mix design the Contractor proposes to use.

The Contractor shall submit for this purpose a statement, in writing, of the sources of all ingredient materials, the type and brand of the cement and the number of pounds of each of the materials in a saturated surface-dry condition making up one (1) cubic yard of concrete. The range of water-cement ratios within which the concrete will be manufactured and the method of mixing to be employed shall also be stated. The mix design submittal shall include gradation of aggregates, specific gravities of ingredients, unit weight, mix proportion for each batch (a minimum of four (4) batches except in case of precast plants where one specific mix may be proposed), compressive strength test results for each mix at 7-days, 28-days (high-early strength mixes may require 6-hours,

24-hours, 3-days and shrinkage test as per the requirements), and graphical representation of strength vs. W/C projected in hours/days.

The Contractor may submit for approval concrete mixes that (within one (1) year of the contract) have been previously approved and used on other jobs with any Bureau of the Department of Environmental Protection or the Department of Design and Construction. Such submittals shall contain evidence that the concrete mix was approved within one (1) year of this contract and shall show that the concrete will be produced at the same mix plant, that the cement and admixtures are the same type (though not necessarily the same brand), that the water/cement ratio is the same and that adjustments have been made in the mix for air content, specific gravity and gradation of the aggregates.

If the Contractor elects to submit a concrete mix that was not previously approved, the Contractor shall submit the new concrete mix in accordance with Chapters 2 and 3 of General Specification 11 as modified herein.

- (9) **Refer** to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-13:  
**Add** to Subsection 2.15.3, before Reference Number D 8.2 the following:

D 7.3.3 **ADD** the following to Subsection 7.3.3 of GS11:

Each Portland cement concrete batching plant shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the preconstruction meeting or from the Engineer. The minimum requirement for approval is that the proposed Portland cement concrete batching plant must be on the New York State Department of Transportation (NYSDOT) approved list for the current construction season.

The minimum requirement for approval of a precast concrete plant is that the proposed plant must be on the NYSDOT approved list. A waiver for this requirement may be granted by the DDC's Quality Assurance and Construction Safety (QACS) Director for special products that no NYSDOT approved plant is capable of producing.

Each Portland cement concrete batching plant shall also be subject to auditing and approval of the DDC's Director of Quality Assurance and Construction Safety (QACS). The Director of QACS may at any time discontinue the use of any previously approved equipment if nonconformance with the specifications results during the progress of the work. When the Director of QACS discontinues the use of the plant, production will not be acceptable for Department work until corrective measures satisfactory to the Director are carried out.

- (10) **Refer** to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-14:

**Delete** from Subsection 2.15.3, Reference Number D 16.3 together with its paragraphs in their entirety:

**Substitute** the following:

D 16.3 Testing Service - **ADD** the following:

The Contractor shall retain the services of an independent testing laboratory to provide for the services outlined in 16.3.1.4 to 16.3.1.11 of GS11, with the exception of those tests specified herein to be performed by the Engineer and the City Retained Laboratory.

All laboratories shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the pre-

construction meeting or from the Engineer. The minimum requirement for approval is that the laboratory must have the current AMRL/AASHTO R-18 accreditation in the category of service proposed and must be currently licensed by the NYC Department of Buildings (DOB).

**(11) Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-14:**

**Delete** from **Subsection 2.15.3, Reference Number D 16.8** together with its paragraphs in their entirety:

**Substitute** the following:

D 16.8 Responsibilities and Duties of Contractor - **ADD** the following:

The Contractor may, if the Contractor so desires, take cylinders corresponding to those taken by the Engineer for the City Retained Laboratory. However, determination of payment will be based solely on the cylinders taken by the Engineer for the City Retained Laboratory.

**CONCRETE TEST CYLINDERS**

The Contractor will be responsible for safe delivery of concrete cylinders to the Department of Design and Construction Laboratory, within two (2) days after molding, where they will be properly stored and cured until the date of test, and tested by others, upon removal from the curing room. The Department of Design and Construction testing laboratory will provide the services for the curing and breaking of the test cylinders.

The Contractor shall provide empty cylinder molds and facilities for the proper care of these cylinders while on the site, and shall safeguard them against injury and protect them from the elements.

The Engineer will be responsible for the preparation, documentation and labeling of the cylinders and for notifying the Contractor, at least twenty-four (24) hours in advance, when a shipment of cylinders is ready for delivery, so that cylinders can be tested for the standard twenty-eight (28) day and seven (7) day tests. Cylinders are to be delivered by the Contractor to a designated area near 30-30 Thomson Avenue, Long Island City, New York, or where otherwise directed within the City of New York.

The Contractor shall make arrangements to protect all cylinders from damage during loading, transport to, and unloading at a Department of Design and Construction designated testing laboratory, and shall obtain a receipt for delivered cylinders, which shall be submitted to the Engineer.

**(12) Refer to Subsection 4.05.6 - Design Criteria, Paragraph (G) - Decking, Subparagraph (1), Page IV-14:**

**Delete Subparagraph (1)** in its entirety:

**Substitute** the following:

(1) Unless otherwise specified in the contract documents or approved in writing by the Engineer the minimum live load on decking shall be thirty-five (35) percent more than AASHTO HS20-44 or Contractor's equipment or heaviest truck loading (i.e. concrete truck) whichever is greater plus an impact factor of thirty-three (33) percent.

**(13) Refer to Section 4.06 - Backfilling, Subsection 4.06.3 - Method Of Depositing All Backfill, Page IV-18:**

**(A) Add** the following paragraph to beginning of **Subsection 4.06.3:**



At the preconstruction meeting, the Contractor shall submit for approval a full description of the Contractor's proposed methods to be used for all backfilling operations including, but not limited to, equipment, backfill material, depth of compaction layers, and trench locations where each is to be employed. In the field, the Contractor shall be required to demonstrate that the Contractor's methods of backfilling and compaction shall obtain a minimum of ninety-five (95) percent of Standard Proctor Maximum Dry Density.

**(B) Delete** from **Subsection 4.06.3**, the fourth paragraph in its entirety:  
**Substitute** the following:

Unless otherwise approved in writing by the Engineer, backfilling of the remainder of the trenches and excavations from a point not less than twelve (12) inches above the top of the barrel of the water main pipe to the underside of the pavement shall be progressively deposited in uniform and successive horizontal layers not exceeding twelve (12) inches in depth for the entire width of the trench or excavation and each successive layer shall be solidly compacted by mechanical tamping or other approved means so as to achieve the required density. In deep trenches defined as those requiring sheeting, the Contractor may submit to the Engineer, for approval, an alternate backfill method (i.e. jetting, deeper deposited layers not exceeding twenty-four (24) inches, etc.) for depositing and compacting the backfill from twelve (12) inches above the top of the barrel of the water main pipe to a plane five (5) feet below final surface elevation. However, approval of any alternate backfill method shall not relieve the Contractor from obtaining a minimum of ninety-five (95) percent of Standard Proctor Maximum Dry Density. Should the Engineer determine that the specified density is not being obtained, the area must be re-excavated and backfilled at the Contractor's own cost until the required compaction density is achieved.

**(C) Delete** from **Subsection 4.06.3**, the seventh paragraph in its entirety:  
**Substitute** the following:

Backfill shall proceed simultaneously with the withdrawal of sheeting but at no time shall the withdrawal of sheeting exceed a height of six (6) inches above the deposited backfill. Withdrawal of sheeting below levels previously backfilled and compacted is prohibited.

**(14) Refer** to **Section 5.02 - Laying Ductile Iron Pipe And Fittings, Subsection 5.02.3(F) - Bedding And Foundation Of Pipes, Page V-8:**  
**Delete** from **Subsection 5.02.3(F)**, Paragraph (5) - Pier And Plate, in its entirety:  
**Substitute** the following new Paragraph (5):

(5) Shallow Cover: Where mains 24-inches and smaller are laid with covers of 2'-0" or less, the Contractor shall provide protection in accordance with **Standard Drawing No. 42063-Y** or as directed by the Engineer.

Where mains 24-inches and smaller are laid with covers between 2'-6" and 2'-0", the Contractor shall provide steel plates only over the main with dimensions as shown on **Standard Drawing No. 46464-Z** or as directed by the Engineer.

Where mains 30-inches and larger are laid with covers of 2'-6" or less, the Contractor shall provide protection in accordance with **Standard Drawing No. 46464-Z** or as directed by the Engineer.

Covers over the new mains shall not be less than 1'-6".

**(15) Refer** to **Section 5.02 - Laying Ductile Iron Pipe And Fittings, Subsection 5.02.3 - Construction Methods, Paragraph (M) - Laying Temporary Connections, Page V-12:**  
**Delete Paragraph (M)**, in its entirety:  
**Substitute** the following:

**(M) LAYING TEMPORARY CONNECTIONS AND INSTALLING TEMPORARY CAP ASSEMBLIES AND/OR BULKHEADS**

- (1) When new water mains are laid and it becomes necessary to provide a temporary connection between the existing main and new mains laid under this contract (regardless of whether the new and existing water mains are in the same trench or are offset in two different trenches), the Contractor shall, if ordered, provide all labor, equipment and facilities for laying, maintaining and removing when directed, temporary connections and appurtenances. If City forces do laying of temporary connections, the Contractor shall make all required equipment and facilities available to them. No payment will be made for providing temporary house services which may be required when making a temporary connection between the existing and new main.
- (2)
  - (a) Temporary cap assemblies on distribution water mains (20" and less in diameter) shall consist of a 2-foot long spigot/spigot ductile iron pipe with a mechanical joint cap restrained to the pipe with a "wedge-type" retainer gland and a minimum 2-inch tap on the pipe section.
  - (b) Temporary cap assemblies on distribution water mains (20" and less in diameter) shall be restrained and braced in a manner sufficient to support system working pressures, and thrust forces.
  - (c) The 2-inch tap required as part of the temporary cap assembly is to be utilized to allow air to escape while filling the main in addition to allow for proper flushing of the main.
  - (d) Restraint and bracing as well as temporary cap assemblies/bulkheads for water mains greater than 20" in diameter shall be submitted for approval by the Engineer prior to being utilized.

**(16) Refer to Section 5.02 - Laying Ductile Iron Pipe And Fittings, Subsection 5.02.5 - Price To Cover, Paragraph (10), Page V-16:  
Delete Paragraph (10), in its entirety:  
Substitute the following:**

- (10)(a) No separate or additional payment will be made to the Contractor for furnishing, delivering, installing, restraining, bracing and removing temporary cap assemblies/bulkheads for water mains as ordered by the Engineer. The costs thereof shall be deemed included in the unit prices bid for all items of the contract.
- (b) Payment for temporary valves (i.e. construction valves) and its associated fittings ordered by the Engineer during the course of the work to be installed will be paid for at the same rates as for valves and fittings permanently installed.
- (c) If ordered by the Engineer, removal of valves (i.e. construction valves) and its associated fittings, including their transfer and disposal shall be deemed included in the prices bid for all items of the contract. No separate or additional payment will be made for this work.
- (d) Payment For Temporary Connections: When new mains are laid and it becomes necessary to provide a temporary connection between the existing and new mains the following method of payment shall apply: The Contractor shall be paid once for furnishing and delivering pipes and fittings used in temporary connections. The Contractor shall also be paid for laying the temporary pipe connection and fitting using the appropriate pipe laying item for each time that the Contractor is directed to use them throughout the project as directed by the Engineer.

**(17) Refer to Subsection 5.04.4 - Furnishing, Delivering And Installing Steel Tee, Paragraph (5), Item Numbers list, Page V-23:  
Delete Item No. "60.23ST20T48", together with Description "FURNISHING, DELIVERING AND INSTALLING 48-INCH X 20-INCH STEEL TEE", and Pay Unit "EACH":**

(18) Refer to **Section 5.05 - Furnishing And Delivering Gate Valves**, Page V-35:

(A) Delete from **Subsection 5.05.1 - Description**, the first paragraph in its entirety:  
Substitute the following:

This specification describes furnishing and delivering of double disc 3-inch to 20-inch gate valves, resilient seated 3-inch to 20-inch gate valves and resilient seated 3-inch to 12-inch tapping valves.

Unless otherwise specified in the contract documents or ordered in writing by the Engineer, only resilient seated gate valves and tapping valves shall be furnished and delivered by the Contractor on the contract.

(B) Delete from **Subsection 5.05.2 - Materials**, second paragraph, first line, the words, "6-inch hydrant":

Substitute the following words, "3-inch to 20-inch":

(19) Refer to **Section 5.06 - Setting Gate Valves**, Page V-38:

(A) Delete from **Subsection 5.06.1 - Description**, the first paragraph in its entirety:  
Substitute the following:

This specification describes the installation of double disc 3-inch to 20-inch gate valves, resilient seated 3-inch to 20-inch gate valves and resilient seated 3-inch to 12-inch tapping valves. It also describes the installing of manhole frames (skirts and heads) and covers.

Unless otherwise specified in the contract documents or ordered in writing by the Engineer, only resilient seated gate valves and tapping valves shall be installed by the Contractor on the contract.

(B) Delete from **Subsection 5.06.2 - Materials**, second paragraph, first line, the words, "6-inch hydrant":

Substitute the following words, "3-inch to 20-inch":

(20) Refer to Page V-43:

Add the following new **Section 5.07B**:

**SECTION 5.07B  
 DELIVERING AND INSTALLING BUTTERFLY VALVES AND EXPANSION JOINTS**

**5.07B.1 DESCRIPTION**

This specification describes delivering and installing of butterfly valves 24-inch to 72-inch with manual actuators (30-inch thru 72-inch with by-pass arrangements and outlets). It also describes delivering and installing of expansion joint (30-inch thru 72-inch) for butterfly valves including 6-inch by-pass outlets.

The Contractor shall pick-up these butterfly valves and expansion joints at the DEP Third Ward Yard, 4914 Fresh Meadow Lane, Flushing, NY 11365, Telephone No. (718) 359-0931.

These butterfly valves and expansion joints are stored in container(s) at the DEP Third Ward Yard. The Contractor shall coordinate these activities with the Supervisor of the DEP Third Ward Yard.

The Contractor shall furnish, deliver and install the by-pass arrangements and outlets required and necessary to complete the installation of the butterfly valves and expansion joints.

**5.07B.2 MATERIALS**

Materials shall be in accordance with **Subsection 5.07.2.**

**5.07B.3 CONSTRUCTION METHODS**

All construction work shall be done in accordance with **Subsection 5.07.3.**

**5.07B.4 MEASUREMENT**

(A) The quantity of butterfly valves (30-inch thru 72-inch) with manual actuators (including by-pass arrangements and outlets) 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 picked-up, delivered and installed by the Contractor as shown, specified or ordered.

(B) The quantity of butterfly valves (24-inch) with manual actuators measured for payment shall be the number of butterfly valves (24-inch) with manual actuators of each size actually picked-up, delivered and installed by the Contractor as shown, specified or ordered.

(C) The quantity of expansion joints (30-inch thru 72-inch) for butterfly valves (including 6-inch by-pass outlets) measured for payment shall be the number of expansion joints (30-inch thru 72-inch) for butterfly valves (including 6-inch by-pass outlets) of each size actually picked-up, delivered and installed by the Contractor as shown, specified or ordered.

**5.07B.5 PRICE TO COVER**

(A) The contract price for "DELIVERING AND INSTALLING BUTTERFLY VALVE (30-INCH THRU 72-INCH) WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE" shall be the unit price bid per each size of butterfly valve (30-inch thru 72-inch) with by-pass arrangement and outlet picked-up, delivered and installed and shall cover the cost of all labor, equipment, materials, plant, samples, tests and insurance required and necessary to pick-up, deliver and install butterfly valves (30-inch thru 72-inch) in the manner specified herein. No separate or additional payment will be made for any costs associated with the work of furnishing, delivering and installing the by-pass arrangements and outlets to be installed with the butterfly valves (30-inch thru 72-inch).

(B) The contract price for "DELIVERING AND INSTALLING BUTTERFLY VALVE (24-INCH), COMPLETE" shall be the unit price bid per each size of butterfly valve (24-inch) picked-up, delivered and installed and shall cover the cost of all labor, equipment, materials, plant, samples, tests and insurance required and necessary to pick-up, deliver and install butterfly valves (24-inch) in the manner specified herein.

(C) The contract price for "DELIVERING AND INSTALLING EXPANSION JOINT (30-INCH THRU 72-INCH) FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET" shall be the unit price bid per each size of expansion joint (30-inch thru 72-inch) for butterfly valve including 6-inch by-pass outlet delivered and installed and shall cover the cost of all labor, equipment, materials, plant, samples, tests and insurance required and necessary to pick-up, deliver and install expansion joints (30-inch thru 72-inch) for butterfly valves including 6-inch by-pass outlets in the manner specified herein. No separate or additional payment will be made for any costs associated with the work of furnishing, delivering and installing the 6-inch by-pass outlets to be installed with the expansion joints (30-inch thru 72-inch).

**5.07B.6 SEPARATE PAYMENT**

(A) Payment for butterfly valves, couplings or expansion joints 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; and for piping and other type valves 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 36-inch cast iron manhole heads and covers shall be made under the item labeled "FURNISHING, DELIVERING AND INSTALLING 36-INCH CAST IRON MANHOLE HEADS AND COVERS".

**5.07B.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 Delivering And Installing Butterfly Valves (30-Inch Thru 72-Inch) With By-Pass Arrangement And Outlet, Complete; Delivering And Installing Butterfly Valves (24-Inch), Complete; and for; Delivering And Installing Expansion Joints (30-Inch Thru 72-Inch) For Butterfly Valves Including 6-Inch By-Pass Outlet will be made under the Item Number as calculated below:*

The Item Numbers for Delivering And Installing Butterfly Valves (30-Inch Thru 72-Inch) With By-Pass Arrangement And Outlet, Complete; Delivering And Installing Butterfly Valves (24-Inch), Complete; and for; Delivering And Installing Expansion Joints (30-Inch Thru 72-Inch) For Butterfly Valves Including 6-Inch By-Pass Outlet have ten characters. (The decimal point is considered a character, the third character.)

(1) The first five characters shall define Delivering And Installing Butterfly Valves (30-Inch Thru 72-Inch) With By-Pass Arrangement And Outlet, Complete; Delivering And Installing Butterfly Valves (24-Inch), Complete; and; Delivering And Installing Expansion Joints (30-Inch Thru 72-Inch) For Butterfly Valves Including 6-Inch By-Pass Outlet:

61.23

(2) The sixth, seventh and eighth characters shall define Butterfly Valves (30-Inch Thru 72-Inch) With By-Pass Arrangement And Outlet, Complete; Butterfly Valves (24-Inch), Complete; and; Expansion Joints (30-Inch Thru 72-Inch) For Butterfly Valves Including 6-Inch By-Pass Outlet:

- BVB - Butterfly Valves (30-Inch Thru 72-Inch) With By-Pass Arrangement And Outlet, Complete
- BVO - Butterfly Valves (24-Inch), Complete (No By-Pass Arrangement And Outlet)
- EJB - Expansion Joints (30-Inch Thru 72-Inch) For Butterfly Valves Including 6-Inch By-Pass Outlet

(3) The ninth and tenth characters shall define the Size (Diameter) of the Butterfly Valves, and the Size (Diameter) of the Expansion Joints. (The ninth and tenth characters representing the unit of inches for the Size (Diameter) of the Butterfly Valves, and the Size (Diameter) of the Expansion Joints.) 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
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61.23BVB72	DELIVERING AND INSTALLING 72-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	EACH
61.23BVB66	DELIVERING AND INSTALLING 66-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	EACH
61.23BVB60	DELIVERING AND INSTALLING 60-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	EACH
61.23BVB54	DELIVERING AND INSTALLING 54-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	EACH
61.23BVB48	DELIVERING AND INSTALLING 48-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	EACH
61.23BVB42	DELIVERING AND INSTALLING 42-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	EACH
61.23BVB36	DELIVERING AND INSTALLING 36-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	EACH
61.23BVB30	DELIVERING AND INSTALLING 30-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	EACH
61.23BVO24	DELIVERING AND INSTALLING 24-INCH BUTTERFLY VALVE, COMPLETE	EACH
61.23EJB72	DELIVERING AND INSTALLING 72-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET	EACH
61.23EJB66	DELIVERING AND INSTALLING 66-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET	EACH
61.23EJB60	DELIVERING AND INSTALLING 60-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET	EACH
61.23EJB54	DELIVERING AND INSTALLING 54-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET	EACH
61.23EJB48	DELIVERING AND INSTALLING 48-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET	EACH
61.23EJB42	DELIVERING AND INSTALLING 42-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET	EACH
61.23EJB36	DELIVERING AND INSTALLING 36-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET	EACH
61.23EJB30	DELIVERING AND INSTALLING 30-INCH EXPANSION JOINT FOR BUTTERFLY VALVE INCLUDING 6-INCH BY-PASS OUTLET	EACH

**(21) Refer to Section 5.23 - Decking, Subsection 5.23.1 - Description, Page V-73:**

**Delete** from **Subsection 5.23.1**, the third paragraph in its entirety:

**Substitute** the following:

Steel plates that are resting on pavement, that are not part of a decking system, and are used to temporarily span trenches and excavations for vehicular traffic and for pedestrian crossings and walkways shall not be included for payment under this decking section. The cost of all labor, materials, equipment, insurance and incidentals necessary to furnish, place, anchor and ramp these temporary steel plates, when and where directed, in order to comply with the requirements of the NYCDOT Office of Construction Mitigation and Coordination (OCMC) traffic stipulations, the directions of the Engineer, and the Contractor's construction operations shall be deemed included in the prices bid for all contract items of work.

**(22) Refer to Section 5.23 - Decking, Subsection 5.23.4 - Design Criteria, Page V-74:**

**Add** the following to **Subsection 5.23.4**:

(C) The Contractor may substitute skid resistant steel plates (Non-Skid Textured Plates) for timber mats, subject to approval in accordance with **Subsection 4.05.5**. These steel plates shall be placed flush with the existing roadway and shall be installed in compliance with the requirements of **Subsection 4.05.6(G)**.

(23) Refer to Subsection 5.32.4 - Specific Pavement Restoration Provisions, Page V-101:  
Add the following to Subsection 5.32.4:

(E) Specific Pavement Restoration Provisions:

- (1) Within the limits of the highway rehabilitation the restoration shall be accomplished and paid for in accordance with Highway Construction Plans, Details and Specifications for Highway Project ID. HWMBRT5A (MED-607B). This work consists of resurfacing in 34<sup>th</sup> Street and full depth pavement restoration in both Avenues and in intersections with 34<sup>th</sup> Street.
- (2) In 34<sup>th</sup> Street, excluding intersections and Avenues, where there is sewer and water main work and no full width roadway restoration, the permanent pavement restoration shall be as follows:
  - (a) The permanent restoration over the **trench width and cutbacks only** shall consist of a top course of a minimum of three (3) inches of binder mixture on a base course of a minimum of twelve (12) inches of extra-high-early strength concrete, to match the existing pavement as directed by the Engineer.
  - (b) Finally the entire width of the roadway from **curb to curb** or **edge to edge** of existing roadway shall be resurfaced as specified under capital project HWMBRT5A.
- (3) The following requirements shall apply to all work required under paragraph (2) above:
  - (a) Before the top course is installed, an additional width of asphalt beyond the edge of new base course shall 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 shall be in accordance with paragraph (b) below.
  - (b) Pavement excavation along with saw cutting of pavements for sewer and water main trenches shall be in accordance with **Section 5.30 - Pavement Excavation** of both the Standard Sewer Specifications and the Standard Water Main Specification.
  - (c) At locations requiring the installation of a concrete base course, a reflective cracking membrane shall be installed over joints prior to restoration. Payment for this work shall be made under Item No. 6.91 - REFLECTIVE CRACKING MEMBRANE (18" WIDE). Additionally, appropriate pavement keys as described below shall be used.
  - (d) Pavement keys **Type B-1** shall 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** shall 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 tack coating, eradication of temporary roadway markings, and adjustment of city-owned castings shall be deemed included in the prices bid for all pavement restoration items.
  - (f) Payment for placement of temporary pavement marking shall be made under Item No. 6.49 - TEMPORARY PAVEMENT MARKINGS (4" WIDE).
  - (g) Payment for removal of existing pavement markings shall be made under Item No. 6.53 - REMOVE EXISTING LANE MARKINGS (4"WIDE).
  - (h) Payment for permanent placement of pavement marking with thermoplastic reflectorized pavement markings (crosswalk and lane dividers) shall be made under

Item No. 6.44 - THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE).

- (i) Payment for stripping or milling of the pavement shall be made under Item No. 6.75 - GRINDING EXISTING ASPHALTIC CONCRETE WEARING COURSE.
- (j) Payment for pavement restoration shall be made under the following items:

<u>Item No.</u>	<u>Item</u>	<u>Payment Description</u>
4.02 CB	Asphaltic Concrete Mixture	(For binder mixture in Type A and B Keys; and binder mixture to fill in roadway depressions and to provide a leveling course prior to resurfacing where ordered.)
4.02 I4-2	Asphaltic Concrete Wearing Coarse, Type I-4 Mix, 2" Thick	(For top course when resurfacing is required.)
6.97 A	Extra-High-Early Strength Concrete	(For concrete base course over trenches and cutbacks.)

(24) Refer to Section 5.36 - Additional Earth Excavation Including Test Pits, Subsection 5.36.4 - Price To Cover, Paragraph (3), fifth line, Page V-114: Change 16", to 16'.

**END OF ADDENDUM NO. 4**  
**This Addendum consists of thirty (30) pages.**



ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HWMBRT5A (MED-607B)

EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE

FROM FDR DRIVE TO LEXINGTON AVENUE

INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 5

DATED: February 19, 2013

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

The Specifications contained in this Addendum No. 5 are to be used to installing Transit fare machines at designated temporary Select Bus Service (SBS) bus stop locations as detailed on the plans or as directed by the Engineer. The specifications in this Addendum are for work Items listed in the Bid Schedule beginning with the prefix "E" (i.e. "E 260519 E", "E 260519 G", "E 260553-B", etc.).

SPECIAL SPECIFICATIONS

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**SECTION E 260100**  
**BASIC ELECTRICAL REQUIREMENTS**  
**(NOT A BID ITEM)**

**E 260100.1. INTENT**

- A) This Section includes general requirements for electrical installations. These requirements are applicable to all Electrical work. The following requirements are included in this Section to expand the requirements specified in the General Conditions of the NYCDOT Standard Highway Specifications:
- 1) Submittals.
  - 2) Coordination drawings.
  - 3) Record documents.
  - 4) Maintenance manuals.
  - 5) Rough-ins.
  - 6) Electrical installations.
  - 7) Cutting and patching.
  - 8) Codes, Permits and Inspections.
  - 9) Separation of Work between Trades.
  - 10) Definitions and Interpretations.
- B) Related Sections: The following sections contain requirements that relate to this section:
- 1) Section E260500, Common Work Results for Electrical, for materials and methods common to the remainder of Electrical specifications, plus general related specifications including:
    - Excavation and backfill and concrete work.

**E 260100.2. DEFINITIONS**

- (A) As used in the drawings and specifications for electrical work, certain non-technical words shall be understood to have specific meanings as follows regardless of indications to the contrary in the General Conditions or other documents governing the electric work.
1. "Furnish" -- Purchase and deliver to the project site complete with every necessary appurtenance and support, all as part of the electrical work. Purchasing shall include payment of all sales taxes and other surcharges as may be required to assure that purchased items are free of all liens, claims or encumbrances. Payment of sales taxes is, however, specifically excluded.
  2. "Install" -- Unload at the delivery point at the site and perform every operation necessary to establish secure mounting and correct operation at the proper location in the project, all as part of the electrical work.
  3. "Provide" -- "Furnish" and "install."
  4. "New" -- Manufactured within the past two years and never before used.
  5. Regardless of their usage in codes or other industry standards, certain words as used in the drawings or specifications for the electrical work, shall be understood to have the specific meanings ascribed to them in the following list:
  6. "Circuitry" -- Any electric work (not limited to light and power distribution) which consists of wires, cables, raceways, and/or specialty wiring method assemblies taken all together complete with associated junction boxes, pull boxes, outlet boxes, joints, couplings, splices and connections except where limited to a lesser meaning by specific description.

7. "Wiring" -- Same as Circuitry.
8. "Circuit" -- Any specific run of circuitry.
9. "Branch Circuit" -- Any light and power distribution system circuit which, at its load end, is directly connected to one or more electrical energy consuming items with no overcurrent protection devices interposed, other than (where required) those protecting the energy a consuming items from overloading or overheating.
10. "Appliance Panel" -- Any panel, used in a light and power distribution system, containing single pole and/or multipole branches rated in various sizes.
11. "Lighting Panel" -- Any panel used in a light and power distribution system, having all (or the majority) of its branches single pole and rated the same.
12. "Lighting and Appliance Branch Circuitry" -- All or any portion of branch circuits outgoing from a lighting or appliance panel.
13. "Feeder" -- Any item of light and power circuitry used in a distribution system which is not lighting and appliance branch circuitry.
14. "Main Feeder" -- Any feeder which, at its supply end, is connected through its own overcurrent protection (and switching) device, and none other, directly to a main service or a main service overcurrent protection (and switching) device.
15. "Branch Feeder" -- A feeder, other than a main feeder, which complies with the definition of a branch circuit.
16. "Submain Feeder" -- Any feeder which is neither a main feeder nor a branch feeder.
17. "Distribution Panel" -- Any panel, used in a light and power distribution system, containing only multi-pole branches and with all (or the majority) of its branches used for feeders supplying other panels.
18. "Grade Slab" -- A building floor slab which is in contact with or directly over grade (earth).
19. "Building Confines" -- The extent of a building, as defined by the outside surfaces of its peripheral walls, the top surface of its roof, and the underside surface of its grade slab.
20. "Distribution Switch" -- Any switch used in a light and power system other than a tumbler, toggle or specialty switch in the "wiring device" category.
21. "Normal Electric Work Conditions" -- Locations within building confines which are neither damp, wet nor hazardous and which are not used for air handling.
22. "Underground" -- Subsurface and exterior to building foundations.
23. "At Underside of Grade Slab" -- Under a grade slab and integrated into it.
24. "Below Grade Slab" -- Under a grade slab but not integrated into it.
25. "Standard" (as applied to wiring devices) -- Not of a separately designated individual type.

26. "Raceway" -- Any pipe, duct, extended enclosure, or conduit (as specified for a particular system) which is used to contain wires, and which is of such nature as to require that the wires be installed by a "pulling in" procedure.
  27. "Concealed" (as applied to circuitry) -- Covered completely by building materials, except for penetrations (by boxes and fittings) to a level flush with the surface as necessitated by functional or specified accessibility requirements.
  28. "Exposed" (as applied to circuitry) -- Not covered in any way by building materials.
  29. "Subject to Mechanical Damage" -- Exposed within seven feet of the floor in mechanical rooms, manufacturing spaces, vehicular spaces, or other spaces where heavy items (over 44.6 kg or 100 pounds) are moved around or rigged as a common practice or as required for replacement purposes.
  30. "Assembly" -- A defined set of elements of electric work.
- (B) Where the word "conduit" is used without specific reference to type, it shall be understood to mean "raceway."
  - (C) Except where modified by a specific notation to the contrary, it shall be understood that the indication and/or description of any electrical item in the drawings and specifications for electrical work carries with it the instruction to furnish, install and connect the item as part of the electrical work regardless of whether or not this instruction is explicitly stated.
  - D) It shall be understood that the specifications and drawings are complementary and are to be taken together for a complete interpretation of the work. Where there are conflicts between the drawings and specifications or within the specifications or drawings themselves, the items of higher standard shall govern.
  - E) To the extent that they govern the basic work, the specifications also govern 'change order' work if any.
  - F) No exclusion from or limitation in, the symbolism used on the drawings for electrical work or the language used in the specifications for electrical work shall be interpreted as a reason for omitting the appurtenances or accessories necessary to complete any required system or item of equipment.
  - G) The drawings for electrical work utilize symbols and schematic diagrams which have no dimensional significance. The work shall, therefore, be installed to fulfill the diagrammatic intent expressed on the electrical drawings, but in conformity with the dimensions indicated -on the final working drawings, field layouts and shop drawings of all trades. In particular, information as to the exact size, location and electrical connection points for mechanical equipment shall be derived by reference to mechanical documents.
  - H) Certain details appear on the drawings for electrical work which are specific with regard to the dimensioning and positioning of the work. These are intended only for general information purposes. They do not obviate field coordination for individual items of the indicated work.
  - I) The use of words in the singular shall not be considered as limiting where other indications denote that more than one item is referred to.
  - J) Ratings of devices, materials and equipment specified without reference to specific performance criteria shall be understood to be nominal or nameplate ratings established by means of industry standard procedures.

**E 260100.3. SUBMITTALS**

- A) General: Follow the procedures specified in the General Conditions of Section 1.06.31 in the NYCDOT Standard Highway Specifications.
- B) Additional copies may be required by individual sections of these Specifications.

**E 260100.4. RECORD DOCUMENTS**

- A) Prepare record documents in accordance with the requirements in the General Conditions of Section 1.06.31 in the NYCDOT Standard Highway Specifications. In addition to the requirements specified in Standard Construction Contract comply with the following:
  - 1) A complete set of "as-built" or record electric drawings shall be made up and delivered to the Engineer.
  - 2) The drawings shall show:
    - a) All electric work installed exactly in accordance with the original design.
    - b) All electric work installed as a modification or addition to the original design.
    - c) The dimensional information necessary to delineate the exact location of all circuitry and wiring runs (other than lighting and appliance branch circuitry and small control, signal and communications runs) which are so buried or concealed as to be untraceable by inspection through the regular means of access established for inspection and maintenance.
    - d) The numbering information necessary to correlate all electrical energy consuming items (or outlets for same) to the panel or switchboard circuits from which they are supplied.
  - 3) The drawings shall be produced using AutoCad software. "As-built" information shall be submitted as follows:
    - a) CAD drawing files on 4 compact discs (CD's) in AutoCad format.
    - b) Four (4) copies of drawings.
  - 4) The quantity of design drawings which are made available shall in no way be interpreted as setting a limit to the number of drawings necessary to show the required "as-built" information.
  - 5) Progress prints of record drawings shall be submitted monthly during the construction period for the Engineer's approval.

**E 260100.5. N/A**

**E 260100.6. DELIVERY, STORAGE AND HANDLING**

- (A) Deliver products to the project properly identified with names, model numbers, types, grades, compliance labels, and other information needed for identification.

**E 260100.7. CODES, PERMITS AND INSPECTIONS**

- (A) All work shall meet or exceed the latest requirements of the NEC, NY State, NY City, and other authorities exercising jurisdiction over electrical construction work and the project.
- (B) All required permits and inspection certificates shall be obtained, paid for, and made available at the completion of the work.

