

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 www1.nyc.gov/site/ddc/index.page

LAW

VOLUME 1 OF 3 BID BOOKLET

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

Together with All Work Incidental Thereto
BOROUGH OF BROOKLYN
CITY OF NEW YORK

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN

DECEMBER 15, 2016



Bid Tab

	Description	1	CONSTRUCTION OF I SEWERS AND APPUR MAINS & APPURTENA	TENANC!	ES/REPLACE!	MEN.	I OF WAILK
	Bid Date		4/12/2017	FMS ID		SE	-855
	Estimated	Cost	\$42,096,822.00	Client A	gency	DF	EP
	Bid Securi	ty	Not less than 2% of Total Bid Price	PLA		NO)
	Time Allov	ved	1095CCD	Federal	Funded:	NO	O
	Addendum	ı	7	Contrac	t Manager	Tr	avis Letbetter
	PIN		8502016SE0002C	Project	Manager	As	shishkumar Patel
	Selective B	idding	□Yes ⊠No	E-PIN		85	017B0074
	Bid Rank 1	INTER C	Vendor ONTRACTING CORP.		Bid Amount \$36,782,831	.70	Security Type Bond
)	2	JR CRUZ			\$37,842,926	.42	Bond
	3	C.A.C. IN	DUSTRIES, INC.		\$38,821,151	.41	Bond
	4	RESTAN	I CONSTRUCTION CORP.	•	\$39,834,910	.00	Bond
	5		EAST REMSCO LUCTION, INC		\$40,987,906	i . 00	Bond
	6	PERFET	TO CONTRACTING CO. II	NC.	\$41,444,000	00.	Bond
	7	LAWS C	ONSTRUCTION CORP.		\$43,394,912	2.00	Bond
	8	BEDFOR	RD/CARP CONSTRUCTION	N	\$50,550,550).00	Bond
	9	DELANE	CY ASSOCIATES, LP		\$54,003,277	7.00	Bond
	R	tecorder: <u>B</u>	renda Barreiro Ext. 1041	Approver:	phy	<u> </u>	

Bid Tab Pin: 8502016SE0002C

Page 1 of 1



Dr. Feniosky Peña-Mora Commissioner

Charlette Hamamgian, Esq., Agency Chief. Contracting Officer Lorraine Holley Deputy ACGO Competitive Sealed Bid Contracts

June 09, 2017

CERTIFIED MAIL - RETURN RECEIPT REQUEST INTER CONTRACTING CORP. 274 WHITEPLAINS ROAD - STE 6 EASTCHESTER, NY 10709

RE:

FMS ID: SE-855

E-PIN: 85017B0074001 DDC PIN: 8502016SE0002C

CONSTRUCTION OF HIGH LEVEL STORM SEWERS, SANITARY SEWERS AND APPURTENANCES/REPLACEMENT OF WATER MAINS & APPURTENANCES-

BOROUGH OF BROOKLYN

NOTICE OF AWARD

Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of \$36,782,831.70 submitted at the bid opening on April 12, 2017. 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 two copies of the Agreement in the Contracts Unit, 30-30 Thomson Avenue, 1st 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 two 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.

Telephone: (718) 391-2838



On or before the contract commencement date, you are required to submit all other certificates of insurance and/or policies in the types and amounts required by Schedule A. Such certificates of Insurance and/or policies must be submitted to the Agency Chief Contracting Office, Attention: Risk Manager, Fourth Floor at the above indicated department address.

Your attention is directed to the section of the Information for Bidders entitled "Failure to Execute Contract". As indicated in this section, in the event you fail to execute the contract and furnish the required bonds within the (10) days of your receipt of this notice of award, your bid security will be retained by the City and you will be liable for the difference between your bid price and the price for which the contract is subsequently awarded, less the amount of the bid security retained.

Sincerely

Michael Shipman Director of Contracts

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: Inter Contracting Corp.
, .
Name of Project: SER 0023/6
Name of Project: Style Ave, Staten Island Location of Project: Rossville Ave, Staten Island
Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: DDC - Hitendra Patel Title:Phone Number:
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: Dec. 2014 To June 2016

Name of Contractor: Inter Contracting Cop.
Name of Project: SER 200209
Name of Project: SER 200209 Location of Project: Canton Ave., Stoken Island
Commercia representative (Architect or Engineer) who is familiar with the work performed.
Name: DOC-Arvird Pate/ Title: Phone Number:
Name: Phone Number:
Brief description of the Project completed or the Project in progress:
0
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: 2014
, BID BI

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION CONTRACT PIN:8502016SE0002C DIVISION OF INFRASTRUCTURE - BUREAU OF PROJECT ID:SE855

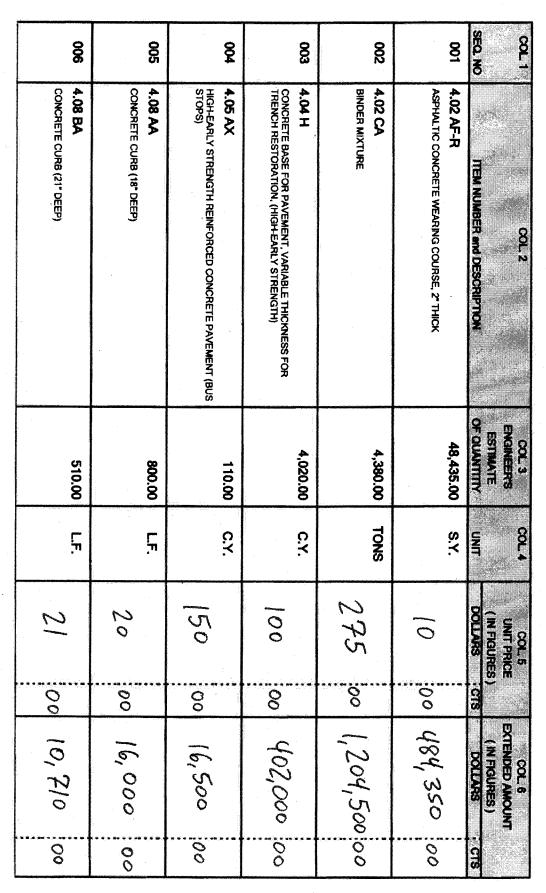
BID SCHEDULE

- NOTE: (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable 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 item numbers appliances of every description necessary to complete the entire work, as specified, and the removal of all in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and debrts, temporary work and appliances.
- (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM. Alterations must be initiated in ink by the bidder.
- (4) The Extended Amount entered in Column 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.
- (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 [REVISION #3] Through B-40 [REVISION #3]

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.



B-4 [REVISION #3]



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BID SCHEDULE FORM

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION **DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C** PROJECT ID: SE855

Department of Design and Construction

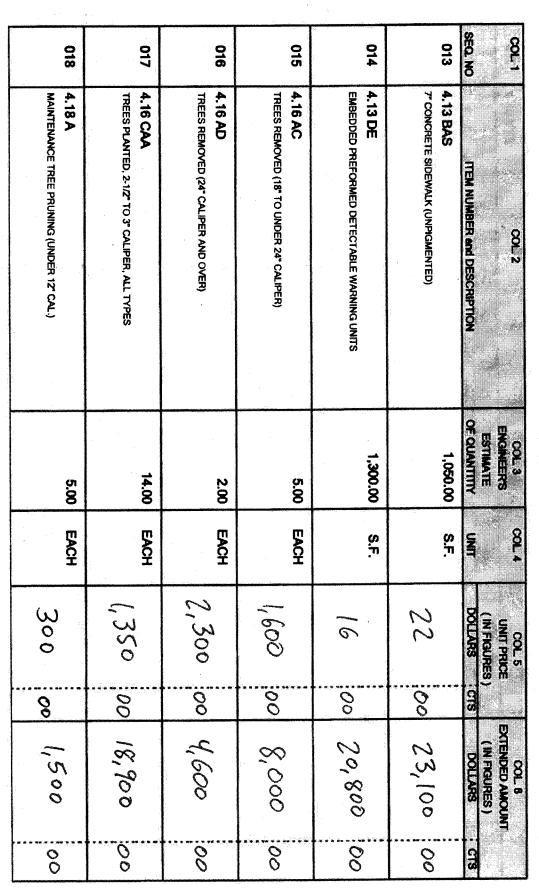


NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 CONTRACT PIN: 8502016SE0002C

DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

OOL 2 COUL 5						
COL.3 ENGINEER'S ESTIMATE OFF QUANTITY VANIT 320.00 LF. 3740.00 LF. 5550.00 LF. 400.00 LF. 35 515.00 LF. 85	~		S.F.	5,400.00	4.13 AAS 4" CONCRETE SIDEWALK (UNPIGMENTED)	012
COL.4 COL.5 ENGALERS ESTIMATE: OF QUANTITITY UNIT PROCE 320.00 L.F. 740.00 L.F. 550.00 L.F. 400.00 L.F. 3 5 400.00 L.F. 3 5			Ę	515.00	4.09 CE CORNER STEEL FACED CONCRETE CURB (21" DEEP)	011
COL 3 COL 4 UNIT PRICE ESTIMATE OF QUANTITY UNIT 320.00 LF. 740.00 LF. 350 550.00 LF. 35 559.00 LF. 35			LF.	400.00	4.09 CD CORNER STEEL FACED CONCRETE CURB (18" DEEP)	010
COL. 3 COL. 4 UNIT PRICE ESTIMATE: UNIT PRICE 320.00 L.F. 30 740.00 L.F. 35				550.00	4.09 BD DEPRESSED STEEL FACED CONCRETE CURB (18" DEEP)	900
COLL\$ COLL5 ENGINEERS (IN FIGURES) OF QUANTITY UNIT DOLLARS 320.00 L.F. 320.00 L.F.				740.00	4.09 AE STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)	800
COL.3 COL.4 COL.5 ENGINEERS UNIT PRICE ESTIMATE (IN FIGURES OF QUANTITY UNIT DOLLARS			Ę.	320.00	4.09 AD STRAIGHT STEEL FACED CONCRETE CURB (18* DEEP)	007
ESTIMATE SOL 4			UNIT	OF QUANTITY	ITEM NUMBER and DESCRIPTION	SEQ. NO
		COL 5 UNIT PRICE (IN FIGURES)	<u>8</u>	ENGINEER'S ESTIMATE	oor 5	COL 1





BID SCHEDULE FORM

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN **CONTRACT PIN: 8502016SE0002C** PROJECT ID: SE855





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
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PROJECT ID: SE855
CONTRACT PIN: 8502016SE0002C

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	024	023	922	021	920		g <u>8</u>
5:-0"W X 2:-5"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS050026	50.11MS046026 4-5"W X 2-6"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS040026 4-0°W X 2-8°H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS040020 4'-0"W X 2'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	4.21 TREE CONSULTANT	4,18 B MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	OOL 2
	255.00	235.00	1,075.00	265.00	500.00	11.00	COL 3 ENGINEERS ESTIMATE OF QUANTITY
	Ľ.	Ä	Ę.	Ë	P/HR	EACH	COL 4
71100	2 (00	1, 900	1,700	1,500	95	325	COL 5 UNIT PRICE (IN FIGURES) DOLLARS
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	00 <35,500 00	446,500 00	00 1,827,500 00	397,500 00	00 00 th	00 3,575	COL 6 (IN PIGURES) DOLLARS
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B-8 [REVISION#3]

030	029	028	027	026	025	SEQ. NO
50.21C3C036D 36" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C030D 30" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C024D 24" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.11MS130040 13-0"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS116040 11'-6"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS050030 5'0"W X 3'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	COL 2 TIEM NUMBER and DESCRIPTION
260.00	815.00	760.00	650.00	2,190.00	1,015.00	ENGINEER'S ESTIMATE OF QUANTITY
LF.	LF.	LF.	LF.	LF.	Ę	UNIT
625	600	575	3,600	2,700	2,200	UNIT PRICE (IN FIGURES DOLLARS
00	00	00	00	00	00	СТВ
162,500	00 000 18h	00 437,000 00	00 2,340,000 00	00 5,913,000 00	2,200 00 2,233,000 00	EXTENDED AMOUNT (IN FIGURES) BOLLARS
00 00	00	00	00	0	Ş	" \$

BID SCHEDULE FORM

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

CONTRACT PIN: 8502016SE0002C

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770.00 L		LF. 550	, (i)
255.00 L.F.	I —	F. 490	
760.00 LF.	اشا	450	
255.00 L.F.	<u> </u>	695	
50.21C3C038W 24"H R.C.P. CLASS HE-III COMBINED SEWER, ON CONCRETE CRADLE	11 1		635 00 136,525
ESTIMATE OF QUANTITITY UNIT	1 4		UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) TOULDS COLD EXTENDED AMOUNT ONLY ONLY





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

CONTRACT PIN: 8502016SE0002C

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1							
	88,150	0	01h	LF.	215.00	50.31ME18 18" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	9 2
	84,000	00	aoh	LF.	210.00	50.31ME15 15" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	2
	41,325	00	435	Ľ.	95.00	50.31ME12 12" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	046
	19,125	00	42S	LF.	45.00	50.31MC15 15" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	039
	980,925 00	0	519	Ę.	1,595.00	50.31CC18 18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	038
	833,000 00	00	595	Ę.	1,400.00	50.31CC15 15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	87
	(IN FIGURES) DOLLARS	CIS	(IN FIGURES	UNIT	ESTIMATE OF QUANTITY	TTEM NUMBER and DESCRIPTION	SEQ. NO
	COL 6		COL 5	COL 4	COL3	©L2	∞L.1



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

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048	047	046	045	044	043	8 40. ₹
51.11C006 CHAMBER NO. 6	51.11C005 CHAMBER NO. 5	51.11C004 CHAMBER NO. 4	51.11C003 CHAMBER NO. 3	51.11C002 CHAMBER NO. 2	51.11C001 CHAMBER NO. 1	COL.2 TITEM NUMBER and DESCRIPTION
1.00	1.00	1.00	1.00	1.00	1.00	COL 3 ENGAVEER'S ESTIMATE OF QUANTITY
EACH	EACH	EACH	EACH	EACH	EACH	UNIT
100,000	115,000	95,000 00	65,000 00	325,000 00	250,000 00	COL 5 UNIT PRICE (IN FIGURES) DOLLARS
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00,000 00 100,000	000 /5/1	000,29	65,000	00 000 528	250,000	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
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B-12 [REVISION#3]

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65 4	053	052	651	8 50	049	SEO NO
51.21A000000C ACCESS MANIHOLE	51.11P006 STANDARD 6-0" DIAMETER PRECAST MANHOLE	51.11P005 STANDARD 5'-0" DIAMETER PRECAST MANHOLE	51.11P004 STANDARD 4:-0" DIAMETER PRECAST MANHOLE	51.11C008 CHAMBER NO. 8	51.11C007 CHAMBER NO. 7	COL 2 TIEM NUMBER and DESCRIPTION
21.00	13.00	5.00	2.00	1.00	1.00	COL 3 ENGINEERS ESTIMATE OF QUANTITY
EACH	EACH	EACH	EACH	EACH	EACH	ONL 4
20,000	12,000	7,500	6,500	65,000 00	115,000	OOL 5 UNIT PRICE (IN FIGURES) DOLLARS
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470,000	156,000	32,500	000/21	000'59	115,000	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
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BID SCHEDULE FORM

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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 CONTRACT PIN: 8502016SE0002C





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C PROJECT ID: SE855

STANDAR	059 51.2180	058 51.21SC STANDAR	057 51.21SC	056 51.21S0 STANDARI	055 51.21A000000E	SEC. NO	
51.21S0E1038H STANDARD MANHOLE TYPE E-1 ON 38"W X 24"H H.E.R.C.P. SEWER		51.21S0B1000V STANDARD MANHOLE TYPE B-1	51.21S0A3000V STANDARD SHALLOW MANHOLE TYPE A-3	51.21S0A1000V STANDARD MANHOLE TYPE A-1	51.21A000000E ACCESS MANHOLE ON EXISTING SEWER	COL 2 THEM NUMBER and DESCRIPTION	
	2.00	8.00	9.00	10.00	3.00	COL 3 ENGINEERS ESTIMATE OF QUANTITY	
[] 오	EACH	EACH	EACH	EACH	EACH	OOL 4	
	11,000	4,300	4,500	6,000	35,000 00	COL 5 UNIT PRICE (IN FIGURES)	
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>	22,000	34,400	005'ah	60,000	(05,000	COL 8 EXTENDED AMOUNT (IN FIGURES) DOLLARS	
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

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LF. 250
EACH 4,500
EACH 6, 100
EACH 11,000
EACH 6,500
COL 4 COL 5 UNIT PRICE (IN FIGURES UNIT DOLLARS



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

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CONTRACT PIN: 8502016SE0002C

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BID SCHEDULE FORM

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8					,	ક -
52.41V06R 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.41D08R 8" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.41C08R 8" C.I.S.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.31V08C18 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	52.31V08C15 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	52.31V06C18 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	TIEM NUMBER and DESCRIPTION
1,490.00	00.06	00.06	5.00	3.00	55.00	ENGINEER'S ESTIMATE OF QUANTITY
Ľ	ŗ.	L.F.	EACH	EACH	EACH	UNIT COL,4
]]	12	10	700	545	550	UNIT PRICE (IN FIGURES DOLLARS
00	00	00	00	00	8	CCS
(6,390	1,080	00 900	00 3,500	1,635	00 30,250	EXTENDED AMOUNT (IN FIGURES) DOLLARS
			المتعادة فافتدا ليتوليها	00	00	

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

CONTRACT PIN: 8502016SE0002C

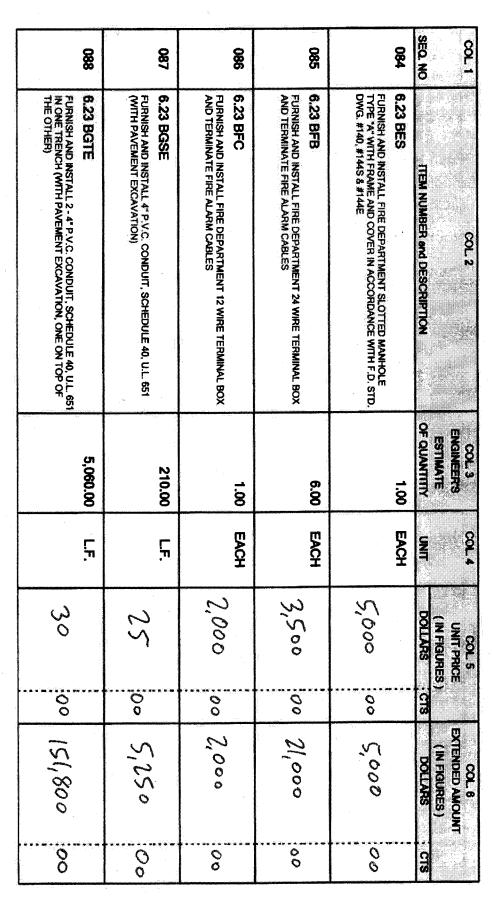
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			1			Access
	00 00 5,400	30	C.Y.	18.00	6.02 XHEC INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) TRANSIT FACILITIES AND BUILDING VAULTS	078
	95 00 528,200	-0	C.Y.	5,560.00	6.02 AAN UNCLASSIFIED EXCAVATION	077
	000 :00		EACH	11.00	55.11AB ABANDONING BASINS AND INLETS	076
	500 00	ž	C.Y.	20.00	54.12CS CLEANING OF DRAINAGE STRUCTURES	075
27,750	2 00		ĹŦ.	13,875.00	53.11DR TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	074
	13 00		LF.	130.00	52.41V08R 8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	073
	UNIT PRICE (IN FIGURES) DOLLARS : CTS	82	UNIT	ENGINEER'S ESTIMATE OF QUANTITY	TTEM NUMBER and DESCRIPTION	SEQ. NO
	COL 5		82.4	COL.3	∞∟2	8



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C





BID SCHEDULE FORM

DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION CONTRACT PIN: 8502016SE0002C PROJECT ID: SE855





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855

NEW YORK CITY DEPARTMENT OF DESIGN AND CONTRACT PIN: 8502016SE0002C DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

994	093	092	8	090	089	COL1 SEQ.NO
6.40 D ENGINEER'S FIELD OFFICE (TYPE D)	6.28 AA LIGHTED TIMBER BARRICADES	6.26 TIMBER CURB	6.25 RS TEMPORARY SIGNS	6.23 BP FURNISH AND INSTALL FIRE ALARM PEDESTAL BUMPERS (2 REQUIRED PER SET) IN ACCORDANCE WITH F.D. STD. DWG. #168	6.23 BHE FURNISH AND INSTALL 4* 90-DEGREE P.V.C. WIDE BEND, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141 OR #145AA.	COL. 2 TIEM NUMBER and DESCRIPTION
42.00	13,150.00	31,860.00	4,700.00	7.00	7.00	COL.3 ENGINEERS ESTRIATE OF QUANTITY
HINOM	Ę.	Ë	S.F.	SETS	EACH	޶ 80.
500	0	0	0	650	500	OOL. 5 UNIT PRICE (IN FIGURES) DOLLARS
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00 21,000	ol 131	318	47	4,550	00 3,500	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

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BID SCHEDULE FORM

		7.			***************************************		
750	00 807,750 00	00	325	Ę.	2,470.00	60.11R520 FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	8
~	9,155	95	0	EACH	18,310.00	6.87 PLASTIC BARRELS	088
:	89	0/	0	Ģ	8,905.00	6.53 REMOVE EXISTING LANE MARKINGS (4" WIDE)	098
0	24,800	00	40	SHVd	620.00	6.52 CG CROSSING GUARD	097
(2)	266'h	20	0	LF.	24,960.00	6.49 TEMPORARY PAVEMENT MARKINGS (4" WIDE)	096
	3,620	00		LF.	3,620.00	6.44 THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	285
MOUNT ES)	COL_6 EXTENDED AMOUNT (IN FIGURES) DOLLARS))	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	UNIT COL-4	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 2 TTEM NUMBER and DESCRIPTION	SEC NO

8 - 20 [REVISION #3]

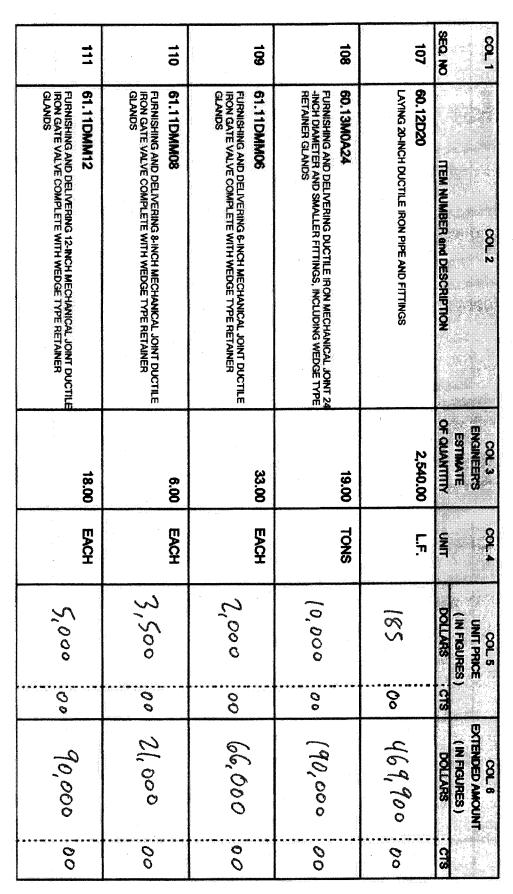


NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C

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 175
LF. (50
LF. 55
LF. (85
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LF. 75
 UNIT PRICE (IN FIGURES) UNIT DOLLARS





BID SCHEDULE FORM

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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

PROJECT ID: SE855

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION

Department of Design and Construction



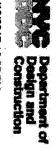
NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT F

TION PROJECT ID: SE855
CONTRACT PIN: 8502016SE0002C

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T		:				g Ω
117	116	115	114	133		86. SC -
61.12DMM06 SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11TWC08 FURNISHING AND DELIVERING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11TWC06 FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11TWC04 FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE REVAINER GLANDS	61.11TWC03 FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11DMM20 FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	COL_2 TIEM NUMBER and DESCRIPTION
33.00	1.00	4.00	5.00	3.00	6.00	ENGINEERS ESTIMATE OF QUANTITY
EACH	EACH	EACH	EAC	EACH	EACH	UNIT
500	950	675	550	005	30,000	OOL 5 UNIT PRICE (IN FIGURES) DOLLARS
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16,500	950	2,200	00 2,750	00 1,500	180,000 00	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
4			0	00	AND THE PROPERTY OF THE PROPER	# 10 PER





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C PROJECT ID: SE855

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EACH (35 00 540 00	135 00	[35]		EACH	1	4.00	61.12TWC06 SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
EACH 125 00 625 00	125 00	125		EACH		5.00	61.12TWC04 SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
EACH (00 00 300 00	(00 00)	(00)		EACH		3.00	61.12TWC03 SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
EACH (,000 00 6,000 00	(,000 00	(,000		EACH		6.00	61.12DMM20 SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
EACH 750 00 (3,500 00	250 00	250		EACH	. 24	18.00	61.12DMM12 SETTING 12:INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
00 3,600	600 00	600 00		EACH		6.00	61.12DMM08 SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) UNIT DOLLARS : CTS DOLLARS : CTS	COL 5 UNIT PRICE (IN FIGURES) DOLLARS : CTS	COL.5 UNIT PRICE (IN FIGURES) DOLLARS]			ENGINEERS ESTIMATE OF QUANTITY	ITEM NUMBER and DESCRIPTION
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

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129	128	127	128	125	124	SEO. NO.
63.11VC FURNISHING AND DELIVERING VARIOUS CASTINGS	62.14FS FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	62.13RH REMOVING HYDRANTS	62.12SG SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	62.11SD FURNISHING AND DELIVERING HYDRANTS	61.12TWC08 SETTING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	COL_2 TEM NUMBER and DESCRIPTION
33.00	88.00	32.00	33.00	33.00	1.00	ENGINEERS ESTIMATE OF QUANTITY
SNOT	EACH	EACH	EACH	EACH	EACH	UNIT ONL4
1,000	575	500	3,500	4,500	(22)	UNIT PRICE (IN FIGURES) DOLLARS
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00 000, 88 g	37,950 00	(6,000	115,500	[48, 500	155	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION CONTRACT PIN: 8502016SE0002C PROJECT ID: SE855

DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

			NCH DIAMETER)
1	LF. q<	1,020.00	64.12ESLT EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-
(00 :00	Ë	170.00	64.12ESEG EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)
15 00	Ë	1,020.00	64.12COLT CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)
100 00	<u>, </u>	170.00	64.12COEG CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)
175 00	EACH	151.00	64.11ST WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS
	EACH	15.00	84.11EL WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2- INCH OR LARGER SCREW TAPS
DOLLARS CTS	UNIT	OF QUANTITY	TIEM NUMBER AND DESCRIPTION
COL 5 UNIT PRICE (IN FIGURES)		ESTIMATE	



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

141 G II 60	146 G 7 02	139 % P. 6 2	33 82 9	137 22 Q	36	SEQ. NO
65.31FF FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$ 0.10	65.21PS FURNISHING AND PLACING POLYETHYLENE SLEEVE Unit price bid shall not be less than: \$ 0.50	65.11BR FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	64.13WC20 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64, 13WC12 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64.13WC08 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 8-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	COL 2 TIEM NUMBER and DESCRIPTION
293,800.00	10,900.00	21,000.00	5.00	7.00	1.00	ENGINEERS ESTIMATE OF QUANTITY
S.F.	LF.	LBS.	EACH	EACH	EACH	SA 5
0	0	0	3,200	2,000	1,000	UNIT PRICE (IN FIGURES) DOLLARS
ô	9	0	60	00	8	CIB
29,380	5,450	710	16,000	(4,000	(,000	EXTENDED AMOUNT (IN FIGURES) DOLLARS
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

BID SCHEDULE FORM

147 7.88 AB RODENT BA Unit price b	146 7.88 AA RODENT IN Unit price b	145 7.36 PEDESTRIA		144 7.19		
7.88 AB RODENT BAIT STATIONS Unit price bid shell not be less than: \$ 60.00	7.88 AA RODENT INFESTATION SURVEY AND MONITORING Unit price bid shell not be less then: \$ 10,400.00	7.36 PEDESTRIAN STEEL BARRICADES		7.19 LOAD TRANSFER JOINT	7.13 B MAINTENANCE OF SITE Unit price bid shell not be less then: \$8,000.00 7.19 LOAD TRANSFER JOINT	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING 7.13 B MAINTENANCE OF SITE Unit price bid shall not be less than: \$ 8,000.00 7.19 LOAD TRANSFER JOINT
486.00	1.00	25,530.00		830.00	36.00 830.00	36.00 830.00
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09	004,00	3	£	95	8,000	8,000
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00 29,160	10,400	00 76,590		41,500		
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT II
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PI

ON PROJECT ID: SE855
CONTRACT PIN: 8502016SE0002C

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CATITI BE IN THE INTERPRETATION OF THE INTER
7.88 AC BAITING OF RODENT BAIT STATIONS Unit price bid shaft not be less than: \$9.50 7.88 AD WATERBUG BAIT APPLICATIONS Unit price bid shall not be less than: \$65.00 70.12AN CONTINUOUS FLIGHT AUGER (CFA) PILES 70.12AT CONTINUOUS FLIGHT AUGER (CFA) PILES, LOAD TEST
UMBER and DES AIT STATIONS be less than: \$ 9 be less than: \$ 6 be less than: \$ 6
UMBER and DES AIT STATIONS be less than: \$ 9 ICATIONS It be less than: \$ 6 AUGER (CFA) PILE
UMBER and DES AIT STATIONS be less than: \$9 CATIONS CATIONS CATIONS
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

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	55.00 C	55.00 C.Y. 75	C.Y.
	1.00 L	1.00 L.S.	
	1.00 L	1.00 LS. (
: -	1.00	1.00 L.S.	
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C

ADDITIONAL EARTH DEPTHS) Unit price bid shall r	164 73.31AE0	163 73.21AC ADDITIONAL CONCRETE		162 73.11AB ADDITIONAL BRICK MASONRY Unit price bid shall not be less				
ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS) Unit price bid shall not be less than: \$ 20.00	73.31AE0	CRETE		73.11AB ADDITIONAL BRICK MASONRY Unit price bid shall not be less than: \$ 62.50	72.11HF HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS 73.11AB ADDITIONAL BRICK MASONRY Unit price bid shell not be less then: \$ 62.50	70.81CB CLEAN BACKFILL Unit price bid shell not be less than: \$ 15.00 72.11HF HYDRAULIC FILL FOR ABANDONED SEWERS AND ADDITIONAL BRICK MASONRY Unit price bid shell not be less than: \$ 62.50	70.71SB STONE BALLAST Unit price bid shall not be less than: \$ 15.00 70.81CB CLEAN BACKFILL Unit price bid shall not be less than: \$ 15.00 72.11HF HYDRAULIC FILL FOR ABANDONED SEWERS AND ADDITIONAL BRICK MASONRY Unit price bid shall not be less than: \$ 62.50	hall not be less than: \$ 15.00 L L FOR ABANDONED SEWERS AND W. NICK MASONRY hall not be less than: \$ 62.50
EST PITS (ALL					D WATER MAINS	O WATER MAINS	D WATER MAINS	
e i	150.00	255.00		65.00	30.00 65.00	10,300.00 30.00 65.00	227.00 10,300.00 30.00 65.00	227.00 10,300.00 30.00 65.00
3973	C.Y.	C.Y.		C.Y.	C.Y.	C.Y. C.Y.	5. 5. 6.<	C, Y,
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

BID SCHEDULE FORM

CONTRACT PIN: 8502016SE0002C PROJECT ID: SE855

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170	169	168	167	15 66	8	COL. I SEQ. NO
8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	76.21MR MONITORING AND POST-CONSTRUCTION REPORT	76.11CR CONSTRUCTION REPORT	73.61AT ADDITIONAL STONE BALLAST Unit price bid shell not be less then: \$ 15.00	73.51AS ADDITIONAL STEEL REINFORCING BARS Unit price bid shall not be less then: \$ 1.00	73.41AG ADDITIONAL SELECT GRANULAR BACKFILL Unit price bid shall not be less than: \$ 15.00	COL. 2 THEM NUMBER and DESCRIPTION
20,000.00	1.00	1.00	50.00	21,950.00	1,060.00	COL 3 ENGINEERS ESTIMATE OF QUANTITY
TONS	L.S.	Ls	C.Y.	LBS.	C.Y.	UNIT
50	3,000 00	5,000	52	3	15	COL 5 UNIT PRICE (IN FIGURES) DOLLARS
0	00	00	00	8	00	.CTS
00 (,000,000 00	3,000	000'5	3,750	00 058'59	15,900	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

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BID SCHEDULE FORM

176	175	174	173	172	171	SEC NO
8.02 A SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	8,01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER	8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	8.01 S HEALTH AND SAFETY	8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	COL 2 TIEM NUMBER and DESCRIPTION
400.00	24.00	720.00	1.00	1,000.00	16.00	ENGINEERS ESTIMATE OF QUANTITY
Ş. T.	SETS	DAY	LS.	TONS	SETS	UNIT 00L.4
2	_		5,000	150	3,000	COL.5 UNIT PRICE (IN FIGURES) DOILLARS
00	00	00	00	00	00) CIS
800	24	720	5,000	000/05	(8,000	COL. 8 EXTENDED AMOUNT (IN FIGURES) DOLLARS
80	00	00	00	00	00	CIS



[]	Martin on the second				The second secon		
00	0057	00	250	EACH	6.00	SL-20.08.01 REMOVE STANDARD TYPE ANCHOR BOLT CONCRETE FOUNDATION	181
00	008,0)	00	(,800	EACH	6.00	SL-20,02,02 FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	186
<u>0</u>	41,000	00	41,000 00	LS.	1.00	9.30 STORM WATER POLLUTION PREVENTION	179
8	\$5 0,000 00	8	50,000 00	F.S.	1.00	9.04 HW ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 50,000.00	178
0	200	60	N	5	40.00	8.02 B SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	177
CIS	DOLLARS	CIS	DOLLARS	UNIT	OF QUANTITY	ITEM NUMBER and DESCRIPTION	SEQ. NO
	COL 6 EXTENDED AMOUNT (IN FIGURES)		COL. 5 UNIT PRICE (IN FIGURES)	% _100	COL 3 ENGINEERS ESTIMATE	001.2	8 1

BID SCHEDULE FORM

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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SERSS

Department of Design and Construction





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 CONTRACT PIN: 8502016SE0002C

DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

BID SCHEDULE FORM

187	₹	18 5	2	188	182	COL 1
7 UTL-6.01.2 GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01) Unik price bid shall not be less than: \$ 1,770.00	GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01) Unit price bid shall not be less then: \$ 1,040.00	SL-26.01.04 FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT	SL-22.16.05 FURNISH AND INSTALL ROADWAY TYPE LED FIXTURE AS PER SPECIFICATION 466 WITH PEC RECEPTACLE AND PEC	SL-21.09.05 REMOVE STANDARD FABRICATED STEEL, SPUN ALUMINUM NO. 10, ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY.	SL-21.03.02 FURNISH AND INSTALL TYPE 2S, 4S, 6S, 8S OR 12S LAMPPOST WITH TRANSFORMER BASE	COL 2 TIEM NUMBER and DESCRIPTION
1.00	13.00	6.00	6.00	6.00	6.00	COL S ENGINEER'S ESTIMATE OF QUANTITY
EACH	EACH	EACH	EACH	EACH	EACH	OOL.4
(,770	1,040	(40	950	(,000	3,850	COL 5 UNIT PRICE (IN FIGURES) DOLLARS
8	0	00	0	00	00	CIS
1,770	13,520	840	00 7,300	6,000	00 27,100	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
00	80	8	000	80	0	CIS





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C

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BID SCHEDULE FORM

SEQ NO		ENGINEER'S ESTIMATE		UNIT PRICE (IN FIGURES)	9)	EXTENDED AMOUNT (IN FIGURES)	
188	UTL-8.01.2A	2.00	EACH	DOLLARS	CIS	DOLLARS	CIS
	GAS MAIN CROSSING 38"V X 24"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less then: \$1,870.00			1,870	00	3,740	8
189	UTL-6.01.2B GAS MAIN CROSSING 30"W X 19"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	1.00	EACH	1,770	9	1,770	00
190	UTL-6.01.4A GAS MAIN CROSSING 4"-0"W X 2-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shell not be less then: \$ 1,960.00	1.00	EACH	1,960	0	(, 960	00
191	UTL-6.01.4C GAS MAIN CROSSING 45"W X 29"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$ 1,960.00	2.00	EACH	1,960	8	3,970	8
192	UTL-6.01.4D GAS MAIN CROSSING 4'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	5.00	EACH	2,120	00	(0,600	0
193	UTL-8.01.4N GAS MAIN CROSSING 4'-6"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,120.00	1.00	EACH	2,120	00	2,120	00



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C

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BID SCHEDULE FORM

						CITA PARA UNI SHORE INA UM ROSS GREET. 4 TOULOU	
0	15,520	8	58h	EACH	32.00	GAS MAIN CROSSING WATER MAIN UP TO 20' IN DIAMETER (S6.01)	199
1 6	00 41,850 00	00	59h	EACH	90.00	UTL-6.01.8 GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01) Unit price bid shell not be less than: \$465.00	198
00	00 5,680	00	2,840	EACH	2.00	UTL-6.01.7VV GAS MAIN CROSSING 11'-5"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$ 2,840.00	197
00	8,820	00	2,940	EACH	3.00	UTL-6.01.700 GAS MAIN CROSSING 13'-0"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less then: \$2,940.00	196
	2,340 00	00	2,340	EACH	1.00	UTL-6.01.5H GAS MAIN CROSSING 5'-0"W X 3'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less then: \$ 2,340.00	195
. 0	2,340 00	00	2,340	EACH	1.00	UTL-6.01.5C GAS MAIN CROSSING 5'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00	
CIS	EXTENDED AMOUNT (IN FIGURES) DOLLARS	ig	UNIT PRICE (IN FIGURES)	UNIT COL	ENGINEER'S ESTIMATE OF QUANTITY	COL. 2 ITEM NUMBER and DESCRIPTION	SEQ.NO

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

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BID SCHEDULE FORM

							CONTRACTOR OF CO
00	00 000,069	00	[80	C.Y.	3,500.00	UTL-6.06 SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06) Unit price bid shall not be less then: \$ 180.00	205
00	11,375 00	0	65	EACH	175.00	UTL-8,05 ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05) Unit price bid shall not be less than: \$ 65.00	204
00	6,125 00	0	38	EACH	175.00	UTL-6.04 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (56.04) Unit price bid shall not be less then: \$ 35.00	203
Ŏ O	187,500 00	Ö	25	ĽF.	7,500.00	UTL-6.03.1 REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP, ALL SIZES, (FOR NATIONAL GRID WORK ONLY) (S6.03) Unit price bid shall not be less than: \$ 25.00	202
000	2,500	8	51	LF.	500.00	UTL-6.03 REMOVAL OF ABANDONED GAS FACILITIES, ALL SIZES, (56.03) Unit price bid shall not be less then: \$ 15.00	201
00	2,860	00	215	EACH	4.00	UTL-6.02 EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEVER DRAIN PIPES WITH GAS INTERPERENCES (S6.02) Unit price bid shall not be less than: \$ 715.00	200
WIII CCIS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	i) :CTS	COL 5 UNIT PRICE (IN FIGURES DOLLARS	COL.4	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	ITEM NUMBER and DESCRIPTION	SEQ. NO

B - 38 [REVISION # 3]



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

3/16/2017 12:25 PM

BID SCHEDULE FORM

208	207	206	SEQ.NO
UTL-GCS-2WS GAS INTERFERENCES AND ACCOMINODATIONS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 150,000.00 Unit price bid shall not be less than: \$ 0.00	UTL-6.07 TEST PITS FOR GAS FACILITIES (S6.07) Unit price bid shell not be less then: \$ 100.00	UTL-6.06A SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG) (86.06A) Unit price bid shall not be less than: \$ 230.00	COL 2 TIEM NUMBER and DESCRIPTION
1.00	100.00	100.00	ENGINEERS ESTIMATE OF QUANTITY
F.S.	.X.5	C.Y.	OOL.4
150,000 00	00)	230	COL.5 UNIT PRICE (IN FIGURES) DOLLARS : CTS
8	00	8) CTS
\$150,000 00	000,0)	00 23,000	OOL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
8	00	00	: ପାଞ

SUB-TOTAL: \$ 35,432,831.70

	jana ji	209
BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.	MOBILIZATION	6.39 A
	2.0	
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á	1,350,000	A THE STATE OF THE
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•	1,350,000	



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN **CONTRACT PIN: 8502016SE0002C** PROJECT ID: SE855

3/16/2017 12:25 PM

BID SCHEDULE FORM

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TOTAL BID PRICE: \$ 36,782,831.70

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.

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: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN

Name of Bidder: Inter Contracting Corp.	
Date of Bid Opening: April 12, 2017	
Bidder is: (Check one, whichever applies) Individual () Partnership Place of Business of Bidder: 274 White Plains Rd., Suite 6	• •
Bidder's E-Mail Address: Mutino Cinter contracting Corp. C	
Residence of Bidder (If Individual):	
If Bidder is a Partnership, fill in the following blanks:	
Names of Partners Residen	nce 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 Miking	
458 Hillcrest Rd. Ridgewood, NJ 07450	and the second s
Name and Home Address of Secretary: Davio Caroliere	
50 Nelson Rd., Scarsdule, NY 10583	
Name and Home Address of Treasurer: Michael Mutino	
Same us above	
CITY OF NEW YORK C-1	BID BOOKLET

DEPARTMENT OF DESIGN AND CONSTRUCTION

JULY 2016

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 Contractor have been finally accepted by the City. In the event of any breach or violation of the foregoing, the Contractor may be subject to damages, liquidated or otherwise, cancellation of the Contract and suspension as a bidder for a period of three years. (The words, "the bidder", "he", "his", and "him" where used herein shall mean the individual bidder, firm, partnership or corporation executing the bid). 1000 1000 Partie Marketine

C-2

6. Compliance Report

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

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

- 7. By submission of this bid, the bidder certifies that it now has and will continue to have the financial capability to fully perform the work required for this contract. Any award of this contract will be made in reliance upon such certification. Upon request therefor, the bidder will submit written verification of such financial capability in a form that is acceptable to the department.
- 8. In accordance with Section 165 of the State Finance Law, the bidder agrees that tropical hardwoods, as defined in Section 165 of the State Finance Law, shall not be utilized in the performance of this Contract, except as the same are permitted by the foregoing provision of law.
- 9. The bidder has visited and examined the site of the work and has carefully examined the Contract in the form approved by the Corporation Counsel, and will execute the Contract and perform all its items, covenants and conditions, and will provide, furnish and deliver all the work, materials, supplies, tools and appliances for all labor and materials necessary or required for the hereinafter named work, all in strict conformity with the Contract, for the prices set forth in the Bid Schedule:
- 10. M/WBE UTILIZATION PLAN: By signing its bid, the bidder agrees to the Vendor Certification and Required Affirmations set forth below, unless a full waiver of the Participation Goals is granted. The Vendor Certification and Required Affirmations will be deemed to satisfy the requirement to complete Section V of Part II of Schedule B: M/WBE Utilization Plan.

Section V: Vendor Certification and Required Affirmations:

I hereby:

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

PROJECT ID: SE855

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)

\$36,782,831.90 4/12/17 BB

BIDDER'S SIGNATURE AND AFFIDAVIT

Bidder: $\underline{\mathcal{L}}$	nter	Conti	racking	LOVA.
			7	

By

(Signature of Partner or corporate officer)

Attest: (Corporate Seal)

Secretary of Corporate Bidder

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

BID FORM (TO BE NOTARIZED)

AFFIDAVIT WHER	RE BIDDER IS AN INDIVIDUAL
TATE OF NEW YORK, COUNTY OF	88:
am the person described in and who executed the tespects true.	foregoing bid, and the several matters therein stated are in all
Soppose was	
	(Signature of the person who signed the Bid)
subscribed and sworn to before me this	
day of	
Notary Public	
AFFIDAVIT WHE	RE BIDDER IS A PARTNERSHIP
THE OF MENT YORK COLDITY OF	SS:
STATE OF NEW YORK, COUNTY OF	being duly sworn says.
1000	the firm described in and which executed the foregoing
I am a member of	chalf of the firm, and the several matters therein stated are in all
respects true.	
	*
P.	(Signature of Partner who signed the Bid)
Subscribed and sworn to before me this	(-
day of ,	
day of	
	*
Notary Public	*
fourly I done	
AFFIDAVIT WHE	RE BIDDER IS A CORPORATION
STATE OF NEW YORK, COUNTY OF	veer's ss:
	being duly sworn says:
Lam the Part for of the	above named corporation whose name is subscribed to and which
Ad Francisco hid I recide at	Mariand MT
I have knowledge of the several matters therein str	ated, and they are in all respects true.
	(Signature of Partner who signed the Bid)
Subscribed and sworn to before me this day of April , 2017	
Slater .	Notary Public, State of New York No. OILE6004261
Notary Public	
	Commission Expires June 7, 20 18
	C-5 BID BOOKL
CITY OF NEW YORK	ULY 20
DEPARTMENT OF DESIGN AND CONSTRUCTION	

AFFIRMATION

			the responsibility or o				•
(If no	one, the	bidder shall insert	the word "None" in the	he space provide	ed above.)		The commence of the commence o
	**						
Full 1	Name of	Bidder: Take	Contracting C	(-00			* *
Addre	ess: Z	24 Wite 16	ins Re, Since 6	0//-			derina nte de la companya del companya de la companya del companya de la company
ity_	Cas	exper	State		Zip Code	10709	***************************************
HE	CK ON	E BOX AND INCL	UDE APPROPRIAT	E NUMBER:			*
/	A -	Individual or So	ole Proprietorship*				
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	If a con	poration, place sea	ıl here				
		•	officer or duly authoriz				71

BID BOND 1 FORM OF BID BOND

KNOW ALL MEN BY THESE PRESENTS. That we,
274 White Plains Road, Suite 6, Eastchester, NY 10709
hereinafter referred to as the "Principal", and
Western Surety Company
P. O. Box 5077, Sioux Falls, SD 57117-5077
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 Amount Bid
(\$
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 Construction of High Level Storm Sewers in
Glenwood Road etc. Brooklyn. Project #SE855
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 fulfullment of such Contract, which bonds shall be satisfactory in all respects to 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 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.

their proper officers the	23rd	day of	March	2017	ese presents to be signed by	
						,
(Seal)			Inter Contrac	cting Corp.	Œs	S.)
		Ву:		16		
(0.1)						
(Seal)			Western Sur	Surety		
		Ву:	Dana Granica	e Att	orney-in-Fact	 -4

BID BOND 3

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION
State of New York County of Chans ss: On this 11th day of April , 2017, before me personally came Michael Muhin to me known, who, being by me duly sworn, did depose and say that he resides at Kidgewood, N.J.
that he is the President of Inter Contracting Corp.
that he is the
Notary Public, State of New York No. Cill E6004261 Qualified in Queens County 18 Commission Expires June 7, 20 Notary Public
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
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

AFFIX ACKNOWLEDGEMENTS AND JUSTIFICATION OF SURETIES

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF NEW YORK
COUNTY OF NASSAU

On this March 23, 2017 before me personally came Dana Granice to me known, who, being by me duly sworn, did depose and say; that he/she resides in Suffolk County, State of New York, that he/she is the Attorney-In-Fact of the Western Surety Company the corporation described in which executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that is was so affixed by the Board of Directors of said corporation; and that he/she signed his/her name thereto by like order; and the affiant did further depose and say that the Superintendent of Insurance of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State of New York, issued to Western Surety Company (Surety) his/her certificate of qualification evidencing the qualification of said Company and its sufficiency under any law of the State of New York as surety and guarantor, and the propriety of accepting and approving it as such; and that such Certificate has not been revoked.

Notary Public

MELISSA SARACINO
Notary Public, State of New York
No. 01SA6155895
Qualified in Nassau County
Commission Expires November 20, 2018

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Camille Maitland, Robert T Pearson, , Susan Lupski, Thomas Bean, Gerard S Macholz, Colette R Chisholm, Rita Sagistano, Mia Woo-Warren, George O Brewster, Dana Granice, Michelle Wannamaker, Desiree Cardlin, Individually

of Uniondale, NY, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 29th day of December, 2016.

WESTERN SURETY COMPANY

Paul T. Bruflat, V

State of South Dakota County of Minnehaha SS

On this 29th day of December, 2016, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2021



I Mohr Notary Pub

CERTIFICATE



WESTERN SURETY COMPANY

J. Relson, Assistant Secretary

Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

WESTERN SURETY COMPANY

Sioux Falls, South Dakota Statement of Net Admitted Assets and Liabilities December 31, 2015

ASSETS

Bonds		5	1,694,282,606
Common stocks			24,218,356
Cash, cash equivalents, and short-term investments			25.339,975
Investment income due and acerued			20,596,996
Premiums and considerations			27,577,388
Amounts recoverable from reinsurers			9.329,459
Federal & foreign income taxes recoverable			3,597,963
Net deferred tax asset			16,095,068
Receivable from parent, subsidiaries, and affiliates			1,645,324
Other assets	_		1,016,832
Total Assets		S	1,823,699,967
<u>LIABILITIES AND SURPLUS</u>		.00	311030 320
Losses		S	214,978,759
Loss adjustment expense			56,382,252
Other expenses			1,040,680
Taxes, License and fees			2,313,346
Unearned premiums			207,378,031
Advance premiums			5,566,599
Ceded reinsurance premiums payable			1,844,830
Provision for reinsurance			681,280
Other liabilities			10,175,884
Total Liabilities		5	500,361,661
Surplus Account:			
Common stock	\$ 4,000,000		
Gross paid in and contributed surplus	280,071,837		
Unassigned funds	1,039,266,469		
Surplus as regards policyholders	 · · · · · · · · · · · · · · · · · · ·	S	1,323,338,306
Total Liabilities and Capital		\$	1,823,699,967
ratar Liarantes and Capital			.,

I. Troy Wray, Assistant Vice President of Western Surety Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2015, as filed with the various Insurance Departments and is a true and correct statement of the condition of Western Surety Company as of that date.

Western Surety Company

Subscribed and sworn to me this 21st day of March, 2016.

My commission expires:

YOLANDA JIMENEZ
OFFICIAL SEAL
Neigry Public, State of Illinois
My Gommission Expires
8891ember 24, 2017

Gland Jumones Nother Aublic

Project ID: SE855

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Tax ID #	20-	457	' >>	U	
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	The Salary of Street	
PIN#:	85017B0074	

SCHEDULE B - M/WBE Utilization Plan Part I: M/WBE Participation Goals

Part I to be completed by contracting agency

APT E- Pin #	85017B0074	FMS Project ID#:	SE855
Project Title/ Agency PIN #	Construction Of Sanitary, S Glenwood Road, etc/8502016	=	nd Appurtenances In,
Bid/Proposal Response Date	MARCH 8, 2017		
Contracting Agency	Department of Design and Co	onstruction	
Agency Address	30-30 Thomson Avenue City	Long Island City State	NY Zip Code 11101
Contact Person	Emmanuel K. Charles	Title <u>MWBE Compl</u>	lance Analyst
Telephone #	(718) 391-1450	Email charlesem@de	dc.nyc.gov

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

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

M/WBE Participation Goals for Services

Enter the percentage amount for each group or for an unspecified goal. Please note that there are no goals for Asian Americans in Professional Services:

Prime Contract Industry: Construction

Group	Percentage		· · · · · · · · · · · · · · · · · · ·
Unspecified*	9%		
or			
Black American	UNSPECIFIED*		
Hispanic American	UNSPECIFIED*	A 19	4
Asian American	UNSPECIFIED*		₽.
· Women	UNSPECIFIED*		
Total Participation Goals	9%	Line 1	

^{*}Note: For this procurement, individual ethnicity and gender goals are not specified. The Total Participation Goal for construction contracts may be met by using either Black-American, Hispanic-American, Asian American, or Women certified firms or any combination of such firms.

Tax ID#: 20-4575508	i.	APT E- PIN#:	85017B0074
SCHEDULE B - Part II: M/WBE Partic	ination Plan		
Part il to be completed by the bidder/pro Please note: For Non-M/WBE Prime C entire contract, you must obtain a FULL submitting it to the contracting agency granted, it must be included with your bibld or proposal.	poser. ontractors who will (walver by completin	A mie asmaet Whiblication (n pages 17 and 18 and tim
Section I: Prime Contractor Contact Info			Ψ
Business Name Tater Contract	Eine Land	FMS Vendor ID# Contact Person Claster NY 107	11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
Address 274 White Place	Cien (Ga	Contact Person	Michigal Milino
Telephone # 9/4.332/350	O SURE O, CAR	claster NY 10f	04
	<u> </u>		*
PRIME CONTRACTOR ADOPTING AG	ation Chack the ann	Small to the control of	ubsection.
For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency M/WBE Participation Goals.	Total Bid/Proposal Value	Agency Total Participation Goals (Line 1, Page 13)	Calculated M/WBE Participation Amount
Calculate the total dollar value of your total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an M/WBE prime contractor or Qualified Joint Venture. Please review the Notice to Prospective	36,782,831.70	9%	\$5,310,454.85
Contractors for more information on how to obtain credit for M/WBE participation.			\$
PRIME CONTRACTOR OBTAINED PAR PARTICIPATION GOALS	TIAL WAIVER APPR	OVAL: ADOPTING MOD	= Line 2 DIFIED M/WBE
For Prime Contractors (including Qualified Joint Ventures and M/WBE Irms) adopting Modified M/WBE Participation Goals.	Total Bid/Proposal Value	Adjusted Participation Goal (From Partial Walver)	Calculated M/WBE Participation Amount
calculate the total dollar value of your total id that you agree will be awarded to IWBE subcontractors for services and/or redited to an MWBE prime contractor or unalified Joint Venture.			

Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation.

» 20-4575508	APT E- PIN #:85017B007	4
ion III: M/WBE Utilization F w the Notice to Prospectiv icipation, Check applicable	Plan: How Proposer/Bidder Will Fulfill M/WBE Participation Goals re Contractors for more information on how to obtain credit for Ne box. The Proposer or Bidder will fulfill the M/WBE Participation	Goals:
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Tax ID #: 20 -4575508

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PIN #:		85017	B0074	

Section V: Vendor Certification and Required Affirmations

I hereby:

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

Signature	WAR -	Date 4/11/17		
Print Name	Michael Motion	Title Pres.	***************************************	·····
		44.00.00		

SCHEDULE B - PART III - REQUEST FOR WAIVER OF M/WBE PARTICIPATION REQUIREMENT

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		XYES	NO	
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		YES	NO	
3. Has/have	the bidder's A	stration with the New	m successfully passed t York State Department	he two-year Probation period of Labor ("NYSDOL")?
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OPTY OF NEW 1	VORK		20	BID BOOKLET

APPRENTICESHIP PROGRAM QUESTIONNAIRE ("APQ")

•	Where the bidder participates in any such Apprenticeship Programs through collective bargaining agreements, the bidder shall provide the following:
	 The contact information for such collective bargaining entity(ies) and the apprenticeable trade(s) covered pursuant to the bidder's affiliation therewith; A letter(s) from such collective bargaining entity(ies), on letterhead of such entity(ies) executed by an officer, delegate or official thereof, which verifies/verify the bidder's status as a signatory/participant in good standing to such collective bargaining entity(ies) Apprenticeship Program Agreements.
	Union agreements on file at DDC: Lad 731 Laborers
	Local 1010 Caborers
	Local 1556 Timbermen/Corpenters
	Local 14 Operating Engineers
	Local 15 Operating Engineers
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Bidde	Total Contracting Corp.
By:	(Signature of Partner or Corporate Officer)
Data	4/10/12
Daic.	1/10/11

G.C.A.-HEAVY CONSTRUCTION,
EXCAVATION, DOCKBUILDING AND
FOUNDATION WORK, BUILDING
FOUNDATION WORK, PAVING AND
ROAD BUILDING WORK,
UTILITY WORK, TUNNEL WORKOPERATING ENGINEERS
LOCALS 14-14B & 15-15A

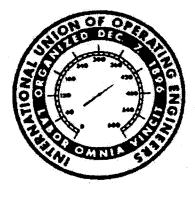
AGREEMENT

between

MEMBERS OF THE GENERAL CONTRACTORS ASSOCIATION OF NEW YORK, INC.

and

THE INTERNATIONAL UNION OF OPERATING ENGINEERS LOCALS 14-14B & 15-15A



JULY 1, 2014 - JUNE 30, 2018

- 5. The Employer agrees to be responsible for the payment of fringe benefit contributions on the stamps reported for each of the three (3) reporting periods which occur every year in March, July and November. Further, the Employer agrees that for every period in which an individual is reported as being employed as an Operating Engineer, the Employer shall be responsible for the payment of fringe benefit contributions for a minimum of forty (40) hours per week for every week in such period. This requirement shall apply to any and all individuals employed as Operating Engineers for any length of time during any given period, regardless of whether they are also employed by the Employer during such period in some other capacity and/or hold a different title with said Employer's company, including but not limited to owner, shareholder, officer, director, etc.
- 6. The Employer agrees that the applicable Association shall, on behalf of the Employer, negotiate successor Collective Bargaining Agreements, amendments, renewals and extensions of the applicable Collective Bargaining Agreements and the Employer agrees to be bound by any and all amendments, renewals and/or extensions of the above referenced Association Collective Bargaining Agreements unless and until this Agreement is properly terminated by either the Employer or the Union in accordance with therenewal and/or Termination Provisions of the applicable Association Collective Bargaining Agreements.

IN WITNESS WHEREOF, the parties have caused this agreement to be executed by their duly authorized representatives.

	•
色しょりた	INTER CONTRACTING CORP
Edwin L. Christian President and Business Manager	Company Name
International Union of Operating Engineers, Local 14-14B	50 NELSON RD.
Chicy	Address
Christopher T. Confrey Recording Corresponding Secretary International Union of Operating Engineers, Local 14-14B	SCAPSDALE, N.V. 10583 City, State, Zip Code
James T Callebra	(914) 723-2360 / 755-1682 Telephone Number
lames T. Callahan	·
President and Business Manager International Union of Operating Engineers,	(914) 723-2365
Local 15, 15A. 15C and 15D	Fax Suppler
Brian S. Kally	Who
Brian S. Kelly	Signature of Officer(s)
Recording Corresponding Secretary International Union of Operating Engineers.	_
Local 15, 15A, 15C and 15D	DARIO CAUALIEZE V.P.
	Name and Title of Officer(s)

(PLEASE PRINT)

AGREEMENT

BETWEEN
THE HIGHWAY ROAD AND STREET
CONSTRUCTION LABORERS
LOCAL UNION 1010

OF

THE DISTRICT COUNCIL OF PAVERS
AND ROAD BUILDERS OF THE
LABORERS' INTERNATIONAL UNON
OF NORTH AMERICA AFL-CIO
AND

THE EMPLOYER

JULY 1, 2015 - JUNE 30, 2018

INDEPENDENT AGREEMENT HIGHWAY, ROAD, AND STREET CONSTRUCTION LABORERS LOCAL 1010 JULY 1, 2015 – JUNE 30, 2018

PAVERS AND ROAD BUILDERS
DISTRICT COUNCIL /
By: Letth January Date: 6/22/15
Keith Losgalzo, Business Manager
By: Oth Date: 6/22/15
N N N N N N N N N N N N N N N N N N N
Keith Loscalzo, Business Manager
Print Name of Company
By: Date:
Signature
INTER CONTRACTING CORP.
Print Name and Title Michael Milino
Presilent
Address: 274 White Plain, Rd.
Svite 6 Caseclester NY 10709
Telephone #: 9/4 337 /350
Fax#: 14 337 1450
Email Address: MMutinop intercontracting corp. com
Original Jobsite:
(RENEWAL)

GENERAL CONTRACTORS ASSOCIATION - CARPENTERS 2011

AGREEMENT

BETWEEN MEMBERS OF

THE GENERAL CONTRACTORS ASSOCIATION

OF NEW YORK, INC.

AND

THE DISTRICT COUNCIL OF CARPENTERS

OF NEW YORK CITY AND VICINITY

JULY 1, 2011 - MAY 31, 2017

Article V. Execution and Compliance with New Agreement

Our firm, its successors and/or assigness, shall execute successor agreement(s) within five (5) days of the receipt of the Union's request. However, our firm shall be bound to the terms contained in the New Agreement(s) retroactive to July 01, 2011, by virtue of executing this agreement, regardless of whether it actually executes a successor agreement.

Article VI Direct Negotiations

If the Union is unable to reach an agreement with the Association(s) for terms and conditions of employment for a successor agreement, upon ten (10) days oral or written notice to our firm, the Union, at its sole option, may cancel the No-Strike Provision of this agreement and demand that direct negotiations be opened with our firm to negotiate a successor Gollective Bargaining Agreement.

In Witness Whereof, the parties hereto make and enter into this Interim Compliance Agreement, and we, their duly authorized and empowered representatives, have hereunto set our hands and seal this:

Contractor:	INTER CON	ITRACTING	CORP.			4	m, * ·
	50 NELSON	ROAD					. :.
	SCARSDAL	E.NY 10583	i i militari i i i i i i i i i i i i i i i i i i			1 30	· · · · ·
			DI	. 1/2	cheel	Mn.	رازعت
1/2//			fresiles	701	ichs ell	/aw	يمبرس
OFFICER'S	SIGNATURI	Britaniya (J. K.	TITLE	PRIN	ENAME		1,1
	1 /	in America a fil				•	
Date Signed:	8/21/0						
	44015						• • • • •

DISTRICT COUNCIL OF NEW YORK CITY AND VICINITY OF THE UNITED BROTHERHOOD OF CARPENTERS AND JOINERS OF AMERICA

_ ··			_					٠.,	
By:	14	i.e.		.* :	, 5	٠٠ <i>۽</i>	4.5		•
,,_,	777					$\overline{}$. ,		-

BUILDING, CONCRETE
EXCAVATING &
COMMON LABORERS' UNION
LOCAL No. 731
of
GREATER NEW YORK
LONG ISLAND AND VICINITY
of the
LABORERS' INTERNATIONAL
UNION OF NORTH AMERICA

INDEPENDENT AGREEMENT

JULY 1, 2016 to APRIL 30, 2022



This Agreement and all of its terms and provisions are based on an effort and a spirit of bringing about more equitable conditions in the Construction Industry, and the language herein shall not be misconstrued to evade the principles or intent of this Agreement.

This Agreement may not be altered, modified or changed in any way unless any such proposed alteration, modification or change is in writing, is approved by the Union and is initialed or signed by an officer of the Union at the location in the Agreement of such proposed alteration, modification or change.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year stated in Article XIII hereof.

EMPLOYER:	BUILDING, CONCRETE, EXCAVATING
	& COMMON LABORERS' UNION
	LOCAL NO. 731 OF GREATER
	NEW YORK, LONG ISLAND & VICINITY
Taken (a. k. (
(Full and Exact Name of Employer)	Frank Biancaniello President
_	
BY: Pes. (Title of signing Representative)	BY: Joseph D'Amato Business Manager
BY:	BY: Dominic J. Valdner Secretary-Treasurer
Dated: 8/17/16	

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: Inter Contracting DDC Project Number: SE855	609	einen in der
DDC Project Number: SE855	· · · · · · · · · · · · · · · · · · ·	
DDC Hojoci Number.		
Company Size: Ten (10) e	employees or less	
K Greater th	an ten (10) employees	
Company has previously worked for DDC	XYES	NO
2. Type(s) of Construction Work		
TYPE OF WORK 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)	LAST 3 YEARS	THIS PROJECT
3. Experience Modification Rate: The Experience Modification Rate (EMR) is a Insurance (NCCI). This rating is used to determinate. The contractor may obtain its EMR contractor cannot obtain its EMR, it must substitute the substitute of the contractor cannot obtain its EMR, it must substitute the contractor cannot obtain its EMR, it must substitute the contractor cannot obtain its EMR, it must substitute the contractor cannot obtain its EMR.	rmine the contractor's premium R by contacting its insurance br	oker or the NCCI. If the
	21	BID BOOKLET

Project	ш. <i>SE85</i> S	•

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

YEAR	INTRASTATE RATE	INTERSTATE RATE
2016	0.83	n la
2015	0.98	A /4
2014	1.05	nla

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:

YES	∑ _{NO}	Contractor has received a willful violation issued by OSHA or New York City Department of Buildings (NYCDOB) within the last three years.
YES	X NO	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.

Incident Rate =	Total Number of Incidents Total Number of Hours Worked b	
YEAR	TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES	INCIDENT RATE
2016	81,585	49
2015	47.625	0
2014	32,536	0

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

5.	Safety	Performance	on	Previous	DDC	Project(s)
----	--------	-------------	----	----------	-----	------------

X YESNO	Contractor previously audited by the DDC Office of Site Safety. DDC Project Number(s): SEQZ00463, SERZ00241, SER002316
YESNO	Accident on previous DDC Project(s). DDC Project Number(s): SEQZ00463, SERZ00241,
yes 🗶 no	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: 4/12/17	DDC Project Number(s):, By: (Signature of Owner, Partner, Corporate Officer)
***	Title: Pres.

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.

SEQ 002657 Water's Edge Pr., Queens	SERZOOZSZ Scarboro Arcy SI	SER 200209 Carbon Ave, SI	P502 WILZ Willowbrook Park, SI	SER 002316 Rossulle Ave, SI	SEQ 200574 58th Ave., Queens	Project & Location
Sewert	Sewar t	Sewart	Sewer	Sewert	Sewert WM	Contract Type
\$ 3.3mg	\$ 1.9 mm	\$ 6. 9mm	\$2 mm	\$ 10.7 mm	\$2mm	Contract Amount (\$000)
9/13	Shy	6/15	6/16	6/16	6/16	Date Completed
DDC	DDC	DPC	DDC	DDC	DDC	Owner Reference & Tel. No.
3 44						Architect/Engineer Reference & Tel. No. if different from owner

æ 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.

	 1	-	·		·		***************************************	,	1				
	. The state of the	:		:			CZ	11.11	Queens	Callage Pl.		rioject & Location	
22.						***************************************	no de		L'MY			Туре	Contract
							13.5	HIRD CONTRACTOR CONTRA	15.2mm			(\$000)	Contract Amount
		***************************************	3				10		1. Sura	•	-	-	Subcontracted to Others (\$000)
			·			ZZ	**		\$ 3mm			(\$000)	Uncompleted Portion
			,		ż	9			10/17			Complete	Date Scheduled to
			11 11 11 11 11 11 11 11 11 11 11 11 11		::		PBC		D0C			Tel. No.	Owner Reference &
										from owner	if different	Reference &	Architect/En

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION

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BID BOOKLET DECEMBER 2013

Ü 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
Mace Ave Branx	Sewer + hm	\$1,2ma	7/17	PPC	
			V4.		
American money in the property of the property			. (2000) of the Company of the Compa		

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION

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BID BOOKLET DECEMBER 2013

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) <u>Confirmation of Vendex Compliance</u>: 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: Inter Contracting Corp.
	Bidder's Address: 274 White Plains Rd., Swite 6 Cost closter My 10709
	Bidder's Telephone Number: 9/4.337 350
	Bidder's Fax Number: 914.337.1450
	Date of Bid Opening: April 12, 2017
	Project ID: SE855
Vene eithe	lex Compliance: To demonstrate compliance with Vendex requirements, the Bidder shall complete r 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 th Floor, New York, New York 10007.
	Date of Submission:
	By:
	(Signature of Partner or corporate officer)
	Print Name:
(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.
	D. J.

Print Name:

(Signature of Partner or corporate officer)

Certificate of No Change Form



- Please fill in all the fields and DO NOT leave any field blank.
- 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

may subject the person making the false statement to criminal charges
Michael Mutino
Enter Your Name Enter Your Name being duly sworn, state that I have reached the sworn in the state that I have reached the sworn in the state that I have reached the sworn in the sworn
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.
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: Inter Contracting Corp.
Vendor's Address: 274 White Plains Road, Suite 6, Eastchester, NY 10709
Vendor's EIN or TIN: 204575508 Requesting Agency: NYC DDC
Are you submitting this Certification as a parent? (Please circle one) Yes VNo

Mayor's Office of Contract Services 253 Broadway, 9th Floor New York, NY 10007 Phone: 212-788-0010 Fax: 212-788-0049

Signature date on the last full vendor questionnaire signed by the submitting vendor: 02/04/2017

ature date on changed submission, if applicable, for the submitting vendor:

Principal Questionnaire

This section refers to the most recent principal questionnaire submissions.

Date of signature



Principal Name	Date of signature on last full Principal Questionnaire	Date(s) of signature or Changed Submission
1 Michael Mutino	02/04/2017	(if applicable)
2 Dario Cavaliere	02/04/2017	
3		
4		
5		and the second s
6		
Check if additional changes were sub	omitted and attach a document with th	
Certification This section is real This form must be signed and notarized Certified By:	quired. ed. Please complete this twice. C	Copies will not be accepted.
Michael Mutino		'
Name (Print)		
President		
Title		
Inter Contracting Corp.		
Name of Submitting Entity		
		04/12/2017
Signature		Date
Notarized By:		Elizabeth Lelchnam
Slatel X	Queens	Elizabeth Lefchnam Notary Public, State of New York No. CILEGOO-1261 Qualified in Queens County 18 Commission Expires June 7, 20
Notary Públic	County License Issued	License Number
Sworn to before me on: April	2, 2017	

Certificate of No Change Form



- Please fill in all the fields and DO NOT leave any field blank.

 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

Michael Mutino	, being duly sworn, state that I have read
Enter Your Name	
as identified on page one of this form and contanged. I further certify that, to the best of	te vendor questionnaire and any submission of change ertify that as of this date, these items have not f my knowledge, information and belief, those answers to the best of my knowledge, information, and belief, and accurate.
principal questionnaire(s) and any submissi	submitting vendor that the information contained in the on of change identified on page two of this form have ntinue, to the best of my knowledge, to be full, complete
I understand that the City of New York will readditional inducement to enter into a contract	ely on the information supplied in this certification as ct with the submitting entity.
	ubmitted for the vendor doing business with the City.
Name of Submitting Entity: Inter Contracting Corp.	
Vendor's Address: 274 White Plains Road, Suite 6, Eas	tchester, NY 10709
Vendor's EIN or TIN: 204575508	Requesting Agency: NYC DDC
Are you submitting this Certification as a part	rent? (Please circle one)
	onnaire signed by the submitting vendor:
gnature date on changed submission, if a	
Mayor's Of	ffice of Contract Services

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 Changed Submission (if applicable)
1 Michael Mutino	02/04/2017	÷
2 Dario Cavaliere	02/04/2017	
3		
4		
5		
6		
Check if additional changes were sub Certification This section is rec		the date of additional submissions.
This form must be signed and notarize Certified By: Michael Mutino	ed. Please complete this twice.	Copies will not be accepted.
Name (Print)		
President		
Title		
Inter Contracting Corp.		
Name of Submitting Entity		
		04/12/2017
Signature		Date
Notarized By:		Elizabeth Leichnam Notary Public State of New York No. OILESOO1261
Slabeth L	Queens	Qualified in Queens County 18 Commission Experies June 7, 20
Notary Public	County License Issued	License Number
Sworn to before me on: April	12, 2017	

Date of signature

BIDDER'S CERTIFICATION OF COMPLIANCE WITH <u>IRAN DIVESTMENT ACT</u>

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:

bidder/proposer submits the following certification:	THES III MA	uner 8)		
[Please Check One]				
RIDDER'S CERTIFICATION				

Ø	behalf of any bidder/propose certifies as to its own orga knowledge and belief, that	proposal, each bidder/proposer and each person signing oner certifies, and in the case of a joint bid each party thereto nization, under penalty of perjury, that to the best of its each bidder/proposer is not on the list created pursuant to 3 of Section 165-a of the State Finance Law.
	on the list created nursuant to	y name and the name of the bidder/proposer does not appear o paragraph (b) of subdivision 3 of Section 165-a of the State ed a signed statement setting forth in detail why I cannot so
		· · ·
		A Commence of the Commence of
		SIGNATURE
•		Mahad Making
		PRINTED NAME
		President
		TITLE
Sworn	to before me this	
	day of, 20	
Notary	Public .	
Dated	1:	

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

GENERAL INFORMATION

1.	Your contractual relationship in this contract is:	Prime contractor_x_Subcontractor_
1a.	Are M/WBE goals attached to this project? Yes X	No
2.	Please check one of the following if your firm would City of New York as a:	like information on how to certify with the
	Minority Owned Business Enterprise Women Owned Business Enterprise Disadvantaged Business Enterprise	Locally Based Business EnterpriseEmerging Business Enterprise
2a.	If you are certified as an MBE, WBE, LBE, EBE or I certified with?	OBE, what city/state agency are you Are you DBE certified? Yes No
3.	Please indicate if you would like assistance from SBS contracting opportunities: Yes No_X_	in identifying certified M/WBEs for
4.	Is this project subject to a project labor agreement?	Yes No <u>X</u> _
5.	Are you a Union contractor? Yes X No If with 1010, 731, 1556, 14, 15	yes, please list which local(s) you affiliated
6.	Are you a Veteran owned company? Yes No _	
PART	I I: CONTRACTOR/SUBCONTRACTOR INFORMATION	ON .
7.	20-4575508 Employer Identification Number or Federal Tax I.D.	Mmutino Qintercontracting corp Email Address
8.	Total Lake to	Lindii Addiess
9.	274 White Plains Rd., Suite 6, Company Address and Zip Code	Eusechesear NY 10709
10.	Michael Mutino	914.337.1350
11,	Chief Operating Officer Same	Telephone Number
Ti,		Telephone Number
12.	Some	
	Name of Prime Contractor and Contact Person (If same as Item #8, write "same")	A .

13.	Number of employees in your company:
³ 14.	Contract information:
	(a) DDC (b) 36, 782,831.70 Contract Amount
	(c) 85020/6SE0002C (d) Contract Registration Number (CT#)
\$- -	(e) TBD (f) TBD Projected Commencement Date Projected Completion Date
	(g) Description and location of proposed contract: Const. of High Level Storm Sawers, etc. in Glenwood Road
15.	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.
16.	Has DLS within the past month reviewed an Employment Report submission for your company and issued a Conditional Certificate of Approval? Yes No_X
	if yes, attach a copy of certificate.
W	OTE: DLS WILL NOT ISSUE A CONTINUED CERTIFICATE OF APPROVAL IN CONNECTION ITH THIS CONTRACT UNLESS THE REQUIRED CORRECTIVE ACTIONS IN PRIOR ENDITIONAL CERTIFICATES OF APPROVAL HAVE BEEN TAKEN.
17.	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? YesNo<
	Date submitted: Agency to which submitted:
	Agency to which submitted:
	Name of Agency Person:
	Contract No:
18.	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,

Page 2
Revised 8/13
FOR OFFICIAL USE ONLY: File No.

	(a)	Name and address of OFCCP office.
		Was a Certificate of Equal Employment Compliance issued within the past 36 months? Yes No
ž.		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 NoX
		If yes, attach a copy of such findings.
19.	is re	our company or its affiliates a member or members of an employers' trade association which sponsible for negotiating collective bargaining agreements (CBA) which affect construction hiring? Yes No
	If ye	s, attach a list of such associations and all applicable CBA's.
PART	II: D	OCUMENTS REQUIRED
20.	broc	the following policies or practices, attach the relevant documents (e.g., printed booklets, hures, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation e 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
	(Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
	(g) Collective bargaining agreement(s).
٠	(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?

21,	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 (b) After a conditional job offer (c) After a job offer Yes No Yes_X No
	(c) After a job offer (d) Within the first three days on the job Yes X No Yes X No
*	(e) To some applicants Yes No
; *	(f) To all applicants Yes X No Yes No Yes No Yes No
	(d) to solite employees
	(II) To all employees
22.	Explain where and how completed I-9 Forms, with their supportive documentation, are maintained and made accessible. They are kept in Main office and available upon coguest.
23.	Does your firm or any of its collective bargaining agreements require job applicants to take a medical examination? Yes No_X
	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
	(d) To all applicants Yes No Yes No 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.
24.	Do you have a written equal employment opportunity (EEO) policy? Yes X No
	If yes, list the document(s) and page number(s) where these written policies are located.
25	Does the company have a current affirmative action plan(s) (AAP)
25.	Minorities and Women
4.0 ·	
	Individuals with handicaps Other. Please specify
26.	Does your firm or collective bargaining agreement(s) have an Internal grievance procedure with respect to EEO complaints? Yes X 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.
Page 4	

Page 4
Revised 8/13
FOR OFFICIAL USE ONLY: File No._____

27,	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? YesNoX
	If yes, attach an internal complaint log. See instructions.
28.	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_X
	If yes, attach a log. See instructions.
29.	Are there any jobs for which there are physical qualifications? Yes_X_ No
	If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s). Laborers must be fit and adequately strong to life heavy objects.
30.	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_X_
	If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

	SIGNATURE PAGE	
submitted with the understa requirements, as contained amended, and the impleme	official signing) Nichael Multi- erewith is true and complete to the best inding that compliance with New York C in Chapter 56 of the City Charter, Executing Rules and Regulations, is a contra bmit a certified copy of payroll records to	ity's equal employment utive Order No. 50 (1980), as octual obligation. I also agree on
Inter Contraction Contractor's Name	4 Corp.	5
Contractor's Name		
Michael Muting	3	President
Name of person who prepar	ed this Employment Report	Title
Same		
	o sign on behalf of the contractor	Title
914.337.1350		
Telephone Number		
		Ulalia
Signature of authorized office	ial	Date
56 Section 3H, the Division of data and to implement an er Contractors who fail to compnoncompliance may be subjected with the contract becontracts for a period of up to criminal prosecution.	oly with the above mentioned requirement ect to the withholding of final payment. ions of any data or information submittent etween the City and the bidder or contrator of five years. Further, such falsification in	equest the contractor's workforce Ints or are found to be in Ind herewith may result in the lactor and in disapproval of future lactor result in civil and/and or
Charter Chapter 56 of the Ci	w and consistent with the proper discharty Charter and Executive Order No. 50 tion provided by a contractor to DLS sha	(1980) and the implementing Rules
	Only original signatures accepte	od.
Sworn to before me this	12th day of April 20 17	
	- Elahot L -	April 12,2017
Notary Public	Authorized Signature	Date
	Notary Public	th Leichnam , State of New York 31 Chrone County - A

Page 6 Revised 8/13 FOR OFFICIAL USE ONLY: File No. Commission Expires June 7, 20 18

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

- Do you plan to subcontractor work on this contract? Yes X No
- If yes, complete the chart below. તં

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
fi .	v	Paving	Operators, Laborers	\$ 700,000
	9.	Trucking	Divers	\$ (MM+
		Sawweling	Laborers	\$ /65, sov
		Fire Nams/Elec.	Electricions	\$ 400,000
		Piles	Operators, Pockbuildes	\$ 1.3MM

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

OWNERSHIP CODES

W: White

Black

H: Hispanic

A: Asian N: Native American F: Female

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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 Males and Females by trade classification on this project, enter the projected workforce for the charts below.

建筑

Native (10) Amer. Asian 6 FEMALES 8 Hisp. (7) Black Hisp. No No White Non Hisp. Native Amer. 9 Asian 3 ල Hisp. MALES (2) Black Non Hisp. White Non Hisp. T TRN 70 I 4 Total Minority, Male & Female (Col. #2,3,4,5,7,8,9, & 10): Union Affiliation, if applicable Operators Total (Col. #1-10): 12.15 (Col. #6 - 10): Total Female

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

/wja/

FOR OFFICIAL USE ONLY: File No. Revised 8/13 Page 9

FORM B: PROJECTED WORKFORCE

Trade:			2	MALES				11	FEMALES		
Union Affiliation, if applicable		(1) White Non Hisp	(2) Black Non Hisp.	(3) HSD	(4) Asian	(5) Native	(6) White Non Hisp	Black Non Hish	(8) (8)	(9)	(10) Native
7.31, 10/0, 1556 Total (Col. #1-10):	~			2							
20 Total Minority, Male & Female	I						-				
(Col. #2,3,4,5,7,8,9, & 10):	K						1				
Total Female (Col. #6 $-$ 10):	T N										
	TOT	2	3 15	8							
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What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)? (A,bas)	

Page 10 Revised 8/13 FOR OFFICIAL USE ONLY: File No__

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:	i e	\$5	~	MALES				ii.	FEMALES		
Operators Inion Affiliation if applicable		(1) White	(2) Black	(3)	4	(5)	(6) White	(7) Black	.(8)	6)	(10) Native
/4 /5	, °	Hisp.	Hisp.	Hisp.	Asian	Amer.	E SE	F	Hisp.	Asian	Amer.
Total (Col. #1-10):	7	2									
5	1										
Total Minority, Male & Female	-										
(Col. #2,3,4,5,7,8,9, & 10):	<						and the state of t				
Total Female (Col. #6 − 10): O	TRN			: 3							
	TOT	3									
		_									

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

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Page 11

Revised 8/13 FOR OFFICIAL USE ONLY: File No.

FORM C: CURRENT WORKFORCE

rade:			2	MALES			ŝ	뿐	FEMALES		
Laborers		(1) White	(2) Black	(3)	4)	(2)	(6) White	(7) Black	(8)	(6)	(10)
nion Affiliation, if applicable	3	Non Hisp.	Non Hisp.	Hisp.	Asian	Native Amer.	Non Hisp.	Non Hisp.	Hisp.	Asian	Native Amer.
otal (Çoj, #1-10):	7	\sim		~			mannet en lacat en				
otal Minority, Male & Female	I	:									
2ol. #2,3,4,5,7,8,9, & 10): S	A										
otal Female Sol. #6 – 10): O	TRN										
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217CY201

May 4, 2017

Mr. Michael Mutino
President
Inter Contracting Corporation
274 White Plains Road - Suite 6
Eastchester, NY 10709

Re: NYC Department of Design & Construction Contract (DDC); Contract No. SE-855; Pin No. 8502016SE0002C; Construction of High Level Storm Sewers, Sanitary Sewers and Appurtenances/ Replacement of water mains & Appurtenances; Borough of Brooklyn; Contract Value: \$36,782,831.70; Continued Certificate of Approval.

Dear Mr. Mutino:

Please be advised that Inter Contracting Corporation has already received notice of its approval status for the three (3) year period indicated in the Department of Small Business Services/Division of Labor Services' (DLS') Certificate of Approval dated April 15, 2015 – DLS File No. 215CY129.

As your organization continues to meet the equal employment opportunity requirements of the City of New York, DLS approves the awarding of the above-referenced contract. This approval does not extend the initial three (3) year approval to (April 15, 2015- April 14, 2018) referred to above.

If you have any questions, please call Mr. Irving Angrum at (212) 513-6431 or by email iangrum@sbs.nyc.gov.

Very truly yours,

Helen Wilson

Assistant Commissioner
Division of Labor Services

ia c:

Travis Letbetter Irving Angrum File

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 1

DATED: February 24, 2017

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.

- (1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, BID SCHEDULE, pages B-3 to B-39;

 Delete all pages in their entirety;

 Substitute attached revised pages B-3 (REVISION #1) to B-39 (REVISION #1).

 (Changes made: SEQ. NO. 151, ITEM NO. 70.41K081580001A, description has been revised and SEQ. NO. 152, ITEM NO. 70.41K081580001B, description has been revised)
- (2) Refer to the Contract Drawings Sheet 4 of 34 and 5 of 34;

 Delete Sheet 4 of 34 and 5 of 34 in their entirety;

 Substitute with attached revised Sheet 4R of 34 and 5R of 34.

 (NOTE: Please see the bubbles for the changes as shown on the contract drawings)
- (3) See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum plus thirty eight (38) pages of attachments and two (2) drawings.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

GURDIP SAINI, P.E.

Associate Commissioner/Design I

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 2

DATED: March 3, 2017

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.

(1)See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum plus one (1) page of Attachment.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

OGURDIP SAINI, P.E.

Associate Commissioner/Design I

: /4////

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

> Together With All Work Incidental Thereto BOROUGH OF BROOKLYN **ADDENDUM NO. 3**

> > DATED: March 6, 2017

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.

- (1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page A-1, Attachment 1 Bid Information: Change the dates shown for Submission of Bids To: and for Bid Opening: from "March 8, 2017" to read "March 16, 2017."
- (2) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page 13, Schedule B MWBE; Change the dates shown for Bid/Proposal Response Date: from "March 8, 2017" to read "March 16,

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum.

> THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

> > **GURDIP SAINI. P.E.**

Associate Commissioner/Design I

Inter Contracting Conf.

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 4

DATED: March 13, 2017

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.

- (1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page A-1, Attachment 1 Bid information;
 Change the dates shown for Submission of Bids To: and for Bid Opening: from "March 16, 2017" to read "March 29, 2017."
- (2) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page 13, Schedule B MWBE;
 Change the dates shown for Bid/Proposal Response Date: from "March 16, 2017" to read "March 29, 2017."
- (3) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, BID SCHEDULE, pages B-3 (REVISION #1) to B-39 (REVISION #1);

 Delete all pages in their entirety;

 Substitute with attached revised pages B-3 (REVISION #2) to B-40 (REVISION #2).
- (4) Refer to the Contract Drawings Sheet 4 of 34, 5 of 34, 6 of 34, 7 of 34, 8 of 34, 9 of 34, 10 of 34, 11 of 34, 13 of 34, 14 of 34, 15 of 34, 17 of 34, 18 of 34, 19 of 34 and 32 of 34; Delete Sheet 4 of 34, 5 of 34, 6 of 34, 7 of 34, 8 of 34, 9 of 34, 10 of 34, 11 of 34, 13 of 34, 14 of 34, 15 of 34, 17 of 34, 18 of 34, 19 of 34 and 32 of 34 in their entirety; Substitute with attached revised Sheet 4R of 34, 5R of 34, 6R of 34, 7R of 34, 8R of 34, 9R of 34, 10R of 34, 11R of 34, 13R of 34, 14R of 34, 15R of 34, 17R of 34, 18R of 34, 19R of 34 and 32R of 34

(NOTE: Please see the bubbles for the changes as shown on the contract drawings)

(5) Refer to the Contract Drawings

Add Fire Department Drawings: two (2) sheets of key map, sheet 1 of 4 to sheet 4 of 4, Standard Drawing 140, Standard Drawing 141, Standard Drawing 144, Standard Drawing 144E, Standard Drawing 148 and Standard Drawing 168.

By signing in the space provided below, the bidder acknowledges receipt of two (2) page of this Addendum plus thirty eight (38) pages of attachments and twenty seven (27) drawings.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

GURDIP SAINI, P.E.

Associate Commissioner/Design I

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 5

DATED: March 16, 2017

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.

(1) <u>Refer</u> to the Bid and Contract Documents, VOLUME 1 OF 3, BID SCHEDULE, pages B-3(REVISION #2) to B-40 (REVISION #2);

Delete all pages in their entirety:

Substitute with attached revised pages B-3 (REVISION #3) to B-40 (REVISION #3).

NOTE: Delete SEQ.NO. 053 Item No. 51.11P006 & SEQ.NO. 054 Item No 51.11P006 from BID SCHEDULE (REVISION#2) and replace with SEQ NO. 053 ITEM NO. 51.11P006 of the attached BID SCHEDULE (REVISION#3).

By signing in the space provided below, the bidder acknowledges receipt of two (1) page of this Addendum plus thirty-eight (38) pages of attachments.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

GURDIP SAINI, P.E.

Associate Commissioner/Design I

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With Ali Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 6

DATED: March 23, 2017

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.

- (1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page A-1, Attachment 1 Bid information; Change the dates shown for Submission of Bids To: and for Bid Opening: from "March 29, 2017" to read "April 12, 2017."
- (2) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page 13, Schedule B MWBE;

 Change the dates shown for Bid/Proposal Response Date: from "March 29, 2017" to read "April 12, 2017."

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

GURDIP SAINI, P.E.

Associate Commissioner/Design i

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 7

DATED: April 4, 2017

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.

- (1) <u>Refer</u> to the Bid and Contract Documents, VOLUME 1 OF 3, Notices to Bidders; <u>Delete</u> all pages in their entirety. <u>Substitute</u> attached revised Notices to Bidders.
- (2) Refer to the Bid and Contract Documents, VOLUME 2 OF 3;

 Delete VOLUME 2 OF 3 in its entirety.

 Substitute attached new revised VOLUME 2 OF 3.
 - (3) Refer to the Bid and Contract Documents, VOLUME 3 OF 3; Schedule A. Delete all pages in their entirety.

 Substitute attached revised Schedule A.
 - (4) See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum plus three hundreds and one (301) pages of attachments.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

GURDIP SAINI, P.E.

Associate Commissioner/Design I

n*ter Contracting* Name of Bidder

A7-1

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES IN:

GLENWOOD ROAD

BETWEEN E. 98TH STREET AND WILLIAMS AVENUE

FARRAGUT ROAD

BETWEEN E. 102ND STREET AND E. 108TH STREET

EAST 102ND STREET

BETWEEN GLENWOOD ROAD AND FLATLANDS AVENUE

EAST 103RD STREET

BETWEEN FARRAGUT ROAD AND GLENWOOD ROAD

EAST 104TH STREET

BETWEEN FARRAGUT ROAD AND GLENWOOD ROAD

EAST 105TH STREET

BETWEEN FARRAGUT ROAD AND GLENWOOD ROAD

EAST 108TH STREET

BETWEEN STANLEY AVENUE AND FARRAGUT ROAD

STANLEY AVENUE

BETWEEN E. 108TH STREET AND HINSDALE STREET

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES IN:

GLENWOOD ROAD

BETWEEN E. 98TH STREET AND E. 101ST STREET

EAST 102ND STREET

BETWEEN FARRAGUT ROAD AND FLATLANDS AVENUE

EAST 103RD STREET

BETWEEN FARRAGUT ROAD AND GLENWOOD ROAD

EAST 104TH STREET

BETWEEN FARRAGUT ROAD AND GLENWOOD ROAD

EAST 105TH STREET

BETWEEN FARRAGUT ROAD AND GLENWOOD ROAD

EAST 108TH STREET

BETWEEN STANLEY AVENUE AND FARRAGUT ROAD

STANLEY AVENUE

BETWEEN E. 108TH STREET AND WILLIAMS STREET

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:

GLENWOOD ROAD
BETWEEN ROCKAWAY PARKWAY AND WILLIAMS AVENUE

EAST 98TH STREETBETWEEN GLENWOOD ROAD AND CONKLIN AVENUE

EAST 102ND STREETBETWEEN FARRAGUT ROAD AND FLATLANDS AVENUE

 $\begin{array}{c} \textbf{FARRAGUT ROAD} \\ \textbf{BETWEEN E. } 102^{\text{ND}} \ \textbf{STREET AND E.} 108^{\text{TH}} \ \textbf{STREET} \end{array}$

EAST 103RD STREETBETWEEN FARRAGUT ROAD AND GLENWOOD ROAD

EAST 104TH STREETBETWEEN FARRAGUT ROAD AND GLENWOOD ROAD

EAST 105TH STREETBETWEEN DEAD END NORTH OF FARRAGUT ROAD AND GLENWOOD ROAD

EAST 108TH STREETBETWEEN STANLEY AVENUE AND FLATLANDS AVENUE

Notices to Bidders

Pre-Bid Questions (PBQs)

Please be advised that PBQs should be submitted to the Agency Contact Person at least five (5) business days (by 5:00 PM EST) prior to the bid opening date as indicated in ATTACHMENT 1 - BID INFORMATION, page A-1 and SCHEDULE B, page 13, VOLUME 1 OF 3 of this BID BOOKLET.