- (C) Any portion of the work which is not subject to the requirements of an electric code published by a specific authority having jurisdiction shall be governed by the National Electrical Code and other applicable sections of the National Fire Code, as published by the National Fire Protection Association.
- (D) Equipment, material, layout and installation provided as part of the electrical work shall conform to the requirements of the Department of Transportation and other agencies having jurisdiction. Include as part of the electrical work all required filings and submissions for approval. Equipment furnished separate from - but installed as part of - the electrical work, which does not have all necessary approvals, shall not be installed until approvals are obtained by the parties furnishing the equipment.
- (E) Installation procedures, methods and conditions shall comply with the latest requirements of the Federal Occupational Safety and Health Administration (OSHA).

**E 260100.8. ROUGH-IN**

- (A) Verify final locations for rough-ins with field measurements and with the requirements of the actual equipment to be connected.
- (B) Refer to equipment specifications contained herein this Addendum for rough-in requirements.

**E 260100.9. ELECTRICAL INSTALLATIONS**

- (A) General: Sequence, coordinate, and integrate the various elements of electrical systems, materials, and equipment. Comply with the following requirements:-
  - 1) Coordinate electrical systems, equipment, and materials installation with other building components.
  - 2) Verify all dimensions by field measurements.
  - 3) Sequence, coordinate, and integrate installations of electrical materials and equipment for efficient flow of the Work. Give particular attention to large equipment requiring positioning prior to backfill or finish.
  - 4) Coordinate connection of electrical systems with exterior underground and overhead utilities and services. Comply with requirements of governing regulations, franchised service companies, and controlling agencies. Provide required connection for each service.
  - 5) Install systems, materials, and equipment to conform with approved submittal data to greatest extent possible. Conform to arrangements indicated by the Contract Documents, recognizing that portions of the Work are shown only in diagrammatic form. Where coordination requirements conflict with individual system requirements, refer conflict to the Engineer. Install systems, materials, and equipment level and plumb, parallel and perpendicular to other building systems and components, where installed exposed in finished spaces.
  - 6) Install electrical equipment to facilitate servicing, maintenance, and repair or replacement of equipment components. As much as practical, connect equipment for ease of disconnecting, with minimum of interference with other installations.

**E 260100.10. CUTTING AND PATCHING**

- (A) General: Perform cutting and patching in accordance with the following requirements:
1. Perform cutting, fitting, and patching of electrical equipment and materials required to:
    - a) Uncover Work to provide for installation of ill-timed Work.
    - b) Remove and replace defective Work.
    - c) Remove and replace Work not conforming to requirements of the Contract Documents.
    - d) Upon written instructions from the Engineer, uncover and restore Work - to provide for Engineer observation of concealed Work.
  2. Protection of Installed Work: During cutting and patching operations; protect adjacent installations.
  3. Patch finished surfaces and building components using new materials specified for the original installation and experienced installers.

**E 260100.11. MEASUREMENT AND PRICE TO COVER**

No separate payments will be made for compliance with this Section. Any work required to comply with this section shall be deemed included in the unit price bid for all electrical items.



**SECTION E 260500**  
**COMMON WORK RESULTS FOR ELECTRICAL**  
**(NOT A BID ITEM)**

**E 260500.1. INTENT**

This Section includes the following

- 1) Electrical equipment coordination and installation.
- 2) Sleeves for raceways and cables.
- 3) Sleeve seals.
- 4) Grout.
- 5) Common electrical installation requirements.

**E 260500.2. RELATED WORK AND REQUIREMENTS**

The following requirements are included in this Section to expand the requirements specified in the General Conditions of the NYCDOT Standard Highway Specifications.

**E 260500.3. DEFINITIONS**

EPDM: Ethylene-propylene-diene terpolymer rubber.

**E 260500.4. SUBMITTALS**

Product Data: For sleeve seals.

**E 260500.5. COORDINATION**

- A) Coordinate arrangement, mounting, and support of electrical equipment:
- 1) Coordinate with Transit Authority and Engineer to confirm fare machine location.
  - 2) Coordinate with Transit Authority and Engineer to confirm when electrical feeds are to be energized and de-energized.
  - 3) To provide for ease of disconnecting the equipment with minimum interference to other installations.
  - 4) To allow right of way for piping and conduit installed at required slope.
  - 5) So connecting raceways, cables, and wireways, will be clear of obstructions and of the working and access space of other equipment.
- B) Coordinate installation of required supporting devices and set sleeves in cast-in-place concrete, walls, and other structural components as they are constructed.

**E 260500.6. MATERIALS**

A) SLEEVES FOR RACEWAYS AND CABLES

- 1) Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.
- 2) Sleeves for Rectangular Openings: Galvanized sheet steel. Minimum Metal Thickness:
  - a) For sleeve cross-section rectangle perimeter less than 50 inches (1270 mm) and no side more than 16 inches (400 mm), thickness shall be 0.052 inch (1.3 mm).
  - b) For sleeve cross-section rectangle perimeter equal to, or more than, 50 inches (1270 mm) and 1 or more sides equal to, or more than, 16 inches (400 mm), thickness shall be 0.138 inch (3.5 mm).

**B) SLEEVE SEALS**

- 1) Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and raceway or cable.
  - a) Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - i) Advance Products & Systems, Inc.
    - ii) Calpico, Inc.
    - iii) Metraflex Co.
    - iv) Pipeline Seal and Insulator, Inc.
  - b) Sealing Elements: EPDM interlocking links shaped to fit surface of cable or conduit. Include type and number required for material and size of raceway or cable.
  - c) Pressure Plates: Stainless steel. Include two for each sealing element.
  - d) Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements. Include one for each sealing element.

**C) GROUT**

- 1) Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107, factory-packaged, nonmetallic aggregate grout, noncorrosive, nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.

**E 260500.7. METHODS**

**A) COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION**

- 1) Comply with NECA 1-210 Standard Practice of Good Workmanship in Electrical Construction.
- 2) Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounting items.
- 3) Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.
- 4) Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.
- 5) Right of Way: Give to piping systems installed at a required slope.

**B) SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS**

- 1) Electrical penetrations occur when raceways, cables, or busways penetrate concrete slabs, concrete or masonry walls, or fire-rated floor and wall assemblies.
- 2) Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.
- 3) Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
- 4) Cut sleeves to length for mounting flush with both surfaces of walls.
- 5) Extend sleeves installed in floors 2 inches above finished floor level.

- 6) Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and raceway or cable, unless indicated otherwise.
- 7) Seal space outside of sleeves with grout for penetrations of concrete and masonry
- 8) Promptly pack grout solidly between sleeve and wall so no voids remain. Tool exposed surfaces smooth; protect grout while curing.
- 9) Aboveground, Exterior-Wall Penetrations: Seal penetrations using steel pipe sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch (25-mm) annular clear space between pipe and sleeve for installing mechanical sleeve seals.
- 10) Underground, Exterior-Wall Penetrations: Install cast-iron pipe sleeves. Size sleeves to allow for 1-inch (25-mm) annular clear space between raceway or cable and sleeve for installing mechanical sleeve seals.

**C) SLEEVE-SEAL INSTALLATION**

- 1) Install to seal exterior wall penetrations.
- 2) Use type and number of sealing elements recommended by manufacturer for raceway or cable material and size. Position raceway or cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway or cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

**E 260500.8. MEASUREMENT AND PAYMENT**

No separate payments will be made for this work. Any work completed under this section shall be deemed included in the unit price bid for all electrical items.

**SECTION E 260519**  
**LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES**

**E 260519.1. INTENT**

This Section includes the following:

- 1) Building wires and cables rated 600 V and less.
- 2) Connectors, splices, and terminations rated 600 V and less.
- 3) Sleeves and sleeve seals for cables.

**E 260519.2. RELATED WORK AND REQUIREMENTS**

The following requirements are included in this Section to expand the requirements specified in the General Conditions of the NYCDOT Standard Highway Specifications.

**E 260519.3. DEFINITIONS**

XLPE: Cross-Linked Polyethylene

EPDM: Ethylene-propylene-diene terpolymer rubber.

**E 260519.4. SUBMITTALS**

- A) Product Data: For each type of product indicated.
- B) Qualification Data: For testing agency.
- C) Field quality-control test reports.

**E 260519.5. QUALITY CONTROL**

- (a) Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the International Electrical Testing Association (NETA) or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.

Testing Agency's Field Supervisor: Person currently certified by the International Electrical Testing Association (NETA) or the National Institute for Certification in Engineering Technologies to supervise on-site testing specified in Subsection E260519.8.G).

- (b) Electrical Components, Devices, and Accessories: Listed and labeled as defined in (National Fire Protection Association) NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- (c) Comply with NFPA 70.

**E 260519.6. COORDINATION**

- A) Set sleeves and conduit in cast-in-place concrete, masonry walls, and other structural components as they are constructed.

**E 260519.7. MATERIALS****A) CONDUCTORS AND CABLES**

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:  
Alcan Products Corporation; Alcan Cable Division.  
American Insulated Wire Corp.; a Leviton Company.  
General Cable Corporation.  
Senator Wire & Cable Company.  
Southwire Company.  
or approved equivalent.

Copper Conductors: Comply with NEMA WC 70.

Conductor Insulation: Comply with NEMA WC 70 for Types THHN-THWN and RHH/RHW-2/USE-2-XLPE.

**B) CONNECTORS AND SPLICES**

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a) AFC Cable Systems, Inc.
  - b) Hubbell Power Systems, Inc.
  - c) O-Z/Gedney; EGS Electrical Group LLC.
  - d) 3M; Electrical Products Division.
  - e) Tyco Electronics Corp.
  - f) or approved equivalent.
2. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

**C) SLEEVES FOR CABLES**

- 1) Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.
- 2) Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.
- 3) Sleeves for Rectangular Openings: Galvanized sheet steel with minimum 0.052- or 0.138-inch (1.3- or 3.5-mm) thickness as indicated and of length to suit application.

**D) SLEEVE SEALS**

- 1) Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a) Advance Products & Systems, Inc.
  - b) Calpico, Inc.
  - c) Metraflex Co.
  - d) Pipeline Seal and Insulator, Inc.
  - e) or approved equal.
- 2) Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and cable.
  - a) Sealing Elements: EPDM interlocking links shaped to fit surface of cable or conduit. Include type and number required for material and size of raceway or cable.

- b) Pressure Plates: Stainless steel. Include two for each sealing element.
- c) Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements. Include one for each sealing element.

**E 260519.8. METHODS**

**A) CONDUCTOR MATERIAL APPLICATIONS**

- 1) Feeders: Copper. Stranded for No. 8 AWG and larger.
- 2) Branch Circuits: Copper. Solid for No. 12 AWG and No. 12 AWG; stranded for No. 8 AWG and larger.

**B) CONDUCTOR INSULATION APPLICATIONS AND WIRING METHODS**

- 1) Service Entrance: Type THHN-THWN, single conductors in raceway.
- 2) Wiring for TA SBS Fare Machines to be RHH/RHW-2/USE-2 XLPE.
- 3) Concealed Feeders in Vaults: Type THHN-THWN, single conductors in raceway.
- 4) Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.
- 5) Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.
- 6) Class 1 Control Circuits: Type THHN-THWN, in raceway.
- 7) Class 2 Control Circuits: Type THHN-THWN, in raceway.

**C) INSTALLATION OF CONDUCTORS AND CABLES**

- 1) Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- 2) Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips that will not damage cables or raceway.
- 3) Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.

**D) CONNECTIONS**

- 1) Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.
- 2) Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
- 3) Wiring at Fare Machines: Install conductor at each machine, with at least 24 inches of slack or as directed by TA.

E) SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

- 1) Concrete Slabs: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.
- 2) Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
- 3) Rectangular Sleeve Minimum Metal Thickness:
  - a) For sleeve rectangle perimeter less than 50 inches (1270 mm) and no side greater than 16 inches (400 mm), thickness shall be 0.052 inch (1.3 mm).
  - b) For sleeve rectangle perimeter equal to, or greater than, 50 inches (1270 mm) and 1 or more sides equal to, or greater than, 16 inches (400 mm), thickness shall be 0.138 inch (3.5 mm).
- 4) Size pipe sleeves to provide 1/4-inch (6.4-mm) annular clear space between sleeve and cable unless sleeve seal is to be installed.
- 5) Seal space outside of sleeves with grout for penetrations of concrete and masonry.
- 6) Underground Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inch (25-mm) annular clear space between cable and sleeve for installing mechanical sleeve seals.

F) SLEEVE-SEAL INSTALLATION

- 1) Install to seal underground exterior-wall penetrations.
- 2) Use type and number of sealing elements recommended by manufacturer for cable material and size. Position cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

G) FIELD QUALITY CONTROL

- 1) Testing Agency: Engage a qualified testing agency to perform tests and inspections and prepare test reports where applicable.
- 2) Tests and Inspections:
  - a) After installing conductors and cables and before electrical circuitry has been energized, test service entrance and feeder conductors, and conductors feeding the following critical equipment and services for compliance with requirements.
    - i) Fare Machines
  - b) Perform each visual and mechanical inspection and electrical test stated in InterNational Electrical Testing Association (NETA) Acceptance Testing Specification. Certify compliance with test parameters.
- 3) Test Reports: Prepare a written report to record the following:
  - a) Test procedures used.
  - b) Test results that comply with requirements.
  - c) Test results that do not comply with requirements and corrective action taken to achieve compliance with requirements.
  - d) Remove and replace malfunctioning units and retest as specified above.

**E 260519.9. MEASUREMENT**

The quantity of Conductors and Cables to be paid for under Items E 260519 E and E 260519 G used for wiring SBS fare machines only shall be the actual number of linear feet of each size conductors and cables actually installed, to the satisfaction of the Engineer. When multiple lengths of conductors and cables are used, each length of shall be measured separately.

**E 260519.10. PRICES TO COVER**

The unit price bid per linear foot of each size conductor and cable used for wiring the SBS fare machines shall cover the cost of furnishing all labor, materials, equipment, insurance, permits and incidentals to complete the work of wiring the SBS fare machines and shall include, but not be limited to, furnishing and installing all associated connectors and splices; all in accordance with the NYC Electrical Code, Contract Drawings, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
E 260519 E	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 8 AWG WIRE)	L.F.
E 260519 G	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 10 AWG WIRE)	L.F.



**SECTION E 260526**  
**GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS**  
**(NOT A BID ITEM)**

**E 260526.1. INTENT**

This Section includes methods and materials for grounding systems and equipment.

1. Underground distribution grounding.

**E 260526.2. RELATED WORK AND REQUIREMENTS**

The following requirements are included in this Section to expand the requirements specified in the General Conditions of the NYCDOT Standard Highway Specifications.

**E 260526.3. SUBMITTALS**

- A) Product Data: For each type of product indicated.
- B) Other Informational Submittals: Plans showing dimensioned as-built locations of grounding features specified in Subsection E260526.6.E) "FIELD QUALITY CONTROL" herein, including the following:
  - 1) Test wells.
  - 2) Ground rods.
  - 3) Ground rings.
  - 4) Grounding arrangements and connections for separately derived systems.
- C) Qualification Data: For testing agency and testing agency's field supervisor.

**E 260526.4. QUALITY CONTROL**

- A) Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the International Electrical Testing Association (NETA) or is a Nationally Recognized Testing Laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.
  - 1) Testing Agency's Field Supervisor: Person currently certified by the International Electrical Testing Association to supervise on-site testing specified in Part 3.
- B) Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C) Comply with UL 467 for grounding and bonding materials and equipment.
- D) Comply with New York City Electrical Code.

**E 260526.5. MATERIALS**

- A) CONDUCTORS
  - 1) Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
  - 2) Bare Copper Conductors:
    - a) Solid Conductors: ASTM B 3.

- b) Stranded Conductors: ASTM B 8.
  - c) Tinned Conductors: ASTM B 33.
  - d) Bonding Cable: 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch (6 mm) in diameter.
  - e) Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.
  - f) Bonding Jumper: Copper tape, braided conductors, terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.
  - g) Tinned Bonding Jumper: Tinned-copper tape, braided conductors, terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.
- 3) Grounding Bus: Rectangular bars of annealed copper, 1/4 by 2 inches (6 by 50 mm) in cross section, unless otherwise indicated; with insulators.

#### B) CONNECTORS

- 1) Listed and labeled by a nationally recognized testing laboratory acceptable to authorities having jurisdiction for applications in which used, and for specific types, sizes, and combinations of conductors and other items connected.
- 2) Bolted Connectors for Conductors and Pipes: Copper or copper alloy, bolted pressure-type, with at least two bolts.
  - a) Pipe Connectors: Clamp type, sized for pipe.
- 3) Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

#### C) GROUNDING ELECTRODES

- 1) Ground Rods: Copper-clad; 3/4 inch by 10 feet (19 mm by 3 m) in diameter.

### E 260526.6. METHODS

#### A) APPLICATIONS

- 1) Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger, unless otherwise indicated.
- 2) Underground Grounding Conductors: Install bare copper conductor, No. 2/0 > AWG minimum.
  - a) Bury at least 24 inches (600 mm) below grade.
- 3) Conductor Terminations and Connections:
  - a) Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
  - b) Underground Connections: Welded connectors, except at test wells and as otherwise indicated.
  - c) Connections to Ground Rods at Test Wells: Bolted connectors.

#### B) GROUNDING UNDERGROUND DISTRIBUTION SYSTEM COMPONENTS

- 1) Comply with IEEE C2 grounding requirements.
- 2) Grounding Manholes and Handholes: Install a driven ground rod through manhole or handhole floor, close to wall, and set rod depth so 4 inches (100 mm) will extend above finished floor. If necessary, install ground rod before manhole is placed and provide No. 1/0 AWG bare, tinned-copper conductor from ground rod into manhole through a waterproof sleeve in manhole wall. Protect ground rods passing through concrete floor with a double wrapping of pressure-sensitive insulating tape or heat-

shrunk insulating sleeve from 2 inches (50 mm) above to 6 inches (150 mm) below concrete. Seal floor opening with waterproof, nonshrink grout. Final grounding requirements for manholes/handholes shall be as required by Con Edison.

- 3) Grounding Connections to Manhole Components: Bond exposed-metal parts such as inserts, cable racks, pulling irons, ladders, and cable shields within each manhole or handhole, to ground rod or grounding conductor. Make connections with No. 4 AWG minimum, stranded, hard-drawn copper bonding conductor. Train conductors level or plumb around corners and fasten to manhole walls. Connect to cable armor and cable shields as recommended by manufacturer of splicing and termination kits. Final grounding connections to manhole components shall be as required by Con Edison.

#### C) EQUIPMENT GROUNDING

- 1) Install insulated equipment grounding conductors with all feeders and branch circuits.
- 2) Isolated Equipment Enclosure Circuits: For designated equipment supplied by a branch circuit or feeder, isolate equipment enclosure from supply circuit raceway with a nonmetallic raceway fitting listed for the purpose. Install fitting where raceway enters enclosure, and install a separate insulated equipment grounding conductor. Isolate conductor from raceway and from panel board grounding terminals. Terminate at equipment grounding conductor terminal of the applicable derived system or service, unless otherwise indicated.

#### D) INSTALLATION

- 1) Grounding Conductors: Route along shortest and straightest paths possible, unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.
- 2) Ground Rods: Drive rods until tops are 2 inches (50 mm) below finished floor or final grade, unless otherwise indicated.
  - a) Interconnect ground rods with grounding electrode conductor below grade and as otherwise indicated. Make connections without exposing steel or damaging coating, if any.
  - b) For grounding electrode system, install at least three rods spaced at least one-rod length from each other and located at least the same distance from other grounding electrodes, and connect to the service grounding electrode conductor.
- 3) Test Wells: Ground rod driven through drilled hole in bottom of handhole. Handholes shall be at least 12 inches (300 mm) deep, with cover.
  - a) Test Wells: Install at least one test well for each service, unless otherwise indicated. Install at the ground rod electrically closest to service entrance. Set top of test well flush with finished grade or floor.
- 4) Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance, except where routed through short lengths of conduit.
  - a) Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.
  - b) Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install so vibration is not transmitted to rigidly mounted equipment.
  - c) Use exothermic-welded connectors for outdoor locations, but if a disconnect-type connection is required, use a bolted clamp.

E) FIELD QUALITY CONTROL

- 1) Testing Agency: Engage a qualified testing and inspecting agency to perform the following field tests and inspections and prepare test reports:
  - a) After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
  - b) Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal. Make tests at ground rods before any conductors are connected.
    - i) Measure ground resistance not less than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.
    - ii) Perform tests by fall-of-potential method according to (Institute of Electrical and Electronic Engineers) IEEE 81.
    - iii) Prepare dimensioned drawings locating each test well, ground rod and ground rod assembly, and other grounding electrodes. Identify each by letter in alphabetical order, and key to the record of tests and observations. Include the number of rods driven and their depth at each location, and include observations of weather and other phenomena that may affect test results.
- 2) Report measured ground resistances that exceed the following values:
  - a) Power and Lighting Equipment or System with Capacity 500 kVA and Less: 10 ohms.
  - b) Manhole Grounds: 10 ohms.
- 3) Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Engineer promptly and include recommendations to reduce ground resistance.

**E 260519.7. MEASUREMENT AND PAYMENT**

No separate payments will be made for this work. Any work completed with this section shall be deemed included in the unit price bid for all electrical items.

**SECTION E 260553  
CONDUIT FOR ELECTRICAL SYSTEMS**

**E 260553.1. DESCRIPTION.** This specification section covers common conduit systems, boxes, sleeves, and firestopping. Where other methods are specified under separate sections for specific applications, the specific application requirements shall govern.

**E 260553.2. MATERIALS**

A) Conduit Type - Application (Use only conduit types listed)

1. Conduit - Rigid or Intermediate Grade Galvanized Threaded.

**Applications:**

- a. Exposed Outdoors.
- b. Poured concrete.

**Restrictions - (Not to be used in):**

- d. Direct buried in corrosive soils.
- e. Corrosive atmospheres.

2. Conduit - Flexible Metal (Greenfield type), galvanized steel.

**Application:** as directed or approved by the Engineer

3. Conduit sizes

- a. Conduits shall be 1" minimum size or as directed.

B) Conduit Fittings

1. Fittings and workmanship shall assure electrical continuity. All conduit systems in poured concrete shall be concrete tight.

2. Application of bushings, locknuts and insulated fittings shall comply with NEC requirements.

3. Use conduit fittings as manufactured by Efcor, Steel City, Raco, Midwest, Appleton, ETP / O-Z / Gedney, Thomas & Betts, or an approved equivalent manufacturer, equivalent to the following catalog numbers:

a. Rigid conduit

- (1) All fittings, couplings and connectors shall be threaded type.

- (1) Grounding bushings, malleable iron; insulated; Steel City BG-801; Midwest Series GLL.

b. Flexible conduit

- (1) Malleable iron, "squeeze" type, non-insulated; Midwest series 1708; Steel City XC-901; Appleton 7481V. (For lighting fixture whips only - all steel or die-cast screw-in connector; Midwest 771; Steel City XC-241; Appleton SGC-50DC).

C) Boxes

1. Junction boxes and pull boxes shall be code gauge galvanized steel, fully gasketed, with multiple screw fasteners and covers.
2. Outlet boxes all steel construction with galvanized or plated finish or otherwise all metal, by Steel City, Appleton, Crouse Hinds, R&S, Racco, or other equivalent approved manufacturer.
3. Provide watertight boxes, slip expansions and bonding jumpers where dictated by construction conditions.
4. Terminations at boxes shall be secured by locknuts or approved bushings.

D) Sleeves and Openings

1. Sleeves and formed openings shall be placed in walls, partitions, floor slabs, and poured concrete roof decks for the passage of conduit, cable, wireway, and cable tray. Sleeves and formed openings are not required:
  - a. In floor slabs on grade.
  - b. Where conduit is installed before the slab is constructed.
  - c. Openings are cut for conduit passage and patched with equivalent or comparable material to close the space around the conduit.
  - d. In core drilled openings in solid concrete not requiring water protection. Sleeves are required, however, at core drilling thru hollow pre-cast slabs and concrete block walls, to facilitate containment of required firestopping material.
2. Sleeves for passage of conduit and cables shall be schedule 40 black steel pipe or galvanized rigid conduit. Rectangular sleeves for cables, wireway and cable tray shall be 18 gauge galvanized steel in poured concrete floors, walls and roof decks; 26 gauge galvanized sheet steel in other than poured concrete.
3. Sleeves shall be sized to afford 0.25" to 0.75" clearance space.

- E) Escutcheon plates shall be split-ring chromium plated pressed steel. Plates shall be sized to cover the surface penetration and sleeve. Plates shall be installed on exposed piping in finished rooms and areas where conduits penetrate walls,

floors, ceilings or overhead structure.

### **E 260553.3. INSTALLATION**

- A) Conduit shall be run concealed in all finished areas of new construction and elsewhere unless specifically indicated or upon specific written permission by the Engineer.
- B) Where permitted in concrete slabs, limit conduit size to 1" maximum. Place metallic conduits above vapor barrier when slab is on grade. Where feeders are permitted to be run below floor slab on grade, they shall be installed in non-metallic conduit encased in 3" concrete using galvanized rigid steel elbows. The 90-degree elbow and stub-up shall be galvanized rigid steel.
- C) Conduit crossing building expansion joints shall have expansion provisions with grounding continuity; use special expansion fittings or other National Electrical Code (NEC) approved method.
- D) Work shall be so planned as to:
  - 1. Minimize the number of offsets and junction boxes. For feeder conduits, use all long radius conduit bends or accessibly located large junction boxes with screw covers.
  - 2. Running conduits promiscuously at various levels and directions will not be acceptable.
  - 3. Coordinate activity in advance to avoid interference with other trades.
  - 4. Provide access to all junctions and pull boxes.
- E) Secure feeder conduit to basic structural elements with galvanized straphangers and clamps; use of trapeze type hangers is encouraged for multiple conduits where space will permit. Galvanized metal clamps and screws may be used for attaching and supporting branch circuit conduit. Non-metallic fasteners shall not be used except plastic inserts may be used in concrete for small conduits. Vertical conduits shall be supported at each floor by clamps.
- F) During construction temporarily cap open ends of conduit. Caution trades to take special care of runs in concrete slabs during pouring.
- G) Empty conduit installed for communications use or for future systems shall have an insulated pull wire or heavy nylon cord inserted for use in pulling wires.
- H) Pull mandrel or large swab thru conduit to assure freedom from debris before pulling wires. Use pulling lubricants sparingly.
- I) Conduits, wire and cables entering from outside the building shall be sealed water and moisture tight. Seal between conduit and sleeves, conduits and core-drilled holes and around conductors inside conduits. Provide cast iron pipe or schedule 40 galvanized steel conduit sleeves in exterior walls below grade, with intermediate wall stop and anchor collar set in place before concrete pouring. Sleeve shall be a part of the sealing assembly. When the wall opening is core

drilled the wall sleeve may be omitted. A mechanically compressed rubber sealing assembly equivalent to Thunderline Corp. "Link-Seal" shall be placed in the annular space between conduit and sleeve or core drilling.

- J) Contractor shall record carefully on a set of "as built" prints the exact location of all feeder conduits.
- K) Unless noted otherwise on the drawings, a maximum of 8 conductors shall be installed in a branch circuit conduit. This maximum is a count of all phase and neutral conductors only - ground conductors are not counted when determining maximum fill for this purpose.

**E 260553.4. MEASUREMENT.** The quantity to be measured for payment shall be the actual number of linear feet of Rigid Galvanized Steel Conduit - 1" Nom. Dia. installed, complete, as shown, specified or required, to the satisfaction of the Engineer, measured along the center line of each run of the SBS fare machine conduit measured from the utility pole to the SBS machine post or between SBS machine posts.

**E 260553.5. PRICE TO COVER.** The price bid shall be a unit price for furnishing and installing electrical conduits with pull wires, and shall include the cost of all labor, materials, and equipment, insurance, and incidentals required to complete the work including, but not limited to, all excavation and backfilling, and necessary accessories, all in accordance with the NYC Electrical Code, plans and specifications, and directions of the Engineer.

*Payment will be under:*

Item No.	Item	Pay Unit
E 260553- B	RIGID GALVANIZED STEEL CONDUIT - 1" NOM. DIA.	L.F.



**SECTION E 262400  
TEMPORARY FARE MACHINE HOOK UPS**

**E 262400.1 DESCRIPTION.** Under this section, the Contractor shall be required to furnish and install conduits, poles, concrete foundations, anchor bolts, overhead and below grade wiring as detailed on the plans or as directed by the Engineer in support of installing Transit fare machines at designated temporary Select Bus Service (SBS) bus stop locations. The Contractor shall also coordinate with NYC Transit personnel, who install the fare machines, to assist in energizing or de-energizing the power supply.

The Contractor shall also remove all previously installed temporary facilities upon completing the permanent fare machine installations at the final bus stops locations and then restore sidewalks and existing lighting systems at the temporary locations as detailed on the plans or as directed by the Engineer.

- B) Related Sections: The following sections contain the scope of work that relate to this section:
- 1) Section E260100, Basic Electrical Requirements
  - 2) Section E260500, Common Work Results for Electrical

**E 262400.2 MATERIALS.** All materials, except as noted, shall comply with the standards and material specifications of the New York City Department of Transportation Street Lighting.

Conduit and related components shall comply with Section E 260533 "Conduits for Electrical Systems", herein.

Conductors, cables and associated connectors and splices shall comply with Section E 260519 "Low-Voltage Electrical Power Conductors and Cables", herein.

Temporary Posts shall be either steel or aluminum. Used poles may be accepted if approved by the Engineer.

Concrete for footings shall be Class B-32, Type IIA; cement - Type II Portland; sand - Type 1A; coarse aggregate Type 1, Grade B, or Type 2, Size No. 57; and an approved air-entraining agent shall be added at the time that concrete is mixed. Concrete, cement and aggregate shall comply with the requirements of Section 3.05.

Concrete Sidewalk shall be Class B-32, Type IIA, in accordance with the requirements for concrete under Section 4.13, and pigmented where indicated and where required to match adjoining sidewalk.

**E 262400.3 METHODS.**

1. The Contractor shall provide at least a 20 day advance notice prior to mobilizing and closing an existing SBS bus stop. The contractor shall be responsible in coordinating the construction of the temporary fare machine locations i.e. street lighting,

2. The Contractor shall confirm the temporary machine locations with the Engineer and install traffic control measures to protect the work zone. The Contractor shall cut a neat hole in the sidewalk and excavate to the required depth, then place the concrete and install the

temporary conduits and pole. The exposed surface shall be troweled to a neat, smooth finish, sloped to provide drainage away from the pole and conduit stub ups. The Contractor shall dispose of all unused fill and other materials, leaving the site in a clean and neat condition to the satisfaction of the Engineer.

3. Once the temporary pole is set and approved by the Engineer, the contractor shall install the overhead messenger wire and #8 conductors from an approved existing street light. Existing trees between poles may require pruning. The contractor shall assure that the temporary pole height allows for proper overhead wire clearances between the supply and temporary pole.

4. The Contractor shall cover and protect conduit stub ups and cables until NYC Transit installs the fare machines.

5. On an agreed upon work period (one 8 hour shift) with NYC Transit, the Contractor shall de-energize the existing fare machines at the existing bus stop and energize the fare machines at the temporary bus stop locations in order for NYC Transit to relocate the existing fares machines from the existing bus stop to the temporary bus stop location.

6. Following two full days of operation, the Contractor shall test for stray currents at the temporary bus stop location and provide documentation to the Engineer.

7. Once the new bus bulb is completed and ready for bus service as approved by the Engineer, the contractor shall de-energize the existing fare machines at the temporary bus stop and energize the fare machines at the new bus stop location in order for NYS Transit to relocate the existing fares machines from the temporary to the new bus stop location.

8. Once the temporary fare machines have been removed the contractor shall remove the overhead cables, temporary pole, conduits and restore the concrete sidewalk (2 - 5' x 5' flags) including wire or splice connections and the street light as directed by the Engineer.

9. In lieu of cast-in place, the Contractor may consider using a precast concrete foundation which can be reused at other temporary fare machine locations.

**E 262400.4 MEASUREMENT.** The quantity of Installing Temporary Fare Machine Hook Ups to be measured for payment shall be the actual number of each temporary bus stop location where temporary fare machine hook-ups are satisfactorily installed. The quantity shall be limited to one per each existing bus stop location regardless if the Contractor requests to relocate a previously installed temporary bus to facilitate his construction.

The quantity of Removing Temporary Fare Machine Hook Ups to be measured for payment shall be the actual number of each temporary bus stop location having fare machine hook ups satisfactorily removed and site restored following final installation of the fare machines at the permanent bus stop location.

**E 262400.5 PRICES TO COVER.** The price bid for Installing Temporary Fare Machine Hook Ups shall be a unit price per each temporary bus stop location, and shall cover the cost of all labor, materials, plant, equipment, insurance, and necessary incidentals required to furnish, install the temporary fare machine hook ups, conduit, overhead wiring, posts, concrete, etc, including excavation, backfilling, concrete footings, poles, wiring; furnish stray current testing, energizing and de-energizing installed the fare machines as may be required; complete in place

and completing the work; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

The price bid for Removing Temporary Fare Machine Hook Ups shall be a unit price per each temporary bus stop location, and shall cover the cost of all labor, materials, plant, equipment, insurance, and necessary incidentals required to demolish and remove the temporary fare machine hook ups, conduit, overhead and below grade wiring , posts concrete, etc., including excavation, backfilling, restoration of concrete sidewalk, energizing and de-energizing installed the fare machines, as may be required; and completing the work; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
E 262400 A	INSTALLING TEMPORARY FARE MACHINE HOOK UPS	EA
E 262400 AR	REMOVING TEMPORARY FARE MACHINE HOOK UPS	EA

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THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HWMBRT5A(MED607B)

EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE

FROM FDR DRIVE TO LEXINGTON AVE

INCLUDING NEW BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK

TOGETHER WITH ALL WORK INCIDENTAL THERETO  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO.6

DATED: February 28, 2013

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. The Contractor shall be responsible for compliance with all the provisions of the following Sections and Schedules, which are hereby made a part of the original contract documents:
  - A. "SECTION U: Additional Contract Requirements Applying to Work Performed in the Presence of Privately Owned Utility Facilities" (Pages A6-3 through A6-13)
  - B. Schedule U-1 (Page A6-14)
  - C. Schedules U-2 (one for each Utility Company) (Pages A6-15 through A6-89)
  - D. Section U-3 Page A6-90 (as per the Private Utilities reference document for SECTION U called "CET SPECIFICATIONS AND SKETCHES", dated November 2010), Test Pits and Sketches, Pages (A6-91 through A6-105) in this Addendum; and,
  - E. Utility drawings (7 Sheets) consisting of:
    - \* Coned General Notes and Conditions (1 sheet)
    - \* Coned Existing Facility Plans (3 sheets)
    - \* Coned Proposed Facility Plans (2 sheets)
    - \* Coned Special Care Excavations (1 sheet)attached to the Plans.
2. Each facility operator shall provide inspectors at the work site to inspect methods of interference work, verify quantities and items of Utility Work, and coordinate all phases of the facility operator operations.

3. In addition, the following statements are made to provide clarification of various paragraphs under Section U:
- A. Section U, ¶4, requires the Contractor to immediately commence negotiations with each Company for an Interference Agreement under which the Company will compensate the Contractor for any Interference Work which the Company does not elect to perform with its own forces or by specialty contractors retained by the Company. Thus the Contractor is on notice that its work under the Contract may be affected by Interference Work performed by (a) the Contractor pursuant to a separate Interference Agreement with the Company, (b) the Company, or (c) partly by each.
  - B. Section U, ¶2, informs the Contractor that the duration of the Contract as shown in Schedule A includes the time which may be necessary for the Contractor to perform the necessary Interference Work.
  - C. The Contractor is hereby informed that the duration of the Contract as shown in Schedule A includes the time which may be necessary for the Company to perform whatever portion of the Interference Work which the Company elects to perform with its own forces or by specialty contractors retained by the Company.
  - D. Section U informs the Contractor that the City has entered into a Utility Agreement with the Companies regarding interferences to the City work in this Contract created by the facilities owned and/or operated by such Companies. Pursuant to this Addendum, a sample of the Utility Agreement letter as executed by the Companies is annexed on page A6-13, as an Exhibit to the Contract. Signed copies of those Utility Agreement letters are on file with NYCDDC.
  - E. The City has no contract with any of the Companies for work on or adjacent to the site of work under this Contract, and the Companies are not "Other Contractors" as defined for the purposes of this Contract. The Contractor is reminded, however, that pursuant to Section U, ¶4, the City will not compensate the Contractor for any direct and/or indirect costs related to Interference Work, regardless of whether such Interference Work is covered by an Interference Agreement between the Contractor and the Company or is performed by the Company using its own forces or by specialty contractors retained by the Company.
  - F. Section U, ¶14, provides that the provisions of Section U are material provisions of the Contract and that the Contractor's failure to comply with the procedures set forth in Section U are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract. Pursuant to this Addendum, the Contractor is informed that the Performance Bond required of the Contractor pursuant to the Contract is not deemed to guarantee performance of any of the Interference Work.

**Section U: Additional Contract Requirements Applicable to Work Performed in the Presence of Privately Owned Utility Facilities**

The Contractor is hereby notified that pursuant to the law and franchise agreements issued by the City, certain private utility and public service companies named in Schedule U-1 (“the Companies”) own and/or operate surface and/or subsurface facilities within the limits of this contract. The existence of these facilities impacts the productivity of the City work called for in the contract. In order to improve coordination of the City construction with the private utility facilities owned and/or operated by the Companies named in Schedule U-1, Article 1.06.30 of the Standard Highway Specifications of the New York City Department of Transportation, Dated November 1, 2010; Articles 1.06.14 through 1.06.17 of the General Provisions of the Standard Water Main Specifications of the New York City Department of Environmental Protection, dated August 1, 2009; and/or Articles 1.06.14 through 1.06.17 of the Standard Sewer Specifications of the New York City Department of Environmental Protection, Dated August 1, 2009; as applicable, are amended and will be implemented as follows:

**1. *Pre-engineering:***

The anticipated scopes of private utility facilities interferences and anticipated work items and specifications are included in this contract. The locations of these interferences are indicated on the plans and/or listed in the specifications for this contract, and a schedule of estimated quantities by type of interference expected to be encountered within the limits of this project area have been listed on Schedule U-2. In addition, in Section U-3 the Companies have provided standard details and methods for supporting, protecting, relocating, and/or working around their facilities when they are in interference with City contract work.

**2. *Means and methods for City work:***

- a) The Contractor is hereby notified that the utility interferences identified on the plans and/or listed in the Specifications to be known conditions which may impact the performance of, and/or interferes with, City work. The contractor will be required to perform such utility work as directed by the Resident Engineer in order to clear all utility interferences from the project site as required for satisfactory completion of City work within specified contract schedule.
- b) In areas serviced by overhead electric system, the contractor understands and by bidding for this contract agrees that he/she has reviewed the section ‘U’ package and

that he/she will be required to perform the public work in the presence of energized electrical overhead lines and appurtenances located in areas adjacent and/or within the project area. As a consequence he/she will select means and method of construction appropriate to maintain the safety clearances required or as permitted by contract specifications (e.g. "CET 350 – Overhead Accommodation Protection of Overhead Facilities, Poles, and Appurtenances") in order to avoid damaging the insulation or shielding of these lines and also to prevent knocking them down. The duration of the contract as shown in Schedule A thus includes the time which may be necessary for the Contractor to remove, repair, protect, support, shift, relocate, temporarily remove and replace, work around and/or work in the presence of the Companies' facilities ("Interference Work") as described on the plans and/or specifications of the contract during the progress of the City work.

**3. *Field inspection prior to construction:***

Prior to the start of any contract work in areas serviced by overhead electric lines, and after the award to the apparent low bidder for this contract, the contractor must request a field walk of the project area along with the operator of the overhead electrical facilities and the DDC Engineer-In-Charge. At that time the facility operator, pursuant to contract specification (e.g. "CET 350 – Overhead Accommodation Protection of Overhead Facilities, Poles, and Appurtenances") will confirm the type and condition of the overhead electrical lines and the sufficiency of their insulating properties with respect to the means and methods proposed by the contractor. The contractor must be prepared to describe in enough details his/her proposed means and methods of construction operations in order to anticipate the likelihood that electric lines insulation would be cut or otherwise compromised. Also such details will allow the facility operator to anticipate the need for added insulation and/or shielding of non-insulated lines.

**4. *Compensation for interference work:***

Compensation for Interference Work is a matter of adjustment between the Contractor and each private utility company located within the limits of the project area and whose utility facilities are affected by City contract work. In particular, the City will not compensate the Contractor for any direct and/or indirect costs related to Interference Work, including, but not limited to, lost profit, increased overhead, or any other impact costs. Upon receipt of a Notice of Award from the City, the Contractor shall immediately commence negotiations with each of the Companies concerning the manner in which and the price for which the Contractor,



through its own forces or by others hired by it, will perform and be paid by the Company for all necessary Interference Work as defined above that the Company(ies) choose(s) not to perform with its(their) own forces or by specialty Contractors hired by it (them) (as per "Interference Agreement"). (Specialty contractors' work is limited to (i) insulation installation and removal, (ii) live gas and steam work, (iii) cleanup and disposal of hazardous materials, (iv) splicing live electrical and telecommunications facilities, and (v) work not traditionally performed by general construction contractors.)

**5. *Interference Agreement:***

1. The Companies have provided estimate of the quantity of each of the types of interferences expected to be encountered in the contract in Schedule U-2. Although the parties may negotiate an Interference Agreement in any format or manner they deem fit, the Contractor is hereby advised that the Companies have indicated to the City that they will agree to compensate the Contractor on a unit price basis according to the Quantity and Types of Interferences expected to be encountered on this Contract as stated in Schedule U-2.
2. Furthermore, in Section U-3, standard unit work measurement and payment provisions are specified and shall apply only if the Contractor and affected Utility companies enters into a unit price based Interference Agreement, otherwise the unit of work measurement, and payment provisions set forth in Section U-3 shall not apply. The Contractor shall notify the City upon concluding an Interference Agreement with each of the Companies, which shall be binding and final once concluded.

**6. *City contract work to continue without Interference Agreement :***

If, prior to the start of construction, as directed by the City's Order to work / Notice To Proceed (OTW/ NTP) date any of the Companies and the Contractor have not concluded an Interference Agreement as described above, then the City construction will proceed as ordered and the Contractor will be directed by the Resident Engineer to perform the City work on Time, Material and Equipment basis (T&M) as specified in standard City contract agreement Article 26.2. T&M records will include identification of types of utility facilities interfering with City work, utility facility owners, specifying the nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such work and crew size, such as: name and number of each worker employed on such work. T&M records will also indicate the hours of active time, standby time and idle time. The Company (ies) and the Contractor will maintain separate records of the actual quantity and cost of labor, materials,

and equipment expended, and will provide copies of this information to the other party on a daily basis for reconciliation. These T&M records along with cost evaluations will be submitted daily to the Resident Engineer for review and approval. The total cost of City work will be based on quantity of work performed multiplied by unit price contract bid items. The total interference cost will be calculated as the difference between the total T&M cost and total cost for City work. The Resident Engineer will conduct a monthly reconciliation session of the daily T&M records with the affected Company (ies) and contractor. If the contractor and affected utility companies cannot reconcile their T&M records, by the last day of each month, then the Resident Engineer will submit the approved City's T&M records along with total cost evaluations to the DDC Director of Construction who will review these records and recommend approval and validity certification by the DDC Deputy Commissioner.

1. Copies of the DDC approved and certified T&M records will then be transmitted by the DDC to the contractor and the utility companies. These certified records may be used by the contractor for compensation claims against the responsible private facility owners, or may be used by any party as supporting documentation in dispute regarding compensation for performing Interference Work as identified in Schedule U-2. The contractor will be required to perform City work while invoices are submitted by the contractor to the Utility companies for payment within 30 days, or while compensation disputes between contractor and affected company (ies) are submitted to Binding Arbitration process described in Paragraph 10.
2. All issues related to utility work and/ or delays due to compensation disputes or claims against utility companies are not allowable as justification for granting contract time extensions. The City may assess liquidated damages specified in the contract for net overall delays suffered by City contract work as a result of utility issues, disputes and claims.
3. The standard City contract dispute resolution process specified in Article 27 "Presentation of disputes to Commissioner", of the standard City contract agreement is not applicable to any disputes related to utility work and/ or compensation for such work or claim against utility companies. Utility work issues, disputes and claims may only be submitted to Binding Arbitration process described in Paragraph 10.
4. The contractor will notify the Resident Engineer when utility capital work not specified in Schedule U2 and/ or for utility work that require the intervention of company utility specialty crews causes excessive contractor's labor and equipment standby or idleness

and, thereby jeopardizing the City project schedule. The Resident Engineer will submit the facts to the DDC Director of construction who will recommend to the Deputy Commissioner regarding the issuance of a "48 hours notice" to the concerned utility company as authorized by the New York City administrative Code Section 19-143 and/or Section 24-521 as applicable.

5. Utility delays caused by utility capital work not listed in Schedule U2 and/ or by unavailability of utility specialty crews cannot be discounted for earning any contractual bonus when such bonus clause is included in a contract. However, if such specified bonus is not earned or disallowed by the City or if the City assesses specified liquidated damages as a result of such excessive delays, the contractor may seek damages from the responsible utility company (ies).

**7. *Extra utility work with Utility Agreement:***

If during construction the Contractor encounters utility facilities interferences or utility scope of work that it believes is not covered by the Interference Agreement as described above, then the Contractor shall immediately notify the Company in writing, with a copy to the City, describing the nature and location of the extra work in question. The Company then has five (5) business days to investigate the conditions and then:

1. Advise the Contractor and the City in writing that no interference with its facilities exists at the location in question, and hence that the Contractor may proceed with City work without providing for any impact from Company facilities;
2. Advise the Contractor and the City in writing that the Interference Agreement negotiated pursuant to Paragraph (6), above, provides for the scope of work encountered, specifying the exact unit items and/or terms of the agreement that cover the work;
3. Advise the Contractor and the City in writing that it intends to perform the necessary utility Work with company forces or with its own contractor including, but not limited to, relocating its facility out of the way of the proposed City work. In this case, the Company shall provide a written schedule for the performance of the utility work it proposes to perform, which shall be subject to approval by the City based on its impact to the Contractor's currently approved progress schedule. Upon approval of the Company's schedule by the City, the Contractor shall provide access to the worksite to the Company and/or any contractors hired by it to perform this utility work. If necessary, the City may

grant a contract time extension for delays caused by the performance of such utility work by the company.

4. Reasonably specify in writing the scope of work to be performed by the Contractor on behalf of the Company that is not covered under the Interference Agreement negotiated pursuant to Paragraph (6), including, but not limited to, relocating, supporting, and/or protecting the Company's facilities, and/or shifting the City facility if approved by the Resident Engineer, and/or otherwise changing its operations to work in the presence of the Company's facilities. Should the Company elect this option, it must adequately define and provide an initial price offer for the work required to be performed.

**8. *Means and Methods for utility work:***

Upon receipt of the Company's determination pursuant to paragraphs 7.2, or 7.4, above, the Contractor shall determine reasonable means and methods of performing the work defined by the Company. These means and methods are subject to approval of the Company, which shall not be unreasonably withheld. If, however, the Company objects to the Contractor's proposed means and methods then it shall define an alternate method of construction. Upon receipt of the Company's approval or its proposed alternate method of construction, the Contractor shall commence performance of the work defined by the Company as soon as possible, and shall perform the work in a good, workmanlike, and efficient manner, using the means and methods approved by the Company, in order to permit the City work to proceed in the most expeditious manner possible, but without imposing unreasonable and/or unnecessary costs on the Company. It is expressly understood by all parties that the City's rights pursuant to Article 4 of the Contract apply to Utility Work performed pursuant to this section.

**9. *Disputed utility work covered by a utility agreement:***

The City Work will continue as described in paragraph 6 above. In the event of any dispute between the Company (ies) and the Contractor regarding any issue related to the performance of, or payment for, utility work, including, but not limited to, any indirect or impact costs incurred by the Contractor due to the Utility Work and/or to the existence of facilities owned or operated by the Company (ies) on the line of the work. The Company (ies) and the Contractor hereby agree to submit to each other a "Final Offer," in writing, by certified mail. Each party shall then have three business days to consider each other's Final Offer. In the event that neither party accepts the other's Final Offer within those three days, the Company (ies) and the Contractor agree to immediately submit the dispute to binding arbitration as described in Paragraph 10. During the pendency of any arbitration, the Company (ies) and the Contractor

shall maintain separate records of the actual quantity and cost of labor, materials, and equipment expended, and to provide copies of this information to the other party on a daily basis for reconciliation. Any and all disagreement with the records maintained and provided by the other, must be documented in writing to all parties. However, these records are solely for the benefit of presentation to the arbitrator, whose decision may not necessarily be based on these records and in any event is final. Both parties should be aware that the City will not confirm or deny the accuracy of any records maintained by either party for Utility work performed pursuant to a Utility Agreement. While the arbitration is pending, the Company shall pay the Contractor on a monthly basis, based on the price offered by the Company to the Contractor for the performance of the work.

**10. Arbitration of utility work:**

The arbitration of the issues described above shall be conducted pursuant to the Construction Industry Arbitration Rules of the American Arbitration Association (hereinafter "the Rules" and "AAA") in effect on the date the arbitration is initiated except as set forth herein. 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.

- (a) 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.
- (b) No later than seven days prior to the first arbitration hearing, Company and Contractor shall submit to the arbitrator(s), and to each other, a summary of each party's respective position and such other information as is deemed appropriate, along with a copy of each party's Final Offer as specified in paragraph 9.
- (c) The arbitration shall be conducted and concluded in two days.
- (d) On the morning of the first day of the arbitration, Contractor and/or representatives shall have 3 ½ hrs to make a presentation of its claim to the arbitrator. During its presentation, Contractor shall not be permitted to produce any documents or cost records which have not already been provided to the Company. Contractor shall be permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
- (e) After lunch, Company and/or its representatives shall have two hours to ask Contractor questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask Contractor questions about its claim and its presentation.

- (f) On the morning of the second day of the arbitration, Company and/or its representatives shall have 3 ½ hours to make a presentation of its claim to the arbitrator. During its presentation, the Company shall not be permitted to produce any documents or cost records which have not already been provided to the Contractor. The Company shall be permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
- (g) After lunch, Contractor and/or its representatives shall have two hours to ask Company questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask Company questions about its claim and its presentation.
- (h) Subject to the above time limitations, the arbitrator(s) may conduct the arbitration in such manner as the arbitrator(s) deems reasonable.
- (i) The arbitrator(s) shall then have one week to select in writing, as the arbitrator ('s) award, that party's Final Offer which appears to be more reasonable, based on the presentations at the arbitration hearings.
- (j) The arbitrator shall have no discretion to grant an award other than one of the two Final Offers submitted by the parties.
- (k) Any award for work that has already been performed shall be paid on the 7<sup>th</sup> day after receipt of the arbitrator's decision, or on the 30<sup>th</sup> 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 30 days of completion of work. Interest shall accrue from the date payment is due at the rate of 9% 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.
- (l) The arbitrator's fees and any other costs of the arbitration shall be initially shared equally by Company and 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.
- (m) The parties may, at any time, settle any matter submitted to arbitration.

**11. Order-out waiver:**

The Contractor and all subcontractors hired by it, if an Interference Agreement is executed as specified between the concerned parties, agree to waive any rights they may have, if any, under law, contract or otherwise to compel the City to assert any right the City may have, including the issuance of any directives required under the New York City Administrative Code, Section 19-143 and Section 24-521, to require any or all of the Companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove utility facilities in connection with the work to be performed under this contract. However, nothing in this section shall preclude the City from exercising its rights under the Law to issue such a directive to the Company.

**12. Cost of insurance:**

Each of the named Companies, at their option and if an Interference Agreement is executed as specified between the concerned parties, may be named as an additional insured on all insurance policies required to be maintained under this contract. In the event that a Company opts to be so named as an additional insured, the actual incremental cost, if any, to the Contractor of providing such insurance coverage shall be borne by that Company. The Contractor shall provide a written statement from its insurance provider documenting the actual cost of this added coverage to the Company. Under no circumstances shall the cost of insurance coverage on behalf of any Company 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, the Company and the Contractor bear joint and full responsibility to ensure that any Utility Work performed by the Contractor is in compliance with all applicable government and Company regulations.

**13. Cost of utility interference work:**

The Companies, by virtue of a prior agreement with the City, have agreed to perform their obligations described in this section. It is expressly understood that the cost of Utility Work shall not be a charge against the City, but shall be a matter for adjustment between the Contractor and the Company or Companies concerned. The City and the Contractor agree that the Companies are third party beneficiaries of this section of the contract, if a Utility Agreement is executed between the contractor and utility company (ies). The provisions of this section shall govern in all cases where Company property interferes with or is about to be disturbed by the City work, notwithstanding any other provision of the Contract, except for Natural Gas transmission/distribution facilities covered subject to the Gas Facility Cost Allocation Act (GFCAA) and covered separately in this contract.

***14. Default declaration:***

The Contractor agrees that the provisions of this section are material provisions of the contract, and that the Contractor's failure to comply with the procedures set forth above are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract.

***15. NYS Labor Law:***

The Contractor is hereby advised that New York State Labor Law applies to public work. The work described in this Section U of the contract performed by utility company (ies) with their own forces or vendors hired by such company (ies) is not public work.

***16. Facility operators:***

The insurance requirements in Paragraph 12 of this Section U apply to: (i) additional Companies, if any, who were not named in Schedule "A" but which have executed a Utility Agreement with the contractor for utility work; and (ii) additional coverage, if any, paid for by Utility Companies whose utility facilities are located within the project limits, that they may require for the utility work pursuant to an utility agreement between the contractor and such utility companies.

[End]



“STANDARD UTILITY LETTER OF AGREEMENT”

(Name)  
Deputy Commissioner, Infrastructure Division  
Department of Design and Construction  
30-30 Thomson Avenue  
Long Island City, NY 11101

RE: City Work Performed in the Presence of Private Utility Facilities  
Project No: \_\_\_\_\_

Dear (Name):

This letter is to certify that \_\_\_\_\_, has requested the inclusion of the attached “Section U: Additional contract requirements applying to work performed in the presence of privately owned utility.” The company agrees to abide by the terms of this Section U and to submit a schedule listing the scope of work, including the items and estimated quantities, and types of utility facilities to be supported and protected at the company’s own expenses due to interferences with the Public work.

Sincerely,

\_\_\_\_\_  
By: Authorized Company Representative

\_\_\_\_\_  
Title

NOTARY PUBLIC

CERTIFIED AS TO FORM  
AND LEGAL AUTHORITY:

By: \_\_\_\_\_

**SCHEDULE U-1**

HWMBRT5A (MED607B)

34<sup>th</sup> STREET TRANSITWAY  
EAST 34<sup>TH</sup> STREET FROM 3<sup>RD</sup> AVE TO FDR DRIVE  
BOROUGH OF MANHATTAN

**SCHEDULE U-1**

**LISTING OF COMPANIES NAMED FOR THIS CONTRACT**

<b><u>COMPANY NAME</u></b>	<b><u>CONTACT NAME</u></b>	<b><u>CONTACT TELEPHONE</u></b>
CON EDISON	THERESA KONG	212-460-4834
ECS	AUBREY MAKHANLAL	718-877-8165

**SCHEDULE U-2**

**HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN  
FOR INFORMATION ONLY**

**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE  
FOR CONSOLIDATED EDISON**

JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity
CET 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .1)	EA.	35
CET 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2)	EA.	8
CET 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .3)	EA.	12
CET 100.4	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .4)	EA.	2
CET 100.5	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .5)	EA.	3
CET 101.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	EA.	1
CET 101.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	EA.	1
CET 101.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	EA.	1
CET 101.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .4)	EA.	1
CET 101.5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .5)	EA.	1
CET 106.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .1)	EA.	9
CET 106.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .2)	EA.	1
CET 106.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .3)	EA.	3
CET 106.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .4)	EA.	1
CET 108.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)	EA.	23
CET 108.2	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .2)	EA.	14
CET 108.3	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3)	EA.	3
CET 108.4	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .4)	EA.	5
CET 108.5	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .5)	EA.	1
CET 109.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	EA.	44
CET 109.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	EA.	11
CET 109.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	EA.	3

**SCHEDULE U-2**

**HWMBRT5A (MED 607-B)**  
**34TH STREET TRANSITWAY**  
**E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE**  
**BOROUGH OF MANHATTAN**  
**FOR INFORMATION ONLY**

**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE**  
**FOR CONSOLIDATED EDISON**

<b>JOINT BID ITEM NUMBER</b>	<b>DESCRIPTION</b>	<b>Unit of Measure</b>	<b>Estimated Quantity</b>
CET 109.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	EA.	1
CET 109.5	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5)	EA.	2
CET 110.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .1)	EA.	4
CET 110.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .2)	EA.	2
CET 110.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3)	EA.	1
CET 110.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .4)	EA.	1
CET 111.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)	EA.	1
CET 111.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)	EA.	3
CET 111.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)	EA.	5
CET 111.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .4)	EA.	1
CET 200.1	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	285
CET 200.2	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	30
CET 225.1A	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	10
CET 225.2A	INSTALLATION & REMOVAL OF CATCH BASIN WITH UTILITY INTERFERENCES AT AND ADDITIONAL DEPTH OF UP TO 3 FT.	EA.	1
CET 225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	9
CET 225.2B	INSTALLATION OF CATCH BASIN WITH UTILITY INTERFERENCES AT AND ADDITIONAL DEPTH OF UP TO 3 FT.	EA.	1
CET 225.1C	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	4
CET 300	SPECIAL CARE EXCAVATION AND BACKFILLING	C.Y.	400
CET 301	SPECIAL CARE EXCAVATION AND BACKFILLING FOR OIL-O-STATIC PIPES	C.Y.	200
CET 302	FIELD COATING OF OIL-O-STATIC FEEDER PIPES	L.F.	600
CET 303	FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL	C.Y.	800
CET 304	FURNISH, DELIVER & INSTALL CONCRETE PAVEMENT FOR ROADWAY OR SIDEWALK	C.Y.	160

**SCHEDULE U-2**

**HWMBRT5A (MED 607-B)**

**34TH STREET TRANSITWAY**

**E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE**

**BOROUGH OF MANHATTAN**

**FOR INFORMATION ONLY**

**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE**

**FOR CONSOLIDATED EDISON**

<b>JOINT BID ITEM NUMBER</b>	<b>DESCRIPTION</b>	<b>Unit of Measure</b>	<b>Estimated Quantity</b>
CET 305	FURNISH & INSTALL ASPHALT PAVING MIXTURE	TONS	100
CET 330E-A.1	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .1)	L.F.	210
CET 330E-A.2	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .2)	L.F.	20
CET 330E-A.3	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .3)	L.F.	20
CET 330E-A.4	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .4)	L.F.	60
CET 330E-A.5	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .5)	L.F.	130
CET 330E-B.1	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT REQUIRE SHEETING (TYPE .1)	L.F.	1,000
CET 330E-B.2	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT REQUIRE SHEETING (TYPE .2)	L.F.	220
CET 330E-B.3	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT REQUIRE SHEETING (TYPE .3)	L.F.	300
CET 330E-B.4	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT REQUIRE SHEETING (TYPE .4)	L.F.	20
CET 400	TEST PITS FOR UTILITY FACILITIES	C.Y.	400
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	C.Y.	1,600

**SCHEDULE U-2**

**HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE**

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FOR CONSOLIDATED EDISON**

JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity
CET 401A	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES CONNECTED TO THE BASE PAVEMENT	C.Y.	20
CET 402.1	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	500
CET 402.1A	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	2,000
CET 402.2	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	2,400
CET 402.2A	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	3,000
CET 403	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	S.F.	2,200
CET 404	PIER & PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAINS WITH LESS THAN 24" COVER	S.F.	620
CET 405.1	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	C.Y.	1,950
CET 405.2	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET	C.Y.	1,000
CET 406	EXCAVATION FOR UTILITY STRUCTURE	C.Y.	250
CET 450.1	CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE SIZE SURVEY CREW THAT WILL PERFORM TYPICAL FIELD SURVEY FUNCTIONS AND PROVIDE DATA ANALYSIS REPORTS	Crhrs.	1,200
CET 450.2	CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE SMALL SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS, 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), PERFORMING CONDUIT OCCUPANCY IDENTIFICATION, CLEAN-UP STORAGE WORK-SITE AREA, ETC.	Crhrs.	1,600
CET 450.3	CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE MEDIUM SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS, WHICH MAY INCLUDE BUT NOT LIMITED TO: EXCAVATIONS DUE TO CABLE FAILURES, INCLUDING EMERGENCY TYPE EXCAVATIONS, CONSTRUCT MANHOLE ENCLOSURES, DEWATERING UTILITY STRUCTURES AND EXCAVATIONS, OPENING/CLOSING TRAFFIC AND/OR PEDESTRIAN PLATES, ETC.	Crhrs.	3,200
CET 500	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	L.F.	6,800
CET 501	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	C.Y.	40
CET 603E.1	CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	17,220
CET 603E.2	CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	800

**SCHEDULE U-2**

**HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
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**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE  
FOR CONSOLIDATED EDISON**

JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity
CET 636 EA RD	ADJUSTMENT OF UTILITY HARDWARE ( UNDER 7" WIDTH )	EA.	1
CET 636 EB RD	ADJUSTMENT OF UTILITY HARDWARE ( 7" TO UNDER 14" WIDTH )	EA.	1
CET 636 EC RD	ADJUSTMENT OF UTILITY HARDWARE ( 14" TO UNDER 30" WIDTH )	EA.	1
CET 636 ED RD	ADJUSTMENT OF UTILITY HARDWARE ( 30" TO UNDER 34" WIDTH )	EA.	5
CET 636 EE RD	ADJUSTMENT OF UTILITY HARDWARE ( 34" TO UNDER 41" WIDTH )	EA.	5
CET 636 EG RD	ADJUSTMENT OF UTILITY HARDWARE ( 41" TO UNDER 75" WIDTH )	EA.	40
CET 636 EH RD	ADJUSTMENT OF UTILITY HARDWARE ( 75" TO UNDER 125" WIDTH )	EA.	1
CET 636 EI RD	ADJUSTMENT OF UTILITY HARDWARE ( 125" TO UNDER 170" WIDTH )	EA.	1
CET 636 MG	MOD. OF METHODS TO ACCOMM. UTILITY STREET HRDW. DURING PAVE. MILL. AND RESURF. OPS (41" TO UNDER 75" WIDTH)	EA.	10
CET 636 SMB	MOD. OF METHODS TO ACCOMM. STEAM HRDW. DURING PAVE. MILLING AND RESURFAC. OPS ( UNDER & INCLUDING 8" WIDTH)	EA.	2
CET 636 SMC	MOD. OF METHODS TO ACCOMM. STEAM HRDW. DURING PAVE. MILLING AND RESURFAC. OPS ( ABOVE 8" TO 34" WIDTH)	EA.	5
CET 636 RM	REBUILDING AND MODIFICATIONS TO UTILITY STRUCTURES	C.Y.	40
CET 636 RS	STRUCTURAL REPAIR TO UTILITY STRUCTURES	C.Y.	20
CET 636 SA	ADJUSTMENT OF UTILITY STEAM HARDWARE (CONCRETE COLLAR)	S.F.	150
CET 636 SB	ADJUSTMENT OF UTILITY STEAM CASTINGS (UNDER AND INCLUDING 8" WIDTH)	EA.	5
CET 636 SC	ADJUSTMENT OF UTILITY STEAM CASTINGS (ABOVE 8" TO 34" WIDTH)	EA.	10
CET 638 N	INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE	C.Y.	80
CET 638 R	BREAK OUT AND REMOVE UTILITY STRUCTURE	C.Y.	80
CET 700	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	C.Y.	600
CET 710.1	REMOVAL OF ABANDONED UTILITY STEEL/ CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPES	L.F.	3,800
CET 710.2	REMOVAL OF ABANDONED UTILITY STEEL/ CAST IRON/ PLASTIC PIPES, OVER 12" AND UP TO AND INCLUDING 20" DIAMETER PIPES	L.F.	40
CET 710.3	REMOVAL OF ABANDONED UTILITY STEEL/ CAST IRON, OVER 20" DIAMETER PIPES.	L.F.	700

**SCHEDULE U-2**

**HWMBRT5A (MED 607-B)**

**34TH STREET TRANSITWAY**

**E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE**

**BOROUGH OF MANHATTAN**

**FOR INFORMATION ONLY**

**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE**

**FOR CONSOLIDATED EDISON**

JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity
CET 711	USE SHEETING LINE AS FORM	L.F.	800
CET 781	REMOVABLE CURB SIDEWALK PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS	EA.	1
CET 800	MODIFICATION OF TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	L.F.	200
CET 801	MODIFICATION OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	L.F.	600
CET 802A	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW SIDEWALKS	S.F.	5,950
CET 802B	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW CURB	L.F.	490
CET 803.1	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL, ASPHALT ROADWAY	L.F.	50
CET 803.2	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL, ASPHALT AND CONCRETE ROADWAY	L.F.	800
CET 850	PLACING RUBBER SHEETS FOR UTILITY FACILITIES	S.F.	600
CET 1006V	6" VERTICAL OR ROLLED WATERMAIN OFFSET	EA.	10
CET 1006H	6" HORIZONTAL WATERMAIN OFFSET	EA.	5
CET 1012V	12" VERTICAL OR ROLLED WATERMAIN OFFSET	EA.	3
CET 1012H	12" HORIZONTAL WATERMAIN OFFSET	EA.	2
CET 1020V	20" VERTICAL OR ROLLED WATERMAIN OFFSET	EA.	3
CET 1020H	20" HORIZONTAL WATERMAIN OFFSET	EA.	2



CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

CET 100.1 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .1) EA.

At the following locations:

NWC E. 34TH STREET AND 3RD AVENUE  
SWC E. 34TH STREET AND 3RD AVENUE  
NEC E. 34TH STREET AND 3RD AVENUE  
SWC E. 34TH STREET AND 2ND AVENUE  
NWC E. 34TH STREET AND 2ND AVENUE  
NWC E. 34TH STREET AND MIDTOWN TUNNEL APPROACH  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE  
NWC E. 34TH STREET AND 1ST AVENUE  
SWC E. 34TH STREET AND 1ST AVENUE  
SEC E. 34TH STREET AND 1ST AVENUE  
N/S E. 34TH STREET W/O FDR DRIVE  
S/S E. 34TH STREET W/O FDR DRIVE

Total quantity for CET 100.1 = 35

CET 100.2 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2) EA.

At the following locations:

SWC E. 34TH STREET AND 3RD AVENUE  
NEC E. 34TH STREET AND 3RD AVENUE  
NWC E. 34TH STREET AND MIDTOWN TUNNEL APPROACH  
NWC E. 34TH STREET AND 1ST AVENUE  
NEC E. 34TH STREET AND 1ST AVENUE  
N/S E. 34TH STREET W/O FDR DRIVE

Total quantity for CET 100.2 = 8

CET 100.3 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .3) EA.

At the following locations:

NEC E. 34TH STREET AND 3RD AVENUE  
SWC E. 34TH STREET AND 2ND AVENUE  
NWC E. 34TH STREET AND 2ND AVENUE  
NWC E. 34TH STREET AND 1ST AVENUE  
SWC E. 34TH STREET AND 1ST AVENUE  
SEC E. 34TH STREET AND 1ST AVENUE

Total quantity for CET 100.3 = 12

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

- CET 100.4 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .4) EA.**
- At the following locations:  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
NEC E. 34TH STREET AND 1ST AVENUE
- Total quantity for CET 100.4 = 2
- CET 100.5 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .5) EA.**
- At the following locations:  
NWC E. 34TH STREET AND 3RD AVENUE  
NEC E. 34TH STREET AND 1ST AVENUE  
SEC E. 34TH STREET AND 1ST AVENUE
- Total quantity for CET 100.5 = 3
- CET 101.1 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1) EA.**
- At the following locations:  
INT. OF E. 34TH STREET AND 1ST AVENUE
- Total quantity for CET 101.1 = 1
- CET 101.2 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2) EA.**
- At the following locations:  
INT. OF E. 34TH STREET AND 1ST AVENUE
- Total quantity for CET 101.2 = 1
- CET 101.3 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3) EA.**
- At the following locations:  
INT. OF E. 34TH STREET AND 1ST AVENUE
- Total quantity for CET 101.3 = 1

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

CET 101.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .4)	EA.
	At the following locations: INT. OF E. 34TH STREET AND 1ST AVENUE	
	Total quantity for CET 101.4 =	1
CET 101.5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .5)	EA.
	At the following locations: INT. OF E. 34TH STREET AND 1ST AVENUE	
	Total quantity for CET 101.5 =	1
CET 106.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .1)	EA.
	At the following locations: E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE	
	Total quantity for CET 106.1 =	9
CET 106.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .2)	EA.
	At the following locations: E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE	
	Total quantity for CET 106.2 =	1
CET 106.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .3)	EA.
	At the following locations: E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE	
	Total quantity for CET 106.3 =	3
CET 106.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .4)	EA.
	At the following locations: AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE	
	Total quantity for CET 106.4 =	1

**CON EDISON CET SCOPE OF WORK**  
**SUPPORT & PROTECTION**

**HWMBRT5A (MED 607-B)**  
**34TH STREET TRANSITWAY**  
**E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE**  
**BOROUGH OF MANHATTAN**

**CET 108.1 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)**

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
INT. OF E. 34TH STREET AND 2ND AVENUE  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE

Total quantity for            CET 108.1            =            23

**CET 108.2 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .2)**

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
INT. OF E. 34TH STREET AND 2ND AVENUE  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE

Total quantity for            CET 108.2            =            14

**CET 108.3 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3)**

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE  
INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for            CET 108.3            =            3

**CET 108.4 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .4)**

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for            CET 108.4            =            5

**CET 108.5 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .5)**

At the following locations:

INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for            CET 108.5            =            1

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

CET 109.1 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1) EA.