Apprenticeship Program

If Apprenticeship Program is required as noted on Page 19 of this BID BOOKLET, the following notice applies:

Please be advised that, pursuant to the authority granted to the City under Labor Law §816-b, the New York City Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this solicitation, and any of its subcontractors with subcontracts worth two 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 program/s have successfully passed the two year Probation period following the initial registration date of such program/s with the New York State Department of Labor.

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 subcontractor not being approved.

Please be further advised that, pursuant to Labor Law §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.

Notices to Bidders

Compliance with HireNYC and Reporting Requirements

The Hiring and Employment Rider shall apply to contracts valued at \$1 million or more for all goods, services and construction except human services contracts that are subject to the Public Assistance Hiring Commitment Rider. The Rider describes the Hire NYC process and obligations, including reporting requirements throughout the life of the contract. The Hire NYC process requires contractors to enroll with the Hire NYC system within thirty days after the registration of the contract subject to this solicitation, to provide information regarding all entry to mid-level job opportunities arising from this contract and located in New York City, and to agree to interview qualified candidates from HireNYC for those opportunities. The Rider also includes reporting requirements unrelated to HireNYC.

NYC Construction Loan Pilot Program

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 to learn more about the loan or contact 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.

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: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN

(NO TEXT ON THIS PAGE)

PROJECT ID: SE855

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. Schedule B: M/WBE Utilization Plan (if participation goals have been established)

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)
- 11. Any addenda issued prior to the receipt of bids

FAILURE TO SUBMIT ITEMS (4) THROUGH (11) 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.
- (2) If the bidder has any questions or requires additional information, please contact the Department of Design and Construction by phone (718-391- 2601) or by fax (718-391-2615).
- (3) <u>VENDEX QUESTIONNAIRES</u>: The Bidder is advised that Vendex Questionnaires and procedures have been changed. Vendex Questionnaires, as well as detailed instructions, may be obtained at <u>www.nyc.gov/vendex</u>. The bidder may also obtain Vendex forms and instructions by contacting the Agency Chief Contracting Officer or the contact person for this contract.
- (4) <u>SPECIAL EXPERIENCE REQUIREMENTS</u>: The Bidder is advised that Special Experience Requirements may apply to this contract. Such requirements are set forth on pages 3, 3a, 3b and 4 of this Bid Booklet.

SPECIAL NOTICE TO BIDDERS

SPECIAL EXPERIENCE REQUIREMENTS (Revised 03/2014)

(A) <u>SPECIAL EXPERIENCE REQUIREMENTS</u> FOR THE BIDDER: The Special Experience Requirements set forth below apply to the bidder. Compliance with such Special Experience Requirements will be determined solely by the City prior to an award of contract. Failure to comply with the Special Experience Requirements will result in rejection of the bid as non-responsive.

The requirements in this Section (A) apply to this contract where indicated by a blackened box (m).

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

last	nk Water Main Work: The entity that will perform the trunk water main work must, within the seven (7) consecutive years prior to the bid opening, have successfully completed in a timely on at least one (1) project similar in scope and type to the required work.
the I	Management Practice Work: Best Management Practice ("BMP") Work is any item of work in Bid Schedule that begins with the prefix "BMP". The entity that will perform any BMP Work, within the last five (5) consecutive years prior to the bid opening, have successfully completed in the last three (3) projects similar in scope and type to the required work.
indiv to the	professional services in connection with BMP Work, (i.e., monitoring and reporting services), the ridual who will perform the required services must, within the last five (5) consecutive years prior be bid opening, have successfully completed in a timely fashion at least three (3) projects similar in a and type to the required work. Additional requirements are set forth below.
	The individual serving as the Restoration Specialist (Construction Monitor) must be a Registered Landscape Architect licensed by the state of New York, or must have equivalent professional experience.
	The individual serving as the Erosion and Sediment Control Licensed/Certified Professional must be a Certified Professional in Erosion and Sediment Control (CPESC), certified by CPESC, Inc.
work	ro-Tunneling/Pipe Jacking Work: The entity that will perform the micro-tunneling/pipe jacking must, within the last five (5) consecutive years prior to the bid opening, have successfully pleted in a timely fashion at least two (2) projects similar in scope and type to the required work.
OTE	IER:

3

(B) <u>SPECIAL EXPERIENCE REQUIREMENTS FOR SPECIFIC AREAS OF WORK (to be provided after an award of contract):</u>

The requirements in this Section (B) apply to this contract where indicated by a blackened box (m).

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

Special Experience Requirements apply to the contractor, subcontractor or sub-subcontractor (hereinafter referred to as the "entity") that will perform any specific area of work indicated by a blackened box. The entity may have performed the required prior project(s) as a prime contractor, subcontractor or subsubcontractor.

- Hazmat Work: Hazmat Work is any item of work in the Bid Schedule that begins with the prefix 8.01. The entity that will perform any Hazmat Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least five (5) projects similar in scope and type to the required work.
- Pile, CFA Pile, and/or Mini-Pile Work: The entity that will perform the Pile, CFA Pile and/or Mini-Pile Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

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

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

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

	Engineer licensed by the state of New York requirements for prior projects.	s. Such individual must also comply with the abov
3	OTHER:	

- (C) <u>SPECIFICATIONS</u>: In the event of any conflict, omission or inconsistency between (1) the Specifications and/or Contract Drawings, and (2) the Special Experience Requirements in Section (B) of the Special Notice To Bidders, the special experience listed in the Specifications and/or Contract Drawings shall be controlling. The Special Experience Requirements in Section (B) of this Special Notice To Bidders are only for the convenience of the bidders.
- Experience Requirements, the bidder must complete and submit the Qualification Form included in the Bid Booklet. The City will only evaluate a project if the following criteria are met: (1) the project is described on the Qualification Form, and (2) all information on the Qualification Form is provided. The City will not evaluate any project which does not comply with the criteria set forth herein, including any project which is referred to only on the resume of an individual.

If Special Experience Requirements are indicated for any specific area of work, the submission requirement set forth above shall apply to the entity that will perform the specific area of work.

- (E) <u>CONDITIONS</u>: 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.
 - 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 (6) months or more from the inception of the bidding entity.
 - 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.
- (F) <u>JOINT VENTURES</u>: In the event the bidder is a joint venture, at least one firm in the joint venture must meet the above described experience requirements.

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: Fholie 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:

(NO TEXT ON THIS PAGE)

Project ID: SE855

ATTACHMENT 1 - BID INFORMATION

PROJECT ID: SE855 PIN: 8502016SE0002C

CITY OF NEW YORK	**	A-1				BID BO	OOKLET
Agency Contact Person		rraine Holley one: 718-391-2601	FA	X: 718-39	01-2615		
Performance and Paym Performance Security a Price.	ent Security nd Payment	: Required for cont Security shall each	racts in the ar be in an amo	mount of Sount equal	51,000,000 to 100% of	or more. the Contr	act
	(2) Ce	rtified Check in an ICE set forth on the	amount not le	ess than 2%	% of the TO	TAL BID)
	` '	ond in an amount no th on the Bid Form		% of the T	OTAL BII	O PRICE s	et
Bid Security:	security is	ty is required in the not required if the 1,000,000.00.	amount set for COTAL BID	orth below PRICE set	; provided, forth on th	however, le Bid For	bid m is
	Tiı	Yes, Mandatory: me and Date:cation:					
Pre-Bid Conference:		es					
	Tiı	me and Date: 11:00	A.M. on	MARC	H 8, 2017		
Bid Opening:	Fir	-30 Thomson Avenuest Floor Bid Procuring Island City, New	ement Room				
Submission of Bids To	Fir Lo	-30 Thomson Avenuest Floor Bid Procuring Island City, Newsfore 11:00 A.M. on	ement Room York 11101		17		
Documents Available A	Fir Lo	-30 Thomson Avenus Floor Bid Procuring Island City, New 30 A.M. to 4:00 P.M.	ement Room York 11101		day		
Description and Locat	Ap	: Construction Of Sopurtenances In, Goidental Thereto, Bo	lenwood Ro	oad, etc,	wers And y Together	water mair With All	ıs And Work

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LIST OF DRAWINGS

PROJECT ID: SE855 PIN: 8502016SE0002C

Sheet No.	Description
1	Title Sheet
2	Key Map
3-19	Plans and Profiles
20-25	Chambers Details
26-28	Miscellaneous Details
29-35	Traffic Signal Plans
MPT 1-3	Maintenance & Protection of Traffic
FD1	FDNY Fire Base Maps
B101-117	Boring Records
For Reference	ONLY
	Utility Drawings

(NO TEXT ON THIS PAGE)

Project ID: SE855

BID SCHEDULE

NOTICE TO BIDDERS

Items listed in this Bid Schedule which have one (1) digit followed by a decimal (e.g. 4.02 CA), excluding items beginning with the number "8.01", shall comply with the requirements of the corresponding numerical Sections of the NYCDOT Standard Highway Specifications as amended by Revisions To The New York City Department Of Transportation Standard Highway Specifications and I-Pages New Sections, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the number "8.01" (e.g. 8.01 C1) shall comply with the requirements of Specifications For Handling, Transportation And Disposal Of Nonhazardous And Potentially Hazardous Contaminated Materials, 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. 53.11 DR) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer and Water Main Specifications dated July 1, 2014, as amended by Sewer And Water Main Revisions To Specifications, herein Volume 3 of 3.

Items listed in this Bid Schedule which have two (2) digits beginning with the number "6" followed by a decimal (e.g. 60.13M0A24) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer and Water Main Specifications dated July 1, 2014, as amended by Sewer And Water Main Revisions To Specifications, herein Volume 3 of 3.

Items listed in this Bid Schedule which have two (2) digits beginning with the number "7" followed by a decimal (e.g. 70.81CB) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer and Water Main Specifications dated July 1, 2014, as amended by Sewer And Water Main Revisions To Specifications, 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 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 "UTL-" (e.g. UTL-6.01.8) are for Gas Cost Sharing (EP-7) work and shall comply with the requirements of Gas Cost Sharing (EP-7) Standard Specifications, herein Volume 3 of 3.

(NO TEXT ON THIS PAGE)



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION CONTRACT PIN:8502016SE0002C **DIVISION OF INFRASTRUCTURE - BUREAU OF**

PROJECT ID:SE855

BID SCHEDULE

- proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated 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 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 item numbers appliances of every description necessary to complete the entire work, as specified, and the removal of all in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and 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 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.
- Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the them. The pages of this Bid Schedule are numbered consecutively, as follows: B - 3 Through B - 39

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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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 **DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN**

CONTRACT PIN: 8502016SE0002C

OCIL 1 SECINO	COL P	COL 3. EKINERS. ESTRIATE OF CONTRIN	COLL 45 COLL COLL COLL COLL COLL COLL COLL COL	COL & COL & EXTENDED ANIOUNT (RES) (REJOURES)
001	4.02 AF-R ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	44,335.00	S.Y.	
005	4.02 CA BINDER MIXTURE	4,270.00	SNOT	
003	4.04 H CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	3,950.00	C.Y.	
004	4.05 AX HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	110.00	c.Y.	
002	4.08 AA CONCRETE CURB (18" DEEP)	800.00	L.F.	
900	4.08 BA CONCRETE CURB (21" DEEP)	510.00	L. F.	





CONTRACT PIN: 8502016SE0002C

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COL. 6 UNIT PRICE EXTENDED AMOUNT: (IN FIGURES) (IN FIGURES) DOLLARS CTS DOLLARS CTS						
COL 4	F.	L.F.	L.F.	LF.	LF.	S.F.
COL 3 ENGINEERS ESTINATE OF QUANTITY	320.00	740.00	550.00	400.00	515.00	5,400.00
COL 2: TEM NUMBER and DESCRIPTION	4.09 AD STRAIGHT STEEL FACED CONCRETE CURB (18" DEEP)	4.09 AE STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)	4.09 BD DEPRESSED STEEL FACED CONCRETE CURB (18" DEEP)	4.09 CD CORNER STEEL FACED CONCRETE CURB (18" DEEP)	4.09 CE CORNER STEEL FACED CONCRETE CURB (21" DEEP)	4.13 AAS 4" CONCRETE SIDEWALK (UNPIGMENTED)
COL.1 SEQ. NO	007	800	600	010	011	012



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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

ONIT PRICE EXTENDED ANOUNT (IN FIGURES)						
100 TO	S.F.	R. T.	ЕАСН	ЕАСН	ЕАСН	ЕАСН
COBS ENGINEER'S ESTIMATE OF GUANTITY	1,050.00	1,300.00	5.00	2.00	14.00	5.00
COL 2 TEM NUMBER and DESCRIPTION	4.13 BAS 7" CONCRETE SIDEWALK (UNPIGMENTED)	4.13 DE EMBEDDED PREFORMED DETECTABLE WARNING UNITS	4.16 AC TREES REMOVED (18" TO UNDER 24" CALIPER)	4.16 AD TREES REMOVED (24" CALIPER AND OVER)	4.16 CAA TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES	4.18 A MAINTENANCE TREE PRUNING (UNDER 12" CAL.)
COL. 1 SEG. NO	013	014	015	016	017	018





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855

BID SCHEDULE FORM

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4.18 B MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.) TREE CONSULTANT	20 P	ENGINEERS ESTIMATE OF QUANTITY 11.00	COL 4 COLUMITY IN THE UNITY PARTY COLUMINATE DOLUMINS EACH P/HR	COL. 5 UNIT PRICE (INFICURES) (INFICURES) (INFICURES) (INFICURES)
50.11MS040020 4'-0"W X 2'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	<u> </u>	265.00	F.	
50.11MS040026 4'-0"W X 2'-6"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	ш	1,305.00	<u> </u>	
50.11MS050026 5-0"W X 2-6"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER		255.00	<u>.</u>	
50.11MS050030 5-0"W X 3-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER		1,015.00	L.F.	



CONTRACT PIN: 8502016SE0002C NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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COL.6 CMIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS (CTS DOLLARS)				`		
COL.4 UNIT	F	п .	Ę.	Ę.	Ä.	ı,
COLS ENGINEER'S. ESTIMATE. OF QUANTITY	2,190.00	650.00	760.00	815.00	260.00	215.00
COL 2 THEM NUMBER and DESCRIPTION	50.11MS116 11'-6"W X 4'-0"H STORM SEWER	50.11MS130040 13:0"W X 4:0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.21C3C024D 24" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C030D 30" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C036D 36" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C038W 38"W X 24"H R.C.P. CLASS HE-III COMBINED SEWER, ON CONCRETE CRADLE
COL. 1 SEG. NO	025	026	027	028	029	030



PROJECT ID: SE855 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

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EXTENDED AMOUNT (IN FIGURES) DOLLARS Ľ. <u>ٿ</u> Ľ. Ľ. Ë. Ę. **BID SCHEDULE FORM** 760.00 770.00 500.00 710.00 255.00 255.00 OF QUANTITIES COLA ENGINEERS ESTINATE 42" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE 45"W X 29"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE 30"W X 19"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE 38"W X 24"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE 24" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE THEM NUMBER AND DESCRIPTION 50.21M3E030W 50.21M3E045W 50.21M3E038W 50.21M3E024D 50.21C3C042D **50.31CC15** SEQ. NO 032 033 035 930 83 031

15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE



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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

SEC. NO. 037 039 040 040	18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE 19" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE 15" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE 12" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE 15" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE 15" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE 15" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE 16" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE 18" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	ENGINEER'S ESTIMATE OF CLUANTITIV 1,595.00 95.00 210.00		COL B UNIT PRICE (IN FIGURES) DOLLARS CTS DOLLARS CTS CTS DOLLARS CTS CTS CTS CTS CTS CTS CTS CTS CTS CT	
045	51.11C001 CHAMBER NO. 1	1.00	ЕАСН		



COL. 1 SEC. NO.	Control of the Contro	ENGINEERS ESTINATE OF QUANTITY	COL 5 UNIT FOLLARS CTS	COL.6 EXTENDED AMOUNT (IN FIGURES) S DOLLARS CTS
_	51.11C002 CHAMBER NO. 2	1.00	EACH	
044	51.11C003 CHAMBER NO. 3	1.00	ЕАСН	
045	51.11C004 CHAMBER NO. 4	1.00	ЕАСН	
046	51.11C005 CHAMBER NO. 5	1.00	ЕАСН	
047	51.11C006 CHAMBER NO. 6	1.00	ЕАСН	
048	51.11C007 CHAMBER NO. 7	1.00	ЕАСН	



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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

COL. 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEERS ESTHATE OF QUANTITY	COL 4 COL 5 EX- UNIT PRICE EX- (IN FIGURES) UNIT FOLLARS	COL. 6 EXTENDED AMOUNT (IN FIGURES) POLLARS CTS
049	51.11C008 CHAMBER NO. 8	1.00	ЕАСН	
020	51.11P004 STANDARD 4:-0" DIAMETER PRECAST MANHOLE	5.00	ЕАСН	
051	51.11P005 STANDARD 5'-0" DIAMETER PRECAST MANHOLE	7.00	ЕАСН	
052	51.11P006 STANDARD 6'-0" DIAMETER PRECAST MANHOLE	3.00	ЕАСН	
053	51.11P007 STANDARD 7'-0" DIAMETER PRECAST MANHOLE	2.00	ЕАСН	
054	51.21A000000C ACCESS MANHOLE	21.00	ЕАСН	





CONTRACT PIN: 8502016SE0002C

COLS COLS UNIT PRICE (IN FIGURES) (IN FIGURES) DOLLARS CTS DOLLARS GTS						
GOL.	ЕАСН	ЕАСН	ЕАСН	ЕАСН	ЕАСН	ЕАСН
COL.3 ENGINEER'S ESTINATE OF QUANTITY	3.00	6.00	9.00	11.00	1.00	1.00
COL.2 TTEM NUMBER and DESCRIPTION	51.21A000000E ACCESS MANHOLE ON EXISTING SEWER	51.21S0A1000V STANDARD MANHOLE TYPE A-1	51.21S0A3000V STANDARD SHALLOW MANHOLE TYPE A-3	51.21S0B1000V STANDARD MANHOLE TYPE B-1	51.21S0E1038H STANDARD MANHOLE TYPE E-1 ON 38"W X 24"H H.E.R.C.P. SEWER	51.21S0E1045H STANDARD MANHOLE TYPE E-1 ON 45"W X 29"H H.E.R.C.P. SEWER
COL.1 SEQ. NO	055	950	057	058	620	090



CONTRACT PIN: 8502016SE0002C

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COL 5 COL 5 COL 6						
COL 4 ÚNIT	ЕАСН	ЕАСН	ЕАСН	ЕАСН	L.F.	ЕАСН
COL 3 ENGINEER'S ESTIMATE OF QUANTITY	55.00	2.00	33.00	11.00	1,980.00	5.00
COL. 2 TTEM NUMBER and DESCRIPTION	51.41S001 STANDARD CATCH BASIN, TYPE 1	51.41S003 STANDARD CATCH BASIN, TYPE 3	51.41W000 SHALLOW CATCH BASIN	51.42S1SO INCREMENTAL COST OF STANDARD CATCH BASIN TYPE 3 WITH CURB PIECE IN LIEU OF STANDARD CATCH BASIN TYPE 1	52.11D12 12" DUCTILE IRON PIPE BASIN CONNECTION	52.31V06C15 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER
COL 1 SEC. NO	061	062	£90	064	990	990



CONTRACT PIN: 8502016SE0002C

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COL 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) (IN FIGURES) DOLLARS OTS						
COL 4	ЕАСН	ЕАСН	ЕАСН	L.F.	L.F.	L.F.
COL 3 ENGINEERS ESTINIATE OF QUANTITY	60.00	2.00	5.00	1,240.00	220.00	13,185.00
COL. 2. TIEM NUMBER and DESCRIPTION:	52.31V06C18 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	52.31V08C15 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	52.31V08C18 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	52.41V06R 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.41V08R 8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	53.11DR TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS
COLT SEQ. NO	290	890	690	070	071	072



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COL 1 SEQ. NO	COL. 2 TTEM NUMBER and DESCRIPTION	GOL.3 ENGINEER'S ESTIMATE OF QUANTITY	COLA (I	COL. 5 COL. 5 CINT PRICE (IN FIGURES) (IN FIGURES) DOLLARS CIS DOLLARS CIS
073	54.12CS CLEANING OF DRAINAGE STRUCTURES	20.00	C.Y.	
074	55.11AB ABANDONING BASINS AND INLETS	11.00	ЕАСН	
075	6.02 AAN UNCLASSIFIED EXCAVATION	5,480.00	c.Y.	
076	6.02 XHEC INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) TRANSIT FACILITIES AND BUILDING VAULTS	18.00	c.Y.	
7.20	6.02 XSCW INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) TRANSIT FACILITIES	18.00	c.Y.	
078	6.23 AB REMOVE EXISTING FIRE ALARM POST	3.00	ЕАСН	





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6.23 BA FURNISH AND INSTALL FIRE ALARM POST AND SUBBASE IN ACCORDANCE WITH F.D. STD. DWG. #141 ACCORDANCE WITH F.D. STD. DWG. #141 6.23 BA FURNISH AND INSTALL 4-PAIR FIRE ALARM CABLE FURNISH AND INSTALL FIRE DEPARTMENT MANHOLE TYPE "A" WITH #144 & #1446 6.23 BF 6.23 BF AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES AND TERMINATE FIRE ALARM CABLES
6.23 BGSE FURNISH AND INSTALL 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION)



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EXTENDED AMOUNT IN FIGURES) DOLLARS EACH SETS S. T. Ę. Ę. **BID SCHEDULE FORM** 4.00 4.00 1,870.00 4,700.00 29,800.00 OF QUANTITIES ENGINEERS ESTIMATE COL. 3 FURNISH AND INSTALL 4" 90-DEGREE P.V.C. WIDE BEND, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141 OR #145AA FURNISH AND INSTALL 2 - 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 IN ONE TRENCH (WITHOUT PAVEMENT EXCAVATION, ONE ON TOP OF THE OTHER) FURNISH AND INSTALL FIRE ALARM PEDESTAL BUMPERS (2 REQUIRED PER SET) IN ACCORDANCE WITH F.D. STD. DWG. #168 TEMPORARY SIGNS TIMBER CURB 6.23 BHE 6.23 BGT 6.25 RS 6.26 SEQ. NO **COL. 1** 082 980 88 680 087



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6.28 AA LIGHTED TIMBER BARRICADES 6.40 D ENGINEER'S FIELD OFFICE (TYI THERMOPLASTIC REFLECTORI TEMPORARY PAVEMENT MARK 6.52 CG CROSSING GUARD 6.53	THEM.NUMBER and DESCRIPTION	SR'S FIELD OFFICE (TYPE D) 3,550.00 PLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	6.49 TEMPORARY PAVEMENT MARKINGS (4" WIDE) 6.52 CG CROSSING GUARD	8,905.00 L.F.
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COL.1 SEG. NO	COL. 2 [FEM NUMBER and DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF GLANTITIV	COL. 6 EXTENDED AMOUNT (IN FIGURES)
960	6.87 PLASTIC BARRELS	16,950.00	
097	60.11R520 FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	2,470.00	H.
860	60.11R606 FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	330.00	H.
660	60.11R608 FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	2,025.00	г.
100	60.11R612 FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	6,410.00	ш <u>'</u>
101	60.12D06 LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	365.00	F.



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COL 1 SEG. NO 102	COL.2 TTEM NUMBER and DESCRIPTION 60.12D08	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY 2,100.00	COL 4 COL 5 COL 5 COL 5 COL 5 COL 5 COL 4	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
103	LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS 60.12D12 LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	6,585.00	L.F.	
401	60.12D20 LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	2,540.00	L.F.	
105	60.13M0A24 FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24 -INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	19.00	TONS	
106	61.11DMM06 FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	33.00	EACH	



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COL.8 UNITERICE. (IN FIGURES) OUTARS CIS DOLLARS	}				
COLL4	EACH	ЕАСН	ЕАСН	ЕАСН	ЕАСН
COL 3 ENGINEERS ESTIMATE OF QUANTITY	6.00	18.00	6.00	3.00	5.00
COL. 2 ITEM NUMBER and DESCRIPTION	61.11DMM08 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11DMM12 FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11DMM20 FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11TWC03 FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11TWC04 FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
COL. 1 SEQ. NO.	107	108	109	110	=



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COL.8 COL.6 ENGINEERS: UNIT PRICE EXTENDED AMOUNT (IN FIGURES). (IN FIGURES) OF QUANTITY UNIT DOLLARS CIS	APPING	APPING	33.00 EACH	6.00 EACH	18.00 EACH	6.00 EACH
COL 2 THEM NUMBER and DESCRIPTION	61.11TWC06 FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11TWC08 FURNISHING AND DELIVERING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM06 SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM08 SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM12 SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM20 SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPI ETE WITH WEDGE TYPE RETAINER GLANDS
COL.1 SEQ. NO	112	113	114	115	116	117



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COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE OF GUANTITITY	COL 4 COL 5 COL 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) UNIT: DOLLARS CTS DOLLARS	. 6 AMOUNT (RES.) RRS CTS
118	61.12TWC03 SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	3.00	ЕАСН	
119	61.12TWC04 SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	5.00	ЕАСН	
120	61.12TWC06 SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	4.00	ЕАСН	
121	61.12TWC08 SETTING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	ЕАСН	
122	62.11SD FURNISHING AND DELIVERING HYDRANTS	33.00	ЕАСН	
123	62.12SG SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	33.00	ЕАСН	



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COL 5 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) DOLLARS GTS DOLLARS CTS						
COL 4	ЕАСН	ЕАСН	TONS	ЕАСН	ЕАСН	H.
COL 3 ENGINEERS ESTIMATE OF QUANTITY	32.00	96.00	33.00	15.00	151.00	170.00
COL 2 THEN NUMBER AND DESCRIPTION	62.13RH REMOVING HYDRANTS	62.14FS FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	63.11VC FURNISHING AND DELIVERING VARIOUS CASTINGS	64.11EL WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	64.11ST WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	64.12COEG CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)
20L1		125	126	127	128	129



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COL 5 COL 5 COL 6					
WITH LEFT	H.	, F.	ЕАСН	EACH	ЕАСН
ESTIMATE OF QUANTITY 1,020.00	170.00	1,020.00	1.00	7.00	5.00
O ITEM NUMBER and DESCRIPTION 64.12COLT CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	64.12ESEG EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	64.12ESLT EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	64.13WC08 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 8-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64.13WC12 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64.13WC20 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS
SEG NO	131	132	133	134	135



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4	COL.2 TIEW WINNERS and DESCRIPTION	COL3 ENGINEER'S ESTINATE OF GUANTITY	110 12	COL. 5 COL. 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS COTS DOLLARS	
65.11BR FURNISHING, DEI WASHERS, ETC.,	65.11BR FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	21,000.00	LBS.		
65.21PS FURNISHING AN Unit price bid sh	65.21PS FURNISHING AND PLACING POLYETHYLENE SLEEVE Unit price bid shall not be less than: \$ 0.50	10,900.00	描		
65.31FF FURNISHING, DI Unit price bid si	65.31FF FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$0.10	293,800.00	ი. ন.		
65.71SG FURNISHING, D SCREENED BR	65.71SG FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	850.00	C.Y.		
7.13 B MAINTENANCE OF SITE Unit price bid shall not I	7.13 B MAINTENANCE OF SITE Unit price bid shall not be less than: \$8,000.00	36.00	MONTH		
7.19 LOAD TRANSFER JOINT	FER JOINT	830.00	r.		



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COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS COL. 6	MI
142	7.36 PEDESTRIAN STEEL BARRICADES	24,150.00	LF.		
143	7.88 AA RODENT INFESTATION SURVEY AND MONITORING Unit price bid shall not be less than: \$10,400.00	1.00	L.S.		
144	7.88 AB RODENT BAIT STATIONS Unit price bid shall not be less than: \$60.00	458.00	ЕАСН		
145	7.88 AC BAITING OF RODENT BAIT STATIONS Unit price bid shall not be less than: \$9.50	458.00	ЕАСН		
146	7.88 AD WATERBUG BAIT APPLICATIONS Unit price bid shall not be less than: \$65.00	954.00	BLOCK		
147	70.12AN CONTINUOUS FLIGHT AUGER (CFA) PILES	19,630.00	V.F.		





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S COL 6 UNIT PRICE EXTENDED AMOUNT THE (IN FIGURES) TITY UNIT DOLLARS CTS DOLLARS	3.00 ЕАСН	17,900.000 S.Y.	51,945.00 L.F.	1.00 L.S.	1.00 L.S.
COL. 3 ENGINEERS ESTIMATE OF QUANTITY	70.12AT CONTINUOUS FLIGHT AUGER (CFA) PILES, LOAD TEST	70.21DK DECKING	70.31FN FENCING Unit price bid shall not be less than: \$2.00	70.41K081580001A SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING AND MAINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1 - SEVEN (7) STORY BRICK, RESIDENTIAL (523 EAST 108TH STREET)	70.41K081580001B SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING AND MAINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1 - THREE (3) STORY BRICK, RESIDENTIAL (270 STANILEY AVENUE)



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SEG. NO 153	COL. 2 TEM NUMBER and DESCRIPTION 70.41K081580001C	COL.3 ENGINÉER'S ESTIMATE OF QUANTITY	COL4 UNIT	COL. 5. UNIT PRICE ED (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES:) DOLLARS:
	SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING AND MAINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1 - THREE (3) STORY BRICK, RESIDENTIAL (330 STANLEY AVENUE)				
154	70.51EO EXCAVATION OF BOULDERS IN OPEN CUT	50.00	C.Y.		
	Unit price bid shall not be less than: \$ 75.00				
155	70.61RE ROCK EXCAVATION	00.09	C.Y.		
156	70.71SB STONE BALLAST	217.00	C.Y.		
	Unit price bid shall not be less than: \$ 15.00				
157	70.81CB	10,135.00	C.Y.		
	Unit price bid shall not be less than: \$ 15.00				
					-



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COL. 1 SEQ. NO	COL 2 TEM NUMBER and DESCRIPTION	COL: 3 ENGINEERS ESTMATE OF QUANTITY	20L4	COL 5 UNIT PRICE (IN FIGURES)	DUNT (8)
164	73.61AT ADDITIONAL STONE BALLAST Unit price bid shall not be less than: \$ 15.00	20.00			
165	76.11CR CONSTRUCTION REPORT	1.00	l S		
166	76.21MR MONITORING AND POST-CONSTRUCTION REPORT	1.00	L'S.		
167	8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	20,000.00	SNOT		
168	8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	16.00	SETS		
169	8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	1,000.00	TONS		



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COL 1 SED. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL3 ENGINEER'S ESTINATE OF QUANTITY	COL 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) UNIT DOLLARS CTS DOLLARS
170	8.01 S HEALTH AND SAFETY	1.00	L.S.
171	8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	720.00	DAY
172	8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER	24.00	SETS
173	8.02 A SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	400.00	n.
174	8.02 B SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	40.00	н.



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COL.1 SEQ.NO	COL. 2 ITEM NUMBER and DESCRIPTION	ENGINEER'S ESTIMATE ÖF GUÄNTTITY	00L4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL.6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	<u>8</u>
175	9.04 HW ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 50,000.00	1.00	ю. Ю.	T	000	0
176	9.30 STORM WATER POLLUTION PREVENTION	1.00	L.S.			
177	SL-20.02.02 FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	6.00	ЕАСН			
178	SL-20.08.01 REMOVE STANDARD TYPE ANCHOR BOLT CONCRETE FOUNDATION	6.00	ЕАСН			
179	SL-21.03.02 FURNISH AND INSTALL TYPE 2S, 4S, 6S, 8S OR 12S LAMPPOST WITH TRANSFORMER BASE	0009	ЕАСН			



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ESTINA	RS COL 4 COL 5 COL 8 UNIT PRICE EXTENDED AMOUNT E (IN FIGURES) (IN FIGURES) TITY DOLLARS (CTS DOLLARS CTS	6.00 EACH	6.00 ЕАСН	6.00 EACH	13.00 EACH	1.00 EACH	2.00 EACH
SEG. NG 180 SL-21.09.(REMOVE STA ETC. WITH AI ATTACHIMEN 181 SL-22.16.(FURNISH AN SPECIFICATI SPECIFICATI GAS MAIN C	GOL. 2 ITEM NUMBER and DESCRIPTION	SL-21.09.05 REMOVE STANDARD FABRICATED STEEL, SPUN ALUMINUM NO. 10, ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY	SL-22.16.05 FURNISH AND INSTALL ROADWAY TYPE LED FIXTURE AS PER SPECIFICATION 466 WITH PEC RECEPTACLE AND PEC	SL-26.01.04 FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT	UTL-6.01.1 GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,040.00	UTL-6.01.2 GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	UTL-6.01.2A GAS MAIN CROSSING 38"W X 24"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,870.00



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COL.1 SEG, NO	COL. 2 TTEM NUMBER and DESCRIPTION	COL 3 ENCINEERS ESTIMATE OF DIRWITHY	COL 4 COL 5 COL 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES)	100
186	UTL-6.01.2B GAS MAIN CROSSING 30"W X 19"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$1,770.00	1.00		2
187	UTL-6.01.4A GAS MAIN CROSSING 4'-0"W X 2'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (56.01) Unit price bid shall not be less than: \$ 1,960.00	1.00	ЕАСН	
188	UTL-6.01.4C GAS MAIN CROSSING 45"W X 29"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,960.00	2.00	ЕАСН	
189	UTL-6.01.4D GAS MAIN CROSSING 4'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	5.00	ЕАСН	
190	UTL-6.01.4N GAS MAIN CROSSING 4'-6"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	1.00	ЕАСН	
191	UTL-6.01.5C GAS MAIN CROSSING 5'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00	1.00	ЕАСН	





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192 193	COL. 2 TIEM NUMBER and DESCRIPTION UTL-6.01.5H GAS MAIN CROSSING 5'-0"W X 3'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$ 2,340.00 UTL-6.01.7OO GAS MAIN CROSSING 13'-0"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$ 2,940.00	COL.3 ENGINEER'S. ESTIMATE. OF QUANTITY 1.00 3.00	COL. 4. LINIT EACH EACH	UNIT PRICE EXTEN (IN PRICE) (IN DOLLARS CTS (IN	COL.6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
191	UTL-6.01.7VV GAS MAIN CROSSING 11-6"W X 4-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,840.00	2.00	ЕАСН		
195	UTL-6.01.8 GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (\$6.01) Unit price bid shall not be less than: \$465.00	90.00	ЕАСН		
196	UTL-6.01.9 GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 485.00	32.00	ЕАСН		
197	UTL-6.02 EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (\$6.02) Unit price bid shall not be less than: \$715.00	4.00	ЕАСН		



CONTRACT PIN: 8502016SE0002C

1/25/2017 1:02 PM

COL 1 SEC. NO	COL. 2 TEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	COL.4 UNIT	COLS UNIT PRICE EXT (IN FIGURES) COLS	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
198	UTL-6.03 REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (\$6.03) Unit price bid shall not be less than: \$ 15.00	500.00	.E.		
199	UTL-6.03.1 REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (FOR NATIONAL GRID WORK ONLY) (S6.03) Unit price bid shall not be less than: \$25.00	7,500.00	<u>.</u>		
200	UTL-6.04 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04) Unit price bid shall not be less than: \$35.00	175.00	ЕАСН		
201	UTL-6.05 ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05) Unit price bid shall not be less than: \$65.00	175.00	ЕАСН		
202	UTL-6.06 SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06) Unit price bid shall not be less than: \$ 180.00	3,500.00	C.Y.		
203	UTL-6.06A SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG) (\$6.06A) Unit price bid shall not be less than: \$230.00	100.00	C.Y.		



BID SCHEDULE FORM

CONTRACT PIN: 8502016SE0002C

1/25/2017 1:02 PM

\$150,000:00 150,000:00 C.≺ Ę. 100.00 1.00 PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 150,000.00 GAS INTERFERENCES AND ACCOMMODATIONS Unit price bid shall not be less than: \$ 100.00 Unit price bid shall not be less than: \$ 0.00 TEST PITS FOR GAS FACILITIES (S6.07) UTL-GCS-2WS UTL-6.07 205 8

SUB-TOTAL: \$

206	206 6.39 A	1.00	L.S.			
	MOBILIZATION			•••		
	BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE	- 111				
					- 1	-

TOTAL BID PRICE: \$

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 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: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN

Name of Bidder:			
Date of Bid Opening:			
Bidder is: (Check one, whichever applies)	Individual ()	Partnership ()	Corporation ()
Place of Business of Bidder:			
Bidder's Telephone Number:	Fax	Number:	
Bidder's E-Mail Address:			
Residence of Bidder (If Individual):			
If Bidder is a Partnership, fill in the followin	g blanks:		
Names of Partners		Residence of	Partners
If Bidder is a Corporation, fill in the following	ng blanks:		
Organized under the laws of the State of			
Name and Home Address of President:			
Name and Home Address of Secretary:			
Name and Home Address of Treasurer:			
	<u> </u>		DID BOOK! E

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 Contractor have been finally accepted by the City. In the event of any breach or violation of the foregoing, the Contractor may be subject to damages, liquidated or otherwise, cancellation of the Contract and suspension as a bidder for a period of three years. (The words, "the bidder", "he", "his", and "him" where used herein shall mean the individual bidder, firm, partnership or corporation executing the bid).

6. Compliance Report

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

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

- 7. By submission of this bid, the bidder certifies that it now has and will continue to have the financial capability to fully perform the work required for this contract. Any award of this contract will be made in reliance upon such certification. Upon request therefor, the bidder will submit written verification of such financial capability in a form that is acceptable to the department.
- 8. In accordance with Section 165 of the State Finance Law, the bidder agrees that tropical hardwoods, as defined in Section 165 of the State Finance Law, shall not be utilized in the performance of this Contract, except as the same are permitted by the foregoing provision of law.
- 9. The bidder has visited and examined the site of the work and has carefully examined the Contract in the form approved by the Corporation Counsel, and will execute the Contract and perform all its items, covenants and conditions, and will provide, furnish and deliver all the work, materials, supplies, tools and appliances for all labor and materials necessary or required for the hereinafter named work, all in strict conformity with the Contract, for the prices set forth in the Bid Schedule:
- 10. <u>M/WBE UTILIZATION PLAN</u>: By signing its bid, the bidder agrees to the Vendor Certification and Required Affirmations set forth below, unless a full waiver of the Participation Goals is granted. The Vendor Certification and Required Affirmations will be deemed to satisfy the requirement to complete Section V of Part II of Schedule B: M/WBE Utilization Plan.

Section V: Vendor Certification and Required Affirmations:

I hereby:

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

(NO TEXT ON THIS PAGE)

BID FORM	
	-

PROJECT ID: SE855

<u>TOTAL BID PRICE</u>: 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)

\$

BIDDER'S SIGNATURE AND AFFIDAVIT

Bidder:		
Ву:	(Signature of Partner or corporate officer)	-
Attest: (Corporate Seal)	Secretary of Corporate Bidder	

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

BID FORM (TO BE NOTARIZED)

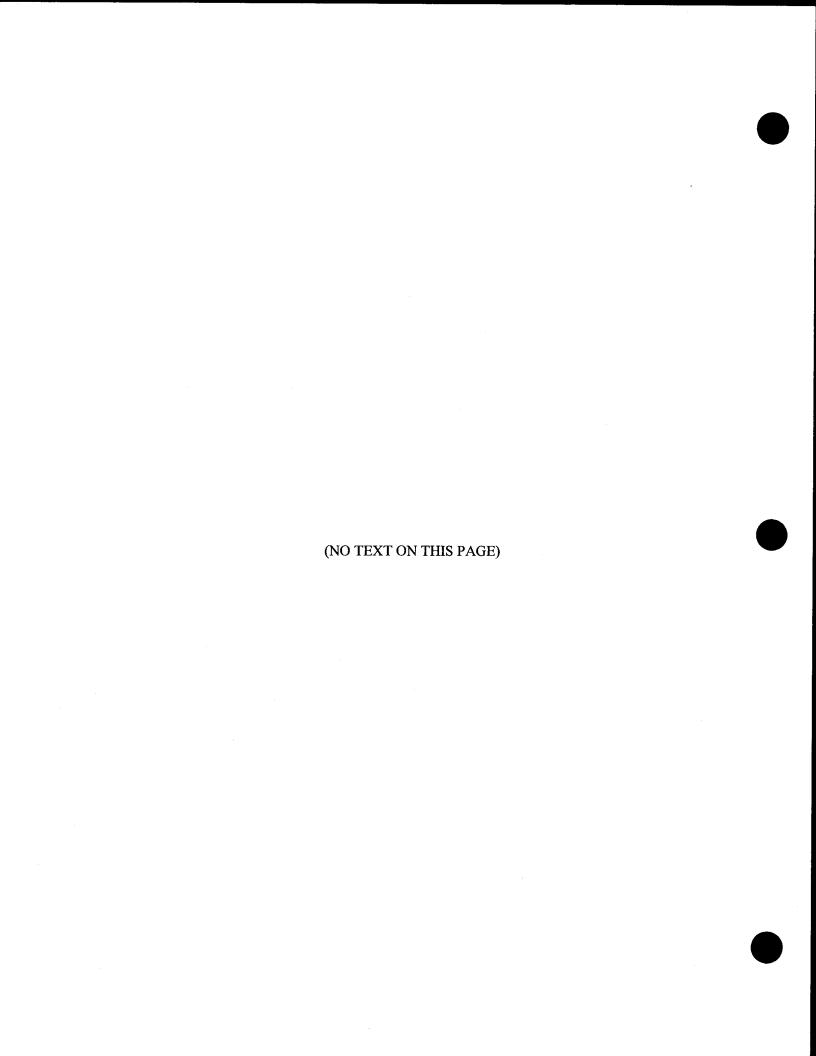
<u>AFFIDAVIT</u>	WHERE BIDDER IS AN INDIVIDUAL •
STATE OF NEW YORK, COUNTY OF	4 4 4 4
I am the person described in and who execut respects true.	being duly sworn says: ted the foregoing bid, and the several matters therein stated are in all
Subscribed and sworn to before me this day of,	(Signature of the person who signed the Bid)
Notary Public	
<u>AFFIDAVIT</u>	WHERE BIDDER IS A PARTNERSHIP
STATE OF NEW YORK, COUNTY OF	
bid. I subscribed the name of the firm theret respects true.	being duly sworn says: the firm described in and which executed the foregoing o on behalf of the firm, and the several matters therein stated are in all
Subscribed and sworn to before me this day of,	(Signature of Partner who signed the Bid)
Notary Public	
<u>AFFIDAVIT</u>	WHERE BIDDER IS A CORPORATION
STATE OF NEW YORK, COUNTY OF	ss: being duly sworn says:
	of the above named corporation whose name is subscribed to and which
executed the foregoing bid. I reside at I have knowledge of the several matters there	ein stated, and they are in all respects true.
Subscribed and sworn to before me this,,	(Signature of Partner who signed the Bid)
Notary Public	-
CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION	C-5 BID BOOKLET JULY 2016

AFFIRMATION

,		PROJECT ID: SE855				
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						
(If non	e, the b	idder shall insert the word "None" in the space provided above.)				
Full N	ame of	Bidder:				
City	ss	State Zip Code	- · · · · · · · · · · · · · · · · · · ·			
CHEC /_/	A - B -	BOX AND INCLUDE APPROPRIATE NUMBER: Individual or Sole Proprietorship* SOCIAL SECURITY NUMBER Partnership, Joint Venture or other unincorporated organization EMPLOYER IDENTIFICATION NUMBER				
/	C-	Corporation EMPLOYER IDENTIFICATION NUMBER				
By:						
<u> </u>	Sig	nature				
Title:_	_					
	If a co	orporation, 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.



BID BOND 1 FORM OF BID BOND

hereinafter referred to as the "Principal", and				
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				
(\$				
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				
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 Principa and such of them as are corporations have cause				
presents to be signed by their proper officers the		day of	_,	_•
			•	
(Seal)			(I	L.S.)
		Principal	`	,
	By:			
(Seal)				
(Bear)		Surety		
				• .
	By:			

BID BOND 3

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of	County of	ss:
On this	day of	ss: ss:, before me personally came wn, who, being by me duly sworn, did depose and say
	to me kno	wn, who, being by me duly sworn, did depose and say
that ha racides at		
that he is the	of	e foregoing instrument; that he knows the seal of said
the corporation of	iescrinea in ana which executed m	trument is such seal; that it was so affixed by order of
•		Notary Public
	ACKNOWLEDGMENT OF P	RINCIPAL, IF A PARTNERSHIP
	C. Arref	00*
State of	County of	ss:
On this	to me kno	own 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 exe	described in and who executed the foregoing cuted the same as and for the act and deed of said
firm.		
	× .	
		Notary Public
	ACKNOWLEDGMENT OF P	RINCIPAL, IF AN INDIVIDUAL
State of	County of	ss:
On this	day of	ss: ,, before me personally appeared nown and known to me to be the person described in
	to me kr	nown and known to me to be the person described in
and who execute	ed the foregoing instrument and ac	knowledged that he executed the same.
		•
		•
		Notary Public
		THE THE PART OF TH
	AFFIX ACKNOWLEDGMENTS	AND JUSTIFICATION OF SURETIES

(NO TEXT ON THIS PAGE)

M/WBE PROGRAM

M/WBE UTILIZATION PLAN

<u>M/WBE Program Requirements</u>: The requirements for the M/WBE Program are set forth on the following pages of this Bid Booklet, in the section entitled "Notice to All Prospective Contractors".

Schedule B: M/WBE Utilization Plan: Schedule B: M/WBE Utilization Plan for this Contract is set forth in this Bid Booklet on the pages following the section entitled "Notice to All Prospective Contractors". The M/WBE 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 an M/WBE Utilization Plan (Part II) with its bid.

Waiver: The bidder may seek a full or partial pre-award waiver of the Participation Goals in accordance with the "Notice to All Prospective Contractors" (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 Participation Goals is set forth in the M/WBE Utilization Plan (Part III).

Rejection of the Bid: The bidder must complete Schedule B: M/WBE Utilization Plan (Part II) set forth in this Bid Booklet on the pages following the section entitled "Notice to All Prospective Contractors". A Schedule B submitted by the bidder which does not include the Vendor Certification and Required Affirmations (See Section V of Part II) will be deemed to be non-responsive, unless a full waiver of the Participation Goals is granted (Schedule B, Part III). In the event that the City determines that the bidder has submitted a Schedule B where the Vendor Certification and Required Affirmations are completed but other aspects of the Schedule B are not complete, or contain a copy or computation error that is at odds with the Vendor Certification and Required Affirmations, 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 Schedule B 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) calendar days from the date of mailing or upon delivery, if delivered.

<u>Impact on LBE Requirements</u>: If Participation 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.

NOTICE TO ALL PROSPECTIVE CONTRACTORS

PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT

ARTICLE I. M/WBE PROGRAM

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). Section 6-129 establishes the program for participation in City procurement ("M/WBE Program") by minority- owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan"), and are detailed below. The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129. Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts. Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

PART A

<u>PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD</u> <u>AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS</u>

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

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

- 2. If Participation Goals have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the Participation Goals, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.
- 3. If Participation Goals have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant Participation Goal, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

- A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant **Participation Goal**. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.
- 4. A. If **Participation Goals** have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals**, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre- award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.
- B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE Participation Goals, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part II (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the Participation Goals that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed nonresponsive.
- (ii) Participation Goals on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If Participation Goals have been established on a Task Order, a contractor shall be required to submit a Schedule B M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. The contractor must engage in good faith efforts to meet the Participation Goals as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.
- C. THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART II). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS (SEE SECTION V OF PART II) WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART III). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO

SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.

- 5. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multiyear contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.
- 6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at www.nyc.gov/buycertified, by emailing DSBS at buyer@sbs.nyc.gov, by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting www.nyc.gov/getcertified, emailing MWBE@sbs.nyc.gov, or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).
- 7. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, with each voucher for payment, and/or periodically as Agency may require, submit statements, certified under penalty of perjury, which shall include, but not be limited to,: the total amount the Contractor paid to its direct subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount direct subcontractors paid to indirect subcontractors; the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor by the Contractor, and, where applicable, hired by any of the Contractor's direct subcontractors; and the dates and amounts paid to each MBE or WBE. The Contractor shall also submit, along with its voucher for final payment: the total amount it paid to subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount its direct subcontractors paid directly to their indirect subcontractors; and a final list, certified under penalty of perjury, which shall include the name, address and contact information of each subcontractor that is an MBE or WBE, the work performed by, and the dates and amounts paid to each.
- 8. If payments made to, or work performed by, MBEs or WBEs are less than the amount specified in the Contractor's M/WBE Utilization Plan, Agency shall take appropriate action, in accordance with Section 6-129 and Article II below, unless the Contractor has obtained a modification of its M/WBE Utilization Plan in accordance with Section 6-129 and Part A, Section 11 below.
- 9. Where an M/WBE Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds the greater of 10 percent of the Contract or Task Order, as applicable, or \$500,000, Agency shall review the scope of work for the Contract or Task Order, as applicable, and the scale and types of work involved in the change order, and determine whether the **Participation Goals** should be modified.

- 10. Pre-award waiver of the Participation Goals. (a) A bidder or proposer, or contractor with respect to a Task Order, may seek a pre-award full or partial waiver of the Participation Goals in accordance with Section 6-129, which requests that Agency change one or more Participation Goals on the grounds that the Participation Goals are unreasonable in light of the availability of certified firms to perform the services required, or by demonstrating that it has legitimate business reasons for proposing a lower level of subcontracting in its M/WBE Utilization Plan.
- (b) To apply for a full or partial waiver of the Participation Goals, a bidder, proposer, or contractor, as applicable, must complete Part III (Page 5) of Schedule B and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing to the Agency by email at zhangji@ddc.nyc.gov or via facsimile at (718) 391-1886. Bidders, proposers, or contractors, as applicable, who have submitted requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.
- (c) If the Agency determines that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.
- (d) Agency may grant a full or partial waiver of the Participation Goals to a bidder, proposer or contractor, as applicable, who demonstrates—before submission of the bid, proposal or Task Order, as applicable—that it has legitimate business reasons for proposing the level of subcontracting in its M/WBE Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder, proposer or contractor, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts represented by the Participation Goals. In making such determination, Agency may consider whether the M/WBE Utilization Plan is consistent with past subcontracting practices of the bidder, proposer or contractor, as applicable, has made efforts to form a joint venture with a certified firm, and whether the bidder, proposer, or contractor, as applicable, has made good faith efforts to identify other portions of the Contract that it intends to subcontract.
- 11. Modification of M/WBE Utilization Plan. (a) A Contractor may request a modification of its M/WBE Utilization Plan after award of this Contract. PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor may request a Modification of its M/WBE Utilization Plan as part of its bid submission. The Agency may grant a request for Modification of a Contractor's M/WBE Utilization Plan if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the Participation Goals. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:
- (i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
- (ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
- (iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;
- (iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the M/WBE Utilization Plan, and for which the Contractor claims an inability to retain MBEs or WBEs;

- (v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
- (vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;
- (vii) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;
- (viii) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

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

- (b) The Agency may modify the **Participation Goals** when the scope of the work has been changed by the Agency in a manner that affects the scale and types of work that the Contractor indicated in its **M/WBE** Utilization Plan would be awarded to subcontractors.
- 12. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an M/WBE Utilization Plan and has committed to subcontract work to MBEs and/or WBEs in order to meet the **Participation Goals**, the Contractor will not be deemed in violation of the M/WBE Program requirements for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.
- 13. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its M/WBE Utilization Plan, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.
- 14. If Participation Goals have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

PART B: MISCELLANEOUS

- 1. The Contractor shall take notice that, if this solicitation requires the establishment of an M/WBE Utilization Plan, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the M/WBE Utilization Plan.
- 2. Pursuant to DSBS rules, construction contracts that include a requirement for an M/WBE Utilization Plan shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.
- 3. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and/or WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and/or WBEs in contracts.
- 4. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).

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

ARTICLE II. ENFORCEMENT

- 1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.
- 2. Whenever Agency believes that the Contractor or a subcontractor is not in compliance with Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to any M/WBE Utilization Plan, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering the Contractor an opportunity to be heard. Agency shall then conduct an investigation to determine whether such Contractor or subcontractor is in compliance.
- 3. In the event that the Contractor has been found to have violated Section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to, any M/WBE Utilization Plan, Agency may determine that one of the following actions should be taken:
- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the Contractor is in default of the Contract;
- (d) terminating the Contract;
- (e) declaring the Contractor to be in breach of Contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the Contract;
- (h) assessing actual and consequential damages;
- (i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;
- (j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
- (k) taking any other appropriate remedy.
- 4. If an M/WBE Utilization Plan has been submitted, and pursuant to this Article II, Section 3, the Contractor has been found to have failed to fulfill its Participation Goals contained in its M/WBE Utilization Plan or the Participation Goals as modified by Agency pursuant to Article I, Part A, Section 11, Agency may assess liquidated damages in the amount of ten percent (10%) of the difference between the dollar amount of work required to be awarded to MBE and/or WBE firms to meet the Participation Goals and the dollar amount the Contractor actually awarded and paid, and/or credited, to MBE and/or WBE firms. In view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of Contractor's failure to meet the Participation Goals, the foregoing amount is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such failure, and not as a penalty. Agency may deduct and retain out of any monies which may become due under this Contract the amount of any such liquidated damages; and in case the amount which may become due under this Contract shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.

- 5. Whenever Agency has reason to believe that an MBE and/or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129(c)(8)), or has violated any provision of Section 6-129, Agency shall notify the Commissioner of DSBS who shall determine whether the certification of such business enterprise should be revoked.
- 6. Statements made in any instrument submitted to Agency pursuant to Section 6-129 shall be submitted under penalty of perjury and any false or misleading statement or omission shall be grounds for the application of any applicable criminal and/or civil penalties for perjury. The making of a false or fraudulent statement by an MBE and/or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.
- 7. The Contractor's record in implementing its M/WBE Utilization Plan shall be a factor in the evaluation of its performance. Whenever Agency determines that a Contractor's compliance with an M/WBE Utilization Plan has been unsatisfactory, Agency shall, after consultation with the City Chief Procurement Officer, file an advice of caution form for inclusion in VENDEX as caution data.

Project ID: SE855

Tax ID #:				APT PIN		85	5017B0074	
SCHEDULE B - M/WBE Part I: M/WBE Participa								
Part I to be completed	l by contracting as	gencv						
Contract Overview		gy				•		
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Bid/Proposal Response Date	MARCH 8, 20	17				•		,
Contracting Agency	Department of De	sign and Co	nstruction					
Agency Address	30-30 Thomson A	venue City	Long Isla	nd City	State	NY	Zip Code	11101
Contact Person	Emmanuel K. Cha		Title				Analvst	
Telephone #	(718) 391-1450		Email		esem@d			
Project Description (atta	ıch additional pages if ned	cessany)						
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SCHEDULE B - Part II: M/WBE Parti					
Part II to be completed by the bidder/pr Please note: For Non-M/WBE Prime of entire contract, you must obtain a FUL submitting it to the contracting agency granted, it must be included with your bid or proposal.	Contractors who will L waiver by complet to the No.	ing tion	the Walver Application	on pa	ges 17 and 18 and time
Section I: Prime Contractor Contact In	formation				
Tax ID#			FMS Vendor ID#		
Business Name			Contact Person		• • •
Address					
Telephone #	Email	l			
Section II: M/WBE Utilization Goal Calc PRIME CONTRACTOR ADOPTING A	ulation: Check the a	pplic	cable box and complete	subso	ection.
For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency M/WBE Participation Goals.	Total Bid/Proposal Value		Agency Total Participation Goals (Line 1, Page 13)		Calculated M/WBE Participation Amount
Calculate the total dollar value of your total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an M/WBE prime contractor or Qualified Joint Venture.					
Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation.	\$	X			\$ Line 2
PRIME CONTRACTOR OBTAINED PA PARTICIPATION GOALS	RTIAL WAIVER AP	PRO	OVAL: ADOPTING MO	DIF	ED M/WBE
For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Modified M/WBE Participation Goals.	Total Bid/Proposal Value		Adjusted Participation Goal (From Partial Walver)		Calculated M/WBE Participation Amount
Calculate the total dollar value of your total oid that you agree will be awarded to MWBE subcontractors for services and/or credited to an MWBE prime contractor or Qualified Joint Venture.					
Please review the Notice to Prospective Contractors for more information on how to btain credit for M/WBE participation.	\$				\$
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and/or the value of any work subcabove, as applicable. The value	with an M/WBE partner, in which the value of the M/WBE partner's participation contracted to other M/WBE firms is at least the amount located on Lines 2 or 3 of any work subcontracted to non M/WBE firms will not be credited towards in Goals. Tractor that will enter into subcontracts with M/WBE firms the value of which is at
least the amount located on Lines	s 2 or 3 above, as applicable.
Section IV: General Contract Info	ormation
What is the expected percenta services, regardless of M/WBE	ge of the total contract dollar value that you expect to award in subcontracts for status? %
	Enter brief description of the type(s) and dollar value of subcontracts for all/any services you plan on subcontracting if awarded this contract. For each item, indicate whether the work is designated for participation by MBEs and/or WBEs and the time frame in which such work is scheduled to begin and end. Use additional sheets if necessary. 1
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✓ Scopes of Subcontract Work	8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
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Tax ID #:	APT E- PIN #:	85017B0074
Section V: Vendor Certification and Required Affirmations I hereby: 1) acknowledge my understanding of the M/WBE participation pertinent provisions of Section 6-129 of the Administrative Cod 129"), and the rules promulgated thereunder; 2) affirm that the information supplied in support of this M/WBE 3) agree, if awarded this Contract, to comply with the M/WBE the pertinent provisions of Section 6-129, and the rules promut deemed to be material terms of this Contract; 4) agree and affirm that it is a material term of this Contract the value of the M/WBE Participation Goals to certified MBEs and/ or such goals are modified by the Agency; and 5) agree and affirm, if awarded this Contract, to make all reaso M/WBE Participation Goals, or If a partial waiver is obtained or to meet the modified Participation Goals by soliciting and obtain and/or WBE firms.	requirements as sede of the City of New E Utilization Plan is a participation require ligated thereunder, and the Vendor will aw for WBEs, unless a conable, good faith elections.	w York ("Section 6- true and correct; ements of this Contract, all of which shall be ward the total dollar full waiver is obtained fforts to meet the
Signature	te	

Title ____

Print Name

SCHEDULE B – PART III – REQUEST FOR WAIVER OF M/WBE PARTICIPATION REQUIREMENT

Contract Overview		FMS Vendor ID #
Tax ID #		LINIS ACTION IN A
Business Name		F11
Contact Name	Telephone #	Email
Type of Procurement	☐ Competitive Sealed Bids ☐ Other	
APT E-PIN # (for this procurement):		Contracting Agency.
%	Goals as described in bid/solicitatio	n documents
•	ency M/WBE Participation Goal	
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for	services and/or credited to an M/WBE	<u>good faith</u> by the bidder/proposer to be subcontracted Prime Contractor or Qualified Joint Venture.
Basis for Waiver Reque	est: Check appropriate box & explain	in detail below (attach additional pages if needed)
☐ Vendor does not subc	ontract services, and has the capac	ity and good faith intention to perform all such work
he vendor will self-perfor Vendor has other legi	rm and subcontract to other vendors timate business reasons for proposi	Attach subcontracting plan outlining services that sor consultants.) ing the M/WBE Participation Goal above. Explain
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periormance of Such contracts.	rformed for other entities. Include info Add more pages if necessary, rformed fewer than 3 New York City cont	rmation for each subcontract awarded in racts.)
TYPE OF Contract	ENTITY	DATE COMPLETED
Manager at entity that hired	d vendor (Name/Phone No./Email)	
Total Contract Amount \$	Total Amount Subcontracted \$	
Type of Work Subcontracted		
TYPE OF Contract	AGENCY/ENTITY	DATE COMPLETED
Manager at agency/entity that hi	<u> </u>	
Total Contract	Total Amount	
Amount \$	Subcontracted \$	·
Item of Work	Item of Work Subcontracted	
Subcontracted and	and Value of	Item of Work Subcontracted and
Value of subcontract	subcontract	Value of subcontract
TYPE OF Contract	AGENCY/ENTITY	DATE COMPLETED
	vendor (Name/Phone No./Email)	
Total Contract Amount \$	Total Amount Subcontracted \$	
Item of Work	Item of Work	
Subcontracted and	Subcontracted and Value of	Item of Work
Value of subcontract	subcontract	Subcontracted and Value of subcontract
VENDOR CERTIFICATION: I he correct, and that this request is r	ereby affirm that the information supp made in good faith.	lied in support of this waiver request is true and
Signature:		Date:
Print Name:		Title:
Shaded area below is for agency	completion only	
AGENCY OFFISE CONFRACTI. Signatura	NG ORRIGERASPASSOVAL	Date:
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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 20	110

(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 two 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 program/s have successfully passed the two year Probation period following the initial registration date of such program/s with the New York State Department of Labor.

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 ("APQ")

idder Name:
roject ID Number:
he Bidder MUST complete, sign, and submit this Apprenticeship Program Questionnaire with its bid. 1. Does the bidder have any Apprenticeship Program agreement(s) appropriate for the type ar scope of work to be performed? (Note: Participation may be by either direct sponsorship through collective bargaining agreement(s).)
YESNO
2. Has/have the bidder's Apprenticeship Program agreement(s) been registered with, and approve by the New York State Commissioner of Labor ("NYSDOL Commissioner")?
YESNO
3. Has/have the bidder's Apprenticeship Program successfully passed the two-year Probation period following its initial registration with the New York State Department of Labor ("NYSDOL")?
YESNO

If the answers to Questions 1, 2, and 3 are "Yes". The bidder shall, in the space below (and/or attached herewith where applicable), provide the contact information for such Apprenticeship Program(s) as well as information demonstrating that such Apprenticeship Program(s) have passed the two-year Probation period following its initial registration with the NYSDOL. (The bidder may attach additional pages if necessary).

- Where the bidder directly sponsors any such apprenticeship Program(s), the bidder shall provide the following:
 - o The trade classification(s) covered by such program(s), and the date(s) such program(s) was/were approved by the NYSDOL Commissioner; and/or
 - O A copy of a letter(s) from the NYSDOL, on NYSDOL's letterhead, executed by an official thereof, which verifies/verify the trade classification(s) covered by such program(s), and the date(s) such program(s) was/were approved by the NYSDOL Commissioner and the Active status of such program(s).
- Where the bidder participates in any such Apprenticeship Program(s) through its membership in an employer organization(s) that directly sponsors such program(s) or where the employer association(s) participates in such program(s) through collective bargaining, the bidder shall provide the following:
 - The contact information for the employer organization(s), and the apprenticeable trade(s) covered pursuant to the bidder's affiliation therewith, and the date such program(s) was/were approved by the NYSDOL Commissioner; or
 - A letter(s) from such employer organization(s), on letterhead of such organization(s), executed by an officer, delegate or official thereof, which verifies/verify the trade classification(s) covered by such program(s) was/were approved by the NYSDOL Commissioner, and that the bidder is both a member in good standing of the identified employer organization and is subject to the provisions of the Apprenticeship Program agreement(s) sponsored thereby.

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APPRENTICESHIP PROGRAM QUESTIONNAIRE ("APQ")

The contact in trade(s) cover A letter(s) fro executed by a status as a sig	nformation fed pursuant om such coll an officer, on natory/partion	or such coll to the bidde lective barg delegate or cipant in go	ective barger's affiliation aining entity official the	aining ent on therewi y(ies), on reof, which	th; letterhead o ch verifies/v	of such er verify the	ntity(ies bidder
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Project ID.	
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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) e	employees or less	
Greater the	an ten (10) employees	
Company has previously worked for DDC	YES	NO
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)	9	•

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.

contractors with les	s than three years o	of experience, the EMR wi	ll be considered to be 1.00].
YEAR	INTR	RASTATE RATE	<u>INTER</u> STATE RATE
			
contractor must at	tach, to this quest		nree years is greater than 1.00, the nation for the rating and identify alting in that rating.
4. OSHA Informa	tion:	·	
YES			tion issued by OSHA or New York City within the last three years.
YES	work-related	l fatalities) or an incident i ork-related in-patient hosp	ng OSHA notification within 8 hours (a requiring OSHA notification within 24 italizations, all amputations and all
employees, on a yea	rly basis to comple s". This form is co	ete and maintain on file the	es employers with ten or more form entitled "Log of Work-related OSHA 300 Log (OSHA 200 Log
The OSHA 300 Log employees.	must be submitted	I for the last three years for	r contractors with more than ten
The Contractor must payroll records for t			y its employees, as reflected in
past three years. T For each given yea Ilnesses reported	The Incident Rate or, the total numl on the OSHA 30	e is calculated in accorda ber of incidents is the to	ne Injuries (the Incident Rate) for the ince with the formula set forth below otal number of non-fatal injuries and ours represents the equivalent of 10
ncident Rate =			f Incidents X 200,000
	· · · · · · · · · · · · · · · · · · ·	Total Number of Hours	Worked by Employees
YEAR	TOTAL NUMB	ERS OF HOURS WORKED EMPLOYEES	BY INCIDENT RATE
		~	

Project ID.

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	Projec	et(s)
J.	Daici	I CI IUI III aucc	OT.	TICITOMS	\mathbf{p}		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

YES	NO	Contractor previously audited by the DDC Office of Site Safety.
¥		DDC Project Number(s):,
YES	NO	Accident on previous DDC Project(s). DDC Project Number(s):
YES	NO	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].
		DDC Project Number(s):
Date:		By: (Signature of Owner, Partner, Corporate Officer)
		Title:

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 27 through 29 of this Bid Booklet. The Project Reference Form consists of 3 parts: (1) Contracts Completed by the Bidder, (2) Contracts Currently Under Construction by the Bidder, and (3) Pending Contracts Not Yet Started by the Bidder.
- (B) Copy of License: If required, the bidder must submit a copy of the license under which the bidder will be performing the work. Such license must clearly show the following: (1) Name of the Licensee, (2) License Number, and (3) Expiration date of the License. A copy of the license will be required from bidders for the following contracts: Plumbing Work, Electrical Work and Asbestos Abatement.
- (C) Financial Information: If required, the bidder must submit the financial information described below:
 - (1) Audited Financial Statements: Financial statements (Balance Sheet and Income Statement) of the entity submitting the bid, as audited by an independent auditor licensed to practice as a certified public accountant (CPA). Audited financial statements for the three most recent fiscal years must be submitted. Each such financial statement must include the auditor's standard report.

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

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

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

- (D) **Project Specific Information**: If required, the bidder must submit the project specific information described below:
 - (1) Statement indicating the number of years of experience the bidder has had and in what type of construction.
 - (2) Resumes of all key personnel to be involved in the project, including the proposed project superintendent.
 - List of significant pieces of equipment expected to be used for the contract, and whether such equipment is owned or leased.
 - (4) Description of work expected to be subcontracted, and to what firms, if known.
 - (5) List of key material suppliers.
 - (6) Preliminary bar chart time schedule
 - (7) Contractor's expected means of financing the project. This should be based on the assumption that the contractor is required to finance 2X average monthly billings throughout the contract period.
 - (8) Any other issues the contractor sees as impacting his ability to complete the project according to the contract.

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

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

PROJECT REFERENCES – CONTRACTS COMPLETED BY THE BIDDER

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

	 	 ——			
Architect/Engineer Reference & Tel. No. if different from owner					
Owner Reference & Tel. No.					
Date Completed					
Contract Amount (\$000)					
Contract					
Project & Location					

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION

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BID BOOKLET JULY 2016

PROJECT REFERENCES - CONTRACTS CURRENTLY UNDER CONSTRUCTION BY THE BIDDER Ä

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

Architect/En	gneer Reference & Tel. No. if different	from owner			
Owner	Kererence & Tel. No.				
Date	Complete				
Uncompleted	(2008)				
Subcontracted to Others (\$000)					
Contract	(\$000)				
Contract	Туре	•			
	Project & Location				

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION

BID BOOKLET JULY 2016

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PROJECT REFERENCES – PENDING CONTRACTS NOT YET STARTED BY THE BIDDER ن

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

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

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION

BID BOOKLET JULY 2016

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(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:	<u> </u>
Proposed Contract Amount:	
Description and Address of Proposed Contrac	pt:
Names of Subcontractors in the amount of 750 state indicating that trades will be subcontract	0,000 or more on this contract (if not known at this time, so
proposed contract with the above-named own	ve-named contractor to certify that said contractor's er or city agency is less than \$1,000,000. This affirmation No. 50 (1980) as amended and its implementing regulations.
Date	Signature
SUBMITTED HEREWITH MAY RESULT IN THE CITY AND THE BIDDER OR CONTRAC	IFICATION OF ANY DATA OR INFORMATION THE TERMINATION OF ANY CONTRACT BETWEEN CTOR AND BAR THE BIDDER OR CONTRACTOR FROM I FOR A PERIOD OF UP TO THREE YEARS. FURTHER, RIMINAL 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:

	Bidder's Address:
	Bidder's Telephone Number:
	Bidder's Fax Number:
	Date of Bid Opening:
	PROJECT ID:
	lex Compliance: To demonstrate compliance with Vendex requirements, the Bidder shall complete r 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, 9th
	Floor, New York, New York 10007.
	Date of Submission:
	By:
	By:(Signature of Partner or corporate officer)
	Print Name:
(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.
	Ву:
	By:(Signature of Partner or corporate officer)
	Print Name:

(NO TEXT ON THIS PAGE)

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,, being duly sworn, state that I have read
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:
Vendor's Address:
Vendor's EIN or TIN: Requesting Agency:
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:
Signature date on change submission for the submitting vendor:





Principal Name	Date of signature on last full Principal Questionnaire	Date(s) of signature on submission of change
1		
3		
4		and the second second
5		
6		
Check if additional changes were su	bmitted and attach a document with	the date of additional submissions
Certified By:		
Name (Print)		
Title		
Name of Submitting Entity		
Signature		Date
Notarized By:		
Notary Public	County License Issued	License Number
en en en en en en en en en en en en en e		
Sworn to before me on:		

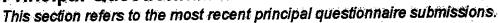
Certificate of No Change Form



- 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 ,	. being duly	sworn, state the	at i have read
Enter Your Name	,		
and understand all the items contained in the as identified on page one of this form and contained. I further certify that, to the best of are full, complete, and accurate; and that, to those answers continue to be full, complete	ertify that as of this date, the first date, the first section of the best of my knowledge	ese items have n and belief, the	not ose answers
In addition, I further certify on behalf of the principal questionnaire(s) and any submissi not changed and have been verified and co and accurate.	on of change identified on p	page two of this	form have
Lundarstand that the City of New York will r	ale on the infermentian accord	liad in Abia aastit	n na vista de la composición dela composición de la composición de la composición dela composición de la composición dela composición dela composición de la composición de la composición de la composición dela composición de la composición dela composici
I understand that the City of New York will readditional inducement to enter into a contra			ication as
	ct with the submitting entity.		n sa sa sa sa sa sa sa sa sa sa sa sa sa
additional inducement to enter into a contra Vendor Questionnaire This section	ct with the submitting entity. on is required. ubmitted for the vendor doin		n was ninger a san ninger a san ninger a san ninger a san ninger a san ninger a san ninger a san ninger a san Pinanger a san ninger a s
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Vendor Questionnaire This section This refers to the vendor questionnaire (s) so Name of Submitting Entity: Vendor's Address: Vendor's EIN or TIN:	ct with the submitting entity. on is required. ubmitted for the vendor doin Requesting Agency: rent? (Please circle one)	ng business with Yes No	

Principal Questionnaire





Principal Name	on last full Principal Questionnaire	Date(s) of signature on submission of change
1		
	a same a same a same a same a same a same a same a same a same a same a same a same a same a same a same a sam	
Check if additional changes were submitted	led and attach a document with the	date of additional submission
ertification This section is required is form must be signed and notarized.	red. Please complete this twice. Co	pies will not be accepted.
ertified By:		
Name (Print)		
Title		
Name of Submitting Entity		
Signature		Date
Notarized By:		
Notary Public	County License Issued	License Number
Swom to before me on:		

Mayor's Office of Contract Services 253 Broadway, 9th Floor New York, NY 10007 Phone: 212 788 0018 Fax: 212 788 0049

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:

- 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
- 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 <u>IRAN DIVESTMENT ACT</u>

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. **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

CONSTRUCTION EMPLOYMENT REPORT INSTRUCTIONS

Fax: (212) 618-8879

WHO MUST FILE A CONSTRUCTION EMPLOYMENT REPORT

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

A Construction Employment Report (ECONTRACT FUNDING SOURCE	CONTRACTOR	CONTRACT VALUE	SUBMISSION REQUIREMENT
Federal/Federally assisted	Prime and subcontractors	\$10,000 or greater	
	Prime contractor	\$1,000,000 or greater	Construction Employment Report
City and state funded		\$750,000 or greater	
	Subcontractor	Less than \$750,000	Less than \$750,000 Certificate (City/State Only)

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" certificate.

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.
- 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 7 – 11: Please provide the required contact information for your company. All contracts must have a designated Equal Employment Officer.

Question 12: If you are a subcontractor, you must state the name of the contractor for whom you are providing the construction services.

Question 13: Please provide the number of permanent employees in your company.

Question 14a-g: 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 15 – 18: 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 18:

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 19:

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 20a 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. 20a, 20b, etc.)
- Questions 21a h: Inquires about the manner/methods by which you comply with the requirements of the Immigration Reform and Control Act of 1986 (IRCA).
- Question 22: Inquires into where and how i-9 forms are maintained and stored.
- Questions 23a 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. Copes of the medical information questionnaire and instructions must be submitted with the Employment Report.
- Question 24: Indicate the existence and location of all statements of your firm's Equal Employment Opportunity policy and attach a copy of each statement.
- Question 25: Submit any current Affirmative Action Plan(s) created pursuant to Executive Order 11246.
- Question 26: 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 27: 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)	Nature of the complaint(s)	Position(s) of the complainant(s)	Was an investigation conducted? Y/N	Current status of the disposition	
			1//N		j

Question 28:

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:

-	Name(s) of complainant(s)	2. Administrative agency or court in which action	Nature of the complaint(s)	4. Current status	5. If not pending, the complaint's disposition
L		was filed			omplaines disposition

Question 29:

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 30:

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 Minonty 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.

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

GENERAL INFORMATION

1.	Your contractual relationship in this contract is:	rime contractor_x_ Subcontractor
1a.	Are M/WBE goals attached to this project? Yes	No
2.	Please check one of the following if your firm would lik City of New York as a:	e information on how to certify with the
	Minority Owned Business EnterpriseWomen Owned Business EnterpriseDisadvantaged Business Enterprise	Locally Based Business Enterprise Emerging Business Enterprise
2a.	If you are certified as an MBE, WBE, LBE, EBE or DI certified with? A	BE, what city/state agency are you are you DBE certified? Yes No
3.	Please indicate if you would like assistance from SBS contracting opportunities: Yes No	in identifying certified M/WBEs for
4.	Is this project subject to a project labor agreement? Y	es No
5.	Are you a Union contractor? Yes No If y with	es, please list which local(s) you affiliated
6.	Are you a Veteran owned company? Yes No	
PAR	TI: CONTRACTOR/SUBCONTRACTOR INFORMATIO	DN .
7.	en en en general de la companya de la companya de la companya de la companya de la companya de la companya de La companya de la co	en en en en en en en en en en en en en e
•	Employer Identification Number or Federal Tax I.D.	Email Address
8.		
.	Company Name	
9.		
	Company Address and Zip Code	
10.		
	Chief Operating Officer	Telephone Number
11.		
	Designated Equal Opportunity Compliance Officer (If same as Item #10, write "same")	Telephone Number
12.		
	Name of Prime Contractor and Contact Person (If same as Item #8, write "same")	

13.	Number of employees in your company:	
14.	Contract information:	
	(a)	(b)
	(a) Contracting Agency (City Agency)	(b) Contract Amount
	(c) Procurement Identification Number (PIN)	(d) Contract Registration Number (CT#)
	(a)	(f)
	(e) Projected Commencement Date	(f) Projected Completion Date
	(g) Description and location of proposed contrac	
15.	Has your firm been reviewed by the Division of La and issued a Certificate of Approval? Yes N	
	If yes, attach a copy of certificate.	
16.	Has DLS within the past month reviewed an Empand issued a Conditional Certificate of Approval?	
	If yes, attach a copy of certificate.	
W	OTE: DLS WILL NOT ISSUE A CONTINUED CER ITH THIS CONTRACT UNLESS THE REQUIRED INDITIONAL CERTIFICATES OF APPROVAL HA	CORRECTIVE ACTIONS IN PRIOR
17.	Has an Employment Report already been submit Employment Report) for which you have not yet a Yes No If yes,	
	Date submitted:	
	Agency to which submitted:	
	Name of Agency Person:	
	Contract No:	
18.	Has your company in the past 36 months been a Labor, Office of Federal Contract Compliance Pro	
	If yes,	

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	(a) Nam	ne and address of OFCCP office.
		s a Certificate of Equal Employment Compliance issued within the past 36 months? No
	if ye	s, attach a copy of such certificate.
•	(c) Wer	e any corrective actions required or agreed to? Yes No
	If ye	s, attach a copy of such requirements or agreements.
	(d) Wer	e any deficiencies found? Yes No
	If ye	es, attach a copy of such findings.
19.	is respo	company or its affiliates a member or members of an employers' trade association which insible for negotiating collective bargaining agreements (CBA) which affect construction ng? Yes No
	If yes, a	ttach a list of such associations and all applicable CBA's.
PAR	ΓII: DOC	UMENTS REQUIRED
20.	brochur	following policies or practices, attach the relevant documents (e.g., printed booklets, es, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation ractices. 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).
	(i)	Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?

	(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 j	oh.	Yes	No_				
	(e) To some applicants	OD	Yes_	No_				
	(f) To all applicants		Yes	No_				
	(g) To some employees		Yes_	No_				
	(h) To all employees		Yes_	No_				
	Explain where and how completed I-9 maintained and made accessible.	Forms	, with the	ir suppo	rtive d	ocumei	ntation, a	are
	Does your firm or any of its collective medical examination? Yes No	bargain –	ing agree	ements	require	job ap	plicants	to take a
	If yes, is the medical examination give	en:						
	(a) Prior to a job offer	⁄es	No					
	· · · · · · · · · · · · · · · · · · ·	res res	No					
	• •	res res	No					
	· ·							
	(a) To all application		No					
	1 1	/es /es	No No					
	(e) Only to some applicants If yes, list for which applicants below a	es and atta	No			l exami	nation o	r
•	(e) Only to some applicants If yes, list for which applicants below a questionnaire forms and instructions under the control of the control	es	No ich copies for these ortunity (EEO) p	ations.	Yes	No	
•	(e) Only to some applicants If yes, list for which applicants below a questionnaire forms and instructions u	es	No ich copies for these ortunity (EEO) p	ations.	Yes	No	
	(e) Only to some applicants If yes, list for which applicants below a questionnaire forms and instructions under the control of the control	rmative	No ich copies for these cortunity ((s) where action pl	EEO) p these v	olicy? vritten	Yes	Nos are loc	ated.
	(e) Only to some applicants If yes, list for which applicants below a questionnaire forms and instructions used to be a written equal employment of yes, list the document(s) and page representation. Does the company have a current affirm Minorities and Women Individuals with handicaps	rmative	ortunity ((s) where	EEO) potential these values an(s) (A	olicy? vritten	Yes	Nos are loc	- ated.
	(e) Only to some applicants If yes, list for which applicants below a questionnaire forms and instructions used to be a written equal employment of yes, list the document(s) and page representation. Does the company have a current affirm Minorities and Women Individuals with handicaps Other. Please specify Does your firm or collective bargaining	rmative	ortunity ((s) where	EEO) potential these values an(s) (A	olicy? vritten	Yes	Nos are loc	- ated.

27.	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.
28.	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.
29.	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).
30.	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).

SIGNATURE PAGE

submitted with the understanding requirements, as contained in Ch amended, and the implementing	ith is true and complete to the bes g that compliance with New York (napter 56 of the City Charter, Exec Rules and Regulations, is a contr	City's equal employment cutive Order No. 50 (1980), as
Cautagatayla Nama		
Contractor's Name	·	
Name of person who prepared the	nis Employment Report	Title
Name of official authorized to sig	n on behalf of the contractor	Title
Telephone Number		
Signature of authorized official	·	Date
	abor Services reserves the right to	in any given trade based on Chapter request the contractor's workforce
	ith the above mentioned requirem o the withholding of final payment	
termination of the contract between	of any data or information submiten the City and the bidder or confee years. Further, such falsification	ractor and in disapproval of future
Charter Chapter 56 of the City C		harge of DLS' responsibilities under 0 (1980) and the implementing Rules hall be confidential.
	Only original signatures accep	ted.
Sworn to before me this	day of 20	
Notary Public	Authorized Signature	Date

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CONTRACT BID INFORMATION: USE OF SUBCONTRACTORS/TRADES FORM A

£	
Yes	
contract?	
on this	
or work	
contract	
to subco	
ou plan	
Do you	

If yes, complete the chart below. 2

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.

		1		
SUBCONTRACTOR'S NAME*	OWNERSHIP (ENTER APPROPRIATE CODE LETTERS BELOW)	WORK TO BE PERFORMED BY SUBCONTRACTOR	I KADE 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

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 Males and Females by trade classification on this project, enter the projected workforce for the charts below.

Frade:		:	Σ	MALES					FEMALES	LES			
		(1) White	Riack	(3)	(4)	(2)	9) Whii			(8)	(6)	(10)	
Union Affiliation, if applicable	L	Non Hisp.	Non Hisp.	Hisp.	Asian	Native Amer.	Non Hisp.	Non Hisp.	-	Hisp.	Asian	Native Amer.	
Total (Col. #1-10):	7		. '										
	I												
Total Minority, Male & Female (Col. #2,3,4,5,7,8,9, & 10):	∢							-					
Total Female (Col. #6 – 10):	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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USE ONLY: File No.

Trade:			,	MALES				11	FEMALES		
		(1) White	(2) Black	(3)	(4)	(2)	(6) White	(7) Black	(8)	(6)	(10)
Union Affiliation, if applicable		Non Hisp.	Non Hisp.	Hisp.	Asian	Native Amer.	Non Hisp.	Non Hisp.	Hisp.	Asian	Native Amer.
Total (Col. #1-10):	٠	· ·									
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Total Minority, Male & Female (Col. #2,3,4,5,7,8,9, & 10):	∢			,							
Total Female (Col. #6 – 10):	TRN										
	TOT										

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

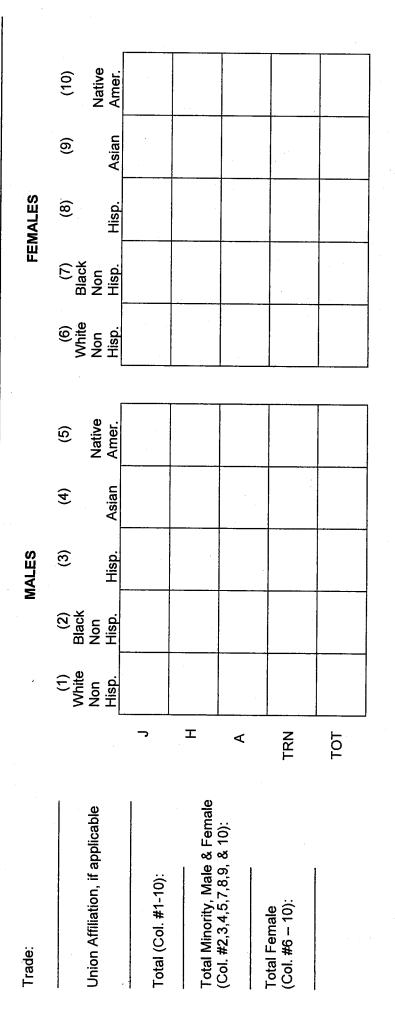
FORM C: CURRENT WORKFORCE

TRADE CLASSIFICATION CODES

(J) Journeylevel Workers (H) Helper (TOT) Total by Column

(A) Apprentice (TRN) Trainee

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



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

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USE ONLY: File No. FOR OFFIG

Trade:			2	MALES				T.	FEMALES		
Union Affiliation if applicable		(1) White Non	(2) Black Non	(3)	4)	(5) Native	(6) White Non	(7) Black Non	(8)	(6)	(10) Native
		Hisp.	Hisp.	Hisp.	Asian	Amer.	Hisp.	-	Hisp.	Asian	Amer.
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(Col. #2,3,4,5,7,8,9, & 10):	∢				:						1
Total Female (Col. #6 – 10):	TRN										
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(i.e., unions, government employment office, job tap center, community outreach)?		
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What are the recruitment sources for you projected hires		

(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

GENERAL INFORMATION

	Your contractual relationship in this contract is: Prime contractor Subcontractorx_
	Are M/WBE goals attached to this project? Yes No
	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 EnterpriseLocally Based Business EnterpriseEmerging Business EnterpriseDisadvantaged Business Enterprise
	If you are certified as an MBE, WBE, LBE, EBE or DBE, what city/state agency are you certified with? Are you DBE certified? Yes No
	Please indicate if you would like assistance from SBS in identifying certified M/WBEs for contracting opportunities: Yes No
	Is this project subject to a project labor agreement? Yes No
	Are you a Union contractor? Yes No If yes, please list which local(s) you affiliated with
	Are you a Veteran owned company? Yes No
₹T	I: CONTRACTOR/SUBCONTRACTOR INFORMATION
	Employer Identification Number or Federal Tax I.D. Email Address
	Company Name
	Company Address and Zip Code
	Company Macross and Espains
	Chief Operating Officer Telephone Number
	Designated Equal Opportunity Compliance Officer Telephone Number (If same as Item #10, write "same")
	Name of Prime Contractor and Contact Person (If same as Item #8, write "same")

13.	Number of employees in your company:	
14.	Contract information:	
	(a)	(b)
	(a) Contracting Agency (City Agency)	(b) Contract Amount
	(c)	(d)
	(c) Procurement Identification Number (PIN)	(d) Contract Registration Number (CT#)
	(e)	(f)
	(e) Projected Commencement Date	(f) Projected Completion Date
	(g) Description and location of proposed contract	at:
15.	Has your firm been reviewed by the Division of L and issued a Certificate of Approval? Yes N	abor Services (DLS) within the past 36 months
	If yes, attach a copy of certificate.	
16.	Has DLS within the past month reviewed an Empand issued a Conditional Certificate of Approval?	ployment Report submission for your company Yes No
	If yes, attach a copy of certificate.	
W	OTE: DLS WILL NOT ISSUE A CONTINUED CER ITH THIS CONTRACT UNLESS THE REQUIRED ONDITIONAL CERTIFICATES OF APPROVAL HA	CORRECTIVE ACTIONS IN PRIOR
17.	Has an Employment Report already been submit Employment Report) for which you have not yet in Yes No If yes,	ted for a different contract (not covered by this eceived compliance certificate?
	Date submitted:	
	Agency to which submitted:	
	name of Agency Person:	
	Telephone:	
18.	Has your company in the past 36 months been a Labor, Office of Federal Contract Compliance Pro	udited by the United States Department of ograms (OFCCP)? Yes No
	If yes,	

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	(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
w.,	If yes, attach a copy of such findings.
19.	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.
PAR	II: DOCUMENTS REQUIRED
20.	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?

(a) Prior to job offer	YesNo
b) After a conditional job offer	Yes No
c) After a job offer	Yes No
d) Within the first three days on	
e) To some applicants	Yes No
f) To all applicants	Yes No
g) To some employees	Yes No
h) To all employees	YesNo
Explain where and how complete naintained and made accessible	ed I-9 Forms, with their supportive documentation, are e.
loes your firm or any of its collenedical examination? Yes less, is the medical examination	
you, is the modical examination	ii giveii.
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	YesNo
e) Only to some applicants	Yes No
yes, list for which applicants be uestionnaire forms and instructi	elow and attach copies of all medical examination or ions utilized for these examinations.
	ployment opportunity (EEO) policy? Yes No page number(s) where these written policies are located.
oes the company have a currer Minorities and Women	
Individuals with handicaps Other. Please specify	
Other. Please specify	aining agreement(s) have an internal grievance procedu
Other. Please specifyooes your firm or collective barga	aining agreement(s) have an internal grievance procedus No

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27.	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.
28.	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.
29.	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).
30.	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).

SIGNATURE PAGE

I, (print name of authorized official	al signing)		h	ereby certify that
the information submitted herewi	th is true and com	plete to the be	st of my knowledge	and helief and
submitted with the understanding	that compliance	with New York	City's equal employ	vment
requirements, as contained in Ch	napter 56 of the C	ity Charter, Exe	ecutive Order No. 5	0 (1980) as
amended, and the implementing	Rules and Regula	ations. is a cont	tractual obligation	l also agree on
benait of the company to submit	a certified copy of	f payroll records	s to the Division of	Labor Services on
a monthly basis.				
Contractor's Name				
Contractor's Name				
Name of person who prepared th	is Employment R	eport	Title	
		•		
Name of Michigan				
Name of official authorized to sign	n on behalf of the	contractor	Title	
Telephone Number				
		•		•
Signature of authorized official	4		Date	
If confined and found to 1				
If contractors are found to be und	erutilizing minoriti	ies and females	s in any given trade	based on Chapter
56 Section 3H, the Division of Lal	or Services rese	rves the right to	request the contra	ctor's workforce
data and to implement an employ	ment program.			
Contractors who fail to comply wit	th the above men	tioned requirem	conto or are found t	o ho in
noncompliance may be subject to	the withholding c	of final navment	ients of are loung t	o be in
in production and the contract of the contract	and wannedding c	or illiai paymeni	•	
Willful or fraudulent falsifications	of any data or info	ormation submit	ted herewith may r	esult in the
termination of the contract between	en the Citv and the	e bidder or con	tractor and in disan	proval of future
contracts for a period of up to five	years. Further,	such falsification	n mav result in civil	and/and or
criminal prosecution.				
Ta 46 - 2.4 - 1 - 20 - 1 - 1				
To the extent permitted by law an	d consistent with	the proper disc	harge of DLS' resp	onsibilities under
Charter Chapter 56 of the City Ch	arter and Executi	ve Order No. 5	0 (1980) and the im	plementing Rules
and Regulations, all information p	rovided by a cont	ractor to DLS s	hall be confidential	•
	Only original sig	natures accep	ted.	
,		•		
• • • • • • • • • • • • • • • • • • • •				
Sworn to before me this	day of	20		
			•	
Notary Public	Authorized Sig	gnature	Date	

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CONTRACT BID INFORMATION: USE OF SUBCONTRACT STRADES FORM A

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Yes
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Do you

If yes, complete the chart below. 7

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

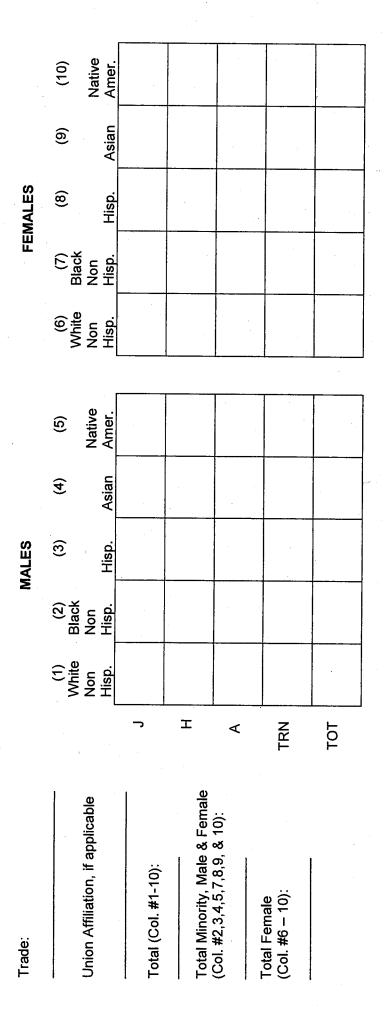
FORM B: PROJECTED WORKFORCE

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.