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
INT. OF E. 34TH STREET AND 2ND AVENUE  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE  
INT. OF E. 34TH STREET AND 1ST AVENUE

Total quantity for CET 109.1 = 44

CET 109.2 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2) EA.

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
INT. OF E. 34TH STREET AND 2ND AVENUE  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE

Total quantity for CET 109.2 = 11

CET 109.3 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3) EA.

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE  
INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for CET 109.3 = 3

CET 109.4 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4) EA.

At the following locations:

INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for CET 109.4 = 1

CET 109.5 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5) EA.

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE  
INT. OF E. 34TH STREET AND 1ST AVENUE

Total quantity for CET 109.5 = 2

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

CET 110.1 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .1) EA.

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE

Total quantity for CET 110.1 = 4

CET 110.2 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .2) EA.

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE

Total quantity for CET 110.2 = 2

CET 110.3 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3) EA.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 110.3 = 1

CET 110.4 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .4) EA.

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE

Total quantity for CET 110.4 = 1

CET 111.1 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1) EA.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 111.1 = 1

CET 111.2 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2) EA.

At the following locations:

INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for CET 111.2 = 3

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

CET 111.3 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)

At the following locations:

INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for CET 111.3 = 5

CET 111.4 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .4)

At the following locations:

INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for CET 111.4 = 1

CET 200.1 EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES

At the following locations:

NWC E. 34TH STREET AND 3RD AVENUE

E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE

NWC E. 34TH STREET AND 2ND AVENUE

NWC E. 34TH STREET AND MIDTOWN TUNNEL APPROACH

NWC E. 34TH STREET AND 1ST AVENUE

SWC E. 34TH STREET AND 1ST AVENUE

SEC E. 34TH STREET AND 1ST AVENUE

Total quantity for CET 200.1 = 285

CET 200.2 EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 200.2 = 30

CET 225.1A INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES

At the following locations:

SWC E. 34TH STREET AND 2ND AVENUE

NWC E. 34TH STREET AND MIDTOWN TUNNEL APPROACH

NWC E. 34TH STREET AND 1ST AVENUE

NEC E. 34TH STREET AND 1ST AVENUE

SWC E. 34TH STREET AND 1ST AVENUE

SEC E. 34TH STREET AND 1ST AVENUE

N/S E. 34TH STREET W/O FDR DRIVE

S/S E. 34TH STREET W/O FDR DRIVE

Total quantity for CET 225.1A = 10

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

CET 225.2A    **INSTALLATION & REMOVAL OF CATCH BASIN WITH UTILITY INTERFERENCES AT AND ADDITIONAL DEPTH OF UP TO 3 FT.**    EA.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for            CET 225.2A            =            1

CET 225.1B    **INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES**    EA.

At the following locations:

NWC E. 34TH STREET AND 3RD AVENUE  
SWC E. 34TH STREET AND 3RD AVENUE  
NEC E. 34TH STREET AND 3RD AVENUE  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
NWC E. 34TH STREET AND 2ND AVENUE  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE  
NWC E. 34TH STREET AND 1ST AVENUE

Total quantity for            CET 225.1B            =            9

CET 225.2B    **INSTALLATION OF CATCH BASIN WITH UTILITY INTERFERENCES AT AND ADDITIONAL DEPTH OF UP TO 3 FT.**    EA.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for            CET 225.2B            =            1

CET 225.1C    **REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES**    EA.

At the following locations:

NWC E. 34TH STREET AND 3RD AVENUE  
SWC E. 34TH STREET AND 2ND AVENUE  
NWC E. 34TH STREET AND 2ND AVENUE  
NWC E. 34TH STREET AND 1ST AVENUE

Total quantity for            CET 225.1C            =            4

CET 300        **SPECIAL CARE EXCAVATION AND BACKFILLING**    C.Y.

At the following locations:

E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
INT. OF E. 34TH STREET AND 2ND AVENUE  
INT. OF E. 34TH STREET AND 1ST AVENUE  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for            CET 300                =            400



CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

CET 301	<b>SPECIAL CARE EXCAVATION AND BACKFILLING FOR OIL-O-STATIC PIPES</b>	C.Y.
	At the following locations: INT. OF E. 34TH STREET AND 3RD AVENUE INT. OF E. 34TH STREET AND 1ST AVENUE AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE	
	Total quantity for            CET 301            =            200	
CET 302	<b>FIELD COATING OF OIL-O-STATIC FEEDER PIPES</b>	L.F.
	At the following locations: INT. OF E. 34TH STREET AND 3RD AVENUE INT. OF E. 34TH STREET AND 1ST AVENUE AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE	
	Total quantity for            CET 302            =            600	
CET 303	<b>FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL</b>	C.Y.
	At the following locations: INT. OF E. 34TH STREET AND 3RD AVENUE INT. OF E. 34TH STREET AND 1ST AVENUE AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE	
	Total quantity for            CET 303            =            800	
CET 304	<b>FURNISH, DELIVER &amp; INSTALL CONCRETE PAVEMENT FOR ROADWAY OR SIDEWALK</b>	C.Y.
	At the following locations: AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE	
	Total quantity for            CET 304            =            160	
CET 305	<b>FURNISH &amp; INSTALL ASPHALT PAVING MIXTURE</b>	TONS
	At the following locations: AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE	
	Total quantity for            CET 305            =            100	
CET 330E-A.1	<b>SUPPORT &amp; PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .1)</b>	L.F.
	At the following locations: INT. OF E. 34TH STREET AND 3RD AVENUE INT. OF E. 34TH STREET AND 1ST AVENUE	
	Total quantity for            CET 330E-A.1            =            210	

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

CET 330E-A.2 SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .2) L.F.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 330E-A.2 = 20

CET 330E-A.3 SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .3) L.F.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 330E-A.3 = 20

CET 330E-A.4 SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .4) L.F.

At the following locations:

INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for CET 330E-A.4 = 60

CET 330E-A.5 SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT DO NOT REQUIRE SHEETING (TYPE .5) L.F.

At the following locations:

INT. OF E. 34TH STREET AND 2ND AVENUE

Total quantity for CET 330E-A.5 = 130

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

**CET 330E-B.1 SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT REQUIRE SHEETING (TYPE .1)** L.F.

At the following locations:

E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE  
INT. OF E. 34TH STREET AND 1ST AVENUE  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 330E-B.1 = 1,000

**CET 330E-B.2 SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT REQUIRE SHEETING (TYPE .2)** L.F.

At the following locations:

INT. OF E. 34TH STREET AND 3RD AVENUE  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 330E-B.2 = 220

**CET 330E-B.3 SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT REQUIRE SHEETING (TYPE .3)** L.F.

At the following locations:

INT. OF E. 34TH STREET AND 1ST AVENUE

Total quantity for CET 330E-B.3 = 300

**CET 330E-B.4 SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS. CITY EXCAVATIONS FOR THE INSTALLATION OF CITY FACILITIES THAT REQUIRE SHEETING (TYPE .4)** L.F.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for CET 330E-B.4 = 20

**CET 400 TEST PITS FOR UTILITY FACILITIES** C.Y.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for CET 400 = 400

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

- CET 401 TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES** C.Y.
- At the following locations:  
INT. OF E. 34TH STREET AND 3RD AVENUE  
INT. OF E. 34TH STREET AND 1ST AVENUE (OIL-O-STATIC AND OTHER SUB-SURFACE FACILITIES)  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for            CET 401            =    1,600
- 
- CET 401A SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES CONNECTED TO THE BASE PAVEMENT** C.Y.
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for            CET 401A            =        20
- 
- CET 402.1 EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT** L.F.
- At the following locations:  
INT. OF E. 34TH STREET AND 3RD AVENUE  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for            CET 402.1            =        500
- 
- CET 402.1A EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT** L.F.
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for            CET 402.1A            =    2,000
- 
- CET 402.2 EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT** L.F.
- At the following locations:  
INT. OF E. 34TH STREET AND 1ST AVENUE (OIL-O-STATIC AND OTHER SUB-SURFACE FACILITIES)  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for            CET 402.2            =    2,400



CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

CET 406      EXCAVATION FOR UTILITY STRUCTURE      C.Y.

At the following locations:

- E. 34TH STREET INT. OF 3RD AVENUE
- E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE
- E. 34TH STREET INT. OF 2ND AVENUE
- E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE
- E. 34TH STREET INT. OF 1ST AVENUE
- AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      CET 406      =      250

CET 450.1      CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE SIZE SURVEY CREW THAT WILL PERFORM TYPICAL FIELD SURVEY FUNCTIONS AND PROVIDE DATA ANALYSIS REPORTS      Crhrs.

At the following locations:

- AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      CET 450.1      =      1,200

CET 450.2      CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE SMALL SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS, 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), PERFORMING CONDUIT OCCUPANCY IDENTIFICATION, CLEAN-UP STORAGE WORK-SITE AREA, ETC.      Crhrs.

At the following locations:

- AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      CET 450.2      =      1,600

CET 450.3      CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE MEDIUM SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS, WHICH MAY INCLUDE BUT NOT LIMITED TO: EXCAVATIONS DUE TO CABLE FAILURES, INCLUDING EMERGENCY TYPE EXCAVATIONS, CONSTRUCT MANHOLE ENCLOSURES, DEWATERING UTILITY STRUCTURES AND EXCAVATIONS, OPENING/CLOSING TRAFFIC AND/OR PEDESTRIAN PLATES, ETC.      Crhrs.

At the following locations:

- AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      CET 450.3      =      3,200

CON EDISON CET SCOPE OF WORK  
SUPPORT & PROTECTION

HWMBRT5A (MED 607-B)  
34TH STREET TRANSITWAY  
E. 34TH STREET FROM 3RD AVENUE TO FDR DRIVE  
BOROUGH OF MANHATTAN

- CET 500      **REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)**      L.F.
- At the following locations:
- E. 34TH STREET INT. OF 3RD AVENUE
  - E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE
  - E. 34TH STREET INT. OF 2ND AVENUE
  - E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE
  - E. 34TH STREET INT. OF 1ST AVENUE
- AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for              CET 500              =      6,800
- 
- CET 501      **REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES**      C.Y.
- At the following locations:
- AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for              CET 501              =      40
- 
- CET 603E.1      **CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT**      L.F.
- At the following locations:
- E. 34TH STREET INT. OF 3RD AVENUE
  - E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE
  - E. 34TH STREET INT. OF 2ND AVENUE
  - E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE
  - E. 34TH STREET INT. OF 1ST AVENUE
- AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for              CET 603E.1              =      17,220
- 
- CET 603E.2      **CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT**      L.F.
- At the following locations:
- AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for              CET 603E.2              =      800
- 
- CET 636 EA RD      **ADJUSTMENT OF UTILITY HARDWARE ( UNDER 7" WIDTH )**      EA.
- At the following locations:
- AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for              CET 636 EA RD              =      1

CON EDISON CET SCOPE OF WORK  
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- CET 636 EB RD ADJUSTMENT OF UTILITY HARDWARE ( 7" TO UNDER 14" WIDTH ) EA.
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 EB RD = 1
- CET 636 EC RD ADJUSTMENT OF UTILITY HARDWARE ( 14" TO UNDER 30" WIDTH ) EA.
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 EC RD = 1
- CET 636 ED RD ADJUSTMENT OF UTILITY HARDWARE ( 30" TO UNDER 34" WIDTH ) EA.
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 ED RD = 5
- CET 636 EE RD ADJUSTMENT OF UTILITY HARDWARE ( 34" TO UNDER 41" WIDTH ) EA.
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 EE RD = 5
- CET 636 EG RD ADJUSTMENT OF UTILITY HARDWARE ( 41" TO UNDER 75" WIDTH ) EA.
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 EG RD = 40
- CET 636 EH RD ADJUSTMENT OF UTILITY HARDWARE ( 75" TO UNDER 125" WIDTH ) EA.
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 EH RD = 1
- CET 636 EI RD ADJUSTMENT OF UTILITY HARDWARE ( 125" TO UNDER 170" WIDTH ) EA.
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 EI RD = 1



CON EDISON CET SCOPE OF WORK  
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- CET 636 MG MOD. OF METHODS TO ACCOMM. UTILITY STREET HRDW. DURING PAVE. MILL. AND RESURF. OPS (41" TO UNDER 75" WIDTH) EA.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 MG = 10
- CET 636 SMB MOD. OF METHODS TO ACCOMM. STEAM HRDW. DURING PAVE. MILLING AND RESURFAC. OPS (UNDER & INCLUDING 8" WIDTH) S.F.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 SMB = 2
- CET 636 SMC MOD. OF METHODS TO ACCOMM. STEAM HRDW. DURING PAVE. MILLING AND RESURFAC. OPS (ABOVE 8" TO 34" WIDTH) EA.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for CET 636 SMC = 5
- CET 636 RM REBUILDING AND MODIFICATIONS TO UTILITY STRUCTURES C.Y.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for CET 636 RM = 40
- CET 636 RS STRUCTURAL REPAIR TO UTILITY STRUCTURES C.Y.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for CET 636 RS = 20
- CET 636 SA ADJUSTMENT OF UTILITY STEAM HARDWARE (CONCRETE COLLAR) S.F.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for CET 636 SA = 150
- CET 636 SB ADJUSTMENT OF UTILITY STEAM CASTINGS (UNDER AND INCLUDING 8" WIDTH) EA.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for CET 636 SB = 5

CON EDISON CET SCOPE OF WORK  
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CET 636 SC ADJUSTMENT OF UTILITY STEAM CASTINGS (ABOVE 8" TO 34" WIDTH ) EA.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 636 SC = 10

CET 638 N INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE C.Y.

At the following locations:

E. 34TH STREET INT. OF 3RD AVENUE  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
E. 34TH STREET INT. OF 2ND AVENUE  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE  
E. 34TH STREET INT. OF 1ST AVENUE  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 638 N = 80

CET 638 R BREAK OUT AND REMOVE UTILITY STRUCTURE C.Y.

At the following locations:

E. 34TH STREET INT. OF 3RD AVENUE  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
E. 34TH STREET INT. OF 2ND AVENUE  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE  
E. 34TH STREET INT. OF 1ST AVENUE  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for CET 638 R = 80

CET 700 SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER C.Y.

At the following locations:

AS SHOWN ON THE SPECIAL CARE EXCAVATION PLANS

Total quantity for CET 700 = 600

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- CET 710.1**    **REMOVAL OF ABANDONED UTILITY STEEL/ CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPES**    **L.F.**
- At the following locations:  
E. 34TH STREET INT. OF 3RD AVENUE  
E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE  
E. 34TH STREET INT. OF 2ND AVENUE  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE  
E. 34TH STREET INT. OF 1ST AVENUE  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for            CET 710.1            =    3,800
- 
- CET 710.2**    **REMOVAL OF ABANDONED UTILITY STEEL/ CAST IRON/ PLASTIC PIPES, OVER 12" AND UP TO AND INCLUDING 20" DIAMETER PIPES**    **L.F.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for            CET 710.2            =        40
- 
- CET 710.3**    **REMOVAL OF ABANDONED UTILITY STEEL/ CAST IRON, OVER 20" DIAMETER PIPES.**    **L.F.**
- At the following locations:  
E. 34TH STREET INT. OF 3RD AVENUE
- Total quantity for            CET 710.3            =        700
- 
- CET 711**    **USE SHEETING LINE AS FORM**    **L.F.**
- At the following locations:  
E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE  
INT. OF E. 34TH STREET AND 1ST AVENUE  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for            CET 711                =        800
- 
- CET 781**    **REMOVABLE CURB SIDEWALK PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS**    **EA.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for            CET 781                =        1
- 
- CET 800**    **MODIFICATION OF TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES**    **L.F.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE
- Total quantity for            CET 800                =        200

CON EDISON CET SCOPE OF WORK  
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- CET 801      MODIFICATION OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES      L.F.**  
At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE  
Total quantity for      CET 801      =      600
- CET 802A      SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW SIDEWALKS      S.F.**  
At the following locations:  
AS SHOWN ON THE SPECIAL CARE EXCAVATION PLANS  
Total quantity for      CET 802A      =      5,950
- CET 802B      SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW CURB      L.F.**  
At the following locations:  
AS SHOWN ON THE SPECIAL CARE EXCAVATION PLANS  
Total quantity for      CET 802B      =      490
- CET 803.1      LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATION, ASPHALT ROADWAY      L.F.**  
At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE  
Total quantity for      CET 803.1      =      50
- CET 803.2      LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATION, ASPHALT AND CONCRETE ROADWAY      L.F.**  
At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE  
Total quantity for      CET 803.2      =      800
- CET 850      PLACING RUBBER SHEETS FOR UTILITY FACILITIES      S.F.**  
At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE  
Total quantity for      CET 850      =      600

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<b>CET 1006V</b>	<b>6" VERTICAL OR ROLLED WATERMAIN OFFSET</b>				<b>EA.</b>
	At the following locations:				
	AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE				
	Total quantity for	CET 1006V	=	10	
<b>CET 1006H</b>	<b>6" HORIZONTAL WATERMAIN OFFSET</b>				<b>EA.</b>
	At the following locations:				
	AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE				
	Total quantity for	CET 1006H	=	5	
<b>CET 1012V</b>	<b>12" VERTICAL OR ROLLED WATERMAIN OFFSET</b>				<b>EA.</b>
	At the following locations:				
	AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE				
	Total quantity for	CET 1012V	=	3	
<b>CET 1012H</b>	<b>12" HORIZONTAL WATERMAIN OFFSET</b>				<b>EA.</b>
	At the following locations:				
	AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE				
	Total quantity for	CET 1012H	=	2	
<b>CET 1020V</b>	<b>20" VERTICAL OR ROLLED WATERMAIN OFFSET</b>				<b>EA.</b>
	At the following locations:				
	AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE				
	Total quantity for	CET 1020V	=	3	
<b>CET 1020H</b>	<b>20" HORIZONTAL WATERMAIN OFFSET</b>				<b>EA.</b>
	At the following locations:				
	AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE				
	Total quantity for	CET 1020H	=	2	

**HWMBRT5A - 34th Street Transitway  
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**Schedule U-2: Scope of Work for CET items**

CET ITEM	UNITS	TOTAL	DESCRIPTION
100.1	EACH	11	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS AND/OR TEST PITS (TYPE .1)
100.2	EACH	8	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS AND/OR TEST PITS (TYPE .2)
100.3	EACH	4	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS AND/OR TEST PITS (TYPE .3)
100.4	EACH	4	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS AND/OR TEST PITS (TYPE .4)
100.5	EACH	1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS AND/OR TEST PITS (TYPE .5)
101.1	EACH	3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)
101.2	EACH	2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)
101.3	EACH	1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)
101.4	EACH	2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .4)
108.1	EACH	20	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)
108.2	EACH	9	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)
108.3	EACH	14	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .3)
108.4	EACH	1	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .4)
109.1	EACH	9	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)
109.2	EACH	5	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)
109.3	EACH	3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO

109.4	EACH	3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)
110.1	EACH	4	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .1)
110.2	EACH	1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .2)
110.3	EACH	3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3)
111.1	EACH	2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)
111.2	EACH	1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)
111.3	EACH	1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)
111.4	EACH	1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .4)
200	LF	70	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES
225.1A	EACH	4	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES
225.1B	EACH	3	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES
225.1C	EACH	3	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES
300	CY	105	SPECIAL CARE EXCAVATION AND BACKFILLING
330T1	LF	525	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMM. FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH
330T2	LF	320	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMM. FACILITIES LIE ADJACENT TO TRENCH AND CONTRACTOR MODIFIES TRENCH AND OR SHEETING
400	CY	15	TEST PITS FOR UTILITY FACILITIES
401AT	CY	10	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF TELECOMMUNICATION UTILITY FACILITIES CONNECTED TO OR NEAR THE BASE PAVEMENT
401	CY	244	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES
402T.1A	LF	4,250	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED

			IN FINAL POSITION WITH CONCRETE ENCASEMENT
402T.V1A	LF	150	EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT
402T.2	LF	130	EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT
402T.V2	LF	25	EXISTING VACANT NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT
636EERD	EA	2	ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (34"-41" WIDTH)
636RM	EA	15	REBUILDING AND MODIFICATIONS TO UTILITY STRUCTURES
700	CY	61	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE /PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER
802A	SF	20	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW SIDEWALK
802B	LF	47	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW CURB
1006V	EA	4	6" VERTICAL OR ROLLED WATER MAIN OFFSET
1012V	EA	3	12" VERTICAL OR ROLLED WATER MAIN OFFSET
1020V	EA	2	20" VERTICAL OR ROLLED WATER MAIN OFFSET



**HWMBRT5A - 34th Street Transitway  
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**Schedule U-2: Scope of Work for CET items**

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**CET 100.1**

**UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS  
AND/OR TEST PITS (TYPE .1)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
NEC OF INT OF E. 34TH ST & FIRST AVE.	1
SEC OF INT OF E. 34TH ST & FIRST AVE.	3
SWC OF INT OF E. 34TH ST & FIRST AVE.	1
SWC OF INT OF E. 34TH ST & SECOND AVE.	2
NWC OF INT OF E. 34TH ST & SECOND AVE.	1
NEC OF INT OF E. 34TH ST & THIRD AVE	1
NWC OF INT OF E. 34TH ST & THIRD AVE	2
<b>CET 100.1</b>	<b>TOTAL 11</b>

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**CET 100.2**

**UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS  
AND/OR TEST PITS (TYPE .2)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
NEC OF INT OF E. 34TH ST & FIRST AVE.	2
SEC OF INT OF E. 34TH ST & FIRST AVE.	2
SWC OF INT OF E. 34TH ST & SECOND AVE.	1
NEC OF INT OF E. 34TH ST & THIRD AVE.	2
NWC OF INT OF E. 34TH ST & THIRD AVE.	1
<b>CET 100.2</b>	<b>TOTAL 8</b>

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**CET 100.3**

**UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS  
AND/OR TEST PITS (TYPE .3)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
SEC OF INT OF E. 34TH ST & FIRST AVE.	1
NWC OF INT OF E. 34TH ST & SECOND AVE.	2
NEC OF INT OF E. 34TH ST & THIRD AVE.	1
<b>CET 100.3</b>	<b>TOTAL 4</b>

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**CET 100.4**

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**Schedule U-2: Scope of Work for CET items**

**UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS  
AND/OR TEST PITS (TYPE .4)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
SEC OF INT OF E. 34TH ST & FIRST AVE.		1
NWC OF INT OF E. 34TH ST & SECOND AVE.		2
SWC OF INT OF E. 34TH ST & SECOND AVE.		1
<b>CET 100.4</b>	<b>TOTAL</b>	<b>4</b>

**CET 100.5  
UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS  
AND/OR TEST PITS (TYPE .5)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
NWC OF INT OF E. 34TH ST & THIRD AVE.		1
<b>CET 100.5</b>	<b>TOTAL</b>	<b>1</b>

**CET 101.1  
UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24"  
DIAMETER (TYPE .1)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
NEC OF INT OF E. 34TH ST & FIRST AVE.		3
<b>CET 101.1</b>	<b>TOTAL</b>	<b>3</b>

**CET 101.2  
UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24"  
DIAMETER (TYPE .2)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
NEC OF INT OF E. 34TH ST & FIRST AVE.		2
<b>CET 101.2</b>	<b>TOTAL</b>	<b>2</b>

**CET 101.3  
UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24"  
DIAMETER (TYPE .3)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
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**Schedule U-2: Scope of Work for CET items**

NEC OF INT OF E. 34TH ST & FIRST AVE.	1
<b>CET 101.3</b>	<b>TOTAL 1</b>

**CET 101.4**

**UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24"  
DIAMETER (TYPE .4)**

<b>@ THE FOLLOWING LOCATIONS</b>		<b>QTY(EA)</b>
NEC OF INT OF E. 34TH ST & FIRST AVE.		2
<b>CET 101.4</b>	<b>TOTAL</b>	<b>2</b>

**CET 108.1**

**UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING  
12" DIAMETER (TYPE .1)**

<b>@ THE FOLLOWING LOCATIONS</b>		<b>QTY(EA)</b>
S. SIDE OF E. 34TH ST BTWN FIRST & SECOND AVES		1
NEC OF INT OF E. 34TH ST & SECOND AVE.		1
SEC OF INT OF E. 34TH ST & SECOND AVE.		3
SWC OF INT OF E. 34TH ST & SECOND AVE.		2
N. SIDE OF E. 34TH ST BTWN SECOND AND THIRD AVES.		3
NEC OF INT OF E. 34TH ST & THIRD AVE.		3
SEC OF INT OF E. 34TH ST & THIRD AVE.		3
NWC OF INT OF E. 34TH ST & THIRD AVE.		4
<b>CET 108.1</b>	<b>TOTAL</b>	<b>20</b>

**CET 108.2**

**UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING  
12" DIAMETER (TYPE .2)**

<b>@ THE FOLLOWING LOCATIONS</b>		<b>QTY(EA)</b>
SEC OF INT OF E. 34TH ST & SECOND AVE.		1
N. SIDE OF E. 34TH ST BTWN SECOND AND THIRD AVES.		2
NEC OF INT OF E. 34TH ST & THIRD AVE.		1
SEC OF INT OF E. 34TH ST & THIRD AVE.		2
NWC OF INT OF E. 34TH ST & THIRD AVE.		2
SWC OF INT OF E. 34TH ST & THIRD AVE.		1
<b>CET 108.2</b>	<b>TOTAL</b>	<b>9</b>

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**Schedule U-2: Scope of Work for CET items**

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**CET 108.3**

**UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING  
12" DIAMETER (TYPE .3)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
SEC OF INT OF E. 34TH ST & SECOND AVE.	2
NWC OF INT OF E. 34TH ST & SECOND AVE.	4
SWC OF INT OF E. 34TH ST & SECOND AVE.	3
NEC OF INT OF E. 34TH ST & THIRD AVE.	3
NWC OF INT OF E. 34TH ST & THIRD AVE.	1
SWC OF INT OF E. 34TH ST & THIRD AVE.	1
<b>CET 108.3</b>	<b>TOTAL 14</b>

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**CET 108.4**

**UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING  
12" DIAMETER (TYPE .4)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
E. SIDE OF THIRD AVE BTWN E. 34TH & E. 35TH STS.	1
<b>CET 108.4</b>	<b>TOTAL 1</b>

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**CET 109.1**

**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO  
24" DIAMETER (TYPE .1)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
SWC OF INT OF E. 34TH ST & FIRST AVE.	1
S. SIDE OF E. 34TH ST BTWN FIRST & SECOND AVES.	2
SEC OF INT OF E. 34TH ST & SECOND AVE.	1
SEC OF INT OF E. 34TH ST & THIRD AVE.	2
NWC OF INT OF E. 34TH ST & THIRD AVE.	2
SWC OF INT OF E. 34TH ST & THIRD AVE.	1
<b>CET 109.1</b>	<b>TOTAL 9</b>

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**CET 109.2**

**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO  
24" DIAMETER (TYPE .2)**

**HWMBRT5A - 34th Street Transitway  
Borough of Manhattan  
Schedule U-2: Scope of Work for CET items**

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@ THE FOLLOWING LOCATIONS	QTY(EA)
SWC OF INT OF E. 34TH ST & SECOND AVE.	2
SEC OF INT OF E. 34TH ST & THIRD AVE.	2
NWC OF INT OF E. 34TH ST & THIRD AVE.	1
<b>CET 109.2</b>	<b>TOTAL 5</b>

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**CET 109.3**  
**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO  
24" DIAMETER (TYPE .3)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
SWC OF INT OF E. 34TH ST & SECOND AVE.	2
SEC OF INT OF E. 34TH ST & THIRD AVE.	1
<b>CET 109.3</b>	<b>TOTAL 3</b>

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**CET 109.4**  
**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO  
24" DIAMETER (TYPE .4)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
SWC OF INT OF E. 34TH ST & SECOND AVE.	1
NEC OF INT OF E. 34TH ST & THIRD AVE.	1
SEC OF INT OF E. 34TH ST & THIRD AVE.	1
<b>CET 109.4</b>	<b>TOTAL 3</b>

---

**CET 110.1**  
**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO  
36" DIAMETER (TYPE .1)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
E. SIDE OF SECOND AVE BTWN E. 34TH & E. 33RD STS	1
NEC OF INT OF E. 34TH ST & THIRD AVE.	2
SEC OF INT OF E. 34TH ST & THIRD AVE.	1
<b>CET 110.1</b>	<b>TOTAL 4</b>

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**CET 110.2**  
**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO**

**HWMBRT5A - 34th Street Transitway  
Borough of Manhattan**

**Schedule U-2: Scope of Work for CET items**

**36" DIAMETER (TYPE .2)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
NEC OF INT OF E. 34TH ST & THIRD AVE.		1
<b>CET 110.2</b>	<b>TOTAL</b>	<b>1</b>

**CET 110.3**

**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
NEC OF INT OF E. 34TH ST & THIRD AVE.		3
<b>CET 110.3</b>	<b>TOTAL</b>	<b>3</b>

**CET 111.1**

**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
SEC OF INT OF E. 34TH ST & SECOND AVE.		1
NWC OF INT OF E. 34TH ST & SECOND AVE.		1
<b>CET 111.1</b>	<b>TOTAL</b>	<b>2</b>

**CET 111.2**

**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
NWC OF INT OF E. 34TH ST & SECOND AVE.		1
<b>CET 111.2</b>	<b>TOTAL</b>	<b>1</b>

**CET 111.3**

**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
SEC OF INT OF E. 34TH ST & SECOND AVE.		1
<b>CET 111.3</b>	<b>TOTAL</b>	<b>1</b>

**HWMBRT5A - 34th Street Transitway  
Borough of Manhattan**

**Schedule U-2: Scope of Work for CET items**

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**CET 111.4**

**UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .4)**

@ THE FOLLOWING LOCATIONS		QTY(EA)
SWC OF INT OF E. 34TH ST & SECOND AVE.		1
<b>CET 111.4</b>	<b>TOTAL</b>	<b>1</b>

---

**CET 200**

**EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES**

@ THE FOLLOWING LOCATIONS		QTY(LF)
NEC OF INT OF E. 34TH ST & FIRST AVE.		40
SEC OF INT OF E. 34TH ST & FIRST AVE.		30
<b>CET 200</b>	<b>TOTAL</b>	<b>70</b>

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**CET 225.1A**

**INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES**

@ THE FOLLOWING LOCATIONS		QTY(EA)
NEC OF INT OF E. 34TH ST & FIRST AVE.		1
SEC OF INT OF E. 34TH ST & FIRST AVE.		1
SWC OF INT OF E. 34TH ST & SECOND AVE.		2
<b>CET 225.1A</b>	<b>TOTAL</b>	<b>4</b>

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**CET 225.1B**

**INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES**

@ THE FOLLOWING LOCATIONS		QTY(EA)
SWC OF INT OF E. 34TH ST & SECOND AVE.		2
NEC OF INT OF E. 34TH ST & THIRD AVE		1
<b>CET 225.1B</b>	<b>TOTAL</b>	<b>3</b>

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**CET 225.1C**

**REMOVAL OF CATCH BASINS WITH UTILITY**

**HWMBRT5A - 34th Street Transitway****Borough of Manhattan****Schedule U-2: Scope of Work for CET items****INTERFERENCES**

@ THE FOLLOWING LOCATIONS	QTY(EA)
SWC OF INT OF E. 34TH ST & SECOND AVE.	2
NWC OF INT OF E. 34TH ST & SECOND AVE.	1
<b>CET 225.1C</b>	<b>TOTAL 3</b>

**CET 300****SPECIAL CARE EXCAVATION AND BACKFILLING**

@ THE FOLLOWING LOCATIONS	QTY(CY)
SEC OF E. 34TH ST & SECOND AVE.	15
W. SIDE OF INT OF E. 34TH ST & THIRD AVE.	60
N. SIDE OF E. 34TH ST BWTN THIRD & SECOND AVES.	30
<b>CET 300</b>	<b>TOTAL 105</b>

**CET 330T1**

**SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES  
DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMM.  
FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH**

@ THE FOLLOWING LOCATIONS	QTY(LF)
S. SIDE OF E. 34TH ST BWTN FIRST & SECOND AVES.	20
NEC OF INT OF E. 34TH ST. & SECOND AVE.	200
N. SIDE OF E. 34TH ST BWTN THIRD & SECOND AVES.	50
S. SIDE OF E. 34TH ST BWTN THIRD & SECOND AVES.	75
SWC OF INT OF E. 34TH ST & THIRD AVE	120
NWC OF INT OF E. 34TH ST & THIRD AVE	60
<b>CET 330T1</b>	<b>TOTAL 525</b>

**CET 330T2**

**SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES  
DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMM.  
FACILITIES LIE ADJACENT TO TRENCH AND CONTRACTOR MODIFIES  
TRENCH OR SHEETING**

@ THE FOLLOWING LOCATIONS	QTY(LF)
SEC OF INT OF E. 34TH ST & SECOND AVE.	65



**HWMBRT5A - 34th Street Transitway  
Borough of Manhattan**

**Schedule U-2: Scope of Work for CET items**

N. SIDE OF E. 34TH ST BWTN THIRD & SECOND AVES.	75
S. SIDE OF E. 34TH ST BWTN THIRD & SECOND AVES.	75
NEC OF INT OF E. 34TH ST & THIRD AVE.	105
<b>CET 330T2</b>	<b>TOTAL 320</b>

**CET 400**

**TEST PITS FOR UTILITY FACILITIES**

@ THE FOLLOWING LOCATIONS	QTY(CY)
AS DIRECTED AND ENCOUNTERED BY ECS FIELD REPRESENTATIVE	
<b>CET 400</b>	<b>TOTAL 15</b>

**CET 401AT**

**SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF  
TELECOMMUNICATION UTILITY FACILITIES CONNECTED TO OR  
NEAR THE BASE PAVEMENT**

@ THE FOLLOWING LOCATIONS	QTY(CY)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP	
<b>CET 401AT</b>	<b>TOTAL 10</b>

**CET 401**

**TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES**

@ THE FOLLOWING LOCATIONS	QTY(CY)
SEC OF INT OF E. 34TH ST & SECOND AVE.	37
W. SIDE OF SECOND AVE BTWN E. 34TH & E. 35TH STS.	40
W. SIDE OF SECOND AVE BTWN E. 34TH & E. 35TH STS.	37
N. SIDE OF E. 34TH ST BTWN SECOND & THIRD AVES.	14
NEC OF INT OF E. 34TH ST & THIRD AVE	19
SEC OF INT OF E. 34TH ST & THIRD AVE.	30
SWC OF INT OF E. 34TH ST & THIRD AVE.	67
<b>CET 401</b>	<b>TOTAL 244</b>

**CET 402T.1A**

**EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS  
PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT**

**HWMBRT5A - 34th Street Transitway  
Borough of Manhattan**

**Schedule U-2: Scope of Work for CET items**

@ THE FOLLOWING LOCATIONS	QTY(LF)
SEC OF INT OF E. 34TH ST & SECOND AVE.	400
W. SIDE OF SECOND AVE BTWN E. 34TH & E. 35TH STS.	450
W. SIDE OF SECOND AVE BTWN E. 34TH & E. 35TH STS.	400
SWC OF INT OF E. 34TH ST & THIRD AVE.	3000
<b>CET 402T.1A</b>	<b>TOTAL 4250</b>

**CET 402T.V1A**

**EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION  
CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT**

@ THE FOLLOWING LOCATIONS	QTY(LF)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP	150
<b>CET 402T.V1A</b>	<b>TOTAL 150</b>

**CET 402T.2**

**EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS  
PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT**

@ THE FOLLOWING LOCATIONS	QTY(LF)
N. SIDE OF E. 34TH ST BTWN SECOND & THIRD AVES.	30
NEC OF INT OF E. 34TH ST & THIRD AVE	20
SEC OF INT OF E. 34TH ST & THIRD AVE.	80
<b>CET 402T.2</b>	<b>TOTAL 130</b>

**CET 402T.V2**

**EXISTING VACANT NON-CONCRETE ENCASED TELECOMMUNICATION  
CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT**

@ THE FOLLOWING LOCATIONS	QTY(LF)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP	25
<b>CET 402T.V2</b>	<b>TOTAL 25</b>

**CET 636 EE RD**

**ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (34"-41" WIDTH)**

@ THE FOLLOWING LOCATIONS	QTY(EA)
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP	2

**HWMBRT5A - 34th Street Transitway  
Borough of Manhattan**

**Schedule U-2: Scope of Work for CET items**

<b>CET 636 EE RD</b>	<b>TOTAL</b>	<b>2</b>
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**CET 636 RM  
REBUILDING AND MODIFICATIONS TO UTILITY STRUCTURES**

<b>@ THE FOLLOWING LOCATIONS</b>		<b>QTY(CY)</b>
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP		15
<b>CET 636 RM</b>	<b>TOTAL</b>	<b>15</b>

**CET 700  
SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT  
UNDERGROUND FACILITIES WITH LIMITED COVER**

<b>@ THE FOLLOWING LOCATIONS</b>		<b>QTY(CY)</b>
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP		61
<b>CET 700</b>	<b>TOTAL</b>	<b>61</b>

**CET 802A  
SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW  
SIDEWALK**

<b>@ THE FOLLOWING LOCATIONS</b>		<b>QTY(SF)</b>
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP		20
<b>CET 802A</b>	<b>TOTAL</b>	<b>20</b>

**CET 802B  
SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW  
CURB**

<b>@ THE FOLLOWING LOCATIONS</b>		<b>QTY(LF)</b>
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP		47
<b>CET 802B</b>	<b>TOTAL</b>	<b>47</b>

**CET 1006V  
6"VERTICAL OR ROLLED WATER MAIN OFFSET**

<b>@ THE FOLLOWING LOCATIONS</b>		<b>QTY(EA)</b>
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP		4
<b>CET 1006V</b>	<b>TOTAL</b>	<b>4</b>

**HWMBRT5A - 34th Street Transitway  
Borough of Manhattan**

**Schedule U-2: Scope of Work for CET items**

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**CET 1012V**

**12" VERTICAL OR ROLLED WATER MAIN OFFSET**

	QTY(EA)
@ THE FOLLOWING LOCATIONS	
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP	3
<b>CET 1012V</b>	
<b>TOTAL</b>	<b>3</b>

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**CET 1020V**

**20" VERTICAL OR ROLLED WATER MAIN OFFSET**

	QTY(EA)
@ THE FOLLOWING LOCATIONS	
AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REP	2
<b>CET 1020V</b>	
<b>TOTAL</b>	<b>2</b>

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**CET 850 (CUSTOM – HWMBRT5A (MED-607B)) - 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.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.  
4 IRVING PLACE  
NEW YORK, NEW YORK 10003

ENGINEERING SPECIFICATION

CE-TS-3352

SPECIFICATION FOR THE INSTALLATION  
OF HIGH PRESSURE PIPE  
FOR 69, 138 AND 345 KV CABLE SYSTEMS

SECTION I - GENERAL REQUIREMENTS  
REVISION 16

February, 2007

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## SECTION I – GENERAL REQUIREMENTS

### 1.0 SCOPE

- 1.1 This specification covers the installation and testing of high pressure pipes for the 69 kV, 138 kV and 345 kV cable systems inside and outside of station areas. It includes pipes to be occupied by the pipe type cable system and the pipes to be used for dielectric fluid associated with pressurizing or cooling of the feeders.
- 1.2 This specification also:
  - 1.2.1 Identifies all equipment and materials to be supplied and installed by the Contractor.
  - 1.2.2 Identifies all equipment to be supplied by others and installed by the Contractor.
  - 1.2.3 Identifies the location where the equipment and materials are to be installed by the Contractor.
  - 1.2.4 Describes the conditions to be met for the installation of the equipment and materials.
  - 1.2.5 Supply the Contractor with Company and/or Manufacturer's drawings showing details for the proper installation of equipment.

### 2.0 PROJECT DESCRIPTION

- 2.1 Installation of high pressure pipe for 69, 138 and 345 kV cable systems.

### 3.0 APPLICABLE STANDARDS AND REFERENCES

- 3.1 The latest editions of the following laws, regulations, codes and standards issued by the following organizations and agencies are applicable to the scope of work covered in this specification:
  - 3.1.1 Institute of Electronic and Electrical Engineers (IEEE)
  - 3.1.2 National Electric Code (NEC)
  - 3.1.3 National Electric Safety Code (NESC)
  - 3.1.4 American National Standards Institute (ANSI)
  - 3.1.5 National Electric Manufacturers Association (NEMA)
  - 3.1.6 New York State Department of Environmental Conservation (NYSDEC)
  - 3.1.7 New York City Department of Environmental Protection (NYCDEP)
  - 3.1.8 United States Environmental Protection Agency (EPA)

- 3.1.9 Occupational Safety and Health Administration (OSHA)
- 3.1.10 "Articles of the General Condition" of the Consolidated Edison Company of New York, Inc.
- 3.1.11 Contractor HASP Manual.
- 3.2 All violations arising from non-compliance of applicable standards and references are the responsibility of the Contractor and shall be promptly rectified.

**4.0 CONTRACT DRAWINGS, SUPPLEMENTAL SPECIFICATIONS, AND MATERIALS LISTS**

- 4.1 Drawings, specifications and material lists (electrical, transmission, mechanical, civil, etc.) are provided in Section III of this specification.
- 4.2 All specifications and drawings attached or referenced herein are the latest revisions. Any new revisions dealing with the subject removals will be furnished as an addendum to the specification and attached tables. All work shall be performed in accordance with the latest detail specification and drawings.
- 4.3 The Contractor shall submit the "As Built" Drawings within three months after the changes have been incorporated in order that the original drawings may be revised.
- 4.4 The bid drawings are construction drawings. The Contractor shall do all work strictly in accordance with such construction drawings.
- 4.5 Specifications and the drawings are complementary and are intended to completely describe the work and what is called for by one, shall be as if, called for by both. If there are any discrepancies or obvious errors in them, the Contractor shall refer the same to the Company for its decision and shall abide by that decision.
- 4.6 Materials or work described in words or phrases, which so applied, have a well-known technical or trade meaning shall be held to refer to such recognized standards.
- 4.7 Certain notes on equipment manufacturers' drawings included in the specification, such as "by others" do not apply to this specification. These notes apply to the equipment manufacturer only and the Contractor shall request a clarification by the Company, when in doubt of their interpretation.
- 4.8 Final installation drawings covering this work will be issued for construction purposes. The Contractor shall do all the work strictly in accordance with such installation drawings.
- 4.9 In cases where it may be found impracticable to adhere strictly to a drawing during construction, the Contractor shall inform the Company's representative on the job, who may authorize the Contractor to modify the work and who will initiate the revision of the drawings involved.
- 4.10 The Company will submit to the Contractor a schedule for the performance of the work covered by this specification to which the Contractor shall be required to adhere. Changes in this schedule may be made by mutual agreement of both parties.

- 4.11 The Contractor shall submit shop or setting drawings and schedules required for the work of the various trades; and the Company will review and approve the drawings with reasonable promptness. The Contractor shall make any corrections required by the Company.

## 5.0 SUBMITTALS

- 5.1 All work by the Contractor shall be performed in accordance with the submitted and approved, site specific Environmental, Health and Safety Plan (eHASP).
- 5.2 The Contractor is responsible for submitting an Environmental and Construction Plan prior to start of all work. The ECP will be approved by the Company.
- 5.3 The Contractor shall furnish for approval any samples of material or workmanship as required and requested by the Company. The final work shall be done in accordance with approved samples.
- 5.4 The Contractor shall submit to the Company, copies of all required permits, licenses, etc., prior to the start of work.

## 6.0 SITE REPRESENTATION

### 6.1 Definitions

6.1.1 Field Representative – When work is performed by a contractor, a representative of the Company's Construction Department, herein referred to as "Field Representative", shall be designated to confer with the Contractor on details concerning the performance of work covered by this Specification. Any proposed tools, equipment or methods for performing the work shall be subject to the Field Representative's approval. He/she shall be notified of all tests so that he/she may arrange to witness the tests, and all test data taken shall be submitted to him/her for approval before the items of work concerned shall be considered as satisfactorily performed. Except where otherwise indicated, the work covered by this specification is to be performed by the contractor.

6.1.2 Engineer – A Discipline Engineer assigned the responsibility for a project by the Central Engineering Department, Transmission Feeders Engineering section, herein shall be referred to as "the Engineer". He/she shall have final responsibility for any changes and exceptions to this specification. Drawings and specifications listed in Section III shall be considered as part of this Specification. Variations affecting the system design or layout concerning the final quality or condition of the work shall be referred to the Engineer for approval. Construction methods shall have the approval of the Construction Department.

- 6.2 Upon execution of the Contract, the Company will identify in writing to the Contractor, an Engineering Field Representative for the Project. The Engineering Field Representative shall have full authority to act, or to cause others to act, on behalf of the Company, to assure that the work is carried out in full compliance with the requirements of the Contract, and to otherwise generally protect the interests of the Company. The Company may change the Engineering Field Representative at any time by notifying the Contractor, in writing, of the name of the new Engineering Field Representative and the effective date of the change.

- 6.3 The Company may also designate one or more additional persons to carry out certain responsibilities on its behalf, and, in that event, the Engineering Field Representative will instruct the Contractor as to the relationship between the Engineering Field Representative and such other designated persons.
- 6.4 Except as specifically set forth elsewhere in these General Requirements or as may be otherwise directed by the Engineering Field Representative, in writing, the Engineering Field Representative shall be the principal first point of contact for the Contractor in all matters relating to the execution of the Work.
- 6.5 No action or decision of the Engineering Field Representative or any other representative of the Company will in any way supersede or diminish the Contractor's obligation to perform the Work in complete conformance with all requirements of the Contract.

## 7.0 QUALITY ASSURANCE

### 7.1 Qualification and personnel certifications

- 7.1.1 The Contractor shall provide copies of all necessary documentation for personnel qualification and certifications required to perform the work.

### 7.2 Regulatory and permit requirements

- 7.2.1 The Contractor shall obtain all necessary regulatory and permits required to complete the work and the project. Copies of all permits, licenses, etc. shall be provided to the Company and maintained at the work site. This includes but is not limited to:
- a. Asbestos permits (ACP-5, ACP-7)
  - b. SPDES permits
  - c. Waste disposal permits
  - d. Building demolition permits

### 7.3 Test reports, material certifications, and code stamps

- 7.3.1 The Contractor shall obtain all necessary code stamps for any materials. He shall also obtain and provide copies of all test reports and material certifications for materials, products, etc.

## 8.0 PROPOSALS

- 8.1 Prior to and as necessary during the progress of the work under the contract, the Contractor's representative shall confer with the Company's representative at the job for the purpose of formulating a working program, so that the work performed under one or more contracts may be coordinated to prevent, if possible, any interference with the progress of work of the other Contractors.

**9.0 SEQUENCING AND SCHEDULING**

- 9.1 All work shall be carried out in such a manner that there will be no interference with station operation. The Company, through a designated representative, will arrange for outages of equipment and for assuring safe working conditions where electrical circuits and equipment are involved. No work on normally alive electrical circuits shall be started without the express permission of the Company's designated representative.
- 9.2 The Contractor shall do all possible preparatory work in advance of equipment shutdown, and he shall provide adequate manpower to do the outage work in the time allotted. The Company reserves the right to perform any items of work which because of operating conditions, should, in the Company's opinion, be performed by Company forces.
- 9.3 No work will be permitted on live electrical circuits, or in central control areas. No cutting will be allowed into floors, walls or ducts without express approval of the Company's inspectors and the Station Supervisor. The station will be maintained in operation during the entire construction period. No compartments, doors or cabinets may be opened or entered into without Company approval. When permission is obtained to work in operating areas, adequate safety precautions shall be exercised to protect personnel and equipment, including barriers, signs and roped-off area. The work schedule shall include allowance for periods when equipment may be taken out of service for alteration, and for work in confined spaces.

**10.0 TRAINING DEMONSTRATION**

- 10.1 None Required

**11.0 OWNER ACCEPTANCE**

- 11.1 A final joint inspection of the completed installation shall be made by representatives of the Company and the Contractor. Final acceptance of the Contractor's work will be contingent upon this inspection in conjunction with other requirements of the contract.
- 11.2 The Company and its representatives shall at all times have access to the Work and the Contractor shall provide proper facilities for such access and for the inspection and testing of the Work.
- 11.3 The Contractor shall keep the Company and the Architect informed of the progress of the Work and shall notify the Company sufficiently in advance of enclosing items of Work, or the work of other contractors, to provide reasonable time for the Company to perform the necessary inspection. No Work, nor the work of other contractors, shall be closed or covered until it has been duly inspected and approved. Should uninspected work or work of other Contractors be covered by the Contractor prior to its inspection, the Contractor shall, if directed by the Company and at its own expense, uncover all such Work, or such work of other contractors, so that it can be properly inspected, and after such inspection the Contractor shall properly repair and replace all affected Work, or work of other contractors, at its own cost and expense.
- 11.4 The Company shall arrange for such inspection of the Work as may be necessary. If, in the opinion of the Company or Architect, the Work is not being installed as required by the Contract, the Company may order such work stopped pending further investigation and a decision by the Company.

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- 11.5 Tests to determine the quality of materials will, unless otherwise specified, be ordered by the Company at the discretion of the Company. If the specifications require the Contractor to provide the inspection service or tests, such inspection or tests shall be made by an engineer or laboratory approved by the Company. Such engineer or laboratory must furnish the Company with as many copies of any inspection or test reports as may be requested. Unless otherwise specified, tests on materials are to be made in accordance with standard methods adopted by the American Society for Testing and Materials.
- 11.6 The right of the Company to inspect and generally supervise the Work is to make certain that the Work conforms to the drawings and specifications and the other Contract Documents. Such inspection and general supervision are not intended to control the contractor as to the manner of performance of the Work.
- 11.7 Any Work installed by the Contractor and found, by the Company, to be defective, or not in strict conformance with the requirements of the drawings and specifications, shall be corrected or removed immediately and satisfactory materials or Work substituted therefore without delay, unless the Company approves such Work subject to an appropriate adjustment in the contract price. The Contractor shall also make good the work of all the other Contractors destroyed or damaged by such corrective Work, removal or replacement. The cost of such corrective Work, removal and replacement shall be at the expense of the Contractor. The Contractor shall promptly remove all rejected materials from the Premises. The Company's authority to reject any Work of the Contractor and any decision of either exercising or not exercising such authority shall not give rise to any duty or responsibility of the Company to the Contractor or any Subcontractor or Supplier.
- 11.8 Should the Company elect, at any time before Final Acceptance, to examine Work already completed by removing, uncovering or testing the same, the Contractor shall, on request, promptly furnish all necessary facilities, labor and materials to remove or uncover such Work to permit such inspection, examination or testing. If such Work is found to be defective or nonconforming in any significant respect, the Contractor shall pay all the expenses of such removal, uncovering, examination, testing and satisfactory reconstruction. If the Work is found to meet the requirements of the Contract documents, the Company shall compensate the Contractor by Change Order, for reasonable additional incurred costs involved in such removal, uncovering, examination, testing and reconstruction and if completion of the Work has been delayed thereby, the Company shall grant the Contractor a reasonable extension in the time allowed for completion.
- 11.9 No previous inspection or payment shall be held as an acceptance of defective Work or materials or relieve the Contractor from the obligation to furnish sound materials and perform satisfactory Work in accordance with the Contract Documents.
- 11.10 Final payment shall not relieve the Contractor of the responsibility for faulty materials or workmanship. The Contractor shall remedy all such defects, paying the cost of such corrective Work and of repair of any damage to other work resulting there from, which shall appear within any guarantee or warranty period provided by the Contractor

## Section II – PRODUCTS AND SERVICES

### 1.0 WORK TO BE PERFORMED BY CONTRACTOR

#### 1.1 General

##### 1.1.1 Dry Air

Prior to the introduction of dry air into any pipe, a Company Representative shall test the air to be used. The dry air and its moisture content shall be in accordance with Con Edison Specification No. EI-4147, latest revision. Compressed air, furnished in trailer loads or bottles from an approved supplier and meeting the specified dew point requirements may be used. Since there is the danger of asphyxiation whenever work is to be done in an enclosed space every precaution shall be taken to insure adequate ventilation whenever and wherever personnel must enter such areas.

##### 1.1.2 Cleanliness

Every precaution shall be taken to prevent the entrance of dirt, moisture or any other contaminant into any pipe, and all methods and operations by the Contractor shall be subjected to approval by the Field Representative as to the adequacy of these precautions.

##### 1.1.3 Testing

The Company reserves the right to perform testing with its own personnel. Testing is required to insure the quality of the work or may be needed to provide data concerning the installation.

##### 1.1.4 Excavating Trenches and Openings

- a. All trenches shall be excavated true to the centerline and grade shown on the approved plan and profile drawings except where unforeseen interferences are encountered. In such cases, specific approval shall be obtained from the Field Representative for appropriate modifications.
- b. In general, the trench shall be excavated to a depth sufficient to provide a minimum of thirty-six inches of cover over the cable pipe or pipes as indicated in Specification No. EO-12640-B, latest revision. When less than twenty-four inches of cover over the cable pipes or pipes associated with pressurization or cooling of the feeders is authorized because of special conditions, suitable guards shall be placed over any pipes having insufficient cover prior to backfill. Such guards shall be flat steel plates having a minimum thickness of 1 inch and wide enough to provide a three-inch overhang on each side of the pipe(s). A concrete pad in lieu of a steel plate shall be used to cover stainless steel or copper risers. Whenever steel plating is used to protect shallow installations, a peering arrangement shall be used, if specified by the Engineer, to prevent the plates from directly contacting the pipe should settlement occur.

- c. Guards placed over cable pipes shall have a cushion of six inches of compacted approved backfill between the pipe and guards, and guards placed over other associated feeder pipes shall have a cushion of six inches of compacted approved backfill between the pipes and guard. If conditions require the protective steel plates to be installed closer than six inches from the top of these pipes, high density polyethylene skids as per Specification No. EO-8069, latest revision, shall be installed on the pipe before the steel plates are set in place. In no case shall there be less than two inches of compacted backfill between the pipes and the protective plates.
- d. The bottom of all trenches shall be smooth, uniform, and free of all loose rock, stones or other foreign matter. Nothing shall be left in the bottom of the trench that might damage the pipe coating. The trench shall be such that a minimum of six inches of compacted approved backfill shall be beneath and beside the pipe as per Specification No. EO-12640-B, latest revision.
- e. Trench widths and spacing of pipes shall conform to EO-12640-B or as specified on the layout. When the trench is in solid rock, changes to the pipe configuration and trench dimensions may be permitted with the written approval of the Engineer. No decrease in dimensions shall be made without specific approval of the Engineer.

## 1.2 Clearance from Subsurface Structures

- 1.2.1 External heat sources such as steam mains, duct banks containing power cables, and the like, limit the current carrying capability of pipe type feeders. To minimize this influence, a face-to-face separation of not less than twelve feet for horizontal runs nor less than two feet for right angle crossings shall be maintained from all steam mains, steam services six inches and over in size, duct bank systems of six ducts or more and all other pipe type feeders. For steam mains under six inches in size and for power duct bank systems of five ducts or less, the separation shall not be less than six feet in a horizontal direction and 1½ feet in a vertical direction. Where these spacings cannot be obtained, specific approval shall be obtained from the Engineer for corrective measures to be applied. Insulating slabs as per Drawing EO-8935-D, latest revision or specifically designed ventilation chambers shall be used if specified in the layout.
- 1.2.2 All new subsurface electric pipes shall be constructed with a standard minimum clearance of 12 inches from liquid petroleum pipelines, gas lines, transmission facilities or concrete structures. When the 12 inches clearance is not practical it may be reduced to a minimum of six inches, provided approval from the Engineer is obtained and piers and skids as described in Specification No. EO-15362-B, latest revision, are installed on the electric pipes to prevent contact from occurring due to settlement.
- 1.2.3 The minimum clearance from the gas distribution facilities shall be six inches provided that piers as described in Specification No. EO-15362-B, latest revision, are installed to prevent contact between the electric facilities and the



gas distribution facilities. The minimum clearance from underground gas service laterals shall be six inches provided that an approved protective separator or skids are installed on the electric facilities and the gas service pipeline. The six inch clearance shall not be reduced without the written permission of the Engineer.

- 1.2.4 When pipes pass within 2 feet of water mains or services, a half inch thick natural rubber sheet having a durometer measurement of not less than 60 shall be installed, centered between the pipe(s) and the water mains or services. There shall be an overlap of at least 6 inches between rubber sheets if more than 1 sheet is necessary to protect the pipe. The rubber sheet(s) shall overhang the water main or service by a minimum of 18 inches or as directed by Engineer. Under no circumstances shall the rubber sheet be wrapped around the feeder pipe.

### 1.3 Pipe through wall sleeves

- 1.3.1 When feeder pipes pass through walls whose thickness does not exceed 12 inches, they shall be encased in plastic wall sleeves and sealed with one set of link seals. The size of the wall sleeve as well as the position of the link seals are specified in the Specification No. EO-9230, latest revision.
- 1.3.2 When feeder pipes pass through walls that are wider than 12 inches, link seals should be installed at both ends of the penetration. In such cases, sleeves made of plastic or other dielectric materials, cannot be used. This condition should be avoided whenever possible by designing the thickness of the wall in the area of the pipe penetration to be no more than 12 inches. If this is not possible, sleeve made of electrically conductive materials should be used. Sonotubes or equivalent materials can be used in such applications since they will allow cathodic protection current flow into the annular space when moisture is present.
- 1.3.3 Under no circumstances should the pipe within sleeves of any length be left uncoated.

### 1.4 Backfill

- 1.4.1 Approved backfill is to be used for backfilling under, beside and over the pipe as indicated in Specification No. EO-12640-B, latest revision. To obtain the optimum compaction essential for pipe type feeders, the backfill, including thermal backfill as specified in Specification No. EO-1173, latest revision, shall be compacted in maximum of 12 inch lifts in accordance with Specification No. EO-1181, latest revision, unless otherwise approved by the Company.
- 1.4.2 The Field Representative or Engineer may order as many in-place density tests as he deems necessary to insure proper compaction. The sand-cone test as per ASTM-D1556 or Nuclear Density tester may be used for all in place density tests.

### 1.5 Manholes.

- 1.5.1 Manholes shall have exact overall dimensions as specified on the accompanying drawings. Where water or unstable soil conditions exist, filter fabric and 12 inches of crushed stone or recycled concrete ( $\frac{3}{4}$  inch to 2 inch) on top of the filter fabric shall be installed, if directed by the Field Representative.

- 1.5.2 *The location of all joint manholes shall be based on field conditions and on pulling tension requirements, as described in section 14.0 of EO-1109, latest revision.*
- 1.5.3 *Stop joint manholes are required as follows:*
- a. *Where a dielectric fluid leak from a 69 kV, 138 kV or a 345 kV pipe type cable with a water crossing (over, in or under the water) could enter a waterway, a full stop joint shall be installed at the cable's shore manhole(s) if the need for such a joint is supported by factors such as distance to waterway, feeder elevation profile, sensitive environments (i.e. presence of sensitive threatened or endangered species or wetlands), etc., as well as risks associated with normal operations, failure modes, and catastrophic events.*
  - b. *A decision not to install a full stop joint at a water crossing shall be approved by the Chief Electrical Engineer with the concurrence of the Vice President of Environmental, Health & Safety.*
- 1.6 Pipe
- 1.6.1 Steel Pipe
- a. Steel pipe in accordance with Specification No. EO-9000, latest revision, shall be specified for installation of high pressure cables, pressurization and dielectric fluid circulation systems.
  - b. The cable pipes and associated pressurization or dielectric fluid circulation pipes having a 5 inch or larger diameter, shall be furnished with ends flared in accordance with Specification No. EO-5199-B, latest revision, unless otherwise specified by Central Engineering.
  - c. Each length of steel pipe installed shall have been cleaned and coated externally in accordance with Specification No. G-8196, latest revision. The interior surface of all steel pipes shall have been cleaned and coated as called for in Specification No. EO-8193, latest revision. The pipe shall be provided with end seals tightly plugged to prevent the entrance of dirt and moisture.
- 1.6.2 Stainless Steel Pipe
- a. Stainless steel pipe in accordance with Specification No. EO-8097, latest revision, shall be specified for installation of single phase cable.
  - b. Stainless steel pipe shall be delivered externally uncoated and protected from damage internally and externally as specified in Specification No. EO-8097, latest revision. The external field coating shall be in accordance with the method specified in Specification No. G-8209, latest revision.

1.6.3 Copper Pipe

- a. Copper pipe, when specified to be used for single phase cable installation, shall be of soft drawn de-oxidized copper, fabricated in accordance with ASTM Specification B-42. Copper pipe shall be supplied uncoated.

1.7 Installation and Tests

- 1.7.1 A visual inspection of each shipment of coated steel pipe shall be made promptly upon receipt, and arrangements shall be made for the replacement of any defective material.
- 1.7.2 The interior of the pipe and the interior coating shall be inspected and all moisture, oil, grease, or other foreign matter shall be removed. No pipe having any rust on its inner surface shall be welded into the line. The external coating on the pipe shall be tested for pinholes or defects as per Paragraph 1.9 of this specification. Each defect detected shall be satisfactorily repaired and retested.
- 1.7.3 Pipe plugs or caps installed at the coating plant shall be kept in place, except during inspection and cleaning, until the pipe is welded. The ends of each section of pipe shall be kept capped at all times except when caps must be removed for construction work.

1.8 Unloading, Handling and Hauling

- 1.8.1 Every precaution shall be exercised in the handling of all pipes. The pipes are to be kept clean, dry and free of any foreign material. Cut ends shall be chamfered to remove burrs or sharp edges and a proper surface shall be provided for welding in accordance with Specification No. G-1064, latest revision. No flame or arc cutting of the pipes shall be permitted. The pipes shall be sealed and purged as specified in Paragraph 1.10.2 and 1.11.4.
- 1.8.2 The coated pipe shall be unloaded, handled, stockpiled, hauled and installed in such a manner as to insure against any damage to the exterior coating. The coated pipe at all times shall be supported on resilient protective padding until it is finally installed in the trench. When supported for their full length, the pipes may be nested and tiered as directed by the Field Representative.
- 1.8.3 No chains or ropes shall be allowed to come in contact with the pipe coating. Canvas slings having a minimum width of ten inches shall be used for lifting the pipe. When lifting or lowering one or more pipe lengths, a sufficient number of canvas slings shall be used to properly distribute the weight and prevent permanent deformation of the pipes or damage to the pipe coating due to flexing. In general, the overhanging pipe length beyond the last support shall not exceed 30% of the pipe length.
- 1.8.4 The coating at all times shall be protected from oil, kerosene, gasoline or other solvents.

1.9 Testing External Coatings

- 1.9.1 A spark test shall be made at 18,000 to 20,000 Volts, peak value, on all coatings as indicated in Specification No. G-8196, latest revision, using an instrument that has been checked by Con Edison. The tests shall be made on the entire length of the pipes including areas coated in the field over welds or at repairs. These tests shall be made as near the time of backfilling as is practicable to insure that the coating is free of defects and to avoid re-excavating to repair defects after the trench has been backfilled. The coater shall furnish Con Edison's Central Stores Department with a written certification as per Specification No. G-8196, latest revision, of a pre-coating inspection.
- 1.9.2 Spark tests shall be made only when the pipe is dry.
- 1.9.3 All defects found shall be repaired as outlined in Specification No. G-8209, latest revision.
- 1.9.4 After the section of pipe has been installed and backfilled, a Coating Resistance Test shall be made by Con Edison's Corrosion Control personnel on the installed section. The minimum acceptable coating resistance value shall be 2,000,000 ohms-square foot. This can be converted into a minimum coating resistance for any length of pipe by the formula: Resistance of section (ohms) = 2,000,000 (ohms-square foot) divided by the surface area of pipe section (sq-ft). This resistance test shall be performed on all pipe sections installed between adjacent manholes; however, tests may be taken at shorter intervals when requested by the Company Field Representative.
- 1.9.5 Whenever the pipe section coating resistance is less than acceptable, an over-the-ground survey shall be conducted to locate coating faults. These faults shall be repaired as outlined in Specification No. G-8209, latest revision, and backfilled. If failing coating resistance values are due to accidental contacts with underground metallic structures, these contacts shall be cleared and all specified clearances shall be maintained. The coating resistance test shall then be repeated to verify that minimum acceptable values are obtained.

1.10 Pipe Installation - General

- 1.10.1 Pipe installation shall be carefully planned to insure a minimum elapsed time between the start of trench excavation and the completion of resurfacing over the excavation. Pipe installation shall follow trench excavation as rapidly as possible.
- 1.10.2 Night caps as per Drawing No. EO-7370-B, latest revision, shall be installed to maintain an airtight seal at the ends of the pipes and a positive pressure of dry air maintained within sections so pipes that might become submerged in case of heavy rains.
- 1.10.3 All pipes shall be labeled at each end of every run and at every tie-in point with other piping to positively identify the pipes and their destination.
- 1.10.4 Prior to backfilling, measurements shall be taken so as to provide an "As Constructed" plan and profile of completed lines, including the cover and offset from the baseline of each weld. Copies of the "As Constructed" drawings shall be sent to the Engineer and Property Records after completion of work.

- 1.10.5 Before any two pieces or sections of pipe are welded together, the interior of each piece or section shall be inspected. If this inspection reveals any condition other than a perfectly clean, dry interior surface, the pipe shall be swabbed with suitable dry swabs until the cleanliness of the interior surface is acceptable to the Field Representative.
- 1.10.6 Where bends are required, the pipe shall be bent with Company approved bending equipment. In general, the minimum radius of curvature to be permitted shall be 40 feet for 345 kV pipe systems and 30 feet for 69 kV and 138 kV systems, except where specific approval is given for a shorter radius. Radii shall be measured with an instrument approved for use by the Field Representative. Adequate measures shall be taken to prevent the pipe from kinking, flattening or going out of round and to prevent damage to the pipe coating during the bending operation.
- 1.10.7 Each bent section of pipe, including the terminal riser cable pipes, shall be checked for ovality before being welded into the line. This test shall be made by pulling through the pipe a mandrel of the size specified in Drawing No. EO-10569-D, latest revision. No pipe through which the mandrel will not pass freely shall be welded into the line.
- 1.10.8 Where it is necessary to pull pipe into or along the bottom of the trench, suitable rollers, straw bags, or other approved means shall be used to prevent damage to the coating.
- 1.10.9 Before stopping work for the night or for any other reason, it shall be mandatory to close all open ends of the pipe as per Paragraph 1.10.2. The pipe shall be purged with enough dry air to displace twice the cubic content of the pipe lengths added during the day, after which the pipe ends shall be closed and the pressure increased to a positive pressure of between 4 and 6 psig.

#### 1.11 Pipe Installation – Steel Pipes

In addition to Paragraphs 1.6.1 and 1.10, the following also applies to steel pipe installations.

- 1.11.1 Each bent section of steel pipe shall be given a radius acceptance test. A mandrel of the proper size as per Drawing No. EO-16325-B, latest revision, shall be pulled through the pipe to check for sharp bends. No pipe through which the mandrel will not pass freely shall be welded into the line.
- 1.11.2 When fitting of steel pipes in the field, which requires the joining of pipe lengths which are not provided with flared ends in accordance with Drawing No. EO-5199-B, latest revision, prefabricated flared ends in accordance with Drawing No. EO-5199-B, latest revision, shall be welded to the square cut and beveled pipe ends and the inner surface of the welds carefully ground smooth. Any internal coating burned due to welding shall be brushed and removed and the pipe surface left clean.
- 1.11.3 Where specified on the layout, connector pads, as shown in Drawing No. EO-4796-D, latest revision, shall be field welded to the pipe to permit the attachment of thermocouples, shunt leads or bonding tests leads.

1.11.4 The closing of pipe ends in the trench shall be done by means of an approved fitting which will not damage the pipe ends and be capable of withstanding a minimum of 10 psig. In manholes, or other pick up points, the open ends shall be welded closed with a pressure test terminating pipe assembly as specified in Drawing No. EO-14661-D, latest revision.

**1.12 Pipe Installation – Stainless Steel Pipes**

In addition to Paragraphs 1.6.2 and 1.10, the following also applies to stainless steel pipe installations.

1.12.1 Stainless steel pipe shall be delivered externally uncoated and shall be field coated as per Specification No. G-8209, latest revision. Stainless steel pipes shall be installed as specified on the layout.