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

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Revised 8/13 FOR OFFIT USE ONLY: File No.

Trade:			Σ	MALES				ш	FEMALES			
		(1) White	(2) Black	(3)	<u>4</u>	(2)	(6) White	(7) Black	(8)	(6)	(10)	
Union Affiliation, if applicable		Non Hisp.	Non Hisp.	Hisp.	Asian	Native Amer.	Non Hisp.		Hisp.	Asian	Native Amer.	
Total (Col. #1-10):	7											
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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 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.

		Ξ		MALES (3)	(4)	(2)	9	E 6	FEMALES		6
Union Affiliation, if applicable		White Non	Black Non			Native	White	Black		<u>`</u>	
		Hisp.	Hisp.	Hisp.	Asian	Amer.	Hisp.	Hisp.	Hisp.		. Asian
Total (Col. #1-10):	7										
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Total Minority, Male & Female	Ξ										
(Col. #2,3,4,5,7,8,9, & 10):	∢										
(Col. #6 – 10):	TRN				·		·	14.1			
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What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

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Trade:			2	MALES			-		E	FEMALES		
Union Affiliation if applicable		(1) White	(2) Black	(3)	(4)	(5) Native		(6) White	(7) Black	(8)	(6)	(10) Native
		Hisp.	Hisp.	Hisp.	Asian	Amer.	.	Hisp.	Hisp.	Hisp.	Asian	Amer.
Total (Col. #1-10):	7					:						
Total Minority, Male & Female	T ·		· · ·				<u> </u>		-			
(Col. #2,3,4,5,7,8,9, & 10):	∢											
Total Female (Col. #6 – 10):	TRN						<u> </u>					
	TOT						<u> </u>		·			
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What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?		
What are		
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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 _							Fi	le Nu	mber	,		
			LESS TI		50,000 SU Y, STATE				CATE			
Are yo	ou currently	y certified as	one of the	followir	ng? Please	e check ye	s or no:					Ÿ
MBE	Yes	No	WBE	Yes _	No	LB	E Y	es	_No			
DBE	Yes_	No	EBE	Yes _	No							
If you	are certifie	ed as an MBE	, WBE, LI	BE, EBE	or DBE, v	vhat city/st	ate age	ncy a	re you c	ertified	d with?	
Please	e check on	ne of the follo	wing if you	ır firm w	ould like in	formation						
Mi	nority Owr	ned Business	Enterpris	е			_Locall	y base	ed Busir	ess E	nterprise	•
W	omen Owr	ned Business	Enterpris	е			_Emer	ging	Busine	ss En	terprise	
Di	sadvantag	ed Business	Enterprise	9		•						
Comp	any Name	• • • • • • • • • • • • • • • • • • •				Emp	oyer ide	entific	ation Nu	mber	or Fede	ral Tax I.D
Comp	any Addre	ss and Zip C	ode	-			, a pass					· · · · · · · · · · · · · · · · · · ·
Conta	ct Person	(First Name,	Last Nam	e)			Т	elepho	one Nun	nber		· .
Fax N	umber	·					E	-mail	Address			
Descr	iption and	location of pr	oposed s	ubcontra	act:	· 						
Are yo	ou a Union	contractor?	Yes	_ No	If yes,	, please lis	t which	local(s) you a	ffiliate	d with	
Are yo	ou a Veter	an owned co	mpany?	Yes	No	-						
	rement Ide	entification Nonly)	umber (PI	N)			ontract		on Numb	per (C	T#)	
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(ICIP projects only)	Contract Amount	
Charter Chapter 56, Executive (I subcontractor to certify that said subcontractor's ency is less than \$750,000. This affirmation is ma Order No. 50 (1980) and the implementing Rules.	ade in accordance with NYC
contract between the City and the	s of any data or information submitted herewith made in bidder or contractor and in disapproval of future ation may result in civil and/and or criminal prose	e contracts for a period of up to
Signature of authorized official		Date
Signature of authorized official Swom to before me this	Only original signatures accepted. day of 20	Date



INFRASTRUCTURE DIVISION BUREAU OF DESIGN

VOLUME 1 OF 3

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

Together with the Construction of BMPS and All Work Incidental Thereto
BOROUGH OF BROOKLYN
CITY OF NEW YORK

	Contractor
Dated	



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 www1.nyc.gov/site/ddc/index.page

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: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

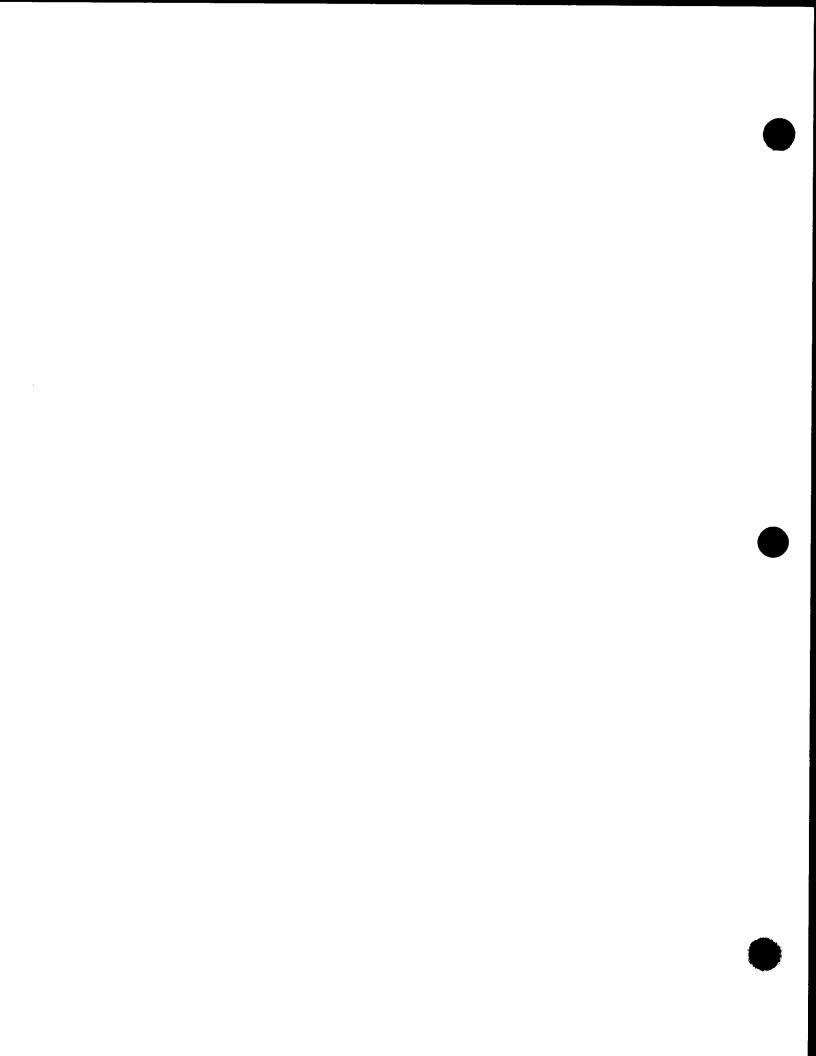
Together with the Construction of BMPS and All Work Incidental Thereto
BOROUGH OF BROOKLYN
CITY OF NEW YORK



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN

DECEMBER 15, 2016

17-078





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 www1.nyc.gov/site/ddc/index.page

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 ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN



DECEMBER 15, 2016

PAID SICK LEAVE LAW CONTRACT RIDER

Introduction and General Provisions

The Earned Sick Time Act, also known as the Paid Sick Leave Law ("PSLL"), requires covered employees who annually perform more than 80 hours of work in New York City to be provided with paid sick time. Contractors of the City of New York or of other governmental entities may be required to provide sick time pursuant to the PSLL.

The PSLL became effective on April 1, 2014, and is codified at Title 20, Chapter 8, of the New York City Administrative Code. It is administered by the City's Department of Consumer Affairs ("DCA"); DCA's rules promulgated under the PSLL are codified at Chapter 7 of Title 6 of the Rules of the City of New York ("Rules").

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

Contractor must notify the Agency Chief Contracting Officer of the City agency or other entity with whom it is contracting in writing within ten (10) days of receipt of a complaint (whether oral or written) regarding the PSLL involving the performance of this agreement. Additionally, Contractor must cooperate with DCA's education efforts and must comply with DCA's subpoenas and other document demands as set forth in the PSLL and Rules.

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

Pursuant to the PSLL and the Rules:

Applicability, Accrual, and Use

An employee who works within the City of New York for more than eighty hours in any consecutive 12-month period designated by the employer as its "calendar year" pursuant to the PSLL ("Year") must be provided sick time. Employers must provide a minimum of one hour of sick time for every 30 hours worked by an employee and compensation for such sick time must

¹ Pursuant to the PSLL, if fewer than five employees work for the same employer, as determined pursuant to New York City Administrative Code §20-912(g), such employer has the option of providing such employees uncompensated sick time.

be provided at the greater of the employee's regular hourly rate or the minimum wage. Employers are not required to provide more than forty hours of sick time to an employee in any Year.

An employee has the right to determine how much sick time he or she will use, provided that employers may set a reasonable minimum increment for the use of sick time not to exceed four hours per day. In addition, an employee may carry over up to forty hours of unused sick time to the following Year, provided that no employer is required to allow the use of more than forty hours of sick time in a Year or carry over unused paid sick time if the employee is paid for such unused sick time and the employer provides the employee with at least the legally required amount of paid sick time for such employee for the immediately subsequent Year on the first day of such Year.

An employee entitled to sick time pursuant to the PSLL may use sick time for any of the following:

- such employee's mental illness, physical illness, injury, or health condition or the care of such illness, injury, or condition or such employee's need for medical diagnosis or preventive medical care;
- such employee's care of a family member (an employee's child, spouse, domestic partner, parent, sibling, grandchild or grandparent, or the child or parent of an employee's spouse or domestic partner) who has a mental illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;
- closure of such employee's place of business by order of a public official due to a public health emergency; or
- such employee's need to care for a child whose school or childcare provider has been closed due to a public health emergency.

An employer must not require an employee, as a condition of taking sick time, to search for a replacement. However, an employer may require an employee to provide: reasonable notice of the need to use sick time; reasonable documentation that the use of sick time was needed for a reason above if for an absence of more than three consecutive work days; and/or written confirmation that an employee used sick time pursuant to the PSLL. However, an employer may not require documentation specifying the nature of a medical condition or otherwise require disclosure of the details of a medical condition as a condition of providing sick time and health information obtained solely due to an employee's use of sick time pursuant to the PSLL must be treated by the employer as confidential.

If an employer chooses to impose any permissible discretionary requirement as a condition of using sick time, it must provide to all employees a written policy containing those requirements, using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny sick time to an employee because of non-compliance with such a policy.

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

Exemptions and Exceptions

Notwithstanding the above, the PSLL does not apply to any of the following:

- an independent contractor who does not meet the definition of employee under section 190(2) of the New York State Labor Law;
- an employee covered by a valid collective bargaining agreement in effect on April 1,
 2014 until the termination of such agreement;
- an employee in the construction or grocery industry covered by a valid collective bargaining agreement if the provisions of the PSLL are expressly waived in such collective bargaining agreement;
- an employee covered by another valid collective bargaining agreement if such provisions are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the PSLL for such employee;
- an audiologist, occupational therapist, physical therapist, or speech language pathologist
 who is licensed by the New York State Department of Education and who calls in for
 work assignments at will, determines his or her own schedule, has the ability to reject or
 accept any assignment referred to him or her, and is paid an average hourly wage that is
 at least four times the federal minimum wage;
- an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;
- an employee whose work is compensated by a qualified scholarship program as that term is defined in the Internal Revenue Code, Section 117 of Chapter 20 of the United States Code; or
- a participant in a Work Experience Program (WEP) under section 336-c of the New York State Social Services Law.

Retaliation Prohibited

An employer may not threaten or engage in retaliation against an employee for exercising or attempting in good faith to exercise any right provided by the PSLL. In addition, an employer may not interfere with any investigation, proceeding, or hearing pursuant to the PSLL.

Notice of Rights

An employer must provide its employees with written notice of their rights pursuant to the PSLL. Such notice must be in English and the primary language spoken by an employee, provided that DCA has made available a translation into such language. Downloadable notices are available on DCA's website at http://www.nyc.gov/html/dca/html/law/PaidSickLeave.shtml.

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

Records

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

Enforcement and Penalties

Upon receiving a complaint alleging a violation of the PSLL, DCA has the right to investigate such complaint and attempt to resolve it through mediation. Within 30 days of written notification of a complaint by DCA, or sooner in certain circumstances, the employer must provide DCA with a written response and such other information as DCA may request. If DCA believes that a violation of the PSLL has occurred, it has the right to issue a notice of violation to the employer.

DCA has the power to grant an employee or former employee all appropriate relief as set forth in New York City Administrative Code 20-924(d). Such relief may include, among other remedies, treble damages for the wages that should have been paid, damages for unlawful retaliation, and damages and reinstatement for unlawful discharge. In addition, DCA may impose on an employer found to have violated the PSLL civil penalties not to exceed \$500 for a first violation, \$750 for a second violation within two years of the first violation, and \$1,000 for each succeeding violation within two years of the previous violation.

More Generous Polices and Other Legal Requirements

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

HIRING AND EMPLOYMENT RIDER:

HIRENYC AND REPORTING REQUIREMENTS

Introduction

This Rider shall apply to all contracts for goods, services, and construction with a value of one million dollars (\$1,000,000.00) or more, provided, however, that certain requirements of the Rider shall only apply as indicated below. This Rider addresses the HireNYC process, including reporting obligations under the HireNYC process, and certain other reporting requirements imposed by law. In general, the HireNYC process under this Rider requires the Contractor to enroll with the HireNYC portal for the City of New York ("the City") found within the Department of Small Business Services's ("SBS") website, to disclose all entry to mid-level job opportunities described in this Rider arising from this contract and located in New York City, and to agree to interview qualified candidates from HireNYC for those opportunities.

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HireNYC Requirements

A. Enrollment

The Contractor shall enroll with the HireNYC system, found at www.nyc.gov/sbs, within thirty (30) days after the registration of this Contract pursuant to Section 328 of the New York City Charter. The Contractor shall provide information about the business, designate a primary contact and say whether it intends to hire for any entry to mid-level job opportunities arising from this contract and located in New York City, and, if so, the approximate start date of the first hire.

B. Job Posting Requirements

Once enrolled in HireNYC, the Contractor agrees to update the HireNYC portal with all entry to mid-level job opportunities arising from this contract and located in New York City, if any, which shall be defined as jobs requiring no more than an associate degree, as provided by the New York State Department of Labor (see Column F of https://labor.ny.gov/stats/2012-2022-NYS-Employment-Prospects.xls). The information to be updated includes the types of entry and mid-level positions made available from the work arising from the contract and located in New York City, the number of positions, the anticipated schedule of initiating the hiring process for these positions, and the contact information for the Contractor's representative charged with overseeing hiring. The Contractor must update the HireNYC portal with any hiring needs arising from the contract and located in New York City, and the requirements of the jobs to be filled, no less than three weeks prior to the intended first day of employment for each new position, except with the permission of SBS, not to be unreasonably withheld, and must also update the HireNYC portal as set forth below.

After enrollment through HireNYC and submission of relevant information, SBS will work with the Contractor to develop a recruitment plan which will outline the candidate screening process,

and will provide clear instructions as to when, where, and how interviews will take place. HireNYC will screen applicants based on employer requirements and refer applicants whom it believes are qualified to the Contractor for interviews. The Contractor must interview referred applicants whom it believes are qualified.

After completing an interview of a candidate referred by HireNYC, the Contractor must provide feedback via the portal within twenty (20) business days to indicate which candidates were interviewed and hired, if any. In addition, the Contractor shall provide the start date of new hires, and additional information reasonably related to such hires, within twenty (20) business days after the start date. In the event the Contractor does not have any job openings covered by this Rider in any given year, the Contractor shall be required to provide an annual update to HireNYC to that effect. For this purpose, the reporting year shall run from the date of the registration of the contract and each anniversary date.

These requirements do not limit the Contractor's ability to assess the qualifications of prospective workers, and to make final hiring and retention decisions. No provision of this Rider shall be interpreted so as to require the Contractor to employ any particular worker.

In addition, the provisions of this Rider shall not apply to positions that the Contractor intends to fill with employees employed pursuant to the job retention provision of Section 22-505 of the Administrative Code of the City of New York. The Contractor shall not be required to report such openings with HireNYC. However, the Contractor shall enroll with the HireNYC system pursuant to Section A, above, and, if such positions subsequently become open, then the remaining provisions of this Rider will apply.

C. Breach and Liquidated Damages

If the Contractor fails to comply with the terms of the contract and this Rider (1) by not enrolling its business with HireNYC; (2) by not informing HireNYC, as required, of open positions; or (3) by failing to interview a qualified candidate, the contracting agency may assess liquidated damages in the amount of two-thousand five hundred dollars (\$2,500.00) per breach. For all other events of noncompliance with the terms of this Rider, the agency may assess liquidated damages in the amount of five hundred dollars (\$500) per breach.

Furthermore, in the event the Contractor breaches the requirements of this Rider during the term of the contract, the City may hold the Contractor in default of this contract.

Audit Compliance

In addition to the auditing requirements set forth in other parts of the contract, the Contractor shall permit SBS and the City to inspect any and all records concerning or relating to job openings or the hiring of individuals for work arising from the contract and located in New York City. The Contractor shall permit an inspection within seven (7) business days of the request.

Other Reporting Requirements

The Contractor shall report to the City, on a monthly basis, all information reasonably requested by the City that is necessary for the City to comply with any reporting requirements imposed by law or rule, including any requirement that the City maintain a publicly accessible database. In addition, the Contractor agrees to comply with all reporting requirements imposed by law or rule, or as otherwise requested by the City.

Construction Requirements

Construction contractors shall comply with the HireNYC requirements set forth above for all non-trades jobs (e.g., for an administrative position arising out of the work of the contract and located in New York City) as set forth above.

In addition, construction contractors shall reasonably cooperate with SBS and the City on specific outreach events, including Hire on the Spot events, for the hiring of trades workers for the work of this contract.

Further, this contract shall be subject to a project labor agreement if so required elsewhere in this contract.

Federal Hiring Requirements

The Contractor shall comply with all federal hiring requirements as may be set forth elsewhere in this contract, including, as applicable:

- Section 3 of the HUD Act of 1968, which requires, to the greatest extent feasible, economic opportunities for 30 percent of new hires be given to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- Executive Order 11246, which prohibits discrimination in employment due to race, color, religion, sex or national origin, and requires the implementation of goals for minority and female participation for work involving any Construction trade.

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NEW YORK CITY STANDARD CONSTRUCTION CONTRACT (DEC. 2013) INSURANCE RIDER

The following provisions supersede the corresponding provisions in the December 2013 version of the New York City Standard Construction Contract:

- 1. Section 22.1.1(c) provides as follows:
 - 22.1.1(c) If the Work requires a permit from the Department of Buildings pursuant to 1 RCNY Section 101-08, the Contractor shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08 or greater limits provided by the Agency in Schedule A. If the Work does not require such a permit, the minimum limits shall be those provided for in Schedule A.
- 2. Section 22.3.3 provides as follows:
 - For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the Contractor shall submit one or more Certificates of Insurance on forms acceptable to the Commissioner. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the City and any other entity specified in Schedule A is an Additional Insured thereunder; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the City is an Additional Insured thereunder; and (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number). All such Certificates of Insurance shall be accompanied by the required additional insured endorsements and either a duly executed "Certification by Insurance Broker or Agent" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

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NOTICE TO BIDDERS

Please be advised that the City of New York has issued a new Standard Construction Contract. The new Contract, which is incorporated in this bid, is significantly different from the 2008 version previously used by the City. A listing of some of the significant changes is provided below. This notice is only a partial listing. Please refer to the Contract itself for a full understanding of the changes and the actual text of the changes that were made. 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.

Significant changes include the following:

ARTICLE 11 DAMAGES CAUSED BY DELAYS

In 2008, the City embarked on a pilot project to test the use of new construction contract language altering the allocation of the risk of project delays, as between the City and the contractor. The City has determined to make the pilot project language the standard language for all City construction contracts. Accordingly, there is now one Standard City Construction Contract that is to be used by all agencies for all bids released after the release of the new contract. The damages for delay language is Article 11. Please note that changes have been made to the damages for delay provisions from the pilot to the adopted version.

ARTICLE 22 INSURANCE

Changes have been made to the insurance provisions, including incorporating requirements that the insurance provided comply with recent NYC Department of Buildings regulations specifying required dollar limits for CGL insurance for certain projects and requiring proof of builder's risk insurance prior to Work commencing rather than within 10 days of award.

ARTICLE 26 EXTRA WORK

The percentage paid for overhead for Extra Work pursuant to Section 26.1.11 is increased from 10% to 12% and the calculation of Worker's Compensation insurance costs reimbursed for Extra Work has been clarified.

ARTICLE 37 LABOR LAW REQUIREMENTS
ARTICLE 38 PAYROLL REPORTS

The provisions governing Labor Law provisions have been tightened, including requirements the employee identification cards include a photo (unless the requirement is waived), a prohibition on cash payments to employees and subcontractors, and clear enforcement authority requirements.

ARTICLE 70 ELECTRONIC FILING

A provision is added to make mandatory the electronic filing of certain alteration permits with the Department of Buildings.

Other significant changes include the following:

ARTICLE 7 INDEMNIFICATION

Changes have been made to the indemnification provisions.

ARTICLE 14 FINAL ACCEPTANCE OF WORK
ARTICLE 44 SUBSTANTIAL COMPLETION PAYMENT

The Commissioner is no longer required to issue a substantial completion determination in addition to the already existing requirement that the Engineer issue a substantial completion determination and reach an agreement on a punch list of remaining work. Now, the Engineer, when issuing the punch list to the Contractor, must also include a proposed schedule for the completion of the punch list. The Contractor may propose an alternative schedule that is subject to the approval of the Engineer. If the Contractor fails to respond to the Engineer's proposed schedule, the Engineer's schedule is deemed accepted.

ARTICLE 15 LIQUIDATED DAMAGES

The contract is revised to match Schedule A to provide that liquidated damages are available only until substantial completion.

ARTICLE 17 SUBCONTRACTS

The requirements for prior approval of subcontractors, and for contractors to be responsible for the actions of their subcontractors, have been tightened. The requirement that the Contractor list subcontractors in the City's Payee Information Portal has been added; the provision was previously attached as a rider.

ARTICLE 19 SECURITY DEPOSIT

The provisions governing the return of bid deposits are clarified.

ARTICLE 20 PAYMENT GUARANTEE

The Payment Guaranty provisions, which apply when the City does not require the Contractor to obtain payment bonds, has been significantly revised to track the requirements of State Finance law 137.

ARTICLE 28 RECORDKEEPING FOR EXTRA OR DISPUTED WORK

The recordkeeping requirement that currently apply to payments for Time & Materials for extra work are expressly made applicable to regular work that is paid for on a T & M basis.

ARTICLE 35 EMPLOYEES

The whistleblower provisions of local law are added to the construction contract. They previously have been attached as a rider.

ARTICLE 38 PAYROLL REPORTS ARTICLE 77 RECORDS RETENTION

Requirements that records be maintained for six years and directions on how such records must be made available.

ARTICLE 42 PARTIAL PAYMENTS

Increased flexibility has been provided for when contractors may submit invoices.

ARTICLE 62 TAX EXEMPTION

The provisions identifying the State tax exemption for municipalities are revised to more clearly describe State law.

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CITY OF NEW YORK

DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURES

INFORMATION FOR BIDDERS

JUNE 2015

(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

Description and Location of Work 1.

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.

Time and Place for Receipt of Bids 2.

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.

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

- 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.
 - All provisions required by law to be inserted in this Contract, whether actually inserted or (1)
 - The Contract Drawings and Specifications
 - The General Conditions, the General Requirements and the Special Conditions, if any (3)
 - The Contract (4)
 - The Information for Bidders; Request for Proposals; Notice of Solicitation and Proposal (5) For Bids; Bid or Proposal, and, if used, the Bid Booklet
 - The Budget Director's Certificate, all Addenda issued prior to the receipt of the bids, the (6)Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed with the Work.
- 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.
- 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.
- All Invitation For Bids Documents must Return of Invitation For Bids Documents: 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. <u>Pre-Bid Conference</u>

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

- (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. <u>Irrevocability of Bid</u>

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.

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.

<u>Restriction</u>: 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) <u>Mistake Discovered Before Bid Opening</u>: 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.

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

20. Low Tie Bids

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

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

21. Rejection of Bids

- Rejection of Individual Bids: The Agency may reject a bid if: (A)
- The bidder fails to furnish any of the information required pursuant to Section 24 or 28 (1)
- The bidder is determined to be not responsible pursuant to the Procurement Policy Board (2)
- (3) The bid is determined to be non-responsive pursuant to the Procurement Policy Board
- The bid, in the opinion of the Agency Chief Contracting Officer, contains unbalanced bid (4) 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.
- 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.
- Rejection of All Bids and Negotiation With All Responsible Bidders: The 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

(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) <u>Submission</u>: 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. 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-l 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) <u>Acceptable Types of Security</u>: 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
 - 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: (I) 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) <u>Power of Attorney</u>: 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. <u>Bidder Responsibilities and Qualifications</u>

- (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. <u>Labor Law Requirements</u>

- (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) <u>Records</u>: 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. <u>Lump Sum Contracts</u>

- (A) <u>Comparison of Bids</u>: 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) <u>Comparison of Bids</u>: 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) <u>Variations from Engineer's Estimate</u>: 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. <u>Multiple Prime Contractors</u>

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;
- demonstration of efforts made to select portions of the work for performance by LBE firms in order to increase the likelihood of achieving the stated goal;
- (f) documented efforts to negotiate with LBE firms for specific subcontracts, including at a minimum:
 - (i) The names, address and telephone numbers of LBE firms that are contacted;
 - (ii) A description of the information provided to LBE firms regarding the plans and specifications for portions of the work to be performed:
 - (iii) Documentation showing that no reasonable price can be obtained from LBE firms;
 - (iv) A statement of why agreements with LBE firms were not reached;
- (g) a statement of the reason for rejecting any LBE firm which the contractor deemed to be unqualified; and
- (h) documentation of efforts made to assist the LBE firms contacted that needed assistance in obtaining required insurance.
- (E) Unless otherwise waived by the Commissioner with the approval of the Office of Economic and Financial Opportunity, failure of a proposed contractor to provide the information required by paragraphs (C) and (D) above may render the bid non-responsive and the Contract may not be awarded to the bidder. If the contractor states that it will subcontract a specific portion of the work, but can demonstrate despite good faith efforts it cannot achieve its required LBE percentage for subcontracted work until after award of Contract, the Contract may be awarded, subject to a letter of compliance from the contractor stating that it will comply with Administrative Code Section 6-108.1 and subject to approval by the Commissioner. If the contractor has not met its required LBE percentage prior to award, the contractor shall demonstrate that a good faith effort has been made subsequent to award to obtain LBEs on each subcontract until its meets the required percentage.
- (F) When a bidder indicates prior to award that no work will be subcontracted, no work may be subcontracted without the prior written approval of the Commissioner, which shall be granted only if the contractor in good faith seeks LBB 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. <u>Bid Submission Requirements</u>

The following forms, all of which are contained in the Bid Booklet, 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) M/WBE Subcontactor Utilization Plan (if participation goals have been established)

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) Special Experience Requirements (if applicable to this contract)

(9) Apprenticeship Program Questionnaire (if applicable)

FAILURE TO SUBMIT ITEMS (4) THROUGH (9) MAY RESULT IN THE DISQUALIFICATION OF THE BID.

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

June 2015

THE DDC SAFETY REQUIREMENTS INCLUDE THE FOLLOWING SECTIONS:

- L POLICY ON SITE SAFETY
- II. PURPOSE
- III. DEFINITIONS
- IV. RESPONSIBILITIES
- V. SAFETY QUESTIONNAIRE
- VL SAFETY PROGRAM AND SITE SAFETY PLAN
- VIL. KICK-OFF/PRE-CONSTRUCTION MEETINGS AND SAFETY REVIEW
- VIII. EVALUATION DURING WORK IN PROGRESS
- IX. SAFETY PERFORMANCE EVALUATION

POLICY ON SITE SAFETY I.

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); 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 16 NYCRR Part 753
- Title 15 of the Rules of the City of New York, Chapter 13 Citywide Construction Dust Mitigation
- Manual on Uniform Traffic Control Devices (MUTCD)
- ☐ Title 15 of the Rules of the City of New York, Chapter 28 Citywide Construction Noise Mitigation

П. PURPOSE

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

Ш. 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 QA&CS 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.

Construction Safety Unit: A part of QA&CS within the Division of Program Management/ Safety & Site Support that assesses contractor safety on DDC jobsites and advises responsible parties of needed corrective actions.

City of New York Department of Design and Construction: Safety Requirements Safety and Site Support—Quality Assurance and Construction Safety

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").

Daily Safety Job Briefing: Daily jobsite safety meetings, giving to all jobsite personnel by contractor, with the purpose of discussing project specific safety procedures for the scheduled construction work.

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

Job Hazard Analysis (JHA): A process of identifying the major job steps and any potential site-specific hazards that may be present during construction and establishing the means and methods to eliminate or control those hazards.

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.

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

Project Safety Representative: The designated project safety representative shall have completed an authorized 30 hour OSHA Construction Safety Course and other safety training applicable to Contractor's/subcontractor's project work. Except in instances where a dedicated Project Safety Manager is required, a Project Safety Representative may also function as a superintendent, foreman or crew leader on the Project, but must have sufficient experience and authority to undertake corrective actions and must qualify to be a competent person. No work is to be performed on site when a Project Safety Representative is not present.

Project Safety Manager: A dedicated, full-time project safety manager may be a contractual requirement on large projects or projects deemed by DDC to be particularly high risk. This would be in addition or in lieu of a Contractor's Project Safety Representative. This individual shall not have any other assigned duties. This individual shall have received, at a minimum an authorized 30 hour OSHA Construction Safety Course. Other examples of acceptable training are OSHA Safety and Health Standards for the Construction Industry training program (OSHA 510), Certified Safety Professional (CSP), Certified Industrial Hygienist (CIH) or a degree/certificate in a safety and health from a college-level curriculum.

A Project Safety Manager shall possess the additional training, years of experience, and skills necessary to thoroughly understand the health and safety hazards and controls for large construction projects, including the full scope of the specific Work.

QA&CS - Quality Assurance and Construction Safety of the New York City Department of Design and Construction.

City of New York Department of Design and Construction: Safety Requirements Safety and Site Support-Quality Assurance and Construction Safety

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 Construction Management firm, 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 Manager: For certain projects, as defined in NYC Construction Codes – Title 28, the Contractor shall provide a Site Safety Manager with a Site Safety Manager License issued by the NYC Department of Building.

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 procedures 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.

Work: The construction required by the Contract Documents whether completed or partially completed, performed by the Contractor/ subcontractors. Work refers to the furnishing of labor, furnishing and incorporating materials and equipment into the construction and providing any service required by the Contract Documents to fulfill the Contractor's obligation to complete the Project.

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. DDC or CM Resident Engineer / Construction Project 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 meetings and daily safety job briefings.
- 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 and
 Accident Notification and Response Protocol.
- Gathers facts related to all accidents and prepares DDC Construction Accident Report.

City of New York Department of Design and Construction: Safety Requirements Safety and Site Support-Quality Assurance and Construction Safety

 Notifies the Construction Safety Unit within two (2) hours of the start of an inspection by any outside regulatory agency personnel, including OSHA, NYC DOB or others and forwards a copy of the inspection report within three days of its receipt.

Monitors the conditions at the site for conformance with the contractor's 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 contractor's Site Safety Plan, applicable federal, state or local codes or any
condition that presents a potential risk of injury to the public or workers or possible damage to
property.

Notifies DDC of any unsafe or unhealthy condition and directs the contractor to provide such labor,

materials, equipment and supervision to abate such conditions.

Escort and assist QA&CS Construction Safety Auditors during the field and record inspections.

• Reports emergency conditions to the Construction Safety Unit immediately.

B. Contractors

 Submit a completed Safety Questionnaire and other safety performance related documentation with its bid or as part of a pre-qualification package.

Complete a written Job Hazard Analysis (JHA) that identifies safety hazards for project specific work tasks and hazard control methods. A written JHA shall be available at the site for reference and

included in the Site Safety Plan submitted by the contractor.

Submit a Site Safety Plan and Safety Program within 30 days from the Award Date 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.

Develop project specific safety procedures to protect general public during all construction activities

for the duration of the project.

Ensure that all employees are aware of the hazards associated with the project through documented formal and informal training and/or other communications. Conduct and document weekly safety meetings and daily job briefing sessions for the duration of the project. Documentation to be provided

to the RE/CPM on a monthly basis.

Name the Project Safety Representative and Project Safety Manager, if required. The Contractor will
be required to identify the Project Safety Representative and Project Safety Manager in the Site Safety
Plan. Resumes, outlining the qualification and experience for the Project Safety Representative and
Project Safety Manager, shall be available upon request. DDC reserves the right to request that the
Contractor replace any Project Safety Representative or Project Safety Manager for any reason at any
time during the project.

Name a Competent Person(s), The Contractor will be required to identify a Competent Person(s) 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.

• Conduct applicable safety training prior to the commencement of work at the site. All training records (OSHA 10-hour, flagger, scaffold, fall protection, confined space entry, etc.) shall be provided to the RE/CPM prior to mobilization, included in the Site Safety Plan, kept current during the course of the project, and available for review. Prior to performing any work on DDC project all employees shall have successfully completed, within the previous five calendar years, a 10 Hour OSHA construction safety course.

As part of the Site Safety Plan, prepare a site specific programs and plans, such as MPT plan, steel erection plan, confined space program, fall protection plan, demolition plan, etc. (if not otherwise

provided in the contract documents) and comply with all of its provisions.

 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

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controls that will be used to protect workers, the general public and property. The Project Safety Representative and/or Project Safety Manager will conduct this training prior to mobilization and provide documentation to the RE/CPM.

 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 or unhealthy conditions to the RE/CPM as soon as practical, but no more than 24 hours after discovery, and take prompt actions to remove or abate such conditions.

Report any accidents involving injuries to workers or the general public, as well as property damage, to the RE/CPM within one (1) hour.

Following an accident, the Contractor shall not remove or alter any equipment, structure, material, or evidence related to the accident. Exception: Immediate emergency procedures taken to secure structures, temporary construction, operations, or equipment that pose a continued imminent danger or facilitate assistance for persons who are trapped or who have sustained bodily injury.

Notify the RE/CPM within one (1) hour of the start of an inspection by any outside regulatory agency personnel, including OSHA, NYC DOB or others.

Maintain all records pertaining to all required compliance documents and accident and injury reports.

Address 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 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 company workers' compensation experience modification rating and OSHA Incident Rates for the three (3) years prior to the date of the bid opening. DDC may request a Contractor to update its Questionnaire at any time or to provide more detailed information. The Contractor must provide the requested information within 15 days.

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

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

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

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

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

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

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

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

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VL SAFETY PROGRAM AND SITE SAFETY PLAN

Within thirty (30) days from the Award Date, 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 standards. The Site Safety Plan shall identify project work scope, safety hazards associated with the project tasks, and include specific safety procedures and training appropriate and necessary to complete the work. The 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.

Safety Program: Corporate Safety Program established by the Contractor that includes the Contractor's overall safety policy, regulatory compliance plan and basic safety procedures covering all aspects of construction operations, performed by the Contractor. The Safety Program shall be a written document with a separate section describing each element of the Safety Program. The Safety Program shall have at minimum the following elements applicable to the Contractor's operations:

- Responsibility and Organization - Contractor's company organization chart, including titles, names, contact information, roles and responsibilities for key personnel, etc.

- Safety Training Program - Contractor's corporate training program.

- Hazard Corrective Actions - Criteria for safety inspections, identification of safety noncompliances, implementation and verification of corrective actions, forms to document safety inspections results, etc.

Accident/Exposure Investigation

- Recordkeeping and Reporting Injuries Responsible staff; reporting and recording criteria; OSHA 300 and 300A form completion, etc.
- Fire Protection and Prevention Program
- Housekeeping
- Illumination
- Sanitation
- Personal Protective Equipment (PPE) Company policy for the use of head protection, foot protection, hearing protection, eye and face protection, protective clothing, and any additional protective equipment based on work tasks; PPE inspection and replacement policy.
- Hazard Communication Program
- Employee Emergency Action Plan
- Protection of Underground Facilities and Utilities
- Ionizing/Nonionizing Radiation
- Material Handling, Storage, Use and Disposal
- Tools Hand and Power
- Signs, Signals, and Barricades
- Scaffold Local Law 52 requirements, installation, use, inspection, dismantling, training and general safety requirements.
- Welding and Cutting
- Electrical Safety
- Fall Protection
- Cranes, Derrick, Hoists, Elevators, Conveyors
- Excavation Safety
- Concrete and Masonry Construction
- Maintenance and Protection of Traffic
- Steel Erection
- Demolition
- Blasting and the Use of Explosives
- Stairways and Ladders

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- Toxic and Hazardous Substances
- Alcohol and Drug Abuse Policy

Rodents and Vermin

Occupational Noise Exposure

Confined Space Program - General confined Space Program: training requirements, confined space hazard evaluation procedure, atmospheric testing procedure, confined space classification, permit-required procedure, communication procedure, rescue procedure, forms, etc.

Construction Vehicles/Heavy Equipment

Dust Control Procedures

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

Project Work Scope - Detailed information regarding work tasks that will be performed by contractor and subcontractors under the project.

Responsibility and Organization - Contractor's organization chart with responsible staff for the

project, including titles, names, contact information, roles and responsibilities.

Safety Training and Education - OSHA 10 Hours training, requirements for daily safety briefings and weekly safety meetings, any work task specific training, responsible staff for implementation of training program for the project.

Job Hazard Analysis (JHA) - Project specific Job Hazard Analysis including work tasks, identified hazards, hazard control methods (administrative, engineering, PPE), contractor's name, project id, location, name and signature of a certifying person, hazard assessment date.

Protection of Public

Hazard Corrective Actions - Responsible staff, forms, frequency of safety inspections and implementation of corrective actions.

Accident/Exposure Investigation - Accident/incident notification procedure of DDC project staff. Project specific procedures for accident investigation and implementation of corrective actions.

First Aid and Medical Attention - Responsible staff, location and inspection of First Aid kit, directions to local hospitals; emergency telephone numbers.

Project Specific Fire Protection and Prevention Program.

Project Specific Illumination Procedure.

Project Specific Sanitation Procedure.

Personal Protective Equipment (PPE)

Hazard Communication Program - Responsible staff; training; SDS records, project specific list of chemical; location of the program and SDS records.

Means of Egress - Information regarding free and unobstructed egress from all parts of the building or structure; exit marking; maintenance of means of egress, etc.

Employee Emergency Action Plan - Project specific: responsible staff, emergency alarm system, evacuation procedure, procedure to account for employees after evacuation, etc.

Evacuation Plan - Project specific evacuation plan (drawing/scheme) with exists and evacuation

Protection of Underground Facilities and Utilities, including responsible staff.

Ionizing/Nonionizing Radiation - Competent person, license and qualification requirements, type of radiation, employees exposure and protection, etc.

Material Handling, Storage, Use and Disposal - Project specific information regarding material storage and disposal.

Signs, Signals, and Barricades - Use of danger/warning signs, sidewalk closure, safety instruction signs, pedestrian fencing and barricades, etc.

Scaffold - Project specific scaffold types, training, scaffold drawings, competent person, criteria for project specific scaffold, falling object protection.

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 Welding and Cutting – project specific procedure for welding and cutting, including all necessary safety requirements such as fire prevention, personal protective equipment, hot work permits, FDNY certificate requirements.

Fall Protection - Project specific information regarding selected fall protection systems, fall

protection plan.

 Cranes, Derrick, Hoists, Elevators, Conveyors – project specific equipment information including type, rated load capacity, manufacture specification requirements, competent person, exposure to falling load, inspection, recordkeeping, clearance requirements, communication procedure, ground lines, permits.

Excavation Safety – Competent person, project specific protective system.

Maintenance and Protection of Traffic Plan - Project specific MPT plan, flagmen training.

Steel Erection - Site specific erection plan, requirements for applicable written notifications,

competent person.

Demolition - Engineering survey, including written evidence, disconnection of all effected
utilities, identification of all hazardous chemicals, materials, gases, etc., floor openings, chutes,
inspection and maintenance of all stairs/passageways, removal of materials/debris/structural
elements, lock out/tag out, competent person.

Blasting and the Use of Explosives - Project specific safety procedures, warning signs,

training/qualification, transportation, storage and use of explosives, inspection.

- Toxic and Hazardous Substances - Safety procedures for substances to be used on project.

- Noise Mitigation Plan - Completed project specific Noise Mitigation Plan

- Confined Space Program - Project specific Confined Space Program, responsible staff, training records, equipment information, rescue procedure, list of project specific confined spaces, forms,

- Construction Vehicles/Heavy Equipment - Type of construction vehicles/heavy equipment to be used on site.

- Dust Mitigation Plan - Completed project specific Dust Mitigation Plan.

The most critical component of the Site Safety Plan is the Job Hazard Analysis (JHA) section. The JHA form is a written document prepared by the contractor. The contractor must conduct a site and task assessment JHA to identify the major job steps and any potential safety or environmental hazards related to performance of the work, eliminate or implement controls for the potential hazards, and identify proper personal protective equipment for the task. The JHA shall be communicated to all contractor/subcontractor personnel on site.

The initial Job Hazard Assessment form shall be included in the contractor's Site Safety Plan and the

current form shall be available at the construction site for reference.

Certain DDC programs, such as Job Order Contracting System (JOCS), may not necessarily require Site Safety Plans. The JOCS contractor shall submit a Safety Program. The Site Safety Plan requirement for the JOCS contractor will be determined by QA&CS based on a project work scope, construction activities and project location. In addition, certain DDC Operating Units may establish client-specific program or safety requirements. The contractor's Site Safety Plan must address such client-specific program or safety requirements.

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

RE/CPM shall invite QA&CS Construction Safety Unit to the construction kick-off meeting. A QA&CS representative will participate in this meeting with the Contractor and RE/CPM 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 QA&CS 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 Project Safety Representatives.

 B. The RE/CPM will continually approximately appro
- 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 have these records available upon request. Any critical deficiencies shall be immediately reported to QA&CS 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 QA&CS, or his/her designee will meet with the Contractor's Project Safety Representative and or Project Safety Manager, the DDC Project Manager, the RE/CPM, and the DDC Environmental Specialist (if environmental issues are involved). The purpose of this meeting is to 1) determine the level of non-compliance; 2) explain and clarify the safety/environmental provisions; 3) agree on a future course of action to correct the deficiencies.
- D. If the deficiencies continue to occur with inadequate attention by the contractor, this shall, among other remedies available, be grounds for default.
- E. The contractor shall within 1 hour inform the RE/CPM/CM of all accidents/incidents including all fatalities, any injuries to employees or members of the general public, and property damage (e.g., shall notify the Construction Safety Unit as per DDC's Construction Safety Emergency and Accident Notification and Response Protocol and shall maintain a record of all contractor
- F. The Construction Safety Unit shall be notified within two (2) hours of the start of any NYS-DOL/NYC-COSH/OSHA/EPA inspections.

IX. SAFETY PERFORMANCE EVALUATION

The contractor's safety record, including accident/incident history and DDC safety inspection results, will be considered as part of the Contractor's performance evaluation at the conclusion of the project. Poor safety performance during the course of the project shall be a reason to rate a Contractor unsatisfactory which may 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

March 2017

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CITY OF NEW YORK STANDARD CONSTRUCTION CONTRACT

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WITNESSETH:

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

CHAPTER I: THE CONTRACT AND DEFINITIONS

ARTICLE 1. THE CONTRACT

- 1.1 Except for titles, subtitles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience), the following, except for such portions thereof as 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 All Addenda issued prior to the receipt of the bids; the Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed or the Order to Work.
- 1.2 Should any conflict occur in or between the Drawings and Specifications, the Contractor shall be deemed to have estimated the most expensive way of doing the Work, unless the Contractor shall have asked for and obtained a decision in writing from the Commissioner of the Agency that is entering into this Contract, before the submission of its bid, as to what shall govern.

ARTICLE 2. DEFINITIONS

- 2.1 The following words and expressions, or pronouns used in their stead, shall, wherever they appear in this Contract, be construed as follows, unless a different meaning is clear from the context:
 - 2.1.1 "Addendum" or "Addenda" shall mean the additional Contract provisions and/or technical clarifications issued in writing by the Commissioner prior to the receipt of bids.
 - 2.1.2 "Agency" shall mean a city, county, borough or other office, position, department, division, bureau, board or commission, or a corporation, institution or agency of government, the expenses of which are paid in whole or in part from the City treasury.
 - 2.1.3 "Agency Chief Contracting Officer" (ACCO) shall mean a person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the CCPO, or his/her duly authorized representative.

- 2.1.4 "Allowance" shall mean a sum of money which the Agency may include in the total amount of the Contract for such specific contingencies as the Agency believes may be necessary to complete the Work, e.g., lead or asbestos remediation, and for which the Contractor will be paid on the basis of stipulated unit prices or a formula set forth in the Contract or negotiated between the parties provided, however, that if the Contractor is not directed to use the Allowance, the Contractor shall have no right to such money and it shall be deducted from the total amount of the Contract.
- 2.1.5 "City" shall mean the City of New York.
- 2.1.6 "City Chief Procurement Officer" (CCPO) shall mean a person delegated authority by the Mayor to coordinate and oversee the procurement activity of Mayoral agency staff, including the ACCO and any offices which have oversight responsibility for the procurement of construction, or his/her duly authorized representative.
- 2.1.7 "Commissioner" shall mean the head of the Agency that has entered into this Contract, or his/her duly authorized representative.
- 2.1.8 "Comptroller" shall mean the Comptroller of the City of New York.
- 2.1.9 "Contract" or "Contract Documents" shall mean each of the various parts of the contract referred to in Article 1 hereof, both as a whole and severally.
- 2.1.10 "Contract Drawings" shall mean only those drawings specifically entitled as such and listed in the Specifications or in any Addendum, or any drawings furnished by the Commissioner, pertaining or supplemental thereto.
- 2.1.11 "Contract Work" shall mean everything required to be furnished and done by the Contractor by any one or more of the parts of the Contract referred to in Article 1, except Extra Work as hereinafter defined.
- 2.1.12 "Contractor" shall mean the entity which executed this Contract, whether a corporation, firm, partnership, joint venture, individual, or any combination thereof, and its, their, his/her successors, personal representatives, executors, administrators, and assigns, and any person, firm, partnership, joint venture, individual, or corporation which shall at any time be substituted in the place of the Contractor under this Contract.
- 2.1.13 "Days" shall mean calendar days, except where otherwise specified.
- "Engineer" or "Architect" or "Project Manager" shall mean the person so designated in writing by the Commissioner in the Notice to Proceed or the Order to Work to act as such in relation to this Contract, including a private Architect or Engineer or Project Manager, as the case may be. Subject to written approval by the Commissioner, the Engineer, Architect or Project Manager may designate an authorized representative.
- 2.1.15 "Engineering Audit Officer" (EAO) shall mean the person so designated by the Commissioner to perform responsible auditing functions hereunder.
- 2.1.16 "Extra Work" shall mean Work other than that required by the Contract at the time of award which is authorized by the Commissioner pursuant to Chapter VI of this Contract.

- 2.1.17 "Federal-Aid Contract" shall mean a contract in which the United States (federal) Government provides financial funding as so designated in the Information for Bidders.
- 2.1.18 "Final Acceptance" shall mean final written acceptance of all the Work by the Commissioner, a copy of which shall be sent to the Contractor.
- 2.1.19 "Final Approved Punch List" shall mean a list, approved pursuant to Article 14.2.2, specifying those items of Work to be completed by the Contractor after Substantial Completion and dates for the completion of each item of Work.
- 2.1.20 "Law" or "Laws" shall mean the Constitution of the State of New York, the New York City Charter, the New York City Administrative Code, a statute of the United States or of the State of New York, a local law of the City of New York, any ordinance, rule or regulation having the force of law, or common law.
- 2.1.21 "Materialman" shall mean any corporation, firm, partnership, joint venture, or individual, other than employees of the Contractor, who or which contracts with the Contractor or any Subcontractor, to fabricate or deliver, or who actually fabricates or delivers, plant, materials or equipment to be incorporated in the Work.
- 2.1.22 "Means and Methods of Construction" shall mean the labor, materials, temporary structures, tools, plant, and construction equipment, and the manner and time of their use, necessary to accomplish the result intended by this Contract.
- 2.1.23"Notice to Proceed" or "Order to Work" shall mean the written notice issued by the Commissioner specifying the time for commencement of the Work and the Engineer, Architect or Project Manager.
- 2.1.24 "Other Contractor(s)" shall mean any contractor (other than the entity which executed this Contract or its Subcontractors) who or which has a contract with the City for work on or adjacent to the building or Site of the Work.
- 2.1.25 "Payroll Taxes" shall mean State Unemployment Insurance (SUI), Federal Unemployment Insurance (FUI), and payments pursuant to the Federal Insurance Contributions Act (FICA).
- 2.1.26 "Project" shall mean the public improvement to which this Contract relates.
- 2.1.27 "Procurement Policy Board" (PPB) shall mean the Agency of the City of New York whose function is to establish comprehensive and consistent procurement policies and rules which shall have broad application throughout the City.
- 2.1.28 "Required Quantity" in a unit price Contract shall mean the actual quantity of any item of Work or materials which is required to be performed or furnished in order to comply with the Contract.
- 2.1.29 "Resident Engineer" shall mean the representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the Work.
- 2.1.30 "Site" shall mean the area upon or in which the Contractor's operations are carried on, and such other areas adjacent thereto as may be designated as such by the Engineer.

- 2.1.31 "Small Tools" shall mean items that are ordinarily required for a worker's job function, including but not limited to, equipment that ordinarily has no licensing, insurance or substantive storage costs associated with it; such as circular and chain saws, impact drills, threaders, benders, wrenches, socket tools, etc.
- 2.1.32 "Specifications" shall mean all of the directions, requirements, and standards of performance applying to the Work as hereinafter detailed and designated under the Specifications.
- 2.1.33 "Subcontractor" shall mean any person, firm or corporation, other than employees of the Contractor, who or which contracts with the Contractor or with its subcontractors to furnish, or actually furnishes labor, or labor and materials, or labor and equipment, or superintendence, supervision and/or management at the Site. Wherever the word Subcontractor appears, it shall also mean sub-Subcontractor.
- 2.1.34 "Substantial Completion" shall mean the written determination by the Engineer that the Work required under this Contract is substantially, but not entirely, complete and the approval of the Final Approved Punch List.
- 2.1.35 "Work" shall mean all services required to complete the Project in accordance with the Contract Documents, including without limitation, labor, material, superintendence, management, administration, equipment, and incidentals, and obtaining any and all permits, certifications and licenses as may be necessary and required to complete the Work, and shall include both Contract Work and Extra Work.

CHAPTER II: THE WORK AND ITS PERFORMANCE

ARTICLE 3. CHARACTER OF THE WORK

3.1 Unless otherwise expressly provided in the Contract Drawings, Specifications, and Addenda, the Work shall be performed in accordance with the best modern practice, utilizing, unless otherwise specified in writing, new and unused materials of standard first grade quality and workmanship 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 City Department of Environmental Protection.
 - 5.3.2 The Contractor agrees to comply with Section 24-219 of the Administrative Code and implementing rules codified at 15 Rules of the City of New York ("RCNY") Section 28-100 et seq. In accordance with such provisions, the Contractor, if the Contractor is the responsible party under such regulations, shall prepare and post a Construction Noise Mitigation Plan at each Site, in which the Contractor shall certify that all construction tools and equipment have been maintained so that they operate at normal manufacturers operating specifications. If the Contractor cannot make this certification, it must have in place an Alternative Noise Mitigation Plan approved by the City Department of Environmental Protection. In addition, the Contractor's certified Construction Noise Mitigation Plan is subject inspection by the City Department of Environmental Protection in accordance with Section 28-101 of Title 15 of RCNY. No Contract Work may take place at a Site unless there is a Construction Noise Mitigation Plan or approved Alternative Noise Mitigation Plan in place. In addition, the Contractor shall create and implement a noise mitigation training program. Failure to comply with these requirements may result in fines and other penalties pursuant to the applicable provisions of the Administrative Code and RCNY.
- 5.4 Ultra Low Sulfur Diesel Fuel: In accordance with the provisions of Section 24-163.3 of the Administrative Code, the Contractor specifically agrees as follows:
 - 5.4.1 Definitions. For purposes of this Article 5.4, the following definitions apply:
 - 5.4.1(a) "Contractor" means any person or entity that enters into a Public Works Contract with a **City Agency**, or any person or entity that enters into an agreement with such person or entity, to perform work or provide labor or services related to such Public Works Contract.

- 5.4.1(b) "Motor Vehicle" means any self-propelled vehicle designed for transporting persons or property on a street or highway.
- 5.4.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.
- 5.4.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this term shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) horsepower or less and that are not used in any construction program or project.
- 5.4.1(e) "Public Works Contract" means a contract with a City Agency for a construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; a contract with a City Agency for the preparation for any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; or a contract with a City Agency for any final work involved in the completion of any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge.
- 5.4.1(f) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

5.4.2 Ultra Low Sulfur Diesel Fuel

- 5.4.2(a) All Contractors shall use Ultra Low Sulfur Diesel Fuel in diesel-powered Nonroad Vehicles in the performance of this Contract.
- 5.4.2(b) Notwithstanding the requirements of Article 5.4.2(a), Contractors may use diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) to fulfill the requirements of this Article 5.4.2, where the Commissioner of the City Department of Environmental Protection ("DEP Commissioner") has issued a determination that a sufficient quantity of Ultra Low Sulfur Diesel Fuel is not available to meet the needs of Agencies and Contractors. Any such determination shall expire after six (6) months unless renewed.
- 5.4.2(c) Contractors shall not be required to comply with this Article 5.4.2 where the City Agency letting this Contract makes a written finding, which is approved, in writing, by the DEP Commissioner, that a sufficient quantity of Ultra Low Sulfur Diesel Fuel, or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is not available to meet the requirements of Section 24-163.3 of the Administrative Code, provided that such Contractor in its fulfillment of the

requirements of this Contract, to the extent practicable, shall use whatever quantity of Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is available. Any finding made pursuant to this Article 5.4.2(c) shall expire after sixty (60) Days, at which time the requirements of this Article 5.4.2 shall be in full force and effect unless the City Agency renews the finding in writing and such renewal is approved by the DEP Commissioner.

- 5.4.2(d) Contractors may check on determinations and approvals issued by the DEP Commissioner pursuant to Section 24-163.3 of the Administrative Code, if any, at www.dep.nyc.gov or by contacting the City Agency letting this Contract.
- 5.4.2(e) The requirements of this Article 5.4.2 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

5.4.3 Best Available Technology

- 5.4.3(a) All Contractors shall utilize the best available technology for reducing the emission of pollutants for diesel-powered Nonroad Vehicles in the performance of this Contract. For determinations of best available technology for each type of diesel-powered Nonroad Vehicle, Contractors shall comply with the regulations of the City Department of Environmental Protection, as and when adopted, Chapter 14 of Title 15 of the Rules of the City of New York (RCNY). The Contractor shall fully document all steps in the best available technology selection process and shall furnish such documentation to the City Agency or the DEP Commissioner upon request. The Contractor shall retain all documentation generated in the best available technology selection process for as long as the selected best available technology is in use.
- 5.4.3(b) No Contractor shall be required to replace best available technology for reducing the emission of pollutants or other authorized technology utilized for a diesel-powered Nonroad Vehicle in accordance with the provisions of this Article 5.4.3 within three (3) years of having first utilized such technology for such vehicle.
- 5.4.3(c) This Article 5.4.3 shall not apply to any vehicle used to satisfy the requirements of a specific Public Works Contract for fewer than twenty (20) Days.
- 5.4.3(d) The Contractor shall not be required to comply with this Article 5.4.3 with respect to a diesel-powered Nonroad Vehicle under the following circumstances:
 - 5.4.3(d)(i) Where the City Agency makes a written finding, which is approved, in writing, by the DEP Commissioner, that the best available technology for reducing the emission of pollutants as required by this Article 5.4.3 is unavailable for such vehicle, the Contractor shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle.
 - 5.4.3(d)(ii) Where the DEP Commissioner has issued a written waiver based upon the Contractor having demonstrated to the DEP Commissioner that the use of the best available technology for reducing the emission of pollutants might endanger the operator of such vehicle or those working near such vehicle, due to engine malfunction, the Contractor shall use whatever technology for

reducing the emission of pollutants, if any, is available and appropriate for such vehicle, which would not endanger the operator of such vehicle or those working near such vehicle.

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

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

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

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

5.4.5 Compliance

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

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

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

5.4.6 Reporting

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

- 5.4.6(a)(i) The total number of diesel-powered Nonroad Vehicles used to fulfill the requirements of this Public Works Contract;
- 5.4.6(a)(ii) The number of such Nonroad Vehicles that were powered by Ultra Low Sulfur Diesel Fuel;
- 5.4.6(a)(iii) The number of such Nonroad Vehicles that utilized the best available technology for reducing the emission of pollutants, including a breakdown by vehicle model and the type of technology;
- 5.4.6(a)(iv) The number of such Nonroad Vehicles that utilized such other authorized technology in accordance with Article 5.4.3, including a breakdown by vehicle model and the type of technology used for each such vehicle;
 - 5.4.6(a)(v) The locations where such Nonroad Vehicles were used; and
- 5.4.6(a)(vi) Where a determination is in effect pursuant to Article 5.4.2(b) or 5.4.2(c), detailed information concerning the Contractor's efforts to obtain Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm).
- 5.4.6(b) The Contractor shall submit the information required by Article 5.4.6(a) at the completion of Work under the Public Works Contract and on a yearly basis no later than August 1 throughout the term of the Public Works Contract. The yearly report shall cover Work performed during the preceding fiscal year (July 1 June 30).
- 5.5 Ultra Low Sulfur Diesel Fuel. In accordance with the Coordinated Construction Act for Lower Manhattan, as amended:
 - 5.5.1 Definitions. For purposes of this Article 5.5, the following definitions apply:
 - 5.5.1(a) "Lower Manhattan" means the area to the south of and within the following lines: a line beginning at a point where the United States pierhead line in the Hudson River as it exists now or may be extended would intersect with the southerly line of West Houston Street in the Borough of Manhattan extended, thence easterly along the southerly side of West Houston Street to the southerly side of Houston Street, thence easterly along the southerly side of Houston Street to the southerly side of East Houston Street, thence northeasterly along the southerly side of East Houston Street to the point where it would intersect with the United States pierhead line in the East River as it exists now or may be extended, including tax lots within or immediately adjacent thereto.
 - 5.5.1(b) "Lower Manhattan Redevelopment Project" means any project in Lower Manhattan that is funded in whole or in part with federal or State funding, or any project intended to improve transportation between Lower Manhattan and the two air terminals in the City known as LaGuardia Airport and John F. Kennedy International Airport, or between Lower Manhattan and the air terminal in Newark known as Newark Liberty International Airport, and that is funded in whole or in part with federal funding.

- 5.5.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.
- 5.5.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower (HP) and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this terms shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) HP or less and that are not used in any construction program or project.
- 5.5.1(e) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).
- 5.5.2 Requirements. Contractors and Subcontractors are required to use only Ultra Low Sulfur Diesel Fuel to power the diesel-powered Nonroad Vehicles with engine HP rating of fifty (50) HP and above used on a Lower Manhattan Redevelopment Project and, where practicable, to reduce the emission of pollutants by retrofitting such Nonroad Vehicles with oxidation catalysts, particulate filters, or technology that achieves lowest particulate matter emissions.
- 5.6 Pesticides. In accordance with Section 17-1209 of the Administrative Code, to the extent that the Contractor or any Subcontractor applies pesticides to any property owned or leased by the City, the Contractor, and any Subcontractor shall comply with Chapter 12 of the Administrative Code.
- 5.7 Waste Treatment, Storage, and Disposal Facilities and Transporters. In connection with the Work, the Contractor and any Subcontractor shall use only those waste treatment, storage, and disposal facilities and waste transporters that possess the requisite license, permit or other governmental approval necessary to treat, store, dispose, or transport the waste, materials or hazardous substances.
- 5.8 Environmentally Preferable Purchasing. The Contractor shall ensure that products purchased or leased by the Contractor or any Subcontractor for the Work that are not specified by the City or are submitted as equivalents to a product specified by the City comply with the requirements of the New York City Environmentally Preferable Purchasing Program contained in Chapter 11 of Title 43 of the RCNY, pursuant to Chapter 3 of Title 6 of the Administrative Code.

ARTICLE 6. INSPECTION

- 6.1 During the progress of the Work and up to the date of Final Acceptance, the Contractor shall at all times afford the representatives of the City every reasonable, safe, and proper facility for inspecting all Work done or being done at the Site and also for inspecting the manufacture or preparation of materials and equipment at the place of such manufacture or preparation.
- 6.2 The Contractor's obligation hereunder shall include the uncovering or taking down of finished Work and its restoration thereafter; provided, however, that the order to uncover, take down and restore shall be in writing, and further provided that if Work thus exposed proves satisfactory, and if the Contractor has complied with Article 6.1, such uncovering or taking down and restoration shall be

considered an item of Extra Work to be paid for in accordance with the provisions of Article 26. If the Work thus exposed proves unsatisfactory, the City has no obligation to compensate the Contractor for the uncovering, taking down or restoration.

- 6.3 Inspection and approval by the Commissioner, the Engineer, Project Manager, or Resident Engineer, of finished Work or of Work being performed, or of materials and equipment at the place of manufacture or preparation, shall not relieve the Contractor of its obligation to perform the Work in strict accordance with the Contract. Finished or unfinished Work not found to be in strict accordance with the Contract shall be replaced as directed by the Engineer, even though such Work may have been previously approved and paid for. Such corrective Work is Contract Work and shall not be deemed Extra Work.
- 6.4 Rejected Work and materials shall be promptly taken down and removed from the Site, which must at all times be kept in a reasonably clean and neat condition.

ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; 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 all persons and the property of the City and of others from damage, loss or injury resulting from the Contractor's, and/or its Subcontractors' operations under this Contract. The Contractor's obligation to protect shall include the duty to provide, place or replace, and adequately maintain at or about the Site suitable and sufficient protection such as lights, barricades, and enclosures.
- 7.3 The Contractor shall comply with the notification requirements set forth below in the event of any loss, damage or injury to Work, persons or property, or any accidents arising out of the operations of the Contractor and/or its Subcontractors under this Contract.
 - 7.3.1 The Contractor shall make a full and complete report in writing to the Resident Engineer within three (3) Days after the occurrence.
 - 7.3.2 The Contractor shall also send written notice of any such event to all insurance carriers that issued potentially responsive policies (including commercial general liability insurance carriers for events relating to the Contractor's own employees) no later than twenty (20) days after such event and again no later than twenty (20) days after the initiation of any claim and/or action resulting therefrom. Such notice shall contain the following information: the number of the insurance policy, the name of the Named Insured, the date and location of the incident, and the identity of the persons injured or property damaged. For any policy on which the City and/or the Engineer, Architect, or Project Manager are Additional Insureds, such notice shall expressly specify that "this notice is

being given on behalf of the City of New York as Additional Insured, such other Additional Insureds, as well as the Named Insured."

- 7.3.2(a) Whenever such notice is sent under a policy on which the City is an Additional Insured, the Contractor shall provide copies of the notice to the Comptroller, the Commissioner and the City Corporation Counsel. The copy to the Comptroller shall be sent to the Insurance Unit, NYC Comptroller's Office, 1 Centre Street Room 1222, New York, New York, 10007. The copy to the Commissioner shall be sent to the address set forth in Schedule A of the General Conditions. The copy to the City Corporation Counsel shall be sent to Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.
- 7.3.2(b) If the Contractor fails to provide any of the foregoing notices to 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 defend, indemnify, and hold the City, its employees, and officials (the "Indemnitees") harmless against any and all claims (including but not limited to claims asserted by any employee of the Contractor and/or its Subcontractors) and costs and expenses of whatever kind (including but not limited to payment or reimbursement of attorneys' fees and disbursements) allegedly arising out of or in any way related to the operations of the Contractor and/or its Subcontractors in the performance of this Contract or from the Contractor's and/or its Subcontractors' failure to comply with any of the provisions of this Contract or of the Law. Such costs and expenses shall include all those incurred in defending the underlying claim and those incurred in connection with the enforcement of this Article 7.4 by way of cross-claim, third-party claim, declaratory action or otherwise. The parties expressly agree that the indemnification obligation hereunder contemplates (1) full indemnity in the event of liability imposed against the Indemnitees without negligence and solely by reason of statute, operation of Law or otherwise; and (2) partial indemnity in the event of any actual negligence on the part of the Indemnitees either causing 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 provisions of this Article 7 shall not be deemed to create any new right of action in favor of third parties against the **Contractor** or the **City**.

CHAPTER III: TIME PROVISIONS

ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK

8.1 The Contractor shall commence the Work on the date specified in the Notice to Proceed or the Order to Work. The time for performance of the Work under the Contract shall be computed from

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

ARTICLE 9. PROGRESS SCHEDULES

- 9.1 To enable the Work to be performed in an orderly and expeditious manner, the Contractor, within fifteen (15) Days after the Notice to Proceed or Order to Work, unless otherwise directed by the Engineer, shall submit to the Engineer a proposed progress schedule based on the Critical Path Method 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**, including the anticipated time for obtaining required approvals pursuant to Article 10; and
 - 9.1.4 The estimated amount in dollars the Contractor will claim on a monthly basis.
- 9.2 The proposed schedule shall be revised as directed by the Engineer, until finally approved by the Engineer, and after such approval, subject to the provisions of Article 11, shall be strictly adhered to by the Contractor.
- 9.3 If the Contractor shall fail to adhere to the approved progress schedule, or to the schedule as revised pursuant to Article 11, it shall promptly adopt such other or additional Means and Methods of Construction, at its sole cost and expense, as will make up for the time lost and will assure completion in accordance with the approved progress schedule. The approval by the City of a progress schedule which is shorter than the time allotted under the Contract shall not create any liability for the City if the approved progress schedule is not met.
- 9.4 The Contractor will not receive any payments until the proposed progress schedule is submitted.

ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVAL

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

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

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

- 11.1 After the commencement of any condition which is causing or may cause a delay in completion of the Work, including conditions for which the Contractor may be entitled to an extension of time, the following notifications and submittals are required:
 - 11.1.1 Within fifteen (15) Days after the Contractor becomes aware or reasonably should be aware of each such condition, the Contractor must notify the Resident Engineer or Engineer, as directed by the Commissioner, in writing of the existence, nature and effect of such condition upon the approved progress schedule and the Work, and must state why and in what respects, if any, the condition is causing or may cause a delay. Such notice shall include a description of the construction activities that are or could be affected by the condition and may include any recommendations the Contractor may have to address the delay condition and any activities the Contractor may take to avoid or minimize the delay.
 - 11.1.2 If the Contractor shall claim to be sustaining damages for delay as provided for in this Article 11, within forty-five (45) Days from the time such damages are first incurred for each such condition, the Contractor shall submit to the Commissioner a verified written statement of the details and estimates of the amounts of such damages, including categories of expected damages and projected monthly costs, together with documentary evidence of such damages as the Contractor may have at the time of submission ("statement of delay damages"), as further detailed in Article 11.6. The Contractor may submit the above statement within such additional time as may be granted by the Commissioner in writing upon written request therefor.
 - 11.1.3 Articles 11.1.1 and 11.1.2 do not relieve the Contractor of its obligation to comply with the provisions of Article 44.
- 11.2 Failure of the Contractor to strictly comply with the requirements of Article 11.1.1 may, 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 both Articles 11.1.1 and 11.1.2 shall be deemed a conclusive waiver by the Contractor of any and all claims for damages for delay arising from such condition and no right to recover on such claims shall exist.
- 11.3 When appropriate and directed by the Engineer, the progress schedule shall be revised by the Contractor until finally approved by the Engineer. The revised progress schedule must be strictly adhered to by the Contractor.

11.4 Compensable Delays

11.4.1 The Contractor agrees to make claim only for additional costs attributable to delay in the performance of this Contract necessarily extending the time for completion of the Work or resulting from acceleration directed by the Commissioner and required to maintain the progress schedule, occasioned solely by any act or omission to act of the City listed below. The Contractor also agrees that delay from any other cause shall be

compensated, if at all, solely by an extension of time to complete the performance of the Work.

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

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

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

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

11.4.1.5 Differing site conditions or environmental hazards that were neither known nor reasonably ascertainable on a pre-bid inspection of the Site or review of the bid documents or other publicly available sources, and that are not ordinarily encountered in the Project's geographical area or neighborhood or in the type of Work to be performed.

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

11.4.1.7 Delays not contemplated by the parties;

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

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

- 11.4.2 No claim may be made for any alleged delay in Substantial Completion of the Work if the Work will be or is substantially completed by the date of Substantial Completion provided for in Schedule A unless acceleration has been directed by the Commissioner to meet the date of Substantial Completion set forth in Schedule A, or unless there is a provision in the Contract providing for additional compensation for early completion.
- 11.4.3 The provisions of this Article 11 apply only to claims for additional costs attributable to delay and do not preclude determinations by the Commissioner allowing reimbursements for additional costs for Extra Work pursuant to Articles 25 and 26 of this Contract. To the extent that any cost attributable to delay is reimbursed as part of a change order, no additional claim for compensation under this Article 11 shall be allowed.
- 11.5 Non-Compensable Delays. The Contractor agrees to make no claim for, and is deemed to have included in its bid prices for the various items of the Contract, the extra/additional costs attributable to any delays caused by or attributable to the items set forth below. For such items, the Contractor shall be compensated, if at all, solely by an extension of time to complete the performance of the Work, in accordance with the provisions of Article 13. Such extensions of time will be granted, if at all, pursuant to the grounds set forth in Article 13.3.
 - 11.5.1 The acts or omissions of any third parties, including but not limited to Other Contractors, public/ governmental bodies (other than City Agencies), utilities or private enterprises, who are disclosed in the Contract Documents or are ordinarily encountered or generally recognized as related to the Work;

- 11.5.2 Any situation which was within the contemplation of the parties at the time of entering into the Contract, including any delay indicated or disclosed in the Contract Documents or that would be generally recognized by a reasonably prudent contractor as related to the nature of the Work, and/or the existence of any facility or appurtenance owned, operated or maintained by any third party, as indicated or disclosed in the Contract Documents or ordinarily encountered or generally recognized as related to the nature of the Work;
- 11.5.3 Restraining orders, injunctions or judgments issued by a court which were caused by a Contractor's submission, action or inaction or by a Contractor's Means and Methods of Construction, or by third parties, unless such order, injunction or judgment was the result of an act or omission by the City;
- 11.5.4 Any labor boycott, strike, picketing, lockout or similar situation;
- 11.5.5 Any shortages of supplies or materials, or unavailability of equipment, required by the Contract Work;
- 11.5.6 Climatic conditions, storms, floods, droughts, tidal waves, fires, hurricanes, earthquakes, landslides or other catastrophes or acts of God, or acts of war or of the public enemy or terrorist acts, including the City's reasonable responses thereto; and
- 11.5.7 Extra Work which does not significantly affect the overall completion of the Contract, reasonable delays in the review or issuance of change orders or field orders and/or in shop drawing reviews or approvals.
- 11.6 Required Content of Submission of Statement of Delay Damages
 - 11.6.1 In the verified written statement of delay damages required by Article 11.1.2, the following information shall be provided by the Contractor:
 - 11.6.1.1 For each delay, the start and end dates of the claimed periods of delay and, in addition, a description of the operations that were delayed, an explanation of how they were delayed, and the reasons for the delay, including identifying the applicable act or omission of the City listed in Article 11.4.
 - 11.6.1.2 A detailed factual statement of the claim providing all necessary dates, locations and items of **Work** affected by the claim.
 - 11.6.1.3 The estimated amount of additional compensation sought and a breakdown of that amount into categories as described in Article 11.7.
 - 11.6.1.4 Any additional information requested by the Commissioner.

11.7 Recoverable Costs

- 11.7.1 Delay damages may be recoverable for the following costs actually and necessarily incurred in the performance of the Work:
 - 11.7.1.1 Direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits, based on time and materials records;
 - 11.7.1.2 Necessary materials (including transportation to the Site), based on time and material records;

- 11.7.1.3 Reasonable rental value of necessary plant and equipment other than small tools, plus fuel/energy costs according to the applicable formula set forth in Articles 26.2.4 and/or 26.2.8, based on time and material records;
- 11.7.1.4 Additional insurance and bond costs;
- 11.7.1.5 Extended Site overhead, field office rental, salaries of field office staff, on-site project managers and superintendents, field office staff vehicles, **Project**-specific storage, field office utilities and telephone, and field office consumables;
- 11.7.1.6 Labor escalation costs based on actual costs;
- 11.7.1.7 Materials and equipment escalation costs based on applicable industry indices unless documentation of actual increased cost is provided;
- 11.7.1.8 Additional material and equipment storage costs based on actual documented costs and additional costs necessitated by extended manufacturer warranty periods; and
- 11.7.1.9 Extended home office overhead calculated based on the following formula:
 - (1) Subtract from the original Contract amount the amount earned by original contractual Substantial Completion date (not including change orders);
 - (2) Remove 15% overhead and profit from the calculation in item (1) by dividing the results of item (1) by 1.15;
 - (3) Multiply the result of item (2) by 7.25% for the total home office overhead;
 - (4) Multiply the result of item (3) by 7.25% for the total profit; and
 - (5) The total extended home office overhead will be the total of items (3) and (4).
- 11.7.2 Recoverable Subcontractor Costs. When the Work is performed by a Subcontractor, the Contractor may be paid the actual and necessary costs of such subcontracted Work as outlined above in Articles 11.7.1.1 through 11.7.1.8, and an additional overhead of 5% of the costs outlined in Articles 11.7.1.1 through 11.7.1.3.
- 11.7.3 Non-Recoverable Costs. The parties agree that the City will have no liability for the following items and the Contractor agrees it shall make no claim for the following items:
 - 11.7.3.1Profit, or loss of anticipated or unanticipated profit, except as provided in Article 11.7.1.9;
 - 11.7.3.2Consequential damages, including, but not limited to, construction or bridge loans or interest paid on such loans, loss of bonding capacity, bidding opportunities, or interest in investment, or any resulting insolvency;
 - 11.7.3.3 Indirect costs or expenses of any nature except those included in Article 11.7.1;
 - 11.7.3.4 Direct or indirect costs attributable to performance of Work where the Contractor, because of situations or conditions within its control, has not progressed the Work in a satisfactory manner; and
 - 11.7.3.5 Attorneys' fees and dispute and claims preparation expenses.

- 11.8 Any claims for delay under this Article 11 are not subject to the jurisdiction of the Contract Dispute Resolution Board pursuant to the dispute resolution process set forth in Article 27.
- 11.9 Any compensation provided to the Contractor in accordance with this Article 11 will be made pursuant to a claim filed with the Comptroller. Nothing in this Article 11 extends the time for the Contractor to file an action with respect to a claim within six months after Substantial Completion pursuant to Article 56.

ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS

- 12.1 During the progress of the Work, Other Contractors may be engaged in performing other work or may be awarded other contracts for additional work on this Project. In that event, the Contractor shall coordinate the Work to be done hereunder with the work of such Other Contractors and the Contractor shall fully cooperate with such Other Contractors and carefully fit its own Work to that provided under other contracts as may be directed by the Engineer. The Contractor shall not commit or permit any act which will interfere with the performance of work by any Other Contractors.
- 12.2 If the Engineer determines that the Contractor is failing to coordinate its Work with the work of Other Contractors as the Engineer has directed, then the Commissioner shall have the right to withhold any payments otherwise due hereunder until the Contractor completely complies with the Engineer's directions.
- 12.3 The Contractor shall notify the Engineer in writing if any Other Contractor on this Project is failing to coordinate its work with the Work of this Contract. If the Engineer finds such charges to be true, the Engineer shall promptly issue such directions to the Other Contractor with respect thereto as the situation may require. The City shall not, however, be liable for any damages suffered by any Other Contractor's failure to coordinate its work with the Work of this Contract or by reason of the Other Contractor's failure to promptly comply with the directions so issued by the Engineer, or by reason of any Other Contractor's default in performance, it being understood that the City does not guarantee the responsibility or continued efficiency of any contractor. The Contractor agrees to make no claim against the City for any damages relating to or arising out of any directions issued by the Engineer pursuant to this Article 12 (including but not limited to the failure of any Other Contractor to comply or promptly comply with such directions), or the failure of any Other Contractor to coordinate its work, or the default in performance of any Other Contractor.
- 12.4 The Contractor shall indemnify and hold the City harmless from any and all claims or judgments for damages and from costs and expenses to which the City may be subjected or which it may suffer or incur by reason of the Contractor's failure to comply with the Engineer's directions promptly; and the Comptroller shall have the right to exercise the powers reserved in Article 23 with respect to any claims which may be made for damages due to the Contractor's failure to comply with the Engineer's directions promptly. Insofar as the facts and Law relating to any claim would preclude the City from being completely indemnified by the Contractor, the City shall be partially indemnified by the Contractor to the fullest extent provided by Law.
- 12.5 Should the Contractor sustain any damage through any act or omission of any Other Contractor having a contract with the City for the performance of work upon the Site or of work which may be necessary to be performed for the proper prosecution of the Work to be performed hereunder, or through any act or omission of a subcontractor of such Other Contractor, the Contractor shall have no claim against the City for such damage, but shall have a right to recover such damage from the Other

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

- 12.5.1 Should any Other Contractor having or who shall hereafter have a contract with the City for the performance of work upon the Site sustain any damage through any act or omission of the Contractor hereunder or through any act or omission of any Subcontractor of the Contractor, the Contractor agrees to reimburse such Other Contractor for all such damages and to defend at its own expense any action based upon such claim and if any judgment or claim (even if the allegations of the action are without merit) against the City shall be allowed the Contractor shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith and agrees to indemnify and hold the City harmless from all such claims. Insofar as the facts and Law relating to any claim would preclude the City from being completely indemnified by the Contractor, the City shall be partially indemnified by the Contractor to the fullest extent provided by Law.
- 12.6 The City's right to indemnification hereunder shall in no way be diminished, waived or discharged by its recourse to assessment of liquidated damages as provided in Article 15, or by the exercise of any other remedy provided for by Contract or by Law.

ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE

- 13.1 If performance by the Contractor is delayed for a reason set forth in Article 13.3, the Contractor may be allowed a reasonable extension of time in conformance with this Article 13 and the PPB Rules.
- 13.2 Any extension of time may be granted only by the ACCO or by the Board for the Extension of Time (hereafter "Board") (as set forth below) upon written application by the Contractor.
- 13.3 Grounds for Extension: If such application is made, the Contractor shall be entitled to an extension of time for delay in completion of the Work caused solely:
 - 13.3.1 By the acts or omissions of the City, its officials, agents or employees; or
 - 13.3.2 By the act or omissions of Other Contractors on this Project; or
 - 13.3.3 By supervening conditions entirely beyond the control of either party hereto (such as, but not limited to, acts of God or the public enemy, excessive inclement weather, war or other national emergency making performance temporarily impossible or illegal, or strikes or labor disputes not brought about by any act or omission of the **Contractor**).
 - 13.3.4 The Contractor shall, however, be entitled to an extension of time for such causes only for the number of Days of delay which the ACCO or the Board may determine to be due solely to such causes, and then only if the Contractor shall have strictly complied with all of the requirements of Articles 9 and 10.
- 13.4 The Contractor shall not be entitled to receive a separate extension of time for each of several causes of delay operating concurrently, but, if at all, only for the actual period of delay in completion of the Work as determined by the ACCO or the Board, irrespective of the number of causes contributing to produce such delay. If one of several causes of delay operating concurrently results from any act, fault or omission of the Contractor or of its Subcontractors or Materialmen, and would of itself (irrespective

of the concurrent causes) have delayed the Work, no extension of time will be allowed for the period of delay resulting from such act, fault or omission.

- 13.5 The determination made by the ACCO or the Board on an application for an extension of time shall be binding and conclusive on the Contractor.
- 13.6 The ACCO or the Board acting entirely within their discretion may grant an application for an extension of time for causes of delay other than those herein referred.
- 13.7 Permitting the Contractor to continue with the Work after the time fixed for its completion has expired, or after the time to which such completion may have been extended has expired, or the making of any payment to the Contractor after such time, shall in no way operate as a waiver on the part of the City of any of its rights under this Contract.
 - 13.8 Application for Extension of Time:
 - 13.8.1 Before the Contractor's time extension request will be considered, the Contractor shall notify the ACCO of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the ACCO identifying:
 - 13.8.1(a) The Contractor; the registration number; and Project description;
 - 13.8.1(b) Liquidated damage assessment rate, as specified in the Contract;
 - 13.8.1(c) Original total bid price;
 - 13.8.1(d) The original Contract start date and completion date;
 - 13.8.1(e) Any previous time extensions granted (number and duration); and
 - 13.8.1(f) The extension of time requested.
 - 13.8.2 In addition, the application for extension of time shall set forth in detail:
 - 13.8.2(a) The nature of each alleged cause of delay in completing the Work;
 - 13.8.2(b) The date upon which each such cause of delay began and ended and the number of **Days** attributable to each such cause;
 - 13.8.2(c) A statement that the Contractor waives all claims except for those delineated in the application, and the particulars of any claims which the Contractor does not agree to waive. For time extensions for Substantial Completion and final completion payments, the application shall include a detailed statement of the dollar amounts of each element of claim item reserved; and
 - 13.8.2(d) A statement indicating the Contractor's understanding that the time extension is granted only for purposes of permitting continuation of Contract performance and payment for Work performed and that the City retains its right to conduct an investigation and assess liquidated damages as appropriate in the future.
 - 13.9 Analysis and Approval of Time Extensions:

- 13.9.1 For time extensions for partial payments, a written determination shall be made by the ACCO who may, for good and sufficient cause, extend the time for the performance of the Contract as follows:
 - 13.9.1(a) If the Work is to be completed within six (6) months, the time for performance may be extended for sixty (60) Days;
 - 13.9.1(b) If the Work is to be completed within less than one (1) year but more than six (6) months, an extension of ninety (90) Days may be granted;
 - 13.9.1(c) If the Contract period exceeds one (1) year, besides the extension granted in Article 13.9.1(b), an additional thirty (30) Days may be granted for each multiple of six (6) months involved beyond the one (1) year period; or
 - —13.9.1(d) If exceptional circumstances exist, the ACCO may extend the time for performance beyond the extensions in Articles 13.9.1(a), 13.9.1(b), and 13.9.1(c). In that event, the ACCO shall file with the Mayor's Office of Contract Services a written explanation of the exceptional circumstances.
- 13.9.2 For extensions of time for Substantial Completion and final completion payments, the Engineer, in consultation with the ACCO, shall prepare a written analysis of the delay (including a preliminary determination of the causes of delay, the beginning and end dates for each such cause of delay, and whether the delays are excusable under the terms of this Contract). The report shall be subject to review by and approval of the Board, which shall have authority to question its analysis and determinations and request additional facts or documentation. The report as reviewed and made final by the Board shall be made a part of the Agency contract file. Neither the report itself nor anything contained therein shall operate as a waiver or release of any claim the City may have against the Contractor for either actual or liquidated damages.
- 13.9.3 Approval Mechanism for Time Extensions for Substantial Completion or Final Completion Payments: An extension shall be granted only with the approval of the Board which is comprised of the ACCO of the Agency, the City Corporation Counsel, and the Comptroller, or their authorized representatives.
- 13.9.4 Neither the granting of any application for an extension of time to the Contractor or any Other Contractor on this Project nor the papers, records or reports related to any application for or grant of an extension of time or determination related thereto shall be referred to or offered in evidence by the Contractor or its attorneys in any action or proceeding.
- 13.10 No Damage for Delay: The Contractor agrees to make no claim for damages for delay in the performance of this Contract occasioned by any act or omission to act of the City or any of its representatives, except as provided for in Article 11.

ARTICLE 14. COMPLETION AND FINAL ACCEPTANCE OF THE WORK

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

- 14.2 Determining the Date of Substantial Completion: The Work will be deemed to be substantially complete when the two conditions set forth below have been met.
 - 14.2.1 Inspection: The Engineer or Resident Engineer, as applicable, has inspected the Work and has made a written determination that it is substantially complete.
 - 14.2.2 Approval of Final Approved Punch List and Date for Final Acceptance: Following inspection of the Work, the Engineer/Resident Engineer shall furnish the Contractor with a final punch list, specifying all items of Work to be completed and proposing dates for the completion of each specified item of Work. The Contractor shall then submit in writing to the Engineer/Resident Engineer within ten (10) Days of the Engineer/Resident Engineer furnishing the final punch list either acceptance of the dates or proposed alternative dates for the completion of each specified item of Work. If the Contractor neither accepts the dates nor proposes alternative dates within ten (10) Days, the schedule proposed by the Engineer/Resident Engineer shall be deemed accepted. If the Contractor proposes alternative dates, then, within a reasonable time after receipt, the Engineer/Resident Engineer, in a written notification to the Contractor, shall approve the Contractor's completion dates or, if they are unable to agree, the Engineer/Resident Engineer/Resident Engineer shall establish dates for the completion of each item of Work. The latest completion date specified shall be the date for Final Acceptance of the Work.
- 14.3 Date of Substantial Completion. The date of approval of the Final Approved Punch List, shall be the date of Substantial Completion. The date of approval of the Final Approved Punch List shall be either (a) if the Contractor approves the final punch list and proposed dates for completion furnished by the Engineer/Resident Engineer, the date of the Contractor's approval; or (b) if the Contractor neither accepts the dates nor proposes alternative dates, ten (10) Days after the Engineer/Resident Engineer furnishes the Contractor with a final punch list and proposed dates for completion; or (c) if the Contractor proposes alternative dates, the date that the Engineer/Resident Engineer sends written notification to the Contractor either approving the Contractor's proposed alternative dates or establishing dates for the completion for each item of Work.
- 14.4 Determining the Date of Final Acceptance: The Work will be accepted as final and complete as of the date of the Engineer's/Resident Engineer's inspection if, upon such inspection, the Engineer/Resident Engineer finds that all items on the Final Approved Punch List are complete and no further Work remains to be done. The Commissioner will then issue a written determination of Final Acceptance.
- 14.5 Request for Inspection: Inspection of the Work by the Engineer/Resident Engineer for the purpose of Substantial Completion or Final Acceptance shall be made within fourteen (14) Days after receipt of the Contractor's written request therefor.
- 14.6 Request for Re-inspection: If upon inspection for the purpose of Substantial Completion or Final Acceptance, the Engineer/Resident Engineer determines that there are items of Work still to be performed, the Contractor shall promptly perform them and then request a re-inspection. If upon re-inspection, the Engineer/Resident Engineer determines that the Work is substantially complete or finally accepted, the date of such re-inspection shall be the date of Substantial Completion or Final Acceptance. Re-inspection by the Engineer/Resident Engineer shall be made within ten (10) Days after receipt of the Contractor's written request therefor.

14.7 Initiation of Inspection by the Engineer/Resident Engineer: If the Contractor does not request inspection or re-inspection of the Work for the purpose of Substantial Completion or Final Acceptance, the Engineer/Resident Engineer may initiate such inspection or re-inspection.

ARTICLE 15. LIQUIDATED DAMAGES

- 15.1 In the event the Contractor fails to substantially complete the Work within the time fixed for such Substantial Completion in Schedule A of the General Conditions, plus authorized time extensions, or if the Contractor, in the sole determination of the Commissioner, has abandoned the Work, the Contractor shall pay to the City the sum fixed in Schedule A of the General Conditions, for each and every Day that the time consumed in substantially completing the Work exceeds the time allowed therefor; which said sum, in view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of delay in the Substantial Completion of the Work hereunder, is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such delay, and not as a penalty. This Article 15 shall also apply to the Contractor whether or not the Contractor is defaulted pursuant to Chapter X of this Contract. Neither the failure to assess liquidated damages nor the granting of any time extension shall operate as a waiver or release of any claim the City may have against the Contractor for either actual or liquidated damages.
- 15.2 Liquidated damages received hereunder are not intended to be nor shall they be treated as either a partial or full waiver or discharge of the City's right to indemnification, or the Contractor's obligation to indemnify the City, or to any other remedy provided for in this Contract or by Law.
- 15.3 The Commissioner may deduct and retain out of the monies which may become due hereunder, the amount of any such liquidated damages; and in case the amount which may become due hereunder shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.

ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION

- 16.1 Unless otherwise provided for in the Specifications, the Commissioner may take over, use, occupy or operate any part of the Work at any time prior to Final Acceptance, upon written notification to the Contractor. The Engineer or Resident Engineer, as applicable, shall inspect the part of the Work to be taken over, used, occupied, or operated, and will furnish the Contractor with a written statement of the Work, if any, which remains to be performed on such part. The Contractor shall not object to, nor interfere with, the Commissioner's decision to exercise the rights granted by Article 16. In the event the Commissioner takes over, uses, occupies, or operates any part of the Work:
 - 16.1.1 the Engineer/Resident Engineer shall issue a written determination of Substantial Completion with respect to such part of the Work;
 - 16.1.2 the Contractor shall be relieved of its absolute obligation to protect such part of the unfinished Work in accordance with Article 7;
 - 16.1.3 the Contractor's guarantee on such part of the Work shall begin on the date of such use by the City; and;
 - 16.1.4 the Contractor shall be entitled to a return of so much of the amount retained in accordance with Article 21 as it relates to such part of the Work, except so much thereof as may be retained under Articles 24 and 44.

CHAPTER IV: SUBCONTRACTS AND ASSIGNMENTS

ARTICLE 17. SUBCONTRACTS

- 17.1 The Contractor shall not make subcontracts totaling an amount more than the percentage of the total Contract price fixed in Schedule A of the General Conditions, without prior written permission from the Commissioner. All subcontracts made by the Contractor shall be in writing. No Work may be performed by a Subcontractor prior to the Contractor entering into a written subcontract with the Subcontractor and complying with the provisions of this Article 17.
- 17.2 Before making any subcontracts, the Contractor shall submit a written statement to the Commissioner giving the name and address of the proposed Subcontractor; the portion of the Work and materials which it is to perform and furnish; the cost of the subcontract; the VENDEX questionnaire if required; the proposed subcontract if requested by the Commissioner; and any other information tending to prove that the proposed Subcontractor has the necessary facilities, skill, integrity, past experience, and financial resources to perform the Work in accordance with the terms and conditions of this Contract.
- 17.3 In addition to the requirements in Article 17.2, Contractor is required to list the Subcontractor in the web based Subcontractor Reporting System through the City's Payee Information Portal (PIP), available at www.nyc.gov/pip. For each Subcontractor listed, Contractor is required to provide the following information: maximum contract value, description of Subcontractor's Work, start and end date of the subcontract and identification of the Subcontractor's industry. Thereafter, Contractor will be required to report in the system the payments made to each Subcontractor within 30 days of making the payment. If any of the required information changes throughout the Term of the Contract, Contractor will be required to revise the information in the system.