1.12.2 The minimum-bending radius for nominal 6 inch O.D. stainless steel pipe shall be 8 feet. When more than one bend is required, the minimum bending radius of 8 feet shall occur only once in the line and all other bends shall have a minimum bending radius of 16 feet. The minimum bending radius for nominal 5" O.D. and nominal 4 inch O.D. stainless steel pipes shall be 6 feet. When it is required to make several bends, the minimum bending radius of 6 feet shall occur only once in the line and all other bends shall have a minimum bending radius of 12 feet. Adequate measures shall be taken to prevent the pipe from kinking, flattening or going out of round.

1.12.3 The stainless steel pipes shall be joined by means of stainless steel sleeves in accordance with Specification No. EO-8048, latest revision. After the welds have passed the test requirements, the weld areas shall be coated in accordance with Specification No. G-8209, latest revision.

**1.13 Pipe Installation – Copper Pipes**

In addition to Paragraphs 1.6.3 and 1.10, the following also applies to copper pipe installation.

1.13.1 Copper pipes shall be bent with bending machines or by such other means as to prevent the pipe from kinking, flattening or going out of round. The minimum bending radius for copper pipes shall be 6 feet. When it is required to make several bends, the minimum bending radius of 6 feet shall occur only once in the line and all other bends shall have a minimum bending radius of 12 feet, unless otherwise approved by the Engineer.

1.13.2 Sleeves for joining copper pipes shall be those supplied by the Company. The sleeves are the same material as that of the pipe. The clearance between O.D. of the pipe and I.D. of the sleeve shall be in accordance with Drawing No. EO-6947-D, latest revision. The brazing material shall have minimum silver content of 15 percent.

**1.14 Installation of Pipe in Casings or Abandoned Gas Mains**

1.14.1 Whenever the pipe is installed within a steel casing, it shall be kept electrically isolated from the casing by means of approved casing insulating skids as per Specification No. G-100, 280, latest revision. The skids shall be installed on the

pipe at intervals not greater than ten feet and at one foot from each end of the casing. Both ends of the casing shall be sealed as per Specification No. G-8096, latest revision.

**1.15** Installation of Pipe within Tunnels

1.15.1 Whenever a pipe is to be installed in a tunnel, on a bridge or on any other such structure, the pipe shall be kept electrically isolated from the structures. If the Engineer determines that ground connections are required at those locations, these connections shall be made through isolator/surge protectors.

**1.16** Cathodic Protection

1.16.1 Unless otherwise specified, the cathodic protection for new pipe type feeders shall include D.C. electrical isolation by grounding through isolator/surge protectors with protective current supplied by impressed current rectifiers. Corrosion Engineering shall specify the location and design of impressed current rectifiers for each feeder installation.

**1.17** Test Stations

1.17.1 Test stations, as specified by Corrosion Engineering shall generally be installed in the proximity of each manhole and at both ends of all casings as per Drawing No. 301709, latest revision.

**1.18** Installation of Dielectric Fluid Circulation Pipes

1.17.2 Pipes for cable cooling systems using dielectric fluid circulation shall be installed where so specified on the layout and shall be positioned with respect to the high pressure cable pipe as shown in Drawing No. EO-12640-B, latest revision.

1.17.3 The 5 inch diameter dielectric fluid circulation pipes shall be furnished with flared ends and joined by welding with backing rings in accordance with Drawing No. EO-5199-B, latest revision. Where cut ends are to be joined, the internal coating shall be properly removed 2" from the pipe end, following all Company environmental requirements, and the interior surface dry-swabbed clean before welding on prefabricated flared ends in accordance with Drawing No. EO-5199-B, latest revision. Couplings can only be used with Engineering approval.

**1.19** Sleeves

1.19.1 Sleeves for joining pipes of all materials are designed for a specified clearance to provide a minimum offset and give a maximum strength joint. To properly install sleeves, care should be taken to maintain the pipe and pipe sleeves as round as possible. In the event the sleeve and/or pipe is out of round it shall be re-rounded. Shaving or machining to increase the clearance shall not be permitted. Installation of the stainless steel or copper sleeves for pothead riser shall be as per Drawing No. EO-14276-C, latest revision. After the sleeves have been welded, the sleeves shall be radio-graphically inspected to determine the separation between the pipe ends and the roundness of the pipe ends. In no case shall the pipe end separation exceed ¼ inch.

**1.20 Welding**

- 1.20.1 Steel pipe welding shall be performed as prescribed in Specification No. G-1064, latest revision.
- 1.20.2 Stainless steel pipe welding shall be performed as prescribed in Specification No. EO-8048, latest revision.
- 1.20.3 Steel and stainless steel pipe welding shall be performed by welders who have been qualified by the Company for welding the type of steel as per Specification Nos. G-1065 and EO-8048, latest revisions, respectively.
- 1.20.4 Prior to welding of pipe lengths, the protective masking over the uncoated portion of the pipe ends shall be removed and any rust or foreign material left on the pipe which may leave undesirable ash from welding heat shall be carefully cleaned off.
- 1.20.5 Pipes 2 inches or smaller shall be joined using socket weld fittings. Pipes 3 inches and larger shall be joined using butt welds. Couplings can only be used with Engineering approval.
- 1.20.6 Under no circumstances shall a mitered joint of any angle be made in changing direction of any pipe.
- 1.20.7 All bend fittings used shall be of a large radius type.
- 1.20.8 Separate qualifications shall be made for welding of steel, welding of stainless steel and brazing of copper; that is, an individual performing all three functions shall have been qualified for each function separately as per Specification Nos. G-1065 and/or EO-8048, latest revisions, as applicable.
- 1.20.9 When welding gate or globe valves into any line, care must be taken not to damage any part of the valve. Valves shall be slightly closed or just making contact when welded into the line. When installing ball valves, the pipe flanges shall be tack welded in place, the valve body removed and then the weld completed.
- 1.20.10 All dead end valves provided for vacuum and/or filling ports shall be 2 inch gate valves or 2 inch ball valves as specified on the layout.
- 1.20.11 Whenever possible, the use of "tee" fittings, which would be buried, shall be avoided.

**1.21 Acceptance of Welds**

- 1.21.1 Acceptance of each weld shall be based upon an acceptance radiograph test. The radiograph test shall be performed as per Specification No. G-1070, latest revision, by an independent vendor, hired by the Company, who shall inform the Company's Field Representative about the acceptability of the weld.
- 1.21.2 Each welded pipeline section is to be pressure tested at 500 psig internal pressure. Test to be conducted at a later date. (See Paragraph 1.23 of this Specification).



1.22 Final Radius and Ovality Tests

- 1.22.1 A final radius and ovality acceptance test shall be performed by pulling through the entire welded section a mandrel of the proper size as per Drawing Nos. EO-16325-B and EO-10569-D, latest revisions. If either mandrel does not pass through for any reason, the problem shall be rectified by the Contractor to the satisfaction of the Field Representative before proceeding.

1.23 Acceptance Proof Test

- 1.23.1 While the proof tests are in progress using dry air no personnel shall be inside a manhole.
- 1.23.2 All pipes above grade (i.e., risers and pipes associated with bridges and tunnels) shall be tested hydrostatically using water. If this test is being performed during the winter and there is the possibility of the water freezing, the Contractor shall use a mixture of water and isopropyl alcohol (at least 50% alcohol) or other mixture with prior Engineering approval. However, the use of any ethylene glycol mix or anti-freeze is prohibited. The Contractor is responsible for following all applicable regulations and safety precautions in the storage and handling of alcohol. Dry air shall not be used on above ground piping unless approved by Engineering and special safety precautions are put into effect while the proof test is in progress.
- 1.23.3 Acceptance of any completed pipeline by the Company shall be based on a (a) free passage of the ovality and radius mandrels through the pipeline, (b) acceptable coating resistance measurement, (c) cleanliness and dryness inside the pipes, (d) 500 psig proof (burst) test, (e) 250 psig pressure drop test, (f) successful completion of vacuum drying requirements and (g) the final acceptance proof test as per Paragraph 2.4
- 1.23.4 Before each pipe section is approved for use, it shall be given a 500 psig (burst) pressure test. This test shall be made using dry air as per Section 5.0 or a liquid as per Paragraph 1.23.2. After the pressure has reached 500 psig, this test pressure shall be maintained for not less than one-half hour. The test shall be performed by the Contractor and witnessed by the Field Representative or by Transmission Operations as follows:
- a. New Pipe on a new feeder:
    - (1) If tested with air as per Paragraph 1.1.1, the test shall be performed by either Company forces or the Contractor, as specified in the bid documents.
    - (2) If tested with a liquid as per Paragraph 1.23.2, the test shall be performed by the Contractor.
  - b. New Pipe on an existing feeder (cut-over, Tee taps, replacement, etc.):
    - (1) The Contractor shall perform the test on this piping whether the test is performed with air as per Paragraph 1.1.1 or with a liquid as per Paragraph 1.23.2.

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- 1.23.5 Whenever a liquid as per Paragraph 1.23.2 is used to test a piping section, the Contractor shall remove all the liquid remaining in the pipe section to the satisfaction of the Field Representative. The Contractor has the responsibility of properly disposing of the used liquid in accordance with all regulations.
- 1.23.6 Where welds cannot be checked for acceptance individually by radiograph tests (i.e., joint casings, by-pass piping, etc.) those welds shall be tested at the time of making the overall acceptance pressure tests on the completed section between manholes as described in Paragraph 2.4 of this Specification.
- 1.23.7 Upon completion of the 500 psig gas pressure test, the pressure within the pipe shall be reduced to 250 psig and held for a minimum of seventy-two (72) hours to check for the presence of leaks in the pipe system. During the seventy-two hour period, the pipe under test shall be connected through a manometer to a buried reference tank that is known to be tight so that the manometer will indicate whether a loss of pressure in the pipe under test is being experienced during the test period. Pressure readings shall be recorded every hour. This work shall be performed by either Company forces or the Contractor, as specified in the bid documents.
- 1.23.8 The reference tank shall be made as per Drawing No. EO-12215-C, latest revision, and shall have a cylindrical steel pressure vessel capable of withstanding the test pressures and having a volume of not less than 1.5 cubic feet. It shall be buried at the manhole locations indicated on construction drawings so as to have at least two feet of cover to minimize the effects of ambient temperature changes.
- 1.23.9 After one of the pipes entering any particular manhole has successfully withstood this comparison test and is found to be tight, this pipe may then be used as a reference tank for the testing of other pipes. This work shall be performed by either Company forces or the Contractor, as specified in the bid documents.
- 1.23.10 Any loss of pressure indicating the presence of leaks shall be fully investigated and the leaks located and repaired. All leaks shall be reported to and inspected by the Field Representative.
- 1.23.11 The method of repairing leaks shall be subject to the approval of the Field Representative. After the repairs have been made the 500 psig pressure (burst) test and the 250 psig dry air leakage drop test shall be repeated.

**NOTE**

The following work shall be performed by company forces or as indicated otherwise.

**2.0 WORK TO BE PERFORMED BY OTHERS**

**2.1 Installation of Reducers**

- 2.1.1 After these pressure tests have been completed and the pipe is known to be free of leaks, the boiler end caps over the pipe ends in the manhole shall be cut off and the joint reducers welded to the pipe. The point at which the pipe is to be cut

shall be determined by the reference to manufacturer's drawings for the joints to be made in the manholes. Any ash from the burning of the internal pipe coating due to welding shall be removed and the pipe left clean.

- 2.1.2 The reducer welds shall be tested at 50 psig, dry air, to insure that no leaks exist on the welds. Refer to section 2.2.4

## 2.2 Cleaning and Mandrelling

- 2.2.1 Each section of pipeline, dielectric fluid circulating line and dielectric fluid supply line shall be individually pigged and swabbed. A projectile shall be blown through the pipe, using dry air as the pressure source, for the purpose of removing burrs (pigging) and also for cleaning (swabbing) of each pipe. If the fittings installed on a pipe section will not allow a pig to pass through, the Engineer shall be contacted for the procedure to be used to properly clean the pipe section.
- 2.2.2 In the terminal sections of pipe, stainless steel or copper, a continuous 3/16 inch polyethylene rope shall be left in each pipe attached to the sealing plates at both ends, after the pipe has been swabbed clean and dry.
- 2.2.3 A mandrel of the proper size for the pipe size involved, per Drawing No. EO-10569-D, latest revision, shall be pulled or blown through the pipe to check for excessive ovality or other obstructions within the pipe. A steel line capable of pulling in the winch rope shall be left in the cable pipe after the mandrelling operation is completed. Steel line having a hemp center shall not be used. A rope shall be used to pull cable in the termination pipes for safety.
- 2.2.4 After the steel line for pulling the winch line in has been installed within the cable pipe, the pipe ends shall be sealed by gasketed blank-off plates bolted to the joint reducers. The pipe section shall be pressurized to 50 psig and the reducer welds soap tested to insure that no leaks exist (refer to section 2.1.2). The pipes shall be left with a positive pressure of dry air sufficient to insure against the entrance of moisture in the event that the pipe is submerged. Such pressure shall in no case be less than 5 psig.

## 2.3 Vacuum Dryness Test

- 2.3.1 Vacuum drying shall be done after the installation of joint reducers and pilot lines in the pipes.
- 2.3.2 All pipes, including pressure, dielectric fluid circulation and gas pipelines shall be vacuum dried before filling with dielectric fluid or gas. In the event that the new section of pipe shall be attached to an existing section of pipe, the new section shall also be vacuum dried before it is connected to the existing section.
- 2.3.3 After the pipe ends have been closed and prior to cable pulling, a vacuum test shall be made on the pipe section to insure its dryness. Vacuum shall be maintained continuously until the pressure within the pipe is down to 150 microns of mercury. Evacuation shall then continue for a period of four hours. At the end of this period, the vacuum pump shall be valved off and the pressure rise in the pipe over a one-half hour period observed. The pipe shall be considered acceptable if the pressure rise during this one-half hour period is less than 100 microns. Pressure readings taken during evacuation and the pressure rise test,

**CONSTRUCTION SPECIFICATION**  
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shall be taken at points remote from the vacuum pump. If the pressure rise during the one half hour pressure rise test is in excess of 100 microns, vacuum shall be reapplied continuously again until the pressure is down to 150 microns, a subsequent one half hour pressure rise test made and this procedure continued until the requirements are met.

2.3.4 After the pipe has successfully passed the vacuum dryness test, the vacuum shall be broken with tested dry air as per Paragraph 1.1.1. A positive pressure of not less than 10 psig shall then be built up and maintained in the pipe to prevent the entrance of moisture in the case of submersion.

**2.4 Final Acceptance Proof Test**

2.4.1 Upon completion of the splicing, evacuation and filling of a feeder with dielectric fluid as per Specification No. EO-1109, latest revision, the completed pipe system, including the dielectric fluid circulation pipes, shall be proof tested with dielectric fluid for not less than one half hour as follows:

- |    |                          |                |
|----|--------------------------|----------------|
| a. | 345 kV System            | 950 psig (Max) |
| b. | 138 kV and 69 kV Systems | 550 psig (Max) |

**NOTE**

Maximum proof test pressure will change if system pressure is increased.

2.4.2 The dielectric fluid circulation pipes shall be subjected to proof tests at a higher pressure as required by the Engineer.

2.4.3 All safety pressure valves and/or discs, gauges, pressure switches and other components that may be damaged due to the high pressure are to be valved off before the test is commenced.

2.4.4 After the pressure has been maintained at the 950 psig or 500 psig level as per Paragraph 2.4.1 for one-half hour it shall be reduced to 250 psig and held for a minimum of twenty four (24) hours. During the twenty-four hour test, the pumps and dielectric fluid pressure must constantly be monitored.

**2.5 Spare Pipes**

2.5.1 In the event that a pipe is installed which will not be used for a period of time such as in the case of spares submarine pipes, all the requirements of this specification shall be followed. A ¾ inch pipe connection shall be made to the pipe, terminating in a plugged valve in a suitable place where the pressure may be checked periodically. Consecutive sections of pipes route through the same manhole systems shall be connected in series with 5/8 inch copper tubing. All such pipes are to be left with a positive pressure of 25 psig of dry air and shall have proper identification as indicated in Paragraph 1.10.3. To insure that a positive pressure of 25 psig is maintained, such spare pipes shall be checked periodically as per EO-6045.

2.6 Pipe Verification

2.6.1 The following pipe verification shall be performed on new pipes installed prior to the 500 psig burst test. Existing installed pipes, which have not been identified by this verification process, shall be identified prior to installation of new cable and splicing in advance of outage related work. The objective of this test procedure is to confirm and ensure the following:

- a. New Pipes installed are connected to the correct feeder pipe at the cutover location and terminate at the location as specified on construction drawings.
- b. New pipes installed do not cross underground, resulting in pipes terminating in wrong location.
- c. Provide positive confirmation through testing that feeder terminating at the substation pothead is the same feeder identified at the cutover location.
- d. Existing installed pipes are identified and tagged prior to installation of cable and splicing activities.

2.6.2 All data, test information and results shall immediately be submitted to the Field Representative or Transmission Operations and the Engineer for evaluation. A prompt identification of pipes shall ensure that corrective actions can immediately be implemented to correct any problem during installation of new pipes.

2.6.3 Identification of Feeder at Pickup Location

- a. The following methods to identify the transmission pipe designation at the cut over location are acceptable for establishing positive feeder identification. Identification of transmission feeder described in this section shall be performed by Company personnel only. The pipe verification process is not to be used for working on the feeder. To perform work on the feeder, it must be identified using standard ungrounded tracing current.
  - (1) Permanent Feeder Identification Point – Permanent identification tags exist on the pipes. Permanent tagging of pipe type feeders shall be in accordance with Specification No. EO-6064, latest revision.
  - (2) Feeder Pressure Variation Method – Pressure gauges shall be placed on both pipes on the upper splice casing valves in the designated cutover manhole. Transmission and Substation Operations personnel shall coordinate the pressure change activity on the proposed feeder. The pumping plant operator shall vary the feeder pressure at the pressurizing plant while the mechanic at the cutover location monitors gauge pressure. The pumping plant operator shall raise the feeder pressure by a maximum of 20 psig, and once positive indication is observed at the cutover location, the mechanic shall request from the pumping plant operator the corresponding feeder designation.

Transmission Operations personnel shall tag the feeder pipe accordingly. The Substation Operator shall ensure that he/she is properly identifying the feeder in the pressurizing plant.

(3) Electrical Test Procedure Method

- Major Pipe Section Relocation – When extended lengths of pipe are required to be installed due to a major facility relocation, then test pits are to be excavated at both ends at the proposed tie-in locations. Both pipes are to be exposed and one of the two feeder pipes shall be identified by the use of ungrounded tracing current and tagged accordingly by Company personnel. Once positive identification is achieved, the feeder shall be returned to service.
- Installation of New Manhole – When the new manhole structure will be installed over existing feeders to allow installation of “Wye” joint(s), then a test pit will be excavated at the proposed location exposing the pipes. One of the two feeder pipes shall be identified by use of ungrounded tracing current and tagged accordingly by Company personnel. Once positive identification is achieved, the feeder shall be returned to service.

2.6.4 Installation of New Pipes or Verification of Existing Pipes to Substation

**NOTE**

Either Company forces or the Contractor, as specified in the bid documents, shall perform this work.

- a. Verification of pipes shall be performed on all completed pipe sections and connecting manholes using dry air and pressure gauges. Testing shall begin at the cutover location and proceed towards the station potheads. The existing transmission feeder pipe identified in accordance with Paragraph 2.6.3 and the new and/or existing pipe to be connected, will both be designated as the reference pipe. (New pipes are typically installed just outside the manhole wall or placed on top of the existing pipes until the final cutover of the feeder is performed.)
- b. The reference pipe shall be filled with dry air. Steps detailing the verification process are as follows:
  - (1) Establish reference pipe in accordance with Paragraph 2.6.3.
  - (2) Install pressure gauges on both pipes in the next connecting manhole.
  - (3) Raise pressure of reference pipe to 10 psig and observe gage pressure at connecting manhole. The pipe that registers a pressure change shall now be designated the reference pipe and

tagged accordingly. Remove gauges and connect 5/8" copper tubing in series to the opposite pipe across the manhole.

**NOTE**

If 5/8" copper tubing is not used, then tag the in-line series pipe across manhole and fill with dry air once gauges are installed on pipes in next connecting manhole.

- (4) Install pressure gauges on both pipes in the next connecting manhole.
- (5) Repeat pipe verification as required until station potheads are reached or other positive identification point is reached.
- (6) Verify that installed piping terminates at the designated location in accordance with the construction drawings issued.

2.6.5 Pipe Replacement between Manhole Sections

**NOTE**

Either Company forces or the Contractor, as specified in the bid documents, shall perform this work.

- a. Establish reference pipe designation in accordance with Paragraph 35.1 and tag accordingly.
- b. Install pressure gauges on both ends of new pipes at the furthest point away from the established reference pipe.
- c. Raise pressure of the reference pipe to 10 psig and observe gauge pressure at opposite end.
- d. Tag the associated pipe that registers positive gauge pressure.
- e. Verify that installed piping terminates at the designated location in accordance with the construction drawings issued.

**3.0 REQUIRED SUBMITTALS**

- 3.1 Environmental, Health, and Safety Plans (eHASP).
- 3.2 Environmental Construction Plan (ECP)
- 3.3 Shop drawings, product data, & samples.
- 3.4 Quality Assurance/Control submittals.
- 3.5 "As Constructed" drawings, O&M manuals, training documentation.

3.6 Copies of all necessary permits, licenses, etc.

3.7 Detailed construction and removal schedule.

#### 4.0 DELIVERY, STORAGE, AND HANDLING

4.1 The Contractor shall furnish all necessary labor, equipment and material required to unload the equipment and materials at the construction site. Each shipping crate or drum must be inspected for damage before being removed from the transporting vehicles. If there is visible evidence of damage to the crate or equipment, this must be reported immediately to the Company representative on site to facilitate any damage claims against the carrier or manufacturer.

4.2 The Contractor shall uncrate the equipment or waste materials carefully, taking all necessary precautions to prevent damage to the existing equipment.

4.3 The Contractor shall inspect the shipping manifest and verify that all equipment and/or materials specified herein are on the shipping manifest. The Contractor shall immediately notify the Company representative on site if there is shortage or excess of equipment and/or materials.

4.4 The Contractor shall remove and dispose of all shipping crates and packing materials from the construction site immediately after the equipment is unloaded.

4.5 The Contractor shall remove, store and transport off site, all associated materials and waste items referred to in the attached drawings and specifications.

4.6 The Contractor, on a daily basis, shall dispose of all packing materials, crating, general debris and other waste items from the site, in order to maintain proper safety, environmental and sanitary conditions on the site.

4.7 The Contractor shall be responsible for the security and loss of his material and equipment.

4.8 The Contractor shall maintain the work area in a neat and orderly condition at all times. Site clean-up shall be performed on a daily basis and as directed by the field representative, and shall include removal of all material no longer needed for construction purposes as well as papers, cups, cans, and other non-construction debris. The Contractor shall be responsible to furnish and maintain trash receptacles suitable for the type and quantity of material to be removed. Type and quantity shall be subject to the approval of the field representative. At the completion of the job the site should be left in a clean and finished condition.

4.9 The Contractor shall dispose of all construction debris, equipment, etc. in accordance with all federal, state and local environmental laws and regulations.

#### 5.0 FABRICATION

5.1 Items must be manufactured, fabricated, or assembled prior to delivery to the site. If necessary, the Contractor shall pre-assemble all working parts prior to disassembly to shipment to the job site.



**6.0 MATERIALS AND MIXES**

- 6.1 Specifications for materials to be provided.
- 6.2 The Contractor shall furnish any equipment and materials necessary for installing the High pressure pipe.
- 6.3 The Company shall approve all chemicals in advance, be part of the eHASP and the MSDS sheets must be on site.

**7.0 PREPARATION AND MAINTENANCE**

- 7.1 The Contractor shall do all possible preparatory work in advance of equipment shutdown, and he shall provide adequate manpower to do the outage work in the time allotted. The Company reserves the right to perform any items of work which because of operating conditions, should, in the Company's opinion, be performed by Company forces.
- 7.2 The Contractor shall confine his equipment, storage of materials and the operations of his employees to the limits indicated by law, ordinances, permits or reasonable direction of the Company or its duly authorized representatives, and shall not unreasonably encumber the premises with his materials or equipment.
- 7.3 All arrangements for the use of the highways, public property and private property for the storage of materials or equipment shall be made by the Contractor, and he shall obtain and pay for any permits that may be required for the storage of materials and equipment.
- 7.4 The detailed part of this specification will inform the Contractor of the environmental conditions and hazards to be found on the job site. The Contractor is responsible for implementing an effective Environment, Health and Safety (EH&S) program for performance of the Work.
- 7.5 Changes to project activities/materials or unanticipated site conditions may require a re-assessment and/or modification of project EH&S requirements. Additional EH&S measures may be required (sampling, testing, monitoring, personal protective equipment, permits/licenses/approvals). If issues or concerns arise which were not anticipated, the Contractor shall stop work activity, take appropriate precautions and contact the Site Representative immediately.
- 7.6 The Site Representative is responsible for overseeing the environment, health and safety of Company employees and Contractor personnel. The Contractor is required to comply with all federal, state and local requirements, as well as any Company policy or procedure directed by the Site Representative, applicable to the performance of the Work.
- 7.7 The Site Representative will monitor the Contractor's EH&S compliance and to ensure immediate correction of any EH&S hazard or procedural non-compliance. The Site Representative has the authority and responsibility to stop an activity or job, if in his professional assessment, the Contractor shows a disregard, lack of knowledge or expertise for any EH&S requirement. There shall be no increase in cost to the Company or schedule relaxation allowed as a result of work stoppage due to the Contractor's disregard, lack of knowledge or expertise for EH&S requirements.

- 7.8 Prior to bringing any materials on the job site or Company property, the Contractor shall submit Material Safety Data Sheets (MSDS) to the Site Representative for approval. The MSDS's will be submitted as part of the required Health and Safety Plan (HASP). The Contractor must keep copies of all MSDS's on the job site during the Work
- 7.9 The Contractor shall obtain any permit, license or approval necessary to perform the Work in accordance with all federal, New York State and local regulations, codes and laws.

## 8.0 CONSTRUCTION

- 8.1 None.

## 9.0 FIELD QUALITY CONTROL

- 9.1 All parts of the Work shall throughout the time of the performance of the Contract, be subject to inspection by the Company. The Company shall be final judge of the quality and acceptability of the Work, the materials and equipment used herein, and the process of the manufacture and methods of constructions employed in connection with the Work. The Company shall have the right to witness any tests the Contractor or third party conducts.
- 9.2 If at any time prior to the completion of all of the Work, the Company finds as a result of any inspections any part of the Work, is not suitable or of good quality, or fails to conform to the specifications or drawings, the Company has the options to require the Contractor, at his expense and within reasonable time, to reconstruct, replace or correct the applicable Work.
- 9.3 Upon completion of the work, the Contractor shall clean the entire work area of all unused material and equipment. The Contractor shall remove all of his equipment and construction materials and vacate storage areas which may have been temporarily assigned for his use by the Company. The Contractor will not leave any hazardous wastes, solid wastes, chemicals, lead, asbestos or other environmental hazards on the site.
- 9.4 This work will take place in an active, operational, high voltage substation. The Contractor shall not interfere with the normal and/or emergency substation operation. Workers shall limit their access to active work areas only.
- 9.5 The Contractor shall use the Trades having jurisdiction to perform the work covered by this specification and he shall comply with all rules and regulations of Trades covering the type of work as accepted by a recognized group of trade employers. The employees shall be skilled in their particular lines and shall not conflict in any way with those of other Trades employed under other Company contracts at any location.

## 10.0 REPAIR AND RESTORATION

- 10.1 The Contractor shall install equipment and materials as shown on the drawings, except where obvious, unforeseen interferences occur.
- 10.2 When field changes are required, every effort shall be made to coordinate the change with other conduit work, structural work, lighting installations, etc., being done at the

same site. The Contractor shall keep a complete record of all such changes being made by his forces on the Contractor's copies of the affected drawings.

- 10.3** In event of any damage, the Contractor shall promptly make replacements and repairs to the approval of the Company's Project Engineer and at no additional cost. Additional time required to secure replacements and to make repairs will not be considered by the Company to justify any extension in the Contract Time of Completion.

**SECTION III – CONSTRUCTION PACKAGE DOCUMENTS AND SUPPLEMENTAL SPECIFICATIONS**

**PART 0 – (Contract Drawings, Tables, & Lists)**

- 1.0 The list of contract drawings included with the construction package
- 2.0 The list of supplemental specifications and applicable revision. If the specification is not provided as a Part in this section, provide instructions where the specifications are to be found (e.g. Con Edison, Manual of Construction) and how to obtain copies.
- 3.0 Reference Drawings
  - 3.1 301709 Cathodic Corrosion Protection for Electrical Feeder Pipe Test Station Installation.
  - 3.2 EO-4796-D Connector Plate Assembly for Attaching Bonds, Thermocouple and Shunt Wires to Steel Electric Cable Pipes.
  - 3.3 EO-5199-B Pipe with Flared Ends for Chill Ring Welds on Electric Cable Pipes.
  - 3.4 EO-6947-D Welding Sleeve for Pipe Connection in Pipe Type Cable System.
  - 3.5 EO-7370-B Night Cap for 5-9/16", 6-5/8" and 10-3/4" OD Pipe and 7" Tubing.
  - 3.6 EO-8935-D Heat Deflecting Slab for Installation between Steam Mains and Electric Cables.
  - 3.7 EO-9230-C Sleeve Details and Method of Sealing H.P. Cable Pipe through Manhole wall.
  - 3.8 EO-10569-D Mandrels for H.P. Cable Pipes.
  - 3.9 EO-12215-C Reference Tank for Leakage Testing of H.P. Pipelines.
  - 3.10 EO-12640-B B.H.P. Cable and Dielectric Fluid Circulating Pipe Trenching and Backfill.
  - 3.11 EO-14267-C Typical Sleeve Installation of High Pressure Cable Pipe Type.
  - 3.12 EO-14661-D Typical Pressure Test Assemblies and Installation for 5" to 12" Pipes.
  - 3.13 EO-15362-B Pier Installation and Details for 138/345 kV High Pressure Pipes Crossing Facilities.
  - 3.14 EO-16325-B Radius Acceptance Mandrel for 5-9/16", 8-5/8" and 10-3/4" O.D.H.P. Pipe.

**PART 1 thru XX – (Supplemental Specifications)**

- 4.0 Reference Specifications
  - 4.1 G-1064 Shielded Metal Arc Welding Procedure for Welding Steel Pipe and Fittings.

- 4.2 G-1065 Qualification of Welders and Welding Procedures.
- 4.3 G-1070 Radiographic Inspection of Pipeline Welds.
- 4.4 EO-1109 High Pressure Pipe Type Cable Systems Cable Installation and Pressurization of Lines.
- 4.5 EO-1173 Specification for Controlled Backfill Material for H.P. Cable Pipe Installation.
- 4.6 EO-1181 General Specification for Backfilling or Trench and Small Openings.
- 4.7 EO-8069 Pipe Skids and Liners.
- 4.8 EO-8048 Specification for Welding Austenitic Stainless Steel Pipe.
- 4.9 EO-8085 General Backfill and Bedding Material for Excavations.
- 4.10 G-8096 Sealing of the Annular Space between Gas Pipe and Casing or Sleeves.
- 4.11 EO-8097 Stainless Steel Pipe for Single Phase Terminal Circuits for Pipe Type Cables.
- 4.12 G-8209 Field Coating of Steel Pipe and Fittings Installed Underground and in Subsurface Structures.
- 4.13 EO-8193 Purchase Specification for Internal Coating of Steel Electric Feeder Pipe.
- 4.14 G-8196 Purchase Specification for Extruded Polyolefin Coating on Steel Electric Feeder Pipe.
- 4.15 EO-9000 Specification for Purchase of Steel Pipes for Electric Facilities. Fuel Oil Facilities and Casings.
- 4.16 G-100, 280 Pipeline Casing Insulating Skids.
- 4.17 EI-4147 General Specification for Dry Compressed Breathable Air.
- 4.18 EO-6064 Tagging of Pipe Type Feeders Operating at 345 kV, 138 kV, and 69 kV to Establish Permanent Feeder Identification Points.

## **SECTION U-3**

(NO TEXT IN THIS SECTION)

# TEST PITS

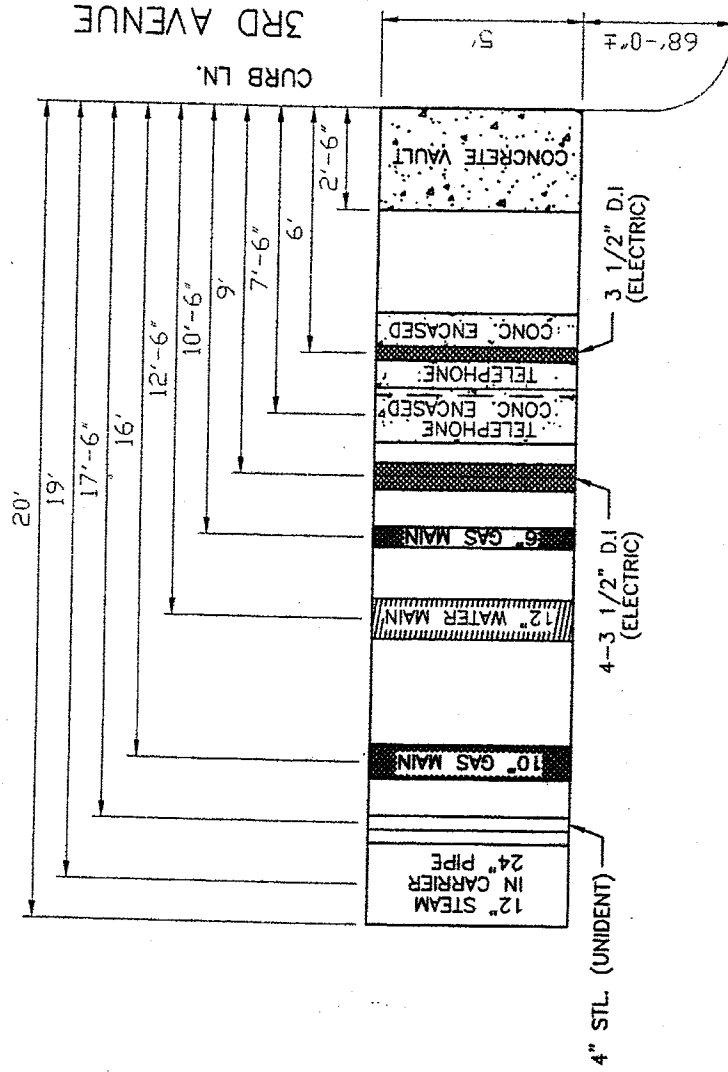
- (1) THESE TEST PITS DETAIL EXISTING CONDITIONS (AS OF BID DATE) OF UTILITIES AND OTHER SUBSURFACE FACILITIES AT LOCATIONS AS SHOWN ON THE TEST PIT LOCATIONS PLAN OF THE CONTRACT DRAWINGS.
  
- (2) DEPTHS OF FACILITIES ARE FROM EXISTING ROADWAY AND SIDEWALK ELEVATIONS AS SHOWN, OFFSETS ARE FROM EXISTING CURB, PROPERTY AND BUILDING LINES, AS SHOWN.
  
- (3) RELEVANT ITEMS ARE NOTED ON EACH TEST PIT DIAGRAM.



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JOB NO: HMMBRT5A/MED-607B TEST PIT # 1 PAGE 1 OF 2  
 PREPARED BY: P. MALLARI DATE: 07/22/12  
 CHECKED BY: E. BARCELONA DATE: 07/23/12

JOB NAME: E. 34TH ST. TRUNK WATER MAINS LOCATION: 68' N/N/C 34TH STREET  
 PURPOSE: LOCATE SUB-SURFACE FACILITIES E/S 3RD AVENUE  
 DATE OF EXCAVATION: 07/21/12 CONTRACT SHEET NO: 1 OF 1



34TH STREET

PLAN

N.T.S

CET





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JOB NO: HMMBRT5A/MED-607B TEST PIT # 1 PAGE 2 OF 2

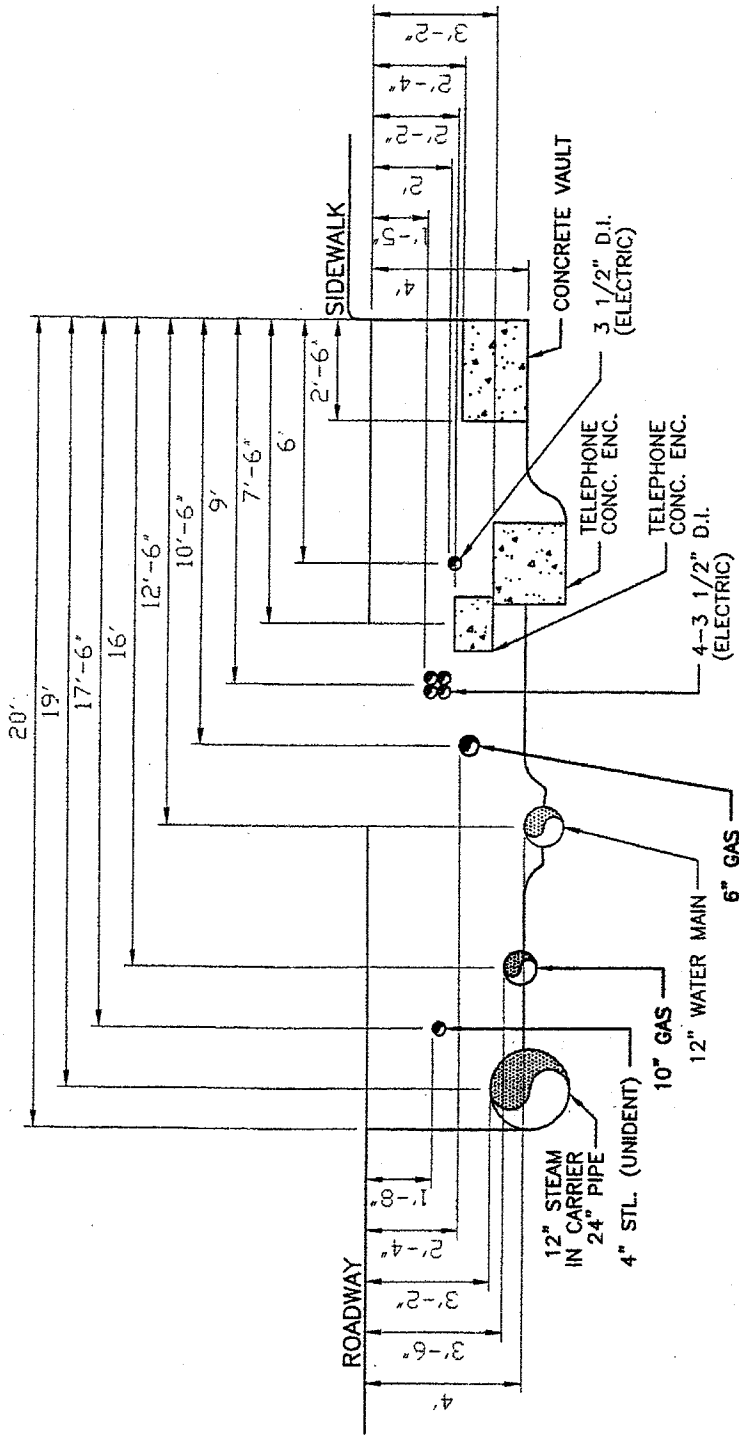
PREPARED BY: P. MALLARI DATE: 07/22/12

CHECKED BY: E. BARCELONA DATE: 07/23/12

JOB NAME: E. 34TH ST. TRUNK WATER MAINS LOCATION: 68' N/N/C 34TH STREET

PURPOSE: LOCATE SUB-SURFACE FACILITIES E/S 3RD AVENUE

DATE OF EXCAVATION: 07/21/12 CONTRACT SHEET NO: 1 OF 1



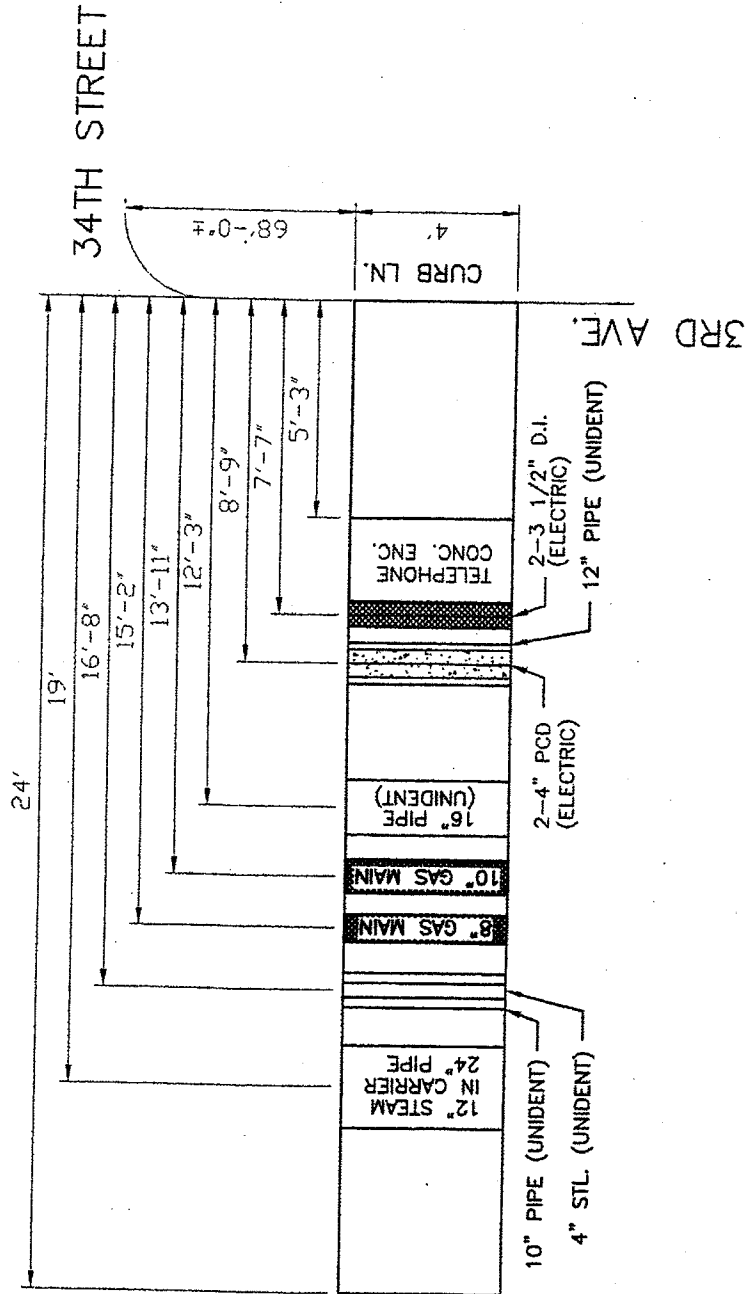
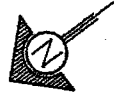
PROFILE - LOOKING NORTH  
N.T.S.



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JOB NO: HMBRT15A/MED-607B TEST PIT # 2 PAGE 1 OF 2  
 PREPARED BY: P. MALLARI DATE: 07/22/12  
 CHECKED BY: E. BARCELONA DATE: 07/23/12

JOB NAME: E. 34TH ST. TRUNK WATER MAINS LOCATION: 68' S/S/C 34TH STREET  
 PURPOSE: LOCATE SUB-SURFACE FACILITIES E/S 3RD AVENUE  
 DATE OF EXCAVATION: 07/21/12 CONTRACT SHEET NO: 1 OF 1



PLAN  
 N.T.S

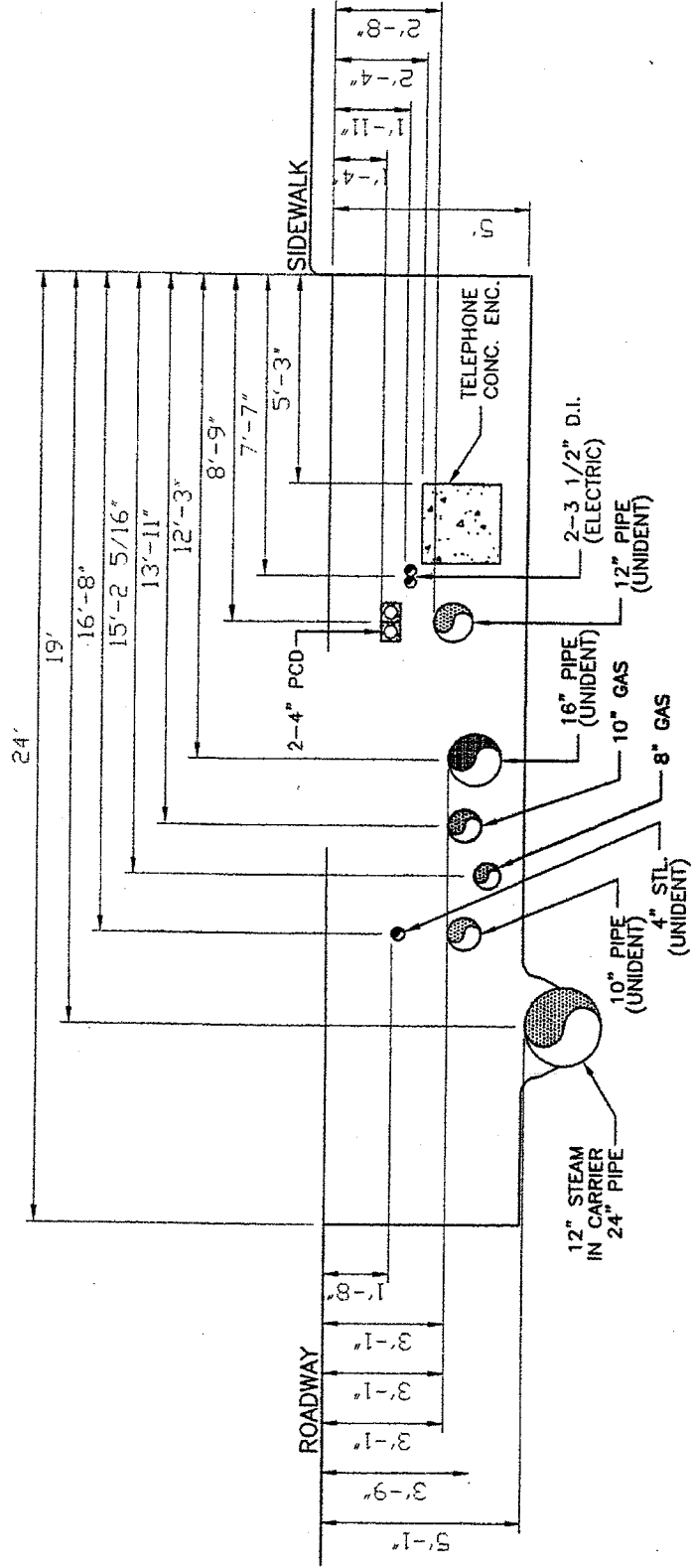
CET



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JOB NO: HMMBRT15A/MED-607B TEST PIT # 2 PAGE 2 OF 2  
 PREPARED BY: P. MALLARI DATE: 07/22/12  
 CHECKED BY: E. BARCELONA DATE: 07/23/12

JOB NAME: E. 34TH ST. TRUNK WATER MAINS LOCATION: 68' S/S/C 34TH STREET  
E/S 3RD AVENUE  
 PURPOSE: LOCATE UNDERGROUND FACILITIES  
 DATE OF EXCAVATION: 07/21/12 CONTRACT SHEET NO.: 1 OF 1



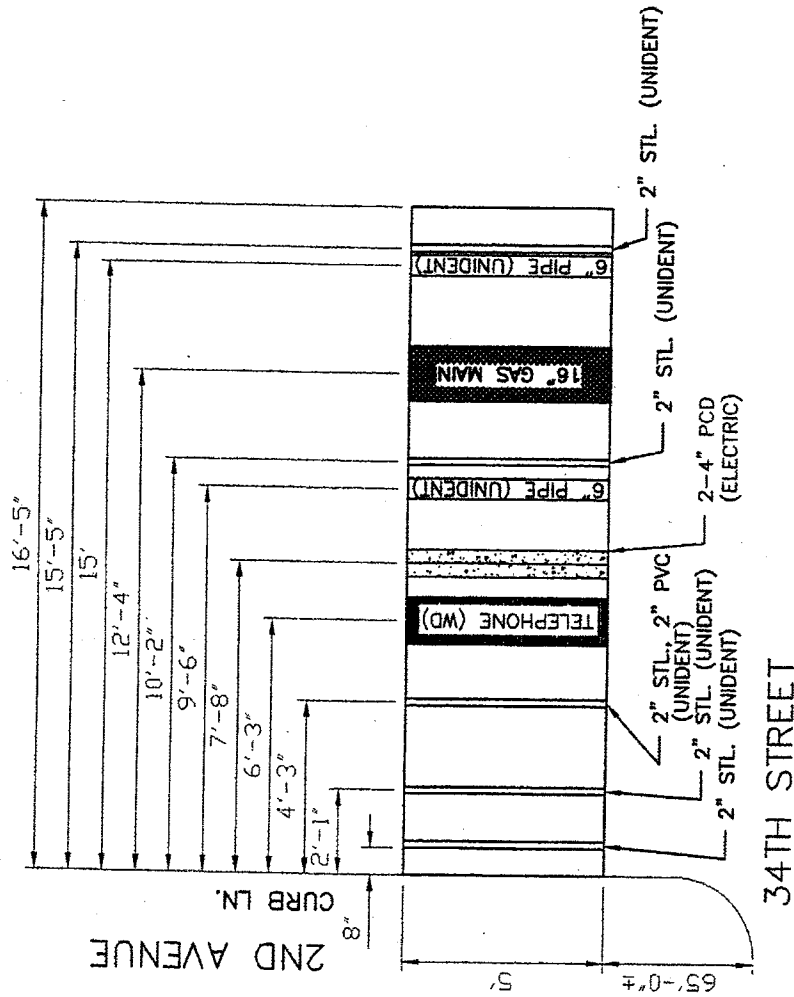
PROFILE -- LOOKING NORTH  
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JOB NO: HMMBR15A/MED-607B TEST PIT # 3 PAGE 1 OF 2  
 PREPARED BY: P. MALLARI DATE: 07/22/12  
 CHECKED BY: E. BARCELONA DATE: 07/23/12

JOB NAME: E. 34TH ST. TRUNK WATER MAINS LOCATION: 65' N/N/C 34TH STREET  
W/S 2ND AVENUE  
 PURPOSE: LOCATE SUB-SURFACE FACILITIES  
 DATE OF EXCAVATION: 07/21/12 CONTRACT SHEET NO: 1 OF 1



34TH STREET

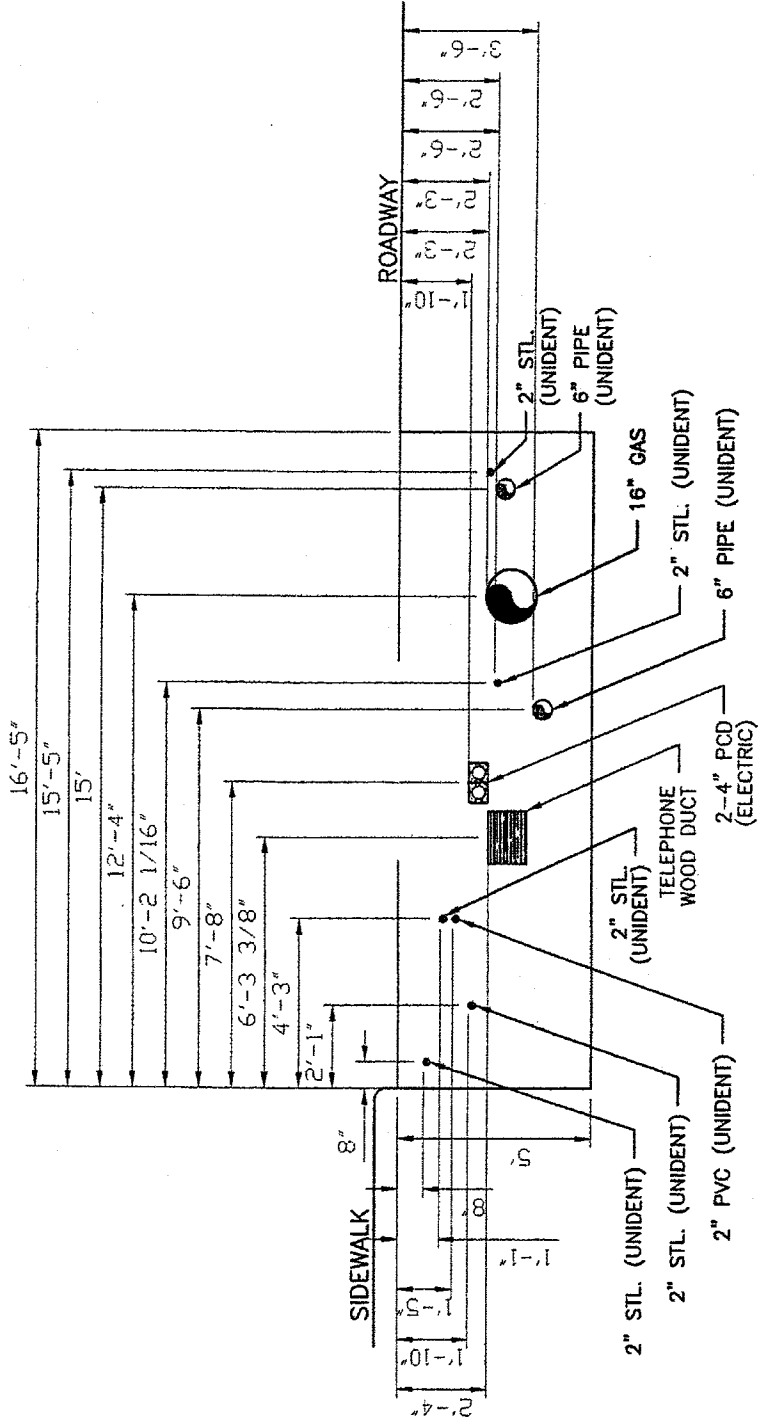
PLAN  
N.T.S



conEdison

JOB NO: HMBRTISA/MED-607B TEST PIT # 3 PAGE 2 OF 2  
 PREPARED BY: P. MALLARI DATE: 07/22/12  
 CHECKED BY: E. BARCELONA DATE: 07/23/12

JOB NAME: E. 34TH ST. TRUNK WATER MAINS LOCATION: 65' N/N/C 34TH STREET  
 PURPOSE: LOCATE UNDERGROUND FACILITIES W/S 2ND AVENUE  
 DATE OF EXCAVATION: 07/21/12 CONTRACT SHEET NO: 1 OF 1



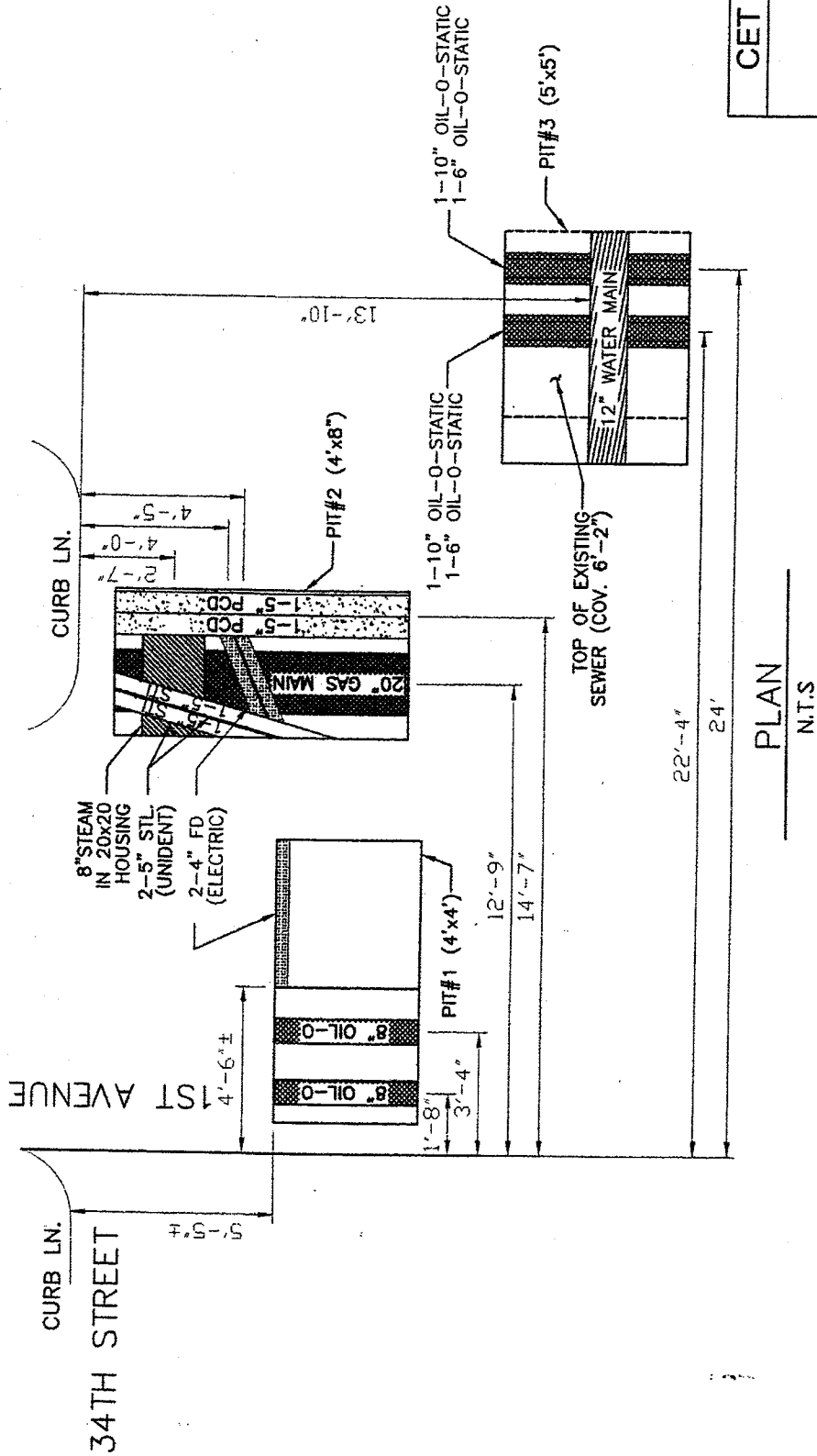
PROFILE - LOOKING NORTH  
 N.T.S.



conEdison

JOB NO: HWMBRT5A/MED-607B TEST PIT # 5 PAGE 1 OF 2  
 PREPARED BY: P. MALLARI DATE: 07/28/12  
 CHECKED BY: E. BARCELONA DATE: 07/30/12

JOB NAME: E. 34TH ST. TRUNK WATER MAINS LOCATION: 5'-5" S/N/C 34TH STREET  
4'-6" E/W/C 1ST AVENUE  
 PURPOSE: LOCATE SUB-SURFACE FACILITIES  
 DATE OF EXCAVATION: 07/28/12 CONTRACT SHEET NO: 1 OF 1



PLAN  
N.T.S

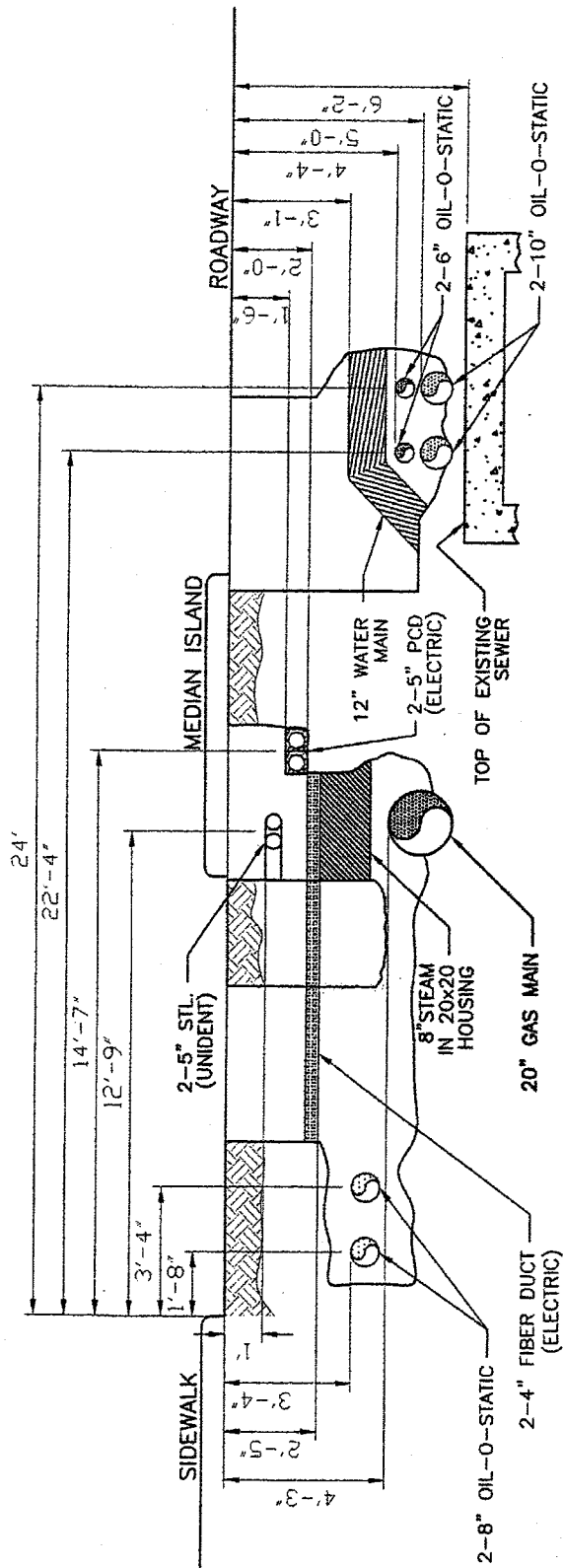
CET



conEdison

JOB NO: HMMBRT15A/MED-607B TEST PIT # 5 PAGE 2 OF 2  
 PREPARED BY: P. MALLARI DATE: 07/28/12  
 CHECKED BY: E. BARCELONA DATE: 07/30/12

JOB NAME: E. 34TH ST. TRUNK WATER MAINS LOCATION: 5'-5" S/N/C 34TH STREET  
4'-6" E/W/C 1ST AVENUE  
 PURPOSE: LOCATE SUB-SURFACE FACILITIES  
 DATE OF EXCAVATION: 07/28/12 CONTRACT SHEET NO: 1 OF 1



PROFILE -- LOOKING NORTH  
 N.T.S.



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 1 OF 1

conEdison  
a consolidated Edison company

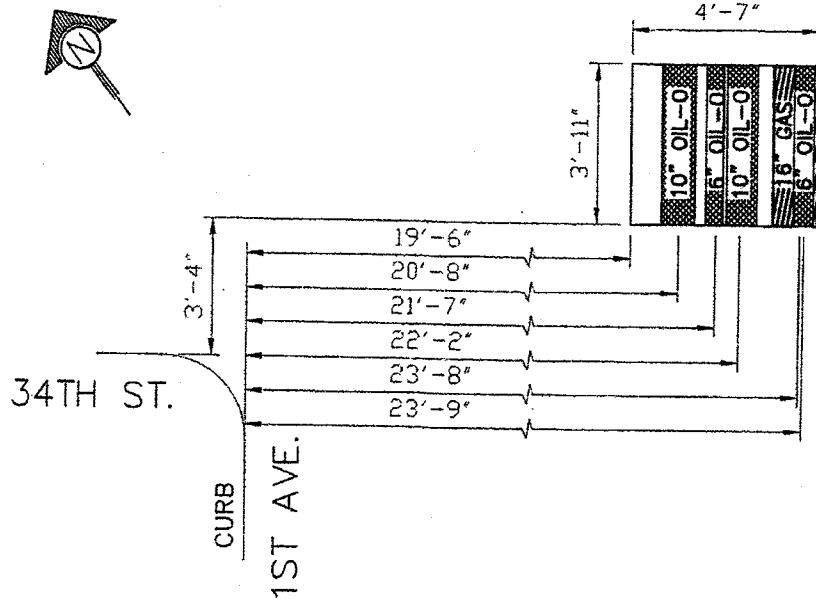
JOB: E. 34TH ST. TRUNK WATER MAIN PREPARED BY: PM DATE: 07/28/2012

JOB NO: HWMBRT5A/MED607B CHECKED BY: EB DATE: 07/30/2012

TEST PIT # 5A LOCATION: 3'-4" N/S/C 34TH ST., 19'-6" E/W/C 1ST AVE.

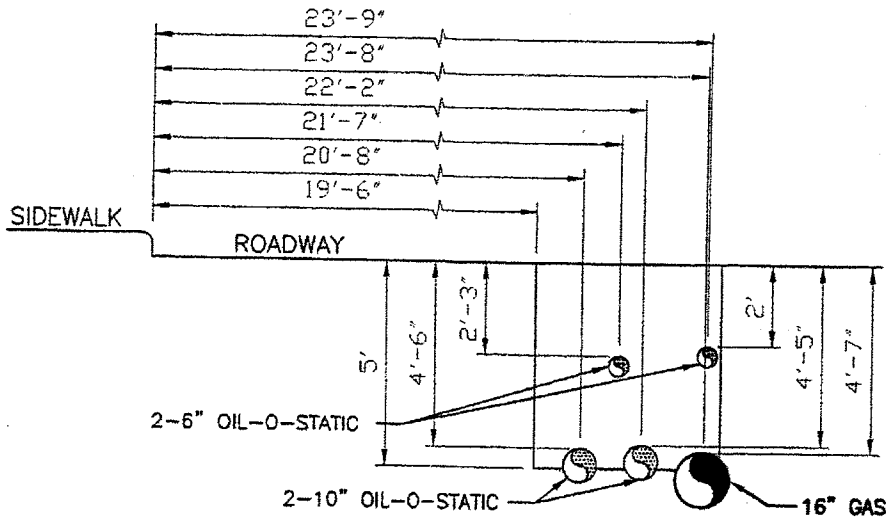
PURPOSE: LOCATE SUB-SURFACE FACILITIES TEST PIT DATE: 07/28/2012

TEST PIT DIMENSION 5'-0"X4'-0"X5'-0"



CET  
ITEMS

PLAN  
NTS

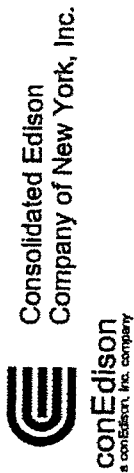


PROFILE - LOOKING NORTH



# **SKETCHES**

(NO TEXT IN THIS SECTION)



SHEET NO. 1 OF 4

JOB: E. 34TH STREET FROM

PREPARED BY: CA

DATE: 08/03/2012

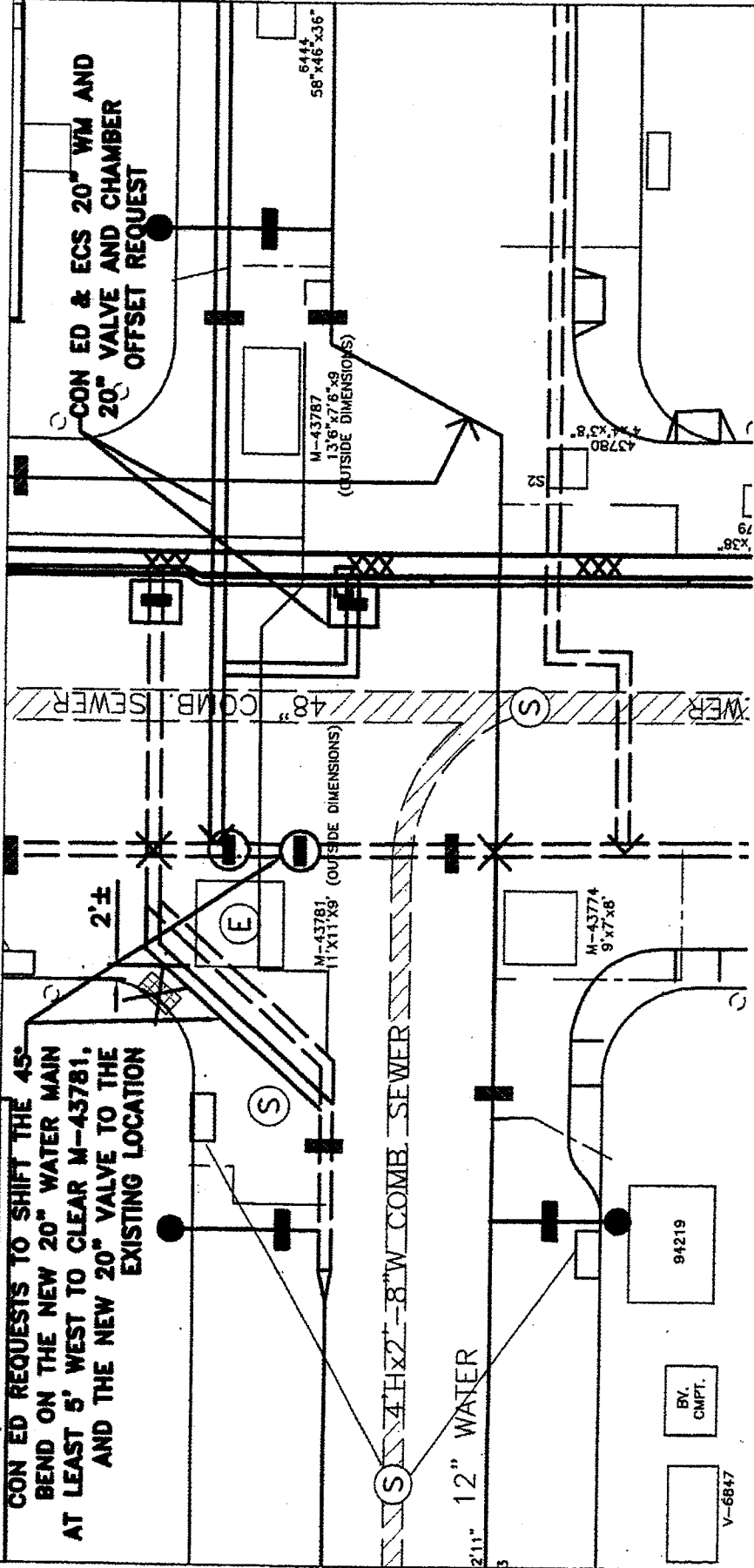
3RD AVENUE TO 1ST AVENUE CHECKED BY:

DATE:

JOB NO: HWMBRT5A (MED607B)

OFFSET # 1 LOCATION: INT. E. 34TH STREET AND 3RD AVENUE

CON ED REQUESTS TO SHIFT THE 45° BEND ON THE NEW 20" WATER MAIN AT LEAST 5' WEST TO CLEAR M-43781, AND THE NEW 20" VALVE TO THE EXISTING LOCATION



WATER MAIN OFFSET SKETCH -- PLAN

N.T.S.