Failure of the Contractor to list a Subcontractor and/or to report Subcontractor payments in a timely fashion may result in the Commissioner declaring the Contractor in default of the Contract and will subject Contractor to liquidated damages in the amount of \$100 per day for each day that the Contractor fails to identify a Subcontractor along with the required information about the Subcontractor and/or fails to report payments to a Subcontractor, beyond the time frames set forth herein or in the notice from the City. Article 15 shall govern the issue of liquidated damages.

- 17.4 If an approved **Subcontractor** elects to subcontract any portion of its subcontract, the proposed sub-subcontract shall be submitted in the same manner as directed above.
- 17.5 The Commissioner will notify the Contractor in writing whether the proposed Subcontractor is approved. If the proposed Subcontractor is not approved, the Contractor may submit another proposed Subcontractor unless the Contractor decides to do the Work. No Subcontractor shall be permitted to enter or perform any work on the Site unless approved.
- 17.6 Before entering into any subcontract hereunder, the Contractor shall provide the proposed Subcontractor with a complete copy of this document and inform the proposed Subcontractor fully and completely of all provisions and requirements of this Contract relating either directly or indirectly to the Work to be performed and the materials to be furnished under such subcontract, and every such

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¹ In order to use the new system, a PIP account will be required. Detailed instructions on creating a PIP account and using the new system are also available at www.nyc.gov/pip. Additional assistance with PIP may be obtained by emailing the Financial Information Services Agency Help Desk at pip@fisa.nyc.gov.

Subcontractor shall expressly stipulate that all labor performed and materials furnished by the Subcontractor shall strictly comply with the requirements of this Contract.

- 17.7 Documents given to a prospective Subcontractor for the purpose of soliciting the Subcontractor's bid shall include either a copy of the bid cover or a separate information sheet setting forth the Project name, the Contract number (if available), the Agency (as noted in Article 2.1.6), and the Project's location.
- 17.8 The Commissioner's approval of a Subcontractor shall not relieve the Contractor of any of its responsibilities, duties, and liabilities hereunder. The Contractor shall be solely responsible to the City for the acts or defaults of its Subcontractor and of such Subcontractor's officers, agents, and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the Contractor to the extent of its subcontract.
- 17.9 If the Subcontractor fails to maintain the necessary facilities, skill, integrity, past experience, and financial resources (other than due to the Contractor's failure to make payments where required) to perform the Work in accordance with the terms and conditions of this Contract, the Contractor shall promptly notify the Commissioner and replace such Subcontractor with a newly approved Subcontractor in accordance with this Article 17.
- 17.10 The Contractor shall be responsible for ensuring that all Subcontractors performing Work at the Site maintain all insurance required by Law.
- 17.11 The Contractor shall promptly, upon request, file with the Engineer a conformed copy of the subcontract and its cost. The subcontract shall provide the following:
 - 17.11.1 Payment to Subcontractors: The agreement between the Contractor and its Subcontractor shall contain the same terms and conditions as to method of payment for Work, labor, and materials, and as to retained percentages, as are contained in this Contract.
 - 17.11.2 Prevailing Rate of Wages: The agreement between the Contractor and its Subcontractor shall include the prevailing wage rates and supplemental benefits to be paid in accordance with Labor Law Section 220.
 - 17.11.3 Section 6-123 of the Administrative Code: Pursuant to the requirements of Section 6-123 of the Administrative Code, every agreement between the Contractor and a Subcontractor in excess of fifty thousand (\$50,000) dollars shall include a provision that the Subcontractor shall not engage in any unlawful discriminatory practice as defined in Title VIII of the Administrative Code (Section 8-101 et seq.).
 - 17.11.4 All requirements required pursuant to federal and/or state grant agreement(s), if applicable to the Work.
- 17.12 The Commissioner may deduct from the amounts certified under this Contract to be due to the Contractor, the sum or sums due and owing from the Contractor to the Subcontractors according to the terms of the said subcontracts, and in case of dispute between the Contractor and its Subcontractor, or Subcontractors, as to the amount due and owing, the Commissioner may deduct and withhold from the amounts certified under this Contract to be due to the Contractor such sum or sums as may be claimed by such Subcontractor, or Subcontractors, in a sworn affidavit, to be due and owing until such time as such claim or claims shall have been finally resolved.

- 17.13 On contracts where performance bonds and payment bonds are executed, the Contractor shall include on each requisition for payment the following data: Subcontractor's name, value of the subcontract, total amount previously paid to Subcontractor for Work previously requisitioned, and the amount, including retainage, to be paid to the Subcontractor for Work included in the requisition.
- 17.14 On Contracts where performance bonds and payment bonds are not executed, the Contractor shall include with each requisition for payment submitted hereunder, a signed statement from each and every Subcontractor and/or Materialman for whom payment is requested in such requisition. Such signed statement shall be on the letterhead of the Subcontractor and/or Materialman for whom payment is requested and shall (i) verify that such Subcontractor and/or Materialman has been paid in full for all Work performed and/or material supplied to date, exclusive of any amount retained and any amount included on the current requisition, and (ii) state the total amount of retainage to date, exclusive of any amount retained on the current requisition.

ARTICLE 18. ASSIGNMENTS

- 18.1 The Contractor shall not assign, transfer, convey or otherwise dispose of this Contract, or the right to execute it, or the right, title or interest in or to it or any part thereof, or assign, by power of attorney or otherwise any of the monies due or to become due under this Contract, unless the previous written consent of the Commissioner shall first be obtained thereto, and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments.
- 18.2 Such assignment, transfer, conveyance or other disposition of this Contract shall not be valid until filed in the office of the Commissioner and the Comptroller, with the written consent of the Commissioner endorsed thereon or attached thereto.
- 18.3 Failure to obtain the previous written consent of the Commissioner to such an assignment, transfer, conveyance or other disposition, may result in the revocation and annulment of this Contract. The City shall thereupon be relieved and discharged from any further liability to the Contractor, its assignees, transferees or sublessees, who shall forfeit and lose all monies therefor earned under the Contract, except so much as may be required to pay the Contractor's employees.
- 18.4 The provisions of this clause shall not hinder, prevent, or affect an assignment by the Contractor for the benefit of its creditors made pursuant to the Laws of the State of New York.
- 18.5 This Contract may be assigned by the City to any corporation, agency or instrumentality having authority to accept such assignment.

CHAPTER V: CONTRACTOR'S SECURITY AND GUARANTEE

ARTICLE 19. SECURITY DEPOSIT

19.1 If performance and payment bonds are required, the City shall retain the bid security to ensure that the successful bidder executes the Contract and furnishes the required payment and performance security within ten (10) Days after notice of the award of the Contract. If the successful bidder fails to execute the Contract and furnish the required payment and performance security, the City shall retain such bid security as set forth in the Information for Bidders. If the successful bidder executes the

Contract and furnishes the required payment and performance security, the City shall return the bid security within a reasonable time after the furnishing of such bonds and execution of the Contract by the City.

- 19.2 If performance and payment bonds are not required, the bid security shall be retained by the City as security for the Contractor's faithful performance of the Contract. If partial payments are provided, the bid security will be returned to the Contractor after the sum retained under Article 21 equals the amount of the bid security, subject to other provisions of this Contract. If partial payments are not provided, the bid security will be released when final payment is certified by the City for payment.
- 19.3 If the Contractor is declared in default under Article 48 prior to the return of the deposit, or if any claim is made such as referred to in Article 23, the amount of such deposit, or so much thereof as the Comptroller may deem necessary, may be retained and then applied by the Comptroller:
 - 19.3.1 To compensate the City for any expense, loss or damage suffered or incurred by reason of or resulting from such default, including the cost of re-letting and liquidated damages; or
 - 19.3.2 To indemnify the City against any and all claims.

ARTICLE 20. PAYMENT GUARANTEE

- 20.1 On Contracts where one hundred (100%) percent performance bonds and payment bonds are executed, this Article 20 does not apply.
- 20.2 In the event the terms of this Contract do not require the Contractor to provide a payment bond or where the Contract does not require a payment bond for one hundred (100%) percent of the Contract price, the City shall, in accordance with the terms of this Article 20, guarantee payment of all lawful claims for:
 - 20.2.1 Wages and compensation for labor performed and/or services rendered; and
 - 20.2.2 Materials, equipment, and supplies provided, whether incorporated into the Work or not, when demands have been filed with the City as provided hereinafter by any person, firm, or corporation which furnished labor, material, equipment, supplies, or any combination thereof, in connection with the Work performed hereunder (hereinafter referred to as the "beneficiary") at the direction of the City or the Contractor.
 - 20.3 The provisions of Article 20.2 are subject to the following limitations and conditions:
 - 20.3.1 If the Contractor provides a payment bond for a value that is less than one hundred (100%) percent of the value of the Contract Work, the payment bond provided by the Contractor shall be primary (and non-contributing) to the payment guarantee provided under this Article 20.
 - 20.3.2 The guarantee is made for the benefit of all beneficiaries as defined in Article 20.2 provided that those beneficiaries strictly adhere to the terms and conditions of Article 20.3.4 and 20.3.5.

- 20.3.3 Nothing in this Article 20 shall prevent a beneficiary providing labor, services or material for the Work from suing the Contractor for any amounts due and owing the beneficiary by the Contractor.
- 20.3.4 Every person who has furnished labor or material, to the Contractor or to a Subcontractor of the Contractor, in the prosecution of the Work and who has not been paid in full therefor before the expiration of a period of ninety (90) Days after the date on which the last of the labor was performed or material was furnished by him/her for which the claim is made, shall have the right to sue on this payment guarantee in his/her own name for the amount, or the balance thereof, unpaid at the time of commencement of the action; provided, however, that a person having a direct contractual relationship with a Subcontractor of the Contractor but no contractual relationship express or implied with the Contractor shall not have a right of action upon the guarantee unless he/she shall have given written notice to the Contractor within one hundred twenty (120) Days from the date on which the last of the labor was performed or the last of the material was furnished, for which his/her claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the material was furnished or for whom the labor was performed. The notice shall be served by delivering the same personally to the Contractor or by mailing the same by registered mail, postage prepaid, in an envelope addressed to the Contractor at any place where it maintains an office or conducts its business; provided, however, that where such notice is actually received by the Contractor by other means, such notice shall be deemed sufficient.
- 20.3.5 Except as provided in Labor Law Section 220-g, no action on this payment guarantee shall be commenced after the expiration of the one-year limitations period set forth in Section 137(4)(b) of the State Finance Law.
- 20.3.6 The Contractor shall promptly forward to the City any notice or demand received pursuant to Article 20.3.4. The Contractor shall inform the City of any defenses to the notice or demand and shall forward to the City any documents the City requests concerning the notice or demand.
- 20.3.7 All demands made against the City by a beneficiary of this payment guarantee shall be presented to the Engineer along with all written documentation concerning the demand which the Engineer deems reasonably appropriate or necessary, which may include, but shall not be limited to: the subcontract; any invoices presented to the Contractor for payment; the notarized statement of the beneficiary that the demand is due and payable, that a request for payment has been made of the Contractor and that the demand has not been paid by the Contractor within the time allowed for such payment by the subcontract; and copies of any correspondence between the beneficiary and the Contractor concerning such demand. The City shall notify the Contractor that a demand has been made. The Contractor shall inform the City of any defenses to the demand and shall forward to the City any documents the City requests concerning the demand.
- 20.3.8 The City shall make payment only if, after considering all defenses presented by the Contractor, it determines that the payment is due and owing to the beneficiary making the demand.
- 20.3.9 No beneficiary shall be entitled to interest from the City, or to any other costs, including, but not limited to, attorneys' fees, except to the extent required by State Finance Law Section 137.

- 20.4 Upon the receipt by the City of a demand pursuant to this Article 20, the City may withhold from any payment otherwise due and owing to the Contractor under this Contract an amount sufficient to satisfy the demand.
 - 20.4.1 In the event the City determines that the demand is valid, the City shall notify the Contractor of such determination and the amount thereof and direct the Contractor to immediately pay such amount to the beneficiary. In the event the Contractor, within seven (7) Days of receipt of such notification from the City, fails to pay the beneficiary, such failure shall constitute an automatic and irrevocable assignment of payment by the Contractor to the beneficiary for the amount of the demand determined by the City to be valid. The Contractor, without further notification or other process, hereby gives its unconditional consent to such assignment of payment to the beneficiary and authorizes the City, on its behalf, to take all necessary actions to implement such assignment of payment, including without limitation the execution of any instrument or documentation necessary to effectuate such assignment.
 - 20.4.2In the event that the amount otherwise due and owing to the Contractor by the City is insufficient to satisfy such demand, the City may, at its option, require payment from the Contractor of an amount sufficient to cover such demand and exercise any other right to require or recover payment which the City may have under Law or Contract.
 - 20.4.3 In the event the City determines that the demand is invalid, any amount withheld pending the City's review of such demand shall be paid to the Contractor; provided, however, no lien has been filed. In the event a claim or an action has been filed, the terms and conditions set forth in Article 23 shall apply. In the event a lien has been filed, the parties will be governed by the provisions of the Lien Law of the State of New York.
- 20.5 The provisions of this Article 20 shall not prevent the City and the Contractor from resolving disputes in accordance with the PPB Rules, where applicable.
- 20.6 In the event the City determines that the beneficiary is entitled to payment pursuant to this Article 20, such determination and any defenses and counterclaims raised by the Contractor shall be taken into account in evaluating the Contractor's performance.
- 20.7 Nothing in this Article 20 shall relieve the Contractor of the obligation to pay the claims of all persons with valid and lawful claims against the Contractor relating to the Work.
- 20.8 The Contractor shall not require any performance, payment or other bonds of any Subcontractor if this Contract does not require such bonds of the Contractor.
- 20.9 The payment guarantee made pursuant to this Article 20 shall be construed in a manner consistent with Section 137 of the State Finance Law and shall afford to persons furnishing labor or materials to the Contractor or its Subcontractors in the prosecution of the Work under this Contract all of the rights and remedies afforded to such persons by such section, including but not limited to, the right to commence an action against the City on the payment guarantee provided by this Article 20 within the one-year limitations period set forth in Section 137(4)(b).

ARTICLE 21. RETAINED PERCENTAGE

21.1 If this Contract requires one hundred (100%) percent performance and payment security, then as further security for the faithful performance of this Contract, the Commissioner shall deduct, and

retain until the substantial completion of the Work, five (5%) percent of the value of Work certified for payment in each partial payment voucher.

- 21.2 If this Contract does not require one hundred (100%) percent performance and payment security and if the price for which this Contract was awarded does not exceed one million (\$1,000,000) dollars, then as further security for the faithful performance of this Contract, the Commissioner shall deduct, and retain until the substantial completion of the Work, five (5%) percent of the value of Work certified for payment in each partial payment voucher.
- 21.3 If this Contract does not require one hundred (100%) percent performance and payment security and if the price for which this Contract was awarded exceeds one million (\$1,000,000) dollars, then as further security for the faithful performance of this Contract, the Commissioner shall deduct, and retain until the substantial completion of the Work, up to ten (10%) percent of the value of Work certified for payment in each partial payment voucher. The percentage to be retained is set forth in Schedule A-of the General Conditions.

ARTICLE 22. INSURANCE

- 22.1 Types of Insurance: The Contractor shall procure and maintain the following types of insurance if, and as indicated, in Schedule A of the General Conditions (with the minimum limits and special conditions specified in Schedule A). Such insurance shall be maintained from the date the Contractor is required to provide Proof of Insurance pursuant to Article 22.3.1 through the date of completion of all required Work (including punch list work as certified in writing by the Resident Engineer), except for insurance required pursuant to Article 22.1.4, which may terminate upon Substantial Completion of the Contract. All insurance shall meet the requirements set forth in this Article 22. Wherever this Article requires that insurance coverage be "at least as broad" as a specified form (including all ISO forms), there is no obligation that the form itself be used, provided that the Contractor can demonstrate that the alternative form or endorsement contained in its policy provides coverage at least as broad as the specified form.
 - 22.1.1Commercial General Liability Insurance: The Contractor shall provide Commercial General Liability Insurance covering claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this Contract. Coverage under this insurance shall be at least as broad as that provided by the latest edition of Insurance Services Office ("ISO") Form CG 0001. Such insurance shall be "occurrence" based rather than "claims-made" and include, without limitation, the following types of coverage: premises operations; products and completed operations; contractual liability (including the tort liability of another assumed in a contract); broad form property damage; independent contractors; explosion, collapse and underground (XCU); construction means and methods; and incidental malpractice. Such insurance shall contain a "per project" aggregate limit, as specified in Schedule A, that applies separately to operations under this Contract.
 - 22.1.1(a) Such Commercial General Liability Insurance shall name the City as an Additional Insured. Coverage for the City shall specifically include the City's officials and employees, be at least as broad as the latest edition of ISO Form CG 20 10 and provide completed operations coverage at least as broad as the latest edition of ISO Form CG 20 37.
 - 22.1.1(b) Such Commercial General Liability Insurance shall name all other entities designated as additional insureds in Schedule A but only for claims arising from the

Contractor's operations under this Contract, with coverage at least as broad as the latest edition of ISO Form CG 20 26.

22.1.1(c) If the Work requires a permit from the Department of Buildings pursuant to 1 RCNY Section 101-08, the Contractor shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08 or greater limits required by the Agency in accordance with Schedule A. If the Work does not require such a permit, the minimum limits shall be those provided for in Schedule A.

22.1.1(d) If any of the Work includes repair of a waterborne vessel owned by or to be delivered to the City, such Commercial General Liability shall include, or be endorsed to include, Ship Repairer's Legal Liability Coverage to protect against, without limitation, liability arising from navigation of such vessels prior to delivery to and acceptance by the City.

22.1.2 Workers' Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance: The Contractor shall provide, and shall cause its Subcontractors to provide, Workers Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance in accordance with the Laws of the State of New York on behalf of all employees providing services under this Contract (except for those employees, if any, for which the Laws require insurance only pursuant to Article 22.1.3).

22.1.3 United States Longshoremen's and Harbor Workers Act and/or Jones Act Insurance: If specified in Schedule A of the General Conditions or if required by Law, the Contractor shall provide insurance in accordance with the United States Longshoremen's and Harbor Workers Act and/or the Jones Act, on behalf of all qualifying employees providing services under this Contract.

22.1.4 Builders Risk Insurance: If specified in Schedule A of the General Conditions, the Contractor shall provide Builders Risk Insurance on a completed value form for the total value of the Work through Substantial Completion of the Work in its entirety. Such insurance shall be provided on an All Risk basis and include coverage, without limitation, for windstorm (including named windstorm), storm surge, flood and earth movement. Unless waived by the Commissioner, it shall include coverage for ordinance and law, demolition and increased costs of construction, debris removal, pollutant clean up and removal, and expediting costs. Such insurance shall cover, without limitation, (a) all buildings and/or structures involved in the Work, as well as temporary structures at the Site, and (b) any property that is intended to become a permanent part of such building or structure, whether such property is on the Site, in transit or in temporary storage. Policies shall name the Contractor as Named Insured and list the City as both an Additional Insured and a Loss Payee as its interest may appear.

22.1.4(a) Policies of such insurance shall specify that, in the event a loss occurs at an occupied facility, occupancy of such facility is permitted without the consent of the issuing insurance company.

22.1.4(b) Such insurance may be provided through an Installation Floater, at the **Contractor's** option, if it otherwise conforms with the requirements of this Article 22.1.4.

22.1.5 Commercial Automobile Liability Insurance: The Contractor shall provide Commercial Automobile Liability Insurance for liability arising out of ownership,

maintenance or use of any owned (if any), non-owned and hired vehicles to be used in connection with this Contract. Coverage shall be at least as broad as the latest edition of ISO Form CA0001. If vehicles are used for transporting hazardous materials, the Automobile Liability Insurance shall be endorsed to provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90.

22.1.6 Contractors Pollution Liability Insurance: If specified in Schedule A of the General Conditions, the Contractor shall maintain, or cause the Subcontractor doing such Work to maintain, Contractors Pollution Liability Insurance covering bodily injury and property damage. Such insurance shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants (including asbestos), including any loss, cost or expense incurred as a result of any cleanup of pollutants (including asbestos) or in the investigation, settlement or defense of any claim, action, or proceedings arising from the operations under this Contract. Such insurance shall be in the Contractor's name and list the City as an Additional Insured and any other entity specified in Schedule A. Coverage shall include, without limitation, (a) loss of use of damaged property or of property that has not been physically injured, (b) transportation, and (c) nonowned disposal sites.

22.1.6(a) Coverage for the City as Additional Insured shall specifically include the City's officials and employees and be at least as broad as provided to the Contractor for this Project.

22.1.6(b) If such insurance is written on a claims-made policy, such policy shall have a retroactive date on or before the effective date of this Contract, and continuous coverage shall be maintained, or an extended discovery period exercised, for a period of not less than three (3) years from the time the Work under this Contract is completed.

22.1.7 Marine Insurance:

22.1.7(a) Marine Protection and Indemnity Insurance: If specified in Schedule A of the General Conditions or if the Contractor engages in marine operations in the execution of any part of the Work, the Contractor shall maintain, or cause the Subcontractor doing such Work to maintain, Marine Protection and Indemnity Insurance with coverage at least as broad as Form SP-23. The insurance shall provide coverage for the Contractor or Subcontractor (whichever is doing this Work) and for the City (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured for bodily injury and property damage arising from marine operations under this Contract. Coverage shall include, without limitation, injury or death of crew members (if not fully provided through other insurance), removal of wreck, damage to piers, wharves and other fixed or floating objects and loss of or damage to any other vessel or craft, or to property on such other vessel or craft.

22.1.7(b) Hull and Machinery Insurance: If specified in Schedule A of the General Conditions or if the Contractor engages in marine operations in the execution of any part of the Work, the Contractor shall maintain, or cause the Subcontractor doing such Work to maintain, Hull and Machinery Insurance with coverage for the Contractor or Subcontractor (whichever is doing this Work) and for the City (together with its officials and employees) as Additional Insured at least as broad as the latest edition of American Institute Tug Form for all tugs used under this

Contract and Collision Liability at least as broad as the latest edition of American Institute Hull Clauses.

- 22.1.7(c) Marine Pollution Liability Insurance: If specified in Schedule A of the General Conditions or if the Contractor engages in marine operations in the execution of any part of the Work, the Contractor shall maintain, or cause the Subcontractor doing such Work to maintain, Marine Pollution Liability Insurance covering itself (or the Subcontractor doing such Work) as Named Insured and the City (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured. Coverage shall be at least as broad as that provided by the latest edition of Water Quality Insurance Syndicate Form and include, without limitation, liability arising from the discharge or substantial threat 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.
- 22.1.8 The Contractor shall provide such other types of insurance, at such minimum limits and with such conditions, as are specified in Schedule A of the General Conditions.

22.2 General Requirements for Insurance Coverage and Policies:

- 22.2.1 All required insurance policies shall be maintained with companies that may lawfully issue the required policy and have an A.M. Best rating of at least A-/VII or a Standard and Poor's rating of at least A, unless prior written approval is obtained from the City Corporation Counsel.
- 22.2.2 The Contractor shall be solely responsible for the payment of all premiums for all required policies and all deductibles and self-insured retentions to which such policies are subject, whether or not the City is an insured under the policy.
- 22.2.3 In his/her sole discretion, the Commissioner may, subject to the approval of the Comptroller and the City Corporation Counsel, accept Letters of Credit and/or custodial accounts in lieu of required insurance.
- 22.2.4 The City's limits of coverage for all types of insurance required pursuant to Schedule A of the General Conditions shall be the greater of (i) the minimum limits set forth in Schedule A or (ii) the limits provided to the Contractor as Named Insured under all primary, excess, and umbrella policies of that type of coverage.
- 22.2.5 The Contractor may satisfy its insurance obligations under this Article 22 through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.
- 22.2.6 Policies of insurance provided pursuant to this Article 22 shall be primary and non-contributing to any insurance or self-insurance maintained by the City.

22.3 Proof of Insurance:

22.3.1 For all types of insurance required by Article 22.1 and Schedule A, except for insurance required by Articles 22.1.4 and 22.1.7, the Contractor shall file proof of insurance in accordance with this Article 22.3 within ten (10) Days of award. For insurance

provided pursuant to Articles 22.1.4 and 22.1.7, proof shall be filed by a date specified by the Commissioner or ten (10) Days prior to the commencement of the portion of the Work covered by such policy, whichever is earlier.

- 22.3.2 For Workers' Compensation Insurance provided pursuant to Article 22.1.2, the Contractor shall submit one of the following forms: C-105.2 Certificate of Workers' Compensation Insurance; U-26.3 State Insurance Fund Certificate of Workers' Compensation Insurance; Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the Commissioner. For Disability Benefits Insurance provided pursuant to Article 22.1.2, the Contractor shall submit DB-120.1 Certificate Of Insurance Coverage Under The NYS Disability Benefits Law, Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the Commissioner. ACORD forms are not acceptable.
- 22.3.3 For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the Contractor shall submit one or more Certificates of Insurance on forms acceptable to the Commissioner. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the City and any other entity specified in Schedule A is an Additional Insured thereunder; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the City is an Additional Insured thereunder; (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number); and (e) the number assigned to the Contract by the City. All such Certificates of Insurance shall be accompanied by either a duly executed "Certification by Insurance Broker or Agent" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.
- 22.3.4 Documentation confirming renewals of insurance shall be submitted to the Commissioner prior to the expiration date of coverage of policies required under this Contract. Such proofs of insurance shall comply with the requirements of Articles 22.3.2 and 22.3.3.
- 22.3.5 The Contractor shall be obligated to provide the City with a copy of any policy of insurance provided pursuant to this Article 22 upon the demand for such policy by the Commissioner or the City Corporation Counsel.

22.4 Operations of the Contractor:

- 22.4.1 The Contractor shall not commence the Work unless and until all required certificates have been submitted to and accepted by the Commissioner. Acceptance by the Commissioner of a certificate does not excuse the Contractor from securing insurance consistent with all provisions of this Article 22 or of any liability arising from its failure 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.
- 22.4.4 In the event the Contractor receives notice, from an insurance company or other person, that any insurance policy required under this Article 22 shall be cancelled or terminated (or has been cancelled or terminated) for any reason, the Contractor shall immediately forward a copy of such notice to both the Commissioner and the New York City Comptroller, attn: Office of Contract-Administration, Municipal-Building, One Centre Street, room 1005, New York, New York 10007. Notwithstanding the foregoing, the Contractor shall ensure that there is no interruption in any of the insurance coverage required under this Article 22.
- 22.4.5 Where notice of loss, damage, occurrence, accident, claim or suit is required under an insurance policy maintained in accordance with this Article 22, the Contractor shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this Contract (including notice to Commercial General Liability insurance carriers for events relating to the Contractor's own employees) no later than 20 days after such event. For any policy where the City is an Additional Insured, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. The Contractor shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.
- 22.4.6 In the event of any loss, accident, claim, action, or other event that does or can give rise to a claim under any insurance policy required under this Article 22, the Contractor shall at all times fully cooperate with the City with regard to such potential or actual claim.
- 22.5 Subcontractor Insurance: In the event the Contractor requires any Subcontractor to procure insurance with regard to any operations under this Contract and requires such Subcontractor to name the Contractor as an Additional Insured thereunder, the Contractor shall ensure that the Subcontractor name the City, including its officials and employees, as an Additional Insured with coverage at least as broad as the most recent edition of ISO Form CG 20 26.
- 22.6 Wherever reference is made in Article 7 or this Article 22 to documents to be sent to the Commissioner (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth in Schedule A of the General Conditions. In the event no address is set forth in Schedule A, such documents are to be sent to the Commissioner's address as provided elsewhere in this Contract.
- 22.7 Apart from damages or losses covered by insurance provided pursuant to Articles 22.1.2, 22.1.3, or 22.1.5, the Contractor waives all rights against the City, including its officials and employees, for any damages or losses that are covered under any insurance required under this Article 22 (whether or

not such insurance is actually procured or claims are paid thereunder) or any other insurance applicable to the operations of the Contractor and/or its employees, agents, or Subcontractors.

- 22.8 In the event the Contractor utilizes a self-insurance program to satisfy any of the requirements of this Article 22, the Contractor shall ensure that any such self-insurance program provides the City with all rights that would be provided by traditional insurance under this Article 22, including but not limited to the defense and indemnification obligations that insurers are required to undertake in liability policies.
- 22.9 Materiality/Non-Waiver: The Contractor's failure to secure policies in complete conformity with this Article 22, or to give an insurance company timely notice of any sort required in this Contract or to do anything else required by this Article 22 shall constitute a material breach of this Contract. Such breach shall not be waived or otherwise excused by any action or inaction by the City at any time.
- 22.10 Pursuant to General Municipal Law Section 108, this Contract shall be void and of no effect unless Contractor maintains Workers' Compensation Insurance for the term of this Contract to the extent required and in compliance with the New York State Workers' Compensation Law.
- 22.11 Other Remedies: Insurance coverage provided pursuant to this Article 22 or otherwise shall not relieve the Contractor of any liability under this Contract, nor shall it preclude the City from exercising any rights or taking such other actions available to it under any other provisions of this Contract or Law.

ARTICLE 23. MONEY RETAINED AGAINST CLAIMS

- 23.1 If any claim shall be made by any person or entity (including Other Contractors with the City on this Project) against the City or against the Contractor and the City for any of the following:
 - (a) An alleged loss, damage, injury, theft or vandalism of any of the kinds referred to in Articles 7 and 12, plus the reasonable costs of defending the City, which in the opinion of the Comptroller may not be paid by an insurance company (for any reason whatsoever); or
 - (b) An infringement of copyrights, patents or use of patented articles, tools, etc., 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 23, and return the balance, if any, without interest, to the Contractor.

ARTICLE 24. MAINTENANCE AND GUARANTY

- 24.1 The Contractor shall promptly repair, replace, restore or rebuild, as the Commissioner may determine, any finished Work in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during the one (1) year period subsequent to the date of Substantial Completion (or use and occupancy in accordance with Article 16), except where other periods of maintenance and guaranty are provided for in Schedule A.
- 24.2 As security for the faithful performance of its obligations hereunder, the Contractor, upon filing its requisition for payment on Substantial Completion, shall deposit with the Commissioner a sum equal to one (1%) percent of the price (or the amount fixed in Schedule A of the General Conditions) in cash or certified check upon a state or national bank and trust company or a check of such bank and trust company signed by a duly authorized officer thereof and drawn to the order of the Comptroller, or obligations of the City, which the Comptroller may approve as of equal-value with the sum so required.
- 24.3 In lieu of the above, the Contractor may make such security payment to the City 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 of such equipment and materials or lessees of the premises into which the equipment and materials have been installed.

CHAPTER VI: CHANGES, EXTRA WORK, AND DOCUMENTATION OF CLAIM

ARTICLE 25. CHANGES

- 25.1 Changes may be made to this Contract only as duly authorized in writing by the Commissioner in accordance with the Law and this Contract. All such changes, modifications, and amendments will become a part of the Contract. Work so ordered shall be performed by the Contractor.
- 25.2 Contract changes will be made only for Work necessary to complete the Work included 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 Agency.

ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK

- 26.1 Overrun of Unit Price Item: An overrun is any quantity of a unit price item which the Contractor is directed to provide which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule.
 - 26.1.1For 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 the basis of time and material records for the actual and reasonable cost as determined under Article 26.2, but in no event at a unit price exceeding the unit price bid.

- 26.2 Extra Work: For Extra Work where payment is by agreement on a fixed price in accordance with Article 25.3.2, the price to be paid for such Extra Work shall be based on the fair and reasonable estimated cost of the items set forth below. For Extra Work where payment is based on time and material records in accordance with Article 25.3.3, the price to be paid for such Extra Work shall be the actual and reasonable cost of the items set forth below, calculated in accordance with the formula specified therein, if any.
 - 26.2.1 Necessary materials (including transportation to the Site); plus
 - 26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits; plus
 - 26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such Extra Work; plus
 - 26.2.4 Reasonable rental value of Contractor-owned (or Subcontractor-owned, as applicable), necessary plant and equipment other than Small Tools, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour: (.035) x (HP rating) x (Fuel cost/gallon). Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75%) percent of such rental rates; second shift shall be sixty (60%) percent of the first shift rate; and third shift shall be forty (40%) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. Contractor-owned (or Subcontractor-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the Contractor (or Subcontractor, as applicable), as determined by the Commissioner. In establishing cost reimbursement for non-operating Contractor-owned (or Subcontractor-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the City may restrict reimbursement to a purchase-salvage/life cycle basis if less than the computed rental costs; plus
 - 26.2.5 Necessary installation and dismantling of such plant and equipment, including transportation to and from the Site, if any, provided that, in the case of non-Contractor-owned (or non-Subcontractor-owned, as applicable) equipment rented from a third party, the cost of installation and dismantling are not allowable if such costs are included in the rental rate; plus
 - 26.2.6 Necessary fees charged by governmental entities; plus

- 26.2.7 Necessary construction-related service fees charged by non-governmental entities, such as landfill tipping fees; plus
- 26.2.8 Reasonable rental costs of non-Contractor-owned (or non-Subcontractor-owned, as applicable) necessary plant and equipment other than Small Tools, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per hour of operation: (.035) x (HP rating) x (Fuel cost/gallon). In lieu of renting, the City reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus
- 26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the City for the performance of the Extra Work which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus
- 26.2.10 Additional costs incurred as a result of the Extra Work for performance and payment bonds; plus
- 26.2.11 Twelve percent (12%) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus
- 26.2.12 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes; plus
- 26.2.13 Five (5%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.
- 26.3 Where the Extra Work is performed in whole or in part by other than the Contractor's own forces pursuant to Article 26.2, the Contractor shall be paid, subject to pre-audit by the Engineering Audit Officer, the cost of such Work computed in accordance with Article 26.2 above, plus an additional allowance of five (5%) percent to cover the Contractor's overhead and profit.
- 26.4 Where a change is ordered, involving both Extra Work and omitted or reduced Contract Work, the Contract price shall be adjusted, subject to pre-audit by the EAO, in an amount based on the difference between the cost of such Extra Work and of the omitted or reduced Work.
- 26.5 Where the Contractor and the Commissioner can agree upon a fixed price for Extra Work in accordance with Article 25.3.2 or another method of payment for Extra Work in accordance with

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Article 25.3.4, or for Extra Work ordered in connection with omitted Work, such method, subject to pre-audit by the EAO, may, at the option of the Commissioner, be substituted for the cost plus a percentage method provided in Article 26.2; provided, however, that if the Extra Work is performed by a Subcontractor, the Contractor shall not be entitled to receive more than an additional allowance of five (5%) percent for overhead and profit over the cost of such Subcontractor's Work as computed in accordance with Article 26.2.

ARTICLE 27. RESOLUTION OF DISPUTES

- 27.1 All disputes between the City and the Contractor of the kind delineated in this Article 27.1 that arise under, or by virtue of, this Contract shall be finally resolved in accordance with the provisions of this Article 27 and the PPB Rules. This procedure for resolving all disputes of the kind delineated herein shall be the exclusive means of resolving any such disputes.
 - 27.1.1 This Article 27 shall not apply to disputes concerning matters dealt with in other sections of the **PPB** Rules, or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software.
 - 27.1.2 This Article 27 shall apply only to disputes about the scope of Work delineated by the Contract, the interpretation of Contract documents, the amount to be paid for Extra Work or disputed work performed in connection with the Contract, the conformity of the Contractor's Work to the Contract, and the acceptability and quality of the Contractor's Work; such disputes arise when the Engineer, Resident Engineer, Engineering Audit Officer, or other designee of the Commissioner makes a determination with which the Contractor disagrees.
- 27.2 All determinations required by this Article 27 shall be made in writing clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Article 27 shall be deemed a non-determination without prejudice that will allow application to the next level.
- 27.3 During such time as any dispute is being presented, heard, and considered pursuant to this Article 27, the Contract terms shall remain in force and the Contractor shall continue to perform Work as directed by the ACCO or the Engineer. Failure of the Contractor to continue Work as directed shall constitute a waiver by the Contractor of its claim.
 - 27.4 Presentation of Disputes to Commissioner.

Notice of Dispute and Agency Response. The Contractor shall present its dispute in writing ("Notice of Dispute") to the Commissioner within thirty (30) Days of receiving written notice of the determination or action that is the subject of the dispute. This notice requirement shall not be read to replace any other notice requirements contained in the Contract. The Notice of Dispute shall include all the facts, evidence, documents, or other basis upon which the Contractor relies in support of its position, as well as a detailed computation demonstrating how any amount of money claimed by the Contractor 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 dispute presented, whether or not the Commissioner participated therein. The Commissioner may or, at the request of any party to the dispute, shall compel the participation of any Other Contractor with a contract related to the Work of this Contract, and that Contractor shall be bound by the decision of the Commissioner. Any Other Contractor thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the Contractor initiating the dispute.
- 27.4.2 Commissioner Determination. Within thirty (30) Days after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the Commissioner shall make his or her determination and shall deliver or send a copy of such determination to the Contractor, the ACCO, and Engineer, Resident Engineer, Engineering Audit Officer, or other designee of the Commissioner, as applicable, together with a statement concerning how the decision may be appealed.
- 27.4.3 Finality of Commissioner's Decision. The Commissioner's decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The City may not take a petition to the Contract Dispute Resolution Board. However, should the Contractor take such a petition, the City may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the Contractor and more favorable to the City than the decision of the Commissioner.
- 27.5 Presentation of Dispute to the Comptroller. Before any dispute may be brought by the Contractor to the Contract Dispute Resolution Board, the Contractor must first present its claim to the Comptroller for his or her review, investigation, and possible adjustment.
 - 27.5.1 Time, Form, and Content of Notice. Within thirty (30) Days of its receipt of a decision by the Commissioner, the Contractor shall submit to the Comptroller and to the Commissioner a Notice of Claim regarding its dispute with the Agency. The Notice of Claim shall consist of (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the Contractor contends the dispute was wrongly decided by the Commissioner; (ii) a copy of the written decision of the Commissioner; and (iii) a copy of all materials submitted by the Contractor to the Agency, including the Notice of Dispute. The Contractor may not present to the Comptroller any material not presented to the Commissioner, except at the request of the Comptroller.

- 27.5.2 Response. Within thirty (30) Days of receipt of the Notice of Claim, the Agency shall make available to the Comptroller a copy of all material submitted by the Agency to the Commissioner in connection with the dispute. The Agency may not present to the Comptroller any material not presented to the Commissioner except at the request of the Comptroller.
- 27.5.3 Comptroller Investigation. The Comptroller may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Sections 7-201 and 7-203 of the Administrative Code. In addition, the Comptroller may demand of either party, and such party shall provide, whatever additional material the Comptroller deems pertinent to the claim, including original business records of the Contractor. Willful failure of the Contractor to produce within fifteen (15) Days any material requested by the Comptroller shall constitute a waiver by the Contractor of its claim. The Comptroller may also schedule an informal conference to be attended by the Contractor, Agency representatives, and any other personnel desired by the Comptroller.
- 27.5.4 Opportunity of Comptroller to Compromise or Adjust Claim. The Comptroller shall have forty-five (45) Days from his or her receipt of all materials referred to in Article 27.5.3 to investigate the disputed claim. The period for investigation and compromise may be further extended by agreement between the Contractor and the Comptroller, to a maximum of ninety (90) Days from the Comptroller's receipt of all materials. The Contractor may not present its petition to the Contract Dispute Resolution Board until the period for investigation and compromise delineated in this Article 27.5.4 has expired. In compromising or adjusting any claim hereunder, the Comptroller may not revise or disregard the terms of the Contract between the parties.
- 27.6 Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board composed of:
 - 27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;
 - 27.6.2 The CCPO or his/her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and
 - 27.6.3 A person with appropriate expertise who is not an employee of the City. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established and administered by OATH with appropriate background to act as decision-makers in a dispute. Such individual may not have a contract or dispute with the City or be an officer or employee of any company or organization that does, or regularly represents persons, companies, or organizations having disputes with the City.
- 27.7 Petition to the Contract Dispute Resolution Board. In the event the claim has not been settled or adjusted by the Comptroller within the period provided in this Article 27, the Contractor,

within thirty (30) Days thereafter, may petition the Contract Dispute Resolution Board to review the Commissioner's determination.

- 27.7.1 Form and Content of Petition by Contractor. The Contractor shall present its dispute to the Contract Dispute Resolution Board in the form of a petition, which shall include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the Contractor contends the dispute was wrongly decided by the Commissioner; (ii) a copy of the written Decision of the Commissioner, (iii) copies of all materials submitted by the Contractor to the Agency; (iv) a copy of the written decision of the Comptroller, if any, and (v) copies of all correspondence with, or written material submitted by the Contractor, to the Comptroller. The Contractor shall concurrently submit four (4) complete sets of the Petition: one set to the City Corporation Counsel (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the City Corporation Counsel. In addition, the Contractor shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the Commissioner and the Comptroller.
- 27.7.2 Agency Response. Within thirty (30) Days of its receipt of the Petition by the City Corporation Counsel, the Agency shall respond to the brief written statement of the Contractor and make available to the Contract Dispute Resolution Board all material it submitted to the Commissioner and Comptroller. Three (3) complete copies of the Agency response shall be provided to the Contract Dispute Resolution Board and one to the Contractor. Extensions of time for submittal of the Agency response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) Days.
- 27.7.3 Further Proceedings. The Contract Dispute Resolution Board shall permit the Contractor to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the Agency to present its case in response to the Contractor by submission of memoranda, briefs, and oral argument. If requested by the City Corporation Counsel, the Comptroller shall provide reasonable assistance in the preparation of the Agency's case. Neither the Contractor nor the Agency may support its case with any documentation or other material that was not considered by the Comptroller, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.
- 27.7.4 Contract Dispute Resolution Board Determination. Within forty-five (45) Days of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) Days, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the Contract. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.

- 27.7.5 Notification of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board shall send a copy of its decision to the Contractor, the ACCO, the Engineer, the Comptroller, the City Corporation Counsel, the CCPO, and the PPB. A decision in favor of the Contractor shall be subject to the prompt payment provisions of the PPB Rules. The Required Payment Date shall be thirty (30) Days after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.
- 27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of Law, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.
- 27.8 Any termination, cancellation, or alleged breach of the Contract prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the Commissioner or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK OR WORK ON A TIME & MATERIALS BASIS

- 28.1 While the Contractor or any of its Subcontractors is performing Work on a time and material basis or Extra Work on a time and material basis ordered by the Commissioner under Article 25, or where the Contractor believes that it or any of its Subcontractors is performing Extra Work but a final determination by Agency has not been made, or the Contractor or any of its Subcontractors is performing disputed Work (whether on or off the Site), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the Contractor shall furnish the Resident Engineer daily with three (3) copies of written statements signed by the Contractor's representative at the Site showing:
 - 28.1.1 The name, trade, and number of each worker employed on such Work or engaged in complying with such determination or order, the number of hours employed, and the character of the Work each is doing; and
 - 28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such **Work** or compliance with such determination or order, and from whom purchased or rented.
- 28.2 A copy of such statement will be countersigned by the **Resident Engineer**, noting thereon any items not agreed to or questioned, and will be returned to the **Contractor** within two (2) **Days** after submission.
- 28.3 The Contractor and its Subcontractors, when required by the Commissioner, or the Comptroller, shall also produce for inspection, at the office of the Contractor or Subcontractor, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports,

and cancelled checks, and any other documents relating to showing the nature and quantity of the labor, materials, plant and equipment actually used in the performance of such Work, or in complying with such determination or order, and the amounts expended therefor, and shall permit the Commissioner and the Comptroller to make such extracts therefrom, or copies thereof, as they or either of them may desire.

- 28.4 In connection with the examination provided for herein, the Commissioner, upon demand therefor, will produce for inspection by the Contractor such records as the Agency may have with respect to such Extra Work or disputed Work performed under protest pursuant to order of the Commissioner, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the Contractor's claim.
- 28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such Work or compliance with such determination or order.

ARTICLE 29. OMITTED WORK

- 29.1 If any Contract Work in a lump sum Contract, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid Contract is omitted by the Commissioner pursuant to Article 33, the Contract price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of Work omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.
- 29.2 If the whole of a lump sum item or units of any other item is so omitted by the Commissioner in a unit price, lump sum, or percentage-bid Contract, then no payment will be made therefor except as provided in Article 29.4.
- 29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of **Work** omitted subject to Article 29.4.
- 29.4 In the event the Contractor, with respect to any omitted Work, has purchased any non-cancelable material and/or equipment that is not capable of use except in the performance of this Contract and has been specifically fabricated for the sole purpose of this Contract, but not yet incorporated into the Work, the Contractor shall be paid for such material and/or equipment in accordance with Article 64.2.1(b); provided, however, such payment is contingent upon the Contractor's delivery of such material and/or equipment in acceptable condition to a location designated by the City.
- 29.5 The Contractor agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted Work.

ARTICLE 30. NOTICE AND DOCUMENTATION OF COSTS AND DAMAGES: PRODUCTION OF FINANCIAL RECORDS

30.1 If the Contractor shall claim to be sustaining damages by reason of any act or omission of the City or its agents, it shall submit to the Commissioner within forty-five (45) Days from the time such damages are first incurred, and every thirty (30) Days thereafter to the extent additional damages are being incurred for the same condition, verified statements of the details and the amounts of such

damages, together with documentary evidence of such damages. The Contractor may submit any of the above statements within such additional time as may be granted by the Commissioner in writing upon written request therefor. Failure of the Commissioner to respond in writing to a written request for additional time within thirty (30) Days shall be deemed a denial of the request. On failure of the Contractor to strictly comply with the foregoing provisions, such claims shall be deemed waived and no right to recover on such claims shall exist. Damages that the Contractor may claim in any action or dispute resolution procedure arising under or by reason of this Contract shall not be different from or in excess of the statements and documentation made pursuant to this Article 30. This Article 30.1 does not apply to claims submitted to the Commissioner pursuant to Article 11 or to claims disputing a determination under Article 27.

- 30.2 In addition to the foregoing statements, the Contractor shall, upon notice from the Commissioner, produce for examination at the Contractor's office, by the Engineer, Architect or Project Manager, all of its books of account, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this Contract, and submit itself and persons in its employment, for examination under oath by any person designated by the Commissioner or Comptroller to investigate claims made or disputes against the City under this Contract. At such examination, a duly authorized representative of the Contractor may be present.
- 30.3 In addition to the statements required under Article 28 and this Article 30, the Contractor and/or its Subcontractor shall, within thirty (30) Days upon notice from the Commissioner or Comptroller, produce for examination at the Contractor's and/or Subcontractor's office, by a representative of either the Commissioner or Comptroller, all of its books of account, bid documents, financial statements, accountant workpapers, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this Contract. Further, the Contractor and/or its Subcontractor shall submit any person in its employment, for examination under oath by any person designated by the Commissioner or Comptroller to investigate claims made or disputes against the City under this Contract. At such examination, a duly authorized representative of the Contractor may be present.
- 30.4 Unless the information and examination required under Article 30.3 is provided by the Contractor and/or its Subcontractor upon thirty (30) Days' notice from the Commissioner or Comptroller, or upon the Commissioner's or Comptroller's written authorization to extend the time to comply, the City shall be released from all claims arising under, relating to or by reason of this Contract, except for sums certified by the Commissioner to be due under the provisions of this Contract. It is further stipulated and agreed that no person has the power to waive any of the foregoing provisions and that in any action or dispute resolution procedure against the City to recover any sum in excess of the sums certified by the Commissioner to be due under or by reason of this Contract, the Contractor must allege in its complaint and prove, at trial or during such dispute resolution procedure, compliance with the provisions of this Article 30.
- 30.5 In addition, after the commencement of any action or dispute resolution procedure by the Contractor arising under or by reason of this Contract, the City shall have the right to require the Contractor to produce for examination under oath, up until the trial of the action or hearing before the Contract Dispute Resolution Board, the books and documents described in Article 30.3 and submit itself and all persons in its employ for examination under oath. If this Article 30 is not complied with as required, then the Contractor hereby consents to the dismissal of the action or dispute 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** pursuant to the provisions of Article 12; or
 - 33.1.3(c) To expedite the completion of the entire **Project** even though the completion of this particular **Contract** may thereby be delayed.

<u>ARTICLE 34. NO ESTOPPEL</u>

- 34.1 Neither the City nor any Agency, official, agent or employee thereof, shall be bound, precluded or estopped by any determination, decision, approval, order, letter, payment or certificate made or given under or in connection with this Contract by the City, the Commissioner, the Engineer, the Resident Engineer, or any other official, agent or employee of the City, either before or after the final completion and acceptance of the Work and payment therefor:
 - 34.1.1 From showing the true and correct classification, amount, quality or character of the Work actually done; or that any such determination, decision, order, letter, payment or certificate was untrue, incorrect or improperly made in any particular, or that the Work, or any part thereof, does not in fact conform to the requirements of this Contract; and
 - 34.1.2 From demanding and recovering from the Contractor any overpayment made to it, or such damages as the City may sustain by reason of the Contractor's failure to perform each and every part of its Contract.

CHAPTER VIII: LABOR PROVISIONS

ARTICLE 35. EMPLOYEES

- 35.1 The Contractor and its Subcontractors shall not employ on the Work:
 - 35.1.1 Anyone who is not competent, faithful and skilled in the Work for which he/she shall be employed; and whenever the Commissioner shall inform the Contractor, in writing, that any employee is, in his/her opinion, incompetent, unfaithful or disobedient, that employee shall be discharged from the Work forthwith, and shall not again be employed upon it; or

- 35.1.2 Any labor, materials or means whose employment, or utilization during the course of this Contract, may tend to or in any way cause or result in strikes, work stoppages, delays, suspension of Work or similar troubles by workers employed by the Contractor or its Subcontractors, or by any of the trades working in or about the buildings and premises where Work is being performed under this Contract, or by Other Contractors or their Subcontractors pursuant to other contracts, or on any other building or premises owned or operated by the City, its Agencies, departments, boards or authorities. Any violation by the Contractor of this requirement may, upon certification of the Commissioner, be considered as proper and sufficient cause for declaring the Contractor to be in default, and for the City to take action against it as set forth in Chapter X of this Contract, or such other article of this Contract as the Commissioner may deem proper; or
- 35.1.3 In accordance with Section 220.3-e of the Labor Law of the State of New York (hereinafter "Labor Law"), the Contractor and its Subcontractors shall not employ on the Work any-apprentice, unless he/she is a registered individual, under a bona fide program registered with the New York State Department of Labor. The allowable ratio of apprentices to journey-level workers in any craft classification shall not be greater than the ratio permitted to the Contractor as to its work force on any job under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the Comptroller of the City for the classification of Work actually performed. The Contractor or Subcontractor will be required to furnish written evidence of the registration of its program and apprentices as well as all the appropriate ratios and wage rates, for the area of the construction prior to using any apprentices on the Contract Work.
- 35.2 If the total cost of the Work under this Contract is at least two hundred fifty thousand (\$250,000) dollars, all laborers, workers, and mechanics employed in the performance of the Contract on the public work site, either by the Contractor, Subcontractor or other person doing or contracting to do the whole or a part of the Work contemplated by the Contract, shall be certified prior to performing any Work as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration.
- 35.3 In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the Administrative Code, respectively,
 - 35.3.1 The Contractor shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this Contract to (a) the Commissioner of the Department of Investigation, (b) a member of the New York City Council, the Public Advocate, or the Comptroller, or (c) the CCPO, ACCO, Agency head, or Commissioner.
 - 35.3.2 If any of the Contractor's officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 35.3.1, he or she shall be entitled to bring a cause of action against the Contractor to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (a) an injunction to restrain continued retaliation, (b) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (c) reinstatement of full fringe benefits and seniority rights, (d) payment of two times back

pay, plus interest, and (e) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.

- 35.3.3 The Contractor shall post a notice provided by the City in a prominent and accessible place on any site where work pursuant to the Contract is performed that contains information about:
 - 35.3.3(a) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the **Contract**; and
 - 35.3.3(b) the rights and remedies afforded to its employees under Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the Contract.
- 35.3.4 For the purposes of this Article 35.3, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.
- 35.3.5 This Article 35.3 is applicable to all of the Contractor's Subcontractors having subcontracts with a value in excess of \$100,000; accordingly, the Contractor shall include this rider in all subcontracts with a value a value in excess of \$100,000.
- 35.4 Article 35.3 is not applicable to this Contract if it is valued at \$100,000 or less. Articles 35.3.1, 35.3.2, 35.3.4, and 35.3.5 are not applicable to this Contract if it was solicited pursuant to a finding of an emergency.
 - 35.5 Paid Sick Leave Law.
 - 35.5.1 Introduction and General Provisions.
 - 35.5.1(a) The Earned Sick Time Act, also known as the Paid Sick Leave Law ("PSLL"), requires covered employees who annually perform more than 80 hours of work in New York City to be provided with paid sick time. Contractors of the City or of other governmental entities may be required to provide sick time pursuant to the PSLL.
 - 35.5.1(b) The PSLL became effective on April 1, 2014, and is codified at Title 20, Chapter 8, of the New York City Administrative Code. It is administered by the City's Department of Consumer Affairs ("DCA"); DCA's rules promulgated under the PSLL are codified at Chapter 7 of Title 6 of the Rules of the City of New York ("Rules").

² Pursuant to the PSLL, if fewer than five employees work for the same employer, as determined pursuant to New York City Administrative Code § 20-912(g), such employer has the option of providing such employees uncompensated sick time.

- 35.5.1(c) The Contractor agrees to comply in all respects with the PSLL and the Rules, and as amended, if applicable, in the performance of this Contract. The Contractor further acknowledges that such compliance is a material term of this Contract and that failure to comply with the PSLL in performance of this Contract may result in its termination.
- 35.5.1(d) The Contractor must notify the Agency Chief Contracting Officer of the Agency with whom it is contracting in writing within ten (10) days of receipt of a complaint (whether oral or written) regarding the PSLL involving the performance of this Contract. Additionally, the Contractor must cooperate with DCA's education efforts and must comply with DCA's subpoenas and other document demands as set forth in the PSLL and Rules.
- 35.5.1(e) The PSLL is summarized below for the convenience of the Contractor. The Contractor is advised to review the PSLL and Rules in their entirety. On the website www.nyc.gov/PaidSickLeave there are links to the PSLL and the associated Rules as well as additional resources for employers, such as Frequently Asked Questions, timekeeping tools and model forms, and an event calendar of upcoming presentations and webinars at which the Contractor can get more information about how to comply with the PSLL. The Contractor acknowledges that it is responsible for compliance with the PSLL notwithstanding any inconsistent language contained herein.
- 35.5.2 Pursuant to the PSLL and the Rules: Applicability, Accrual, and Use.
 - 35.5.2(a) An employee who works within the City of New York for more than eighty hours in any consecutive 12-month period designated by the employer as its "calendar year" pursuant to the PSLL ("Year") must be provided sick time. Employers must provide a minimum of one hour of sick time for every 30 hours worked by an employee and compensation for such sick time must be provided at the greater of the employee's regular hourly rate or the minimum wage. Employers are not required to provide more than 40 hours of sick time to an employee in any Year.
 - 35.5.2(b) An employee has the right to determine how much sick time he or she will use, provided that employers may set a reasonable minimum increment for the use of sick time not to exceed four hours per **Day**. In addition, an employee may carry over up to 40 hours of unused sick time to the following Year, provided that no employer is required to allow the use of more than forty hours of sick time in a Year or carry over unused paid sick time if the employee is paid for such unused sick time and the employer provides the employee with at least the legally required amount of paid sick time for such employee for the immediately subsequent Year on the first **Day** of such Year.
 - 35.5.2(c) An employee entitled to sick time pursuant to the PSLL may use sick time for any of the following:
 - such employee's mental illness, physical illness, injury, or health condition
 or the care of such illness, injury, or condition or such employee's need for
 medical diagnosis or preventive medical care;
 - ii. such employee's care of a family member (an employee's child, spouse, domestic partner, parent, sibling, grandchild or grandparent, or the child or parent of an employee's spouse or domestic partner) who has a mental

- illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;
- iii. closure of such employee's place of business by order of a public official due to a public health emergency; or
- iv. such employee's need to care for a child whose school or childcare provider has been closed due to a public health emergency.
- 35.5.2(d) An employer must not require an employee, as a condition of taking sick time, to search for a replacement. However, an employer may require an employee to provide: reasonable notice of the need to use sick time; reasonable documentation that the use of sick time was needed for a reason above if for an absence of more than three consecutive work days; and/or written confirmation that an employee used sick time pursuant to the PSLL. However, an employer may not require documentation specifying the nature of a medical condition or otherwise require disclosure of the details of a medical condition as a condition of providing sick time and health information obtained solely due to an employee's use of sick time pursuant to the PSLL must be treated by the employer as confidential.
- 35.5.2(e) If an employer chooses to impose any permissible discretionary requirement as a condition of using sick time, it must provide to all employees a written policy containing those requirements, using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny sick time to an employee because of non-compliance with such a policy.
- 35.5.2(f) Sick time to which an employee is entitled must be paid no later than the payday for the next regular payroll period beginning after the sick time was used.
- 35.5.3 Exemptions and Exceptions. Notwithstanding the above, the PSLL does not apply to any of the following:
 - 35.5.3(a) an independent contractor who does not meet the definition of employee under section 190(2) of the New York State Labor Law;
 - 35.5.3(b) an employee covered by a valid collective bargaining agreement in effect on April 1, 2014, until the termination of such agreement;
 - 35.5.3(c) an employee in the construction or grocery industry covered by a valid collective bargaining agreement if the provisions of the PSLL are expressly waived in such collective bargaining agreement;
 - 35.5.3(d) an employee covered by another valid collective bargaining agreement if such provisions are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the PSLL for such employee;
 - 35.5.3(e) an audiologist, occupational therapist, physical therapist, or speech language pathologist who is licensed by the New York State Department of Education and who calls in for work assignments at will, determines his or her own schedule, has the ability to reject or accept any assignment referred to him or her, and is paid an average hourly wage that is at least four times the federal minimum wage;

- 35.5.3(f) an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;
- 35.5.3(g) an employee whose work is compensated by a qualified scholarship program as that term is defined in the Internal Revenue Code, Section 117 of Chapter 20 of the United States Code; or
- 35.5.3(h) a participant in a Work Experience Program (WEP) under section 336-c of the New York State Social Services Law.
- 35.5.4 Retaliation Prohibited. An employer may not threaten or engage in retaliation against an employee for exercising or attempting in good faith to exercise any right provided by the PSLL. In addition, an employer may not interfere with any investigation, proceeding, or hearing pursuant to the PSLL.

35.5.5 Notice of Rights.

- 35.5.5(a) An employer must provide its employees with written notice of their rights pursuant to the PSLL. Such notice must be in English and the primary language spoken by an employee, provided that DCA has made available a translation into such language. Downloadable notices are available on DCA's website at http://www.nyc.gov/html/dca/html/law/PaidSickLeave.shtml.
- 35.5.5(b) Any person or entity that willfully violates these notice requirements is subject to a civil penalty in an amount not to exceed fifty dollars for each employee who was not given appropriate notice.
- 35.5.6 Records. An employer must retain records documenting its compliance with the PSLL for a period of at least three years, and must allow DCA to access such records in furtherance of an investigation related to an alleged violation of the PSLL.

35.5.7 Enforcement and Penalties.

- 35.5.7(a) Upon receiving a complaint alleging a violation of the PSLL, DCA has the right to investigate such complaint and attempt to resolve it through mediation. Within 30 **Days** of written notification of a complaint by DCA, or sooner in certain circumstances, the employer must provide DCA with a written response and such other information as DCA may request. If DCA believes that a violation of the PSLL has occurred, it has the right to issue a notice of violation to the employer.
- 35.5.7(b) DCA has the power to grant an employee or former employee all appropriate relief as set forth in New York City Administrative Code § 20-924(d). Such relief may include, among other remedies, treble damages for the wages that should have been paid, damages for unlawful retaliation, and damages and reinstatement for unlawful discharge. In addition, DCA may impose on an employer found to have violated the PSLL civil penalties not to exceed \$500 for a first violation, \$750 for a second violation within two years of the first violation, and \$1,000 for each succeeding violation within two years of the previous violation.
- 35.5.8 More Generous Polices and Other Legal Requirements. Nothing in the PSLL is intended to discourage, prohibit, diminish, or impair the adoption or retention of a more generous sick time policy, or the obligation of an employer to comply with any contract,

collective bargaining agreement, employment benefit plan or other agreement providing more generous sick time. The PSLL provides minimum requirements pertaining to sick time and does not preempt, limit or otherwise affect the applicability of any other law, regulation, rule, requirement, policy or standard that provides for greater accrual or use by employees of sick leave or time, whether paid or unpaid, or that extends other protections to employees. The PSLL may not be construed as creating or imposing any requirement in conflict with any federal or state law, rule or regulation.

35.6 HireNYC: Hiring and Reporting Requirements. This Article 35.6 applies to construction contracts of \$1,000,000 or more. The Contractor shall comply with the requirements of Articles 35.6.1-35.6.5 for all non-trades jobs (e.g., for an administrative position arising out of Work ant located in New York City). The Contractor shall reasonably cooperate with SBS and the City on specific outreach events, including "Hire-on-the-Spot" events, for the hiring of trades workers in connection with the Work. If provided elsewhere in this Contract, this Contract is subject to a project labor agreement.

35.6.1 Enrollment. The Contractor shall enroll with the HireNYC system, found at www.nyc.gov/sbs, within thirty (30) days after the registration of this Contract pursuant to Section 328 of the New York City Charter. The Contractor shall provide information about the business, designate a primary contact and say whether it intends to hire for any entry to mid-level job opportunities arising from this Contract and located in New York City, and, if so, the approximate start date of the first hire.

35.6.2 Job Posting Requirements.

35.6.2(a) Once enrolled in HireNYC, the Contractor agrees to update the HireNYC portal with all entry to mid-level job opportunities arising from this Contract and located in New York City, if any, which shall be defined as jobs requiring no more than an associate degree, as provided by the New York State Department of Labor (see Column F of https://labor.ny.gov/stats/2012-2022- NYS-Employment-Prospects.xls). The information to be updated includes the types of entry and mid-level positions made available from the work arising from the Contract and located in New York City, the number of positions, the anticipated schedule of initiating the hiring process for these positions, and the contact information for the Contractor's representative charged with overseeing hiring. The Contractor must update the HireNYC portal with any hiring needs arising from the contract and located in New York City, and the requirements of the jobs to be filled, no less than three weeks prior to the intended first day of employment for each new position, except with the permission of SBS, not to be unreasonably withheld, and must also update the HireNYC portal as set forth below.

35.6.2(b) After enrollment through HireNYC and submission of relevant information, SBS will work with the Contractor to develop a recruitment plan which will outline the candidate screening process, and will provide clear instructions as to when, where, and how interviews will take place. HireNYC will screen applicants based on employer requirements and refer applicants whom it believes are qualified to the Contractor for interviews. The Contractor must interview referred applicants whom it believes are qualified.

35.6.2(c) After completing an interview of a candidate referred by HireNYC, the Contractor must provide feedback via the portal within twenty (20) business days to indicate which candidates were interviewed and hired, if any. In addition, the Contractor shall provide the start date of new hires, and additional information

reasonably related to such hires, within twenty (20) business days after the start date. In the event the Contractor does not have any job openings covered by this Rider in any given year, the Contractor shall be required to provide an annual update to HireNYC to that effect. For this purpose, the reporting year shall run from the date of the registration of the Contract pursuant to Charter section 328 and each anniversary date.

35.6.2(d) These requirements do not limit the Contractor's ability to assess the qualifications of prospective workers, and to make final hiring and retention decisions. No provision of this Article 35.6 shall be interpreted so as to require the Contractor to employ any particular worker.

35.6.2(e) In addition, the provisions of this Article 35.6 shall not apply to positions that the Contractor intends to fill with employees employed pursuant to the job retention provision of Section 22-505 of the Administrative Code of the City of New York. The Contractor shall not be required to report such openings with HireNYC. However, the Contractor shall enroll with the HireNYC system pursuant to Article 35.6.1, above, and, if such positions subsequently become open, then the remaining provisions of this Article 35.6 will apply.

35.6.3 Breach and Liquidated Damages. If the Contractor fails to comply with the terms of the ContrSact and this Article 35.6 (1) by not enrolling its business with HireNYC; (2) by not informing HireNYC, as required, of open positions; or (3) by failing to interview a qualified candidate, the Agency may assess liquidated damages in the amount of two-thousand five hundred dollars (\$2,500) per breach. For all other events of noncompliance with the terms of this Article 35.6, the Agency may assess liquidated damages in the amount of five hundred dollars (\$500) per breach. Furthermore, in the event the Contractor breaches the requirements of this Article 35.6 during the term of the Contract, the City may hold the Contractor in default of this Contract.

35.6.4 Audit Compliance. In addition to the auditing requirements set forth in other parts of the Contract, the Contractor shall permit SBS and the City to inspect any and all records concerning or relating to job openings or the hiring of individuals for work arising from the Contract and located in New York City. The Contractor shall permit an inspection within seven (7) business days of the request.

35.6.5 Other Reporting Requirements. The Contractor shall report to the City, on a monthly basis, all information reasonably requested by the City that is necessary for the City to comply with any reporting requirements imposed by Law, including any requirement that the City maintain a publicly accessible database. In addition, the Contractor agrees to comply with all reporting requirements imposed by Law, or as otherwise requested by the City.

35.6.6 Federal Hiring Requirements. If this Contract is federally funded (as indicated elsewhere in this Contract), the Contractor shall comply with all federal hiring requirements as may be set forth in this Contract, including, as applicable: (a) Section 3 of the HUD Act of 1968, which requires, to the greatest extent feasible, economic opportunities for 30 percent of new hires be given to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing and Executive Order 11246, which prohibits discrimination in employment due to race, color, religion, sex or national origin, and requires the implementation of goals for minority and female participation for work involving any construction trade.

ARTICLE 36. NO DISCRIMINATION

- 36.1 The Contractor specifically agrees, as required by Labor Law Section 220-e, as amended, that:
 - 36.1.1 In the hiring of employees for the performance of Work under this Contract or any subcontract hereunder, neither the Contractor, Subcontractor, nor any person acting on behalf of such Contractor or Subcontractor, shall by reason of race, creed, color or national origin discriminate against any citizen of the State of New York who is 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.
 - 36.1.5 This Article 36 covers all construction, alteration and repair of any public building or public work occurring in the State of New York and the manufacture, sale, and distribution of materials, equipment, and supplies to the extent that such operations are performed within the State of New York pursuant to this Contract.
- 36.2 The Contractor specifically agrees, as required by Section 6-108 of the Administrative Code, as amended, that:
 - 36.2.1 It shall be unlawful for any person engaged in the construction, alteration or 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 Article 36.2 shall, upon

conviction thereof, be punished by a fine of not more than one hundred (\$100.00) dollars or by imprisonment for not more than thirty (30) Days, or both.

- 36.3 This Contract is subject to the requirements of Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules and regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. By signing this Contract, the Contractor agrees that it:
 - 36.3.1 Will not engage in any unlawful discrimination against any employee or 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, before the award of the Contract, all information and reports, including an employment report, that are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the City Department of Business Services, Division of Labor Services (DLS) and will permit access to its books, records, and accounts by the DLS for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 36.4 The Contractor understands that in the event of its noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this Contract and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of the DLS, the Director of the DLS may direct the Commissioner to impose any or all of the following sanctions:
 - 36.4.1 Disapproval of the Contractor; and/or
 - 36.4.2 Suspension or termination of the Contract; and/or
 - 36.4.3 Declaring the Contractor in default; and/or
 - 36.4.4 In lieu of any of the foregoing sanctions, the Director of the DLS may impose an employment program.

In addition to any actions taken under this Contract, failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in a City Agency declaring the Contractor to be non-responsible in future procurements. The Contractor further agrees that it will refrain from entering into any Contract or Contract modification subject to E.O. 50 and the rules and regulations promulgated thereunder with a Subcontractor who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder.

- 36.5 The Contractor specifically agrees, as required by Section 6-123 of the Administrative Code, that:
 - 36.5.1 The Contractor will not engage in any unlawful discriminatory practice in violation of Title 8 of the Administrative Code; and
 - 36.5.2 Any failure to comply with this Article 36.5 may subject the Contractor to the remedies set forth in Section 6-123 of the Administrative Code, including, where appropriate, sanctions such as withholding of payment, imposition of an employment program, finding the Contractor to be in default, cancellation of the Contract, or any other sanction or remedy provided by Law or Contract.

ARTICLE 37. LABOR LAW REQUIREMENTS

- 37.1 The Contractor shall strictly comply with all applicable provisions of the Labor Law, as amended. Such compliance is a material term of this Contract.
- 37.2 The Contractor specifically agrees, as required by Labor Law Sections 220 and 220-d, as amended, that:
 - 37.2.1 Hours of Work: No laborer, worker, or mechanic in the employ of the Contractor, Subcontractor or other person doing or contracting to do the whole or a part of the Work contemplated by this Contract shall be permitted or required to work more than eight (8) hours in any one (1) Day, or more than five (5) Days in any one (1) week, except as provided in the Labor Law and in cases of extraordinary emergency including fire, flood, or danger to life or property, or in the case of national emergency when so proclaimed by the President of the United States of America.
 - 37.2.2 In situations in which there are not sufficient laborers, workers, and mechanics who may be employed to carry on expeditiously the Work contemplated by this Contract as a result of such restrictions upon the number of hours and Days of labor, and the immediate commencement or prosecution or completion without undue delay of the Work is necessary for the preservation of the Site and/or for the protection of the life and limb of the persons using the same, such laborers, workers, and mechanics shall be permitted or required to work more than eight (8) hours in any one (1) Day; or five (5) Days in any one (1) week; provided, however, that upon application of any Contractor, the Commissioner shall have first certified to the Commissioner of Labor of the State of New York (hereinafter "Commissioner of Labor") that such public Work is of an important nature and that a delay in carrying it to completion would result in serious disadvantage to the public; and provided, further, that such Commissioner of Labor shall have determined that such an emergency does in fact exist as provided in Labor Law Section 220.2.
 - 37.2.3 Failure of the Commissioner to make such a certification to the Commissioner of Labor shall not entitle the Contractor to damages for delay or for any cause whatsoever.

- 37.2.4 Prevailing Rate of Wages: The wages to be paid for a legal day's Work to laborers, workers, or mechanics employed upon the Work contemplated by this Contract or upon any materials to be used thereon shall not be less than the "prevailing rate of wage" as defined in Labor Law Section 220, and as fixed by the Comptroller in the attached Schedule of Wage Rates and in updated schedules thereof. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the Work is being performed.
- 37.2.5 Requests for interpretation or correction in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the Work under this Contract. In the event that a trade not listed in the Contract is in fact employed during the performance of this Contract, the Contractor shall be required to obtain from the Agency the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this Contract at the price at—which the—Contract was awarded.
- 37.2.6 Minimum Wages: Except for employees whose wage is required to be fixed pursuant to Labor Law Section 220, all persons employed by the Contractor and any Subcontractor in the manufacture or furnishing of the supplies, materials, or equipment, or the furnishing of work, labor, or services, used in the performance of this Contract, shall be paid, without subsequent deduction or rebate unless expressly authorized by Law, not less than the sum mandated by Law.
- 37.3 Working Conditions: No part of the Work, labor or services shall be performed or rendered by the Contractor in any plants, factories, buildings or surroundings or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of this Contract. Compliance with the safety, sanitary, and factory inspection Laws of the state in which the Work is to be performed shall be prima facie evidence of compliance with this Article 37.3.
- 37.4 Prevailing Wage Enforcement: The Contractor agrees to pay for all costs incurred by the City in enforcing prevailing wage requirements, including the cost of any investigation conducted by or on behalf of the Agency or the Comptroller, where the City discovers a failure to comply with any of the requirements of this Article 37 by the Contractor or its Subcontractor(s). The Contractor also agrees that, should it fail or refuse to pay for any such investigation, the Agency is hereby authorized to deduct from a Contractor's account an amount equal to the cost of such investigation.
 - 37.4.1 The Labor Law Section 220 and Section 220-d, as amended, provide that this Contract shall be forfeited and no sum paid for any Work done hereunder on a second conviction for willfully paying less than:
 - 37.4.1(a) The stipulated prevailing wage scale as provided in Labor Law section 220, as amended, or
 - 37.4.1(b) The stipulated minimum hourly wage scale as provided in Labor Law section 220-d, as amended.
 - 37.4.2 For any breach or violation of either working conditions (Article 37.3) or minimum wages (Article 37.2.6) provisions, the party responsible therefor shall be liable to the City for liquidated damages, which may be withheld from any amounts due on any contracts with the City of such party responsible, or may be recovered in actions brought by the City

Corporation Counsel in the name of the City, in addition to damages for any other breach of this Contract, for a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this Contract. In addition, the Commissioner shall have the right to cancel contracts and enter into other contracts for the completion of the original contract, with or without public letting, and the original Contractor shall be liable for any additional cost. All sums withheld or recovered as deductions, rebates, refunds, or underpayment of wages hereunder, shall be held in a special deposit account and shall be paid without interest, on order of the Comptroller, directly to the employees who have been paid less than minimum rates of pay as set forth herein and on whose account such sums were withheld or recovered, provided that no claims by employees for such payments shall be entertained unless made within two (2) years from the date of actual notice to the Contractor of the withholding or recovery of such sums by the City.

37.4.3 A determination by the Comptroller that a Contractor and/or its Subcontractor willfully violated Labor Law Section 220 will be forwarded to the City's five District Attorneys for review.

37.4.4 The Contractor's or Subcontractor's noncompliance with this Article 37.4 and Labor Law Section 220 may result in an unsatisfactory performance evaluation and the Comptroller may also find and determine that the Contractor or Subcontractor willfully violated the New York Labor Law.

37.4.4(a) An unsatisfactory performance evaluation for noncompliance with this Article 37.4 may result in a determination that the Contractor is a non-responsible bidder on subsequent procurements with the City and thus a rejection of a future award of a contract with the City, as well as any other sanctions provided for by Law.

37.4.4(b) Labor Law Section 220-b, as amended, provides that when two (2) final determinations have been rendered against a Contractor or Subcontractor within any consecutive six (6) year period determining that such Contractor or Subcontractor has willfully failed to pay the prevailing rate of wages or to provide supplements in accordance with the Labor Law and this Article 37.4, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public works projects are rendered simultaneously, such Contractor or Subcontractor shall be ineligible to submit a bid on or be awarded any public works contract with the City for a period of five (5) years from the second final determination. If the final determination involves the falsification of payroll records or the kickback of wages or supplements, the Contractor or Subcontractor shall be ineligible to submit a bid on or be awarded any public works contract with the City for a period of five (5) years from the first final determination.

37.4.4(c) Labor Law Section 220, as amended, provides that the Contractor or Subcontractor found to have violated this Article 37.4 may be directed to make payment of wages or supplements including interest found to be due, and the Contractor or Subcontractor may be directed to make payment of a further sum as a civil penalty in an amount not exceeding twenty-five (25%) percent of the total amount found to be due.

37.5 The Contractor and its Subcontractors shall within ten (10) Days after mailing of a Notice of Award or written order, post in prominent and conspicuous places in each and every plant, factory, building, and structure where employees of the Contractor and its Subcontractors engaged in the

performance of this Contract are employed, notices furnished by the City, in relation to prevailing wages and supplements, minimum wages, and other stipulations contained in Sections 220 and 220-h of the Labor Law, and the Contractor and its Subcontractors shall continue to keep such notices posted in such prominent and conspicuous places until Final Acceptance of the supplies, materials, equipment, or Work, labor, or services required to be furnished or rendered under this Contract.

37.6 The Contractor shall strictly comply with all of the provisions of Articles 37.6.1 through 37.6.5, and provide for all workers, laborers or mechanics in its employ, the following:

37.6.1 Notices Posted At Site: Post, in a location designated by the City, schedules of prevailing wages and supplements for this Project, a copy of all re-determinations of such schedules for the Project, the Workers' Compensation Law Section 51 notice, all other notices required by Law to be posted at the Site, the City notice that this Project is a public works project on which each worker is entitled to receive the prevailing wages and supplements for the occupation at which he or she is working, and all other notices which the City directs the Contractor to post. The Contractor shall provide a surface for such notices which is satisfactory to the City. The Contractor shall maintain and keep current such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The Contractor shall post such notices before commencing any Work on the Site and shall maintain such notices until all Work on the Site is complete; and

37.6.2 Daily Site Sign-in Sheets: Maintain daily Site sign-in sheets, and require that Subcontractors maintain daily Site sign-in sheets for its employees, which include blank spaces for an employee's name to be both printed and signed, job title, date started and Social Security number, the time the employee began work and the time the employee left work, until Final Acceptance of the supplies, materials, equipment, or Work, labor, or services to be furnished or rendered under this Contract unless exception is granted by the Comptroller upon application by the Agency. In the alternative, subject to the approval of the CCPO, the Contractor and Subcontractor may maintain an electronic or biometric sign-in system, which provides the information required by this Article 37.6.2; and

37.6.3 Individual Employee Information Notices: Distribute a notice to each worker, laborer or mechanic employed under this Contract, in a form provided by the Agency, that this Project is a public works project on which each worker, laborer or mechanic is entitled to receive the prevailing rate of wages and supplements for the occupation at which he or she is working. If the total cost of the Work under this Contract is at least two hundred fifty thousand (\$250,000) dollars, such notice shall also include a statement that each worker, laborer or mechanic must be certified prior to performing any Work as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration. Such notice shall be distributed to each worker before he or she starts performing any Work of this Contract and with the first paycheck after July first of each year. "Worker, laborer or mechanic" includes employees of the Contractor and all Subcontractors and all employees of suppliers entering the Site. At the time of distribution, the Contractor shall have each worker, laborer or mechanic sign a statement, in a form provided by the Agency, certifying that the worker has received the notice required by this Article 37.6.3, which signed statement shall be maintained with the payroll records required by this Contract; and

37.6.3(a) The Contractor and each Subcontractor shall notify each worker, laborer or mechanic employed under this Contract in writing of the prevailing rate of

wages for their particular job classification. Such notification shall be given to every worker, laborer, and mechanic on their first pay stub and with every pay stub thereafter; and

37.6.4 Site Laminated Identification Badges: The Contractor shall provide laminated identification badges which include a photograph of the worker's, laborer's or mechanic's face and indicate the worker's, laborer's or mechanic's name, trade, employer's name, and employment starting date (month/day/year). Further, the Contractor shall require as 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. The Commissioner may grant a written waiver from the requirement that the laminated identification badge include a photograph if the Contractor demonstrates that the identity of an individual wearing a laminated identification badge can be easily verified by another method; and

37.6.5 Language Other Than English Used On Site: Provide the ACCO notice when three (3) or more employees (worker and/or laborer and/or mechanic) on the Site, at any time, speak a language other than English. The ACCO will then provide the Contractor the notices described in Article 37.6.1 in that language or languages as may be required. The Contractor is responsible for all distributions under this Article 37; and

37.6.6 Provision of Records: The Contractor and Subcontractor(s) shall produce within five (5) Days on the Site of the Work and upon a written order of the Engineer, the Commissioner, the ACCO, the Agency EAO, or the Comptroller, such records as are required to be kept by this Article 37.6; and

37.6.7 The Contractor and Subcontractor(s) shall pay employees by check or direct deposit. If this Contract is for an amount greater than one million (\$1,000,000) dollars, checks issued by the Contractor to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the Agency). For any subcontract for an amount greater than seven hundred fifty thousand (\$750,000) dollars, checks issued by a Subcontractor to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be 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 in default and/or the withholding of payments otherwise due under the Contract.

37.7 The Contractor and its Subcontractors shall keep such employment and payroll records as are required by Section 220 of the Labor Law. The failure of the Contractor or Subcontractor(s) to comply with the provisions of this Article 37.7 may result in the Commissioner declaring the Contractor in default and/or the withholding of payments otherwise due under the Contract.

37.8 At the time the Contractor makes application for each partial payment and for final payment, the Contractor shall submit to the Commissioner a written payroll certification, in the form provided by this Contract, of compliance with the prevailing wage, minimum wage, and other provisions and stipulations required by Labor Law Section 220 and of compliance with the training requirements of Labor Law Section 220-h set forth in Article 35.2. This certification of compliance shall be a condition precedent to payment and no payment shall be made to the Contractor unless and until each such certification shall have been submitted to and received by the Commissioner.

- 37.9 This Contract is executed by the Contractor with the express warranty and representation that the Contractor is not disqualified under the provisions of Section 220 of the Labor Law from the award of the Contract.
- 37.10 Any breach or violation of any of the foregoing shall be deemed a breach or violation of a material provision of this Contract, and grounds for cancellation thereof by the City.

ARTICLE 38. PAYROLL REPORTS

- 38.1 The Contractor and its Subcontractor(s) shall maintain on the Site during the performance of the Work the original payrolls or transcripts thereof which the Contractor and its Subcontractor(s) are required to maintain and shall submit such original payrolls or transcripts, subscribed and affirmed by it as true, within thirty (30) Days after issuance of its first payroll, and every thirty (30) Days thereafter, pursuant to Labor-Law-Section 220(3-a)(a)(iii). The Contractor-and Subcontractor(s) shall submit such original payrolls or transcripts along with each and every payment requisition. If payment requisitions are not submitted at least once a month, the Contractor and its Subcontractor(s) shall submit original payrolls and transcripts both along with its payment requisitions and independently of its payment requisitions.
- 38.2 The Contractor shall maintain payrolls or transcripts thereof for six (6) years from the date of completion of the Work on this Contract. If such payrolls and transcripts are maintained outside of New York City after the completion of the Work and their production is required pursuant to this Article 38, the Contractor shall produce such records in New York City upon request by the City.
- 38.3 The Contractor and Subcontractor(s) shall comply with any written order, direction, or request made by the Engineer, the Commissioner, the ACCO, the Agency EAO, the Agency Labor Law Investigator(s), or the Comptroller, to provide to the requesting party any of the following information and/or records within five (5) Days of such written order, direction, or request:
 - 38.3.1 Such original payrolls or transcripts thereof subscribed and affirmed by it as true and the statements signed by each worker pursuant to this Chapter VIII; and/or
 - 38.3.2 Attendance sheets for each Day on which any employee of the Contractor and/or any of the Subcontractor(s) performed Work on the Site, which attendance sheet shall be in a form acceptable to the Agency and shall provide information acceptable to the Agency to identify each such employee; and/or
 - 38.3.3 Any other information to satisfy the Engineer, the Commissioner, the ACCO, the Agency EAO, the Agency Labor Law Investigator(s) or the Comptroller, that this Chapter VIII and the Labor Law, as to the hours of employment and prevailing rates of wages and/or supplemental benefits, are being observed.
- 38.4 The failure of the Contractor or Subcontractor(s) to comply with the provisions of Articles 38.1 and/or 38.2 may result in the Commissioner declaring the Contractor in default and/or the withholding of payments otherwise due under the Contract.

ARTICLE 39. DUST HAZARDS

39.1 Should a harmful dust hazard be created in performing the Work of this Contract, for the elimination of which appliances or methods have been approved by the Board of Standards and Appeals

of the City of New York, such appliances and methods shall be installed, maintained, and effectively operated during the continuance of such harmful dust hazard. Failure to comply with this provision after notice shall make this Contract voidable at the sole discretion of the City.

CHAPTER IX: PARTIAL AND FINAL PAYMENTS

ARTICLE 40. CONTRACT PRICE

40.1 The City shall pay, and the Contractor agrees to accept, in full consideration for the Contractor's performance of the Work subject to the terms and conditions hereof, the lump sum price or unit prices for which this Contract was awarded, plus the amount required to be paid for any Extra Work ordered by the Commissioner under Article 25, less credit for any Work omitted pursuant to Article 29.

ARTICLE 41, BID BREAKDOWN ON LUMP SUM

- 41.1 Within fifteen (15) Days after the commencement date specified in the Notice to Proceed or Order to Work, unless otherwise directed by the Resident Engineer, the Contractor shall 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 each calendar month (except where the Commissioner approves in writing the submission of invoices on a more frequent basis and for invoices relating to Work performed pursuant to a change order), the Contractor may submit to the Engineer a requisition for a partial payment in the prescribed form, which shall contain an estimate of the quantity and the fair value of the Work done during the payment period.
- 42.2 Partial payments may be made for materials, fixtures, and equipment in advance of their actual incorporation in the Work, as the Commissioner may approve, and upon the terms and conditions set forth in the General Conditions.
- 42.3 The Contractor shall also submit to the Commissioner in connection with every application for partial payment a verified statement in the form prescribed by the Comptroller setting forth the information required under Labor Law Section 220-a.

42.4 Within thirty (30) Days after receipt of a satisfactory payment application, and within sixty (60) Days after receipt of a satisfactory payment application in relation to Work performed pursuant to a change order, the Engineer will prepare and certify, and the Commissioner will approve, a voucher for a partial payment in the amount of such approved estimate, less any and all deductions authorized to be made by the Commissioner under the terms of this Contract or by Law.

ARTICLE 43. PROMPT PAYMENT

- 43.1 The Prompt Payment provisions of the PPB Rules in effect at the time of the bid will be applicable to payments made under this Contract. The provisions require the payment to the Contractor of interest on payments made after the required payment date, except as set forth in the PPB Rules.
- 43.2 The Contractor shall submit a proper invoice to receive payment, except where the Contract provides that the Contractor will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.
 - 43.3 Determination of interest due will be made in accordance with the PPB Rules.
- 43.4 If the Contractor is paid interest, the proportionate share(s) of that interest shall be forwarded by the Contractor to its Subcontractor(s).
- 43.5 The Contractor shall pay each Subcontractor or Materialman not later than seven (7) Days after receipt of payment out of amounts paid to the Contractor by the City for Work performed by the Subcontractor or Materialman under this Contract.
 - 43.5.1 If Contractor fails to make any payment to any Subcontractor or Materialman within seven (7) Days after receipt of payment by the City pursuant to this Article 43.5, then the Contractor shall pay interest on amounts due to such Subcontractor or Materialman at the rate of interest in effect on the date such payment is made by the Contractor computed in accordance with Section 756-b (1)(b) of the New York General Business Law. Accrual of interest shall commence on the Day immediately following the expiration of the seventh Day following receipt of payment by the Contractor from the City and shall end on the date on which payment is made.
- 43.6 The Contractor shall include in each of its subcontracts a provision requiring each Subcontractor to make payment to each of its Subcontractors or Materialmen for Work performed under this Contract in the same manner and within the same time period set forth above.

ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT

- 44.1 The Contractor shall submit with the Substantial Completion requisition:
 - 44.1.1 A final verified statement of any pending Article 27 disputes in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the

Contractor claims the performance of the Work or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay.

44.1.1(a) With respect to each such claim, the Commissioner, the Comptroller and, in the event of litigation, the City Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the Contractor's books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 44.1.1(a) is intended to or shall relieve the Contractor from the obligation of complying strictly with Articles 11, 27, 28, and 30. The Contractor is warned that unless such claims are completely set forth as herein required, the Contractor upon acceptance of the Substantial Completion payment pursuant to this Article 44, will have waived any such claims.

44.1.2 A Final Approved Punch-List.

- 44.1.3 Where required, a request for an extension of time to achieve Substantial Completion or final extension of time.
- 44.2 The Commissioner shall issue a voucher calling for payment of any part or all of the balance due for Work performed under the Contract, including monies retained under Article 21, less any and all deductions authorized to be made by the Commissioner, under this Contract or by Law, and less twice the amount the Commissioner considers necessary to ensure the completion of the balance of the Work by the Contractor. Such a payment shall be considered a partial and not a final payment. No Substantial Completion payment shall be made under this Article 44 where the Contractor failed to complete the Work within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of Work have been acted upon pursuant to Article 13.
- 44.3 No further partial payments shall be made to the Contractor after Substantial Completion, except the Substantial Completion payment and payment pursuant to any Contractor's requisition that were properly filed with the Commissioner prior to the date of Substantial Completion; however, the Commissioner may grant a waiver for further partial payments after the date of Substantial Completion to permit payments for change order Work and/or release of retainage and deposits pursuant to Articles 21 and 24. Such waiver shall be in writing.
- 44.4 The Contractor acknowledges that nothing contained in this Article 44 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 45. FINAL PAYMENT

45.1 After completion and Final Acceptance of the Work, the Contractor shall submit all required certificates and documents, together with a requisition for the balance claimed to be due under the Contract, less the amount authorized to be retained for maintenance under Article 24. Such submission shall be within 90 days of the date of the Commissioner's written determination of Final Acceptance, or within such additional time as may be granted by the Commissioner in writing. If the Contractor fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the Contractor and the Contractor shall be deemed to have forfeited its right to payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the Commissioner.

- 45.2 Amended Verified Statement of Claims: The Contractor shall also submit with the final requisition any amendments to the final verified statement of any pending dispute resolution procedures in accordance with the PPB Rules and this Contract and any and all alleged claims against the City, in any way connected with or arising out of this Contract (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) that have occurred subsequent to Substantial Completion, setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each such item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the Contractor claims the performance of the Work or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay. With reference to each such claim, the Commissioner, the Comptroller and, in the event of litigation, the City Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the Contractor's books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 45.2, is intended to or shall relieve the Contractor from the obligation of complying strictly with Articles 11, 27, 28, and 30. The Contractor is warned that unless such claims are completely set forth as herein required, the Contractor, upon acceptance of the Final Payment pursuant to Article 46, will have waived any such claims.
- 45.3 Preparation of Final Voucher: Upon determining the balance due hereunder other than on account of claims, the Engineer will prepare and certify, for the Commissioner's approval, a voucher for final payment in that amount less any and all deductions authorized to be made by the Commissioner under this Contract or by Law. In the case of a lump sum Contract, the Commissioner shall certify the voucher for final payment within thirty (30) Days from the date of completion and acceptance of the Work, provided all requests for extensions of time have been acted upon.
 - 45.3.1 All prior certificates and vouchers upon which partial payments were made, being merely estimates made to enable the Contractor to prosecute the Work more advantageously, shall be subject to correction in the final voucher, and the certification of the Engineer thereon and the approval of the Commissioner thereof, shall be conditions precedent to the right of the Contractor to receive any money hereunder. Such final voucher shall be binding and conclusive upon the Contractor.
 - 45.3.2 Payment pursuant to such final voucher, less any deductions authorized to be made by the Commissioner under this Contract or by Law, shall constitute the final payment, and shall be made by the Comptroller within thirty (30) Days after the filing of such voucher in his/her office.
- 45.4 The Contractor acknowledges that nothing contained in this Article 45 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT

46.1 The acceptance by the Contractor, or by anyone claiming by or through it, of the final payment, whether such payment be made pursuant to any judgment of any court, or otherwise, shall constitute and operate as a release of the City from any and all claims of and liability to the Contractor for anything heretofore done or furnished for the Contractor relating to or arising out of this Contract and the Work done hereunder, and for any prior act, neglect or default on the part of the City or any of its officials, agents or employees, excepting only a claim against the City for the amounts deducted or retained in accordance with the terms and provisions of this Contract or by Law, and excepting any claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the

verified statement filed with the Contractor's substantial and final requisitions pursuant to Articles 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 46, or those for amounts deducted by the Commissioner from the final requisition or from the final payment as certified by the Engineer and approved by the Commissioner, shall not be effective to reserve such claims, anything stated to the Contractor orally or in writing by any official, agent or employee of the City to the contrary notwithstanding.
- 46.3 Should the Contractor refuse to accept the final payment as tendered by the Comptroller, it shall constitute a waiver of any right to interest thereon.
- 46.4 The Contractor, however, shall not be barred by this Article 46 from commencing an action for breach of Contract to the extent permitted by Law and by the terms of the Contract for any claims that are contained in the verified statement filed with the Contractor's substantial and final requisitions pursuant to Articles 44 and 45 or that arose after submission of the final payment requisition, provided that a detailed and verified statement of claim is served upon the contracting Agency and Comptroller not later than forty (40) Days after the making of such final payment by electronic funds transfer (EFT) or the mailing of such final payment. The statement shall specify the items upon which the claim will be based and any such claim shall be limited to such items.

ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION

47.1 All works of art, including paintings, mural decorations, stained glass, statues, bas-reliefs, and other sculptures, monuments, fountains, arches, and other structures of a permanent character 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 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; or if
- 48.1.14 The Contractor or any of its officers, directors, partners, five (5%) percent shareholders, principals, or other persons substantially involved in its activities, commits any of the acts or omissions specified as the grounds for debarment in the PPB Rules.
- 48.2 Before the Commissioner shall exercise his/her right to declare the Contractor in default, the Commissioner shall give the Contractor an opportunity to be heard, upon not less than two (2) Days' notice.

ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT

- 49.1 The right to declare the **Contractor** in default for any of the grounds specified or referred to in Article 48 shall be exercised by sending the **Contractor** a notice, signed by the **Commissioner**, setting forth the ground or grounds upon which such default is declared (hereinafter referred to as a "Notice of Default").
- 49.2 The Commissioner's determination that the Contractor is in default shall be conclusive, final, and binding on the parties and such a finding shall preclude the Contractor from commencing a plenary action for any damages relating to the Contract. If the Contractor protests the determination of the Commissioner, the Contractor may commence an action in a court of competent jurisdiction of the State of New York under Article 78 of the New York Civil Practice Law and Rules.

ARTICLE 50. QUITTING THE SITE

50.1 Upon receipt of such notice the Contractor shall immediately discontinue all further operations under this Contract and shall immediately quit the Site, leaving untouched all plant, materials, equipment, tools, and supplies then on the Site.

ARTICLE 51. COMPLETION OF THE WORK

- 51.1 The Commissioner, after declaring the Contractor in default, may then have the Work completed by such means and in such manner, by contract with or without public letting, or otherwise, as he/she may deem advisable, utilizing for such purpose such of the Contractor's plant, materials, equipment, tools, and supplies remaining on the Site, and also such Subcontractors, as he/she may deem advisable.
- 51.2 After such completion, the Commissioner shall make a certificate stating the expense incurred in such completion, which shall include the cost of re-letting and also the total amount of liquidated damages (at the rate provided for in the Contract) from the date when the Work should have been completed by the Contractor in accordance with the terms hereof to the date of actual completion of the Work. Such certificate shall be binding and conclusive upon the Contractor, its sureties, and any person claiming under the Contractor, as to the amount thereof.
- 51.3 The expense of such completion, including any and all related and incidental costs, as so certified by the Commissioner, and any liquidated damages assessed against the Contractor, shall be charged against and deducted out of monies which are earned by the Contractor prior to the date of default. Should the expense of such completion, as certified by the Commissioner, exceed the total sum which would have been payable under the Contract if it had been completed by the Contractor, any excess shall be paid by the Contractor.

ARTICLE 52. PARTIAL DEFAULT

52.1 In case the Commissioner shall declare the Contractor in default as to a part of the Work only, the Contractor shall discontinue such part, shall continue performing the remainder of the Work in strict conformity with the terms of this Contract, and shall in no way hinder or interfere with any Other Contractor(s) or persons whom the Commissioner may engage to complete the Work as to which the Contractor was declared in default.

52.2 The provisions of this Chapter relating to declaring the Contractor in default as to the entire Work shall be equally applicable to a declaration of partial default, except that the Commissioner shall be entitled to utilize for completion of the part of the Work as to which the Contractor was declared in default only such plant, materials, equipment, tools, and supplies as had been previously used by the Contractor on such part.

ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK

53.1 In completing the whole or any part of the Work under the provisions of this Chapter X, the Commissioner shall have the power to depart from or change or vary the terms and provisions of this Contract, provided, however, that such departure, change or variation is made for the purpose of reducing the time or expense of such completion. Such departure, change or variation, even to the extent of accepting a lesser or different performance, shall not affect the conclusiveness of the Commissioner's certificate of the cost of completion referred to in Article 51, nor shall it constitute a defense to an action to recover the amount by which such certificate exceeds the amount which would have been payable to the Contractor hereunder but for its default.

ARTICLE 54. OTHER REMEDIES

- 54.1 In addition to the right to declare the Contractor in default pursuant to this Chapter X, the Commissioner shall have the absolute right, in his/her sole discretion and without a hearing, to complete or cause to be completed in the same manner as described in Articles 51 and 53, any or all unsatisfactory or uncompleted punch list Work that remains after the completion date specified in the Final Approved Punch List. A written notice of the exercise of this right shall be sent to the Contractor who shall immediately quit the Site in accordance with the provisions of Article 50.
- 54.2 The expense of completion permitted under Article 54.1, including any and all related and incidental costs, as so certified by the **Commissioner**, shall be charged against and deducted out of monies which have been earned by the **Contractor** prior to the date of the exercise of the right set forth in Article 54.1; the balance of such monies, if any, subject to the other provisions of this **Contract**, to be paid to the **Contractor** without interest after such completion. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.
- 54.3 The previous provisions of this Chapter X shall be in addition to any and all other remedies available under Law or in equity.
- 54.4 The exercise by the City of any remedy set forth herein shall not be deemed a waiver by the City of any other legal or equitable remedy contained in this Contract or provided under Law.

CHAPTER XI: MISCELLANEOUS PROVISIONS

ARTICLE 55. CONTRACTOR'S WARRANTIES

55.1 In consideration of, and to induce, the award of this Contract to the Contractor, the Contractor represents and warrants:

- 55.1.1 That it is financially solvent, sufficiently experienced and competent to 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 action, unless the Contractor shall have strictly complied with all requirements relating to the giving of notice and of information with respect to such claims, as herein before provided.
- 56.2 Nor shall any action be instituted or maintained on any such claims unless such action is commenced within six (6) months after **Substantial Completion**; except that:
 - 56.2.1 Any claims arising out of events occurring after Substantial Completion and before Final Acceptance of the Work shall be asserted within six (6) months of Final Acceptance of the Work;
 - 56.2.2 If the Commissioner exercises his/her right to complete or cause to complete any or all unsatisfactory or uncompleted punch list Work that remains after the completion date specified in the Final Approved Punch List pursuant to Article 54, any such action shall be commenced within six (6) months from the date the Commissioner notifies the Contractor in writing that he/she has exercised such right. Any claims for monies deducted, retained or withheld under the provisions of this Contract shall be asserted within six (6) months after the date when such monies otherwise become due and payable hereunder; and
 - 56.2.3 If the Commissioner exercises his/her right to terminate the Contract pursuant to Article 64, any such action shall be commenced within six (6) months of the date the Commissioner exercises said right.

ARTICLE 57. INFRINGEMENT

57.1 The Contractor shall be solely responsible for and shall defend, indemnify, and hold the City harmless from any and all claims (even if the allegations of the lawsuit are without merit) and judgments for damages and from costs and expenses to which the City may be subject to or which it may suffer or incur allegedly arising out of or in connection with any infringement by the Contractor of any copyright, trade secrets, trademark or patent rights or any other property or personal right of any third party by the Contractor and/or its Subcontractors in the performance or completion of the Work. Insofar as the facts or Law relating to any claim would preclude the City from being completely indemnified by the Contractor, the City shall be partially indemnified by the Contractor to the fullest extent permitted by Law.

ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES

58.1 No claim whatsoever shall be made by the Contractor against any official, agent or employee of the City for, or on account of, anything done or omitted to be done in connection with this Contract.

ARTICLE 59. SERVICE OF NOTICES

- 59.1 The Contractor hereby designates the business address, fax number, and email address specified in its bid, as the place where all notices, directions or other communications to the Contractor may be delivered, or to which they may be mailed. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless-receipt of the fax-or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage prepaid envelope.
- 59.2 Contractor's notice address, email address, or fax number may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor, and delivered to the Commissioner.
- 59.3 Nothing herein contained shall, however, be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the Contractor personally, or, if the Contractor is a corporation, upon any officer thereof.

ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT

60.1 If this Contract contains any unlawful provision not an essential part of the Contract and which shall not appear to have been a controlling or material inducement to the making thereof, the same shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the Contract without affecting the binding force of the remainder.

ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED

61.1 It is the intent and understanding of the parties to this Contract that each and every provision of Law required to be inserted in this Contract shall be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is to be deemed to be inserted herein, and if, through mistake or otherwise, any such provision is not inserted, or is not inserted in correct form, then this Contract shall forthwith upon the application of either party be amended by such insertion so as to comply strictly with the Law and without prejudice to the rights of either party hereunder.

ARTICLE 62. TAX EXEMPTION

62.1 The City is exempt from payment of Federal, State, and local taxes, including sales and compensating use taxes of the State of New York and its cities and counties on all tangible personal property sold to the City pursuant to the provisions of this Contract. These taxes are not to be included in bids. However, this exemption does not apply to tools, machinery, equipment or other property leased by or to the Contractor, Subcontractor or Materialman or to tangible personal property which, even

though it is consumed, is not incorporated into the completed Work (consumable supplies) and tangible personal property that the Contractor is required to remove from the Site during or upon completion of the Work. The Contractor and its Subcontractors and Materialmen shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on such leased tools, machinery, equipment or other property and upon all such consumable supplies and tangible personal property that the Contractor is required to remove from the Site during or upon completion of the Work.

- 62.2 The Contractor agrees to sell and the City agrees to purchase all tangible personal property, other than consumable supplies and other tangible personal property that the Contractor is required to remove from the Site during or upon completion of the Work, that is required, necessary or proper for or incidental to the construction of the Project covered by this Contract. The sum paid under this Contract for such tangible personal property shall be in full payment and consideration for the sale of such tangible personal property.
 - 62.2.1 The Contractor agrees to construct the Project and to perform all Work, labor and services rendered, necessary, proper or incidental thereto for the sum shown in the bid for the performance of such Work, labor, and services, and the sum so paid pursuant to this Contract for such Work, labor, and services, shall be in full consideration for the performance by the Contractor of all its duties and obligations under this Contract in connection with said Work, labor, and services.
- 62.3 20 NYCRR Section 541.3(d) provides that a Contractor's purchases of tangible personal property that is either incorporated into real property owned by a governmental entity or purchased for and sold to a governmental entity are exempt from sales and use tax. The City shall not pay sales tax for any such tangible personal property that it purchases from the Contractor pursuant to the Contract. With respect to such tangible personal property, the Contractor, at the request of the City, shall furnish to the City such bills of sale and other instruments as may be required by the City, properly executed, acknowledged and delivered assuring to the City title to such tangible personal property, free of liens and/or encumbrances, and the Contractor shall mark or otherwise identify all such tangible personal property as the property of the City.
- 62.4 Title to all tangible personal property to be sold by the Contractor to the City pursuant to the provisions of the Contract shall immediately vest in and become the sole property of the City upon delivery of such tangible personal property to the Site. Notwithstanding such transfer of title, the Contractor shall have the full and continuing responsibility to install such tangible personal property in accordance with the provisions of this Contract, protect it, maintain it in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional tangible personal property in place of any that may be lost, stolen or rendered unusable, without cost to the City, until such time as the Work covered by the Contract is fully accepted by the City. Such transfer of title shall in no way affect any of the Contractor's obligations hereunder. In the event that, after title has passed to the City, any of the tangible personal property is rejected as being defective or otherwise unsatisfactory, title to all such tangible personal property shall be deemed to have been transferred back to the Contractor.
- 62.5 The purchase by **Subcontractors** or **Materialmen** of tangible personal property to be sold hereunder shall be a purchase or procurement for resale to the **Contractor** (either directly or through other **Subcontractors**) and therefore not subject to the aforesaid sales and compensating use taxes, provided that the subcontracts and purchase agreements provide for the resale of such tangible personal property and that such subcontracts and purchase agreements are in a form similar to this **Contract** with respect to the separation of the sale of consumable supplies and tangible personal property that the

Contractor is required to remove from the Site during or upon completion of the Work from the Work and labor, services, and any other matters to be provided, and provided further that the subcontracts and purchase agreements provide separate prices for tangible personal property and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for tangible personal property from the payments for other Work and labor and other things to be provided.

- 62.6 The Contractor and its Subcontractors and Materialmen shall furnish a Contractor Exempt Purchase Certificate to all persons, firms or corporations from which they purchase tangible personal property for the performance of the Work covered by this Contract.
- 62.7 In the event any of the provisions of this Article 62 shall be deemed to be in conflict with any other provisions of this Contract or create any ambiguity, then the provisions of this Article 62 shall control.

ARTICLE 63. INVESTIGATION(S) CLAUSE

- 63.1 The parties to this Contract agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a United States, a State of New York (State) or a City governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit or license that is the subject of the investigation, audit or inquiry.
- 63.2 If any person who has been advised that his/her statement, and any information from such statement, will not be used against him/her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the City, the State, or any political subdivision or public authority thereof, or the Port Authority of 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 Contract, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the City incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the City.
- 63.7 The **Commissioner** shall consider and address in reaching his/her determination and 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 in this Article 63 shall be defined as a license, permit, franchise or concession not granted as a matter of right.
- 63.8.2 The term "person" as used in this Article 63 shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

- 63.8.3 The term "entity" as used in this Article 63 shall be defined as any firm, partnership, corporation, association, joint venture, or person that receives monies, benefits, licenses, leases, or permits from or through the City or otherwise transacts business with the City.
- 63.8.4 The term "member" as used in this Article 63 shall be defined as any person associated with another person or entity as a partner, director, officer, principal or employee.
- 63.9 In addition to and notwithstanding any other provision of this Contract, the Commissioner may in his/her sole discretion terminate this Contract upon not less than three (3) Days' written notice in the event the Contractor fails to promptly report in writing to the Commissioner of the Department of Investigations ("DOI") of the City any solicitation of money, goods, requests for future employment or other benefit or thing of value, by or on behalf of any employee of the City or other person, firm, corporation or entity for any purpose which may be related to the procurement or obtaining of this Contract by the Contractor, or affecting the performance of this Contract.

ARTICLE 64. TERMINATION BY THE CITY

- 64.1 In addition to termination pursuant to any other article of this Contract, the Commissioner may, at any time, terminate this Contract by written notice to the Contractor. In the event of termination, the Contractor shall, upon receipt of such notice, unless otherwise directed by the Commissioner:
 - 64.1.1 Stop Work on the date specified in the notice;
 - 64.1.2 Take such action as may be necessary for the protection and preservation of the City's materials and property;
 - 64.1.3 Cancel all cancelable orders for material and equipment;
 - 64.1.4 Assign to the City and deliver to the Site or another location designated by the Commissioner, any non-cancelable orders for material and equipment that is not capable of use except in the performance of this Contract and has been specifically fabricated for the sole purpose of this Contract and not incorporated in the Work;
 - 64.1.5 Take no action which will increase the amounts payable by the City under this Contract.
- 64.2 In the event of termination by the City pursuant to this Article 64, payment to the Contractor shall be in accordance with Articles 64.2.1, 64.2.2 or 64.2.3, to the extent that each respective article applies.
 - 64.2.1 Lump Sum Contracts or Items: On all lump sum Contracts, or on lump sum items in a Contract, the City will pay the Contractor the sum of the amounts described in Articles 64.2.1(a) and 64.2.1(b), less all payments previously made pursuant to this Contract. On lump sum Contracts only, the City will also pay the Contractor an additional sum as provided in Article 64.2.1(c).
 - 64.2.1(a) For Work completed prior to the notice of termination, the Contractor shall be paid a pro rata portion of the lump sum bid amount, plus approved change orders, based upon the percent completion of the Work, as determined by the

Commissioner. For the purpose of determining the pro rata portion of the lump sum bid amount to which the Contractor is entitled, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be dispositive. The Commissioner's determination hereunder shall be final, binding, and conclusive.

64.2.1(b) For non-cancelable material and equipment that is not capable of use except in the performance of this Contract and has been specifically fabricated for the sole purpose of this Contract, but not yet incorporated in the Work, the Contractor shall be paid the lesser of the following, less salvage value:

64.2.1(b)(i) The Direct Cost, as defined in Article 64.2.4; or

64.2.1(b)(ii) The fair and reasonable value, if less than Direct Cost, of such material and equipment, plus necessary and reasonable delivery costs.

64.2.1(b)(iii) In addition, the **Contractor** shall be paid five (5%) percent of the amount described in Article 64.2.1(b)(i) or Article 64.2.1(b)(ii), whichever applies.

64.2.1(c) Except as otherwise provided in Article 64.2.1(d), on all lump sum Contracts, the Contractor shall be paid the percentage indicated below applied to the difference between the total lump sum bid amount and the total of all payments made prior to the notice of termination plus all payments allowed pursuant to Articles 64.2.1(a) and 64.2.1(b):

64.2.1(c)(i) Five (5%) percent of the first five million (\$5,000,000) dollars; and

64.2.1(c)(ii) Three (3%) percent of any amount between five million (\$5,000,000) dollars and fifteen million (\$15,000,000) dollars; plus

64.2.1(c)(iii) One (1%) percent of any amount over fifteen million (\$15,000,000) dollars.

64.2.1(d) In the event the City terminates a lump sum Contract pursuant to this Article 64 within ninety (90) Days after registration of the Contract with the Comptroller, the Contractor shall be paid one (1%) percent of the difference between the lump sum bid amount and the total of all payments made pursuant to this Article 64.2.

64.2.2 Unit Price Contracts or Items: On all unit price Contracts, or on unit price items in a Contract, the City will pay the Contractor the sum of the amounts described in Articles 64.2.2(a) and 64.2.2(b), less all payments previously made pursuant to this Contract:

64.2.2(a) For all completed units, the unit price stated in the Contract, and

64.2.2(b) For units that have been ordered but are only partially completed, the **Contractor** will be paid:

64.2.2(b)(i) A pro rata portion of the unit price stated in the Contract based upon the percent completion of the unit and

64.2.2(b)(ii) For non-cancelable material and equipment, payment will be made pursuant to Article 64.2.1(b).

- 64.2.3 Time and Materials Contracts or Items Based on Time and Material Records: On all Contracts or items in a Contract where payment for the Work is based on time and material records, the Contractor shall be paid in accordance with Article 26, less all payments previously made pursuant to this Contract.
- 64.2.4 Direct Costs: Direct Costs as used in this Article 64.2 shall mean:
 - 64.2.4(a) The actual purchase price of material and equipment, plus necessary and reasonable delivery costs,
 - -64.2.4(b) The actual cost of labor involved in construction and installation at the Site, and
 - 64.2.4(c) The actual cost of necessary bonds and insurance purchased pursuant to requirements of this Contract less any amounts that have been or should be refunded by the Contractor's sureties or insurance carriers.
 - 64.2.4(d) Direct Costs shall not include overhead.
- 64.3 In no event shall any payments under this Article 64 exceed the Contract price for such items.
- 64.4 All payments pursuant to Article 64 shall be in the nature of liquidated damages and shall be accepted by the Contractor in full satisfaction of all claims against the City.
- 64.5 The City may deduct or set off against any sums due and payable pursuant to this Article 64, any deductions authorized by this Contract or by Law (including but not limited to liquidated damages) and any claims it may have against the Contractor. The City's exercise of the right to terminate the Contract pursuant to this Article 64 shall not impair or otherwise effect the City's right to assert any claims it may have against the Contractor in a plenary action.
- 64.6 Where the Work covered by the Contract has been substantially completed, as determined in writing by the Commissioner, termination of the Work shall be handled as an omission of Work pursuant to Articles 29 and 33, in which case a change order will be issued to reflect an appropriate reduction in the Contract sum, or if the amount is determined after final payment, such amount shall be paid by the Contractor.

ARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE

- 65.1 This Contract shall be deemed to be executed in the City regardless of the domicile of the Contractor, and shall be governed by and construed in accordance with the Laws of the State of New York and the Laws of the United States, where applicable.
- 65.2 The parties agree that any and all claims asserted against the City arising under this Contract or related thereto shall be heard and determined in the courts of the State of New York ("New York State Courts") located in the City and County of New York. To effect this Contract and intent, the Contractor agrees:

- 65.2.1 If the City initiates any action against the Contractor in Federal court or in a New York State Court, service of process may be made on the Contractor either in person, wherever such Contractor may be found, or by registered mail addressed to the Contractor at its address as set forth in this Contract, or to such other address as the Contractor may provide to the City in writing; and
- 65.2.2 With respect to any action between the City and the Contractor in a New York State Court, the Contractor hereby expressly waives and relinquishes any rights it might otherwise have:
 - 65.2.2(a) To move to dismiss on grounds of forum non conveniens;
 - 65.2.2(b) To remove to Federal Court; and
 - 65.2.2(c) To move for a change of venue to a New York State Court outside New York County.
- 65.2.3 With respect to any action brought by the City against the Contractor in a Federal Court located in the City, the Contractor expressly waives and relinquishes any right it might otherwise have to move to transfer the action to a Federal Court outside the City.
- 65.2.4 If the Contractor commences any action against the City in a court located other than in the City and County of New York, upon request of the City, the Contractor shall either consent to a transfer of the action to a New York State Court of competent jurisdiction located in the City and County of New York or, if the Court where the action is initially brought will not or cannot transfer the action, the Contractor shall consent to dismiss such action without prejudice and may thereafter reinstate the action in a New York State Court of competent jurisdiction in New York County.
- 65.3 If any provision(s) of this Article 65 is held unenforceable for any reason, each and all other provision(s) shall nevertheless remain in full force and effect.

ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT

- 66.1 The Contractor agrees that neither the Contractor nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the Federal Export Administration Act of 1979, as amended, or the regulations of the United States Department of Commerce (Commerce Department) promulgated thereunder.
- 66.2 Upon the final determination by the Commerce Department or any other agency of the United States as to, or conviction of the Contractor or a substantially-owned affiliated company thereof for participation in an international boycott in violation of the provisions of the Export Administration Act of 1979, as amended, or the regulations promulgated thereunder, the Comptroller may, at his/her option, render forfeit and void this Contract.
- 66.3 The Contractor shall comply in all respects, with the provisions of Section 6-114 of the Administrative Code and the rules and regulations issued by the Comptroller thereunder.

ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM

- 67.1 This Contract is subject to the requirements of Section 6-108.1 of the Administrative Code and regulations promulgated thereunder. No construction contract shall be awarded unless and until these requirements have been complied with in their entirety; however, compliance with this Article 67 is not required if the Agency sets Subcontractor Participation Goals for Minority- and Women-Owned Business Enterprises (M/WBEs).
- 67.2 Unless specifically waived by the Commissioner with the approval of the Division of Economic and Financial Opportunity of the City Department of Business Services, if any portion of the Contract is subcontracted, not less than ten (10%) percent of the total dollar amount of the Contract shall be awarded to locally based enterprises (LBEs); except that where less than ten (10%) percent of the total dollar amount of the Contract is subcontracted, such lesser percentage shall be so awarded.
 - -67.3 The Contractor shall not require performance and payment bonds from LBE Subcontractors.
- 67.4 If the Contractor has indicated prior to award that no Work will be subcontracted, no Work shall be subcontracted without the prior approval of the Commissioner, which shall be granted only if the Contractor makes a good faith effort beginning at least six (6) weeks before the Work is to be performed to obtain LBE Subcontractors to perform the Work.
- 67.5 If the Contractor has not identified sufficient LBE Subcontractors prior to award, it shall sign a letter of compliance stating that it complies with Section 6-108.1 of the Administrative Code, recognizes that achieving the LBE requirement is a condition of its Contract, and shall submit documentation demonstrating its good faith efforts to obtain LBEs. After award, the Contractor shall begin to solicit LBE's to perform subcontracted Work at least six (6) weeks before the date such Work is to be performed and shall demonstrate that a good faith effort has been made to obtain LBEs on each subcontract until it meets the required percentage.
- 67.6 Failure of the Contractor to comply with the requirements of Section 6-108.1 of the Administrative Code and the regulations promulgated thereunder shall constitute a material breach of this Contract. Remedy for such breach may include the imposition of any or all of the following sanctions:
 - 67.6.1 Reducing the Contractor's compensation by an amount equal to the dollar value of the percentage of the LBE subcontracting requirement not complied with;
 - 67.6.2 Declaring the Contractor in default;
 - 67.6.3 If the Contractor is an LBE, de-certifying and declaring the Contractor ineligible to participate in the LBE program for a period of up to three (3) years.

ARTICLE 68. ANTITRUST

68.1 The Contractor hereby assigns, sells, and transfers to the City all right, title, and interest in and to any claims and causes of action arising under the antitrust Laws of New York State or of the United States relating to the particular goods or services purchased or procured by the City under this Contract.

ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS

- 69.1 Notice To All Prospective Contractors:
 - 69.1.1 Local Law No. 34 of 1991 became effective on September 10, 1991 and added Section 6-115.1 of the Administrative Code. The local Law provides for certain restrictions on City Contracts to express the opposition of the people of the City to employment discrimination practices in Northern Ireland to promote freedom of work-place opportunity.
 - 69.1.2 Pursuant to Section 6-115.1, prospective Contractors for Contracts to provide goods or services involving an expenditure of an amount greater than ten thousand (\$10,000.) dollars, or for construction involving an amount greater than fifteen thousand (\$15,000.) dollars, are asked to sign a rider in which they covenant and represent, as a material condition of their Contract, that any business operations in Northern Ireland conducted by the Contractor and any individual or legal entity in which the Contractor holds a ten (10%) percent or greater ownership interest in the Contractor will be conducted in accordance with the MacBride Principles of nondiscrimination in employment.
 - 69.1.3 Prospective Contractors are not required to agree to these conditions. However, in the case of Contracts let by competitive sealed bidding, whenever the lowest responsible bidder has not agreed to stipulate to the conditions set forth in this notice and another bidder who has agreed to stipulate to such conditions has submitted a bid within five (5%) percent of the lowest responsible bid for a Contract to supply goods, services or contraction of comparable quality, the Agency shall refer such bids to the Mayor, the Speaker or other officials, as appropriate, who may determine, in accordance with applicable Law, that it is in the best interest of the City that the Contract be awarded to other than the lowest responsible pursuant to Section 313(b)(2) of the City Charter.
 - 69.1.4 In the case of Contracts let by other than competitive sealed bidding, if a prospective Contractor does not agree to these conditions, no Agency, elected official or the City Council shall award the Contract to that bidder unless the Agency seeking to use the goods, services or construction certifies in writing that the Contract is necessary for the Agency to perform its functions and there is no other responsible Contractor who will supply goods, services or construction of comparable quality at a comparable price.
- 69.2 In accordance with Section 6-115.1 of the Administrative Code, the Contractor stipulates that such Contractor and any individual or legal entity in which the Contractor holds a ten (10%) percent or greater ownership interest in the Contractor either:
 - 69.2.1 Have no business operations in Northern Ireland, or
 - 69.2.2 Shall take lawful steps in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Principles, and shall permit independent monitoring of their compliance with such principles.
 - 69.3 For purposes of this Article, the following terms shall have the following meanings:
 - 69.3.1 "MacBride Principles" shall mean those principles relating to nondiscrimination in employment and freedom of work-place opportunity which require employers doing business in Northern Ireland to:

- 69.3.1(a) increase the representation of individuals from under-represented religious groups in the workforce, including managerial, supervisory, administrative, clerical and technical jobs;
- 69.3.1(b) take steps to promote adequate security for the protection of employees from under-represented religious groups both at the work-place and while traveling 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 asses, identify, and actively recruit employees from under-represented religious groups with potential for further advancement; and
- 69.3.1(i) appoint a senior management staff member to oversee affirmative 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 69 is in violation thereof, the Agency shall review such information and give the Contractor an opportunity to respond. If the Agency finds that a violation has occurred, the Agency shall have the right to declare the Contractor in default in default and/or terminate this Contract for cause and procure supplies, services or Work from another source in the manner the Agency deems proper. In the event of such termination, the Contractor shall pay to the Agency, or the Agency in its sole discretion may withhold from any amounts otherwise payable to the Contractor, the difference between the Contract price for the uncompleted portion of this Contract and the cost to the Agency of completing performance of this Contract either itself or by engaging another Contractor or Contractors. In the case of a requirement Contract, the Contractor shall be liable for such difference in price for the entire amount of supplies required by the Agency for the uncompleted term of Contractor's Contract. In the case of a construction Contract, the Agency shall also have the right to hold the Contractor in partial or total default in accordance with the default provisions of this Contract, and/or may seek debarment or suspension of the Contractor. The rights and remedies of the Agency hereunder shall be in addition to, and not in lieu of, any rights and remedies the Agency has pursuant to this Contract or by operation of Law.

ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB

70.1 The Contractor shall electronically file all alteration type-2 and alteration type-3 applications via the New York City Development Hub Web site, except applications for the following types of minor alterations: enlargements, curb cuts, legalizations, fire alarms, builders pavement plans, and jobs filed on Landmark Preservation Commission calendared properties. All such filings must be professionally certified. Information about electronic filing via the New York City Development Hub is available on the City Department of Buildings Web site at www.nyc.gov/buildings.

ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS

71.1 Tropical hardwoods, as defined in Section 165 of the New York State Finance Law (Finance Law), shall not be utilized in the performance of this Contract except as expressly permitted by Section 165 of the Finance Law.

ARTICLE 72. CONFLICTS OF INTEREST

72.1 Section 2604 of the City Charter and other related provisions of the City Charter, the Administrative Code, and the Penal Law are applicable under the terms of this Contract in relation to conflicts of interest and shall be extended to Subcontractors authorized to perform Work, labor and services pursuant to this Contract and further, it shall be the duty and responsibility of the Contractor to so inform its respective Subcontractors. Notice is hereby given that, under certain circumstances, penalties may be invoked against the donor as well as the recipient of any form of valuable gift.

ARTICLE 73. MERGER CLAUSE

73.1 The written Contract herein, contains all the terms and conditions agreed upon by the parties hereto, and no other agreement, oral or otherwise, regarding the subject matter of this Contract shall be deemed to exist or to bind any of the parties hereto, or to vary any of the terms contained herein.

ARTICLE 74. STATEMENT OF WORK

74.1 The Contractor shall furnish all labor and materials and perform all Work in strict accordance with the Specifications and Addenda thereto, numbered as shown in Schedule A.

ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR

75.1 The City will pay and the Contractor will accept in full consideration for the performance of the Contract, subject to additions and deductions as provided herein, the total sum shown in Schedule A, this said sum being the amount at which the Contract was awarded to the Contractor at a public letting thereof, based upon the Contractor's bid for the Contract.

ARTICLE 76. ELECTRONIC FUNDS TRANSFER

76.1 In accordance with Section 6-107.1 of the Administrative Code, the Contractor agrees to accept payments under this Contract from the City by electronic funds transfer (EFT). An EFT is any

transfer of funds, other than a transaction originated by check, draft or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument or computer or magnetic tape so as to order, instruct or authorize a financial institution to debit or credit an account. Prior to the first payment made under this Contract, the Contractor shall designate one financial institution or other authorized payment agent and shall complete the attached "EFT Vendor Payment Enrollment Form" in order to provide the Commissioner of the City Department of Finance with information necessary for the Contractor to receive electronic funds transfer payments through a designated financial institution or authorized payment agent. The crediting of the amount of a payment to the appropriate account on the books of a financial institution or other authorized payment agent designated by the Contractor shall constitute full satisfaction by the City for the amount of the payment under this Contract. The account information supplied by the Contractor to facilitate the electronic funds transfer shall remain confidential to the fullest extent provided by Law.

76.2 The Commissioner may waive the application of the requirements of this Article 76 to payments on contracts entered into pursuant to Section 315 of the City Charter. In addition, the Commissioner of the Department of Finance and the Comptroller may jointly issue standards pursuant to which the Agency may waive the requirements of this Article 76 for payments in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the interest of the City.

ARTICLE 77. RECORDS RETENTION

77.1 The Contractor agrees to retain all books, records, and other documents relevant to this Contract for six years after the final payment or termination of this Contract, whichever is later. City, state, and federal auditors and any other persons duly authorized by the City shall have full access to and the right to examine any such books, records, and other documents during the retention period.

ARTICLE 78. EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER SOURCES OF INFORMATION AND CHANGED SITE CONDITIONS

78.1 Pre-Bidding (Investigation) Viewing of Site — Bidders must carefully view and examine the Site of the proposed Work, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions and hazards on, about or above the Site relating to or affecting in any way the performance of the Work to be done under the Contract that were or should have been known by a reasonably prudent bidder. To arrange a date for visiting the Site, bidders are to contact the Agency contact person specified in the bid documents.

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

ARTICLE 79. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT

NOTICE TO ALL PROSPECTIVE CONTRACTORS

ARTICLE I. M/WBE PROGRAM

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). Section 6-129 establishes the program for participation in City procurement ("M/WBE Program") by minority- owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan"), and are detailed below. The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129. Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts. Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

PART A

<u>PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD</u> <u>AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS</u>

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

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

- 2. If Participation Goals have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the Participation Goals, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.
- 3. If Participation Goals have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant Participation Goal, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

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

- 4. A. If Participation Goals have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the Participation Goals, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.
- B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE Participation Goals, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part II (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the Participation Goals that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed nonresponsive.

- (ii) Participation Goals on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If Participation Goals have been established on a Task Order, a contractor shall be required to submit a Schedule B M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. The contractor must engage in good faith efforts to meet the Participation Goals as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.
- C. THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART II). A SCHEDULE B SUBMITTED BY BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS (SEE SECTION V OF PART II) WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART III). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.
- Where an M/WBE Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multiyear contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.
- 6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the

firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at www.nyc.gov/buycertified, by emailing DSBS at buyer@sbs.nyc.gov, by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting www.nyc.gov/getcertified, emailing MWBE@sbs.nyc.gov, or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

- 7. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, with each voucher for payment, and/or periodically as Agency may require, submit statements, certified under penalty of perjury, which shall include, but not be limited to; the total amount the Contractor paid to its direct subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount direct subcontractors paid to indirect subcontractors; the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor by the Contractor, and, where applicable, hired by any of the Contractor's direct subcontractors; and the dates and amounts paid to each MBE or WBE. The Contractor shall also submit, along with its voucher for final payment: the total amount it paid to subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount its direct subcontractors paid directly to their indirect subcontractors; and a final list, certified under penalty of perjury, which shall include the name, address and contact information of each subcontractor that is an MBE or WBE, the work performed by, and the dates and amounts paid to each.
- 8. If payments made to, or work performed by, MBEs or WBEs are less than the amount specified in the Contractor's M/WBE Utilization Plan, Agency shall take appropriate action, in accordance with Section 6-129 and Article II below, unless the Contractor has obtained a modification of its M/WBE Utilization Plan in accordance with Section 6-129 and Part A, Section 11 below.
- 9. Where an M/WBE Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds the greater of 10 percent of the Contract or Task Order, as applicable, or \$500,000, Agency shall review the scope of work for the Contract or Task Order, as applicable, and the scale and types of work involved in the change order, and determine whether the Participation Goals should be modified.
- 10. Pre-award waiver of the Participation Goals. (a) A bidder or proposer, or contractor with respect to a Task Order, may seek a pre-award full or partial waiver of the Participation Goals in accordance with Section 6-129, which requests that Agency change one or more Participation Goals on the grounds that the Participation Goals are unreasonable in light of the availability of certified firms to perform the services required, or by demonstrating that it has legitimate business reasons for proposing a lower level of subcontracting in its M/WBE Utilization Plan.
- (b) To apply for a full or partial waiver of the Participation Goals, a bidder, proposer, or contractor, as applicable, must complete Part III (Page 5) of Schedule B and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing to the Agency by email at poped@ddc.nyc.gov or via facsimile at (718) 391-1886. Bidders, proposers, or contractors, as applicable, who have submitted requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.
- (c) If the Agency determines that the Participation Goals are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.

- (d) Agency may grant a full or partial waiver of the Participation Goals to a bidder, proposer or contractor, as applicable, who demonstrates—before submission of the bid, proposal or Task Order, as applicable—that it has legitimate business reasons for proposing the level of subcontracting in its M/WBE Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder, proposer or contractor, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts represented by the Participation Goals. In making such determination, Agency may consider whether the M/WBE Utilization Plan is consistent with past subcontracting practices of the bidder, proposer or contractor, as applicable, whether the bidder, proposer or contractor, as applicable, has made efforts to form a joint venture with a certified firm, and whether the bidder, proposer, or contractor, as applicable, has made good faith efforts to identify other portions of the Contract that it intends to subcontract.
- M/WBE Utilization Plan after award of this Contract. PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor may request a Modification of its M/WBE Utilization Plan as part of its bid submission. The Agency may grant a request for Modification of a Contractor's M/WBE Utilization Plan if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the Participation Goals. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:
- (i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
 (ii) The Contractor provided notice of provided notice of provided notice.

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

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

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

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

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

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

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

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

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

- 12. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an M/WBE Utilization Plan and has committed to subcontract work to MBEs and/or WBEs in order to meet the Participation Goals, the Contractor will not be deemed in violation of the M/WBE Program requirements for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.
- 13. If Participation Goals have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its M/WBE Utilization Plan, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.
- 14. If Participation Goals have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

PART B: MISCELLANEOUS

- 1. The Contractor shall take notice that, if this solicitation requires the establishment of an M/WBE Utilization Plan, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the M/WBE Utilization Plan.
- 2. Pursuant to DSBS rules, construction contracts that include a requirement for an M/WBE Utilization Plan shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.
- 3. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and/or WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and/or WBEs in contracts.
- 4. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).
- 5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE Program requirements set forth herein and the pertinent provisions of Section 6-129, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE Program requirements of this Contract and pertinent provisions of Section 6-129, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of MBEs and/or WBEs to meet the required **Participation Goals**.

ARTICLE II. ENFORCEMENT

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

- 2. Whenever Agency believes that the Contractor or a subcontractor is not in compliance with Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to any M/WBE Utilization Plan, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering the Contractor an opportunity to be heard. Agency shall then conduct an investigation to determine whether such Contractor or subcontractor is in compliance.
- 3. In the event that the Contractor has been found to have violated Section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to, any M/WBE Utilization Plan, Agency may determine that one of the following actions should be taken:
- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the Contractor is in default of the Contract;
- (d) terminating the Contract;
- (e) declaring the Contractor to be in breach of Contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the Contract;
- (h) assessing actual and consequential damages;
- (i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;
- (j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
- (k) taking any other appropriate remedy.
- 4. If an M/WBE Utilization Plan has been submitted, and pursuant to this Article II, Section 3, the Contractor has been found to have failed to fulfill its Participation Goals contained in its M/WBE Utilization Plan or the Participation Goals as modified by Agency pursuant to Article I, Part A, Section 11, Agency may assess liquidated damages in the amount of ten percent (10%) of the difference between the dollar amount of work required to be awarded to MBE and/or WBE firms to meet the Participation Goals and the dollar amount the Contractor actually awarded and paid, and/or credited, to MBE and/or WBE firms. In view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of Contractor's failure to meet the Participation Goals, the foregoing amount is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such failure, and not as a penalty. Agency may deduct and retain out of any monies which may become due under this Contract the amount of any such liquidated damages; and in case the amount which may become due under this Contract shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.
- 5. Whenever Agency has reason to believe that an MBE and/or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129(c)(8)), or has violated any provision of Section 6-129, Agency shall notify the Commissioner of DSBS who shall determine whether the certification of such business enterprise should be revoked.

- 6. Statements made in any instrument submitted to Agency pursuant to Section 6-129 shall be submitted under penalty of perjury and any false or misleading statement or omission shall be grounds for the application of any applicable criminal and/or civil penalties for perjury. The making of a false or fraudulent statement by an MBE and/or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.
- 7. The Contractor's record in implementing its M/WBE Utilization Plan shall be a factor in the evaluation of its performance. Whenever Agency determines that a Contractor's compliance with an M/WBE Utilization Plan has been unsatisfactory, Agency shall, after consultation with the City Chief Procurement Officer, file an advice of caution form for inclusion in 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	
	6/-/	
	By: Tufailari	
	Compassioner	
		•
	the state of the s	
	CONTRACTOR: Inter Contracting C	orp.
	By: /4/	
	(Member of Firm or Officer of Corporation)	
	\mathcal{D}	•
	Title: Tres.	
	Title.	
(Where Contractor is a Corporation, add):		
Attest:		•
	·	
(11/41)		
11100		
Secretary		
	(0.1)	
	(Seal)	

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of New York	County of <u>Queen</u> f <u>June</u> , <u>2017</u> , before me p ng by me duly sworn did depos	5ss:		
On this 15th day of	f Tine 2017 hefore men	personally came My	rue / Mutius	
to me known who, being	ng by me duly sworn did depos	e and say that he resides a	at Ridgewood NJ	
	tnat	ne is the Pre Giller	1 <i>†</i>	
of the corporation desc	cribed in and which executed the	ne foregoing instrument; the	hat he knows the seal of said	
	of the seals affixed to said instr			
the directors of said co	orporation, and that he signed hi	s name thereto by like ord	ler.	
	///			
	[]/	(1) /	VICTORIA AYO-VAU Notary Public, State of N	GHAN
		1 / /	No. 01AY501404	2
	Notary Publi	cor Commissioner of De	eds Qualified in Queens Commission Expires July	15, 20/
	· · · · · · · · · · · · · · · · · · ·			•
<u>A</u> (CKNOWLEDGEMENT OF PR	RINCIPAL, IF A PARTN	ERSHIP	•
a	-			
State of	County of	ss:		
On this day of	hafara ma na	manally appeared	••	
to me known, and known	wn to me to be one of the mem	bers of the firm of		
	described in	and who executed the f	oregoing instrument; and he	
acknowledged to me the	hat he executed the same as and			
		•		
			•	
		•		
	Notary Publi	c or Commissioner of De	eds	
A .	CKNOWLEDGEMENT OF PR	DINICIDAT DE ANI INDIN	ZIDITAT	
A	CKNOWLEDGEMENT OF PR	CINCIPAL, IF AN INDIV	IDUAL	
State of	County of	ss:		
	•			
On this day of _	,, before me per	sonally appeared		
to me known, and kno	wn to me to be the person descr	ribed in and who executed	the foregoing instrument;	
and acknowledged tha	t he executed the same.			
	Notary Publi	c or Commissioner of De	eds	
		•		

ACKNOWLEDGEMENT BY COMMISSIONER

State of <u>New York</u> County of <u>Queens</u> ss:
On this 15th day of 5000, 2011, before me personally came Eric Machalene
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.
Λ Λ Λ Λ
VICTORIA AYO-VAUGHAN
Notary Public, State of New York No. 01AY5014042
Qualified in Queens County Commission Expires July 15, 20 Notary Public or Commissioner of Deeds

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

Thirty-Six Million Seven Hundred Eighty-Two Thasand,
Eight Hundred Thick -One Dollars and Sevent roots
- July Dung July Dung
Thirty-Six Million Seven Hundred Eighty-Two Thasend, Eight Hundred Thirty-One Dollars and Sovenly cents Dollars (\$36,782,831.70)
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. Commissioner
Constitution
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

MAYOR'S CERTIFICATE OR CERTIFICATE OF THE DIRECTOR OF THE BUDGET

Performance Bond #2 (Pages 96 to 99): Use if the total contract price is more than \$5 Million. PERFORMANCE BOND #2 (Page 1)

PERFORMANCE BOND #2

274 White Plains Road, Suite 6, Eastchester, NY 10709	
hereinafter referred to as the "Principal," and, Western Surety Company	
P.O. Box 5077, Sioux Falls, SD 57117-5077	And the state of t
hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THI YORK, hereinafter referred to as the "City" or to its successors and assigns in the penal s of	<u> </u>
Thirty Six Million Seven Hundred Eighty Two Thousand Eight Hundred Thirty One and 7	0/100 Dollars
(\$_36,782,831.70) Dollars, lawful money of the United States for which said sum of money well and truly to be made, we, and each of us, bind our executors, administrators, successors and assigns, jointly and severally, firmly by these p	useives, our heirs,
CACULOIS, Administrators, Scoopsister and March 1997	i · · · ·
WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with	h the City for

CITY OF NEW YORK DDC

STANDARD CONSTRUCTION CONTRACT
December 2013

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 96 to 99): 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.

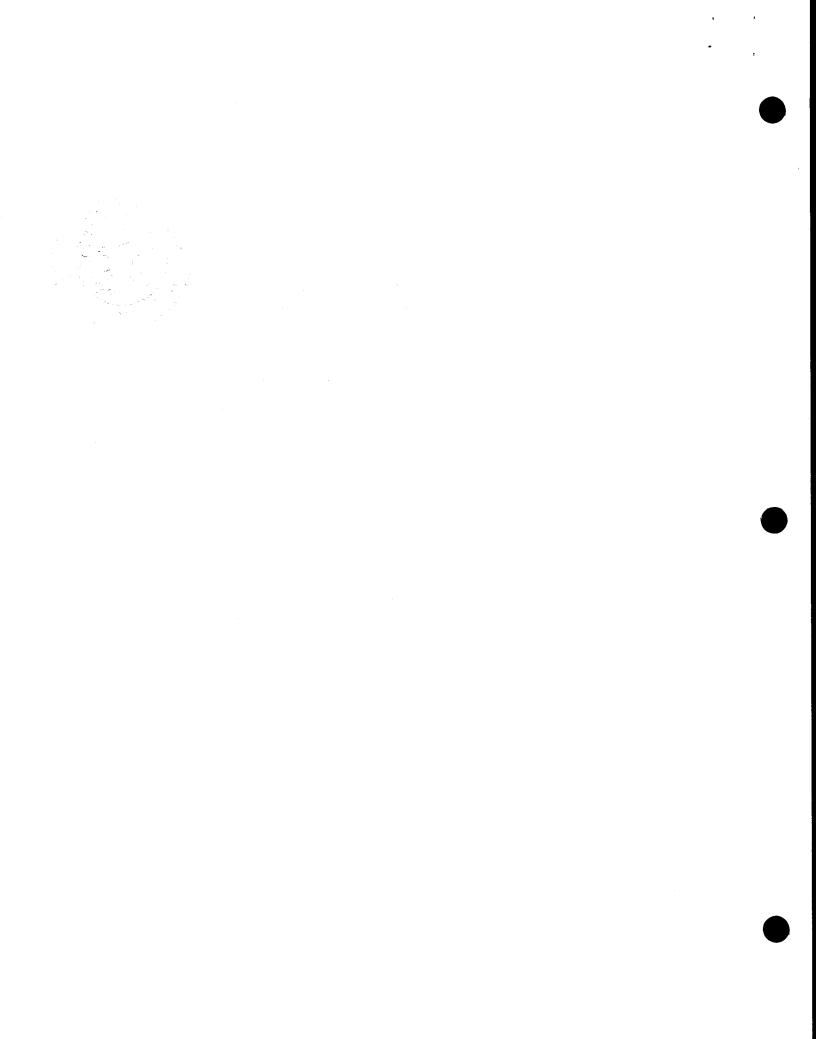
The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or to the said 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 96 to 99): 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

12th	day of	June	20 17	
(Seal)		Inter Contrac		<i>(</i> 1, C)
	,		Principal	(L.S.)
			2//	
(Seal)		By:		
, ,			Surety	
		Western Surety (ompany	
		By:		
		Dana Granice, At	torney-In-Fact	<u> </u>
(Seal)			Surety	
		Ву:		1
(Seal)			Surety	
		Ву:		¥
(Seal)			Surety	
		Bv:		
45. 1)		- J.		·
(Seal)			Surety	
		Ву:		•
Bond Premium Rate	•			
	у			
Bond Premium Cost				
If the Contractor (Principal) partners.) is a partnership,	the bond should be s	igned by each of the indiv	riduals who are
If the Contractor (Principal duly authorized officer, age) is a corporation, nt, or attorney-in-f	the bond should be s	signed in its correct corpo	rate name by a
There should be executed a of counterparts of the Control	n appropriate num		of the bond corresponding	to the number
TITY OF NEW YORK		0.77	41Th 4 Th 5 CO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	



Performance Bond #2 (Pages 96 to 99): Use if the total contract price is more than \$5 Million.

PERFORMANCE BOND #2 (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of	NewYork		Coun	ty of <i>Queens</i>	_	ss:
On this	1266	day of _	June_	, 20	7	before me personally
came /	Michael 1	1/betira				
to me k	nown, who, bei	ng by me dul	ly sworn did dep	pose and say that he r	esides	1. 6
		/_		; that he/she is the	: Ines	itert
of the c	comogration desc	ctibed in and	i which execute	d the foregoing instr	ument: tha	it he/she signed his/her name to th
foregoi	ng instrument b	order of the	directors of sa	VICTORIA AYO-	VAUGHAN	rized and binding act thereof.
Notary	Mublic of Com	nissioner of l	Deeds.	Notary Public, State No. 01AY50 Qualified in Quee	14042	
/	\vee	1		Qualified in Quee Commission Expires OF PRINCIPAL II	9 July 15, 2 F A PAR'	019 INERSHIP
State of	.		Count	ty of		ss:
						before me personally
						verore me personary
to me k		ng by me dul	y sworn did deg	pose and say that he/si	he resides	
				: that he/she is		partner of
			, a limited/gene	ral partnership existing	ng under ti	ne laws of the State of
						ne foregoing instrument;
	t he/she signed l tnership.	his/her name	to the foregoing	g instrument as the du	lly authori	zed and binding act of
Notary :	Public or Comm	nissioner of I	Decds			
		ACKNOW	LEDGMENT	OF PRINCIPAL I	F AN INI	DIVIDUAL
State of	,		Count	y of		ss;
						before me personally
to me k	nown, who, bei	ng by me dul	y sworn did dep	oose and say that he/si	he resides	
at		_		, and that he/she is	the indivi	iual whose name is
subscrib	ed to the within	instrument	and acknowledg	ged to me that by his/l	her signatı	re on the
instrum	ent, said individ	lual executed	the instrument.			
Notary I	Public or Comn	issioner of I	Deeds	, •		
_						
duly cer represen of Attorn	tified copy of Pe tative of Princip	ower of Attored or Surety; ificate of aut	ney or other cer (c) a duly certifi hority of its ager	tificate of authority wi ied extract from By-La at, officer or represent	here bond aws or reso	the respective parties; (b) appropriat is executed by agent, officer or othe olutions of Surety under which Powe ssued, and (d) certified copy of lates
-				******		
		A £Æ	Aalmandadaa	ante and Tratificati	of C	-4

CITY OF NEW YORK

STANDARD CONSTRUCTION CONTRACT December 2013

DDC

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF NEW YORK
COUNTY OF NASSAU

On this June 12, 2017 before me personally came <u>Dana Granice</u> to me known, who, being by me duly sworn, did depose and say; that he/she resides in <u>Suffolk County</u>, State of New York, that he/she is the Attorney-In-Fact of the <u>Western Surety Company</u> the corporation described in which executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that is was so affixed by the Board of Directors of said corporation; and that he/she signed his/her name thereto by like order; and the affiant did further depose and say that the Superintendent of Insurance of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State of New York, issued to <u>Western Surety Company</u> (Surety) his/her certificate of qualification evidencing the qualification of said Company and its sufficiency under any law of the State of New York as surety and guarantor, and the propriety of accepting and approving it as such; and that such Certificate has not been revoked.

Notary Public

DESIREE CARDLIN
Notary Public, State of New York
No. 01CA6150043
Qualified in Suffolk County
Commission Expires 07/24/2018

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Camille Maitland, Gerard S Macholz, Robert T Pearson, Thomas Bean, Susan Lupski, Rita Sagistano, George O Brewster, Colette R Chisholm, Mia Woo-Warren, Michelle Wannamaker, Dana Granice, Desiree Cardlin, Individually

of Uniondale, NY, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 12th day of April, 2017.

WESTERN SURETY COMPANY

SE AL STANDARD

Paul T. Bruflat, Vice President

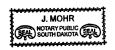
State of South Dakota County of Minnehaha

SS

On this 12th day of April, 2017, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2021



J. Mohr, Notary Public

CERTIFICATE



WESTERN SURETY COMPANY

J. Nelson, Assistant Secretary

Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

WESTERN SURETY COMPANY

Sioux Falls, South Dakota Statement of Net Admitted Assets and Liabilities December 31, 2016

ASSETS

n I	\$	1 852 070 625
Bonds	Ψ	1,852,079,625
Common stocks		22,190,065
Cash, cash equivalents, and short-term investments		40,860,171
Investment income due and accrued		21,267,722
Premiums and considerations		31,990,790 919,390
Amounts recoverable from reinsurers		919,390
Current federal and foreign income taxes recoverable from CNA		3,116,372
Financial Corporation		16,401,098
Net deferred tax asset		9,896,461
Receivable from parent, subsidiaries, and affiliates		62,275
Other assets	-\$	1,998,783,969
Total Assets	<u> </u>	1,998,783,909
THE STATE OF THE S		
<u>LIABILITIES AND SURPLUS</u>	φ	220 957 429
Losses	\$	229,857,438
Loss adjustment expense		68,982,110
Commissions payable, contingent commissions and other similar		7,779,628
charges		1,109,441
Other expenses (excluding taxes, license and fees)		, ,
Taxes, License and fees (excluding federal and foreign income		2,678,781
taxes)		213,765,490
Unearned premiums		5,316,156
Advance premiums		1,730,621
Ceded reinsurance premiums payable		1,750,021
Amounts withheld or retained by company for account of others		10,021,647
		1,671,808
Provision for reinsurance		12,103
Payable to parent, subsidiaries and affiliates		3.447.756
Other liabilities	\$	546,372,979
Total Liabilities	Ψ	340,372,777
Surplus Account:		
Common stock \$ 4,000,000		
Gross paid in and contributed surplus 280,071,837		
Unassigned funds 1,168,339,153		
Surplus as regards policyholders	\$	1,452,410,990
Total Liabilities and Capital	\$	1,998,783,969
NAME OF THE PARTY		

I, Troy Wray, Assistant Vice President of Western Surety Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2016, as filed with the various Insurance Departments and is a true and correct statement of the condition of Western Surety Company as of that date.

Western Surety Company

SE A STATE OF THE SECOND SECON Subscribed and sworn to me this _

10th __ day of _

Assistant Vice President 2017. March

My commission expires:

YOLANDA JIMENEZ OFFICIAL SEAL Notary Public, State of Illinois My Commission Expires September 24, 2017

PAYMENT BOND (Page 1)

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we, Inter Contracting Corp.	
274 White Plains Road, Suite 6, Eastchester, NY 10709	
	jetekon ang
	
hereinafter referred to as the "Principal", and Western Surety Company	
P.O. Box 5077, Sioux Falls, SD 57117-5077	
	
hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW hereinafter referred to as the "City" or to its successors and assigns, in the penal sum of	YYORK,
Thirty Six Million Seven Hundred Eighty Two Thousand Eight Hundred Thirty One and 70/100 Dol	lars
• •	
(\$36,782,831.70) Dollars, lawful money of the United States, for the payment of which said sum of mo and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, success 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 C	ity for
Construction of High Level Storm Sewers, Sanitary Sewers and Appurtenances/Replacement of Wa	ter Mains & Appurtenances
Borough of Brooklyn. FMS ID: SE-855 E-PIN: 85017B0074001 DDC PIN: 8502016SE0002C	
	
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, h representatives or assigns and other Subcontractors to whom Work under this Contract is sublet and his 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 er the prosecution of the Work under said Contract, and any amendment or extension thereof or addition	ngaged in n thereto,

CITY OF NEW YORK DDC

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 (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.
- (c) 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 place in this bond.

And the Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties), and its bonds shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or of the said Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any part thereof, or of any Work to be performed, or any moneys due to become due thereunder and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, Subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done or in relation to said Principal.

CITY OF NEW YORK

PAYMENT BOND (Page 3)

Western Surety Company Dana Granice, Attorney-In-Fact Surety By:
Western Surety Company By: Dana Granice, Attorney-In-Fact Surety
By: Dana Granice, Attorney-In-Fact Surety
By: Dana Granice, Attorney-In-Fact Surety
By: Dana Granice, Attorney-In-Fact Surety
Dana Granice, Attorney-In-Fact Surety
Dana Granice, Attorney-In-Fact Surety
Surety
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Ву:
оу. <u> </u>
Surety
Ву:
Surety
•
Ву:
bond should be signed by each of the individuals who are
e bond should be signed in its correct corporate name by

PAYMENT BOND (Page 4)

ACKNOWLEDGM	ENT OF PRINCIPAL, IF A	CORPORATION	
State of New York	County of Gree	13ss:	
to me known, who, b	f <u>Jvre</u> , <u>2017</u> , before n being by me duly sworn did depo tha	ose and say that he resides at	Killsewood NJ
the corporation descr	ribed in and which executed the	e foregoing instrument: that	he knows the seal of said
corporation; that one	of the seals affixed to said ins	trument is such soal; that it	was so affixed by order of
the directors of said o	corporation, and that he signed/	his hame thereto by like order	ds VICTORIA AYO-VAUGHAN
	· V	/	Notary Public, State of New York No. 01AY5014042
ACKNOWLEDGM	ENT OF PRINCIPAL, IF A I	PARTNERSHIP/	Qualified in Queens County Commission Expires July 15, 20
State of	County of	56.	Commission Expires July 15, 20/
State of	County of		
On this day of	f,, before m	ne personally appeared	
to me known, and kn	own to me to be one of the men	nbers of the firm of	
	described in and w	vho executed the foregoing	ng instrument; and he
acknowledged to me	that he executed the same as an	d for the act and deed of said	a nim.
	Notary Pub	lic or Commissioner of Deed	ls
	•	1	
ACKNOWLEDGM	ENT OF PRINCIPAL, IF AN	INDIVIDUAL	
State of	County of	, ee•	
On this day of	f,, before m	ne personally appeared	
to me known and be			
	nown to me to be the person de	scribed in and who executed	the foregoing instrument;
	nown to me to be the person de nat he executed the same.	scribed in and who executed	the foregoing instrument;
	nown to me to be the person de	scribed in and who executed	the foregoing instrument;
	nown to me to be the person de	scribed in and who executed	I the foregoing instrument;
	nown to me to be the person denat he executed the same.	,	I the foregoing instrument; .
	nown to me to be the person denat he executed the same.	scribed in and who executed	I the foregoing instrument; .
Each execute parties; (b) appropria is executed by agent, By-Laws or resolution	Notary Publication of Surety under which Povesentative was issued, and (d) conf Surety.	by: (a) appropriate acknow of Attorney or other certific of Principal or Surety; (c) a wer of Attorney or other ce	Is the foregoing instrument; Is ledgments of the respective ate of authority where bond duly certified extract from retificate of authority of its
Each execute parties; (b) appropria is executed by agent, By-Laws or resolution agent, officer or repr	Notary Publications of Surety under which Powersentative was issued, and (d) of Surety.	by: (a) appropriate acknown of Attorney or other certific of Principal or Surety; (c) a wer of Attorney or other certified copy of latest publications.	Is the foregoing instrument; Is ledgments of the respective ate of authority where bond duly certified extract from rtificate of authority of its shed financial statement of
Each execute parties; (b) appropria s executed by agent, By-Laws or resolution agent, officer or repr	Notary Publications of Surety under which Powersentative was issued, and (d) of Surety.	by: (a) appropriate acknow of Attorney or other certific of Principal or Surety; (c) a wer of Attorney or other certified copy of latest public	Is the foregoing instrument; Is ledgments of the respective ate of authority where bond duly certified extract from rtificate of authority of its shed financial statement of

CITY OF NEW YORK DDC STANDARD CONSTRUCTION CONTRACT December 2013

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF NEW YORK
COUNTY OF NASSAU

On this <u>June 12, 2017</u> before me personally came <u>Dana Granice</u> to me known, who, being by me duly sworn, did depose and say; that he/she resides in <u>Suffolk County, State of New York</u>, that he/she is the Attorney-In-Fact of the <u>Western Surety Company</u> the corporation described in which executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that is was so affixed by the Board of Directors of said corporation; and that he/she signed his/her name thereto by like order; and the affiant did further depose and say that the Superintendent of Insurance of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State of New York, issued to <u>Western Surety Company</u> (Surety) his/her certificate of qualification evidencing the qualification of said Company and its sufficiency under any law of the State of New York as surety and guarantor, and the propriety of accepting and approving it as such; and that such Certificate has not been revoked.

Notary PublisiREE CARDLIN
Notary Public, State of New York
No. 01CA6150043
Qualified in Suffolk County
Commission Expires 07/24/2018

Marie de la companya

•

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Camille Maitland, Gerard S Macholz, Robert T Pearson, Thomas Bean, Susan Lupski, Rita Sagistano, George O Brewster, Colette R Chisholm, Mia Woo-Warren, Michelle Wannamaker, Dana Granice, Desiree Cardlin, Individually

of Uniondale, NY, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 12th day of April, 2017.

WESTERN SURETY COMPANY

SEAL SEAL

Paul T. Bruflat, Vice President

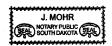
State of South Dakota County of Minnehaha

S

On this 12th day of April, 2017, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2021



J. Mohr, Notary Public

CERTIFICATE



WESTERN SURETY COMPANY

J. Nelson, Assistant Secretary

Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

WESTERN SURETY COMPANY

Sioux Falls, South Dakota Statement of Net Admitted Assets and Liabilities **December 31, 2016**

ASSETS

Bonds Common stocks Cash, cash equivalents, and short-term investments Investment income due and accrued Premiums and considerations Amounts recoverable from reinsurers Current federal and foreign income taxes recoverable from CNA Financial Corporation Net deferred tax asset Receivable from parent, subsidiaries, and affiliates Other assets Total Assets	\$	1,852,079,625 22,190,065 40,860,171 21,267,722 31,990,790 919,390 3,116,372 16,401,098 9,896,461 62,275 1,998,783,969
<u>LIABILITIES AND SURPLUS</u>	ф	220 057 420
Losses Loss adjustment expense	\$	229,857,438 68,982,110
Commissions payable, contingent commissions and other similar		• •
charges		7,779,628
Other expenses (excluding taxes, license and fees) Taxes, License and fees (excluding federal and foreign income		1,109,441
taxes)		2,678,781
Unearned premiums		213,765,490
Advance premiums		5,316,156
Ceded reinsurance premiums payable		1,730,621
Amounts withheld or retained by company for account of others		10,021,647
Provision for reinsurance		1,671,808
Payable to parent, subsidiaries and affiliates		12,103
Other liabilities		3,447,756
Total Liabilities	\$	546,372,979
Surplus Account:		
Common stock \$ 4,000,000		
Gross paid in and contributed surplus 280,071,837 Unassigned funds 1,168,339,153		
Surplus as regards policyholders	\$	1,452,410,990
Total Liabilities and Capital	\$	1,998,783,969

I, Troy Wray. Assistant Vice President of Western Surety Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2016, as filed with the various Insurance Departments and is a true and correct statement of the condition of Western

ind swc Surety Company as of that date.

Western Surety Company

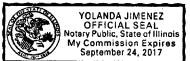
Assistant Vice President

Subscribed and sworn to me this _

10th day of _ March

. 2017.

My commission expires:



CITY OF NEW YORK CERTIFICATION BY INSURANCE BROKER OR AGENT

The undersigned insurance broker or agent represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

20 17

333 Earle Ovington Blvd. Uniondale, NY 11553 [Address of broker or agent (typewritten)]	
GCadigan@alliant.com [Email address of broker or agent (typewritten)]	
(516) 414-8916 / (877) 308-1070 [Phone number/Fax number of broker or agent (type	written)]
I I I I I I	
Mundell John	
[Signature of authorized official, broker, or agent]	

DESIREE CARDLIN
Notary Public, State of New York
No. 01CA6150043
Qualified in Suffolk County
Commission Expires 07/24/2018

NOTARY PUBLIC FOR THE STATE OF

) ss.:

State of .New York

Sworn to before me this 12th day of

County of .Nassau



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 6/12/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

	REPRESENTATIVE OR PRODUCER, A	ND T	HE C	ERTIFICATE HOLDER.					` ''	_										
1	PORTANT: If the certificate holder he terms and conditions of the policy tertificate holder in lieu of such endor	, cer	tain p	policies may require an er	policy(ndorse	ies) must be ment. A stat	endorsed. ement on th	If SUBROGATION IS Was certificate does not c	AIVED	, subject to ights to the										
	DDUCER	<u> </u>	2111(3		CONTA NAME:	CT Liz Hage	nerty		·											
Alliant Insurance Services, Inc.					PHONE 516 414 9029 FAX															
	B Earle Ovington Boulevard iondale NY 11553				E-MAIL	ss: elizabeth		(A/C, No): alliant.com												
					AUDICE					NAIC#										
					INSURER(S) AFFORDING COVERAGE INSURER A : Starr Indemnity & Liability Company				38318											
INS	URED	NTE	CON	N-05				e and Liability In		26247										
Inte	er Contracting Corp.				INSURE															
274	4 White Plains Road, Suite 6 stchester NY 10709				INSURE															
La.	sichester (41 10703				INSURE	RE:														
					INSURE	RF:														
	OVERAGES CER	TIFI	CAT	E NUMBER: 263789952				REVISION NUMBER:												
l II	HIS IS TO CERTIFY THAT THE POLICIES NDICATED. NOTWITHSTANDING ANY RE	EQUII	REME	NT. TERM OR CONDITION	OF AN'	Y CONTRACT	OR OTHER I	OCCUMENT WITH RESPE	CT TO	WHICH THIS										
C	ERTIFICATE MAY BE ISSUED OR MAY EXCLUSIONS AND CONDITIONS OF SUCH	PER POLI	ΓΑΙΝ, CIES.	THE INSURANCE AFFORDE LIMITS SHOWN MAY HAVE	ED BY BEEN F	THE POLICIES	S DESCRIBEI PAID CLAIMS	D HEREIN IS SUBJECT TO	O ALL	THE TERMS,										
INSF LTR		ADDI	SUBR		J		POLICY EXP (MM/DD/YYYY)	LIMIT	•											
A	COMMERCIAL GENERAL LIABILITY	INOD	WVD	1000025521161		8/1/2016	8/1/2017	EACH OCCURRENCE	\$2,000	000										
	CLAIMS-MADE X OCCUR							DAMAGE TO RENTED	\$300,0											
			1					PREMISES (Ea occurrence) MED EXP (Any one person)	\$15,00											
								PERSONAL & ADV INJURY	\$1,000											
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$4,000											
	POLICY X PRO-							PRODUCTS - COMP/OP AGG	\$4,000											
	OTHER:		ļ						\$											
В	AUTOMOBILE LIABILITY			1000198528161		8/1/2016	8/1/2017	COMBINED SINGLE LIMIT (Ea accident)	\$1,000	,000										
	X ANY AUTO ALL OWNED SCHEDULED						BODILY INJURY (Per person)	\$												
	AUTOS AUTOS NON-OWNED							BODILY INJURY (Per accident) \$ PROPERTY DAMAGE												
	HIRED AUTOS AUTOS							(Per accident)	\$											
Α	UMBRELLA LIAB OCCUP			1000033058		0/4/0040	0/4/0047		\$											
^	Y EVOSOULAR													1000022956	1000022958	8/1/2016 8/1/2017	8/1/2017	EACH OCCURRENCE	\$3,000	
	CLAIIVI3-IVIADE							AGGREGATE	\$3,000	.000										
Α	DED RETENTION \$ WORKERS COMPENSATION			100 0002327		4/1/2017	8/1/2017	X PER OTH-	\$											
	AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE				4/1/2017		5/1/25//		24 200 200											
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A						E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE	\$1,000,											
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT												
В	Excess Liability			AEC 0199899-00		8/1/2016	8/1/2017		9,000,00											
								oodinonoo, nggrogato	5,000,00	,,										
DES	CRIPTION OF OPERATIONS / LOCATIONS / VEHIC	ES (CORD	101, Additional Remarks Schedul	e, may b	attached if more	space is requir	ed)												
	E: Project ID - SE855	and i	^	struction City of New Yea	امداناه		-:			-										
Αι	ew York City Department of Design authority (NYCTA), Manhattan and Br	onx	Surfa	ace Transit Operation Au	ıthoritv	′ (MaBSTOA	۱). Staten Is	land Rapid Transit One	eration	Authority										
(5	IKTOA), Metropolitan Transportation	า Au	thorit	tv (MTA). its subsidiaries	and a	iffiliated com	panies and	National Grid are inclu	ided as	s Additional										
be	sured as respects Liability arising ou primary and any other insurance m	t ot ' ainta	work	performed by the Name by the Additional Insure	d Insu	red as requi	red by writte	en contract. The insura	nce pr	ovided shall										
Se	ee Attached		4111CU	by the Additional Insule	u is c	cess and n	Jii-Continuu	ory. Walver of Subloga	auon a	ppiles as										
CE	RTIFICATE HOLDER		·		CANC	ELLATION														
									·											
	Nov. York City Department of I	.						SCRIBED POLICIES BE CA												
~	New York City Department of I 30-30 Thomson Ave.	Jesić	n an	d Construction				REOF, NOTICE WILL E Y PROVISIONS.	BE DEL	IVERED IN										
	Long Island City, NY 11101																			
				Ī	AUTHOR	RIZED REPRESEN	ITATIVE													
					P	-11	- F 2)												
					41	WAL.	<i>\bb</i>													
					//	© 198	8-2014 ACC	RD CORPORATION.	All righ	ts reserved.										

AGENCY CUSTOMER ID: INTECON-05

LOC#:



ADDITIONAL REMARKS SCHEDULE

Page _1 _ of _1

iant Insurance Services, Inc. POLICY NUMBER	NAMED INSURED Inter Contracting Corp. 274 White Plains Road, Suite 6 Eastchester NY 10709	
CARRIER	AIC CODE	
		EFFECTIVE DATE:

A[DI	T	10	NAL	REM/	۱RKS
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THIS ADDITIONAL REMARKS	FORM IS A SCHEDULE TO ACORD FORM,	
FORM NUMBER: 25	FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE	

required by contract. 30 days' notice of cancellation or non-renewal will be provided to Certificate Holder, except 10 days' notice for cancellation for non-payment of premium.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
The City of New York, including its officials and employees, National Grid, The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Authority (SIRTOA), Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies	Project: SE 855

- A. Section II Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:
 - 1. Your acts or omissions; or
 - 2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

- The insurance afforded to such additional insured only applies to the extent permitted by law; and
- 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
- 2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

POLICY NUMBER: 1000025521161

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
The City of New York, including its officials and employees, National Grid, The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Authority (SIRTOA), Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies	Project: SE 855

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

- The insurance afforded to such additional insured only applies to the extent permitted by law; and
- If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

- B. With respect to the insurance afforded to these additional insureds, the following is added to Section III Limits Of Insurance:
 - If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:
 - 1. Required by the contract or agreement; or
 - 2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

POLICY NUMBER: 1000025521161

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – DESIGNATED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):

The City of New York, including its officials and employees, National Grid, The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Authority (SIRTOA), Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

- A. Section II Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:
 - In the performance of your ongoing operations; or
 - 2. In connection with your premises owned by or rented to you.

However:

- The insurance afforded to such additional insured only applies to the extent permitted by law; and
- If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

- 1. Required by the contract or agreement: or
- 2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.



CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

Inter Contracting Corp. 274 White Plans Road, State 6 East-cheeter, NY 10799 Work Location of Insured (Only required if coverage is specifically limited to cortain locations in New York State, i.e., a Wrap-Up Policy) Work Location of Insured (Only required if coverage is specifically limited to cortain locations in New York State, i.e., a Wrap-Up Policy) 2. Name and Address of Entity Requesting Proof of Coverage [Entity Behing Listed as the Cedificate Holder) 3. Name of Insurance Carrier Starr Indemnity & Liability Company New York (City Department of Design and Construction 3. Policy Number of Entity Listed in Box "1a" 1000002327 3. Name of Insurance Carrier Starr Indemnity & Liability Company New York (City Department of Design and Construction 3. Policy Number of Entity Listed in Box "1a" 1000002327 3. Policy effective period 4/1/2017 3. The Proprietor, Partners or Executive Officers are Included, (only check box if all partners)officers excluded. This certifies that the Insurance carrier indicated above in box "3" insures the business referenced above in box "1a" included, (only check box if all partners)officers excluded. This certifies in Insurance to the entity listed above as the certificate holder in Insurance Carrier or its licensed agent will sentitic Certificate in Insurance Carrier or its licensed agent will sentitic Certificate in Insurance Carrier or its licensed agent will sentitic Certificate in Insurance Carrier or its licensed agent will sentitic Certificate in Insurance Carrier or its licensed agent will sentitic Certificate in Insurance Carrier or its licensed agent will senting the Certificate in Insurance Carrier or its licensed agent will senting the Certificate in Insurance Carrier or its licensed agent will senting the Certificate provide the Certificate provide that certificate provide that certificate provide that certificate provide that certificate holder in the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those conta		
inter contracting Corp. 21 V Ninie Prians Road, Suite 6 Eastchester, NY 10709 Work Location of Insured (Only required if coverage is specifically limited to cortain locations in New York State, i.e., a Wap-Up Policy) Work Location of Insured (Only required if coverage is specifically limited to cortain locations in New York State, i.e., a Wap-Up Policy) 1d. Federal Employer Identification Number of Insured or Social Security Number FEIN: 11-1555568 2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) New York City Department of Design and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and Construction 10 per year and City, NY 11101 3d. The Proprietor, Partners of Executive Officers are 10 included. (only sheek box if all persuance) included) 11 per year and English and Policy Proprietor 12 included. (only sheek box if all persuance) included) 13 per year and English and Policy Proprietor 14 year and English and Policy Proprietor 15 year index year and English and Policy Proprietor 16 year and English and Policy Proprietor 17 year the security of the Warrer's Compensation Law. (To use this form, New York (NY) must be listed under Item on the INFORMATION PAGE of the worker's Compensation Law. (To use this form, New York (NY) must be listed under Item on the INFORMATION PAGE of the worker's Compensation Law. (To use this form, New York (NY) must be listed under Item on the INFORMATION PAGE of the worker's Compensation Item Insurance policy). The Insurance of Insurance on it it he insured is otherwise eliminated from the coverage indicated on this criticate prior to the end of the policy is in effect. 11 year and year and year and year and	1a. Legal Name & Address of Insured (use street address only)	
Number FEIN: 11-1555556 2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) Starr Indemnity & Liability Company 3b. Policy Number of Entity Listed in Box "1a" 100002327 3c. Policy Refective period 4/11/2017 3d. The Proprietor, Partners or Executive Officers are Included, ((only check box if all partnersoffician included) all excluded or certain partners/officers excluded. This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. (To use this form, New York (NY) must be listed under Item on the INFORMATION PAGE of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will sent the Certificate of Insurance to the entity listed above as the certificate holder in box "2". Will the carrier notify the certificate holder within 10 days of a policy being cancelled for non-payment of premium or within 30 days if cancelled for any other reason or if the insurance illeminated from the coverage indicated on this certificate holder prior to the end of the policy effective period? "EYES NO This certificate is issued as a matter of Information only and confers no rights upon the certificate holder. This certificate does not amen extend or after the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy. This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect. Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized representative or licensed agent of the insurance ca	274 White Plains Road, Suite 6	1c. NYS Unemployment Insurance Employer Registration Number of
Starr Indemnity & Liability Company 3b. Policy Number of Entity Listed in Box "1a" 1000002327 3c. Policy Gity Department of Design and Construction 30-30 Thomson Avenue Long Island City, NY 11101 3d. The Proprietor, Partners or Executive Officers are		
New York City Department of Design and Construction 30-30 Thomson Avenue Long Island City, NY 11101 Solid Design and Construction 30-30 Thomson Avenue Long Island City, NY 11101 Solid Design and Construction 30-30 Thomson Avenue Solid De		
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 on the INFORMATION PAGE of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will sentis Certificate of Insurance to the entity listed above as the certificate holder in box "2". Will the carrier notify the certificate holder within 10 days of a policy being cancelled for non-payment of premium or within 30 days if cancelled for any other reason or if the insured is otherwise eliminated from the coverage indicated on this certificate prior to the end of the policy effective period? YES NO This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amenextend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy. This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect. Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law. Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form. Approved by: Laura Martino (Print same of authorized representative or licensed agent of insurance carrier) Approved by: Laura Martino (Print same of authori	New York City Department of Design and Construction 30-30 Thomson Avenue	3b. Policy Number of Entity Listed in Box "1a" 1000002327 3c. Policy effective period
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 on the INFORMATION PAGE of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will sent this Certificate of Insurance to the entity listed above as the certificate holder in box "2". Will the carrier notify the certificate holder within 10 days of a policy being cancelled for non-payment of premium or within 30 days if cancelled for any other reason or if the insured is otherwise eliminated from the coverage indicated on this certificate prior to the end of the policy effective period? YES NO This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amenextend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy. This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect. Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law. Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form. Approved by: Laura Martino (Print-pame of authorized representative or licensed agent of insurance carrier) (Challe)		included. (Only check box if all partners/officers included)
This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect. Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law. Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form. Approved by: Laura Martino (Print name of authorized representative or licensed agent of insurance carrier) Approved by: G/12/2017 (Signature) Title: Account Executive	Vill the carrier notify the certificate holder within 10 days of a policy be cancelled for any other reason or if the insured is otherwise eliminated the policy effective period? YES NO This certificate is issued as a matter of information only and confers nextend or alter the coverage afforded by the policy listed, nor does it of	eing cancelled for non-payment of premium or within 30 days if d from the coverage indicated on this certificate prior to the end of o rights upon the certificate holder. This certificate does not amend,
Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law. Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form. Approved by: Laura Martino (Print name of authorized representative or licensed agent of insurance carrier) Approved by: Approved by: Account Executive	, ,	n contract of insurance only while the underlying policy is in effect.
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: Laura Martino	Please Note: Upon cancellation of the workers' compensation ponamed on a permit, license or contract issued by a certificate honew Certificate of Workers' Compensation Coverage or other aut	olicy indicated on this form, if the business continues to be lder, the business must provide that certificate holder with a chorized proof that the business is complying with the
Approved by: Approved by: Account Executive (Print name of authorized representative or licensed agent of insurance carrier) 6/12/2017 (Date)		
Approved by: (Signature) (Date) Title: Account Executive	ALC III III III III III III III III III I	
	$\langle \rangle$ h_1	6/12/2017
T-11 N 1 (11) 1 (Title: Account Executive	
Jelebhone Number of authorized representative or licensed agent of insurance carrier: 12 10/414-6000	Telephone Number of authorized representative or licensed agent of	insurance carrier: (516) 414-8606

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are <u>NOT</u> authorized to issue it.

Workers' Compensation Law

Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.

- 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.



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			
la. Legal Name and Address of Insured (Use street address only)	1b. Business Telephone Number of Insured 914-337-1350		
INTER CONTRACTING CORP. 274 WHITE PLAINS RD SUITE 6 EASTCHESTER, NY 10709	1c. NYS Unemployment Insurance Employer Registration Number of Insured		
Work Location of Insured(Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)	1d. Federal Employer Identification Number of Insured or Social Security Number 11-155556		
Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)	3a. Name of Insurance Carrier HARTFORD LIFE AND ACCIDENT		
NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION	3b. Policy Number of entity listed in box "1a": LNY-621621		
30-30 THOMSON AVE LONG ISLAND CITY, NY 11101	3c. Policy effective period: 10/01/2016 to 09/30/2017		
4. Policy covers: a. All of the employer's employees eligible under b. Only the following class or classes of the employent Under penalty of perjury, I certify that I am an authorized representate that the named insured has NYS Disability Benefits insurance covers.	oyer's employees: tive or licensed agent of the insurance carrier referenced above and		
Date Signed 6/12/2017 By Emily Yvvvalt (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 hox "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, 328 State Street, Schenectady, 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			
	of NYS Workers' Compensation Board Employee)		
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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".

Will the carrier notify the certificate holder within 10 days of a policy being cancelled for non-payment of premium or within 30 days if cancelled for any other reason or if the insured is otherwise eliminated from the coverage indicated on this certificate prior to the end of the policy effective period? YES NO

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Disability Benefits contract of insurance only while the underlying policy is in effect.

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 not withstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits 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.

<u>Performance Bond #1 (Pages 100 to 103)</u>: Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.

PERFORMANCE BOND #1 (Page 1)

PERFORMANCE BOND #1

KNOW ALL PERSONS BY THESE PRESENTS That we,	;		
hereinafter referred to as the "Principal," and,			·.
		•	
hereinafter referred to as the "Surety" ("Sureties") YORK, hereinafter referred to as the "City" or to its of	successors and assigns in	the penal sum	
(\$	everally, firmly by these pr	rselves, our heirs, resents.	executors,
a copy of which Contract is annexed to and hereby full; NOW, THEREFORE, the conditions of trepresentatives or assigns, shall well and faithful amendments, additions and alterations thereto that true intent and meaning, including repair and o maintenance for the periods stated in the Contract, from all cost and damage which it may suffer by reafully reimburse and repay the City for all outlay	his obligation are such the ly perform the said Commay hereafter be made, are replacement of defection and shall fully indemnifusion of the Principal's def	nat if the Principal ntract and all mod according to its ter ive work and gua y and save harmle ault of the Contrac	h, his or its diffications, rms and its arantees of ess the City et, and shall

<u>Performance Bond #1 (Pages 100 to 103)</u>: Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.

PERFORMANCE BOND #1 (Page 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 (1) pay the City the cost to complete the contract as determined by the City in excess of the balance of the Contract held by the City, plus any damages or costs to which the City is entitled, up to the full amount of the above penal sum, (2) fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof, or (3) tender a completion Contractor that is acceptable to the City. The Surety (Sureties) further agrees, at its option, either to notify the City that it elects to pay the city the cost of completion plus any applicable damages and costs under option (1) above, 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, if the Surety elects to fully perform and complete the Work, then to complete all Work within the time set forth in the Contract or such other time as agreed to between the City and Surety in accordance with the Contract. If the Surety elects to tender payment pursuant to (1) above, then the Surety shall tender such amount within fifteen (15) business days notification from the City of the cost of completion. The Surety and the City reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to pay the City the cost of completion, to commence and complete all Work as provided herein, or to tender a completion contractor.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected 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 any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, and waivers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to subcontractors shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal. Notwithstanding the above, if the City makes payments to the Principal before the time required by the contract that in the aggregate exceed \$100,000 or 10% of the Contract price, whichever is less, and that have not become earned prior to the Principal being found to be in default, then all payments made to the Principal before the time required by the Contract shall be added to the remaining contract value available to be paid for the completion of the Contract as if such sums had not been paid to the Principal, but shall not provide a basis for non-performance of its obligation to pay the City the cost of completion, to commence and to complete all Work as provided herein, or to tender a completion contractor.

<u>Performance Bond #1 (Pages 100 to 103)</u>: Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.

PERFORMANCE BOND #1 (Page 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

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	•			(L.S.)
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Sond Premium Rate				
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Sond Premium Cost				

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.

CITY OF NEW YORK DDC

<u>Performance Bond #1 (Pages 100 to 103)</u>: Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.<u>m.</u>

PERFORMANCE BOND #1 (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

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Notary Public or Con	mmissioner of Deeds.		
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instrument, said indi	ividual executed the instrume	ent.	
Notary Public or Co	mmissioner of Deeds		
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duly certified copy of representative of Prio of Attorney or other	of Power of Attorney or other ncipal or Surety; (c) a duly ce	certificate of authority where bond rtified extract from By-Laws or resigent, officer or representative was	d is executed by agent, officer or other solutions of Surety under which Power issued, and (d) certified copy of later

Affix Acknowledgments and Justification of Sureties.

CITY OF NEW YORK DDC

STANDARD CONSTRUCTION CONTRACT
March 2017

PERFORMANCE BOND #2 (Page 1)

PERFORMANCE BOND #2

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nereinafter referred to as the YORK, hereinafter referred to of	"Surety" ("Suras the "City" o	reties") are h	eld and fir	mly bound signs in the	to THE (CITY OF 1
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(\$which said sum of money we executors, administrators, successive whereas, the Principal is all	ell and truly t essors and assi	gns, jointly a	we, and eand severally	ch of us, , firmly by	bind ourse these pres	lves, our l ents.
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copy of which Contract is an	nexed to and	hereby made	a part of th	is bond as	though he	rein set for
	7 41 1141-	ne of this oh	ligation are	such that	if the Prin	cipal, his c

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 (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 (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

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ond Premium Cost			

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by 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 (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of		County of			ss:
On this	day of		, 20	before me j	personally
to me known, who	o, being by me duly swo	rn did depose and	say that he reside	es ·	•
	described in and whice	: that	he/she is the		
foregoing instrum	ent by order of the direc	tors of said corpor	ration as the duly	nt; that he/she signed his authorized and binding a	
Notary Public or (Commissioner of Deeds.				TO MAKE A ARRANGE WITH CONTRACT OF
	ACKNOWLEDO	GMENT OF PRI	NCIPAL IF A	<u>PARTNERSHIP</u>	
State of		County of			ss:
On this	day of		, 20	before me	personally
to me known, who	o, being by me duly swo	rn did depose and	say that he/she re	esides	
	•	·that	he/she is	adon the large of the State	nartner of
	, a lin	nited/general partn	ership existing ur	nder the laws of the State	of
	, the partn	ership described in	and which execu	uted the foregoing instru	ment;
and that he/she sig said partnership.	gned his/her name to the	foregoing instrun	nent as the duly a	uthorized and binding ac	t of
Notary Public or	Commissioner of Deeds	-			
	ACKNOWLED	GMENT OF PR	INCIPAL IF A	N INDIVIDUAL	
On this	day of		, 20	before me	personally
to me known, who	o, being by me duly swo	orn did depose and	say that he/she re	esides	f
		, and	that he/she is the	individual whose name i	s
	within instrument and a ndividual executed the i		e that by his/her	signature on the	
N. (D. 1.1'		_	•		•
Notary Public or	Commissioner of Deeds				
duly certified copy representative of I of Attorney or oth	y of Power of Attorney of Principal or Surety; (c) a	or other certificate of duly certified extra of its agent, office	of authority where act from By-Laws er or representative	ents of the respective particle bond is executed by age or resolutions of Surety use was issued, and (d) cert	nt, officer or other under which Powe

Affix Acknowledgments and Justification of Sureties.

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PAYMENT BOND (Page 1)

PAYMENT BOND

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einafter referred to a			•						•
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inafter referred to a	as the "Surety" (" s the "City" or to	'Sureties") are its successors	held and finance and assigns,	rmly bou	nd to '	ΓΗΕ C m of	ITY O	F NEW	/ YO
einafter referred to a	as the "Surety" (" s the "City" or to	'Sureties") are its successors	and assigns,	rmly bou in the pe	nd to '	THE C	ITY O	F NEW	/ YO
einafter referred to a	as the "Surety" (" s the "City" or to	'Sureties") are its successors	and assigns,	mly bour in the pe	nd to '	THE C	ITY O	F NEW	/ YO
einafter referred to a	as the "Surety" (" s the "City" or to	'Sureties") are its successors	and assigns,	rmly bour in the pe	nd to '	THE C	ITY O	F NEW	/ YO
) Dolla truly to be made, we gas, jointly and seve	rs, lawful money	of the United as, bind ourselnese presents.	States, for the	ne payme	nt of v	m of which s	aid sum trators,	n of mo	oney
) Dolla truly to be made, we gas, jointly and seve	rs, lawful money we, and each of u	of the United as, bind ourselnese presents.	States, for the	ne payme	nt of v	m of which s	aid sum trators,	n of mo	oney
) Dolla truly to be made, we gas, jointly and seve	rs, lawful money we, and each of u	of the United as, bind ourselnese presents.	States, for the	ne payme	nt of v	m of which s	aid sum trators,	n of mo	oney

(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

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

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 place in this bond.

And the Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties), and its bonds shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or of the said Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any part thereof, or of any Work to be performed, or any moneys due to become due thereunder and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, Subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done or in relation to said Principal.

CITY OF NEW YORK

PAYMENT BOND (Page 3)

(Seal)	2.		π ς)	
(DCIII)		Principal	(L.S.)	
	Ву:			
(Seal)		Surety		
(Seal)	<u> </u>	Surety		
	D _v ,	building		
•	Бу			
(Seal)		0		
		Surety		
	Ву:			
(Seal)				
-		Surety		
	By:		•	

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 (Page 4)

State 01	County of	ss:	
On this day of	before me	nersonally came	
o me known, who, be	ing by me duly sworn did depose	and say that he resides at	
	that h	ne is the	of
corporation; that one	ibed in and which executed the f of the seals affixed to said instru orporation, and that he signed his	ment is such seal; that it was	
A CONTRACT OF THE PROPERTY OF	**************************************		
	Notary Public	or Commissioner of Deeds	•
ACKNOWLEDGMI	ENT OF PRINCIPAL, IF A PA	RTNERSHIP	
State of	County of	ss:	
on this day of	,, before me own to me to be one of the member	personally appeared	
	described in and wh	a executed the foregoing	instrument and he
acknowledged to me t	described in and wh	o executed the foregoing for the act and deed of said fi	instrument; and he
acknowledged to me t	described in and whethat he executed the same as and	o executed the foregoing for the act and deed of said fi	instrument; and he
acknowledged to me	described in and whethat he executed the same as and	o executed the foregoing for the act and deed of said fi	instrument; and he
acknowledged to me t	that he executed the same as and	o executed the foregoing for the act and deed of said fi	instrument; and he
acknowledged to me t	that he executed the same as and	for the act and deed of said for the act and deed of said for commissioner of Deeds	instrument; and he irm.
acknowledged to me to	that he executed the same as and notary Public	for the act and deed of said for the act and deed of said for commissioner of Deeds	instrument; and he irm.
ACKNOWLEDGM	Notary Public ENT OF PRINCIPAL, IF AN I County of	for the act and deed of said for the act and deed of said for commissioner of Deeds NDIVIDUAL ss:	rm.
ACKNOWLEDGM State of day of to me known, and kn	Notary Public ENT OF PRINCIPAL, IF AN I County of, before me nown to me to be the person description.	for the act and deed of said for the act and deed of said for commissioner of Deeds NDIVIDUAL ss: personally appeared	rm .
ACKNOWLEDGM State of day of to me known, and kn	Notary Public ENT OF PRINCIPAL, IF AN I County of, before me	for the act and deed of said for the act and deed of said for commissioner of Deeds NDIVIDUAL ss: personally appeared	rm.
ACKNOWLEDGM State of day of to me known, and kn	Notary Public ENT OF PRINCIPAL, IF AN I County of, before me nown to me to be the person description.	for the act and deed of said for the act and deed of said for commissioner of Deeds NDIVIDUAL ss: personally appeared	rm.
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Affix Acknowledgments and Justification of Sureties.

agent, officer or representative was issued, and (d) certified copy of latest published financial statement of

CITY OF NEW YORK DDC

assets and liabilities of Surety.

(NO TEXT ON THIS PAGE)

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. Pursuant to Labor Law §220 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.

This schedule is a compilation of separate determinations of the prevailing rate of wage and supplements made by the Comptroller for each trade classification listed herein pursuant to New York State Labor Law section 220 (5). The source of the wage and supplement rates, whether a collective bargaining agreement, survey data or other, is listed at the end of each classification.

Agency Chief Contracting Officers should contact the Bureau of Labor Law's Classification Unit with any questions concerning trade classifications, prevailing rates or prevailing practices with respect to procurement on New York City public works contracts. Contractors are advised to review the Comptroller's Prevailing Wage Schedule before bidding on public works contracts. Contractors with questions concerning trade classifications, prevailing rates or prevailing practices with respect to public works contracts in the procurement stage must contact the contracting agency responsible for the procurement.

Any error as to compensation under the prevailing wage law or other information as to trade classification, made by the contracting agency in the contract documents or in any other communication, will not preclude a finding against the contractor of prevailing wage violation.

Any questions concerning trade classifications, prevailing rates or prevailing practices on New York City public works contracts that have already been awarded may be directed to the Bureau of Labor Law's Classification Unit by calling (212) 669-7974. All callers must have the agency name and contract registration number available when calling with questions on public works contracts. 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.