NOTE:  
1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECTION WORK ARE FOR REFERENCE ONLY.

SHEET NO. 2 OF 4

JOB: E. 34TH STREET FROM 3RD AVENUE TO 1ST AVENUE

PREPARED BY: CA

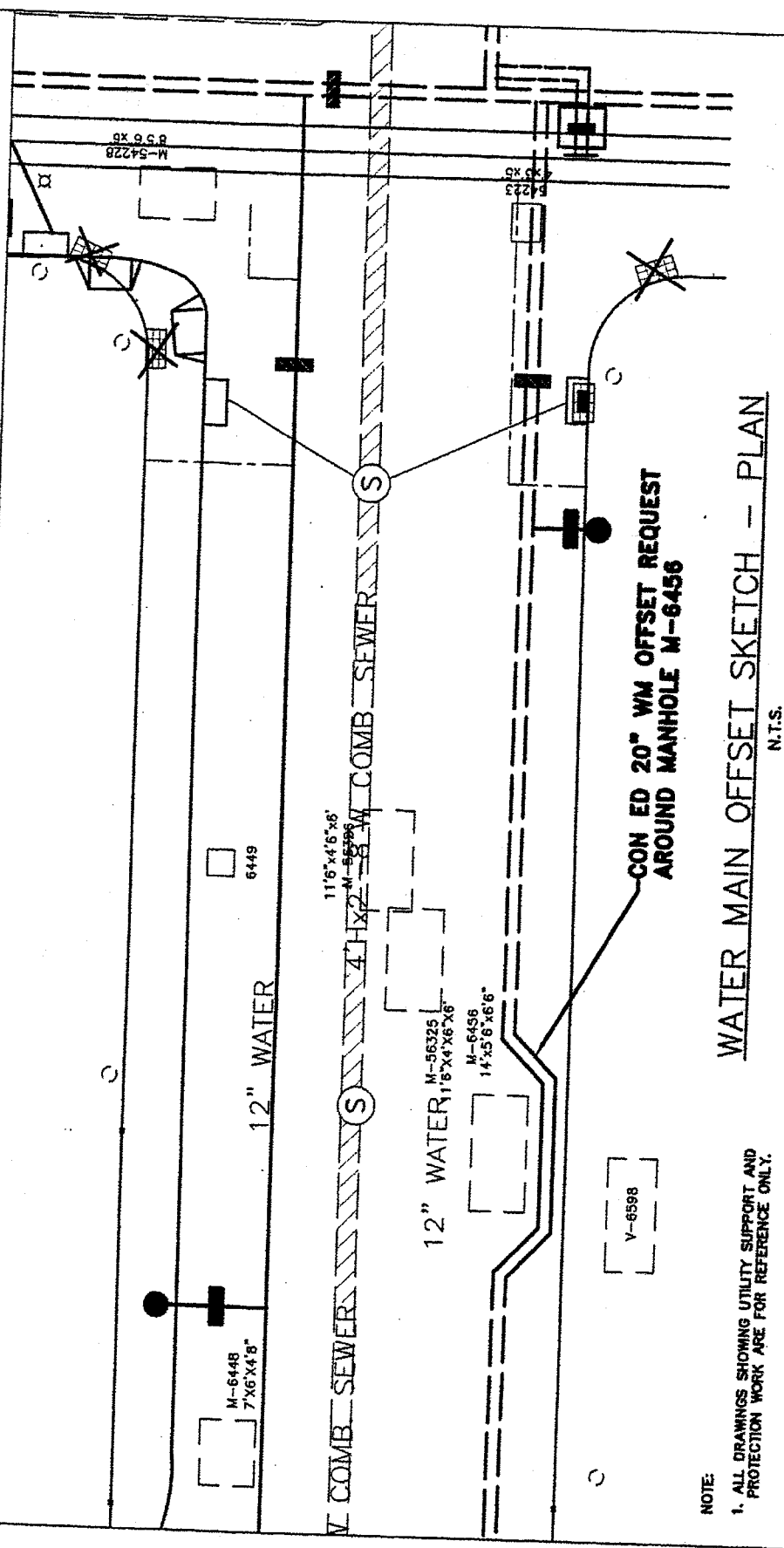
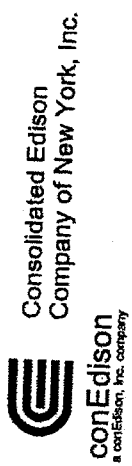
DATE: 08/03/2012

JOB NO: HWMBRT5A (MED607B)

CHECKED BY:

DATE:

OFFSET # 2 LOCATION: E. 34TH STREET BTW 3RD AVENUE AND 2ND AVENUE



CON ED 20" WM OFFSET REQUEST AROUND MANHOLE M-6456

WATER MAIN OFFSET SKETCH - PLAN

N.T.S.

NOTE: 1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECTION WORK ARE FOR REFERENCE ONLY.



Consolidated Edison  
Company of New York, Inc.

conEdison  
a consolidated Edison company

SHEET NO. 3 OF 4

JOB: E. 34TH STREET FROM

PREPARED BY: CA

DATE: 08/03/2012

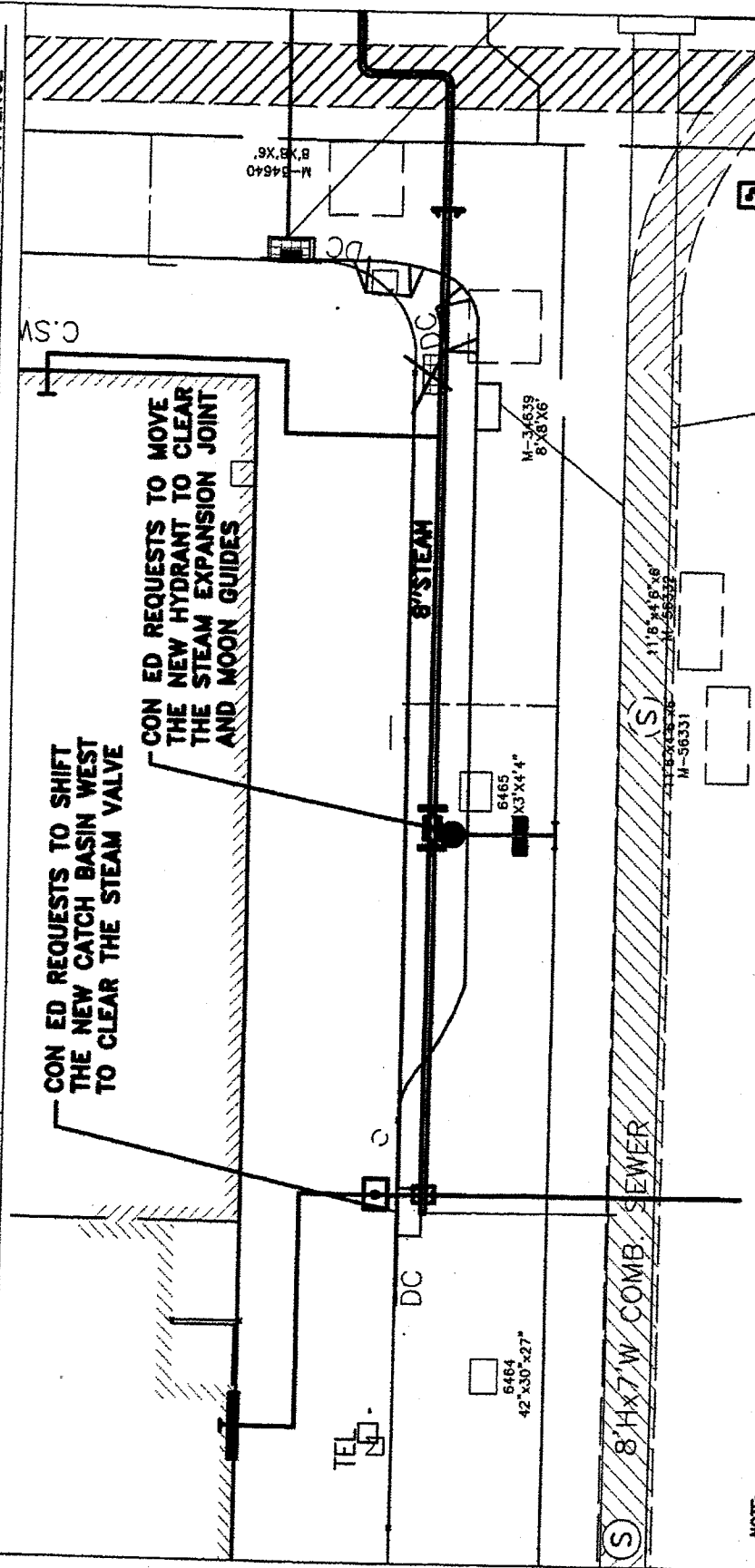
3RD AVENUE TO 1ST AVENUE

CHECKED BY:

DATE:

JOB NO: HWMBERT5A\_(MED607B)

OFFSET # 3 LOCATION: E. 34TH STREET BTW 2ND AVENUE AND 1ST AVENUE



WATER MAIN OFFSET SKETCH - PLAN  
N.T.S.

NOTE:  
1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECTION WORK ARE FOR REFERENCE ONLY.

SHEET NO. 4 OF 4

JOB: E. 34TH STREET FROM 3RD AVENUE TO 1ST AVENUE

PREPARED BY: CA

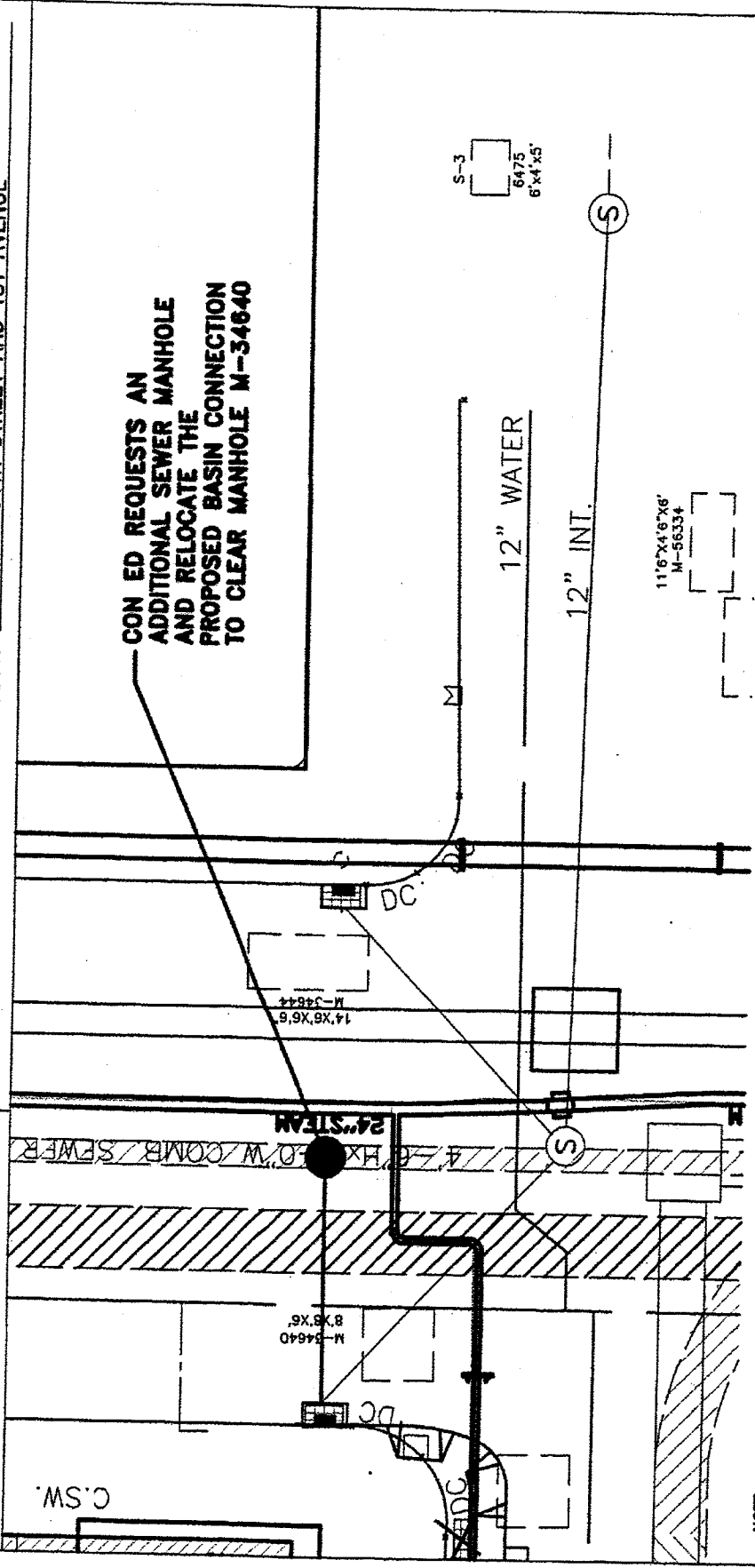
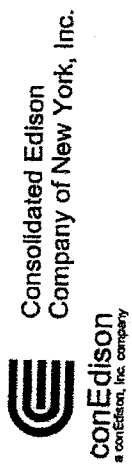
DATE: 08/03/2012

JOB NO: HWMBRT5A (MED607B)

CHECKED BY:

DATE:

OFFSET # 4 LOCATION: INT. OF E. 34TH STREET AND 1ST AVENUE



CON ED REQUESTS AN ADDITIONAL SEWER MANHOLE AND RELOCATE THE PROPOSED BASIN CONNECTION TO CLEAR MANHOLE M-34640

WATER MAIN OFFSET SKETCH - PLAN

N.T.S.

NOTE: 1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECTION WORK ARE FOR REFERENCE ONLY.

**END OF ADDENDUM No.6**

**This Addendum consists of One Hundred and Six (106) pages  
And Seven (7) sheets of Contract Drawings**

**ATTACH TO CONTRACT DOCUMENTS**  
**THE CITY OF NEW YORK**  
**DEPARTMENT OF DESIGN AND CONSTRUCTION**  
**INFRASTRUCTURE DIVISION**  
**BUREAU OF DESIGN**

**PROJECT ID: HWMBRT5A (MED-607B)**

**EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE FROM FDR DRIVE TO LEXINGTON AVENUE**

**INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK, REPLACEMENT OF SEWER,  
WATER MAINS, RESURFACING, STREET LIGHTING, AND TRAFFIC SIGNAL WORK**

**Together With All Work Incidental Thereto**

**BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

**ADDENDUM NO. 7**

**DATED: March 15, 2013**

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**This Addendum is issued for the purpose of amending the requirements of the contract documents and is hereby made part of said contract documents to the same extent as if it was originally included therein.**

---

**Specifications For**  
**Abatement of Transit Authority Duct Insulation Asbestos Containing Materials**  
**ASSOCIATED WITH INSTALLATION OF TRUNK WATER MAINS FOR REHABILITATION**  
**OF EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE FROM FDR DRIVE TO LEXINGTON**  
**AVENUE**  
**BOROUGH OF MANHATTAN**



**NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION**

Prepared By:

**Bureau of Environmental and Geotechnical Services**  
30-30 Thomson Avenue, 5<sup>th</sup> Floor  
Long Island City, New York 11101

Revision #: 00 or Final Submission  
Date: July 15, 2011

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**SECTION 79.11****ALLOWANCE FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING TRANSIT AUTHORITY DUCT INSULATION (REMOVAL OF ASBESTOS-CONTAINING MATERIALS, REPLACEMENT WITH NON-ASBESTOS-CONTAINING MATERIALS, AND SUPPORT AND PROTECTION OF EXISTING TRANSIT AUTHORITY DUCT, COMPLETE)****79.11.1 GENERAL****79.11.1.1 DESCRIPTION**

- (A) The contract documents are as defined in the "Standard Construction Contract". The General Construction Provisions of the Standard Water Main Specifications shall apply to all work of this section.
- (B) Work specified herein shall be as follows:
- (1) The removal and disposal of Asbestos-Containing Materials (ACM) and asbestos-contaminated duct insulation from existing Transit Authority duct that are exposed due to other contract work.
  - (2) The replacement of the removed ACM insulation with a Transit Authority approved non-asbestos-containing materials insulation.
  - (3) The support and protection of the existing Transit Authority duct that are exposed and to remain in service at all times.
- (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).

**79.11.1.2 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 removal and disposal of ACM and asbestos-contaminated duct insulation from existing Transit Authority duct that are exposed, the replacement of the removed ACM insulation with a Transit Authority approved non-asbestos containing materials insulation, and the support and protection of the existing Transit Authority duct that are exposed and to remain in service at all times 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.

The work to be performed in order to replace the removed ACM insulation with a Transit Authority approved non-asbestos containing materials insulation, and to support and protection the existing Transit Authority duct that are exposed and to remain in service at all times shall be done in accordance with Transit Authority specifications, standards and requirements.

- (B) The intent of this section is to ensure that the Contractor is responsible for the following:
- (1) Abatement of all exposed ACM.
  - (2) Cleaning and decontamination of the entire affected area.
  - (3) Removal of sections of ACM duct insulation, as necessary. The Contractor shall dispose of all debris associated with such removal activities as ACM waste.
  - (4) Removal and disposal of all exposed ACM found within these areas such as soil within excavated area, and duct insulation, etc.

- (5) Replacement of the removed ACM insulation with a Transit Authority approved non-asbestos-containing materials insulation.
  - (6) Support and protection of the existing Transit Authority duct that are exposed and to remain in service at all times.
  - (7) 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.
  - (8) The Contractor shall be responsible for acquiring all permits required to perform this work, and paying any and all fees or changes imposed by Local, State or Federal Law, Rule or Regulation applicable to the work specified herein.
- (C) The extent of the work areas requiring this work shall be as ordered by the Engineer. The Contractor shall perform the following work as described below:

WORK AREA EXCAVATION:

- (1) Remove and dispose of asbestos-containing duct insulation within the work area. Asbestos-containing duct insulation 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 duct insulation is to be removed, the Contractor shall be responsible to remove all duct insulation material within the soil below the area where the duct insulation has to be removed. All duct insulation and associated materials as well as impacted soil shall be disposed of as contaminated waste.
  - (2) Replacement of the removed ACM insulation with a Transit Authority approved non-asbestos-containing materials insulation, including all inspection, testing, etc. required.
  - (3) Support and protection of the existing Transit authority duct that are exposed and to remain in service at all times, including the design and submittal of all support and protection drawings required for approval by all appropriate agencies.
- (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 abatement work, 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 abatement 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 Provisions 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.
- (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).
- (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 impeding and/or impacting the installation of any portion of the trunk water main connection. The Contractor shall inform the Engineer prior to start of this work in order that the Engineer can verify all work and quantities. No payment for this work will be made unless verified by the Engineer in writing.

- (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.

### 79.11.1.3 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 of asbestos-containing duct insulation. 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 asbestos-containing duct insulation, 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 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. In addition, the Asbestos Abatement contractor must have on staff a certified Project Designer for the purpose of submitting regulatory filings with the NYSDOL and/or NYCDEP involving variances.
  - (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.

#### 79.11.1.4 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.

#### 79.11.1.5 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 noncontaminated 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 work place, 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 having, at a minimum, a Bachelor's Degree in Engineering from an accredited college or university with four (4) years acceptable experience as an engineer and who has successfully completed both levels of the Professional Engineers Examination administered by the State of New York Department of Education, Division of Professional Licensing.

- (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 having, at a minimum, a Bachelor's Degree in Architecture from an accredited college or university with three (3) years acceptable experience as an architect and who has successfully completed both levels of the Architects Registration 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.

**79.11.1.6 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 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 for this device and all charges accruing shall be deemed included in all scheduled items of work.

(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 work place, 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 work space 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 twice 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. Ventilation unit exhaust ducting shall not exceed twenty five (25) feet in length due to volumetric flow rates caused by friction.
- (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.

#### 79.11.1.7 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.

#### 79.11.1.8 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.

#### 79.11.1.9 SUBMITTALS

- (A) Construction Submittals:

Five (5) business days prior to excavating within three (3) feet of existing Transit Authority ducts which may contain asbestos-containing materials, the Contractor shall submit three (3) copies of the Contractor's detailed plan of action including the following items, bound and indexed. At this time and prior to this excavation work a meeting will be scheduled by the City of New York Department of Design and Construction. This meeting shall be attended by the Contractor and the Contractor's Subcontractor(s), a designated representative of the City of New York third party air monitoring firm and the Engineer.

- (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, encapsulation, 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) Copies of the following items shall be submitted 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 daily to the Engineer.
- (3) Contractor's current work progress 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.

## 79.11.1.10 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. In addition, the Contractor shall have posted in the clean room of the decontamination enclosure unit all state and city certification of all workers involved in the handling and removal of asbestos.
- (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 test and approval 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, 21<sup>st</sup> 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 43<sup>rd</sup> Street (between 5<sup>th</sup> and 6<sup>th</sup> Avenue), 4<sup>th</sup> 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, 8<sup>th</sup> 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.

**79.11.1.11 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 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. 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 provided by the Contractor.
- (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.

**79.11.1.12 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.

**79.11.1.13 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.

**79.11.1.14 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 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 79.11.3.3**; 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.

#### 79.11.1.15 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 work day, 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.

#### 79.11.1.16 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.
- (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 OSHA 1926.1101) 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  $\pm 5$ -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) 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.
- (N) All samples shall be accompanied by a Chain of Custody Record that shall be submitted to the Project Monitor upon completion of analysis.

#### 79.11.1.17 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 ABATEMENT	POST- ABATEMENT
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.

- (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.

**79.11.1.18 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.

**79.11.2 PRODUCTS****79.11.2.1 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.

#### 79.11.2.2 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 duct 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") and 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 for this device and all charges accruing shall be deemed included in all scheduled items of work.

### 79.11.2.3 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.

(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) Waste water from asbestos removal operations, including shower water, may be discharged into the public sewer system only after filtration by an approved device capable of at least 5-micron particle size collection 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.

### 79.11.3 EXECUTION

#### 79.11.3.1 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 duct Insulation.

##### (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, frame work 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, frame work 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.

#### 79.11.3.2 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, frame work 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.

#### **79.11.3.3 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-vacuuuming. 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-vacuuumed 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.

#### **79.11.4 PREPARATION OF WORK AREA AND REMOVAL PROCEDURES**

##### **79.11.4.1 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 Duct Insulation shall be as follows:

Work shall be performed as outlined in the Duct Insulation removal procedures (see Appendix) approved by the New York City Department of Environmental Protection (NYCDEP).

##### **79.11.4.2 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.

#### **79.11.5 ASBESTOS WASTE MANAGEMENT**

##### **79.11.5.1 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, payment for the cost shall be made under the item labeled "ALLOWANCE FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING TRANSIT AUTHORITY DUCT INSULATION (REMOVAL OF ACM, REPLACEMENT WITH NON-ACM, AND SUPPORT AND PROTECTION OF EXISTING TRANSIT AUTHORITY DUCT, COMPLETE)". 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 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 insulationped 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 insulationped 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. Contractor's 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.

#### **79.11.6 ACCEPTANCE**

##### **79.11.6.1 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.

#### **79.11.7 MEASUREMENT AND PAYMENT**

All costs associated with the work required by this specification for the removal and disposal of ACM and asbestos-contaminated duct insulation from existing Transit Authority duct that are exposed, the replacement of the removed ACM insulation with a Transit Authority approved non-asbestos containing

materials insulation, and the support and protection of the existing Transit Authority duct that are exposed and to remain in service at all times as required by these contract documents will be paid on a Time and Material basis in accordance with **Articles 25 and 26** of the Contract except as amended herein. Payment will be made under the item labeled "ALLOWANCE FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING TRANSIT AUTHORITY DUCT INSULATION (REMOVAL OF ACM, REPLACEMENT WITH NON-ACM, AND SUPPORT AND PROTECTION OF EXISTING TRANSIT AUTHORITY DUCT, COMPLETE)". This item shall be used exclusively for the costs associated with the removal and disposal of ACM and asbestos-contaminated duct insulation from existing Transit Authority duct that are exposed, the replacement of the removed ACM insulation with a Transit Authority approved non-asbestos containing materials insulation, and the support and protection of the existing Transit Authority duct that are exposed and to remain in service at all times as required by these contract documents.

No guarantee is given that this allowance for additional costs associated with the work required for the removal and disposal of ACM and asbestos-contaminated duct insulation from existing Transit Authority duct that are exposed, the replacement of the removed ACM insulation with a Transit Authority approved non-asbestos containing materials insulation, and the support and protection of the existing Transit Authority duct that are exposed and to remain in service at all times as required by these contract documents will in fact be required in this contract. The estimated price in the Bid Schedule is included in the total bid solely to insure a method of payment for performing this work as directed by the Engineer.

Payment made under this item shall be equal to the sum total of all vouchers submitted by the Contractor as payment for the cost of performing this work as approved by the Engineer. Payment under this item, including partial payments, will not be made until the Contractor has furnished satisfactory evidence to the Engineer that the Contractor has performed the work.

The voucher for the payment shall be submitted to the Engineer on a monthly basis.

The "fixed sum" in the Bid Schedule is for bidding purposes only and shall not be varied in the bid; however, the Contractor will be paid only for the actual work performed regardless of the fixed sum, which may be more or less than the amount fixed in the Bid Schedule.

*Payment for Allowance For Asbestos Abatement Work Performed On Existing Transit Authority Duct Insulation (Removal Of ACM, Replacement With Non-ACM, And Support And Protection Of Existing Transit Authority Duct, Complete) will be made under the Item Number as calculated below:*

The Item Number for Allowance For Asbestos Abatement Work Performed On Existing Transit Authority Duct Insulation (Removal Of ACM, Replacement With Non-ACM, And Support And Protection Of Existing Transit Authority Duct, Complete) has seven characters. (The decimal point is considered a character, the third character.)

(1) The first five characters shall define Allowance For Asbestos Abatement Work Performed On Existing Transit Authority Duct Insulation (Removal Of ACM, Replacement With Non-ACM, And Support And Protection Of Existing Transit Authority Duct, Complete):

79.11

(2) The sixth, seventh, eighth and ninth characters shall define Allowance For Asbestos Abatement Work Performed On Existing Transit Authority Duct Insulation (Removal Of ACM, Replacement With Non-ACM, And Support And Protection Of Existing Transit Authority Duct, Complete):

AATA - Allowance For Asbestos Abatement Work Performed  
On Existing Transit Authority Duct Insulation (Removal  
Of ACM, Replacement With Non-ACM, And Support  
And Protection Of Existing Transit Authority Duct,  
Complete)

(3) The Item Number together with Description and Pay Unit as provided in the Bid Schedule is provided below:

Item No.	Description	Pay Unit
79.11AATA	ALLOWANCE FOR ASBESTOS ABATEMENT WORK PERFORMED ON EXISTING TRANSIT AUTHORITY DUCT INSULATION (REMOVAL OF ACM, REPLACEMENT WITH NON-ACM, AND SUPPORT AND PROTECTION OF EXISTING TRANSIT AUTHORITY DUCT, COMPLETE)	F.S.

**APPENDIX**  
**NYCDEP ATTACHMENTS**



NYC DEP Asbestos Control Program

VAR # \_\_\_\_\_

**ATTACHMENT TM**  
**REQUIREMENTS FOR MODIFIED TENT PROCEDURES (FOR GROSS ABATEMENT)**  
**APPLIES TO VARIANCES FROM TITLE 15, CHAPTER 1, RULES OF THE CITY OF NEW YORK,**  
**SECTIONS 1-81(m) AND 1-91(c) {15 RCNY § 1-81(m) AND § 1-91(c)}**

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1. All tent enclosures and contiguous 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 § 1-106 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 shall **NOT EXCEED** (a) 160 square feet and/or (b) 260 linear feet.
  - iii. the total amount of ACM that may be abated at any one time in several modified tents shall **NOT EXCEED** 1,000 combined square feet plus linear feet.
3. All modified tents shall be fully framed (including horizontally 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 least 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 tent, located 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 15 RCNY § 1-106(k), before each worker exits any airlock.
7. Any decontamination unit that is not attached to a tent (i.e. that is remote from 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 separating them, and with a second curtained doorway separating the tent from the shower room.
9. After the ACM removal and bagging [refer 15 RCNY § 1-106(f) and (g)], the bagged waste shall be HEPA-vacuumed then wet cleaned and transferred into the airlock 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 or 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 f/cc work shall stop and 15 RCNY § 1-45(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 samples and 3 post abatement clearance air samples must be taken in compliance with section 1-41 of the NYC DEP Asbestos Regulation for each modified tent.

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NOTE: This attachment may be revised at any time 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 1-82(a) AND 1-83(a)\* {15 RCNY § 1-82(a) AND § 1-83(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 work areas.
2. The remote worker decontamination unit shall consist of, at least, a shower room, and a clean 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. The decontamination unit shall be maintained 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 street clothes in the clean 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 aggressive shower.
8. After the ACM removal and bagging {refer 15 RCNY § 1-105(c)15}, the bagged waste shall be HEPA-vacuumed and 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 enclosure system(s) as a remote decontamination unit.
  - i) Final air clearance must be achieved in the full containment area to which the decontamination enclosure system(s) is attached.
  - ii) The decontamination enclosure system(s) shall be re-plasticized in accordance with 15 RCNY § 1-82.

\*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 DUCT INSULATION REMOVAL PROCEDURE**

The work procedure to be utilized for the removal of asbestos containing duct insulation shall be as follows:

**I. Personal Protective Equipment**

Prior to beginning work, all workers performing the removal of the duct insulation must equip themselves with the proper personal protective equipment (PPE). The PPE required for the removal of duct insulation includes:

- (1) Tyvek suit with boot protection ("booties").
- (2) Disposable gloves (latex or nitrile).
- (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 duct insulation.

**II. Work Procedure**

**(A) Removal:**

The following work procedure shall be employed when removing duct insulation:

- (1) Set up the asbestos barrier tape around the perimeter of the excavation.
- (2) Place 6-mil plastic sheeting under the duct to collect loose debris.
- (3) Wet down duct insulation with amended water.
- (4) Use hand tools to break away the large chunks of duct insulation. Place the removed insulation in a plastic asbestos disposal bag.
- (5) Remove the amount of insulation around the required area of the duct necessary to perform the work associated with the installation of the trunk water main - the Engineer shall provide all markouts and make the final determination on quantities requiring removal.
- (6) Ensure that the intact duct insulation on the duct is not damaged when performing the removal of materials from the excavation.
- (7) For sections of duct left in the ground, seal all ends of exposed insulation with duct tape. Plastic insulation and duct tape on all coated duct will be removed from the site.
- (8) In the event that some insulation material did not fall onto the plastic sheeting, collect these pieces and place them on the sheeting.
- (9) Once duct insulation 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) 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 Duct Insulation:

- (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.

**END OF ADDENDUM NO.7**

**This Addendum consists of forty-six (46) pages.**

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HWMBRT5A (MED-607B)

EAST 34<sup>TH</sup> STREET SELECT BUS SERVICE

FROM FDR DRIVE TO LEXINGTON AVENUE

INCLUDING NEW BUS BULBS, BUS PADS, CURB, SIDEWALK,  
REPLACEMENT OF SEWER, WATER MAINS, RESURFACING,  
STREET LIGHTING, AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 8

DATED: June 13, 2013

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, VOLUME 3 OF 3, Addendum No. 1, page A1-170;  
Add OCMC TRAFFIC STIPULATIONS- AMENDMENT #1, as contained on attached pages A1- 170a through A1- 170c, after page A1-170.
2. Refer to the Contract Drawings, SHEET 23 OF 66 (UTILITY PLAN & PROFILE);  
Add attached Sketch #1 for "ROADWAY RECONSTRUCTION" on SHEET 23 OF 66.
3. Refer to the Contract Drawings, SHEET 56 OF 66 (MAINTENANCE OF TRAFFIC);  
Delete cross section for "NON WORKING HOURS WHERE FULL ROADWAY WIDTH TO BE RESTORED" at the bottom right side of Sheet No. 56, in its entirety;  
Substitute the attached Sketch #2 for "NON WORKING HOURS WHERE FULL ROADWAY WIDTH TO BE RESTORED (REVISED)".

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of one (1) page plus five (5) pages of attachments.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID

for Purnime Shari  
GURDIP SAINI, P.E.  
Assistant Commissioner

MFN Contracting Corp.  
Name of Bidder  
By: Michael V. [Signature]







NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

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**INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

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**VOLUME 3 OF 3**

PROJECT ID: HWMBRT5A (MED-607B)

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Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

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*Contractor.*

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Dated \_\_\_\_\_, 20\_\_\_\_

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