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 to work performed during the effective period, unless otherwise noted. Changes to this schedule are published on our web site www.comptroller.nyc.gov. Contractors must pay the wages and supplements in effect when the worker, laborer, mechanic performs the work. Preliminary schedules for future one-year periods appear in the City Record on or about June 1 each succeeding year. Final schedules appear on or about July 1 in the City Record and on our web site 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.

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.

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/wocs/html/vendors/pla.shtml.

Ail 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.

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.

Wasyl Kinach, P.E.
Director of Classifications
Bureau of Labor Law

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ASBESTOS HANDLER

(Hazardous Material; Disturbs, removes, encapsulates, repairs, or encloses friable asbestos material)

Asbestos Handler

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$36.00

Supplemental Benefit Rate per Hour: \$16.45

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 and Local #12A)

BLASTER

<u>Blaster</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$44.93

Supplemental Benefit Rate per Hour: \$46,24

Blaster (Hydraulic)

Effective Period: 7/1/2016 - 6/30/2017

PUBLISH DATE: 7/1/2016 EFFECTIVE PERIOD: JULY 1, 2016 THROUGH JUNE 30, 2017 Page 5 of 87

Wage Rate per Hour: \$45.78

Supplemental Benefit Rate per Hour: \$46.24

Blaster - Trac Drill Hydraulic

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$40.12

Supplemental Benefit Rate per Hour: \$46.24

Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$39.31

Supplemental Benefit Rate per Hour: \$46.24

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$38.23

Supplemental Benefit Rate per Hour: \$46.24

Blaster - Powder Carriers

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$34.20

Supplemental Benefit Rate per Hour: \$46.24

Blaster - Hydraulic Trac Drill Chuck Tender

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$32.88

Supplemental Benefit Rate per Hour: \$46.24

Blaster - Chuck Tender & Nipper

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$32.10

Supplemental Benefit Rate per Hour: \$46.24

Blaster - Magazine Keepers: (Watch Person)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$17.80

Supplemental Benefit Rate per Hour: \$46.24

Overtime Description

Magazine Keepers:

Time and one half for work performed in excess of forty (40) hours per week and for work performed on Saturdays, Sundays and Holidays.

All Other Employees:

Time and one-half for the first two hours of overtime Monday through Friday, the first ten hours, the first ten hours of work on Saturday and for Make-up Time. Double time for all hours over ten Monday through Saturday (except make-up hours) and for all hours worked on Sunday and Holidays.

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 $\frac{1}{2}$ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half (7 $\frac{1}{2}$) hours, but will be paid for eight (8) hours, since only one-half ($\frac{1}{2}$) 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)

BOILERMAKER

<u>Boilermaker</u>

Effective Period: 7/1/2016 - 12/31/2016

Wage Rate per Hour: \$53.36

Supplemental Benefit Rate per Hour: \$42.33

Supplemental Note: For time and one half overtime - \$62.88 For double overtime - \$83.42

Effective Period: 1/1/2017 - 6/30/2017

Wage Rate per Hour: \$55.23

Supplemental Benefit Rate per Hour: \$42.96

Supplemental Note: For time and one half overtime - \$63.82 For double overtime - \$84.68

PUBLISH DATE: 7/1/2016 EFFECTIVE PERIOD: JULY 1, 2016 THROUGH JUNE 30, 2017 Page 7 of 87

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 hollday(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)

BRICKLAYER

Bricklayer

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$52.59

PUBLISH DATE: 7/1/2016 EFFECTIVE PERIOD: JULY 1, 2016 THROUGH JUNE 30, 2017 Page 8 of 87

Supplemental Benefit Rate per Hour: \$30.00

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.

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

Overtime rates to be paid outside the regular scheduled work day.

(Bricklayer District Council)

CARPENTER - BUILDING COMMERCIAL

Building Commercial

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$52.50

Supplemental Benefit Rate per Hour: \$46.28

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
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)

CARPENTER - HEAVY CONSTRUCTION WORK (Construction of Engineering Structures and Building Foundations)

Heavy Construction Work

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$51.63

Supplemental Benefit Rate per Hour: \$48.65

Overtime⁻

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

Shift Rates

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate.

(Carpenters District Council)

CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST

Carpenter - Hod Hoist

(Assisted by Mason Tender)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$50.50

Supplemental Benefit Rate per Hour: \$44.80

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

The second shift will receive one hour at the double time rate of pay for the last hour of the shift; eight hours pay for seven hours of work, nine hours pay for eight hours of work. There must be a first shift in order to work a second shift.

(Carpenters District Council)

CEMENT & CONCRETE WORKER

Cement & Concrete Worker

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$42.48

Supplemental Benefit Rate per Hour: \$23.00

Supplemental Note: \$25.75 on Saturdays; \$28.50 on Sundays & Holidays

Cement & Concrete Worker - (Hired after 2/6/2016)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$32.00

Supplemental Benefit Rate per Hour: \$16.00

Supplemental Note: \$17.25 on Saturdays; \$18.50 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

Paid Holidays

Christmas Day

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)

CEMENT MASON

Cement Mason

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$40.72

Supplemental Benefit Rate per Hour: \$38.96

Supplemental Note: For time and one half overtime - \$48.21; For double overtime - \$57.46

Overtime Description

Time and one-half the regular rate after an 8 hour day, double time the regular rate after 10 hours. Time and one-half the regular rate on Saturday, double time the regular rate after 10 hours. Double time the regular rate on Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

Any worker who reports to work on Christmas Eve or New Year's Eve pursuant to his employer's instruction shall be entitled to three (3) hours afternoon pay without working.

Shift Rates

For 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. Four Days a week at Ten (10)hour day.

(Local #780) (BCA)

CORE DRILLER

Core Driller

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$37.82

Supplemental Benefit Rate per Hour: \$24.00

Core Driller Helper

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$30.17

Supplemental Benefit Rate per Hour: \$24.00

Core Driller Helper(Third year in the industry)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$27.15

Supplemental Benefit Rate per Hour: \$24.00

Core Driller Helper (Second year in the industry)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$24.14

Supplemental Benefit Rate per Hour: \$24.00

Core Driller Helper (First year in the industry)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$21.12

Supplemental Benefit Rate per Hour: \$24.00

Overtime Description

Time and one half the regular rate for work on a holiday plus Holiday pay when worked.

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day Memorial Day Independence Day Labor Day

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 1/2) hours paid for eight (8) hours of labor and be permitted one-half (1/2) hour for mealtime.

(Carpenters District Council)

DERRICKPERSON AND RIGGER

Derrick Person & Rigger

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$45.48

Supplemental Benefit Rate per Hour: \$50.00

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and

Queens. \$51.42 - For work performed in Staten Island.

Overtime Description

The first two hours of overtime on weekdays and the first seven hours of work on Saturdays are paid at time and one half for wages and supplemental benefits. All additional overtimes is paid at double time for wages and supplemental benefits. 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 Dav

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$65.38

Supplemental Benefit Rate per Hour: \$48.65

Diver Tender (Marine)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$46.44

Supplemental Benefit Rate per Hour: \$48.65

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

When three shifts are utilized each shift shall work seven and one half-hours (7 1/2 hours) and paid for 8 hours, allowing for one half hour for lunch.

(Carpenters District Council)

DOCKBUILDER - PILE DRIVER

Dockbuilder - Pile Driver

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$51.63

Supplemental Benefit Rate per Hour: \$48.65

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day

Thanksgiving Day Christmas Day

Paid Holidays

None

Shift Rates

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate.

(Carpenters District Council)

DRIVER: TRUCK (TEAMSTER)

<u> Driver - Dump Truck</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$40.15

Supplemental Benefit Rate per Hour: \$43.39

Supplemental Note: Over 40 hours worked: at time and one half rate - \$18.44; at double time rate - \$24.58

Driver - Tractor Trailer

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$41.46

Supplemental Benefit Rate per Hour: \$43.65

Supplemental Note: Over 40 hours worked: at time and one half rate - \$16.65; at double time rate - \$22.20

Driver - Euclid & Turnapull Operator

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$42.03

Supplemental Benefit Rate per Hour: \$43.65

Supplemental Note: Over 40 hours worked: at time and one half rate - \$16.65; at double time rate - \$22.20

Overtime Description

For Paid Holidays: Holiday pay for all holidays shall be prorated based two hours per day for each day worked in the holiday week, not to exceed 8 hours of holiday pay. For Thanksgiving week, the prorated share shall be 5 1/3 hours of holiday pay for each day worked in Thanksgiving week.

Overtime

Time and one half the regular rate after an 8 hour day. Time and one half the regular rate for Saturday. Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
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

Shift Rates

Off single shift work commencing between 6:00 P.M. and 5:00 A.M. shall work eight and one half hours allowing for one half hour for lunch and receive 9 hours pay for 8 hours of work.

Driver Redi-Mix (Sand & Gravel)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$36.30

Supplemental Benefit Rate per Hour: \$40.02

Supplemental Note: Over 40 hours worked: time and one half rate \$13.90, double time rate \$18.53

Overtime Description

For Pald Holidays: Employees working two (2) days in the calendar week in which the holiday falls are to 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 Election Day Thanksgiving Day Christmas Day

(Local #282)

ELECTRICIAN

(Including all low voltage cabling carrying data; video; and voice in combination with data and or video.)

Electrician "A" (Regular Day)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$54.00

Supplemental Benefit Rate per Hour: \$51.86

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$54.35

Electrician "A" (Regular Day Overtime)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$81.00

Supplemental Benefit Rate per Hour: \$55.24

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$84.00

Supplemental Benefit Rate per Hour: \$57.86

Electrician "A" (Day Shift)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$54.00

Supplemental Benefit Rate per Hour: \$51.86

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$54.35

Electrician "A" (Day Shift Overtime After 8 hours)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$81.00

Supplemental Benefit Rate per Hour: \$55.24

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$84.00

Supplemental Benefit Rate per Hour: \$57.86

Electrician "A" (Swing Shift)

Effective Period: 7/1/2016 - 5/10/2017

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Wage Rate per Hour: \$63.36

Supplemental Benefit Rate per Hour: \$59.01

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$65.71

Supplemental Benefit Rate per Hour: \$61.94

Electrician "A" (Swing Shift Overtime After 7.5 hours)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$95.04

Supplemental Benefit Rate per Hour: \$62.98

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$98.57

Supplemental Benefit Rate per Hour: \$66.05

Electrician "A" (Graveyard Shift)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$70.97

Supplemental Benefit Rate per Hour: \$65.05

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$73.60

Supplemental Benefit Rate per Hour: \$68.33

Electrician "A" (Graveyard Shift Overtime After 7 hours)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$106.46

Supplemental Benefit Rate per Hour: \$69.50

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$110.40

Supplemental Benefit Rate per Hour: \$72.95

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

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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. For three or less workers performing 8 hours temporary light and/or power the supplemental benefit rate is \$25.14 and effective 5/11/17 \$25.67.

Electrician "M" (First 8 hours)

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$28.00

Supplemental Benefit Rate per Hour: \$21.85

First and Second Year "M" Wage Rate Per Hour: \$23.50 First and Second Year "M" Supplemental Rate: \$19.54

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$28.50

Supplemental Benefit Rate per Hour: \$22.10

First and Second Year "M" Wage Rate Per Hour: \$24.00 First and Second Year "M" Supplemental Rate: \$19.80

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: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$42.00

Supplemental Benefit Rate per Hour: \$23.60

First and Second Year "M" Wage Rate Per Hour: \$35.25 First and Second Year "M" Supplemental Rate: \$21.01

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$42.75

Supplemental Benefit Rate per Hour: \$23.89

First and Second Year "M" Wage Rate Per Hour: \$36.00 First and Second Year "M" Supplemental Rate: \$21.30

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

Paid Holidays

Christmas Day

None

(Local #3)

ELECTRICIAN - ALARM TECHNICIAN

(Scope of Work - Inspect, test, repair, and replace defective, malfunctioning, or broken devices, components and controls of Fire, Burglar and Security Systems)

Alarm Technician

Effective Period: 7/1/2016 - 3/9/2017

Wage Rate per Hour: \$32,00

Supplemental Benefit Rate per Hour: \$15.47

Supplemental Note: \$13.97 only after 8 hours worked in a day

Effective Period: 3/10/2017 - 6/30/2017

Wage Rate per Hour: \$32.40

Supplemental Benefit Rate per Hour: \$16.10

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Supplemental Note: \$14.60 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. Up to 4 vacation days may be used as sick days.

(Local #3)

ELECTRICIAN-STREET LIGHTING WORKER

Electrician - Electro Pole Electrician

Effective Period: 7/1/2016 - 5/17/2017

Wage Rate per Hour: \$54.00

Supplemental Benefit Rate per Hour: \$53.69

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Effective Period: 5/18/2017 - 6/30/2017

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$56.26

Electrician - Electro Pole Foundation Installer

Effective Period: 7/1/2016 - 5/17/2017

Wage Rate per Hour: \$40.93

Supplemental Benefit Rate per Hour: \$40.12

Effective Period: 5/18/2017 - 6/30/2017

Wage Rate per Hour: \$41,54

Supplemental Benefit Rate per Hour: \$41.02

Electrician - Electro Pole Maintainer

Effective Period: 7/1/2016 - 5/17/2017

Wage Rate per Hour: \$35.05

Supplemental Benefit Rate per Hour: \$36.11

Effective Period: 5/18/2017 - 6/30/2017

Wage Rate per Hour: \$35.58

Supplemental Benefit Rate per Hour: \$36.89

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 hours

period and Saturday and Sunday,

Electrician - Electro Pole Maintainer: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week. Saturdays and Sundays may be used as a make-up day at straight time when a day is lost during the week to inclement weather.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s). New Year's Day Martin Luther King Jr. Day President's Day **Memorial Day** Independence Day **Labor Dav** Columbus Day Veteran's Day Thanksgiving Day Day after Thanksgiving

Paid Holidays

Christmas Day

None

(Local #3)

ELEVATOR CONSTRUCTOR

Elevator Constructor

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate per Hour: \$60.96

Supplemental Benefit Rate per Hour: \$32.65

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate per Hour: \$62.64

Supplemental Benefit Rate per Hour: \$34.25

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)

ELEVATOR REPAIR & MAINTENANCE

Elevator Service/Modernization Mechanic

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate per Hour: \$47.91

Supplemental Benefit Rate per Hour: \$32.51

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate per Hour: \$49.14

Supplemental Benefit Rate per Hour: \$34.11

Overtime Description

For Scheduled Service Work: Double time - work scheduled in advance by two or more workers performed on Sundays, Holidays, and between midnight and 7:00am.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays

New Year's Day President's Day Good Friday Memoriai Day Independence Day Labor Day Columbus Day Veteran's Dav Thanksgiving Day Day after Thanksgiving

Shift Rates

Christmas Day

Afternoon shift - regularly hourly rate plus a (15%) fifteen percent differential. Graveyard shift - time and one half the regular rate.

Vacation

Employer contributes 8% of regular basic hourly rate as vacation pay for employees with more than 15 years of service, and 6% for employees with 5 to 15 years of service, and 4% for employees with less than 5 years of service.

(Local #1)

ENGINEER

Engineer - Heavy Construction Operating Engineer I

Cherrypickers 20 tons and over and Loaders (rubber tired and/or tractor type with a manufacturer's minimum rated capacity of six cubic yards and over).

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$65.94

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$105.50

Engineer - Heavy Construction Operating Engineer II

Backhoes, Basin Machines, Groover, Mechanical Sweepers, Bobcat, Boom Truck, Barrier Transport (Barrier Mover) & machines of similar nature. Operation of Churn Drills and machines of a similar nature, Stetco Silent Hoist and machines of similar nature, Vac-Alls, Meyers Machines, John Beam and machines of a similar nature, Ross Carriers and Travel Lifts and machines of a similar nature, Bulldozers, Scrapers and Turn-a-Pulls: Tugger Hoists (Used exclusively for handling excavated material); Tractors with attachments, Hyster and Roustabout Cranes, Cherrypickers. Austin Western, Grove and machines of a similar nature, Scoopmobiles, Monoralis, Conveyors, Trenchers: Loaders-Rubber Tired and Tractor: Barber Greene and Elmco Loaders and Elmco 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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$63.98

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$102.37

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$60.69

Supplemental Benefit Rate per Hour: \$35.41

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$97.10

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$63.68

Supplemental Benefit Rate per Hour: \$35.41

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$101.89

Engineer - Heavy Construction Maintenance Engineer II

On Base Mounted Tower Cranes

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$83.66

Supplemental Benefit Rate per Hour: \$35.41

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$133.86

Engineer - Heavy Construction Maintenance Engineer III

On Generators, Light Towers

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$42.01

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$67.22

Engineer - Heavy Construction Maintenance Engineer IV

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$43.11

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63,67 on overtime

Shift Wage Rate: \$68.98

Engineer - Heavy Construction Oilers I

Gradalls, Cold Planer Grader, Concrete Pumps, Driving Truck Cranes, Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2016 - 6/30/2017

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Wage Rate per Hour: \$57.42

Supplemental Benefit Rate per Hour: \$35.41

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$91.87

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$39.70

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$63.52

Engineer - Steel Erection Maintenance Engineers

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$61.13

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$97.81

Engineer - Steel Erection Oiler I

On a Truck Crane

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$57.21

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$91.54

Engineer - Steel Erection Oiler II

On a Crawler Crane

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$43.54

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$69.66

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
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

Engineer - 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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$58.30

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Engineer - Building Work Maintenance Engineers II

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$45,28

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Engineer - Building Work Oilers I

All gasoline, electric, diesel or air operated Gradealls: Concrete Pumps, Overhead Cranes in Power Houses: Their duties shall be to assist the Engineer in oiling, greasing and repairing of all machines; Driving Truck Cranes: Driving and Operating Fuel and Grease Trucks, Cherrypickers (hydraulic cranes) over 70,000 GVW, and machines of a similar nature.

PUBLISH DATE: 7/1/2016 EFFECTIVE PERIOD: JULY 1, 2016 THROUGH JUNE 30, 2017 Page 31 of 87

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$55.42

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 on overtime

Engineer - Building Work Oilers II

Oilers on Crawler Cranes, Backhoes, Trenching Machines, Gunite Machines, Compressors (three or more in Battery).

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$41.16

Supplemental Benefit Rate per Hour: \$35.41 Supplemental Note: \$63.67 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)

ENGINEER - CITY SURVEYOR AND CONSULTANT

Party Chief

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$38.18

Supplemental Benefit Rate per Hour: \$20.15

Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).

Instrument Person

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$31.47

Supplemental Benefit Rate per Hour: \$20.15

Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).

Rodperson

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$27.24

Supplemental Benefit Rate per Hour: \$20.15

Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).

Overtime Description

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (BUILDING CONSTRUCTION) (Construction of Building Projects, Concrete Superstructures, etc.)

Field Engineer - BC Party Chief

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$60.10

Supplemental Benefit Rate per Hour: \$32.15

Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).

Field Engineer - BC Instrument Person

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$46.69

Supplemental Benefit Rate per Hour: \$32.15

Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).

Field Engineer - BC Rodperson

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$30.20

Supplemental Benefit Rate per Hour: \$32.15

Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).

Overtime Description

Time and one half the regular rate after a 7 hour work and time and one half the regular rate for Saturday for the first seven hours worked, Double time the regular time rate for Saturday for work performed in excess of seven hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day

Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (HEAVY CONSTRUCTION)

(Construction of Roads, Tunnels, Bridges, Sewers, Building Foundations, Engineering Structures etc.)

PUBLISH DATE: 7/1/2016 EFFECTIVE PERIOD: JULY 1, 2016 THROUGH JUNE 30, 2017 Page 34 of 87

Field Engineer - HC Party Chief

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$68.09

Supplemental Benefit Rate per Hour: \$33.54

Supplemental Note: Overtime benefit rate - \$46.86 per hour (time & one half), \$60.18 per hour (double time).

Field Engineer - HC Instrument Person

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$49.98

Supplemental Benefit Rate per Hour: \$33.54

Supplemental Note: Overtime benefit rate - \$46.86 per hour (time & one half), \$60.18 per hour (double time).

<u> Field Engineer - HC Rodperson</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$41.93

Supplemental Benefit Rate per Hour: \$33.54

Supplemental Note: Overtime benefit rate - \$46.86 per hour (time & one half), \$60.18 per hour (double time).

Overtime Description

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day Lincoln's Birthday President's Day Memorial Day Independence Day Labor Day Columbus Day Veteran's Day Thanksgiving Day Christmas Day

Employees must work at least one day in the payroll week in which the hollday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (STEEL ERECTION)

Field Engineer - Steel Erection Party Chief

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$63.64

Supplemental Benefit Rate per Hour: \$33.04

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time)

Field Engineer - Steel Erection Instrument Person

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$49.59

Supplemental Benefit Rate per Hour: \$33.04

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time).

Field Engineer - Steel Erection Rodperson

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$33,20

Supplemental Benefit Rate per Hour: \$33.04

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time),

Overtime Description

Time and one half the regular rate for Saturday for the first eight hours worked. Double time the regular rate for Saturday for work performed in excess of eight hours.

Overtime

Time and one half the regular rate after an 8 hour day.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day Lincoln's Birthday President's Day Memorial Day Independence Day **Labor Day Columbus Day** Veteran's Dav

Thanksgiving Day

Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - OPERATING

Operating Engineer - Road & Heavy Construction I

Back Filling Machines, Cranes, Mucking Machines and Dual Drum Paver.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$73.90

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$118.24

Operating Engineer - Road & Heavy Construction II

Backhoes, Power Shovels, Hydraulic Clam Shells, Steel Erection, Moles and machines of a similar nature.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$76.51

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$122.42

Operating Engineer - Road & Heavy Construction III

Mine Hoists, Cranes, etc. (Used as Mine Hoists)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$78.96

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$126.34

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$77.07

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$123.31

Operating Engineer - Road & Heavy Construction V

Pile Drivers & Rigs (employing Dock Builder foreperson): Derrick Boats, Tunnel Shovels.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$75.55

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$120.88

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Operating Engineer - Road & Heavy Construction VI

Mixers (Concrete with loading attachment), Concrete Pavers, Cableways, Land Derricks, Power Houses (Low Air Pressure Units).

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$71.78

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$114.85

Operating Engineer - Road & Heavy Construction VII

Barrier Movers, Barrier Transport and Machines of a Similar Nature.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$57.96

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$92.74

Operating Engineer - Road & Heavy Construction VIII

Utility Compressors

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$44.98

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$56.70

Operating Engineer - Road & Heavy Construction IX

Horizontal Boring Rig

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$68,25

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$109.20

Operating Engineer - Road & Heavy Construction X

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$62,73

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$100.37

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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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$48.73

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$77.97

Operating Engineer - Road & Heavy Construction XII

All Drills and Machines of a similar nature.

Effective Period: 7/1/2016 - 6/30/2017 Wage Rate per Hour: \$72.53

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$116.05

Operating Engineer - Road & Heavy Construction XIII

Concrete Pumps, Concrete Plant, Stone Crushers, Double Drum Hoist, Power Houses (other than above).

Effective Period: 7/1/2016 - 6/30/2017 Wage Rate per Hour: \$70.24

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$112.38

Operating Engineer - Road & Heavy Construction XIV

Concrete Mixer

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$67.16

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$107.46

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 auxillary equipment, Air, Hydraulic, etc.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$45.27

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Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$72.43

Operating Engineer - Road & Heavy Construction XVI

Concrete Breaking Machines, Hoists (Single Drum), Load Masters, Locomotives (over ten tons) and Dinkies over ten tons, Hydraulic Crane-Second Engineer.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$64.13

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$102.61

Operating Engineer - Road & Heavy Construction XVII

On-Site concrete plant engineer, On-site Asphalt Plant Engineer, and Vibratory console.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$64.63

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$103.41

Operating Engineer - Road & Heavy Construction XVIII

Tower Crane

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$92.76

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$148.42

Operating Engineer - Paving I

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$71.78

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$114.85

Operating Engineer - Paving II

Asphalt Roller

Effective Period: 7/1/2016 - 6/30/2017

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Wage Rate per Hour: \$69.91

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$111.86

<u> Operating Engineer - Paving III</u>

Asphalt Plants

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$59.14

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$94.62

Operating Engineer - Concrete I

Cranes

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$76.73

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Operating Engineer - Concrete II

Compressors

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$45.62

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Operating Engineer - Concrete III

Micro-traps (Negative Air Machines), Vac-All Remediation System.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$61.31

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Operating Engineer - Steel Erection I

Three Drum Derricks

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$79.54

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

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Shift Wage Rate: \$127.26

Operating Engineer - Steel Erection II

Cranes, 2 Drum Derricks, Hydraulic Cranes, Fork Lifts and Boom Trucks.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$76.43

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$122.29

Operating Engineer - Steel Erection III

Compressors, Welding Machines.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$45.34

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$72.54

Operating Engineer - Steel Erection IV

Compressors - Not Combined with Welding Machine.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$43.17

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$69.07

Operating Engineer - Building Work I

Forklifts, Plaster (Platform machine), Plaster Bucket, Concrete Pump and all other equipment used for hoisting material.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$63.12

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Operating Engineer - Building Work II

Compressors, Welding Machines (Cutting Concrete-Tank Work), Paint Spraying, Sandblasting, Pumps (with the exclusion of Concrete Pumps), All Engines irrespective of Power (Power-Pac) used to drive Auxiliary Equipment, Air, Hydraulic, Jacking System, etc.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$47,26

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Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Operating Engineer - Building Work III

Double Drum

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$71.85

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Operating Engineer - Building Work IV

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$76.12

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Operating Engineer - Building Work V

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$70.13

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Operating Engineer - Building Work VI

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$69.39

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

Operating Engineer - Building Work VII

Rack & Pinion and House Cars

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$55.17

Supplemental Benefit Rate per Hour: \$31.10 Supplemental Note: \$56.50 overtime hours

For New House Car projects Wage Rate per Hour \$44.02

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.

For House Cars and Rack & Pinion only: Overtime paid at time and one-half for all hours in excess of eight hours in a day, Saturday, Sunday and Holidays worked.

Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
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

For Steel Erection Only: Shifts may be worked at the single time rate at other than the regular working hours (8:00 A.M. to 4:30 P.M.) on the following work ONLY: Heavy construction jobs on work below the street level, over railroad tracks and on building jobs.

(Operating Engineer Local #14)

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$50.50

Supplemental Benefit Rate per Hour: \$45.88

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday. Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidentlal Election Day

Thanksgiving Day

Day after Thanksgiving

Paid Holidays

Christmas Day -

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)

GLAZIER

(New Construction, Remodeling, and Alteration)

<u>Glazier</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$44.45

Supplemental Benefit Rate per Hour: \$37.84

Supplemental Note: Supplemental Benefit Overtime Rate: \$46.84

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. 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)

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 \$127,628. 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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$23.78

Supplemental Benefit Rate per Hour: \$20.14

Overtime

Time and one half the regular rate after an 8 hour day.

Double time the regular rate for Sunday.

Time and one half the regular 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)

HEAT AND FROST INSULATOR

Heat & Frost Insulator

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$57.78

Supplemental Benefit Rate per Hour: \$38.96

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
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) (BCA)

HOUSE WRECKER (TOTAL DEMOLITION)

House Wrecker - Tier A

On all work sites the first, second, eleventh and every third House Wrecker thereafter will be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). Other House Wreckers may be Tier B House Wreckers.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$36.33

Supplemental Benefit Rate per Hour: \$27.77

House Wrecker - Tier B

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$25.56

Supplemental Benefit Rate per Hour: \$20.45

Overtime

Time and one half the regular rate after an 8 hour day. Time and one half the regular rate for Saturday. Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s). New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL

Iron Worker - Ornamental

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$43.75

Supplemental Benefit Rate per Hour: \$49.57

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

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)

IRON WORKER - STRUCTURAL

Iron Worker - Structural

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$49.50

Supplemental Benefit Rate per Hour: \$69.74

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in

effect.

Overtime Description

Monday through Friday- the first eight hours are paid at straight time, the 9th and 10th hours are paid at time and one-half the regular rate, all additional weekday overtime is paid at double the regular rate. Saturdays- the firsteight 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. 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 Dav** 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 onehalf, 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)

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$41.00

Supplemental Benefit Rate per Hour: \$38.63

Overtime

Time and one half the regular rate after an 8 hour day. Time and one half the regular rate for Saturday. Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksglving 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)

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$27.00

Supplemental Benefit Rate per Hour: \$14.55

Landscaper (3 - 6 years experience)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$26.00

Supplemental Benefit Rate per Hour: \$14.55

Landscaper (up to 3 years experience)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$23.50

Supplemental Benefit Rate per Hour: \$14.55

Groundperson

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$23.50

Supplemental Benefit Rate per Hour: \$14.55

Tree Remover / Pruner

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$32.00

Supplemental Benefit Rate per Hour: \$14.55

Landscaper Sprayer (Pesticide Applicator)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$22.00

Supplemental Benefit Rate per Hour: \$14.55

Watering - Plant Maintainer

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$17.00

Supplemental Benefit Rate per Hour: \$14.55

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.

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Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays

New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day

Shift Rates

Work performed on a 4pm to 12am shift has a 15% differential. Work performed on a 12am to 8am shift has a 20% differential.

(Local #175)

MARBLE MECHANIC

Marble Setter

Effective Period: 7/1/2016 - 12/31/2016

Wage Rate per Hour: \$52.32

Supplemental Benefit Rate per Hour: \$37.64

Effective Period: 1/1/2017 - 6/30/2017

Wage Rate per Hour: \$52.74

Supplemental Benefit Rate per Hour: \$38.67

Marble Finisher

Effective Period: 7/1/2016 - 12/31/2016

Wage Rate per Hour: \$41.11

Supplemental Benefit Rate per Hour: \$35.91

Effective Period: 1/1/2017 - 6/30/2017

Wage Rate per Hour: \$41.46

Supplemental Benefit Rate per Hour: \$36.64

Marble Polisher

Effective Period: 7/1/2016 - 12/31/2016

Wage Rate per Hour: \$37.49

Supplemental Benefit Rate per Hour: \$27.80

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Effective Period: 1/1/2017 - 6/30/2017

Wage Rate per Hour: \$37.93

Supplemental Benefit Rate per Hour: \$28.33

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

(Local #7)

MASON TENDER

Mason Tender

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$37.55

Supplemental Benefit Rate per Hour: \$29.04

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)

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$36.19

Supplemental Benefit Rate per Hour: \$22.95

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$25.38

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Supplemental Benefit Rate per Hour: \$17.27

Overtime

Time and one half the regular rate after an 8 hour day. Time and one half the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

(Local #79)

METALLIC LATHER

Metallic Lather

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$44.53

Supplemental Benefit Rate per Hour: \$42.67

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 Memorial Day Independence Day Labor Day Columbus Day

Thanksgiving Day Christmas Day

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M. 1/2 day on New Year's Eve if work is performed in the A.M.

Shift Rates

There will be no shift differential paid on the first shift if more than one shift is employed. The shift differential will remain \$12/hour on the second and third shift for the first eight (8) hours if worked. There will be no pyramiding on overtime worked on second and third shifts. The time and one half (1.5x) rate will be against the base wage rate, not the shift differential

(Local #46)

MILLWRIGHT

Millwright

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$51.50

Supplemental Benefit Rate per Hour: \$52,41

Overtime

Time and one haif 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

(Local #740)

MOSAIC MECHANIC

Mosaic Mechanic - Mosaic & Terrazzo Mechanic

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$46.52

Supplemental Benefit Rate per Hour: \$39.84

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$50.86 per hour.

Mosaic Mechanic - Mosaic & Terrazzo Finisher

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$44.91

Supplemental Benefit Rate per Hour: \$39.83

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$50.85

Mosaic Mechanic - Machine Operator Grinder

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$44.91

Supplemental Benefit Rate per Hour: \$39.83

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$50.85 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 hollday(s). New Year's Day Washington's Birthday **Good Friday** Independence Day **Labor Day** Columbus Day

Veteran's Day Thanksgiving Day Day after Thanksgiving Christmas Day

Paid Holidays

None

(Local #7)

PAINTER

Painter - Brush & Roller

Effective Period: 7/1/2016 - 4/30/2017

Wage Rate per Hour: \$42.50

Supplemental Benefit Rate per Hour: \$26.62 Supplemental Note: \$31.25 on overtime

Effective Period: 5/1/2017 - 6/30/2017

Wage Rate per Hour: \$44.10

Supplemental Benefit Rate per Hour: \$27.02 Supplemental Note: \$ 31.65 on overtime

Spray & Scaffold / Decorative / Sandblast

Effective Period: 7/1/2016 - 4/30/2017

Wage Rate per Hour: \$45.50

Supplemental Benefit Rate per Hour: \$26.62 Supplemental Note: \$ 31.25 on overtime

Effective Period: 5/1/2017 - 6/30/2017

Wage Rate per Hour: \$47.10

Supplemental Benefit Rate per Hour: \$27.02 Supplemental Note: \$ 31.65 on overtime

Overtime

Time and one half the regular rate after a 7 hour day. Time and one half the regular rate for Saturday. Time and one half the regular rate for Sunday.

Overtime Holidays

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

(District Council of Painters #9)

PAINTER - METAL POLISHER

METAL POLISHER

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$28.88

Supplemental Benefit Rate per Hour: \$6.96

METAL POLISHER - NEW CONSTRUCTION

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$29.83

Supplemental Benefit Rate per Hour: \$6.96

METAL POLISHER - SCAFFOLD OVER 34 FEET

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$32.38

Supplemental Benefit Rate per Hour: \$6.96

Overtime Description

All work performed on Saturdays shall be paid at time-in-a half. The exception being; for suspended scaffold work and work deemed as a construction project; an eight (8) hour shift lost during the week due to circumstances beyond the control of the employer, up to amaximumof eight (8) hours per week, may be worked on Saturday at the straight time rate.

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.

Triple time the regular rate for work on the following hollday(s).

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Paid Holidays

New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

Four Days a week at Ten (10) hours straight a day.

Local 8A-28A

PAINTER - STRIPER

Striper (paint)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$35.00

Supplemental Benefit Rate per Hour: \$12,32

Supplemental Note: Overtime Supplemental Benefit rate - \$8.02; New Hire Rate (0-3 months) - \$0.00

Lineperson (thermoplastic)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$39,00

Supplemental Benefit Rate per Hour: \$12.32

Supplemental Note: Overtime Supplemental Benefit rate - \$8.02; 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.

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)

PAINTER - STRUCTURAL STEEL

Painters on Structural Steel

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$49.00

Supplemental Benefit Rate per Hour: \$36.08

Painter - Power Tool

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$55,00

Supplemental Benefit Rate per Hour: \$36.08

Overtime Description

Supplemental Benefits shall be paid for each hour worked, up to forty (40) hours per week for the period of May 1st to November 15th or up to fifty (50) hours per week for the period of November 16th to April 30th.

Overtime

Time and one half the regular rate after 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

Paid Holidays

None

Shift Rates

Regular hourly rates plus a ten per cent (10%) differential

(Local #806)

PAPERHANGER

<u>Paperhanger</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$43.58

Supplemental Benefit Rate per Hour: \$30.73

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

Thanksglving 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.



PAVER AND ROADBUILDER

Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$45.35

Supplemental Benefit Rate per Hour: \$38.95

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$41.48

Supplemental Benefit Rate per Hour: \$38.95

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$45.95

Supplemental Benefit Rate per Hour: \$38.95

Production Paver & Roadbuilder - Raker

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$45.35

Supplemental Benefit Rate per Hour: \$38.95

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: 7/1/2016 - 6/30/2017

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Wage Rate per Hour: \$42.06

Supplemental Benefit Rate per Hour: \$38.95

Overtime Description

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 25%.

Overtime

Time and one half the regular rate after an 8 hour day. Time and one half the regular rate for Saturday. Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day

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 $\frac{1}{2}$) 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 the single time rate, except that production paving work shall be paid at 10% over the single time rate for the screed person, rakers and shovelers directly involved only. This differential is to be paid when there is only one shift and the shift works at night. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

(Local #1010)

PLASTERER

<u>Plasterer</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$43.93

Supplemental Benefit Rate per Hour: \$28.10

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.

(Locai #262)

PLASTERER - TENDER

<u> Plasterer - Tender</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$37.55

Supplemental Benefit Rate per Hour: \$29.04

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s). New Year's Day
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

Shift Rates

When work commences outside regular work hours, workers receive an hour additional (differential) wage and supplement payment. Eight hours pay for seven hours work or nine hours pay for eight hours work.

(Mason Tenders District Council)

PLUMBER

Plumber

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$65.67

Supplemental Benefit Rate per Hour: \$29.28

Supplemental Note: Overtime supplemental benefit rate per hour: \$58.28

Plumber - Temporary Services

Temporary Services - When there are no Plumbers on the job site, there may be three shifts designed to cover the entire twenty-four hour period, including weekends if necessary, at the following rate straight time.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$52.56

Supplemental Benefit Rate per Hour: \$23.40

Overtime Description

Double time the regular rate after a 7 hour day - unless for new construction site work where the plumbing contract price is \$1.5 million or less, the hours of labor can be 8 hours per day at the employers option. On Alteration jobs when other mechanical 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 \$8:44 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)

PLUMBER (MECHNICAL EQUIPMENT AND SERVICE)

(Mechanical Equipment and Service work shall include any repair and/or replacement of the present plumbing system.)

Plumber

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$39.42

Supplemental Benefit Rate per Hour: \$14,19

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

Thanksgiving Day

Day after Thanksgiving Christmas Day

Paid Holidays

None

(Plumbers Local # 1)

PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$45.47

Supplemental Benefit Rate per Hour: \$21.26

Overtime

Double time the regular rate after an 8 hour day. Double time the regular time rate for Saturday. Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates

30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday. 50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

PLUMBER: PUMP & TANK Oil Trades (Installation and Maintenance)

Plumber - Pump & Tank

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$63.52

Supplemental Benefit Rate per Hour: \$22.91

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

Paid Holidays

None

Shift Rates

Christmas Dav

All work outside the regular workday (8:00 A.M. to 3:30 P.M.) is to be paid at time and one half the regular hourly rate

(Plumbers Local #1)

POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER

(Exterior Building Renovation)

Journeyperson

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$50.04

Supplemental Benefit Rate per Hour: \$26.15

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)

ROOFER

Roofer

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$40.70

Supplemental Benefit Rate per Hour: \$30.17

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

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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

Presidentlal Election Day

Thanksglving 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)

SHEET METAL WORKER

Sheet Metal Worker

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$47.70

Supplemental Benefit Rate per Hour: \$46.45

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Sheet Metal Worker - Fan Maintenance

(The temporary operation of fans or blowers in new or existing buildings for heating and/or ventilation, and/or air conditioning prior to the completion of the project.)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$38.16

Supplemental Benefit Rate per Hour: \$46.45

<u> Sheet Metal Worker - Duct Cleaner</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$12.90

Supplemental Benefit Rate per Hour: \$8.07

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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Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates

Work that can only be performed outside regular working hours (eight hours of work between 7:30 A.M. and 3:30 P.M.) - First shift (work between 3:30 P.M. and 11:30 P.M.) - 10% differential above the established hourly rate. Second shift (work between 11:30 P.M. and 7:30 A.M.) - 15% differential above the established hourly rate.

For Fan Maintenance: On all full shifts of fan maintenance work the straight time hourly rate of pay will be pald for each shift, including nights, Saturdays, Sundays, and holidays.

(Local #28)

SHEET METAL WORKER - SPECIALTY (Decking & Siding)

Sheet Metal Specialty Worker

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$43.25

Supplemental Benefit Rate per Hour: \$24,41

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.

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Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

(Local #28)

SHIPYARD WORKER

Shipyard Mechanic - First Class

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$28.33

Supplemental Benefit Rate per Hour: \$3.04

Shipyard Mechanic - Second Class

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$22.18

Supplemental Benefit Rate per Hour: \$2.80

Shipyard Laborer - First Class

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$20.45

Supplemental Benefit Rate per Hour: \$2.74

Shipyard Laborer - Second Class

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$14.36

Supplemental Benefit Rate per Hour: \$2.50

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Shipyard Dockhand - First Class

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$22.70

Supplemental Benefit Rate per Hour: \$2.82

Shipyard Dockhand - Second Class

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$16.01

Supplemental Benefit Rate per Hour: \$2.57

Overtime Description

Work performed on holiday is paid double time the regular hourly wage rate plus holiday pay.

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular hourly rate after 40 hours in any work week.

Paid Holidays

New Year's Day
Martin Luther King Jr. Day
President's Day
Good Eriday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Based on Survey Data

SIGN ERECTOR

(Sheet Metal, Plastic, Electric, and Neon)

Sign Erector

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$46.85

Supplemental Benefit Rate per Hour: \$48.57

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.

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)

STEAMFITTER

Steamfitter I

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$55.50

Supplemental Benefit Rate per Hour: \$54.29

Supplemental Note: Overtime supplemental benefit rate: \$107.84

Steamfitter - Temporary Services

The steamfitters shall not do any other work and shall not be permitted to work more than one shift in a twentyfour hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$42.18

Supplemental Benefit Rate per Hour: \$44.08

Overtime

Double time the regular rate after a 7 hour day. Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Dav

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.

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$55.50

Supplemental Benefit Rate per Hour: \$54.29

Supplemental Note: Overtime supplemental benefit rate: \$107.84

Steamfitter -Temporary Services

The steamfitters shall not do any other work and shall not be permitted to work more than one shift in a twentyfour hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$42.18

Supplemental Benefit Rate per Hour: \$44.08

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

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Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates

May be performed outside of the regular workday except Saturday, Sunday and Holidays. 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

STEAMFITTER - REFRIGERATION AND AIR CONDITIONER (Maintenance and Installation Service Person)

Refrigeration and Air Conditioner Mechanic

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$39.50

Supplemental Benefit Rate per Hour: \$15.06

Refrigeration and Air Conditioner Service Person V

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$32.46

Supplemental Benefit Rate per Hour: \$13.53

Refrigeration and Air Conditioner Service Person IV

Effective Period: 7/1/2016 - 6/30/2017

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Wage Rate per Hour: \$26.89

Supplemental Benefit Rate per Hour: \$12.26

Refrigeration and Air Conditioner Service Person III

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$23.08

Supplemental Benefit Rate per Hour: \$11.31

Refrigeration and Air Conditioner Service Person II

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$19.14

Supplemental Benefit Rate per Hour: \$10.43

Refrigeration and Air Conditioner Service Person I

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$14.00

Supplemental Benefit Rate per Hour: \$9.46

Overtime

Time and one half the regular rate after an 8 hour day. Time and one half the regular rate for Saturday. Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
Independence Day
Labor Day
Veteran's Day
Thanksgiving Day
Christmas Day

Double time and one half the regular rate for work on the following holiday(s).

Martin Luther King Jr. Day

President's Day

Memorial Day

Columbus Day

Paid Holidays

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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)

STONE MASON - SETTER

Stone Mason - Setters

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$51.08

Supplemental Benefit Rate per Hour: \$38.10

Overtime

Time and one half the regular rate after a 7 hour day. Time and one half the regular rate for Saturday. Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s). New Year's Day
Washington's Birthday
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

Shift Rates

For all work outside the regular workday (8:00 A.M. to 3:30 P.M. Monday through Friday), the pay shall be straight time plus a ten percent (10%) differential.

(Bricklayers District Council)

TAPER

Drywall Taper

Effective Period: 7/1/2016 - 12/27/2016

Wage Rate per Hour: \$47.32

Supplemental Benefit Rate per Hour: \$22.68

Effective Period: 12/28/2016 - 6/30/2017

Wage Rate per Hour: \$47.82 ---

Supplemental Benefit Rate per Hour: \$22.68

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.

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)

TELECOMMUNICATION WORKER (Voice Installation Only)

Telecommunication Worker

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$40.35

Supplemental Benefit Rate per Hour: \$13.19

Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. \$12.64 for Staten Island

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**

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

Vacation

.....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.

PUBLISH DATE: 7/1/2016 EFFECTIVE PERIOD: JULY 1, 2016 THROUGH JUNE 30, 2017 Page 82 of 87 (C.W.A.)

TILE FINISHER

Tile Finisher

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$40.69

Supplemental Benefit Rate per Hour: \$30.58

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 -

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 (1½) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TILE LAYER - SETTER

<u> Tile Layer - Setter</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$52.68

Supplemental Benefit Rate per Hour: \$34.48

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

Shift Rates

Christmas Day

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 (1½) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TIMBERPERSON

Timberperson

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$46.99

Supplemental Benefit Rate per Hour: \$48.26

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

Time and one half the regular hourly rate after 40 hours in any work week.

Overtime Holidays

Double time the regular rate for work on the following holiday(s). New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

Shift Rates

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate.

(Local #1536)

TUNNEL WORKER

Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$60.97

Supplemental Benefit Rate per Hour: \$50.72

Tunnel Workers (Compressed Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$58.86

Supplemental Benefit Rate per Hour: \$49.03

Top Nipper (Compressed Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$57.78

Supplemental Benefit Rate per Hour: \$48.16

Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

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Wage Rate per Hour: \$56.74

Supplemental Benefit Rate per Hour: \$47.25

Bottom Bell & Top Bell Signal Person: Shaft Person (Compressed Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$56.74

Supplemental Benefit Rate per Hour: \$47.25

Changehouse Attendant: Powder Watchperson (Compressed Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$49.69

Supplemental Benefit Rate per Hour: \$44.69

Blasters (Free Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$58.19

Supplemental Benefit Rate per Hour: \$48.68

Tunnel Workers (Free Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$55.69

Supplemental Benefit Rate per Hour: \$46.61

All Others (Free Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$51.45

Supplemental Benefit Rate per Hour: \$43.13

Microtunneling (Free Air Rates)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$44.55

Supplemental Benefit Rate per Hour: \$37.29

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. For Small-Bore Micro Tunneling Machines - Time and one-half the regular rate shall be paid for all overtime.

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).

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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)

WELDER

TO BE PAID AT THE RATE OF THE JOURNEYPERSON IN THE TRADE PERFORMING THE WORK.

(NO TEXT 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.

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ASBESTOS HANDLER

(Ratio of Apprentice Journeyperson: 1 to 1, 1 to 3)

Asbestos Handler (First 1000 Hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 78% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$16.45

<u> Asbestos Handler (Second 1000 Hours)</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$16.45

Asbestos Handler (Third 1000 Hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 83% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$16.45

Asbestos Handler (Fourth 1000 Hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 89% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$16.45

(Local #78)

BOILERMAKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Boilermaker (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$30.43

Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$30.84

Boilermaker (Second Year: 1st Six Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 70% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$32.13

Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$32.57

Boilermaker (Second Year: 2nd Six Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$33.82

Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$34.29

Boilermaker (Third Year: 1st Six Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$35.53

Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$36.03

Boilermaker (Third Year: 2nd Six Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 85% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$37.23

Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$37.76

Boilermaker (Fourth Year: 1st Six Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 90% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$38.93

Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$39.51

Boilermaker (Fourth Year: 2nd Six Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 95% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$40.63

Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$41.22

(Local #5)

BRICKLAYER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Bricklayer (First 750 Hours)

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Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$18.35

Bricklayer (Second 750 Hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 60% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$18.35

Bricklayer (Third 750 Hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 70% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$18,35

Bricklayer (Fourth 750 Hours)

Effective Perlod: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$18,35

Bricklayer (Fifth 750 Hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 90% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$18.35

Bricklayer (Sixth 750 Hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 95% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$18.35

(Bricklayer District Council)

CARPENTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Carpenter (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

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Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$32.52

Carpenter (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34 Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$32.52

Carpenter (Third Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34
Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$32.52

Carpenter (Fourth Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34 Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$32.52

(Carpenters District Council)

CEMENT MASON

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Cement Mason (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's Rate

Cement Mason (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's Rate

Cement Mason (Third Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's Rate

(Local #780)

CEMENT AND CONCRETE WORKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Cement & Concrete Worker (First 1333 hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$16.25

Cement & Concrete Worker (Second 1333 hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$21.08

Cement & Concrete Worker (Last 1334 hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$21.90

Cement & Concrete Worker (Hired after 2/6/2016 - First 1334 hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: \$17.00

Supplemental Benefit Rate Per Hour: \$10.75

Cement & Concrete Worker (Hired after 2/6/2016 - Second 1334 hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: \$22.10

Supplemental Benefit Rate Per Hour: \$15.13

Cement & Concrete Worker (Hired after 2/6/2016 - Last 1334 hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: \$27.20

Supplemental Benefit Rate Per Hour: \$15.63

(Cement Concrete Workers District Council)

DERRICKPERSON & RIGGER (STONE)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Derrickperson & Rigger (stone) - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: 50% of Journeyperson's rate

Derrickperson & Rigger (stone) - Second Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

Derrickperson & Rigger (stone) - Second Year: 2nd Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

Derrickperson & Rigger (stone) - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 90% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

(Local #197)

DOCKBUILDER/PILE DRIVER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Dockbuilder/Pile Driver (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 40% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$32.52

Dockbuilder/Pile Driver (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

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Supplemental Benefit Rate Per Hour: \$32.52

Dockbuilder/Pile Driver (Third Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 65% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$32.52

Dockbuilder/Pile Driver (Fourth Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$32.52

(Carpenters District Council)

ELECTRICIAN

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Electrician (First Term: 0-6 Months)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$13.50

Supplemental Benefit Rate per Hour: \$12.12 Overtime Supplemental Rate Per Hour: \$13.01

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$14.00

Supplemental Benefit Rate per Hour: \$12.37 Overtime Supplemental Rate Per Hour: \$13.29

Electrician (First Term: 7-12 Months)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$14.50

Supplemental Benefit Rate per Hour: \$12.63 Overtime Supplemental Rate Per Hour: \$13.58

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$15.00

Supplemental Benefit Rate per Hour: \$12.88
Overtime Supplemental Rate Per Hour: \$13.87

Electrician (Second Term: 0-6 Months)

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Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$15.50

Supplemental Benefit Rate per Hour: \$13.14
Overtime Supplemental Rate Per Hour: \$14.16

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$16.00

Supplemental Benefit Rate per Hour: \$13.39
Overtime Supplemental Rate Per Hour: \$14.44

Electrician (Second Term: 7-12 Months)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$16.50

Supplemental Benefit Rate per Hour: \$13.64
Overtime Supplemental Rate Per Hour: \$14.73

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$17.00

Supplemental Benefit Rate per Hour: \$13.90 Overtime Supplemental Rate Per Hour: \$15.02

Electrician (Third Term: 0-6 Months)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$17.50

Supplemental Benefit Rate per Hour: \$14.15
Overtime Supplemental Rate Per Hour: \$15.31

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$18.00

Supplemental Benefit Rate per Hour: \$14.41
Overtime Supplemental Rate Per Hour: \$15.59

Electrician (Third Term: 7-12 Months)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$18,50

Supplemental Benefit Rate per Hour: \$14.66 Overtime Supplemental Rate Per Hour: \$15.88

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$19.00

Supplemental Benefit Rate per Hour: \$14.92
Overtime Supplemental Rate Per Hour: \$16.17

Electrician (Fourth Term: 0-6 Months)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$19.50

Supplemental Benefit Rate per Hour: \$15.17
Overtime Supplemental Rate Per Hour: \$16.45

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$20.00

Supplemental Benefit Rate per Hour: \$15.43
Overtime Supplemental Rate Per Hour: \$16.75

Electrician (Fourth Term: 7-12 Months)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$21.50

Supplemental Benefit Rate per Hour: \$16.19
Overtime Supplemental Rate Per Hour: \$17.60

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$22.00

Supplemental Benefit Rate per Hour: \$16.44
Overtime Supplemental Rate Per Hour: \$17.89

Electrician (Fifth Term: 0-12 Months)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$23.50

Supplemental Benefit Rate per Hour: \$19.54
Overtime Supplemental Rate Per Hour: \$21.01

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$24.00

Supplemental Benefit Rate per Hour: \$19.80 Overtime Supplemental Rate Per Hour: \$21.30

Electrician (Fifth Term: 13-18 Months)

Effective Period: 7/1/2016 - 5/10/2017

Wage Rate per Hour: \$28.00

Supplemental Benefit Rate per Hour: \$21.85
Overtime Supplemental Rate Per Hour: \$23.60

Effective Period: 5/11/2017 - 6/30/2017

Wage Rate per Hour: \$28.50

Supplemental Benefit Rate per Hour: \$22.10 Overtime Supplemental Rate Per Hour: \$23.89

Overtime Description

Overtime Wage paid at time and one half the regular rate

(Local #3)

ELEVATOR CONSTRUCTOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Elevator (Constructor) - First Year

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$28.24

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$29.72

Elevator (Constructor) - Second Year

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$28.67

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$30.15

Elevator (Constructor) - Third Year

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Rate Per Hour: \$29.52

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.03

Elevator (Constructor) - Fourth Year

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$30.37

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.91

(Local #1)

ELEVATOR REPAIR & MAINTENANCE

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Elevator Service/Modernization Mechanic (First Year)

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Per Hour: \$28.33

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Per Hour: \$29.80

Elevator Service/Modernization Mechanic (Second Year)

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Benefit Per Hour: \$28.74

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Benefit Per Hour: \$30,23

Elevator Service/Modernization Mechanic (Third Year)

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Benefit Per Hour: \$29.58

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Benefit Per Hour: \$31.09

Elevator Service/Modernization Mechanic (Fourth Year)

Effective Period: 7/1/2016 - 3/16/2017

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Benefit Per Hour: \$30.42

Effective Period: 3/17/2017 - 6/30/2017

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Benefit Per Hour: \$31.95

(Local #1)

ENGINEER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

Engineer - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$24.28

Supplemental Benefit Rate per Hour: \$23.41

Engineer - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$30.35

Supplemental Benefit Rate per Hour: \$23.41

Engineer - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$33.38

Supplemental Benefit Rate per Hour: \$23.41

Engineer - Fourth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$36.41

Supplemental Benefit Rate per Hour: \$23.41

(Local #15)

ENGINEER - OPERATING

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

Operating Engineer - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour 40% of Journeyperson's Rate

Supplemental Benefit Per Hour: \$20.85

Operating Engineer - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's Rate

Supplemental Benefit Per Hour: \$20.85

Operating Engineer - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 60% of Journeyperson's Rate

Supplemental Benefit Per Hour: \$20.85

(Local #14)

FLOOR COVERER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Floor Coverer (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.14

Floor Coverer (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.14

Floor Coverer (Third Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Rate Per Hour: \$31,14

Floor Coverer (Fourth Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.14

(Carpenters District Council)

GLAZIER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Glazier (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$14.14

Glazier (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$23.77

<u> Glazier (Third Year)</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$26.73

Glazier (Fourth Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$32.14

(Local #1281)

HEAT & FROST INSULATOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Heat & Frost Insulator (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Heat & Frost Insulator (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

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Heat & Frost Insulator (Third Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

Heat & Frost Insulator (Fourth Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #12)

HOUSE WRECKER (TOTAL DEMOLITION)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

House Wrecker - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$21.17

Supplemental Benefit Rate per Hour: \$17.99

House Wrecker - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$22.32

Supplemental Benefit Rate per Hour: \$17.99

House Wrecker - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$23.97

Supplemental Benefit Rate per Hour: \$17.99

House Wrecker - Fourth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$26.53

Supplemental Benefit Rate per Hour: \$17.99

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Iron Worker (Ornamental) - 1st Ten Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$37.90

Iron Worker (Ornamental) - 11 -16 Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$39.06

Iron Worker (Ornamental) - 17 - 22 Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$40.23

Iron Worker (Ornamental) - 23 - 28 Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$42,57

Iron Worker (Ornamental) - 29 - 36 Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$44.90

(Local #580)

IRON WORKER - STRUCTURAL

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Iron Worker (Structural) - 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$25.85

Supplemental Benefit Rate per Hour: \$48.35

Iron Worker (Structural) - 7- 18 Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$26.45

Supplemental Benefit Rate per Hour: \$48.35

Iron Worker (Structural) - 19 - 36 months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$27.05

Supplemental Benefit Rate per Hour: \$48.35

(Local #40 and #361)

LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE LAYER & COMMON)

(Ratio Apprentice to Journeyperson: 1 to 1, 1 to 3)

<u>Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - First</u> <u>1000 hours</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$38.63

<u>Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Second 1000 hours</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$38.63

<u>Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Third 1000 hours</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$38.63

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<u>Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Fourth 1000 hours</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 90% of Journeyperson's rate

Supplemental Rate Per Hour: \$38.63

(Local #731)

MARBLE MECHANICS

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Cutters & Setters - First 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

Cutters & Setters - Second 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

Cutters & Setters - Third 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

<u>Cutters & Setters - Fourth 750 Hours</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

Cutters & Setters - Fifth 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

Cutters & Setters - Sixth 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

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Polishers & Finishers - First 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

Polishers & Finishers - Second 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Polishers & Finishers - Third 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

Polishers & Finishers - Fourth 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

(Local #7)

MASON TENDER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Mason Tender - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$21.39

Supplemental Benefit Rate per Hour: \$19.10

Mason Tender - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$22.54

Supplemental Benefit Rate per Hour: \$19.10

Mason Tender - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$24.29

Supplemental Benefit Rate per Hour: \$19.15

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Mason Tender - Fourth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$26.95

Supplemental Benefit Rate per Hour: \$19.15

(Local #79)

METALLIC LATHER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Metallic Lather (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$23.01

Supplemental Benefit Rate per Hour: \$17.95

Metallic Lather (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$28.11

Supplemental Benefit Rate per Hour: \$17.95

Metallic Lather (Third Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$33.21

Supplemental Benefit Rate per Hour: \$17.95

(Local #46)

MILLWRIGHT

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Millwright (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$28.33

Supplemental Benefit Rate per Hour: \$34.28

Millwright (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$33.48

Supplemental Benefit Rate per Hour: \$37.88

Millwright (Third Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$38.63

Supplemental Benefit Rate per Hour: \$42.13

Millwright (Fourth Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$48.93

Supplemental Benefit Rate per Hour: \$48.69

(Local #740)

PAVER AND ROADBUILDER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Paver and Roadbuilder - First Year (Minimum 1000 hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$27.55

Supplemental Benefit Rate per Hour: \$18.20

Paver and Roadbuilder - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$29.19

Supplemental Benefit Rate per Hour: \$18.20

(Local #1010)

PAINTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Painter - Brush & Roller - First Year

Effective Period: 7/1/2016 - 4/30/2017

Wage Rate per Hour: \$17.00

Supplemental Benefit Rate per Hour: \$12.38

Effective Period: 5/1/2017 - 6/30/2017

Wage Rate per Hour: \$17.64

Supplemental Benefit Rate per Hour: \$12.78

Painter - Brush & Roller - Second Year

Effective Period: 7/1/2016 - 4/30/2017

Wage Rate per Hour: \$21.25

Supplemental Benefit Rate per Hour: \$16.23

Effective Period: 5/1/2017 - 6/30/2017

Wage Rate per Hour: \$22.05

Supplemental Benefit Rate per Hour: \$16.63

Painter - Brush & Roller - Third Year

Effective Period: 7/1/2016 - 4/30/2017

Wage Rate per Hour: \$25.50

Supplemental Benefit Rate per Hour: \$19.14

Effective Period: 5/1/2017 - 6/30/2017

Wage Rate per Hour: \$26.46

Supplemental Benefit Rate per Hour: \$19.54

Painter - Brush & Roller - Fourth Year

Effective Period: 7/1/2016 - 4/30/2017

Wage Rate per Hour: \$34.00

Supplemental Benefit Rate per Hour: \$24.52

Effective Period: 5/1/2017 - 6/30/2017

Wage Rate per Hour: \$35.28

Supplemental Benefit Rate per Hour: \$24.92

(District Council of Painters)

PAINTER - METAL POLISHER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Metal Polisher (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$11.75

Supplemental Benefit Rate per Hour: \$5.13

Metal Polisher (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$13.00

Supplemental Benefit Rate per Hour: \$5.13

Metal Polisher (Third Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$15.75

Supplemental Benefit Rate per Hour: \$5.13

(Local 8A-28)

PAINTER - STRUCTURAL STEEL

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Painters - Structural Steel (First Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Painters - Structural Steel (Second Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Painters - Structural Steel (Third Year)

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #806)

PLASTERER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Plasterer - First Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$15.91

Plasterer - First Year: 2nd Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$16.39

Plasterer - Second Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$18.36

Plasterer - Second Year: 2nd Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$19.44

Plasterer - Third Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$21.61

Plasterer - Third Year: 2nd Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$22.69

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(Local #530)

PLASTERER - TENDER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Plasterer Tender - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$21.39

Supplemental Benefit Rate per Hour: \$19.10

· Plasterer Tender - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$22.54

Supplemental Benefit Rate per Hour: \$19.10

Plasterer Tender - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$24.29

Supplemental Benefit Rate per Hour: \$19.15

Plasterer Tender - Fourth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$26.95

Supplemental Benefit Rate per Hour: \$19.15

(Local #79)

PLUMBER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Plumber - First Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

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Wage Rate per Hour: \$14.00

Supplemental Benefit Rate per Hour: \$0.71

Plumber - First Year: 2nd Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$14.00

Supplemental Benefit Rate per Hour: \$2.96

Plumber - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$24.07

Supplemental Benefit Rate per Hour: \$13.21

Plumber - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$26.17

Supplemental Benefit Rate per Hour: \$13.21

Plumber - Fourth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$29.02

Supplemental Benefit Rate per Hour: \$13.21

Plumber - Fifth Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$30.42

Supplemental Benefit Rate per Hour: \$13.21

Plumber - Fifth Year: 2nd Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$42.49

Supplemental Benefit Rate per Hour: \$13.21

(Plumbers Local #1)

POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER

(Exterior Building Renovation)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$26.52

Supplemental Benefit Rate per Hour: \$12.10

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$27.89

Supplemental Benefit Rate per Hour: \$16.75

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$33.98

Supplemental Benefit Rate per Hour: \$19.50

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Fourth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$40.80

Supplemental Benefit Rate per Hour: \$20.35

(Bricklayer District Council)

ROOFER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Roofer - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 35% of Journeyperson's Rate

Roofer - Second Year

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Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's Rate

Roofer - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's Rate

Roofer - Fourth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's Rate

(Local #8)

SHEET METAL WORKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Sheet Metal Worker (0-6 Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 25% of Journeyperson's rate

Supplemental Rate Per Hour: \$6.35

Sheet Metal Worker (7-18 Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 35% of Journeyperson's rate

Supplemental Rate Per Hour: \$17.12

Sheet Metal Worker (19-30 Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$23.54

Sheet Metal Worker (31-36 Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$27.70

Sheet Metal Worker (37-42 Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$29.11

Sheet Metal Worker (43-48 Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$33.96

Sheet Metal Worker (49-54 Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$36.07

Sheet Metal Worker (55-60 Months)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$38.15

(Local #28)

SIGN ERECTOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Sign Erector - First Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 35% of Journeyperson's rate

Supplemental Rate Per Hour: \$13.95

Sign Erector - First Year: 2nd Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$15.83

Sign Erector - Second Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$17.72

<u> Sign Erector - Second Year: 2nd Six Months</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$19.60

Sign Erector - Third Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$26.23

Sign Erector - Third Year: 2nd Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$28.24

Sign Erector - Fourth Year: 1st Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Rate Per Hour: \$30.98

Sign Erector - Fourth Year: 2nd Six Months

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$33.06

Sign Erector - Fifth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$35,15

Sign Erector - Sixth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$37.22

(Local #137)

STEAMFITTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

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Steamfitter - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

Steamfitter - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.

<u> Steamfitter - Third Year</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate and Supplemental Rate per Hour: 65% of Journeyperson's rate.

Steamfitter - Fourth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate and Supplemental Rate Per Hour: 80% of Journeyperson's rate.

Steamfitter - Fifth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate and Supplemental Rate Per Hour: 85% of Journeyperson's rate.

(Local #638)

STONE MASON - SETTER

(Ratio Apprentice of Journeyperson: 1 to 1, 1 to 2)

Stone Mason - Setters - First 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

<u> Stone Mason - Setters - Second 750 Hours</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Third 750 Hours

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Effective Period: 7/1/2016 - 6/30/2017

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: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Fifth 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 90% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Sixth 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 100% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

(Bricklayers District Council)

TAPER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Drywall Taper - First Year

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Drywall Taper - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Drywall Taper - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #1974)

TILE LAYER - SETTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Tile Layer - Setter - First 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Tile Layer - Setter - Second 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

Tile Layer - Setter - Third 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

Tile Layer - Setter - Fourth 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

<u> Tile Layer - Setter - Fifth 750 Hours</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

Tile Layer - Setter - Sixth 750 Hours

Effective Period: 7/1/2016 - 6/30/2017

Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

(Local #7)

TIMBERPERSON

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

<u> Timberperson - First Year</u>

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$32.33

Timberperson - Second Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$32.33

Timberperson - Third Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Rate Per Hour: \$32.33

Timberperson - Fourth Year

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$32.33

(Local #1536)

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.

This schedule is a compilation of separate determinations of the prevailing rate of wage and supplements made by the Comptroller for each trade classification listed herein pursuant to New York City Administrative Code section 6-109. The source of the wage and supplement rates, whether a collective bargaining agreement, survey data or other, is listed at the end of each classification.

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. Schedules for future one-year periods will be published annually in the City Record on or about July 1st of each succeeding year and on our web site 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.

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 <u>not</u> 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 that 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

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BUILDING CLEANER AND MAINTAINER (OFFICE)

For the above building service classification, see the Labor Law Section 230 Schedule.								
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BUILDING CLEANER AND MAINTAINER (RESIDENTIAL)

For the above building service classification, see the Labor Law Section 230 Schedule.

CLEANER (PARKING GARAGE)

For the above building service classification, see the Labor Law Section 230 Schedule.

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

FOOD SERVICE EMPLOYEES

Cook

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$16.81

Supplemental Benefit Rate per Hour: \$1.75

Cafeteria Attendant

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$12.81

Supplemental Benefit Rate per Hour: \$1.75

Counter Attendant

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$12,24

Supplemental Benefit Rate per Hour: \$1.75

Kitchen Helper / Dishwasher

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$11.94

Supplemental Benefit Rate per Hour: \$1.75

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)

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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

HOMECARE 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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

LANDSCAPING AND GROUNDSKEEPING WORKER

For the above building service classification, see the Labor Law Section 230 Schedule.

SECURITY GUARD (ARMED)

For the above building service classification, see the Labor Law Section 230 Schedule.

SECURITY GUARD (UNARMED)

For the above building service classification, see the Labor Law Section 230 Schedule.

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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: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

TEMPORARY OFFICE SERVICES

Administrative Assistant

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$34.97

Supplemental Benefit Rate per Hour: None

Cashier

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$11.50

Supplemental Benefit Rate per Hour: None

Clerk (various)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$16.07

Supplemental Benefit Rate per Hour: None

Computer Assistant

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$19.07

Supplemental Benefit Rate per Hour: None

Data Entry Operator

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$16.70

Supplemental Benefit Rate per Hour: None

Receptionist

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$15.78

Supplemental Benefit Rate per Hour: None

Secretary (various)

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$20.22

Supplemental Benefit Rate per Hour: None

Word Processor

Effective Period: 7/1/2016 - 6/30/2017

Wage Rate per Hour: \$20.32

Supplemental Benefit Rate per Hour: None

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 or NYC Administrative Code §6-109)

WINDOW CLEANER

For the above building service classification, see the Labor Law Section 230 Schedule.



THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER 1 CENTRE STREET ROOM 1120 NEW YORK, N.Y. 10007-2341

TELEPHONE: (212) 669-36. FAX NUMBER: (212) 669-84

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 j



INFRASTRUCTURE DIVISION BUREAU OF DESIGN

VOLUME 2 OF 3

,	Contractor
Dated	, 20
APPROVED AS TO FORM CERTIFIED AS TO LEGAL AUTHORITY	
	Acting Corporation Counsel
Dated	



INFRASTRUCTURE DIVISION BUREAU OF DESIGN

VOLUME 2 OF 3

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

Together with the Construction of BMPS and All Work Incidental Thereto BOROUGH OF BROOKLYN CITY OF NEW YORK

Inter Contracting Corp.	
	Contractor
Dated June 15	<u>, 20/7</u>
APPROVED AS TO FORM CERTIFIED AS TO ZEGAL AUTHORITY	
	Acting Corporation Counsel
C	20/7

Rt 1/20/17



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 www1.nyc.gov/site/ddc/index.page

VOLUME'3 OF 3

SCHEDULE A SPECIFICATIONS AND REVISIONS TO STANDARD SPECIFICATIONS

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

Together with the Construction of BMPS and All Work Incidental Thereto
BOROUGH OF BROOKLYN
CITY OF NEW YORK

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN

DECEMBER 15, 2016



VOLUME 3 OF 3

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SECTION	<u>DESCRIPTION</u>	<u>PAGES</u>
SPECIFICATIONS	S AND STANDARDS OF NEW YORK CITY	1 OF 2 AND 2 OF 2
SCHEDULE A	GENERAL CONDITIONS TO CONSTRUCTION CONTRACT	SA-1 to SA-11
R - PAGES	REVISIONS TO STANDARD SPECIFICATIONS	R-1 to R-60
SW - PAGES	SEWER AND WATER MAIN SPECIFICATIONS	SW-1 to SW-16
EP7 – PAGES	GAS COST SHARING (EP-7) STANDARD SPECIFICATIONS	EP7-1 to EP7-28G
HAZ – PAGES	SPECIFICATIONS FOR HANDLING TRANSPORTA AND DISPOSAL OF NONHAZARDOUS AND POTE AZARDOUS CONTAMINATED MATERIALS	
UI - PAGES	SECTION UI	UI-1 to UI-71

(NO TEXT ON THIS PAGE)

SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following New York City Department of Transportation (NYCDOT) reference documents are available on-line at:

http://www1.nyc.gov/site/ddc/resources/publications.page 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 Valdez, Tel. (212) 839-9434

- 1. NYCDOT Standard Highway Specifications, August 1, 2015
- 2. NYCDOT Standard Highway Details of Construction, July 1, 2010
- 3. NYCDOT Division of Street Lighting Specifications
- 4. NYCDOT Division of Street Lighting Standard Drawings
- 5. NYCDOT Standard Specifications for Traffic Signals
- 6. NYCDOT Standard Drawings for Traffic Signals

The following reference documents for New York City Department of Environmental Protection (NYCDEP) are available on-line at: http://www1.nyc.gov/site/ddc/resources/publications.page 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. Nader Soliman, Tel. (718) 391-1179

- 1. NYCDEP Standard Sewer and Water Main Specifications, July 1, 2014
- 2. NYCDEP Instructions for Concrete Specifications, Jan. 92
- 3. NYCDEP General Specification 11-Concrete, November 1991
- 4. NYCDEP Sewer Design Standards, (September 2007) Revised January 2009

The following reference documents for New York City Department of Environmental Protection (NYCDEP) are available on-line at: http://www1.nyc.gov/site/ddc/resources/publications.page 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. NYCDEP Water Main Standard Drawings, November 2010
- 2. Specifications for Trunk Main Work, July 2014
- 3. Standard Design and Guidelines for Green Infrastructure Practices, latest version, available only on-line at:

 http://www.nyc.gov/html/dep/html/stormwater/green_infrastructure_sta_ndards.shtml

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 New York City Fire Department Communications facilities of New York City are available from the FDNY Facilities Management Bureau, Plant Operations Engineering, 316 Sgt. Beers Avenue Cluster 1 Box 16, Fort Totten, N.Y. 11359.
Contact: Mr. Ed Durkin, Tel. (718) 281-3933

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

SCHEDULE A

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT (INCLUDING GENERAL CONDITIONS RELATED TO ARTICLE 22 – INSURANCE) PART I. REQUIRED INFORMATION

	······································
INFORMATION FOR BIDDERS SECTION 26 BID SECURITY	Required provided the TOTAL BID PRICE set forth on the Bid Form is \$1,000,000. or more.
The Contractor shall obtain a bid security in the amount indicated to the right.	Certified Check: 2% of Bid Amount or Bond: 10% of Bid Amount
INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS	Required for contracts in the amount of \$1,000,000 or more.
The Contractor shall obtain performance and payment bonds in the amount indicated to the right.	Performance Security and Payment Security shall each be in an amount equal to 100% of the Contract Price.
INFORMATION FOR BIDDERS DEPARTMENT OF DESIGN AND CONSTRUCTION SAFETY REQUIREMENTS	■ Project Safety Representative
The Contractor shall provide the safety personnel as indicated to the right.	☐ Dedicated, full-time Project Safety Manager
CONTRACT ARTICLE 14 DATE FOR SUBSTANTIAL COMPLETION	
The Contractor shall substantially complete the Work in the number of calendar days indicated to the right.	See Page SA-4
CONTRACT ARTICLE 15 LIQUIDATED DAMAGES	
If the Contractor fails to substantially complete the Work within the time fixed for substantial completion plus authorized time extensions or if the Contractor, in the sole determination of the Commissioner, has abandoned the Work, the Contractor shall pay to the City the amount indicated to the right.	\$7000.00. for each consecutive calendar day over substantial completion time
CONTRACT ARTICLE 17. SUB-CONTRACTOR The Contractor shall not make subcontracts totaling an amount more than the percentage of the total Contract price indicated to the right.	Not to exceed 35% of the Contract price

CONTRACT ARTICLE 21.	
<u>RETAINAGE</u>	m o/ - 6 11
The Commissioner shall deduct and retain until	5 % of the value of the Work
the substantial completion of the Work the percent	
value of the Work indicated to the right.	
CONTRACT ARTICLE 22.	See pages SA-5 through SA-12
(Per Directions Below)	
CONTRACT ARTICLE 24.	
DEPOSIT GUARANTEE	
A 16 Fourth - Southful monformannes of its	
As security for the faithful performance of its	1% of Contract price
obligations, the Contractor, upon filing its	1.70 01 0011111101
requisition for payment on Substantial	
Completion, shall deposit with the Commissioner	
a sum equal to the percentage of the Contract	
price indicated to the right.	
CONTRACT ARTICLE 24.	Eighteen (18) Months, excluding
PERIOD OF GUARANTEE	Trees
Davis do of maintanance and avarantee other than	
Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to	Twenty-four (24) Months for Tree
•	Planting
the right. CONTRACT ARTICLE 74.	
STATEMENT OF WORK	
STATEMENT OF WORK	
The Contractor shall furnish all labor and	Addenda, numbered:1,2,3,4,5,6 and 7
materials and perform all Work in strict	
accordance with the Contract Drawings,	
Specifications, and all Addenda thereto, as	
shown in the column to the right.	
CONTRACT ARTICLE 75.	
COMPENSATION TO BE PAID TO CONTRACTOR	Amount for which the Contract was
	Amount for which the contract was Awarded:
The City shall pay and the Contractor shall accept	
in full consideration for the performance of the	Thirty-Six Million, Seven Hundred Eighty-Ind Sweet Cen Eight Hundred Thirty-one Ochars and Bollars (\$376, 782, 831. 70
Contract, subject to additions and deductions as	ווויון אוכין אוויוויו אוכין וישויון אוכין אווייון אוכין אוויין אוכין אוויין אוכין אוויין אוכין אוויין אוכין אוויין אוכין אוויין אונין אוויין אונין אוויין אוויין אוויין אוויין אוויין אוויין אוויין אוויין אוויין אווייין אווייין אווייין אוויין אוויין אוויין אווייין אווייין אווייין אווייין אווייין אווייין אווייין אווייין אייין אוויייין אווייין איייין אווייין אווייין אווייין אווייין איייין אוויייין אווייין איייין אווייין איייין איייין אווייין איייין אווייין אווייין איייין איייין אייייין אייייין איייייין איייייין אייייין איייייין אייייייין איייייין איייייייי
provided herein, the total sum shown in the	Fill II what This was the large and Dollars
column to the right, being the amount at which	615hr Honorea Mirty-ville bondes 444 20 mare
the Contract was awarded to the Contractor at a	10 24 782 631, 70
public letting thereof, based upon the Contractor's	(W_) (W_)
bid for the Contract.	
CONTRACT ARTICLE 79.	
PARTICIPATION BY MINORITY-OWNED AND	See M/WBE Utilization Plan in the Bid
WOMEN-OWNED BUSINESS ENTERPRISES IN CITY	Booklet
PROCUREMENT	

STANDARD HIGHWAY SPECIFICATIONS SECTION 6.40 LIQUIDATED DAMAGES FOR ENGINEER'S FIELD OFFICE

If the Contractor fails to satisfactorily provide the field office and all equipment specified in **Section 6.40 - Engineer's Field Office**, and/or if a cited deficiency exceed seventy two (72) hours after notice from the Engineer in writing, or is permitted to recur, liquidated damages will be assessed in the amount specified herein for each subsequent calendar day or part thereof that a cited deficiency resulting in nonpayment, as described in **Section 6.40.5**, is not corrected.

\$ <u>250.00</u> for each calendar day of deficiency

STANDARD HIGHWAY SPECIFICATIONS SECTION 6.70 LIQUIDATED DAMAGES FOR MAINTENANCE AND PROTECTION OF TRAFFIC

\$ 250.00 for each instance of failure to comply with the Maintenance and Protection of Traffic requirements within three (3) hours after written notice from the Engineer.

\$ 500.00 for each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation.

STANDARD HIGHWAY SPECIFICATIONS SECTION 7.13 LIQUIDATED DAMAGES FOR MAINTENANCE OF SITE

If the Contractor fails to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of **Section 7.13** - **Maintenance of Site**, the Contractor shall pay to the City of New York, until such notice has been complied with or rescinded, the sum specified above per calendar day, for each instance of such failure, as liquidated damages and not as a penalty, for such default.

\$ 250.00 for each calendar day, for each occurrence

Date for Substantial Completion (Reference: Article 14)

The Contractor shall substantially complete the Work within the Final Contract Duration determined in accordance with the terms and conditions set forth herein.

The Base Contract Duration for this project is ________ tonsecutive 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 of the Work during the winter months. The date of scheduled substantial completion shall be determined by adding the Base Contract Duration to the date specified to commence work in the written Notice to Proceed. The Final Contract Duration shall then be determined as follows:

(a) Find the row that corresponds to the month of substantial completion based on the Base Contract Duration added to the date specified to commence work in the written Notice to Proceed.

(b) Find the number of days to be added to the Base Contract Duration in the table below. Add that number of days to the Base Contract Duration to obtain the Final Contract Duration in consecutive calendar days.

Month of Substantial Completion based on the Base Contract Duration	Number of Days of adjustment
January	150
February	120
March	90
April	60
May	30
June	0
July	0
August	0
September	0
October	0
November –December 15	0
December 16 – December 31	180

In addition, should Item No. 9.30, "Storm Water Pollution Prevention," exist in the Contract and the required Storm Water Pollution Prevention Plan (SWPPP) does not conform to NYSDEC's recommended Standards, an additional 60 ccd shall be added to the above Final Contract Duration.

(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS

<u>Note</u>: All certificate(s) of insurance submitted pursuant to Contract Article 22.3.3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;
- Policy limits consistent with the requirements listed below;
- Additional insureds or loss payees consistent with the requirements listed below;
 and
- The number assigned to the Contract by the City (in the "Description of Operations" field).

Insurance indicated by a blackened box (■) or by X in a □ to left will be required under this contract

	TYPES OF INSURANCE (per Article 22 in its entirety, including listed paragraph)	MINIMUM LIMITS AND SPECIAL CONDITIONS
	paragraph) Commercial General Liability Art. 22.1.1	The minimum limits shall be \$3,000,000 per Occurrence and \$6,000,000 per Project Aggregate applicable to this Contract. Additional Insureds: (1) City of New York, including its officials and employees, with coverage at least as broad as ISO Form CG 20 10 and CG 20 37. (2) All person(s) or organization(s), if any, that Article 22.1.1(b) of the Contract requires to be named as Additional Insured(s), with coverage at least as broad as ISO Form CG 20 26. The Additional Insured endorsement shall either specify the entity's name, if known, or the entity's title (e.g., Project Manager). (3) The 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 st Floor, New York, NY 10004, of any material change and/or cancellation. (4) National Grid

■ Workers' Compensation Art. 22.1.2
 ■ Disability Benefits Insurance Art. 22.1.2
 ■ Employers' Liability Art. 22.1.2
 □ Jones Act Art. 22.1.3
 □ U.S. Longshoremen's and Harbor Workers Compensation Act Art. 22.1.3

Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction.

Note: The following forms are acceptable: (1) New York State Workers' Compensation Board Form No. C-105.2, (2) State Insurance Fund Form No. U-26.3, (3) New York State Workers' Compensation Board Form No. DB-120.1 and (4) Request for WC/DB Exemption Form No. CE-200. The City will not accept an ACORD form as proof of Workers' Compensation or Disability Insurance.

Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. Law.

■ Additional Requirements:

- (1) NYCTA "OUTSIDE CONTRACT" INSURANCE REQUIREMENTS: Workers' Compensation Insurance (including Employer's Liability Insurance) with limits of not less than \$2,000,000, which limit may be met by a combination of primary and excess insurance meeting the statutory limits of New York State.
- (2) 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, 21st Floor, New York, NY 10004

	☐ Required: 100% of total bid amount
	☐ Required: 100 % of total bid amount for Item(s):
☐ Builders' Risk Art. 22.1.4	Contractor the Named Insured; the City both an Additional Insured and one of the loss payees as its interests may appear.
	If the Work does not involve construction of a new building or gut renovation work, the Contractor may provide an installation floater in lieu of Builders Risk insurance.
	Note: Builders Risk Insurance may terminate upon Substantial Completion of the Work in its entirety.
	\$ 2,000,000 per accident combined single limit
	If vehicles are used for transporting hazardous materials, the Contractor shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90
	Additional Insureds:
■ Commercial Auto Liability Art. 22.1.5	(1) City of New York, including its officials and employees.
	(2) 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.
	(3)

	\$ <u>5,000,000</u> per occurrence \$ <u>5,000,000</u> aggregate
□Contractors Pollution Liability Art. 22.1.6	Additional Insureds: 1. City of New York, including its officials and employees, and 2
☐ Marine Protection and Indemnity Art. 22.1.7(a)	\$each occurrence \$aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. 3.
	\$per occurrence \$aggregate
☐ Hull and Machinery Insurance Art. 22.1.7(b)	Additional Insureds: 1. City of New York, including its officials and employees, and 2.
	3.
	\$ 1,000,000 per occurrence \$ 1,000,000 aggregate Additional Insureds:
☐ Marine Pollution Liability Art. 22.1.7	1. City of New York, including its officials and employees, and 2. 3.

[OTHER]

Art. 22.1.8

Railroad Protection Liability Policy

(ISO-RIMA or equivalent form) approved by Permittor covering the work to be performed at the designated site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured's own property and conforming to the following:

- Policy Endorsement CG 28 31 Pollution Exclusion Amendment is required to be endorsed onto the policy when environmental-related work and/or exposures exist.
- Indicate the Name and address of the Contractor to perform the work, the Contract # and the name of the railroad property where the work is being performed and the Agency Permit.
- Evidence of Railroad Protective Liability Insurance, must be provided in the form of the Original Policy. A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within 30 days of the Binder Approval.

\$ <u>2,000,000</u> per occurrence

\$ <u>6,000,000</u> annual aggregate

Named Insureds:

- 1. New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), the Staten Island Rapid Transit Operation Authority (SIRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner) and all other indemnified parties.
- 2. The AMTRAK, its subsidiaries and affiliated companies.

[OTHER]

Art. 22.1.8

■ Professional Liability

- A. The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of \$1,000,000 per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Contract arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor's Professional Engineer or anyone employed by the Contractor's Professional Engineer.
- B. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor's Professional Engineer shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.

[OTHER]	Art. 22.1.8	Fire insurance, extended coverage and
■ Engineer's Field Office	vandalism, ma burglary, and t	vandalism, malicious mischief and burglary, and theft insurance coverage in
Section 6.40, Standard Highway Specifications		the amount of \$40,000
[OTHER]	Art. 22.1.8	
☐ The Following Additional Insurance	. •	
Liability Insurance in the minimum a \$10,000,000 in Aggregate. The polities the underlying policies. The underly as outlined by the contract. Defense	imount of \$10 icy terms and ving policies sl e cost should	condition should be at least as broad as hould comply with the insurance provision be in addition to the limit of liability. The
City of New York, including its official	• •	yees, should be included as additional

SCHEDULE A (GENERAL CONDITIONS TO CONSTRUCTION CONTRACT) (GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART III. CERTIFICATES OF INSURANCE

All certificates of insurance (except certificates of insurance solely evidencing Workers' Compensation Insurance, Employer's Liability Insurance, and/or Disability Benefits Insurance) must be accompanied by one of the following:

(1) the Certification by Insurance Broker or Agent on the following page setting forth the required information and signatures;

-- OR --

(2) copies of all policies as certified by an authorized representative of the issuing insurance carrier that are referenced in such certificate of insurance. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

CITY OF NEW YORK <u>CERTIFICATION BY INSURANCE BROKER OR AGENT</u>

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

	[Name of broker or agent (typewritten)]	
	[Address of broker or agent (typewritten)]	
	[Email address of broker or agent (typewritten)]	
	[Phone number/Fax number of broker or agent (t	ypewritten)]
		·
•	[Signature of authorized official, broker, or agent]	
•		
	[Name and title of authorized official, broker, or a	gent (typewritten)]
State of		
County of) ss.:)	
Swom to before	e me this day of , 20	
	day 01, 20	
NOTARY PUBLI	IC FOR THE STATE OF	

SCHEDULE A

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)

PART IV. ADDRESS OF COMMISSIONER

Wherever reference is made in Article 7 or Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents 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 Dire	ector, Insurance Risk Manage	<u>jer</u>
30 – 30	Thomson Avenue, 4th Floor ((IDCNY Building)
Long Isla	and City, NY 11101	

(NO FURTHER TEXT ON THIS PAGE)

NO TEXT THIS PAGE

R - PAGES

REVISIONS TO STANDARD SPECIFICATIONS

NOTICE

The Specification Bulletin(s) ("SB(s)") contained in this Section (R-Pages) may consist of revisions to the following Standard Specifications:

- New York City Department of Transportation ("NYC DOT") Standard Highway Specifications, dated 8/1/2015;
- New York City Department of Environmental Protection ("NYC DEP") Standard Sewer and Water Main Specifications, dated 7/1/2014; and
- NYC DEP Specifications for Trunk Main Work, dated 7/2014.

The SB(s) modify and supersede portions of the applicable Standard Specifications. The provisions contained in this Contract's I-Pages, S-Pages and SW-Pages may further modify the applicable Standard Specifications.

The following SB(s) are included as part of this contract:

- SB 16-001 REVISIONS TO THE NYC DOT STANDARD HIGHWAY SPECIFICATIONS.
- SB 16-002 REVISIONS TO THE NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS.
- SB 17-001 UV CURED-IN-PLACE-PIPE (CIPP) LINING METHOD
- SB 17-002 RODENT AND WATERBUG PEST CONTROL
- SB 17-003 ENGINEERS FIELD OFFICE
- SB 17-004 FIRE DEPARTMENT FACILITIES
- SB 17-005 DIGITAL PHOTOGRAPHS
- SB 17-006 -- RECORDS OF SUBSURFACE STRUCTURES

(NO TEXT ON THIS PAGE)



SPECIFICATION BULLETIN

SB

16-001

		10-001
Title: REVISIONS TO NYC	DOT STANDA	RD HIGHWAY SPECIFICATIONS
Prepared:	6/29/2016	Approved: 6/29/2016
Richard Jones, P.E. CWI Date Director, Specifications – Infrastructure Design		Mohsen Zargarelahi, P.E. Date Assistant Commissioner – Infrastructure Design

APPLICABILITY:

This Specification Bulletin (SB) is effective for projects advertised on or after 7/11/16.

SUPERSEDENCE:

This SB supersedes the following SBs: NONE

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- a) Refer to Page 3, Subsection 1.06.3; Delete the third paragraph;
 - Substitute the following new paragraph:

"Any doubt as to the meaning of this contract or the specifications thereof, or any obscurity as to the wording of them, or any discrepancy between them, or any discrepancy between figures and drawings will be explained by the Engineer."

- b) Refer to Page 5, Subsection 1.06.8;

 Delete the words "tentative" wherever it occurs in the last paragraph.
- c) Refer to Page 17, Subsection 1.06.23.(G), last paragraph;

 Delete the word "asbestos" wherever it occurs.
- d) Refer to Page 26, Subsection 1.06.29, line number four (4);

 Delete the words and punctuation mark ", and at the prices fixed herein" in its entirety.



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Title: REVISIONS TO NYC DOT STANDARD HIGHWAY SPECIFICATIONS

e) Refer to Page 41 Subsection 1.06.48.(C), 2nd paragraph, 1st line;

Delete from the first line starting from "have maximum grade of one (1) vertical on three (3) horizontal", in its entirety;

Substitute the following:

"have a maximum grade of one (1) vertical on twelve (12) horizontal, for pedestrian ramp and one (1) vertical on six (6) horizontal, for driveway ramp".

- f) Refer to Page 87, Subsection 2.18.3(A), 4th paragraph;
 Change "." to "," after "... and Appeals";
 Add the following words: "and the health standards of OSHA of the U.S. Department of Labor."
- g) Refer to Page 104, Subsection 3.01.3.(C).1.(c), 4th paragraph: Delete the words "to a maximum of 70%"
- h) Refer to Page 120, Subsection 3.05.5.(A), 2nd Table 3.05-V;

 Delete the sentence: "Concrete of Type IA, IIA and IIIA shall have an air entrainment of 4 to 7 percent when the coarse aggregate is 1 1/2" stone and 5 to 7 percent when the coarse aggregate is 3/4" stone, with 6.5 percent desired in either case."

Substitute the following:

"Concrete of classes shown in Table 3.05-II shall have an air entrainment of 4 to 7 percent for size 357 coarse aggregate and 5 to 7 percent for size 67 or 57 aggregate, with 6.5 percent desired in either case. If concrete is pumped, air entrainment shall be measured after the pump."

- i) Refer to Page 135, Subsection 3.05.9, 4th paragraph;
 Add the following words to the end of the 4th paragraph: "Dosing of accelerators and retarders shall be per the manufacturer's published recommendations.

 Addition of an accelerator or retarder per this subsection will not require a separate mix design, unless requested by the Engineer."
- j) Refer to Page 192, Subsection 4.06.12;

 Delete the Subsection 4.06.12, in its entirety and substitute the words "4.06.12. (NO TEXT)." The use of rubble aggregate will not be permitted.
- k) Refer to Page 282, Subsection 5.02.2.(C), 2nd paragraph;
 Add the following words: "6 in x 12 in" after "At least four (4)"



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Refer to Page 282, Subsection 5.02.2.(C), 2nd paragraph;

Delete the sentence: "Curing boxes shall be furnished in good operating condition, capable of maintaining cylinders under water at a curing temperature of 72°F. ±5°F."

Substitute the following:

"Curing boxes meeting the requirements of ASTM C31 and C511 shall be furnished in good operating condition, and shall maintain cylinders under water at a curing temperature of 73.5°F ±3.5°F. Curing boxes with rusted or corroded interior surfaces shall not be used."

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:

No Changes.

(NO TEXT THIS PAGE)



SPECIFICATION BULLETIN

SB

16-002

Title:	REVISIONS TO THE NYC DEP STANI	DARD SEWER AND	WATER MAIN
	SPECIFICATIONS		

Prepared:

10/11/2016

Richard Jones, P.E. CWI

Date

Director, Specifications – Infrastructure Design

Approved:

/ 10/11/2016

Mohsen Zargarelahi, P.E.

Date

Assistant Commissioner – Infrastructure Design

APPLICABILITY:

This Specification Bulletin (SB) is effective for projects advertised on or after 11/14/16.

SUPERSEDENCE:

This SB supersedes the following SBs: NONE

ATTACHMENTS:

- ATTACHMENT 1: Revised Section 40.05 SHEETING AND BRACING Pages A1-1 through A1-7
- ATTACHMENT 2: Revised Section 70.91 SHEETING Pages A2-1 through A2-3

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF ENVIROMENTAL PROTECTION STANDARD SEWER AND WATER MAIN SPECIFICATIONS, DATED 7/1/14:

All references contained below are to the New York City Department of Environmental Protection Standard Sewer and Water Main Specifications, Dated July 1, 2014. Said Standard Sewer and Water Main Specifications are hereby revised as follows:

- a) Refer to Page III-6, Subsection 30.03.1;
 Add the text ", C780 Annex 6" to line (2) after the words "C109".
- b) Refer to Pages IV-12 through IV-18, Section 40.05 SHEETING AND BRACING;
 Delete in its entirety the Section;
 Substitute the revised Section in Attachment 1 (7 pages).
- Refer to Page V-60, Subsection 50.72.5.(A);
 Delete in its entirety the Subsection;
 Substitute the revised Subsection:



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Title: REVISIONS TO THE NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS

- "(A) Cement shall be either Type V cement meeting the requirements of ASTM C150 or blended cement containing 8% microsilica that meets the requirements of NYS Department of Transportation Standard Specification 701-03, Type IP (8)".
- d) Refer to Page V-65, Subsection 50.72.7.(N);

 Delete the second sentence "The test cubes shall be 4"x4"x4"."
- e) Refer to Page V-66, Subsection 50.72.7.(N);

Delete the text:

Test cubes will be made and stored in accordance with ASTM C31 and tested in accordance with ASTM C39, except as otherwise modified by the Engineer. Each test will consist of three (3) cubes; one (1) to be tested at seven (7) days, the other two (2) at twenty-eight (28) days.

Substitute the revised text:

"Test cores will be made, cured, and tested in accordance with ASTM C42, except as otherwise modified by the Engineer. Test cores will be made from a shotcrete test board, where the shotcrete thickness matches the placed thickness. Each test will consist of three (3) cores; one (1) to be tested at seven (7) days, the other two (2) at twenty-eight (28) days."

- f) Refer to Pages V-65, V-66, and V-67, Subsections 50.72.7.(N), 50.72.9, and 50.72.10; Delete the text "Test Cube" wherever it appears; Substitute the text "Test Core".
- g) Refer to Page VII-25, Subsection 70.12.5.(B).(2);
 Delete the text "and C492";
 Substitute the replacement text "or C780 Annex 6"
- h) Refer to Page VII-29, Subsection 70.13.4;
 Add the text " or C780 Annex 6" after the words "C109".
- Refer to Pages VII-48 through VII-51, Section 70.91 SHEETING;
 Delete in its entirety the Section;
 Substitute the revised Section in Attachment 2 (3 pages).

SECTION 40.05 SHEETING AND BRACING

40.05.1 SHEETING AND BRACING

- (A) The sides of the trenches and excavations shall be supported by adequate sheeting and properly braced. All sheeting and bracing systems the Contractor elects to use or are ordered by the Engineer or the Department shall comply with these specifications and must receive the approvals stated herein. Timber sheeting and bracing shall be vertical sheeting with rangers and braces or horizontal sheeting supported by vertical steel soldier beams and the necessary bracing.
- (B) Where the material to be excavated is of such character as to render it necessary, the sheeting shall be tongued and grooved and driven to such depths below the subgrade as may be directed.
- (C) Where the nature of the material encountered or the safety of the adjacent structure render it necessary, the Contractor may resort to the use of steel sheet piling with prestressed bracing or the Contractor may underpin the structure or buildings.
- (D) Other sheeting systems may be permitted upon approval of the Department of Design and Construction. (Trench Boxes will not be permitted for use in trenches and excavations that exceed twelve (12) feet in depth. (See **Subsection 40.05.4(E)**.))
- (E) In general, sheeting and bracing in trenches and excavations shall be designed and installed so that the sheeting shall not be braced or blocked against any part of the new structure, or manholes, or chambers. When conditions warrant, bracing against such structures may be permitted following the approval of drawings prepared and submitted by a Professional Engineer licensed in the State of New York, showing the assumed design loads and stresses, and details of such bracing.
- (F) If, in the opinion of the Engineer, any of the approved temporary or permanent supporting structures are inadequate or unsuitable for the actual conditions in the field, the Engineer may direct the Contractor to strengthen the supporting structures at no additional cost to the City. The Contractor shall be responsible for the sufficiency of all temporary and permanent supporting structures whether or not directed by the Engineer to strengthen them.
- (G) Unless otherwise specified in the plans or these specifications, the Contractor shall remove all sheeting and bracing throughout this project as per **Subsection 40.05.7**.

40.05.2 SHEETING LEFT IN PLACE

When sheeting is specifically shown on the plans or specifically described in the specifications or specifically ordered in writing by the Engineer to be left in place, it refers to all sheeting and bracing in trench excavations for water main pipe and sewer conduit including manholes, valves and chambers. Excavations for catch basins, basin connections, house services and other excavations not considered part of the trench excavation for water main pipe and sewer conduit shall have their sheeting and bracing removed entirely.

When sheeting is to be left in place, all elements such as rangers and braces, of the sheeting used, must be left in place, except for such temporary braces that require removal in order to make way for the structure. Where it is necessary to remove such temporary braces, the sheeting shall be rebraced in a manner approved by the Engineer; however, in no case shall the sheeting be braced against the side of the structure unless approved in writing by the Engineer. Where lagging and soldier beams are used, the soldier beams and all the rangers and braces shall also be left in place. Where steel sheeting is used, the rangers and braces shall also be left in place.

When sheeting is to be left in place, the Contractor shall cut sheeting at the elevations ordered in writing by the Engineer; however, in general such cutoffs shall not be less than four (4) feet below the final

grade. Timber sheeting shall be cut off by sawing. Steel sheeting or soldier beams shall be cut off by burning. Breaking off of sheeting will not be permitted. The Contractor shall remove from the trench and away from the site of work, to the Contractor's own place of disposal, all cut sheeting and soldier beams together with all rangers, lagging and braces above the ordered elevation of cut. Where the removal of rangers and braces above the ordered elevation of cut is determined by the Engineer to render the sheeting system unstable, rangers and braces shall be placed prior to cutting at a level below the ordered elevation of cut and left in place.

(A) FOR SHEETING OF WATER MAIN TRENCHES AND EXCAVATIONS

Additional payment will be made for sheeting and bracing that is specifically shown on the plans or specifically described in the specifications or ordered in writing by the Engineer, to be left in place in water main trenches and excavations. Payment will be made in accordance with **Section 70.91**.

(B) FOR SHEETING OF SEWER TRENCHES AND EXCAVATIONS

No separate or additional payment will be made for sheeting and bracing that is specifically shown on the plans or specifically described in the specifications to be left in place in sewer trenches and excavations, regardless of the type used nor for the removal from the trench and excavation and the disposal away from the job site of the cut sheeting, bracing and rangers. The cost thereof shall be included in the prices bid for all sewer contract items of work, except when separate payment for sheeting and bracing is provided, in this case the cost shall be included therein. When sheeting is specifically ordered by the Engineer, to be left in place in sewer trenches and excavations, the cost for all labor, materials, cutting, removal, disposal, insurance and work required to leave sheeting in place shall be determine in accordance with **Articles 25 and 26** of the Contract.

40.05.3 MATERIALS

- (A) Timber sheeting and bracing shall be of new or acceptable used timber free from injurious defects.
- (B) Steel soldier beams shall comply with the requirements of **Section 23.05 Structural**, **Reinforcing And Miscellaneous Steel**, except that approved used material will be permitted. Steel sheet piling shall comply with the requirements of **Section 24.01 Steel Sheeting**, except that approved used materials will be permitted. Timber and lumber for bracing, shoring, fencing, bridging, and decking shall conform to the requirements of **Section 23.06 Timber And Lumber**. Steel used for sheeting systems or for any other purposes herein shall conform to the requirements of the ASTM A36 and all other applicable requirements of ASTM.
- (C) Steel Plates for use as sheeting will be permitted provided that they are properly installed and supported. The use of steel bracing frames which partially support the steel plates will be permitted up to a depth of twelve (12) feet. The use of steel plates in conjunction with trench boxes will not be permitted (trench boxes can not be considered as steel bracing frames).
- (D) Steel Sheeting shall conform to the requirements of **Section 24.01** and shall be installed with continuous interlock.

40.05.4 CONSTRUCTION METHODS

- (A) GENERAL Timber sheeting and bracing and other sheeting systems shall be of sufficient dimensions and strength, and steel sheeting shall be of sufficient type, size and weight, to support adequately the sides of the trenches and excavations and insure the safety of adjacent structures and shall be installed in accordance with the approved sheeting details. The Contractor shall be solely responsible for the adequacy and sufficiency of all sheeting and bracing used.
- (B) SHEETING Unless otherwise specified, timber sheeting and bracing shall be driven or placed ahead of the excavation in such a manner as to prevent the loss or slippage of ground in order to

safeguard adjacent surface and subsurface structures. The sheeting shall be driven to adequate depth below subgrade. As the work progresses, any voids back of the sheeting shall be filled and compacted in accordance with **Section 40.06** and as directed by the Engineer.

- (C) Sheeting can be used as forms for concrete work. Whenever sheeting is used as formwork as specified or approved by the Engineer only timber sheeting will be permitted unless otherwise approved or specified in writing by the Engineer. When sheeting is used as formwork, an approved protection shall be placed between the sheeting, bracing or soldier beams and the concrete. In addition, when sheeting is used as formwork for any structure or portion thereof, the thickness of that structure or portion of such structure shall be increased be three (3) inches beyond the original neat line of such structure or portion thereof. In no case shall the sheeting, soldier beams or other bracing encroach upon the original neat line of the structure. In such instances when sheeting, soldier beams or other bracing is found to encroach upon the neat line of the structure, the Engineer shall direct the Contractor to remove such sheeting, soldier beams or other braces and redrive and/or replace the sheeting, soldier beams or other braces outside the neat line of the structure. All sheeting used as formwork shall be removed.
- (D) All open cuts shall be excavated with vertical sides and properly supported with close sheeting and bracing in conformity with the requirements of **Section 40.03 Earth Excavation** and with 23 NYCRR "Protection of Persons Employed in Construction and Demolition Work" and 16 NYCRR Part 753 "Protection of Underground Facilities" of the State of New York, Department of Labor, Board of Standards and Appeals.
- (E) The Contractor is advised that trench boxes will be permitted for use as a sheeting system provided that the depth of trench does not exceed twelve (12) feet. The use of trench boxes to partially sheet trenches that are greater than twelve (12) feet in depth, will be strictly prohibited.

Should trench boxes meeting the above requirements be utilized, the trench will not have to be sheeted completely to subgrade. The trench box will be permitted to "hang up" to a maximum of two (2) feet above subgrade provided that the existing soil in the area of the subgrade can "stand up" on its own without sheeting. Should running ground be encountered or should the soil in the subgrade area begin to slough off, the Contractor will be required to extend the trench box to subgrade. The Engineer shall always maintain the right to order the Contractor to lower the trench box to subgrade as required.

No deductions will be made from any payment for not sheeting the bottom two (2) feet of trench if approved by the Engineer and no additional payment will be made should the Contractor be directed to sheet completely to subgrade.

All sheeting and bracing drawings submitted for approval which indicate trench boxes must be designed for the full depth of trench (to subgrade) and shall show the trench box extending to subgrade.

(F) SLOPED SIDES OF TRENCHES OR EXCAVATIONS - Where the Contractor requests permission not to sheet a trench or excavation, and offers to slope the sides of such trench or excavation in accordance with OSHA Regulations in lieu of such sheeting, the Contractor's request shall be reviewed by the Engineer.

If the Engineer deems such sloping to be acceptable the Engineer shall so notify the Contractor in writing.

Pavement excavation and restoration requirements shall be governed by the width of the trench measured at the bottom of the pavement foundation. Pavement excavation and restoration in excess of those required in connection with standard trench excavation, as specified, shall not be paid for.

In those cases where the Contractor does not request permission to side slope, but the Engineer determines that side sloping is in the best interests of the City, the Engineer shall order the Contractor to proceed using such side sloping. In these cases, the additional pavement excavation and restoration will be paid for at the appropriate bid unit price.

In both of the above cases it shall be presumed that side sloping a trench or excavation is done to obtain a lower cost for the work to be performed. The City shall, therefore, take an <u>appropriate</u> credit to cover the difference in overall costs resulting from the use of side sloping instead of timber sheeting.

(G) SHEETING METHODS

The following methods of sheeting trenches are acceptable:

- (a) Vertical Wood Sheeting
- (b) Steel Soldier Beams with Horizontal Wood Lagging
- (c) Interlocking Steel Sheeting
- (d) Trench Boxes for trench depths up to twelve (12) feet
- (e) Steel Soldier Beams with Steel Plates continually supported
- (f) Steel Frames with Steel Plates for trench depths up to twelve (12) feet
- (g) Krings and Icon Type Sheeting Frames and Plates

40.05.5 SHOP DRAWINGS

The Contractor will be required to submit Shop Drawings detailing the sheeting system whenever the depth of cut exceeds five (5) feet.

- (A) Before commencing any excavating operation the Contractor shall have approved drawings from the Department of Design and Construction for all types of sheeting and bracing systems, cofferdams, shoring, underpinning, bridging, decking and all other temporary or permanent supporting structures required.
- (B) The Contractor shall submit for approval five (5) copies of sheeting and bracing drawings, and other structures (i.e. decking, bridging) drawings that the Contractor proposes to use for the work.
- (C) The Contractor shall have these drawings prepared by a Licensed Professional Engineer, currently registered in the State of New York. Such drawings shall be submitted together with design calculations, references, tables and charts. Both drawings and design calculations shall bear the imprint of the Licensed Professional Engineer's seal and signature.
- (D) In designing the sheeting stated above, the Contractor's Engineer shall take note of the standard minimum load diagram requirements for Watertight and Non-Watertight sheeting structures. (See Sewer Design Standards.)
- (E) The following notes shall be required on all sheeting detail submissions:
 - (1) If the actual surcharge is in excess of three hundred thirty (330) pounds per square foot the Contractor shall adequately reinforce the sheeting and bracing as required at no additional cost to the City.
 - (2) Maximum pilot cut shall be five (5) feet.

The sheeting and bracing drawings shall also include but not be limited to the following: the density of the soil, the internal angle of friction of the soil, the stress grade and type of lumber, the allowable steel stresses and the sequence of construction operation where required.

(F) Shop drawings of sheeting, bracing and other structures used by the Contractor shall be signed by and carry the seal of a Professional Engineer licensed in the State of New York. These drawings shall be submitted together with proper design computations bearing the same seal and signature. Shop drawings shall be on sheets twenty-seven (27) inches by forty (40) inches with a one-half (1/2) inch marginal space on three (3) sides and a two (2) inch marginal space for binding on the left side.

Shop drawings shall be numbered consecutively and shall accurately and distinctly present the following:

- (1) All working and erection dimensions.
- (2) Arrangement and sectional views.
- (3) Necessary details, including complete information for making connections between work under this contract and work under other contracts.
- (4) Kinds of materials.
- (G) Each shop drawing shall be dated and contain:
 - (1) The name of this project and this contract number.
 - (2) The description name of classified contract item number or numbers under which it is or they are required.
 - (3) The locations or points at which the sheeting is to be installed in the work.
- (H) All sheeting submissions shall reflect the means and methods chosen by the Contractor and approved by the Engineer. Whenever steel sheeting systems (including trench boxes, frames and plates, etc.) are submitted which would render the crossing of Utilities (i.e. water mains and sewers) impossible the Contractor shall also submit, for approval, a system which can be utilized to permit such crossings (i.e. wood sheeting).
- (I) The submission of multiple sheeting systems shall be kept to a minimum. Whenever the Contractor submits multiple systems they must be accompanied with a Location Plan shop drawing to indicate the exact location where these various systems are to be installed. Since the approval of multiple systems will delay the sheeting approval process the Contractor is requested to submit a schedule indicating the time frame that these systems are required. In addition the Contractor will be required to install these multiple systems at the locations indicated on the submitted Location Plan. Should the Contractor request to change the sheeting system at any particular location the Contractor will be required to resubmit the sheeting drawing, for approval, even though the revised sheeting system may have been approved at another location within the project area. The Contractor is reminded that the approval time for any given sheeting system may require up to four (4) weeks.

40.05.6 DESIGN CRITERIA

The following criteria shall be used in calculating the required sheeting, bracing and/or decking systems.

- (A) All compression members (struts) shall be designed with a factor of safety of two (2.0). The factor of safety of two (2.0) shall be a value above and beyond the allowable value for compressive stresses for steel as designated in the "AISC Manual of Steel Construction", and for wood as designated in the "National Design Specification for Stress-Grade Lumber and its Fastening". All other allowable stresses (not including compression members) may be increased by thirty-three and one-third (33-1/3) percent where sheeting and bracing is deemed a temporary structure.
- (B) A factor of safety shall be used to determine the minimum embedment for sheeting as follows:

Vertical Timber - 15%

Soldier Beams - 20%

Steel Sheeting - 30%

- (C) Embedment shall be calculated in accordance with the procedures and standard minimum load diagrams specified herein. The maximum allowable embedment for vertical timber sheeting shall not exceed three feet six inches (3'-6"). The minimum embedment shall be two (2) feet.
- (D) The Contractor is advised that the maximum allowable bending stress (F_b) for all timber members shall not exceed one thousand seven hundred fifty (1,750) pounds per square inch. If the Contractor

elects to use a bending stress higher than $F_b = 1,750$ -psi, written certification of bending stress test results shall be submitted to the Engineer prior to use of such material in construction.

- (E) Where it is anticipated that heavier crane or equipment loads will fall within the influence line of the trench, design loads shall be increased accordingly.
- (F) The Contractor shall compute and include in the Contractor's submission of drawings and calculations the following:
 - (1) Maximum bending stress
 - (2) Maximum horizontal shear in wale
 - (3) Compression perpendicular to grain
 - (4) Maximum vertical shear stress

(G) DECKING

- (1) Unless otherwise specified in the contract documents or approved in writing by the Engineer, the minimum live load on decking shall be AASHTO HS20-44 or Contractor's equipment or heaviest truck loading (i.e. concrete trucks) whichever is greater plus an impact factor of thirty-three (33) percent.
- (2) Unless otherwise approved, timber mats shall extend a minimum of three (3) feet from sheeting line on either side of trench.
- (3) Unless otherwise approved, a minimum one thousand (1,000) pounds per square foot surcharge load shall be used for sheeting below decking.
- (H) Maximum trench widths shown on sheeting details shall not exceed those allowed by the standards or specifications.
- (I) The Contractor shall provide an individual cross-sectional sheeting (trench) detail for each size water main pipe and sewer conduit to be constructed unless permission to do otherwise is granted.
- (J) Where the water table lies above the subgrade of trench and a well point or deep well dewatering system is not used, the Contractor shall include the effect of hydrostatic loading in calculations for both watertight and non-watertight sheeting.
- (K) Sheeting details shall accurately depict actual field operations. The Contractor shall be restricted to a maximum five (5) feet deep pilot cut and all details must reflect this. Additional braces and wales may be required to install sheeting due to the five (5) feet maximum pilot cut restriction. The Contractor shall not assume that additional pilot cut depths will be allowed.

40.05.7 REMOVAL OF SHEETING

All sheeting design and requirements shall be in strict conformance with this section and all appropriate Addenda to the specifications.

Unless otherwise specified in the plans or these specifications, the Contractor shall remove all sheeting and bracing throughout this project.

(A) The sheeting shall be removed in lifts during the backfilling operation in order to permit proper placement and compaction of material against the structure and the earth bank. This work shall be accomplished in conjunction with the removal of wales and braces. In no case shall the lifts for sheeting exceed the specified or otherwise approved depth of compaction layer.

- (B) The Contractor shall submit to the Engineer, for approval, the Contractor's method for installation and removal of sheeting and the method for backfilling the trench. The submission shall also specify if there are any location(s) where sheeting cannot be removed and detail the reasons why the sheeting cannot be removed. The submission shall be signed by and carry the seal of a New York State Licensed Professional Engineer. These methods must be strictly adhered to.
- (C) The Contractor is advised that the Contractor will be responsible for, and shall solely at the Contractor's own expense, repair, replace and/or relocate all City owned utilities that are damaged and/or disturbed due to the Contractor's removal of sheeting operation.
- (D) If the Contractor is required to leave the sheeting system in place in order to protect City owned utility crossings and structures, payment will be made in accordance with **Subsection 40.05.2(A)** and **Subsection 40.05.2(B)**.
- (E) This section shall not be construed to relieve the Contractor of the Contractor's obligation under the contract to maintain, protect and support (temporarily and permanently) all City owned utilities within the influence lines of the excavated trenches. The Contractor in accordance with the standards of the agencies having jurisdiction thereof shall perform such maintenance, protection and support.
- (F) The cost of maintenance, protection and support (temporarily and permanently) of City owned utilities shall be included in the prices bid for all items for which there are bid prices.
- (G) If a soldier beam and lagging sheeting system is utilized then all parts of the system (i.e. soldier beams, bracing, wales and lagging) must be removed.
- (H) There shall be no additional payment made for repairing, replacing and/or relocating City owned utilities that may be damaged and disturbed due to the Contractor's removal of sheeting operation, or for work performed by the Contractor as directed in **Subsection 40.05.7(E)** above.

40.05.8 COST INCLUDED

There shall be no separate payment for the sheeting and bracing of trenches and excavation of water mains larger than 20-inches in diameter and appurtenances thereto including valve chambers, regulator chambers, etc.; and for the sheeting and bracing of trenches and excavation of all sewer conduits and appurtenances thereto including manholes, chambers, catch basins, etc. The cost of all labor, material, plant, equipment and insurance necessary or required to furnish and install all timber and steel sheeting together with all necessary rangers, bracing, lagging, soldier beams, etc., excavation for the placing of sheeting, backfill and compaction behind sheeting to prevent loss of ground, cut off of sheeting as specified, together with all work incidental thereto, all in accordance with the plans and specifications and as directed by the Engineer, shall be deemed included in the prices bid for the respective contract items.

40.05.9 SEPARATE PAYMENT

Separate payment will be made for the sheeting of water mains 20-inches and smaller in diameter. Payment will be made in accordance with **Section 70.91**.

SECTION 70.91 SHEETING

70.91.1 DESCRIPTION

This section describes the use of Sheeting in water main trenches and excavations only.

70.91.2 MATERIALS

All sheeting materials shall comply with Subsection 40.05.3.

70.91.3 CONSTRUCTION METHODS

To prevent injury to workmen or to avoid damaging existing water pipes, structures, and pavements and their foundations through caving or sliding of the banks of a trench or other excavation, protection shall be provided for all excavation work except where a determination is made by the Contractor, the Engineer or the Engineer's inspector at the work site that the nature of the excavation does not require protection.

Excavation protection, when required, shall be provided in accordance with the requirements of:

- (1) U.S. Occupational Safety and Health Administration (OSHA) Construction Safety and Health Regulations, Part No. 1926, Subpart P;
- (2) 23 NYCRR, Subpart 23-4 Excavation Operations;
- (3) 16 NYCRR, Part 753 Protection of Underground Facilities;
- (4) Special requirements detailed below.

NOTE: Whenever an interpretation difference exists as to selecting the applicable requirements, that of the most stringent one shall govern.

(A) SPECIAL REQUIREMENTS

Unless specifically ordered otherwise by the Engineer or the Engineer's inspector at the work site, the following Special Requirements shall be adhered to:

(a) Trenches For Water Main Pipe 12-Inch In Diameter And Less

In general, such trenches shall not be sheeted since, with the laying depths used, the trench bottoms will be less than five (5) feet below the ground surface. However, removal of existing pipe, or connections to existing pipe may, in some instances result in trench depths of five (5) feet or greater. In such cases, at a minimum, sheeting will be required. If sheeting is required, it shall be of sufficient length so that all ingress and egress is within the sheeted area, and shall extend at least 2 feet beyond all work locations and access points. If workmen are required to transit between sheeted areas, they must exit the trench.

If, in the opinion of the Engineer or the Engineer's inspector at the work site, sheeting is required, for whatever reason, in any trench or other excavation, the Contractor shall install it.

(b) Trenches For Water Main Pipe 16-Inch and 20-Inch In Diameter

All such trenches shall be sheeted, regardless of the depth of the trench.

(c) <u>Trenches For Water Main Pipe Larger Than 20-Inch In Diameter; And Excavations For Chambers</u> And Manholes

All such trenches shall be sheeted, regardless of the depth of the trench.

(d) Detailed Requirements As To Type And Size Of Sheeting

Unless specifically noted otherwise on the contract drawings or in these specifications, the sheeting required in paragraphs (a), (b), and (c) above, above, shall be furnished and installed in full compliance with the requirements of Section 1926.652 of the OSHA Regulations.

The size and spacing of sheeting, stringers, and cross bracing required for various soil conditions shall meet the latest OSHA Regulation requirements.

(B) SUBSTITUTION FOR TIMBER SHEETING

Any substitution for timber sheeting and bracing such as a self-supporting movable shield of timber or metal, etc., must be designed by and stamped with the seal of a Professional Engineer, licensed to practice in the State of New York, and must be approved by the Engineer in writing prior to its being used on the job. Submittal of proposed substitutions shall be made by the Contractor at least four (4) weeks prior to their scheduled use to allow for proper review and approval of it by the Engineer.

(C) SHEETING LEFT IN PLACE

Where the sheeting is ordered to be left in place, the full amount of the lumber so left in place will be paid for at fifty percent (50%) of the market value thereof, without any allowance for the cost of delivery or placing in the work. Sheeting left in place shall be cut off in accordance with **Subsection 40.05.2**.

When sheeting is ordered to be left in place, the cost of all work required for the cutting, removal and disposal of the cut sheeting shall be deemed included in the fifty percent (50%) compensation paid above.

70.91.4 MEASUREMENT

The quantity of sheeting incorporated into the work, complete, as shown, specified or required shall be computed as twice the depth of trench times the length of the sheeted trench. The depth of trench or excavation to be sheeted shall be from the ground surface to the bottom of the pipe. In those cases where a special foundation, such as a broken stone bed or a concrete cradle or mat is required, the depth of trench or excavation to be sheeted shall be from the ground surface to the bottom of such special foundation.

70.91.5 PRICE TO COVER

Payment for sheeting of trenches for water main pipe 12-inch in diameter and less shall be made per square foot under bid Item No. 70.91SW12 - FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS contained in the bid schedule.

Payment for sheeting of trenches for water main pipe 16-Inch and 20-inch in diameter shall be made per square foot under bid Item No. 70.91SW20 - FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER contained in the bid schedule. Where there is no bid item for such sheeting, because the quantities of such pipe to be installed are very small, or the work involves connecting smaller size pipe to 16-Inch and 20-inch mains or larger, payment for such sheeting will be made at the unit price bid for Item No. 70.91SW12 - FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS.

The Contractor's attention is directed to the fact that the Contractor's bid price for sheeting covers the cost of extra earth excavation and other extra costs involved in laying the pipe, such as but not limited to, lesser pipe footage being installed per day, etc.

All of the above provisions are intended to apply to those instances where sheeting is required in a trench in order to lay pipe. In such instances a wider trench is required (to accommodate the sheeting) than when pipe is laid in unsheeted trenches.

When sheeting is provided in portions of a trench (to protect men inserting taps, etc.) that was originally excavated for laying a water main, and when such trench was not sheeted at the time the water main was laid, payment shall be made only for the amount of sheeting actually placed. In all such cases the payment lines for pavement excavation, pavement restoration, and satisfactory backfill shall be those specified for unsheeted trenches.

Where the OSHA Regulations do not require sheeting, but where the Contractor, for the Contractor's own convenience, installs a more limited type of trench support (stay bracing, etc.) such limited type of trench support will not be paid for. The cost of such limited trench support shall be deemed included in the various unit prices bid.

All sheeting that is to be paid for must meet all requirements of the OSHA Regulations.

70.91.6 NO SEPARATE PAYMENT

No separate payment will be made for the sheeting of water main trenches for water mains larger than 20-inches in diameter, the costs thereof shall be deemed included in the prices bid for laying these mains. No payment shall be made for sheeting at chambers and manholes, but payment thereof will be deemed to be included in the various items bid for constructing the chambers and manholes.

Payment for Furnishing And Placing Sheeting And Bracing In Trench For Water Main Pipe will be made under the Item Number as calculated below:

The Item Numbers for Furnishing And Placing Sheeting And Bracing In Trench For Water Main Pipe have nine characters. (The decimal point is considered a character, the third character.)

(1) The first five characters shall define Furnishing And Placing Sheeting And Bracing In Trench For Water Main Pipe:

70.91

(2) The sixth and seventh characters shall define Furnishing And Placing Sheeting And Bracing In Trench For Water Main Pipe:

SW - Furnishing And Placing Sheeting And Bracing In Trench For Water Main Pipe

(3) The eighth and ninth characters shall define the Size of Water Main Pipe That Trench Sheeting will be provided for:

12 - 12-Inch In Diameter And Less20 16-Inch and 20-Inch In Diameter

(4) The Item Numbers together with Description and Pay Unit as provided in the Bid Schedule are provided below:

item No.	Description	Pay Unit
70.91SW12	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	S.F.
70.91SW20	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 16-INCH AND 20-INCH IN DIAMETER	S.F.



Department of Design and Construction

SPECIFICATION BULLETIN

SB

17-001

Title: UV CURED-IN-PLA	CE-PIPE (CIPP)	LINING METHOD	
Prepared	1/12/2017	Approved:	1/12/2017
Richard Jones, P.E. CWI	Date	Mohsen Zargarelahi, P.E.	Date
Director, Specifications - Infrast	ructure Design	Assistant Commissioner – Infra	structure Design

APPLICABILITY:

• This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

SUPERSEDENCE:

• This SB supersedes the following SBs: NONE

ATTACHMENTS:

 ATTACHMENT 1: Revised Section 50.71 - RECONSTRUCTION OF EXISTING SEWERS USING D.E.P. APPROVED CURED-IN-PLACE-PIPE (CIPP) LINING METHOD
 Pages A1-1 through A1-9

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER AND WATER MAIN SPECIFICATIONS, DATED 7/1/14:

All references contained below are to the New York City Department of Environmental Protection Standard Sewer and Water Main Specifications, Dated July 1, 2014. Said Standard Sewer and Water Main Specifications are hereby revised as follows:

a) Refer to Pages V-52 through V-59, Section 50.71 – RECONSTRUCTION OF EXISTING SEWERS USING D.E.P. APPROVED CURED-IN-PLACE-PIPE (CIPP) LINING METHOD;
 Delete in its entirety the Section;
 Substitute the revised Section in Attachment 1 (9 pages).

CURED-IN-PLACE-PIPE (CIPP) LINING METHOD

50.71.1 INTENT

It is the intent of this section to provide for the reconstruction of existing sewers by the installation of a resin-impregnated flexible tube that is inflated within the existing conduit to form a hard, impermeable, corrosion resistant pipe within a pipe. When cured, the cured-in-place-pipe (CIPP) will be formed to the original conduit.

50.71.2 REQUIREMENTS

(A) DESCRIPTION OF WORK

Unless otherwise specified in the contract, the Contractor shall use a Department of Environmental Protection (DEP) approved cured-in-place-pipe lining method on all existing sewers shown, specified, or ordered to be reconstructed under this contract by use of an approved lining method. All such work shall comply with the terms of this specification and with the manufacturer's standards set forth for the lining method(s) selected by the Contractor.

Under this method the Contractor shall reconstruct existing sewers by the insertion of either a flexible polyester felt or glass fiber lining tube that has been saturated with either a thermosetting or photosetting resin. The liner shall be inserted into the existing sewer either by direct inversion (ASTM F1216) using a head of water or air, or by pulling the tube into place by winching and then inflating it by inversion of a calibration hose (ASTM F1743). The thermosetting resin shall then be cured by either circulating hot water through the tube or by circulating hot air (a mixture of steam and air), or by circulating steam to cure the resin into a hard impermeable pipe. The photo-initiated resin shall be exposed to an ultraviolet light source to cure the resin into a hard impermeable pipe.

The Contractor shall make all investigations of the existing sewers to be reconstructed and shall determine and select the most effective approved lining method(s) appropriate for installation in the existing sewers to be reconstructed. The Contractor shall be responsible for the successful completion of all work required herein; failure of the Contractor's selected lining method(s) to be satisfactorily installed in the existing sewers shall not relieve the Contractor of the Contractor's responsibility to provide satisfactorily reconstructed sewers.

Any cost associated with the removal of the unsatisfactorily installed liner and the subsequent, satisfactory reinstallation of an approved liner shall be borne solely by the Contractor, and the Contractor shall not make any claim against the City for this additional required work.

Once installed, the liner shall extend from manhole to manhole in a continuous tight fitting watertight pipe-within-a-pipe, and be chemically resistant to sewage gases and materials. During the warranty period any defects that might affect the integrity or strength of the liner shall be immediately repaired or replaced by the Contractor, at the Contractor's expense, pursuant to the manufacturer's recommendations, and to the satisfaction of the Engineer.

(B) REFERENCE SPECIFICATIONS AND STANDARDS

The American Society for Testing and Materials Standard Specifications ASTM C581, D638, D790, D2990, D5813, F1216, F1743, and F2019, and the manufacturer's standards are hereby made a part of this specification.

(C) LINER SIZE AND LENGTH

The liner shall be fabricated to a size that when installed will neatly fit the internal circumference of the sewer to be lined. The liner thickness shall be designed to adequately resist all external pressures and conditions (e.g. deflection, ring bending, buckling and minimum stiffness). The length of the liner shall be

that deemed necessary to effectively span the distance and carry out the insertion and seal of the liner at the inlet and outlet manholes. The Contractor shall verify the lengths in the field before cutting the liner to length. Prior to the start of work the Contractor will be required to submit design calculations for wall thickness to the Engineer. When UV-cured liners are used, the Contractor must also submit the manufacturer's product specific data regarding the glass fiber tube, the resin and initiator cocktail system and the necessary manufacturer installation reference material detailing the type of light source and the speed in which it will be advanced to insure proper curing.

Allowance for circumferential and longitudinal stretching of the liner during installation shall be made as per the manufacturer's standards for the approved method of lining chosen. Under no circumstances shall the finished wall thickness of liner be less than six (6) millimeters in thickness.

(D) DESIGN PARAMETERS - The following design parameters shall be used in the design of pipe liners in addition to the manufacturer's standards:

(1) Ovality of Existing Pipe
(2) Existing Pipe Condition
(3) Modulus of Soil Reaction
(4) Factor of Safety Against Buckling
(5) Allowable Deflection
(6) Ratio of Pipe to Soil Strength
(7) Live Load
2% Minimum
700-psi Minimum
2 Minimum
5% Maximum
10% Minimum
AASHTO HS20-44

(7) Live Load

AASHTO HS20-44 Loading under Roadways
AASHTO E-80 Loading under Railroads

(8) Soil Unit Weight 120-pcf Minimum (If no Boring Data is available in vicinity.)

(9) Creep Reduction Factor 50% Maximum

(E) LINER MATERIAL - The Contractor shall furnish, prior to use of the lining materials, satisfactory written guarantee of the Contractor's compliance with the liner manufacturer's standards for all materials (polyester felt tubing, including the polyurethane covered felt and the thermosetting resin or glass fiber tubing soaked in photosetting resin) and techniques being used in the method.

Prior to the start of work the Contractor will be required to submit to the Engineer the types of resins and the resultant cure schedules for each length and size of sewer to be lined. The finished liner shall incorporate thermosetting materials that will withstand the corrosive effects of the normal existing effluents.

(F) SAFETY - The Contractor shall carry out the Contractor's operations in strict accordance with all OSHA and manufacturer's safety requirements. Emphasis shall be placed upon safety requirements for entering confined spaces and working with hot water, steam, or resins that may cause fumes. The Contractor shall erect such signs and other devices as are necessary for the safety of the work site and shall secure the site and conform all work to the safety requirements of all pertinent regulatory agencies.

- (G) AIR QUALITY The Contractor is advised that all liner installation work shall be carried out in full compliance with all City, State, and Federal laws, rules, and regulations regarding Air Quality and Safety. The contractor shall take all necessary precautions to minimize the release of styrene or other VOC emissions and mitigate odors generated during set and the CIPP lining process. The Contractor shall also take all necessary precautions to prevent such odors from entering structures, businesses or other types of establishments, through service connections or other plumbing fixtures.
- (H) FLOW BYPASSING Prior to the start of work the Contractor will be required to submit a fluming/bypass-pumping detail in accordance with **Subsection 10.13 (3) Existing Flow**. The Contractor shall provide for the diversion of flow of existing sewers at existing upstream manholes (if available) and pump the flow into an existing downstream manhole. The pumps and bypass lines shall

be of adequate capacity and size to handle the flow. The proposed bypassing system shall be submitted to the Engineer for approval and no work shall commence until such approval is granted.

(I) TELEVISION INSPECTION PRIOR TO INSTALLATION - All bidders are advised that a digital audiovisual inspection was made of the sewers to be reconstructed and that this recording (the "DEP recording") is available for review prior to bid opening. All prospective bidders are urged to view this recording in order to assess the suitability of the lining methods for use on this project. The City of New York does not guarantee the successful use of any particular method on this project and the Contractor shall utilize the Contractor's judgment as to the effective use of the method(s) the Contractor selects.

The Contractor will also be required to perform another television inspection and digital audio-visual recording of the sewer a maximum of seven (7) days prior to the setting up of the liner insertion equipment at the site. This inspection will be performed, utilizing a radial eye camera, to determine the latest condition of the sewer and to accurately identify the location of active service connections. Should the results of this television inspection show a condition different than that shown on the DEP recording, the Contractor shall immediately notify the Engineer.

For each section to be lined, the Contractor shall certify in writing that the DEP approved method the Contractor intends to use is suitable.

(J) CLEANING - The Contractor shall furnish all labor, materials and equipment and shall do all work necessary to remove and dispose of all debris, sediment, silt, refuse, timber, roots, and materials of all kinds which can be removed by conventional non-excavation type pipe cleaning equipment located in the existing sewers and manholes. The Contractor shall immediately notify the Engineer if such debris, etc., cannot be removed by conventional non-excavation type pipe cleaning equipment.

Protruding service connections shall be removed and paid for consistent with Section 52.51.

(K) SERVICE CONNECTIONS - The Contractor shall be required to determine which service connections are active and shall be responsible for controlling (or maintaining) the flow for each active service connection along the line of the sewer to be rehabilitated. Where necessary, the flow from an active service connection shall be bypassed to a manhole downstream of the proposed work by means of pumping from the trap located in the basement of the affected building. However, should such bypassing be judged unfeasible by the Engineer, the Contractor shall excavate to the service connection outside the building area (sidewalk or roadway as determined by the Engineer) and bypass the connection from this point. The pump and bypass line for each service connection shall be of adequate capacity and size to handle the flow.

Prior to the commencement of any work, the Contractor shall make all necessary investigations and prepare a plan for the controlling (or maintaining) of the flow and, where necessary, for the bypassing of active service connections. This plan shall be submitted to the Engineer for approval and no work shall commence until such approval is granted.

(L) EQUIPMENT SPECIFICATION - The Contractor shall provide suitable temperature and pressure gauges in accordance with the manufacturer's standards and specifications. High-pressure steam hoses and fittings have to be rated in accordance with the steam generator used. Thermocouples are to be marked for each fluid to be conveyed: RED-steam; BLUE-water; GREEN-air. The pulling winch shall be equipped with a tension gauge (Type-Martin Decker or Approved Equal) - smooth running and variable speed. The cutting device shall be a Gulectron type or approved equal remote monitored device when used inside the lined pipe.

The Contractor shall prepare and inspect all necessary tools and any spare parts that are required for equipment that suffer frequent breakdowns, and shall ensure that said tools and spare parts are available at the site. Supporting equipment, such as pumps and generators, shall be provided at the site in the event there is a fluid surge and pumping is required on an emergency basis. The Contractor shall also prepare and make operable all necessary communication equipment for the Contractor's field crew.

- (M) INSTALLATION OF LINER Prior to the installation of liner, the Contractor shall fully comply with **Subsections 50.71.2(C) through 50.71.2(L)**, inclusively, and with any additional requirements set forth in the specific provisions applicable to the respective lining methods. The Contractor shall not proceed with the installation of liner until the Engineer, in writing, certifies such compliance and directs the Contractor to proceed with the lining installation. The approved liner shall be installed pursuant to the specific provisions set forth for the selected lining method. If any problem occurs during the installation operation the Contractor shall investigate with a television camera from the remote manhole.
- (N) PRELIMINARY TELEVISION INSPECTION OF INSTALLED LINER After the liner is sufficiently cool (below one hundred degrees Fahrenheit (100°F)) and before opening the service connections, a preliminary television inspection and digital audio-visual recording of the newly installed liner shall be performed to determine if the liner is properly installed.
- (O) SERVICE CONNECTIONS After the liner has been installed, the Contractor shall re-open all existing active service connections and those inactive connections ordered by the Engineer. These service connections shall be re-opened and paid for consistent with **Section 52.61**.
- (P) FINAL TELEVISION INSPECTION AFTER INSTALLATION A final television inspection and digital audio-visual recording of the newly lined sewer including the restored service connections shall be performed immediately after work is completed. Should the results of this final inspection reveal any defects, as determined by the Engineer, the Contractor will be required to repair or replace these defects as ordered by the Engineer at the sole expense of the Contractor.

Payment for this final television inspection will be made under Item No. 53.11DR - TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS.

(Q) WORK SCHEDULE - The Contractor shall be permitted to occupy the lane immediately above the sewer location and the parking lane immediately adjacent to the site of work unless otherwise specified. No further roadway or traffic restrictions shall be permitted.

50.71.3 INSTALLATION

(1) PREPARING AND INSERTING THE LINER - The Contractor shall designate a location where the uncured resin in the original containers and the un-impregnated liner will be impregnated prior to installation. The Contractor shall allow the Engineer and/or the Engineer's representative to inspect the materials and chemical impregnation "wet out" procedure. A resin and catalyst system compatible with the requirement of this method shall be used. The quantities of the liquid thermosetting materials inserted into the lining tube shall be as per manufacturer's standards so as to fully saturate the liner material and provide the lining thickness specified. The contractor shall protect, store and handle materials during transportation and delivery, while stored on-site and during installation following Manufacturer's recommendations. Liners impregnated with thermo-initiated resins shall be stored within the proper temperature range and liners impregnated with photo-initiated resins shall not be exposed to UV-light sources, to insure no premature curing occurs.

Prior to installation of liner, the downstream sewer manhole adjacent to the sewer section to be lined shall be plugged.

The chemical impregnated liner material shall be inserted into the sewer line being reconstructed through the existing manhole by either the direct inversion method or by the pull-in-place method, as recommended by the manufacturer. The head used to extend the liner tube shall be sufficient enough to fully extend the tube both circumferentially and longitudinally. The head used will fall within the manufacturer's guidelines to insure that a proper finished thickness is achieved and that the liner fit snug to the existing pipe wall producing dimples at service connections and flared ends at the entrance and exit manholes.

Winch cable shall be equipped with a tension gauge to measure tension during pull through.

Inflation of liners and heat source method used shall be accomplished in accordance with manufacturer's standards and specifications.

Curing temperatures and pressures shall be monitored so as not to overstress the liner and cause damage or failure of the liner prior to cure.

The use of a lubricant is recommended and such lubricant shall be compatible with liner and resin.

The Contractor will be required to monitor and remove styrene to acceptable levels during the inflation and curing processes. An activated carbon filtration system shall be employed to remove styrene from both the process air flow and condensed steam, prior to release into the air or an adjacent or downstream sanitary or combined sewer manhole.

curing of Liner - After inflation or inversion is completed, the Contractor shall supply a suitable heat source. The equipment shall be capable of delivering steam or hot water to the far end of the liner to uniformly raise the temperature in the entire liner above the temperature required to initiate and effect curing of the resin system. The temperature shall be determined by the resin/catalyst system employed. The heat source shall be fitted with suitable monitors to gauge the temperature and pressure of the incoming and outgoing heat exchanger circulating heating medium. Thermocouples shall be placed between the liner and the invert at each manhole so as to determine and record the temperature of the liner and time of exotherm.Initial cure shall be deemed to be completed when inspection of the exposed portions of the liner show it to be hard and sound; and when temperature reading(s) at the interface of the liner with the host pipe indicate sufficient heating has occurred. The cure period shall be of a duration recommended by the resin manufacturer; modified for the site specific conditions at the time curing is affected. During this cure time, the temperature inside the liner will be continuously maintained in the range required.

Once the cure is complete, the Contractor shall cool the hardened liner to a temperature below one hundred degrees Fahrenheit (100°F) before relieving the internal pressure. Cool down shall be accomplished as recommended by the manufacturer. Care shall be taken in the release of the internal pressure so that a vacuum will not develop that could damage the newly installed liner.

For UV-light CIPP systems, the intensity and duration of exposure to the photo-initiator's required UV-light wavelength shall be as per the manufacturer's recommendations for the proposed size and thickness of tube, to insure that the liner has been cured completely. The UV-light source shall be fitted with multiple temperature sensors to insure that reaction temperatures stay within the Manufacturer's acceptable range and do not blister the interior liner. All lamps shall be monitored to insure that they are on and functioning properly. In the event that a lamp fails or the reaction temperatures fall below the Manufacturer's acceptable range during CIPP installation, the Contractor shall reduce the speed of the light source (increasing the exposure duration) by the Manufacturer's specified amount. The Manufacturer's recommended cooling phase shall be observed after the last lamp of the light source has been turned off. The finished lining shall be continuous over the entire length and be free from visual defects such as foreign inclusions, dry spots, pinholes and delamination. The lining shall be impervious and free of any leakage from the pipe to the surrounding ground or from the ground to the inside of the lined pipe.

If due to broken or misaligned pipe at the access manhole, the lining fails to make a tight seal, the Contractor shall apply a seal of a resin mixture compatible with the liner.

After the curing has been completed, any residual water and condensation that adheres to the inner wall of the liner shall be removed. This residual water shall be collected and pumped from the channel of the downstream manhole and circulated through a separate carbon filtration unit before discharge into a downstream sanitary or combined sewer manhole. In the case of lining a storm sewer section, the collected filtered residual water and process water shall not be discharged into the downstream manhole or stream, but discharged into a nearby sanitary manhole.

50.71.4 MEASUREMENT

The quantity to be measured for payment shall be the length of reconstructed sewer, accepted by the Engineer, measured horizontally along the centerline of the sewer from inside face of manhole to inside face of manhole.

50.71.5 PRICE TO COVER

The contract price for "RECONSTRUCTION OF EXISTING SEWERS, USING D.E.P. APPROVED CIPP LINING METHOD" shall be the unit price bid per linear foot for each size sewer reconstructed by a cured-in-place-pipe DEP approved lining method and shall cover the cost of all labor, materials, plant, equipment, samples, tests and insurance required or necessary to reconstruct the sewers of the sizes shown including the cleaning of the existing sewers using conventional non-excavation type pipe cleaning equipment; television inspection prior to installation; diversion of flow of existing sewers; controlling (or maintaining) the flow for all active service connections; necessary bypassing and pumping of the existing active service connections; repair of active service connections; all necessary excavation, backfilling and compaction; complete installation of the liner; preliminary television inspection of installed liner; temporary and permanent restoration of all disturbed sidewalk and pavement areas (unless items for temporary and permanent restoration are otherwise provided in the Bid Schedule); cleaning up; and furnishing and installing all other items necessary to complete this work and do all work incidental thereto, all in accordance with the plans and specifications and as directed by the Engineer.

50.71.6 SEPARATE PAYMENT

Payment for this final television inspection will be made under Item No. 53.11DR - TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS.

Payment for Reconstruction Of Existing Sewers Using D.E.P. Approved Cured-In-Place-Pipe (CIPP) Lining Method will be made under the Item Number as calculated below:

The Item Numbers for Reconstruction Of Existing Sewers Using D.E.P. Approved Cured-In-Place-Pipe (CIPP) Lining Method have eleven characters. (The decimal point is considered a character, the third character.)

(1) The first five characters shall define Reconstruction Of Existing Sewers Using D.E.P. Approved Cured-In-Place-Pipe (CIPP) Lining Method:

50.71

(2) The sixth character shall define the Type of Sewer Effluent:

S - Sanitary Sewer M - Storm Sewer C - Combined Sewer I - Interceptor Sewer

(3) The seventh and eighth characters shall define either the Diameter of the Sewer for Existing Circular Sewers or the Width of the Sewer for Existing Horizontal Elliptical Sewers, Vertical Elliptical Sewers and Egg-Shaped Sewers. (The seventh and eighth characters representing the unit of inches for either the Diameter of the Sewer for Existing Circular Sewers or the Width of the Sewer for Existing Horizontal Elliptical Sewers, Vertical Elliptical Sewers and Egg-Shaped Sewers.) See examples below:

10 - 10" 30 - 30"

(4) The ninth character shall define the Shape of the Existing Sewer:

D - Circular (Diameter)

NYC DDC SPECIFICATION BULLETIN 17-001 H - Horizontal Elliptical

V - Vertical Elliptical

E - Egg-Shaped

R - Rectangular

(5) The tenth and eleventh characters shall define either Circular or the Height of the Sewer for Existing Horizontal Elliptical Sewers, Vertical Elliptical Sewers and Egg-Shaped Sewers. (The tenth and eleventh characters representing either Circular or the unit of inches for the Height of the Sewer for Existing Horizontal Elliptical Sewers, Vertical Elliptical Sewers and Egg-Shaped Sewers.) See examples below:

00 - Circular

19 - 19"

32 - 32"

(6) Examples of Item Numbers together with Description and Pay Unit as provided in the Bid Schedule are provided below:

Item No.	Description	Pay Unit
50.71S10D00	RECONSTRUCTION OF EXISTING 10" DIAMETER CIRCULAR SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S12D00	RECONSTRUCTION OF EXISTING 12" DIAMETER CIRCULAR SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S18D00	RECONSTRUCTION OF EXISTING 18" DIAMETER CIRCULAR SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S24D00	RECONSTRUCTION OF EXISTING 24" DIAMETER CIRCULAR SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S23H14	RECONSTRUCTION OF EXISTING 23"W X 14"H HORIZONTAL ELLIPTICAL SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S30H19	RECONSTRUCTION OF EXISTING 30"W X 19"H HORIZONTAL ELLIPTICAL SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S14V23	RECONSTRUCTION OF EXISTING 14"W X 23"H VERTICAL ELLIPTICAL SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S19V30	RECONSTRUCTION OF EXISTING 19"W X 30"H VERTICAL ELLIPTICAL SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S20E29	RECONSTRUCTION OF EXISTING 20"W X 29"H EGG-SHAPED SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S24E42	RECONSTRUCTION OF EXISTING 24"W X 42"H EGG-SHAPED SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S25E37	RECONSTRUCTION OF EXISTING 25"W X 37"H EGG-SHAPED SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S29E40	RECONSTRUCTION OF EXISTING 29"W X 40"H EGG-SHAPED SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M15D00	RECONSTRUCTION OF EXISTING 15" DIAMETER CIRCULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M18D00	RECONSTRUCTION OF EXISTING 18" DIAMETER CIRCULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M30D00	RECONSTRUCTION OF EXISTING 30" DIAMETER CIRCULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M42D00	RECONSTRUCTION OF EXISTING 42" DIAMETER CIRCULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M38H24	RECONSTRUCTION OF EXISTING 38"W X 24"H HORIZONTAL ELLIPTICAL STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.

		L.F.
50.71M53H34	RECONSTRUCTION OF EXISTING 53"W X 34"H HORIZONTAL	L.F.
	ELLIPTICAL STORM SEWER, USING D.E.P. APPROVED CIPP LINING	
	METHOD	L.F.
50.71M24V38	RECONSTRUCTION OF EXISTING 24"W X 38"H VERTICAL ELLIPTICAL	L.F.
	STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
50.71M32V48	RECONSTRUCTION OF EXISTING 32"W X 48"H VERTICAL ELLIPTICAL	L.F.
	STORM SEWER LISING D.F.P. APPROVED CIPP LINING METHOD	
50.71M34V53	DECONSTRUCTION OF EXISTING 34"W X 53"H VERTICAL ELLIPTICAL	L.F.
00.1 11110 1110	STORM SEWER LISING D.F.P. APPROVED CIPP LINING METHOD	
50.71M30E45	PECONSTRUCTION OF EXISTING 30"W X 45"H EGG-SHAPED STORM	L.F.
30.7 TWISSE 45	SEWER USING D.F.P. APPROVED CIPP LINING METHOD	
50.71M33E48	RECONSTRUCTION OF EXISTING 33"W X 48"H EGG-SHAPED STORM	L.F.
30.7 NVISSE40	SEWER LISING DEP APPROVED CIPP LINING METHOD	
50.71M35E52	RECONSTRUCTION OF EXISTING 35"W X 52"H EGG-SHAPED STORM	L.F.
50.7 HVISSES2	SEWER LISING DEP APPROVED CIPP LINING METHOD	
50.74M40E52	RECONSTRUCTION OF EXISTING 40"W X 53"H EGG-SHAPED STORM	L.F.
50.71M40E53	SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
	RECONSTRUCTION OF EXISTING 24"W X 36"H RECTANGULAR	L.F.
50.71M24R36	STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
	RECONSTRUCTION OF EXISTING 32"W X 48"H RECTANGULAR	L.F.
50.71M32R48	STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
	RECONSTRUCTION OF EXISTING 16" DIAMETER CIRCULAR	L.F.
50.71C16D00	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
	COMBINED SEWER, USING D.E.P. APPROVED CIFF LIMITO METTERS	L.F.
50.71C24D00	RECONSTRUCTION OF EXISTING 24" DIAMETER CIRCULAR	L.1 1
	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C36D00	RECONSTRUCTION OF EXISTING 36" DIAMETER CIRCULAR	L.F.
	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C48D00	RECONSTRUCTION OF EXISTING 48" DIAMETER CIRCULAR	L.F.
	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C45H29	RECONSTRUCTION OF EXISTING 45"W X 29"H HORIZONTAL	L.F.
	ELLIPTICAL COMBINED SEWER, USING D.E.P. APPROVED CIPP	
	LINING METHOD	
50.71C60H38	RECONSTRUCTION OF EXISTING 60"W X 38"H HORIZONTAL	L.F.
	ELLIPTICAL COMBINED SEWER, USING D.E.P. APPROVED CIPP	
	LINING METHOD	
50.71C29V45	PECONSTRUCTION OF EXISTING 29"W X 45"H VERTICAL ELLIPTICAL	L.F.
30.71020.040	COMBINED SEWER LISING D.E.P. APPROVED CIPP LINING METHOD	
50.71C34V53	PECONSTRUCTION OF EXISTING 34"W X 53"H VERTICAL ELLIPTICAL	L.F.
30,71034733	COMPINED SEWER LISING D.F.P. APPROVED CIPP LINING METHOD	
50.71C38V60	DECONSTRUCTION OF FYISTING 38"W X 60"H VERTICAL ELLIPTICAL	L.F.
50.71036700	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
50.74.000E44	RECONSTRUCTION OF EXISTING 32"W X 44"H EGG-SHAPED	L.F.
50.71C32E44	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
50.74.004546	RECONSTRUCTION OF EXISTING 34"W X 46"H EGG-SHAPED	L.F.
50.71C34E46	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
	RECONSTRUCTION OF EXISTING 38"W X 50"H EGG-SHAPED	L.F.
50.71C38E50	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
· - · - ·	RECONSTRUCTION OF EXISTING 41"W X 60"H EGG-SHAPED	L.F.
50.71C41E60	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
	COMBINED SEWER, USING D.E.P. APPROVED OF FINANCIAL COMBINED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVED SEWER, USING D.E.P. APPROVE	L.F.
50.71C42E56	RECONSTRUCTION OF EXISTING 42"W X 56"H EGG-SHAPED	
	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C30R42	RECONSTRUCTION OF EXISTING 30"W X 42"H RECTANGULAR	E-1 ·
	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C36R48	RECONSTRUCTION OF EXISTING 36"W X 48"H RECTANGULAR	- 114
•	COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71I36D00	RECONSTRUCTION OF EXISTING 36" DIAMETER CIRCULAR	- .1 .

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	INTERCEPTOR SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
50.71I48D00	RECONSTRUCTION OF EXISTING 48" DIAMETER CIRCULAR	L.F.
	INTERCEPTOR SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	
50.71I36R48	RECONSTRUCTION OF EXISTING 36"W X 48"H RECTANGULAR INTERCEPTOR SEWER, USING D.E.P. APPROVED CIPP LINING	L.F.
	METHOD	



Department of Design and Construction

SPECIFICATION BULLETIN

SB

	17-002
Title: RODENT AND WATERBUG PEST C	ONTROL
Prepared: 1/12/2017	Approved: Whofan Zongonelah 1/12/2017
Richard Jones, P.E. W Date Director, Specifications – Infrastructure Design	Mohsen Zargarelahi, P.E. Date Assistant Commissioner – Infrastructure Design

APPLICABILITY:

This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

SUPERSEDENCE:

This SB supersedes the following SBs: <u>NONE</u>

ATTACHMENTS:

 ATTACHMENT 1: Revised Section 7.88 – Rodent and Waterbug Pest Control Pages A1-1 through A1-6

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

No Changes.

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

a) Refer to Pages 515 through 520, Section 7.88 – Rodent and Waterbug Pest Control;
 Delete in its entirety the Section;
 Substitute the revised Section in Attachment 1 (6 pages).

SECTION 7.88 - 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 (cockroaches) within the project limit.

New York City ("NYC") Local Law 37 of 2005 requires that the Contractor, or any subcontractor that the Contractor hires, shall comply with Chapter 12 of Title 17 of the NYC Administrative Code with respect to the application of pesticides to any property owned or leased by the City of New York...

- 7.88.2. MATERIALS. All materials shall be Registered by the New York State Department of Environmental Conservation ("NYSDEC") and comply with the NYC Health Code for the intended usage. Materials classified as Toxicity Category I, carcinogenic to humans by the US Environmental Protection Agency ("USEPA"), or classified as a developmental toxin by the State of California's Office of Environmental Health Hazard Assessment shall not be used. The Contractor shall verify that materials are:
 - "NOT PROHIBITED" by the NYC Department of Health and Mental Hygiene ("NYC-DOHMH")
 using the NYC-DOHMH's Pesticide Product Search, available at:
 - < https://a816-healthpsi.nyc.gov/ll37/ProductTestPesticide.aspx >.
 - On the NYSDEC's list of Currently Registered Pesticides, available at:
 http://pims.psur.cornell.edu/ >.

Rodenticide weatherproof (wax based) bait blocks shall be multiple dose anticoagulants such as Chlorophacinone, or single feed anticoagulants such as Brodifacoum (Weatherblok XT, Final All-Weather Blox), Bromadiolone (Contrac Blox), or an approved equivalent, registered by NYSDEC and not prohibited by NYC-DOHMH. Loose rodenticide meal or rodenticide pellet bait shall not be used.

Tamper proof balt station boxes shall be designed to exclude other mammals and shall be used with poisoned balt to attract rats. Information on "tamper proof balt station boxes" is available from the NYC-DOHMH Office of Pest Control Services (646-632-6600).

Live traps shall be of proper dimensions for trapping rats and mice, and shall <u>not</u> be used with poisoned bait.

Insecticide bait shall be a residual type registered by NYSDEC and not prohibited by NYC-DOHMH.

(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, pesticide labels, product characteristics, typical use, performance and limitation criteria of all rodent and waterbug pest control materials required. All pesticides and rodenticide submittals shall be accompanied by a printout from the NYC-DOHMH Pesticide Product Search showing that the specific brand of pesticide and rodenticide is "NOT PROHIBITED."

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 shall be licensed by NYSDEC as a Commercial Pesticide Applicator, Commercial Pesticide Technician or Commercial Pesticide Apprentice and must be supervised by an exterminator licensed by NYSDEC as a Commercial Applicator in categories 7A ("Structural & Rodent Control") & 8 ("Public Health Pest Control"). It is recommended (but not required) that all personnel engaged in survey and monitoring work or rodent control work possess a certificate of

completion from the NYC-DOHMH's half-day or three-day "Rodent Academy." 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) <u>Prior to Construction</u> 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) <u>During Construction</u> 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. Monitoring during construction shall cover Contractor's plant and temporary facilities. Contractor shall maintain all monitoring records in the manner described in Section 7.88.6. on "Records and Reports" of this specification.

(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) <u>Outside Wetland Areas, Woodland Areas and Beyond Seventy-five (75') feet of a Stream.</u> 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.

<u>During Construction</u> - 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.

Bait may be placed in dry manholes without a tamper-proof bait station box, if the manhole configuration does not permit the use of a bait station box. If a sanitary sewer manhole has a concrete invert platform of sufficient size, a bait box shall be used. Bait placed in a manhole outside of a tamper-proof box shall be strung on a stainless-steel wire, and secured to the manhole structure. No separate payment shall be made for the wire or securing the wire to the manhole, and shall be deemed included in the bid price for Baiting of Rodent Base Stations. Rodent control personnel entering manholes shall comply with the confined space requirements required by the Occupational Safety and Health Administration ("OSHA") 29 CFR 1929 - Subpart AA – Confined Spaces in Construction.

The use of tamper proof bait station boxes shall be used with rodenticide in all other cases.

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. Non-target species captured in live traps shall be released by the baiting exterminator within twenty-four (24) hours after notification by the Engineer. The baiting exterminator shall also be responsible for posting and maintaining signs announcing the baiting of each particular location. The signs shall be placed at least twenty-four (24) hours prior to the application of any pesticide or rodenticide, and shall meet the requirements of Local Law 37 of 2005. NYC-DOHMH provides a sample template sign for pesticide notification purposes in compliance with the law at:

< http://www1.nyc.gov/assets/doh/downloads/pdf/pesticide/notification-sign.pdf >.

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 three (3) mils thick, black plastic. The bag shall have a note taped on with the contents (e.g., "dead rat"), and disposed as required by the NYC Department of Sanitation. 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 CONTROL

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 No. 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, NYCPURS recordkeeping, 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 No. 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, NYCPURS recordkeeping, 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



Department of Design and Construction

SPECIFICATION BULLETIN

SB

17-003

Title.	CNCINEED	10 ELES	A AFEI	
Title:	ENGINEER	S FIEL	.D OFFI	CE

Prepared:

1/12/2017

Approved:

1/12/2017

Richard Jones, P.E. CWI

Date

Mohsen Zargarelahi, P.E.

Date

Director, Specifications – Infrastructure Design

Assistant Commissioner – Infrastructure Design

APPLICABILITY:

This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

SUPERSEDENCE:

This SB supersedes the following SBs: NONE

ATTACHMENTS:

 ATTACHMENT 1: Revised Section 6.40 – Engineer's Field Office Pages A1-1 through A1-7

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

No Changes.

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

a) Refer to Pages 372 through 379, Section 6.40 – Engineer's Field Office;
 Delete in its entirety the Section;
 Substitute the revised Section in Attachment 1 (7 pages).

SECTION 6.40 - Engineer's Field Office

6.40.1. **DESCRIPTION**. The Contractor shall provide, furnish and maintain a fully equipped field office (Type A, B, C, CU, D or DU, as specified) for the exclusive use of and occupancy by the Department's engineering personnel and/or Supervising Consultant (herein after called "City personnel"), and by the engineering personnel of private utilities when specified. The field office shall be at a location approved by the Engineer and shall be a commercial building, store front, or with the approval of both Office of Construction Mitigation and Coordination (OCMC) and the Community Board it may be a mobile trailer(s). If a trailer is used it shall be subject to approval by the Engineer, and all necessary permits shall be obtained by the Contractor. The Contractor may have facilities in an adjoining area separated by a lockable door, provided such facilities are in a location approved by the Engineer. The field office shall be within ½ mile of the job site. Field offices located further than ½ mile from the job site shall require approval by the Director or Assistant Commissioner for Construction.

The field office structure and occupancy thereof shall conform to the requirements of all laws, rules, regulations and orders applicable to it.

The field office and all equipment, except as otherwise specified, may be new materials or may be used materials in good condition and satisfactory to the Engineer.

6.40.2. MATERIALS.

- (A) GENERAL CONSTRUCTION. The Engineer's Field Office shall be in an approved and weatherproof building. It shall have a minimum ceiling height of seven (7') feet and be partitioned to provide the number of rooms required for the type of office specified. Floor space for Field Office Types C, CU, D, and DU shall be subdivided into work areas based on a floor plan provided by the City to the Contractor upon notification of space availability.
- (B) GENERAL FACILITIES. The field office shall contain or have the following facilities incorporated:
 - (a) <u>Lighting</u> Electric light, non-glare type luminaries to provide a minimum illumination level of 100 ft.- candles at desk height level.
 - (b) <u>Heating and Cooling</u> Adequate equipment to maintain an ambient air temperature of 70° F. ±5°.
 - (c) <u>Electrical Energy Outlets</u>
 - (d) <u>Toilet</u> A separate enclosed room, properly ventilated per code and complying with applicable sanitary codes shall contain a lavatory with a sink that provides running hot and cold water, flush-type toilet, mirror, electric hand dryer, and paper towel dispenser.
 - (e) <u>Potable Water</u> Potable water supplied from an existing system or five (5) gallon capacity water cooler of a type to be approved by the Engineer shall be provided for use by City personnel. Replacement bottles of water shall be provided by the Contractor, when required.
 - (f) <u>Signs</u> Store front locations shall have a window graphic sign in black and white lettering with the following inscription. Other locations shall have a wood or metal sign affixed on the outside wall of the building with the following inscription painted in black block lettering on a white background. Paints shall be approved exterior enamels.

CITY OF NEW YORK	2-1/2"
DEPARTMENT OF DESIGN AND CONSTRUCTION	3-1/2"
INFRASTRUCTURE	2-1/2"
RESIDENT ENGINEER'S FIELD OFFICE	2-1/2"

- (g) <u>Electric Refrigerator</u> Five (5) cubic feet minimum capacity for use by City personnel.
- (h) Microwave, Toaster Oven, and Coffee Maker Basic reheating kitchen equipment or approved appliances for use by City personnel.
- (i) <u>Windows and Doors</u> All windows and doors shall be weatherproof and each equipped with adequate locking devices. Each window shall be equipped with vertical blinds. Exterior doors shall be provided with two (2) separate "high security" dead bolt type cylinder locks, keyed alike, and three (3) keys shall be furnished for each lock.

A1-1

- (j) <u>Partitions</u> Partitions for work space enclosures shall be either permanent walls or of the modular type similar to Herman Miller's standard fabric covered line.
- (k) Kitchen Sink Mechanism to provide non-drinking, hot and cold, running water. OFFICE EQUIPMENT.
- (a) <u>Pencil Sharpener</u> One standard pencil sharpener for use by City personnel.
- (b) <u>Telephone Answering Machine</u> The telephone answering machine to be provided shall be an electronic digital voice machine with emergency call forwarding capability. It shall be operable twenty four (24) hours per day and, when unattended, shall transmit to the caller the following message:
- "You have reached the Field Office of the New York City Dept. of Design and Construction. No one is here now. We check our incoming messages frequently. We will get back to you as soon as possible. Please leave your name, message and phone number where you may be reached. In case of emergency, call the New York City Hotline at 311. Again, the emergency number is 311."
- (c) <u>Computer Equipment</u> Computers shall be provided for all contracts regardless of construction duration.
- Computers furnished by the Contractor for use by City Personnel, for the duration of the contract, shall be in accordance with Table I ADDITIONAL SPECIFIC REQUIREMENTS, contained herein, and shall meet the following minimum requirements:
 - (1) Personal Computer(s) Workstation Configuration.
 - (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 (4MB Cache, 3.0GHz) or faster computer Dual Processor.
 - (c) System Ram: Minimum of 16GB (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. Internal CD-RW, 48x Speed or faster.
 - (e) CD-RW: Internal CD-RW, 48x Speed or faste (f) 16X DVD+/-RW DVD Burner (with double layer write capability) 16x Speed or faster
 - (g) I/O Ports: Must have at least one (1) Serial Port, one (1) Parallel Port and three (3) USB Ports.
 - (h) Video Display Card: HD Graphics (VGA, HDMI) with a
 - minimum of 64 MB of RAM. itor: 22" W. 23.0 Inch VIS, Widescreen,
 - (i) Monitor: 22" W, 23.0 Inch VIS, Widescreen, VGA/DVI LCD Monitor.
 - (j) Available Exp. Slots: System as configured above shall have
 - at least two (2) full size PCI Slots available.
 - Network Interface: Integrated 10/100/1000 Ethernet card.
 - (k) Network Interface: Integrated 10/100/1000 Ethernet car (l) Other Peripherals: Optical scroll Mouse, 101 Key Keyboard, Mouse Pad and all
 - necessary cables.
 - (m) Software Requirements: Microsoft Windows 10 Professional, 32 or 64 bit; Microsoft Office Professional
 - 365; Microsoft Project 365; Basic Adobe Acrobat Package; Anti-Virus software package with 2 year updates

(C)

subscription; and, either Auto Cad LT or Microsoft Visio Standard Edition, as directed by the Engineer.

- (2) All field offices requiring computers shall be provided with the following:
 - (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	10 Mbps
6 – 10	20 Mbps
11 – 15	25 Mbps
16 – 20	50 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 (<u>preferably Gmail or Outlook – e.g. HWK666@gmail.com</u>).

- (b) All necessary Cabling.
- (c) Storage Boxes for and Blank CDs/DVDs.
- (d) UPS/Surge Suppressor combo.
- (e) 10 USB Thumb (or Flash) Drive 16GB each
- (3) All computers required for use in the Engineer's Field Office shall be delivered, installed, and setup in the Field Office by the Contractor.
- (4) All Computer Hardware shall come with a three (3) year warranty for onsite repair or replacement. Additionally, and notwithstanding any terms of the warranty to the contrary, the Contractor is responsible for rectifying all computer problems or equipment failures within one (1) business day.
- (5) An adequate supply of blank CDs/DVDs, and paper and toner cartridges for the printer shall be provided by the Contractor, and shall be replenished by the Contractor as required by the Engineer.
- (6) It is the Contractor's responsibility to ensure that electrical service and phone connections are also available at all times; that is, the Field Office Computer(s) is to be powered and turned on twenty-four (24) hours each day.

Broadband connectivity is preferred at each field office location. Please take into consideration that an extra phone line dedicated to the modern must be ordered as part of the contract unless Internet broadband connectivity, via Cable or FiOS, is available at the planned field office location. Any questions regarding this policy should be directed to the Assistant Commissioner of Information Technology Services at 718-391-1761.

- (d) <u>Data Books</u> A copy of The AED Green Book, latest edition, published by Machinery Information Division of K-III Directory Corporation, 1735 Technology Drive, Suite 410, San Jose, California 95110-1313, shall be provided for all contracts that have a total Consecutive Calendar Days for General Construction duration as set forth in Schedule A of greater than 365 CCD's. Contracts of lesser duration shall not require any data books.
- (D) Field Testing Equipment.
 - (a) 2 <u>Air Entrainment Meters</u> Pressure Type, with carrying case for use by City personnel. Each meter shall be capable of producing an accurate test result in approximately five (5) minutes and shall comply with ASTM Designation C 231.

- (b) 2 Slump Test Sets Slump cone and test sets conforming to the requirements of ASTM Designation C 143, complete with rod and scoop for use by City personnel.
- (c) <u>Thermometers</u>: For use by City personnel.
 - (1) 1 Minimum-maximum thermometer.
 - (2) 3 Asphalt thermometers of stainless steel construction with an accuracy of 0.5% of the full scale, able to measure temperatures from 50 to 500 degrees F. in 5 degree increments.
 - (3) 3 Surface Thermometers able to measure temperatures of flat surfaces similar to Sargent-Welsh Model S81441-D, or an approved equivalent.
- (d) Nonsparking Pinch Bar For use in opening manholes.
- (e) Gas Meters For use in detecting the presence of explosive gases and vapors for use by City personnel.
- (f) <u>Straight Edge</u> One 10 foot long straight edge for use by City personnel in detecting pavement surface tolerance.
- (g) 48" Smart Level For use in determining pedestrian ramp and sidewalk slopes.
- (h) <u>Chlorine Test Kits</u> For testing residual chlorine levels following water main flushing.
- (i) <u>Green Florescent Power Trace-Dye</u> For testing sewer connections.
- One Million Candlepower Rechargable Flashlight.
- (k) <u>Distance Measuring Wheel</u> For measuring long distances.
- 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:
 - (a) Each Type shall have a minimum of one outside door and four windows.
 - (b) Type C shall be partitioned to provide three (3) rooms.
 - (c) Type CU shall be partitioned to provide four (4) rooms, one of which shall be at least 150 s.f. in area (for use by private utilities).
 - (d) Type D shall be partitioned to provide four (4) rooms.
 - (e) Type DU shall be partitioned to provide five (5) rooms, one of which shall be at least 150 s.f. in area (for use by private utilities).

TABLE 6.40-I ADDITIONAL SPECIFIC REQUIREMENTS

SPECIFIC REQUIREMENTS	FIELD OFFICE TYPE					
Of Longito Management	Α	В	С	CU	D	DU
Minimum useable floor space (Square Feet)	400	800	1200	1200	1,800	1,800
Office desks, at least 4'-8" x 2'-8", with drawers, locks, and keys.	2	2	4	8*	8	12*
Swivel chairs, with arms, for the above.	2	2	4	8*	8	12*
Office folding chairs, metal, with padded seats and backs.	2	3	6	14**	8	16**
Steel supply cabinets (approximate size 72" high by 36" wide by 18" deep), with four adjustable shelves, tumbler lock and 3 keys.	1	1	1	1	1	1
Fire resistant cabinet, 4-drawer, legal size with lock and three (3) keys, meeting the requirements for "Filing devices, Insulated (36 E 9)" Class D Label, of the Underwriters' Laboratories, Inc. Specifications.	1	1	1	3***	4	6***
Individual lockers (17" wide x 18" deep x 72" high) with flat key	1	1	4	4	4	4
locks and two (2) keys each. Calculating machines, tape type with digital display registering at least ten (10) digits.	1	1	2	2	3	3

Waste paper baskets (metal, approximately 12" square by 16" high).	1	2	2	6*	4	8*
Fire extinguishers, non-toxic, dry chemical type meeting Underwriters Laboratories, Inc., approval for Class A, Class B and Class C fires with a minimum rating of 2A:IOB:10C.	1	1	2	3****	4	5****
First Aid Kit kept properly stocked with appropriate first aid supplies at all times.	1	1	1	1	2	2
Drafting tables (3'-0" x 5'-0") with storage drawers and stool.	1	2	2	3****	4	5****
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 for printing capability.	1	1	1	1	1	1
Standalone networked color laser printer.	XX	XX	XX	XX	XX	XX
(Not required if photocopying machine prints in color)	1	1	2	3****	4	5****
Vertical filing plan racks for six sets of 22"x36" plans each rack.	4	6	6	7±	8	9±
Telephone lines for calls, where one shall be dedicated for the Fax Machine, one for each computer fax/modem and the others for telephone instruments.	4			/ +	o ,	
Telephone instruments.	2	2	3	5‡	4	6‡
Telephone answering machine.	1	1	1	1	1	1
Fax Machine - With an adequate supply of copy paper, toner, etc. The supply of 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.	1	1	1	1	1	1
Personal Computer - Workstation Configuration	1	3	3	3	4	4
Bottled water with refrigerator unit-hot/cold water. (For private				1		1
utilities room.)		ļ.,		1		1
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 Lumins, 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

- Provide one (1) telephone line and two (2) telephone instruments for the exclusive use by private utilities personnel. The line shall interconnect the two telephone instruments by push button control.
- * Provide four (4) each of Office Desks, Swivel Chairs and Waste Paper Baskets in private utilities room.
- Provide eight (8) Folding Chairs in private utilities room.
- *** Provide two (2) Fire Resistant 4- Drawer Legal Size Cabinets in private utilities room.
- **** Provide one (1) each of Fire Extinguisher, Drafting Table and Vertical File Rack in private utilities room.

6.40.4. CONSTRUCTION METHODS. The building shall be fully equipped and made available for use and occupancy by the Department's personnel and/or Supervision Consultant not less than thirty (30) days prior to the start of any contract work.

The building interior (including access foyers, stairwells, etc.) shall be maintained in good, clean, and sanitary working condition by the Contractor for the duration of the contract. The Contractor shall provide and pay all costs for electrical service, telephone service for calls within New York City limits, hot and cold water, heat and fuel, and daily janitor service. Staples, such as paper towels, hand soap, toilet paper, and similar supplies, shall always be available.

Where necessary, the site for a mobile trailer(s) shall be graded and shoulder stone placed and maintained as directed by the Engineer to provide a parking area for City personnel and, if necessary, an approach road shall be provided. Plumbing work shall include all water supply, drainage and piping required for the operation of a complete installation. Temporary water service shall be provided from an existing main and extended into the trailer and all fixtures requiring water supply shall be properly connected up. All necessary soil, waste, vent and drainage piping shall be provided and connected to the existing sewer or as otherwise directed.

The office, incorporated facilities, equipment, and personal property of the Department's employees shall be protected by the Contractor against loss or damage from fire, theft, or other causes, at all hours of the day and night. The Contractor shall provide fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of forty thousand dollars (\$40,000.00) for office equipment of the City of New York in the Engineer's field office and for property of City personnel that is used in the contract work and stored in the office. All insurance coverage shall be written by a company approved by the Commissioner and payable in case of loss to the City of New York. The office shall be maintained by the Contractor in first class condition until final acceptance of the work. At the direction of the Engineer, any equipment on the above lists may be deleted. He may direct that other equipment of equivalent value be supplied by the Contractor or an appropriate credit be taken for the value of equipment not provided.

When directed by the Engineer, the Contractor shall disconnect all services and remove and dispose of all temporary installations from the site, including fencing, surfacing and utilities, the area shall then be cleaned, loamed and seeded if required and left in a neat and acceptable condition. On and after the date of the Engineer's Final Acceptance, the temporary structure and all installed equipment shall become the property of the Contractor, and shall be disposed of, by him, away from the site of the work. Engineer's Final Acceptance shall be when the Contractor has completed all punch list work and Official Completion Date has been set.

6.40.5. NONCONFORMANCE. No payment will be made under Engineer's Field Office for each calendar day during which there are deficiencies in compliance with the requirements of any subsection of this specification. The first calendar day shall commence twenty-four (24) hours after notice to the Contractor of such a deficiency. This non-payment shall be deducted from the Contractor's next estimate as a charge to the Contractor on the item. The amount of such calendar day non-payment will be determined by dividing the unit price bid per month by 30.

In addition, the Contractor may be subject to liquidated damages in accordance with Schedule A.

6.40.6. MEASUREMENT. The quantity to be measured for payment under this item shall be the number of months that the Field Office is available for occupancy by the Field Engineers during the period of the contract. Payment will begin the first month that the office is fully equipped, serviced as specified, and made available for occupancy. The Field Office is to be continuously made available and Monthly payments will continue for the duration of the contract through a period not to exceed 6 months past the substantial completion date. When directed in writing by the Commissioner, the Field Office will be provided and paid for a period of time beyond 6 months past the substantial completion date. Payment for each month's occupancy after the date of substantial completion acceptance will be made as part of the final estimate. Monthly payments may be terminated on a specified date prior to acceptance of the contract by written notification by the Engineer that such office will no longer be required on the contract.

6.40.7. PRICE TO COVER. The unit price bid per month for the item Engineer's Field Office shall include the cost of furnishing all labor, materials, equipment, ground rental, fire and theft insurance, and utility charges necessary to complete the work of providing or constructing the field office; making all necessary electrical, water, sewer, and other connections required to make the above facilities operative; payment of all rental costs; furnishing and paying for heating fuel, as required; all electrical energy;

private telephone services; staples, as specified; and all necessary incidentals to complete the work - all in accordance with the specifications and the directions of the Engineer.

Payment will be made under:

Item No. Item	Pay Unit
	MÓNTH
	MONTH
6.40 B ENGINEER'S FIELD OFFICE (Type B)	MONTH
6.40 C ENGINEER'S FIELD OFFICE (Type C)	
6.40 CU ENGINEER'S FIELD OFFICE (Joint Use) (Type CU)	MONTH
6.40 D ENGINEER'S FIELD OFFICE (Type D)	MONTH
6.40 DU ENGINEER'S FIELD OFFICE (Joint Use) (Type DU)	MONTH



SPECIFICATION BULLETIN

SB

17-004

	27 00
Title: FIRE DEPARTMENT FACILITIES	
Prepared: 1/12/2017	Mohon Zanganelah 1/12/20:
Richard Jones, P.E. CWI Date Director, Specifications – Infrastructure Design	Mohsen Zargarelahi, P.E. Date Assistant Commissioner – Infrastructure Design

APPLICABILITY:

This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

SUPERSEDENCE:

This SB supersedes the following SBs: NONE

ATTACHMENTS:

NONE

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

No Changes.

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

a) Refer to Page 332, Section 6.23 – Fire Department Facilities, Subsection 6.23.4.(A), 3rd paragraph;

<u>Delete</u> the words "Bureau of Fire Communications"; <u>Substitute</u> the words "Bureau of Facilities Management".

b) Refer to Page 332, Section 6.23 – Fire Department Facilities, Subsection 6.23.4.(A), 9th paragraph;

<u>Delete</u> the words "Bureau of Fire Communications"; <u>Substitute</u> the words "Bureau of Facilities Management".



SPECIFICATION BULLETIN

SB

17-004

Title: FIRE DEPARTMENT FACILITIES

c) Refer to Page 332, Section 6.23 – Fire Department Facilities, Subsection 6.23.4.(A), 9th paragraph;

<u>Delete</u> the words "(718) 624-4194"; <u>Substitute</u> the words "(718) 281-3846".

d) Refer to Page 333, Section 6.23 – Fire Department Facilities, Subsection 6.23.4.(E), 1st paragraph;

Delete the words "Bureau of Fire Communications";

Substitute the words "Bureau of Facilities Management".

e) Refer to Page 339, Section 6.23 - Fire Department Facilities, Subsection 6.23.6, 1st paragraph;

<u>Delete</u> the words "Bureau of Communications"; <u>Substitute</u> the words "Bureau of Facilities Management".

- f) Refer to Page 343, Section 6.23 Fire Department Facilities, Subsection 6.23.6.(I);

 Delete the words "steel bar reinforcement and".
- g) Refer to Page 440, Section 6.70 Maintenance and Protection of Traffic, Subsection 6.70.9.(D);

Delete the words "Bureau of Fire Communications";

Substitute the words "Bureau of Facilities Management".

(NO FURTHER TEXT)



SPECIFICATION BULLETIN

SB

17-005

Title: DIGITAL PHOTOGRAPHS	
Proporedia	Motor Langarelet 1/12/2017
Richard Jones, P.E. CWI Date Director, Specifications – Infrastructure Design	Mohsen Zargarelahi, P.E. Date Assistant Commissioner – Infrastructure Design

APPLICABILITY:

• This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

SUPERSEDENCE:

• This SB supersedes the following SBs: NONE

ATTACHMENTS:

• ATTACHMENT 1: Revised Section 6.43 – PHOTOGRAPHS Pages A1-1 through A1-4

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

Refer to Page 37, Section 1.06.45 – Progress Photographs;
 Delete in its entirety the Section;
 Substitute the following: "NO TEXT."

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

b) Refer to Page 385, Section 6.43 - Photographs;
 Delete in its entirety the Section;
 Substitute the revised Section in Attachment 1 (4 pages).



SPECIFICATION BULLETIN

SB

17-005

Title:

DIGITAL PHOTOGRAPHS

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER AND WATER MAIN SPECIFICATIONS, DATED 7/1/14:

All references contained below are to the New York City Department of Environmental Protection Standard Sewer and Water Main Specifications, Dated July 1, 2014. Said Standard Sewer and Water Main Specifications are hereby revised as follows:

a) Refer to Page I-16, Section 10.32 – PHOTOGRAPHS;
 Delete in its entirety the Section;
 Substitute the revised Section:

"The Contractor shall be required to provide "PHOTOGRAPHS" in accordance with New York City Department of Transportation (NYCDOT) Standard Highway Specifications Section 6.43 – Photographs."

SECTION 6.43 - Photographs

6.43.1. INTENT. This section describes the work of providing a photographic record of contract work.

6.43.2. DESCRIPTION. The work shall consist of the furnishing of all required photographic equipment and materials; the taking of digital photographs; making prints from digital files; and submitting prints and digital files to the Engineer.

6.43.3. MATERIALS.

(A) PRINTS

Prints shall be $7-1/2" \times 9-1/2"$ image area on $8" \times 10"$ single-weight, gloss paper, and shall be in color. Prints shall be inserted in standard weight Archival Quality clear poly sheet protectors and submitted in a hard cover three (3) ring binder. The following information shall be imprinted, or indelibly printed, on a white border measuring no more than one and one half (1-1/2") inch at the bottom of the front of each photograph:

- (a) Contract Number and Job Location
- (b) Photograph Number
- (c) View and Description (Indicating a general description of what the photograph represents)
- (d) Photograph Type: Preconstruction Photograph or Construction Progress Photograph
- (e) Date (The date the photograph was taken.)
- (f) Address street address where photograph was taken
- (g) Borough
- (h) Street Segment ID
- (i) Name of Photographer
- (j) Department Witness

The Contractor shall furnish to the Commissioner one (1) set for each view taken, each set consisting of two (2) 8" x 10" prints and one (1) digital file.

All prints and digital files shall become the property of the Commissioner. All completed prints and digital files shall be delivered to the Engineer within two (2) weeks after the photographs have been taken. Approved binders for the clear poly sheet protectors containing all materials shall be furnished by the Contractor and delivered to the designated construction office at the time of the initial submission of prints and DVDs at such other times as may be required thereafter.

(B) DIGITAL FILES

Digital files shall be captured as 7.2 megapixel files or greater, with a minimum pixel array of 2,400 pixels by 3,000 pixels. The camera used to capture the digital files shall be a Digital SLR (Single Lens Reflex) camera or approved equal; "point and shoot" cameras or cameraphones are not acceptable. Digital cameras shall produce images using true optical resolution; "digital zoom" is not acceptable. Images shall not be resized or interpolated. The file format for digital files shall be Joint Photographic Experts Group format ("JPG"). The digital files shall not be modified or processed in any way to alter the JPG file's metadata, including the photograph's original capture date.

Digital files shall be submitted on Digital Versatile Disk ("DVD"). DVDs shall be inserted in standard weight Archival Quality clear poly sheet protectors, and submitted in a hard cover three (3) ring binder. The information imprinted on each print shall be provided on an Excel file included on the DVD. The DVD shall be labeled with the Project ID and the geographical area and streets depicted in the photographs. Labeling using adhesive labels is not acceptable.

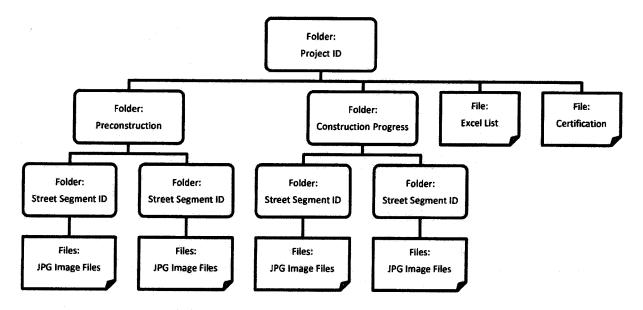
NYC DDC SPECIFICATION BULLETIN 17-005 ATTACHMENT 1

Digital files shall have file names in the following format: a^b^c^d^e^f.JPG, where "a" through "f" are as follows:

- (a) Contract Number
- (b) Photograph Number
- (c) Date, in YYYY-MM-DD format (The date the photograph was taken.)
- (d) Address street address where photograph was taken
- (e) Borough
- (f) Street Segment ID

A sample file name would be "HBX123^0021^2016-04-19^123 Main St^Queens^55555.JPG"

The files on the DVD shall be organized in folders by Photograph Type and Street Segment ID as follows:



(C) CERTIFICATION

The Photographer shall provide a signed certification that the files on the DVD are unaltered and are an accurate representation of the subject photographed. The original certification, in a clear poly sheet protector, shall be submitted with the prints and digital files, and a scanned copy shall be included on the DVD.

6.43.4. METHODS. The Contractor shall employ and pay for the services of a competent Professional Photographer who, at the direction of the Commissioner or his authorized representative, shall take Preconstruction Photographs and Construction Progress Photographs and such other photographs which may be required during the period of the contract.

The Photographer shall be available for taking the required photographs within forty-eight (48) hours after receiving notification from the Commissioner or his authorized representative.

Photographs shall be taken under the supervision and direction of the Engineer. The Engineer reserves the right to reject any and all views that are not reasonably clear and definitive. No separate or additional payment will be made for any additional photographs that are required as a result of the rejection of views.

- **6.43.5. PRECONSTRUCTION PHOTOGRAPHS.** Preconstruction Photographs shall show the conditions existing on the work site prior to the commencement of the contract work. The Preconstruction Photographs will generally represent views of:
 - The original surface conditions of streets, curbs and walks, and buildings;
 - Evidence of damage, disrepair, or emergency situations;
 - All encumbrances and/or encroachments which may be affected by the construction of the proposed work.

When there is no pay item listed in the Bid Schedule, the number of Preconstruction Photographs shall be as follows:

- (A) Highway Street Reconstruction projects: 150 sets per million dollars of street reconstruction work;
- (B) Highway Resurfacing projects: 4 sets per 250 linear feet of roadway for resurfacing work;
- (C) Sewer and Water Main projects: 2 sets (1 set each side of street) per 25 linear foot of sewer and water main.

When there is an item listed in the Bid Schedule, the quantity to be measured for payment shall be the number of sets, each set consisting of a digital file and the two (2) prints made from the digital file, of Preconstruction Photographs including photographs showing the original condition of all encumbrances and/or encroachments which may be affected by construction of the proposed work, and which are delivered as directed by the Engineer.

6.43.6. CONSTRUCTION PROGRESS PHOTOGRAPHS. Construction Progress Photographs shall show the conditions existing during the progress of, and at the completion of the contract work. The photographs will generally represent views of the work under construction and completed work. Construction Progress Photographs shall be taken monthly and upon completion of the work.

The approximate number of Construction Progress Photographs is as follows:

- (A) Highway reconstruction and resurfacing projects: Minimum 2 sets per 250 linear feet of roadway under construction or completed in the last month.
- (B) Pedestrian ramps on all projects: Minimum of 1 set for every pedestrian ramp under construction or completed in the last month, in addition to other progress photographs.
- (C) Sewer and Water Main projects: Minimum of 4 sets for every 100 feet of sewer or water main under construction.

No separate payment will be made for Construction Progress Photographs. The cost of taking and providing sets of Construction Progress Photographs shall be included in the prices bid for all other items of work.

6.43.8. PRICE TO COVER (PRECONSTRUCTION PHOTOGRAPHS ONLY). When there is an item listed in the Bid Schedule, the contract price bid per set shall cover the cost of furnishing all labor, materials, plant, equipment, insurance, and necessary incidentals required, including the cost of the photographer, and the cost of furnishing the required prints, digital files, DVDs, and ring binders, and completing the work in accordance with the specifications and the directions of the Engineer.

When there is no item listed in the Bid Schedule, no separate payment will be made. The cost of furnishing all labor, materials, plant, equipment, insurance, and necessary incidentals required, including the cost of the photographer, and the cost of furnishing the required prints, digital files, DVDs, and ring

binders, and completing the work in accordance with the specifications and the directions of the Engineer shall be included in the prices bid for all other items of work.

Payment will be made under:

Item No.

Item

Pay Unit

6.43 D

DIGITAL PHOTOGRAPHS

SETS



SPECIFICATION BULLETIN

SB

17-006

Title: RECORDS OF SUBSURFACE STRUCTURES				
Prepared: 1/12/2017	Approved: 1/12/2017			
Richard Jones, P.E. CWI Date Director, Specifications – Infrastructure Design	Mohsen Zargarelahi, P.E. Date Assistant Commissioner – Infrastructure Design			

APPLICABILITY:

This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

SUPERSEDENCE:

This SB supersedes the following SBs: NONE

ATTACHMENTS:

NONE

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

a) Refer to Page 9, Section 1.06.18 – Records of Subsurface Structures, Etc.;
 Delete the first two paragraphs;

Add the following paragraph to the beginning of the Section:

"The Contractor stipulates that it has the obligation to examine and review any and all available documents and other sources of information concerning the condition of the sub-soil materials, subsurface conditions and existing subsurface structures of bridges, pipes, tunnels, conduits, sewers, foundations, bulkhead walls and other subsurface structures and stipulates that it has made such investigation and research as it deems necessary. To the extent the Contractor incurs delays or damages based on sub-soil materials, subsurface conditions and existing subsurface structures that were known or reasonably could have been known to the Contractor through such available documents or other sources of information, the Contractor will make no claim for such delays or damages."

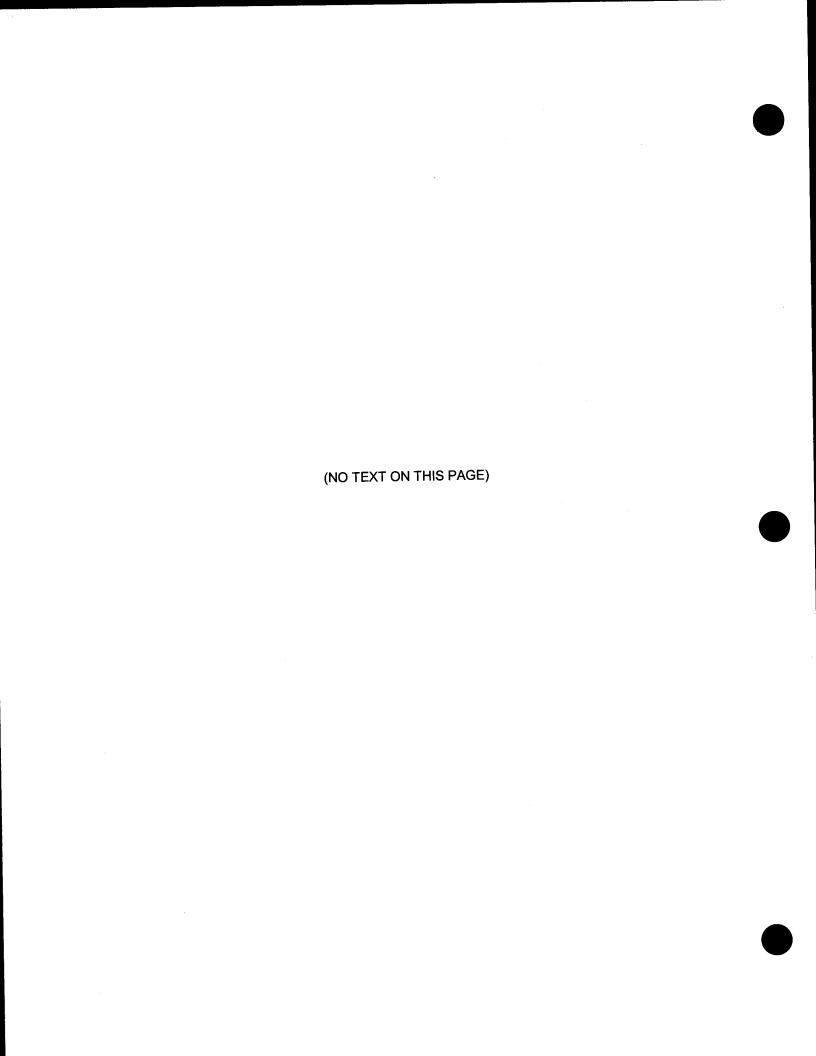
(NO TEXT THIS PAGE)

SEWER AND WATER MAIN REVISIONS TO SPECIFICATIONS

NOTICE

The Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), Sewer Design Standards of the Department of Environmental Protection (dated (September 2007) Revised January 5, 2009), Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), and Specifications For Trunk Main Work of the Department of Environmental Protection (dated July 2014) 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. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
- C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK



A. NOTICE TO BIDDERS

- (1) The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within twenty-one (21) to thirty (30) days of Contract Registration.
- (2) 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.
- (3) 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.
- (4) 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.
- (5) 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.
- (6) 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 Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), the Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), the Specifications For Trunk Main Work (dated July 2014), and the contract drawings, shall be replaced with Bolted Split-Sleeve Restrained Coupling.
- (7) The Contractor is notified that wherever the Item No. "6.52" and words "flagger", "flaggerson" and "flagman" are used in the contract documents and drawings it shall mean the Item No. "6.52 CG" and the words "Crossing Guard", respectively. The Contractor is advised that until the Comptroller of the City of New York sets a prevailing wage rate for crossing guards, there are no prevailing wage rates for crossing guards.
- (8) The Contractor is notified that the fuel cost per gallon used in the formula under **Sub-Article 26.2.8** of the Standard Construction Contract for **Extra Work** will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration ("USEIA"), and available on its website at http://www.eia.gov/petroleum/gasdiesel/. The USEIA published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1st, April 1st, July 1st and September 1st) will be used in the reimbursement formula for all **Extra Work** invoiced that was performed during that calendar quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.
- (9) 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.

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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 (212) 839-3799.

- (10)The Contractor is advised that where the existing roadway pavement is designated to be replaced from curb to curb, then no full depth saw cutting of pavement for sewer and water main trenches will be required, except at the limits of full width pavement restoration. No separate or additional payment will be made for any saw cutting.
- (11)The Contractor shall exercise extreme caution and take all necessary precautions in placing sheeting and excavating to prevent any damage to the existing NYC TRANSIT'S subway structures and its appurtenances during construction work throughout the project area. The Contractor shall take full responsibility to protect the said NYC TRANSIT'S subway structures and its appurtenances and any damage caused by the Contractor's operations shall be made good by the Contractor to the satisfaction of the Engineer at no additional cost to the City.
- (12)The Contractor shall submit shop drawings to NYC Transit Authority showing all the details and methods of construction, such as, sheeting and bracing, including the Contractor's procedure and sequence of construction, supporting and/or protection of the existing TA's structures and its appurtenances, with necessary design calculations for approval prior to starting of the construction. The design shall be made by a New York State Licensed Professional Engineer skilled in this type of construction and as further evidenced by the imprint of Professional Engineer's seal and signature on all drawings. The cost of this work shall be deemed included in the price bid for all items of work under this contract.
- (13) The field office shall be within ½ mile of the job site. Field offices located further than ½ mile from the job site shall require approval by the Assistant Commissioner for Construction.
- (14)The Contractor is advised that at certain locations within the project limit, existing manholes, seepage basins, basins, sewers and water mains that are to be abandoned may fall partially or totally within the trench of proposed sewer or water main. These existing structures shall be removed in part or in whole as necessary and required in order to accommodate the installation of the new sewer or water main. After the removal of the said structures, the resultant voids shall be satisfactorily filled and compacted up to the subgrade of the new sewer or water main by the Contractor. No separate or additional payment will be made for the removal and filling of the said existing structures, additional excavation, sheeting and bracing, providing bulkheads and all other items necessary to complete this work, the cost therefore shall be deemed included in the prices bid for all contract items of work.
- (15)In order to properly abandon existing seepage or catch basins the Contractor shall remove castings, demolish walls to the required depth, bulkhead pipes, break up bottom slabs, fill and compact openings, and perform all work as directed by the Engineer. The cost for this work shall be deemed in the prices bid for all contract items of work. In streets where new storm sewer is being constructed all existing seepage basins shall be replaced by new catch basins and connected to the proposed storm sewer at the direction of the Engineer. The Contractor shall abandon the existing seepage basins using the method outlined in **Subsection 51.41.3 (E) ABANDONING EXISTING CATCH BASINS** of the Standard Sewer and Water Main Specifications (dated July 1, 2014), at no cost to the City.
- (16)The Contractor is advised that at locations throughout this project, where proposed sewer(s) or water main(s) crosses under existing water mains which are not designated for replacement/relocation, the Contractor shall properly support and protect the said existing water mains during the construction of new sewer(s). The Contractor shall take full responsibility for any damage to the said existing water mains and he shall submit support and protection systems and design computations to D.D.C. for approval at least two (2) weeks prior to the start of construction. The cost of this work including supporting design and all necessary incidental work thereto shall be deemed to be included in all bid items of work.
- (17)The Contractor is notified that at some locations there presently exists sewers, manholes, water mains, etc., which are to remain undisturbed and are in close proximity to the line of the proposed work. The Contractor shall exercise extreme care, minimize the trench width of the proposed sewers

and take all necessary precautions in placing sheeting and during excavation of the trenches to prevent any damage to the existing structures, pavement, curbs, and sidewalks that are to remain while working adjacent to them. Should any damage occur to any portion of the existing structures that are to remain due to the Contractor's operations, the Contractor shall make all repairs to the existing structures to the satisfaction of and as directed by the Engineer. The cost of such repair shall be borne by the Contractor, at no cost to the City.

- (18)The Contractor is notified that all chambers and all box sewer curve sections shall be poured in place. No precast substitutions will be permitted.
- (19)At some locations as indicated on the contract plans, the Contractor is required to reconnect all existing sewers to the proposed manholes in this contract. Prior to construction, contractor is required to verify invert elevation at reconnection locations. The said manholes shall be fabricated to provide openings for the existing sewers at the invert elevations as shown on the contract drawings. If invert elevation as shown on contract drawings doesn't match with in field condition, contractor to confirm with the Engineer prior to construction. The cost of reconnecting existing sewer pipes to new manholes, including concrete collar with steel reinforcements and/or grouting around the existing sewer pipes at the openings and all work necessary to complete the pipe reconnection, to the satisfaction of the Resident Engineer shall be deemed included in the prices bid for all items of work. No additional payment shall be made.
- (20)At all locations where the Engineer determines that the existing subgrade material has an unsatisfactory soil bearing capacities, the Contractor shall excavate below subgrade to the depth required to remove the unsatisfactory soil (maximum five (5) foot depth below subgrade), and shall backfilled to subgrade with stone ballast as described in Section 5.28. Payment for this work shall be made under Item No. 73.31AEO ADDITIONAL EARTH EXCAVATION INCLUDING TEST PIT (ALL DEPTHS); and, Item No. 70.71SB STONE BALLAST. The cost for any additional sheeting and bracing required for excavating below subgrade shall be deemed included in the price bid for Item No. 73.31AEO ADDITIONAL EARTH EXCAVATION INCLUDING TEST PIT (ALL DEPTHS).
- (21)The Contractor is advised that there's no record to verify whether there are any existing storm Leader House Connection drains on the existing storm sewers within the project limit. However, if any existing Leader House Connections are encountered during trench excavation, the Contractor shall reconnect them to the proposed storm sewer as ordered by the Engineer. The cost of the work, including but not limited to, investigations; sheeting and bracing; earth excavation; clean backfill; restoration of disturbed and damaged sidewalk, curbs, grass, steps etc. required and necessary to reconnect the existing Leader House Connection drain shall be deemed included in the prices bid for Item No. 52.41V06R 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION) and Item No. 52.41V08R 8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION).
- (22)The Contractor is advised that the location and level of existing storm sewers within the project limits was plotted based on available information from NYCDEP's record. Their accuracy is not guaranteed. The Contractor, prior to the start of construction, shall investigate and determine the correctness of the location and level of the existing storm sewers as shown on the contract drawing in order to ensure that the existing storm sewers is not disturbed or damaged during the construction of new box sewers and their appurtenances which are in close proximity to the said existing 90x90 inch storm sewer along Stanley Avenue, existing 54 inch and existing 60 inch combined sewer along Farragut Road, existing 60 inch combined sewer along Glenwood Road and E. 108th Street, and existing 48 inch combined sewer along Glenwood Road. Should the Contractor's investigation reveal discrepancies between field condition and contract drawing, the Contractor shall notify the Engineer immediately. The aforementioned investigations must be performed prior to the start of construction and the cost therefore shall be deemed included in the prices bid for all items of work.
- (23)The Contractor shall replace disturbed or damaged existing bus pads due to the interference with the construction of sewer or water mains with new ones. New bus pads shall be constructed in compliance with the **New York City Department Of Transportation (NYCDOT) Standard Highway Specifications Section 4.05 Concrete Pavement** and "Typical Cross Sections and Details for Bus Pad" on contract drawing sheet No. 37 of 51.

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(24)No separate or additional payment will be made for the work of investigation, modification of existing roof slab and all work required and necessary to complete the construction of new access manhole on existing 60 inch combined sewer at the intersection of E. 108th Street and Glenwood Road and E. 108th Street and Farragut Road and on the existing 90 inch by 90 inch combined sewer along Stanley Avenue. The cost for this work shall be deemed to be included in the price bid for the contract Item No. 51.21A000000E - ACCESS MANHOLE ON EXISTING SEWER.

(25)The Contractor is advised that the roof slabs of the existing 60 inch combined sewer shall be modified as invert slabs to accommodate the 11'-6"W X 4'-0"H Box Sewer on E. 108th Street at Farragut Road and Glenwood Road. The Contract is also advised that the roof slabs of the existing 90 inch by 90 inch combined sewer shall be modified as invert slabs to accommodate the 11'-6"W X 4'-0"H Box Sewer along Stanley Avenue between Hinsdale Street and Williams Avenue, as shown on the respective details. No separate or additional payment will be made for all work required and necessary to complete the construction of the 11'-6"W X 4'-0"H Box Sewer crossing over the existing 60inch or 90 x 90 inch combined sewer at the aforementioned location, including the work of investigation and modification of existing roof slabs. The cost for this work shall be deemed to be included in the price bid for the Item No. 50.11MS116040- 11'-6"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED STORM SEWER.

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B. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS

(1) Refer to Subsection 10.15 - Notice To Utility Companies, Etc., To Remove Structures Occupying Place Of Sewers, Water Mains Or Appurtenances, Page I-11:

Add the following to Subsection 10.15:

(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 Ms. Phuong Truong at (347) 978-2795 or Arlene Gonzalez at (718) 802-3008.

(2) NATIONAL GRID

There are NATIONAL GRID facilities in the area of construction. The Contractor shall notify NATIONAL GRID at least seventy-two (72) hours prior to the start of construction by contacting Mr. Neville Jacobs Jr. at (718) 963-5612.

(3) VERIZON/RBA

There are VERIZON facilities in the area of construction. The Contractor shall notify VERIZON at least seventy-two (72) hours prior to the start of construction by contacting Mr. Richard Buonomo of RBA at (973) 980-5456.

(2) <u>Refer</u> to Subsection 10.21 - Contractor To Notify City Departments, Page I-13: <u>Add</u> the following to Subsection 10.21:

(1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor shall notify Mr. Peter Gordon, P.E., Chief, Linear Capital Program Management Division 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) 624-4194 or (718) 624-3752.

(3) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor shall notify Mr. Michael Lofesse/Ghanshyyam Patel - Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (212) 839-3799/ (212) 839-3359, 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. James Cruickshank at (718) 965-7739.

(5) N.Y.C. TRANSIT AUTHORITY

(a) The Contractor shall notify Outside Projects at least seven (7) days prior to the start of construction.

The Contractor shall contact:

Mr. Mohamed Adam, P.E.
Project Engineer-Outside Projects
New York City Transit
2 Broadway, 7th Floor
New York, N.Y. 10004
Attention Ms. Alina Avadanei
Telephone No. (646) 252-3641

(b) The Contractor is advised that bus routes as well as bus stops, within the scope of this project may be affected during construction operations. The Contractor shall notify the Transit Authority at least two (2) weeks prior to the start of construction, in order to make the necessary arrangements as required under the NYC TRANSIT GENERAL NOTES included in Section 10.25, paragraph (A), Section 10.25 paragraph (B), and Section 10.25 paragraph (C) of this section.

Arrangements shall be made through:

Ms. Sarah Wyss
Director Of Short Range, Bus Service Planning (SRB)
New York City Transit
2 Broadway, 17th Floor
New York, N.Y. 10004
Telephone No. (646) 252-5517
sarah.wyss@nyct.com

- (c) In addition, the Contractor is advised that construction operations might affect subway lines and stations; and NYCT facilities (i.e. manholes, ducts, etc.). The Contractor shall notify the Transit Authority as required and specified in Section 10.25 paragraph (A), Section 10.25 paragraph (B), and Section 10.25 paragraph (C) of this section.
- (3) Refer to Subsection 10.25 Contractor To Carry Out Agreement Between City And Railroad Company Or Property Owner(s), Page I-14:
 Add the following to Subsection 10.25:
 - (A) NYC TRANSIT GENERAL NOTES

For NYC TRANSIT notes see the contract drawings.

(B) NYC TRANSIT INSURANCE REQUIREMENTS

N.Y.C. TRANSIT INSURANCE: The Contractor (Permittee) shall indemnify and save harmless the City of New York and the New York City Transit (Permittor) 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 carried and shall maintain at all times during the period of performance under this Agreement policies of insurance as herein below set forth below:

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(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 Permittor 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 Permittor/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 (SIRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner).

- (C) <u>Business Automobile Liability Insurance Policy</u> (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 Schedule "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 sub-contractor 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 selfinsured 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 Permittor, 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 thirty (30) days of the Binder Approval.
- (e) If a Certificate of Insurance is submitted, it must: (1) be provided on the Permittor 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

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the policy that materially change the coverage; (4) indicate the Additional Insureds and Named Insureds as required herein, along with a <u>physical copy</u> 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 Permittor, the Permittor shall have the options to: (i) 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.

(C) NYC TRANSIT CURRENT AND FUTURE PROJECTS

- (1) The list of locations and stations of current and future projects (for information only) are attached to the end of this SW Pages
- (2) The Contactor can obtain NYC Transit Structural Drawings by contacting Mr. Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- (4) <u>Refer</u> to Subsection 10.30 Contractor To Provide For Traffic, Page I-15: Add the following to Subsection 10.30:
 - (1) Traffic Stipulations:

The Contractor shall refer to the Traffic Stipulations (seven (7) pages) that are attached to the end of this section, and as directed by the Engineer.

- (5) Refer to Subsection 40.02.15 Disposal Of Water From Trenches, Page IV-9: Add the following to Subsection 40.02.15:
 - (A) The Department of Design and Construction has <u>not</u> filed application for Dewatering Permit with the New York State Department of Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Title 15 of Article 15, for a Temporary Well Point System Permit. However, it is anticipated that the criteria for rate of pumping specified herebefore in this section will be exceeded in areas of construction; the Contractor shall be responsible for applying and obtaining the necessary dewatering permit prior to the dewatering of trenches within the scope of this project.

As part of the permit application the Contractor will be required to comply with all the requirements of **Section 40.14** of this section.

Copies of all materials submitted to NYSDEC shall be sent to the New York City Department of Design and Construction (NYCDDC), Infrastructure/Design.

The following minimum requirements set forth by the New York Department of Environmental Conservation shall be complied with prior to the start of work in areas of construction requiring dewatering permit:

(1) An analysis must be made of water samples taken. The results are to be submitted to the Regional Permit Administrator. An analysis shall be made for BOD, salinity, oil, and grease. The samples shall be analyzed by a laboratory certified by the New York State Health Department and the results are to be submitted directed to the New York State Department of Environmental Conservation by the laboratory. (2) Prior to setting any wells, wellpoints or header pipes, the Contractor shall submit to the NYSDEC a layout of the complete dewatering system including the location of the discharge point. When permitted by the NYSDEC, discharge of groundwater on the beach areas shall be done in such a manner as to eliminate any erosion or siltation and will require the installation of splash blocks and/or settling basins.

The Contractor is advised that all work required in obtaining a permit, must be submitted to, and approved by the NYSDEC prior to the commencement of any work in areas of construction requiring dewatering permit. No payment for any item of work will be made, and no shop drawing shall be approved for the areas of construction until such time that a written approval is obtained from the NYSDEC.

(B) The Contractor is advised that all work shall be governed by the provisions and requirements of the obtained permit, and their said provisions and requirements shall be made a part of the contract and the Contractor shall be responsible for strict adherence thereto.

The cost of all work required for applying, complying and obtaining required dewatering permits including the cost for any required updating of permits shall be deemed included in the prices bid for all item of this contract. No additional or separate payment will be made for any work required in order to comply with these requirements.

(6) Refer to Page IV-34:
Add the following new Section 40.14:

SECTION 40.14 DEWATERING PERMITS

40.14.1 DESCRIPTION

Under this contract, and at locations where groundwater will be present in the trenches and excavations, the Contractor is required to install, maintain and operate a temporary dewatering system of sufficient size and capacity to control ground and surface water flow into the excavation and to allow all work to be accomplished in the "dry condition".

The Contractor shall be required to obtain the following permits in order to operate a temporary dewatering system.

- (A) A Dewatering/Discharge Permit from the New York City Department of Environmental Protection (NYCDEP);
- (B) A Long Island Well Permit from the New York State Department of Environmental Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Title 15 of Article 15, implemented by 6NYCRR Part 601 Water Supply and Part 602 Long Island Well. This permit is required only in the Boroughs of Brooklyn and Queens to withdraw water using a well point or deep well system where the total capacity of such well or wells is in excess of 45-gallons per minute (or 64,800-gallons per day); and,
- (C) An Industrial State Pollutant Discharge Elimination System (SPDES) or a Non-Jurisdictional Determination Letter in compliance with Title 8 and 7 of Article 17 of the Environmental Conservation Law of New York State, respectively.

The Contractor is advised that the provisions and requirements of the aforementioned permits shall govern all work, and the said provisions and requirements are hereby made a part of the sewer contract and the Contractor shall be responsible for strict adherence thereto.

No dewatering work shall commence until the above-mentioned Permits have been obtained for this project.

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The Contractor is advised that in order to comply with all the permits requirements, the Contractor will be required to submit maps, test data, etc. prior to the start of work. In order to expedite the processing of the permit and its requirements, the Contractor shall be required to obtain the services of an independent Environmental Scientist as herein described below in **Subsection 40.14.2** to perform this work and act as liaison with NYSDEC and NYCDEP.

40.14.2 QUALIFICATIONS

The Environmental Scientist utilized to perform the work required under this section must have adequate experience in work of this nature (obtaining Long Island Well Permit/Dewatering Permit) and must have previous experience in working with the NYSDEC and the NYCDEP, designing equivalent dewatering systems, and have successfully obtained the type of permits required under this contract. Prior to the start of work, the Contractor will be required to submit the name and resume of the Environmental Scientist for approval.

40.14.3 NYSDEC DEWATERING PERMITS

The dewatering system shall be designed by the Environmental Scientist using accepted and professional methods of design and engineering consistent with the best modern practices.

The material to be submitted shall include, but not be limited to the following:

(1) Site Plan - Scaled, showing construction activity (e.g. excavation, pathway of the pipe, new outfalls, etc.) locations of well points, header pipes and pumps, and all staging and storage areas.

Also included herein shall be a layout of the complete dewatering system including the location of the discharge point. When permitted by the NYSDEC, discharge of groundwater on beach areas shall be done in such a manner as to prevent any erosion or siltation and will require the design and installation of splash blocks and/or settling basins.

- (2) Dewatering System Specifications:
 - (a) Number of Well Points
 - (b) Diameter of Well Points
 - (c) Spacing of Well Points
 - (d) Length to Screen
 - (e) Depth to Bottom of Screen
 - (f) Static Water Level
 - (g) Drawdown Required

- (h) Total Volume Pumped
- (i) Number of Pumps
- (j) Capacity of Pumps
- (k) Duration of Pumping
- (I) Initial and Average GPM
- (m) Estimated Daily Pumpage
- (n) Flow Meter
- (3) Cross Section Scaled, showing well points, riser, header, annular material (if used) and other equipment associated with each point. A typical construction style drawing may be utilized. Should the Contractor be permitted to use a deep well system, all information regarding it must be submitted.
- (4) Drawdown Contour Map Based upon a review of the surrounding area affected by the dewatering and upon boring within the project area and characteristics of the soils, the depth and pumping rate of dewatering system and the duration of the pumping, the Environmental Scientist shall submit both a narrative and diagram showing the anticipated maximum cone of depression which shall be shown from both above and in cross section on scaled diagrams. Contour lines on diagrams shall be labeled to show depth from land surface.
- (5) Description of Site and Adjacent Areas A short narrative shall be prepared describing the land use in the area paying attention to any potential sources of groundwater contamination that may migrate into the well's cone of depression, such as gas stations, chemical plants, wrecking yards, sanitary landfills, etc. Latest map of the area shall be included in the narrative.
- (6) Groundwater Analysis The Environmental Scientist shall develop and submit a sampling and analysis program subject to NYSDEC Approval (a minimum of one groundwater sample from a site well shall be collected and analyzed). A laboratory certified by the New York State Health

Department shall analyze the samples. The sampling and analysis program must include but is not limited to the following:

NYSDEC REGION 2 - DEWATERING PROJECTS SAMPLING INFORMATION

NO.	PARAMETERS	TYPE	EPA METHOD	DETECTION
1	рН	Grab	150.1	EPA min
2	Temperature	°F	After Pumping	EPA min
3	Fecal Coliform	Grab	5-Tubes/3-Dilutions	2-MPN/100-ml
4	Oil & Grease	Grab	413.1	EPA min
5	BOD5	Grab	405.1	EPA min
6	Total Suspended Solids	Grab	160.2	EPA min
7	Settleable Solids	Grab	160.5	EPA min
8	Chlorides	Grab	325.1-325.3	EPA min
9	Benzene	Grab	602	EPA min
10	Toluene	Grab	602	EPA min
11	Xylenes	Grab	602	EPA min
12	Ethylbenzene	Grab	602	EPA min
13	PCB's	Grab	608	(See Note 1)
14	Pesticides	Grab	608	EPA min
15	13 Priority Metals	Grab	200 series	EPA min
16	Acids Base/Neutrals	Grab	625-GC/MS	EPA min
17	Halogenated Volatiles	Grab	601-GC	EPA min
18	Nitrate/Nitrite	Grab	300 or 353.3	EPA min
19	Aromatic Volatiles	Grab	602-GC	EPA min
20	Cyanide (total or amenable)	Grab	335.1/335.2	EPA min

NOTE:

(1) List each individual aroclor found and report the concentration of each aroclor tested. Use the N.Y.S. detection limit, which is 0.065-µg/l.

Small dewatering projects with a total estimated pumped volume up to 15-Million Gallons (MG) require sampling analysis for parameters No.'s 1 through 12.

Medium dewatering projects with a total estimated pumped volume between 15-MG and 60-MG require sampling analysis for parameters No.'s 1 through 14.

Large dewatering projects with a total estimated pumped volume greater than 60-MG require sampling analysis for parameters No.'s 1 through 20.

Samples are to be collected after development of the well by a licensed well driller.

A laboratory certified by the NYS Department of Health must conduct all testing.

Irrespective of the aforementioned sampling requirements based on total estimated pumped volumes, the Department may require sampling of additional parameters if the proposed dewatering site is suspected of being contaminated.

40.14.4 SUBMISSION OF DEWATERING PLAN

The Environmental Scientist will be required to submit two (2) copies of the Dewatering Plan (together with all reports, materials, designs, drawings, maps and plans) to the Infrastructure Engineering Support

Unit for review and approval. Once approved the Environmental Scientist shall submit in triplicate the Final Dewatering Plan to both the NYSDEC and the NYCDEP. The Dewatering Plan should be bound and bear the name of the Contractor, NYSDEC Application Number and the Signature of the preparer. All drawings and maps shall be on sheets 27-inches by 40-inches and to scale not less than 1"=30'.

40.14.5 DAMAGES

The Contractor shall be responsible for and shall repair at no cost to the City any damage caused by inadequate or improper design and operation of the dewatering system, and any mechanical or electrical failure of the dewatering system.

40.14.6 SYSTEM REMOVAL

The Contractor shall remove all dewatering equipment and temporary electrical service from the site. All wells shall be removed or cut off a minimum of three (3) feet below the final ground surface and capped. Holes left from pulling wells or wells that are capped shall be grouted in a manner approved by the Engineer.

40.14.7 PAYMENTS

No additional or separate payment will be made for any work described herein. The costs for all labor, materials, equipment, permit fees, samples, tests, reports, services and insurance required or necessary to perform all the work described herein shall be deemed included in the price bid for all items of work.

- (7) Refer to Subsection 71.41.4 Specific Pavement Restoration Provisions, Page VII-67: Add the following to Subsection 71.41.4:
 - (E) Specific Pavement Restoration Provisions:

In Glenwood Road between E. 98th Street and E. 101st Street; E. 102nd Street between Flatlands Ave. to Glenwood Road (midblock up to Glenwood Road); the entire intersection of Glenwood Road and E. 102nd Street; E. 104th Street between Glenwood Road and Farragut Road (midblock up to Glenwood Road); E. 103rd Street from Glenwood Road to Farragut Road (midblock up to Farragut Road); E. 105th Street from Turnbull Avenue to Glenwood Road (midblock up to Farragut Road); the entire intersection of E. 105th Street and Farragut Road; E. 108th Street from Farragut Road to Stanley Avenue; Stanley Avenue from E. 108th Street to Williams Avenue; the entire intersection of Stanley Avenue and E. 108th Street; the entire intersection of Glenwood Road and E. 108th Street, requiring combined sewer, storm and water main work, the restoration shall be as follows:

- (a) The permanent restoration over the **trench width and cutbacks only** shall consist of a top course of one and one-half (1-1/2) inches of binder mixture on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of a minimum of three (3) inches of binder mixture on a base course of a minimum of six (6) inches of concrete, to match the existing pavement as directed by the Engineer.
- (b) Finally an overlay of two (2) inches of asphaltic concrete wearing course shall be installed over the entire width of the roadway from **curb to curb** or **edge to edge** of existing roadway.

In all remaining streets within the project limits, the restoration shall be as follows:

(a) The permanent restoration over the **trench width and cutbacks only** shall consist of a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of one and one-half (1-1/2)

inches of asphaltic concrete wearing course on a minimum of one and one-half (1-1/2) inches of binder mixture on a base course of a minimum of six (6) inches of concrete, to match the existing pavement as directed by the Engineer.

- (3) The following requirements apply:
 - (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 71.21 - Pavement Excavation of the Standard Sewer And Water Main Specifications.
 - (c) At locations requiring the installation of a concrete base course, a reflective cracking membrane shall be installed over joints prior to restoration, the cost of which shall be deemed included in the prices bid for all pavement restoration items. Additionally, appropriate pavement keys as described below shall be used.
 - (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 Department Of Transportation Specifications and Standard Details of Construction.
 - (e) Unless otherwise specified, the cost for Proctor analyses, in-place soil density tests, tack coating, eradication of temporary roadway markings, stripping or milling of pavement keys and adjustment of city-owned castings for all roadway work 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 placement of permanent 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 pavement restoration shall be made under the following items:

Item No. Item

Payment Description

4.02 AF-R Asphaltic Concrete Wearing Course, 2" Thick

(For 2" asphaltic concrete wearing course overlay from curb to curb or edge to edge.)

4.02 CA	Binder Mixture	(For binder mixture base course over trenches and cutbacks; binder mixture top filler course under asphaltic concrete wearing course when <u>no</u> overlay is required; binder mixture top course when overlay is required; binder mixture in Type A and B Keys; and binder mixture to fill in roadway depressions and to provide a leveling course prior to overlay where ordered.)
4.04 H	Concrete Base For Pavement, Variable Thickness For Trench Restoration (High-Early Strength)	(For concrete base course over trenches and cutbacks.)
4.05 AX	High-Early Strength Reinforced Concrete Pavement (Bus Stop)	(For reinforced concrete pavement at bus stops.)

DATED: DECEMBER 16, 2016

C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

1) Refer to Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Section 11. Fabrication:, Page 4; Add the following to Section 11:

All steel water mains shall be spiral welded pipes, and all steel water main fittings shall be fabricated from qualified spiral welded pipe. Can type pipe is not acceptable.

2) Refer to Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Section 13. Special Fittings:, Page 5;
Add the following to Section 13:

The steel reducer shall have a length of seven (7) feet for every twelve (12) inches reduction in diameter.

END OF SECTION

This Section consists of sixteen (16) pages plus thirty (30) pages of attachments.



Department of Transportation

POLLY TROTTENBERG, Commissioner

December 06, 2016

OCMC FILE NO:

BNEC-16-060

PROJECT ID:

SE-855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM AND COMBINED SEWERS AND WATER MAIN WORK IN FRESH

CREEK BASAIN AREA- PHASE 2B

LOCATION

BROOKLYN

COMMUNITY BOARD

5.18

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. <u>BUS STOPS</u> 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.
- METERS THE CONTRACTOR MAY NOT REMOVE OR RELOCATE PARKING METERS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT PARKING METER DIVISION AT 718 – 894 – 8651.
- 3. 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.
- 4. 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.
- 5. ENHANCED MITIGATIONS
- 6. <u>EMBARGOES</u> A CONSTRUCTION EMBARGO WILL APPLY TO THOSE LOCATIONS BELOW WHICH FALL WITHIN THE <u>HOUDAY EMBARGO</u> OR ANY OTHER SPECIAL EVENT EMBARGOES AS PUBLISHED BY THE BUREAU OF PERMIT MANAGEMENT AND CONSTRUCTION CONTROL.
 - ENHANCED MITIGATIONS PEDESTRIAN FLOW INCLUDING METAL FENCING, SHALL BE PROVIDED TO ENSURE PEDESTRIAN STAY WITHIN
 THEIR DESIGNATED PATH/ROUTE. FLAGGERS SHALL BE PROVIDED TO ASSIST WITH PEDESTRIANS AT THE DESIGNATED CROSSWALK AREAS. THESE
 FLAGGERS SHALL BE ASSIGNED TO THIS FUNCTION ONLY.
 - 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.
 - O COMMUNITY OUTREACH SHALL BE PROVIDED FOR THE DURATION OF THE PROJECT.

B. MAINTENANCE AND PROTECTION OF TRAFFIC

STANLEY AVENUE FROM HINSDALE AVENUE TO WILLIAMS AVENUE

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also
 when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of the roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the north or south curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

STANLEY AVENUE FROM EAST 108 STREET TO SNEDIKER AVENUE

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of the roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the north or south curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.



Bureau of Permit Management and Construction Control

55 Water Street- Concourse Level New York, NY 10041

T: 212.839.9581 F: 212.839.9696

www.nyc.gov/dot

page 1 of 7

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OCMC FILE NO:

BNEC-16-060

PROJECT ID:

DIVEC-10-0

FOR THE CONSTRUCTION OF HIGH LEVEL STORM AND COMBINED SEWERS AND WATER MAIN WORK IN

FRESH CREEK BASAIN AREA- PHASE 28

LOCATION

BROOKLYN

COMMUNITY BOARD

5.18

EAST 108 STREET BETWEEN FARRAGUT ROAD AND STANLEY AVENUE

Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.

- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of the roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the east or west curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

EAST 108 STREET BETWEEN GLENWOOD ROAD AND FARRAGUT ROAD

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of the roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the east or west curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

EAST 108 STREET BETWEEN FLATLANDS AVENUE AND GLENWOOD ROAD

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of the roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the east or west curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

FARRAGUT ROAD BETWEEN EAST 105 STREET AND EAST 108 STREET

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also
 when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the north or south curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

FARRAGUT ROAD BETWEEN EAST 102 AND EAST 105 STREET

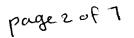
- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also
 The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the north or south curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk tor handicapped accessibility.
- when crossing sidewalk in conjunction with crossing sidewalk permits.

GLENWOOD ROAD BETWEEN EAST 108 STREET AND WILLIAMS AVENUE

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of roadway shall be opened to traffic when site is unaffended.
- The confractor shall occupy 8 foot width of the roadway adjacent to the north or south curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

GLENWOOD ROAD BETWEEN EAST 105 STREET AND EAST 108 STREET

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of roadway shall be opened to traffic when site is unattended.



Page 3 of 7

OCMC FILE NO:

BNEC-16-060

PROJECT ID:

SE-855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM AND COMBINED SEWERS AND WATER MAIN WORK IN

FRESH CREEK BASAIN AREA- PHASE 2B

LOCATION

BROOKLYN

COMMUNITY BOARD

5.18

The contractor shall occupy 8 foot width of the roadway adjacent to the north or south curb line,

The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

GLENWOOD ROAD BETWEEN EAST 102 STREET AND EAST 105 STREET

Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.

- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits,
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the north or south curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

GLENWOOD ROAD BETWEEN EAST 98 STREET AND EAST 101 STREET

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets.
- Full width of roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the north or south curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

EAST 105 STREET BETWEEN FARRAGUT ROAD AND TO DEAD END

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic white lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the East or West curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.
- Full width of roadway shall be opened to traffic when site is unattended.

EAST 105 STREET BETWEEN GLENWOOD ROAD AND FARRAGUT ROAD

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- full width of roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the East curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

EAST 104 STREET BETWEEN GLENWOOD ROAD AND FARRAGUT ROAD

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- full width of roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the East or west curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

EAST 103 STREET BETWEEN GLENWOOD ROAD AND FARRAGUT ROAD

- Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.
- The contractor shall occupy 8 foot width of the roadway adjacent to the East or west curb line,
- The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk for handicapped accessibility.

EAST 102 STREET BETWEEN FLATLANDS AVENUE AND GLENWOOD ROAD

Work hours shall be as follows: 7:00 AM to 6PM Monday to Friday and Saturday 8AM to 4PM.

Page 4 of 7

OCMC FILE NO:

BNEC-16-060

PROJECT ID:

SE-855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM AND COMBINED SEWERS AND WATER MAIN WORK IN

FRESH CREEK BASAIN AREA- PHASE 2B

LOCATION

BROOKLYN

COMMUNITY BOARD 5.18

The contractor shall occupy 8 foot width of the roadway adjacent to the East or west curb line,

The contractor shall maintain 5 foot clear sidewalk or 5 foot clear pedestrian walkway in roadway. Walkway must meet NYCDOT specifications. Walkway must be ramped at entry to sidewalk tor handicapped accessibility.

INTERSECTION OF STANLEY AVENUE AND HINSDALE STREET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF STANLEY AVENUE AND WILLIAMS AVENUE

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain three 11 foot lanes for traffic at the intersection of Flatlands Avenue and maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets at the intersection of Louisiana Avenue
- Full width of roadway shall be opened to traffic when site is unattended

INTERSECTION OF STANLEY AVENUE AND EAST 108 STREET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF STANLEY AVENUE AND SNEDDIKER AVENUE

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF EAST 108 STREET AND FARRAGUT ROAD

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF EAST 108 STREET AND STANLEY AVENUE

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended..

INTERSECTION OF EAST 108 STREET AND GLENWOOD ROAD

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.
- INTERSECTION OF EAST 108 STREET AND FLATLANDS AVENUE
- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF FARRAGUT ROAD AND EAST 105 STREET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF FARRAGUT ROAD AND EAST 102ND STREET

Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.

Page 5 of 7

OCMC FILE NO:

BNEC-16-060

PROJECT ID:

SE-855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM AND COMBINED SEWERS AND WATER MAIN WORK IN FRESH CREEK BASAIN AREA- PHASE 2B

LOCATION

BROOKLYN

COMMUNITY BOARD

5,18

- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets

Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF GLENWOOD ROAD AND EAST 108 STREET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF GLENWOOD ROAD AND WILLIAMS AVENUE

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and 8AM to 4PM on Saturday.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF GLENWOOD ROAD AND EAST 105 STREET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and 8AM to 4PM on Saturday.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF GLENWOOD ROAD AND EAST 108TH STREET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and 8AM to 4PM on Saturday.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF GLENWOOD ROAD AND EAST 102ND STEET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and 8AM to 4PM on Saturday.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF GLENWOOD ROAD AND EAST 105TH STREET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and 8AM to 4PM on Saturday.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF GLENWOOD ROAD AND EAST 98TH STREET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and 8AM to 4PM on Saturday.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF GLENWOOD ROAD AND EAST 101 STREET

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and 8AM to 4PM on Saturday.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF EAST 105TH STREET AND FARRAGUT ROAD

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The confractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF EAST 105TH STREET AND DEAD END

Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday BAM to 4PM.

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OCMC FILE NO:

BNEC-16-060

PROJECT ID:

SE-855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM AND COMBINED SEWERS AND WATER MAIN WORK IN

FRESH CREEK BASAIN AREA- PHASE 2B

LOCATION **COMMUNITY BOARD**

BROOKLYN

- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF EAST 105TH STREET AND GLENWOOD ROAD

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF EAST 105TH STREET AND FARRAGUT ROAD

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF EAST 104TH STREET AND GLENWOOD ROAD

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

RSECTION OF EAST 104TH STREET AND FARRAGUT ROAD

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF EAST 103RD STREET AND GLENWOOD ROAD

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

RSECTION OF EAST 103RD STREET AND FARRAGUT ROAD

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday BAM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF EAST 102ND STREET AND FLATLANDS AVENUE

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain three 11 foot lanes for traffic at the intersection of Flatlands Avenue and maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets at the intersection of East 102nd
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF MALTA STREET AND STANLEY AVENUE

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets
- Full width of roadway shall be opened to traffic when site is unattended.

INTERSECTION OF MALTA STREET AND FLATLANDS AVENUE

- Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Safurday BAM to 4PM.
- Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.
- The contractor shall maintain three 11 foot lanes for traffic at the intersection of Flatlands Avenue and maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets at the intersection of Malta Street
- Full width of roadway shall be opened to traffic when site is unattended

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OCMC FILE NO:

BNEC-16-060

PROJECT ID:

SE-855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM AND COMBINED SEWERS AND WATER MAIN WORK IN

FRESH CREEK BASAIN AREA- PHASE 2B BROOKLYN

LOCATION E COMMUNITY BOARD

5 14

INTERSECTION OF EAST 102ND STREET AND GLENWOOD ROAD

Work hours shall be as follows: 9:00 AM to 4PM Monday to Friday and Saturday 8AM to 4PM.

 Flag person must be provided to stop pedestrian and /or vehicle traffic while lifting materials overhead and also when crossing sidewalk in conjunction with crossing sidewalk permits.

The contractor shall maintain one 11 foot lane on one way streets and two 11 foot lanes on two way streets

Full width of roadway shall be opened to traffic when site is unattended.

to traffic when site is unattended.

Full width of roadway shall be opened to traffic when site is unattended

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.

- 1. 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.
- 2. 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.
- 3. 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 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.

9. THE CONTRACTOR MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.

GARY SMALLS

DIRECTOR

GEMC STREETS

DANIEL PRINCIVIL

PROJECT MANAGER
OCMC-STREETS

page 7 of 7

NO TEXT ON THIS PAGE

MTA LOCATIONS

NO TEXT ON THIS PAGE

List of Locations:

Location 1 - Stanley Avenue from Hinsdale St to Williams Ave Location 2 - Stanley Avenue from 108 St to Snediker Ave Location 3 - E 108 St between Farragut Rd. and Stanley Ave Location 4- E 108 St between Glenwood and Farragut Rd. Location 5 - E 108 St between Flatlands and Glenwood Ave Location 6 - Farragut Rd between E 105h Stand E 108h St Location 7 - Farragut Rd between E 102nd Stand E 105h St Location 8- Glenwood Rd between E 108h Stand Williams Ave Location 9 - Glenwood Rd between E 105h St and 108th St Location 10 -Glenwood Rd between 102nd Stand E 105th St Location 11 -Glenwood Rd between E 98th Stand E 101th St Location 12 - E 105th St between Farragut Rd to Dead End Location 13 - E 105th St between Glenwood Rd and Farragut Rd Location 14-E 1Q4th St between Glenwood Rd and Farragut Rd Location 15 - E 103rd St between Glenwood Rd and Farragut Rd Location 16-E 102"d St between Flatlands Ave. and Farragut Rd

Location #2 - Stanley Avenue from 108 St to Snediker Ave

- 1. The BMT 14th Street Canarsie Line is adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. Kindly find enclosed the enclosed **Drawing P-573-Duct Assignment-Vicinity of New Lots Avenue Station 14th Street Canarsie Line** showing power engineering activities for the area of the above location.

Location #3 - E 108 St between Farragut Rd. and Stanley Ave

- 1. The BMT 14th Street Canarsie Line is adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. Kindly find enclosed the **Drawing P-573 Duct Assignment- Vicinity of New Lots Avenue Station 14th Street Canarsie Line** showing power engineering activities for the area of the above location.

Location #6 - Farragut Rd between E 105th St and E 108th St

- 1. The BMT 14th Street Canarsie Line is adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. The above locations might have an impact at the 105 Street Station Canarsie Line for the BMT L Train.

Should it become necessary to close any of this station entrances, see Note No. 35 from the enclosed General Notes.

- **4.** Should any aspect or phase of the contract (such as mobilization, prep work, etc.) impact pedestrian access to the above mentioned NTCT's line, Cynthia Daniel Mason of Divisions of Stations should be contacted at (718) 694-5270.
- **5.** For your information, enclosed for the above station is a summary of NYC Transit current and planned projects with which your project may need to be coordinated with. Most importantly please ensure that this project is coordinated with following future and on-going contracts so as to avoid any interference with any aspect of the contract design and construction.

Project Coordination Guide E 105 Street Station / Canarsie Line — BMT / Brooklyn

Contract	Project Title	Design Mger/ Tel No.	Constr. Mger/ Tel. No	Resid. Engin/ Tel. No.
ST12-2718 W32799	Public Address/Cust Info PA/CIS ElecmcRplc-CNRS	D. Devoti/ (646) 252-6785	J. Singh/ (718) 613-0027	TCII NO.
ST01-1460 A37628	Stations Sandy Resilie: EBCS	S. Ragheb/ (646) 252-3427	J Singh/ (718) 613-0027	
ST01-1615	Stations HP: 39 Stations (I/H)	D. Wesley/ (646) 252-3061	M. Yu/ (646) 252-3487	
MW62-6928	Structure Overcoating OC: Bwy Jct-New Lots/CNR	J. Patel/ (646) 252-3710	C. Velenovsky/ (718) 643-1954	D. Bishop/ (347) 6720671

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ST04-7247 A36124	Station Access-ADA Induction Loops: 642	D. Devoti/ (646) 252-6785	M. Patel/ (656) 395-9997	S. Stuart/ (646) 252-3577
MW17-5969 W32679	Bths Communic Cable/Eqpt ATM:B Div 253 Stn	K. Asamoah/ (646) 252-4064	V. Cavataio/ (646) 252-4570	S. Jamona/ (212) 8837461
ST17-6862 A36076	OPTION` Stastion Security Pani- Bars System wide	Undesignated	V. Ramotar/ (646) 252-	
MW25-5898 C36407	Power Distr Facilities Pos/NegCbl- CNR:Completion	Vacant	Y. Shukla/ (646) 252-3690	D. Beston/ (646)252-4978
ST07-6403 A35980	Station Rehabil Rehab: E 105 St/CNR	B. Liona/ (646) 252-3890	V. Tadia/ (646) 2732-9956	G. Farjam/ (646) 252-4215
TR01-6706 S32727	Rapid Transit Operations CCTV: 24 Stn/ CNR	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	V. Zohrabian/ (237) 7389
ST18-5862 C43018	Station Comm Rooms 2 Comm Rms- IND/BMT(JOC)	Undesignated	E. Saint-Louis/ (646) 252-3132	I. Ibrahim/ (718) 613-0286
ST12-5276 W32662	Public Address/Cust Info PA/CIS:24 stations-CNR	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	
ST12-6056 W32663	Public Address/Cust Info PA/CIS:Wrap-Up(TIS)	W. Hochman/ (646) 252-2805	M. Jameson/	D. Boston/
MW25-5898 C33229	Power Distrib Facil Pos/Neg Cables: CNR	Vacant	Y. Shukla/ (646) 252-3690	D. Beston/ (646)252-4978 G. Dejean/
ST12-6056 W32649	Public Addr/Cust Info PA/CIS:Wrap-1999	Undesignated	M. Patel/ (646) 395-9997	(646) 252-3239 D. Leng/
MW56-4586 S32701	Comm-Based Train Control CBTC CNR: Phases 1 & 2	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	(347) 7386939
ST06-4908	Station Signage Install Braille Signage	G. Cespedes/ (646) 252-5130	G. Cespedes/ (646) 252-5130	
RC08-4262 A33762	Station Power Upgrade SPU-42 Stns: Ltg 1 Stn	Undesignated	S Abraham/ (646) 252-4736	T. Berry/ (646) 490-4236
ST10-4239 C34348	Token Booth Upgrade/Repl New Token Booth Locks	T. Fackelman/ (646) 252-4578	S Abraham/ (646) 252-4736	
ST12-4247 W32620	Public Addr/Cust Info PA Systems, Ph 1: 140Stn	Vacant	M. Patel/ (646) 395-9997	
ST06-4677 A35735	Station Signage 1992 Stn Signage Replcmt	Undesignated	Undesignated	
RK03-4254 W32612	Fare Control Modernze AFC Communic	J. Payyapilli/ (646) 252-3329	J.L. Diaz/ (646) 790-2101	A. Ciccotelli/ (718) 260-0252

T10-4189	Tolson David			
	Token Booth	Undesignated	T. Millbury/	
√32617	Upgrade/ReplNew Token		(212) 492-8108	
	Booth Intram Sys		(-, 102 0200	
MW22-3005	Line Struct Rehab Elev	Undesignated	Y. Shukla/	
C33121	Str Clearance Mrkgs	January Marco	(646) 252-3690	
PI01-2899	Police	Undesignated		
E32064	Stn Security Elevated	Oridesignated	Di. I. Patel/	
PI01-2865	Police	Undocionatad	(646) 252-4540	
C32057	Stn Security-237 Mirrors	Undesignated	S. Kwa/	
ST06-120	Stribe Ciana		(646) 252-3189	•
A33610	Station Signage	Undesignated	S Abraham/	
	79 Stations		(646) 252-4736	
PL03-1624	OHWA's/Annunciators	Undesignated	O. Adewolu/	
A33613	119 Sts: OHWA's Annun		(646) 542-4848	
CB01-1251	Contingency Founds	Undesignated	Undesignated	
D61142	Sandy-Mitgtn Studies-	,	Oridesignated	
	EBCS			
MW22-1467	Line Struct Rehab	Undesignated	V Ch III	
C33354	Gusset Plates/CNR DES	Unidesignated	Y. Shukla/	· .
MW56-5771	Comm-Based Train	C 1/4	(646) 252-3690	
S32703		S. Kwa/	C. Fraser/	
332/03	ControlCBTC CNR: Safety	(646) 252-3189	(646) 723-9950	
1 0000	Consint			
01-0868	Stations	D. Wesley/	M. Yu/	
A37574	HP: Systmwd Des/Mtl-	(646) 252-3061	(646) 252-3487	
	386Stn	, =====================================	(0.0) 232 340/	

6. There are no power Engineering Electrical Department Facilities this project area.

Location 7 - Farragut Rd between E 102nd St and E 105th St

- 1. The BMT 14th Street Canarsie Line is adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. The above locations might have an impact at the 105 Street Station Canarsie Line for the BMT L Train.

Should it become necessary to close any of this station entrances, see Note No. 35 from the enclosed General Notes.

- **4.** Should any aspect or phase of the contract (such as mobilization, prep work, etc.) impact pedestrian access to the above mentioned NTCT's line, Cynthia Daniel Mason of Divisions of Stations should be contacted at (718) 694-5270.
- **5.** For your information, enclosed for the above station is a summary of NYC Transit current and planned projects with which your project may need to be coordinated with. Most importantly please ensure that this project is coordinated with following future and on-going contracts so as to avoid any interference with any aspect of the contract design and construction.

<u>Project Coordination Guide</u> <u>E 105 Street Station / Canarsie Line – BMT / Brooklyn</u>

Contract	Project Title	Design Mger/ Tel No.	Constr. Mger/ Tel. No	Resid. Engin/ Tel. No.
ST12-2718 W32799	Public Address/Cust Info PA/CIS ElecmcRplc-CNRS	D. Devoti/ (646) 252-6785	J. Singh/ (718) 613-0027	
ST01-1460 A37628	Stations Sandy Resilie: EBCS	S. Ragheb/ (646) 252-3427	J Singh/ (718) 613-0027	
ST01-1615	Stations HP: 39 Stations (I/H)	D. Wesley/ (646) 252-3061	M. Yu/ (646) 252-3487	D. Bisham/
MW62-6928 C33840	Structure Overcoating OC: Bwy Jct-New Lots/CNR	J. Patel/ (646) 252-3710	C. Velenovsky/ (718) 643-1954	D. Bishop/ (347) 6720671
ST04-7247 A36124	Station Access-ADA Induction Loops: 642 Bths	D. Devoti/ (646) 252-6785	M. Patel/ (656) 395-9997	S. Stuart/ (646) 252-3577
MW17-5969 W32679	Communic Cable/Eqpt ATM:B Div 253 Stn OPTION`	K. Asamoah/ (646) 252-4064	V. Cavataio/ (646) 252-4570	S. Jamona/ (212) 8837461
ST17-6862 A36076	Stastion Security Pani- Bars System wide	Undesignated	V. Ramotar/ (646) 252-	
MW25-5898 C36407	Power Distr Facilities Pos/NegCbl- CNR:Completion	Vacant	Y. Shukla/ (646) 252-3690	D. Beston/ (646)252-4978
ST07-6403	Station Rehabil Rehab: E 105 St/CNR	B. Liona/ (646) 252-3890	V. Tadia/ (646) 2732-9956	G. Farjam/ (646) 252-4215
A35980 TR01-6706	Rapid Transit Operations CCTV: 24 Stn/ CNR	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	V. Zohrabian/ (237) 7389
S32727 ST18-5862 C43018	Station Comm Rooms 2 Comm Rms- IND/BMT(JOC)	Undesignated	E. Saint-Louis/ (646) 252-3132	I. Ibrahim/ (718) 613-0286
ST12-5276	Public Address/Cust Info	S. Kwa/	C. Fraser/	

32662	PA/CIS:24 stations-CNR	(646) 252-3189	(646) 723-9950	
ST12-6056	Public Address/Cust Info	W. Hochman/	M. Jameson/	
W32663	PA/CIS:Wrap-Up(TIS)	(646) 252-2805		
MW25-5898	Power Distrib Facil	Vacant	Y. Shukla/	D. Beston/
C33229	Pos/Neg Cables: CNR		(646) 252-3690	(646)252-4978
ST12-6056	Public Addr/Cust Info	Undesignated	M. Patel/	G. Dejean/
W32649	PA/CIS:Wrap-1999		(646) 395-9997	(646) 252-3239
MW56-4586	Comm-Based Train	S. Kwa/	C. Fraser/	D. Leng/
S32701	Control CBTC CNR:	(646) 252-3189	(646) 723-9950	(347) 7386939
	Phases 1 & 2		(0.0).2000	(317)7300333
ST06-4908	Station Signage	G. Cespedes/	G. Cespedes/	<u> </u>
	Install Braille Signage	(646) 252-5130	(646) 252-5130	,
RC08-4262	Station Power Upgrade	Undesignated	S Abraham/	T. Berry/
A33762	SPU-42 Stns: Ltg 1 Stn	3	(646) 252-4736	(646) 490-4236
ST10-4239	Token Booth	T. Fackelman/	S Abraham/	(0.10) 150 1250
C34348	Upgrade/Repl	(646) 252-4578	(646) 252-4736	
	New Token Booth Locks		(3.13) 132 1730	
ST12-4247	Public Addr/Cust Info	Vacant	M. Patel/	
W32620	PA Systems, Ph 1: 140Stn		(646) 395-9997	
ST06-4677	Station Signage	Undesignated	Undesignated	
5735	1992 Stn Signage		J	·
	Replcmt			
RK03-4254	Fare Control Modernze	J. Payyapilli/	J.L. Diaz/	A. Ciccotelli/
W32612	AFC Communic	(646) 252-3329	(646) 790-2101	(718) 260-0252
ST10-4189	Token Booth	Undesignated	T. Millbury/	(* = 0) = 00 0252
W32617	Upgrade/Repl		(212) 492-8108	
	New Token Booth Intram			. :
	Sys	<u> </u>	,	
MW22-3005	Line Struct Rehab Elev	Undesignated	Y. Shukla/	
C33121	Str Clearance Mrkgs		(646) 252-3690	
Pl01-2899	Police	Undesignated	Di. I. Patel/	
E32064	Stn Security Elevated		(646) 252-4540	
Pl01-2865	Police	Undesignated	S. Kwa/	, .
C32057	Stn Security-237 Mirrors	*	(646) 252-3189	
ST06-120	Station Signage	Undesignated	S Abraham/	
A33610	79 Stations		(646) 252-4736	
PL03-1624	OHWA's/Annunciators	Undesignated	O. Adewolu/	
A33613	119 Sts: OHWA's Annun		646) 542-4848	
CB01-1251	Contingency Founds	Undesignated	Undesignated	
D61142	Sandy-Mitgtn Studies-			
	EBCS			
22-1467	Line Struct Rehab	Undesignated	Y. Shukla/	·
C55354	Gusset Plates/CNR DES		(646) 252-3690	

MW56-5771 S32703	Comm-Based Train Control CBTC CNR: Safety Consint	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	
ST01-0868 A37574	Stations HP: Systmwd Des/Mtl- 386Stn	D. Wesley/ (646) 252-3061	M. Yu/ (646) 252-3487	

Kindly find enclosed the enclosed Drawing P-573 – Duct Assignment –
 Vicinity of New Lots Avenue Station – 14th Street Canarsie Line showing
 power engineering activities for the area of the above location.

Location 10 - Glenwood Rd between 102nd St and E 105th St

This location is adjacent to the MTA Bus Company's Spring Creek Depot.

Location 11 - Glenwood Rd between E 98th St and E 101th St

- 1. The BMT 14th Street Canarsie Line is adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. The above locations might have an impact at the Rockaway Park Station Canarsie Line for the BMT L Train.

Should it become necessary to close any of this station entrances, see Note No. 35 from the enclosed General Notes.

- **4.** Should any aspect or phase of the contract (such as mobilization, prep work, etc.) impact pedestrian access to the above mentioned NTCT's line, Cynthia Daniel Mason of Divisions of Stations should be contacted at (718) 694-5270.
- **5.** For your information, enclosed for the above station is a summary of NYC Transit current and planned projects with which your project may need to be coordinated with. Most importantly please ensure that this project is coordinated with following future and on-going contracts so as to avoid any interference with any aspect of the contract design and construction.

<u>Project Coordination Guide</u> <u>Rockaway Parkway Station / Canarsie Line – BMT / Brooklyn</u>

Contract	Project Title	Design Mger/ Tel No.	Constr. Mger/ Tel. No	Resid. Engin/ Tel. No.
ST12-2716	Public Address/Cust Info	D. Devoti/	J. Singh/	10111101
W32799	PA/CIS ElecmcRpic-CNRS		(718) 613-0027	
ST09-6022	Intermodal/Transfer Facil Intermodal: Rockaway Pkway/CNR			
ST01-1460	Stations	S. Ragheb/	J Singh/	
A37628	Sandy Resilie: EBCS	(646) 252-3427	(718) 613-0027	
ST04-6960	Station Accessibility-ADA	R. Dean/	A. Dias/	
A37119	ADA: Rock Pkwy/CNR	(646) 252-4324	(646) 418-5751	•
MW62-6928	Structure Overcoating	J. Patel/	C. Velenovsky/	D. Bishop/
C33840	OC: Bwy Jct-New Lots/CNR	(646) 252-3710	(718) 643-1954	(347) 672-0671
6124	Station Access-ADA Induction Loops: 642	D. Devoti/ (646) 252-6785	M. Patel/ (656) 395-9997	S. Stuart/
	Bths	(010) 232 0/03	(030) 393-9997	(646) 252-3577
ST17-6862	Station Security	B. Liona/	N. G. Patel/	
A36076	Panic Bars @ 277 Locs	(646)252-4636	(646) 252-4366	
MW17-5969	Communic Cable/Eqpt	K. Asamoah/	V. Cavataio/	S. Jamoona/
W32679	ATM:B Div 253 Stn OPTION`	(646) 252-4064	(646) 252-4570	(212) 883-7461
ST17-6882 A36076	Station Security Panic Bars System Wide	Undesignated	V. Ramotar/	
MW25-5898	Power Distr Facilities	Vacant	Y. Shukla/	D. Boston /
C36407	Pos/NegCbl- CNR:Completion	Vacant	(646) 252-3690	D. Beston/ (646) 252-4978
TR01-6706	Rapid Transit Operations	S. Kwa/	C. Fraser/	V. Zohrabian/
532727	CCTV: 24 Stn/ CNR	(646) 252-3189	(646) 723-9950	(646) 237 7389
ST12-5276	Public Address/Cust Info	S. Kwa/	C. Fraser/	
N32662	PA/CIS:24 stations-CNR	(646) 252-3189	(646) 723-9950	·
ST12-6056	Public Address/Cust Info	W. Hochman/	M. Jameson/	
N32663	PA/CIS:Wrap-Up(TIS)	(646) 252-2805		
MW25-5898	Power Distrib Facil	Vacant	Y. Shukla/	D. Beston/
33229	Pos/Neg Cables: CNR		(646) 252-3690	(646)252-4978
602-5204	Asbestos Abatement	K. Singh/	J. Dinaram/	F. Townsend/
32,15	Asbestos Abatement Ph IV	(646) 252-3564	(646) 252-3521	(646) 252-3511

ST12-6056 W32649	Public Addr/Cust Info PA/CIS:Wrap-1999	Undesignated	M. Patel/ (646) 395-9997	G. Dejean/ (646) 252-3239
MW22-1467 C33354	Line Struct Rehab Gusset Plates/CNR DES	Undesignated	Y. Shukla/ (646) 252-3690	
MW56-5771 S32703	Comm-Based Train Control CBTC CNR: Safety Consint	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	
ST01-0868 A37574	Stations HP: Systmwd Des/Mtl- 386Stn	D. Wesley/ (646) 252-3061	M. Yu/ (646) 252-3487	
ST01-1615	Stations HP: 18 Stns RESERVE	D. Wesley/ (646) 252-3061	M. Yu/ (646) 252-3487	·

6. There are no power Engineering Electrical Department Facilities this project area.

Location 12 - E 105th St between Farragut Rd to Dead End

- 1. The BMT 14th Street Canarsie Line is adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. The above locations might have an impact at the Rockaway Park Station Canarsie Line for the BMT L Train.

Should it become necessary to close any of this station entrances, see Note No. 35 from the enclosed General Notes.

- **4.** Should any aspect or phase of the contract (such as mobilization, prep work, etc.) impact pedestrian access to the above mentioned NTCT's line, Cynthia Daniel Mason of Divisions of Stations should be contacted at (718) 694-5270.
- **5.** For your information, enclosed for the above station is a summary of NYC Transit current and planned projects with which your project may need to be coordinated with. Most importantly please ensure that this project is coordinated with following future and on-going contracts so as to avoid any interference with any aspect of the contract design and construction.

Project Coordination Guide Rockaway Parkway Station / Canarsie Line — BMT / Brooklyn

Contract	Project Title	Design Mger/ Tel No.	Constr. Mger/ Tel. No	Resid. Engin/ Tel. No.
ST12-2716	Public Address/Cust Info	D. Devoti/	J. Singh/	
W32799	PA/CIS ElecmcRpic-CNRS	(646) 252-6785	(718) 613-0027	·
ST09-6022	Intermodal/Transfer Facil Intermodal: Rockaway Pkway/CNR	R. Dean/ (646) 252-4324		
ST01-1460	Stations	S. Ragheb/	J Singh/	
A37628	Sandy Resilie: EBCS	(646) 252-3427	(718) 613-0027	
ST04-6960	Station Accessibility-ADA	R. Dean/	A. Dias/	
A37119	ADA: Rock Pkwy/CNR	(646) 252-4324	(646) 418-5751	
MW62-6928 C33840	Structure Overcoating OC: Bwy Jct-New Lots/CNR	J. Patel/ (646) 252-3710	C. Velenovsky/ (718) 643-1954	D. Bishop/ (347) 672-0671
ST04-7247 A36124	Station Access-ADA Induction Loops: 642 Bths	D. Devoti/ (646) 252-6785	M. Patel/ (656) 395-9997	S. Stuart/ (646) 252-3577
17-6862	Station Security	B. Liona/	N. G. Patel/	
A36076	Panic Bars @ 277 Locs	(646)252-4636	(646) 252-4366	
MW17-5969 W32679	Communic Cable/Eqpt ATM:B Div 253 Stn OPTION`	K. Asamoah/ (646) 252-4064	V. Cavataio/ (646) 252-4570	S. Jamoona/ (212) 883-7461
ST17-6882 A36076	Station Security Panic Bars System Wide	Undesignated	V. Ramotar/	
MW25-5898 C36407	Power Distr Facilities Pos/NegCbl- CNR:Completion	Vacant	Y. Shukla/ (646) 252-3690	D. Beston/ (646) 252-4978
TR01-6706 S32727	Rapid Transit Operations CCTV: 24 Stn/ CNR	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	V. Zohrabian/ (646) 237 7389
ST12-5276 W32662	Public Address/Cust Info PA/CIS:24 stations-CNR	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	
ST12-6056 N32663	Public Address/Cust Info PA/CIS:Wrap-Up(TIS)	W. Hochman/ (646) 252-2805	M. Jameson/	
1W25-5898	Power Distrib Facil	Vacant	Y. Shukla/	D. Beston/
C33229	Pos/Neg Cables: CNR		(646) 252-3690	(646)252-4978
SS02-5204	Asbestos Abatement	K. Singh/	J. Dinaram/	F. Townsend/
C33215	Asbestos Abatement Ph IV	(646) 252-3564	(646) 252-3521	(646) 252-3511
2-6056 V32649	Public Addr/Cust Info PA/CIS:Wrap-1999	Undesignated	M. Patel/ (646) 395-9997	G. Dejean/ (646) 252-3239

MW22-1467 C33354	Line Struct Rehab Gusset Plates/CNR DES	Undesignated	Y. Shukla/ (646) 252-3690	(
MW56-5771 S32703	Comm-Based Train Control CBTC CNR: Safety Consint	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	
ST01-0868 A37574	Stations HP: Systmwd Des/Mtl- 386Stn	D. Wesley/ (646) 252-3061	M. Yu/ (646) 252-3487	
ST01-1615	Stations HP: 18 Stns RESERVE	D. Wesley/ (646) 252-3061	M. Yu/ (646) 252-3487	

6. Kindly find enclosed the Drawing P-573 – Duct Assignment – Vicinity of New Lots Avenue Station – 14th Street Canarsie Line showing power engineering activities for the area of the above location.

Location 13 - E 105th St between Glenwood Rd and Farragut Rd

- 1. The BMT 14th Street Canarsie Line is adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. The above locations might have an impact at the 105 Street Station Canarsie Line for the BMT L Train.

Should it become necessary to close any of this station entrances, see Note No. 35 from the enclosed General Notes.

- **4.** Should any aspect or phase of the contract (such as mobilization, prep work, etc.) impact pedestrian access to the above mentioned NTCT's line, Cynthia Daniel Mason of Divisions of Stations should be contacted at (718) 694-5270.
- **5.** For your information, enclosed for the above station is a summary of NYC Transit current and planned projects with which your project may need to be coordinated with. Most importantly please ensure that this project is coordinated with following future and on-going contracts so as to avoid any interference with any aspect of the contract design and construction.

Project Coordination Guide E 105 Street Station / Canarsie Line — BMT / Brooklyn

Contract	Project Title	Design Mger/	Constr. Mger/	Resid. Engin/
ST12-2718	Public Address/Cust Info	Tel No.	Tel. No	Tel. No.
W32799	PA/CIS ElecmcRpic-CNRS	D. Devoti/	J. Singh/	
ST01-1460	Stations		(718) 613-0027	· · · · · · · · · · · · · · · · · · ·
A37628	Sandy Resilie: EBCS	S. Ragheb/	J Singh/	
ST01-1615	Stations	(646) 252-3427	(718) 613-0027	
3101-1013	HP: 39 Stations (I/H)	D. Wesley/	M. Yu/	
MW62-6928		(646) 252-3061	(646) 252-3487	
C33840	OC: Bwy Jct-New Lots/CNR	J. Patel/ (646) 252-3710	C. Velenovsky/ (718) 643-1954	D. Bishop/ (347) 6720671
ST04-7247	Station Access-ADA	D. Devoti/	M. Patel/	S. Stuart/
A36124	Induction Loops: 642 Bths	(646) 252-6785	(656) 395-9997	(646) 252-3577
MW17-5969	Communic Cable/Eqpt	K. Asamoah/	V. Cavataio/	S. Jamona/
W32679	ATM:B Div 253 Stn OPTION`	(646) 252-4064	(646) 252-4570	(212) 8837461
7-6862	Stastion Security	Undesignated	V. Ramotar/	
A36076	Pani- Bars System wide		(646) 252-	
MW25-5898	Power Distr Facilities	Vacant	Y. Shukla/	D. Beston/
C36407	Pos/NegCbl- CNR:Completion		(646) 252-3690	(646)252-4978
ST07-6403	Station Rehabil	B. Liona/	V. Tadia/	G. Farjam/
A35980	Rehab: E 105 St/CNR	(646) 252-3890	(646) 2732-9956	(646) 252-4215
TR01-6706 S32727	Rapid Transit Operations CCTV: 24 Stn/ CNR	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	V. Zohrabian/ (237) 7389
ST18-5862	Station Comm Rooms	Undesignated	E. Saint-Louis/	I. Ibrahim/
C43018	2 Comm Rms- IND/BMT(JOC)		(646) 252-3132	(718) 613-0286
ST12-5276	Public Address/Cust Info	S. Kwa/	C. Fraser/	
W32662	PA/CIS:24 stations-CNR	(646) 252-3189	(646) 723-9950	44
ST12-6056 W32663	Public Address/Cust Info PA/CIS:Wrap-Up(TIS)	W. Hochman/ (646) 252-2805	M. Jameson/	
MW25-5898	Power Distrib Facil	Vacant	Y. Shukla/	D. Beston/
C33229	Pos/Neg Cables: CNR		(646) 252-3690	(646)252-4978
ST12-6056	Public Addr/Cust Info	Undesignated	M. Patel/	G. Dejean/
W32649	PA/CIS:Wrap-1999		(646) 395-9997	(646) 252-3239
56-4586 52/01	Comm-Based Train Control CBTC CNR: Phases 1 & 2	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	D. Leng/ (347) 7386939

ST06-4908	Station Signage	G. Cespedes/	G. Cespedes/ (646) 252-5130	
	Install Braille Signage	(646) 252-5130	S Abraham/	T. Berry/
RC08-4262	Station Power Upgrade	Undesignated	(646) 252-4736	(646) 490-4236
A33762	SPU-42 Stns: Ltg 1 Stn	T. Fackelman/	S Abraham/	(070) 730 7230
ST10-4239	Token Booth	T. Fackelman/		
C34348	Upgrade/Repl	(646) 252-4578	(646) 252-4736	
	New Token Booth Locks	1/	M Date!/	
ST12-4247	Public Addr/Cust Info	Vacant	M. Patel/	
W32620	PA Systems, Ph 1: 140Stn	11. 4	(646) 395-9997	
ST06-4677	Station Signage	Undesignated	Undesignated	
A35735	1992 Stn Signage			
	Replcmt		1 Di/	A Ciccotolli/
RK03-4254	Fare Control Modernze	J. Payyapilli/	J.L. Diaz/	A. Ciccotelli/
W32612	AFC Communic	(646) 252-3329	(646) 790-2101	(718) 260-0252
ST10-4189	Token Booth	Undesignated	T. Millbury/	
W32617	Upgrade/Repl		(212) 492-8108	
	New Token Booth Intram	•		
	Sys			
MW22-3005	Line Struct Rehab Elev	Undesignated	Y. Shukla/	
C33121	Str Clearance Mrkgs		(646) 252-3690	
Pl01-2899	Police	Undesignated	Di. I. Patel/	
E32064	Stn Security Elevated		(646) 252-4540	
PI01-2865	Police	Undesignated	S. Kwa/	
C32057	Stn Security-237 Mirrors		(646) 252-3189	
ST06-120	Station Signage	Undesignated	S Abraham/	
A33610	79 Stations		(646) 252-4736	
PL03-1624	OHWA's/Annunciators	Undesignated	O. Adewolu/	
A33613	119 Sts: OHWA's Annun		646) 542-4848	
CB01-1251	Contingency Founds	Undesignated	Undesignated	
D61142	Sandy-Mitgtn Studies-			
	EBCS			
MW22-1467	Line Struct Rehab	Undesignated	Y. Shukla/	
.C33354	Gusset Plates/CNR DES	_	(646) 252-3690	
MW56-5771	Comm-Based Train	S. Kwa/	C. Fraser/	
S32703	Control	(646) 252-3189	(646) 723-9950	
JJL. VJ	CBTC CNR: Safety			
	Consint			
ST01-0868	Stations	D. Wesley/	M. Yu/	
A37574	HP: Systmwd Des/Mtl-	(646) 252-3061	(646) 252-3487	
NJ/J/T	386Stn		` ′	

^{6.} There are no power Engineering Electrical Department Facilities this project area.

Location 14 - E 104th St between Glenwood Rd and Farragut Rd

- 1. The BMT 14th Street Canarsie Line is adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. The above locations might have an impact at the 105 Street Station Canarsie Line for the BMT L Train.

Should it become necessary to close any of this station entrances, see Note No. 35 from the enclosed General Notes.

- **4.** Should any aspect or phase of the contract (such as mobilization, prep work, etc.) impact pedestrian access to the above mentioned NTCT's line, Cynthia Daniel Mason of Divisions of Stations should be contacted at (718) 694-5270.
- 5. For your information, enclosed for the above station is a summary of NYC Transit current and planned projects with which your project may need to be coordinated with. Most importantly please ensure that this project is coordinated with following future and on-going contracts so as to avoid any interference with any aspect of the contract design and construction.

Project Coordination Guide E 105 Street Station / Canarsie Line - BMT / Brooklyn

Contract	Project Title	Design Mger/ Tel No.	Constr. Mger/ Tel. No	Resid. Engin/ Tel. No.	
ST12-2718 W32799	Public Address/Cust Info PA/CIS ElecmcRpic-CNRS	D. Devoti/ (646) 252-6785	J. Singh/ (718) 613-0027		
ST01-1460 A37628	Stations Sandy Resilie: EBCS	S. Ragheb/ (646) 252-3427	J Singh/ (718) 613-0027		
ST01-1615	Stations HP: 39 Stations (I/H)	D. Wesley/ (646) 252-3061	M. Yu/ (646) 252-3487		
MW62-6928 C33840	Structure Overcoating OC: Bwy Jct-New Lots/CNR	J. Patel/ (646) 252-3710	C. Velenovsky/ (718) 643-1954	D. Bishop/ (347) 6720671	
ST04-7247 124	Station Access-ADA Induction Loops: 642 Bths	D. Devoti/ (646) 252-6785	M. Patel/ (656) 395-9997	S. Stuart/ (646) 252-3577	

	•			
MW17-5969 W32679	Communic Cable/Eqpt ATM:B Div 253 Stn	K. Asamoah/ (646) 252-4064	V. Cavataio/ (646) 252-4570	S. Jamona/ (212) 8837461
ST17-6862	OPTION` Stastion Security	Undesignated	V. Ramotar/ (646) 252-	
A36076 MW25-5898 C36407	Pani- Bars System wide Power Distr Facilities Pos/NegCbl- CNR:Completion	Vacant	Y. Shukla/ (646) 252-3690	D. Beston/ (646)252-4978
ST07-6403 A35980	Station Rehabil Rehab: E 105 St/CNR	B. Liona/ (646) 252-3890	V. Tadia/ (646) 2732-9956	G. Farjam/ (646) 252-4215
TR01-6706 S32727	Rapid Transit Operations CCTV: 24 Stn/ CNR	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	V. Zohrabian/ (237) 7389
ST18-5862 C43018	Station Comm Rooms 2 Comm Rms- IND/BMT(JOC)	Undesignated	E. Saint-Louis/ (646) 252-3132	I. Ibrahim/ (718) 613-0286
ST12-5276 W32662	Public Address/Cust Info PA/CIS:24 stations-CNR	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	
ST12-6056 W32663	Public Address/Cust Info PA/CIS:Wrap-Up(TIS)	W. Hochman/ (646) 252-2805	M. Jameson/	D. Porton/
MW25-5898 C33229	Power Distrib Facil Pos/Neg Cables: CNR	Vacant	Y. Shukla/ (646) 252-3690	D. Beston/ (646)252-4978
ST12-6056 W32649	Public Addr/Cust Info PA/CIS:Wrap-1999	Undesignated	M. Patel/ (646) 395-9997	G. Dejean/ (646) 252-3239 D. Leng/
MW56-4586 S32701	Comm-Based Train Control CBTC CNR: Phases 1 & 2	S. Kwa/ (646) 252-3189	C. Fraser/ (646) 723-9950	(347) 7386939
ST06-4908	Station Signage Install Braille Signage	G. Cespedes/ (646) 252-5130	G. Cespedes/ (646) 252-5130	
RC08-4262 A33762	Station Power Upgrade SPU-42 Stns: Ltg 1 Stn	Undesignated	S Abraham/ (646) 252-4736	T. Berry/ (646) 490-4236
ST10-4239 C34348	Token Booth Upgrade/Repl New Token Booth Locks	T. Fackelman/ (646) 252-4578	S Abraham/ (646) 252-4736	
ST12-4247 W32620	Public Addr/Cust Info PA Systems, Ph 1: 140Stn	Vacant	M. Patel/ (646) 395-9997	
ST06-4677 A35735	Station Signage 1992 Stn Signage Replcmt	Undesignated	Undesignated	
RK03-4254 W32612	Fare Control Modernze AFC Communic	J. Payyapilli/ (646) 252-3329	J.L. Diaz/ (646) 790-2101	A. Ciccotelli/ (718) 260-0252
ST10-4189 W32617	Token Booth Upgrade/ReplNew Token Booth Intram Sys	Undesignated	T. Millbury/ (212) 492-8108	

V22-3005	Line Struct Rehab Elev	Undesignated	Y. Shukla/	
C33121	Str Clearance Mrkgs		(646) 252-3690	
PI01-2899	Police	Undesignated	Di. I. Patel/	
E32064	Stn Security Elevated		(646) 252-4540	
Pl01-2865	Police	Undesignated	S. Kwa/	
C32057	Stn Security-237 Mirrors		(646) 252-3189	
ST06-120	Station Signage	Undesignated	S Abraham/	
A33610	79 Stations		(646) 252-4736	
PL03-1624	OHWA's/Annunciators	Undesignated	O. Adewolu/	
A33613	119 Sts: OHWA's Annun	·	646) 542-4848	
CB01-1251	Contingency Founds	Undesignated	Undesignated	
D61142	Sandy-Mitgtn Studies-	G ²		
100000	EBCS			
MW22-1467	Line Struct Rehab	Undesignated	Y. Shukla/	
C33354	Gusset Plates/CNR DES		(646) 252-3690	
MW56-5771	Comm-Based Train	S. Kwa/	C. Fraser/	
S32703	Control	(646) 252-3189	(646) 723-9950	
·	CBTC CNR: Safety			
	Consint			
ST01-0868	Stations	D. Wesley/	M. Yu/	
2 574	HP: Systmwd Des/Mtl-	(646) 252-3061	(646) 252-3487	
•	386Stn			

6. There are no power Engineering Electrical Department Facilities this project area.

Location 15 - E 103 St between Glenwood Rd and Farragut Rd

- 1. The BMT 14th Street Canarsie Line is adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. The above locations might have an impact at the 105 Street Station Canarsie Line for the BMT L Train.

Should it become necessary to close any of this station entrances, see Note No. 35 from the enclosed General Notes.

4. Should any aspect or phase of the contract (such as mobilization, prep work, etc.) impact pedestrian access to the above mentioned NTCT's line, Cynthia Daniel Mason of Divisions of Stations should be contacted at (718) 694-5270.

5. For your information, enclosed for the above station is a summary of NYC Transit current and planned projects with which your project may need to be coordinated with. Most importantly please ensure that this project is coordinated with following future and on-going contracts so as to avoid any interference with any aspect of the contract design and construction.

<u>Project Coordination Guide</u> <u>E 105 Street Station / Canarsie Line - BMT / Brooklyn</u>

Contract	Project Title	Design Mger/ Tel No.	Constr. Mger/ Tel. No	Resid. Engin/ Tel. No.	
ST12-2718	Public Address/Cust Info	D. Devoti/	J. Singh/		
W32799	PA/CIS ElecmcRplc-CNRS	(646) 252-6785	(718) 613-0027		
ST01-1460 A37628	Stations Sandy Resilie: EBCS	S. Ragheb/ (646) 252-3427	J Singh/ (718) 613-0027		
ST01-1615	Stations HP: 39 Stations (I/H)	D. Wesley/ (646) 252-3061	M. Yu/ (646) 252-3487		
MW62-6928	Structure Overcoating OC: Bwy Jct-New Lots/CNR	J. Patel/	C. Velenovsky/	D. Bishop/	
C33840		(646) 252-3710	(718) 643-1954	(347) 6720671	
ST04-7247	Station Access-ADA Induction Loops: 642 Bths	D. Devoti/	M. Patel/	S. Stuart/	
A36124		(646) 252-6785	(656) 395-9997	(646) 252-3577	
MW17-5969	Communic Cable/Eqpt ATM:B Div 253 Stn OPTION`	K. Asamoah/	V. Cavataio/	S. Jamona/	
W32679		(646) 252-4064	(646) 252-4570	(212) 8837461	
ST17-6862 A36076	Stastion Security Pani- Bars System wide	Undesignated	V. Ramotar/ (646) 252-		
MW25-5898 C36407	Power Distr Facilities Pos/NegCbl- CNR:Completion	Vacant	Y. Shukla/ (646) 252-3690	D. Beston/ (646)252-4978	
ST07-6403	Station Rehabil	B. Liona/	V. Tadia/	G. Farjam/	
A35980	Rehab: E 105 St/CNR	(646) 252-3890	(646) 2732-9956	(646) 252-4215	
TR01-6706	Rapid Transit Operations	S. Kwa/	C. Fraser/	V. Zohrabian/	
S32727	CCTV: 24 Stn/ CNR	(646) 252-3189	(646) 723-9950	(237) 7389	
ST18-5862 C43018	Station Comm Rooms 2 Comm Rms- IND/BMT(JOC)	Undesignated	E. Saint-Louis/ (646) 252-3132	I. Ibrahim/ (718) 613-0286	
ST12-5276	Public Address/Cust Info	S. Kwa/	C. Fraser/		
W32662	PA/CIS:24 stations-CNR	(646) 252-3189	(646) 723-9950		
ST12-6056 Public Address/Cust Info W32663 PA/CIS:Wrap-Up(TIS)		W. Hochman/ (646) 252-2805	M. Jameson/		

V25-5898		Vacant	Y. Shukla/	D. Beston/
C33229	Pos/Neg Cables: CNR	·	(646) 252-3690	(646)252-4978
ST12-6056	Public Addr/Cust Info	Undesignated	M. Patel/	G. Dejean/
W32649	PA/CIS:Wrap-1999		(646) 395-9997	(646) 252-3239
MW56-4586		S. Kwa/	C. Fraser/	D. Leng/
S32701	Control CBTC CNR:	(646) 252-3189	(646) 723-9950	(347) 7386939
	Phases 1 & 2			
ST06-4908	Station Signage	G. Cespedes/	G. Cespedes/	
	Install Braille Signage	(646) 252-5130	(646) 252-5130	
RC08-4262	Station Power Upgrade	Undesignated	S Abraham/	T. Berry/
A33762	SPU-42 Stns: Ltg 1 Stn		(646) 252-4736	(646) 490-4236
ST10-4239	Token Booth	T. Fackelman/	S Abraham/	(0.10) 150 1250
C34348	Upgrade/Repl	(646) 252-4578	(646) 252-4736	
	New Token Booth Locks		(-,	
ST12-4247	Public Addr/Cust Info	Vacant	M. Patel/	
W32620	PA Systems, Ph 1: 140Stn		(646) 395-9997	
ST06-4677	Station Signage	Undesignated	Undesignated	
A35735	1992 Stn Signage			
·	Replcmt			
RK03-4254	Fare Control Modernze	J. Payyapilli/	J.L. Diaz/	A. Ciccotelli/
2612	AFC Communic	(646) 252-3329	(646) 790-2101	(718) 260-0252
5110-4189	Token Booth	Undesignated	T. Millbury/	(710) 200-0232
W32617	Upgrade/Repl	, and a seriginated	(212) 492-8108	3
•	New Token Booth Intram		(212) 132 0100	
	Sys			
MW22-3005	Line Struct Rehab Elev	Undesignated	Y. Shukla/	
C33121	Str Clearance Mrkgs		(646) 252-3690	•
Pl01-2899	Police	Undesignated	Di. I. Patel/	
E32064	Stn Security Elevated	o na opignatea	(646) 252-4540	
Pl01-2865	Police	Undesignated	S. Kwa/	
C32057	Stn Security-237 Mirrors	oridesignated	(646) 252-3189	· · · · · · · · · · · · · · · · · · ·
ST06-120	Station Signage	Undesignated	S Abraham/	
A33610	79 Stations	Or lacaignated		
PL03-1624	OHWA's/Annunciators	Undesignated	(646) 252-4736	
A33613	119 Sts: OHWA's Annun	or racsignateu	O. Adewolu/ 646) 542-4848	
CB01-1251	Contingency Founds	Undesignated		
D61142	Sandy-Mitgtn Studies-	Ondesignated	Undesignated	
,	EBCS			
MW22-1467	Line Struct Rehab	Undesignated	V Shukla/	
C33354	Gusset Plates/CNR DES	o lucay lateu	Y. Shukla/	
	Comm-Based Train	S. Kwa/	(646) 252-3690	
703	Control		C. Fraser/	
	CBTC CNR: Safety	(646) 252-3189	(646) 723-9950	
	Consint			
		·		

ST01-0868	Stations	D. Wesley/	M. Yu/	
A37574	HP: Systmwd Des/Mtl-	(646) 252-3061	(646) 252-3487	
	386Stn			

6. There are no power Engineering Electrical Department Facilities this project area.

Location 16 - E 102 St between Flatlands Ave and Farragut Rd

- The BMT 14th Street Canarsie Line and the MTA Bus Company's Spring Creek Depot are adjacent to the area of the above location.
- 2. NYC Transit Structural Drawings can be obtained by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.
- 3. The above locations might have an impact at the Rockaway Park Station Canarsie Line for the BMT L Train.

Should it become necessary to close any of this station entrances, see Note No. 35 from the enclosed General Notes.

- **4.** Should any aspect or phase of the contract (such as mobilization, prep work, etc.) impact pedestrian access to the above mentioned NTCT's line, Cynthia Daniel Mason of Divisions of Stations should be contacted at (718) 694-5270.
- **5.** For your information, enclosed for the above station is a summary of NYC Transit current and planned projects with which your project may need to be coordinated with. Most importantly please ensure that this project is coordinated with following future and on-going contracts so as to avoid any interference with any aspect of the contract design and construction.

Project Coordination Guide Rockaway Parkway Station / Canarsie Line - BMT / Brooklyn

Contract	Project Title	Design Mger/ Tel No.	Constr. Mger/ Tel. No	Resid. Engin/ Tel. No.
ST12-2716 W32799	Public Address/Cust Info PA/CIS ElecmcRplc-CNRS	D. Devoti/ (646) 252-6785	J. Singh/ (718) 613-0027	
ST09-6022	Intermodal/Transfer Facil Intermodal: Rockaway Pkway/CNR	R. Dean/ (646) 252-4324		
ST01-1460	Stations	S. Ragheb/	J Singh/	

7628	Sandy Resilie: EBCS	(646) 252-3427	(718) 613-0027	
ST04-6960	Station Accessibility-ADA	R. Dean/	A. Dias/	
A37119	ADA: Rock Pkwy/CNR	(646) 252-4324	(646) 418-5751	
MW62-6928		J. Patel/	C. Velenovsky/	D. Pichon/
C33840	OC: Bwy Jct-New	(646) 252-3710	(718) 643-1954	D. Bishop/
	Lots/CNR	(010) 232 3710	(710) 073-1334	(347) 672-0671
ST04-7247	Station Access-ADA	D. Devoti/	M. Patel/	S. Stuart/
A36124	Induction Loops: 642	(646) 252-6785	(656) 395-9997	(646) 252-3577
	Bths	(0.10) 232 0/03	(050) 595-9997	(070) 232-33//
ST17-6862	Station Security	B. Liona/	N. G. Patel/	
A36076	Panic Bars @ 277 Locs	(646)252-4636	(646) 252-4366	
MW17-5969		K. Asamoah/	V. Cavataio/	S. Jamoona/
W32679	ATM:B Div 253 Stn	(646) 252-4064	(646) 252-4570	(212) 883-7461
,	OPTION'	(6.15) 252 1551	(0.10) 232, 1370	(212) 003-7401
ST17-6882	Station Security Panic	Undesignated	V. Ramotar/	
A36076	Bars System Wide	J		
MW25-5898	Power Distr Facilities	Vacant	Y. Shukla/	D. Beston/
C36407	Pos/NegCbl-		(646) 252-3690	(646) 252-4978
	CNR:Completion		(1)	(0.10) 202 1070
TR01-6706	Rapid Transit Operations	S. Kwa/	C. Fraser/	V. Zohrabian/
2727	CCTV: 24 Stn/ CNR	(646) 252-3189	(646) 723-9950	(646) 237 7389
9712-5276	Public Address/Cust Info	S. Kwa/	C. Fraser/	
W32662	PA/CIS:24 stations-CNR	(646) 252-3189	(646) 723-9950	·
ST12-6056	Public Address/Cust Info	W. Hochman/	M. Jameson/	
W32663	PA/CIS:Wrap-Up(TIS)	(646) 252-2805		•
MW25-5898	Power Distrib Facil	Vacant	Y. Shukla/	D. Beston/
C33229	Pos/Neg Cables: CNR		(646) 252-3690	(646)252-4978
SS02-5204	Asbestos Abatement	K. Singh/	J. Dinaram/	F. Townsend/
C33215	Asbestos Abatement Ph	(646) 252-3564	(646) 252-3521	(646) 252-3511
	IV			
ST12-6056	Public Addr/Cust Info	Undesignated	M. Patel/	G. Dejean/
W32649	PA/CIS:Wrap-1999		(646) 395-9997	(646) 252-3239
MW22-1467	Line Struct Rehab	Undesignated	Y. Shukla/	
C33354	Gusset Plates/CNR DES		(646) 252-3690	
MW56-5771	Comm-Based Train	S. Kwa/	C. Fraser/	
S32703	Control	(646) 252-3189	(646) 723-9950	
	CBTC CNR: Safety	·		
CT01 0000	Consint			
ST01-0868	Stations	D. Wesley/	M. Yu/	
A37574	HP: Systmwd Des/Mtl-	(646) 252-3061	(646) 252-3487	
4 1645	386Stn			
1-1615	Stations	D. Wesley/	M. Yu/	
	HP: 18 Stns RESERVE	(646) 252-3061	(646) 252-3487	

6. Kindly find enclosed the enclosed **Drawing P-573 – Duct Assignment – Vicinity of New Lots Avenue Station – 14th Street Canarsie Line** showing power engineering activities for the area of the above location.

Location 1 – Stanley Avenue from Hinsdale St to Williams Ave

Location 4 - E 108 St between Glenwood and Farragut Rd.

Location 5 - E 108 St between Flatlands and Glenwood Ave

Location 8 – Glenwood Rd between E 108th St and Williams Ave

Location 9 – Glenwood Rd between E 105th St and 108th St

These locations will have no impact on NYCT Facilities.

However for the entire project the following comments apply:

1. NYCT Bus Routes may be affected by your project. Please notify:

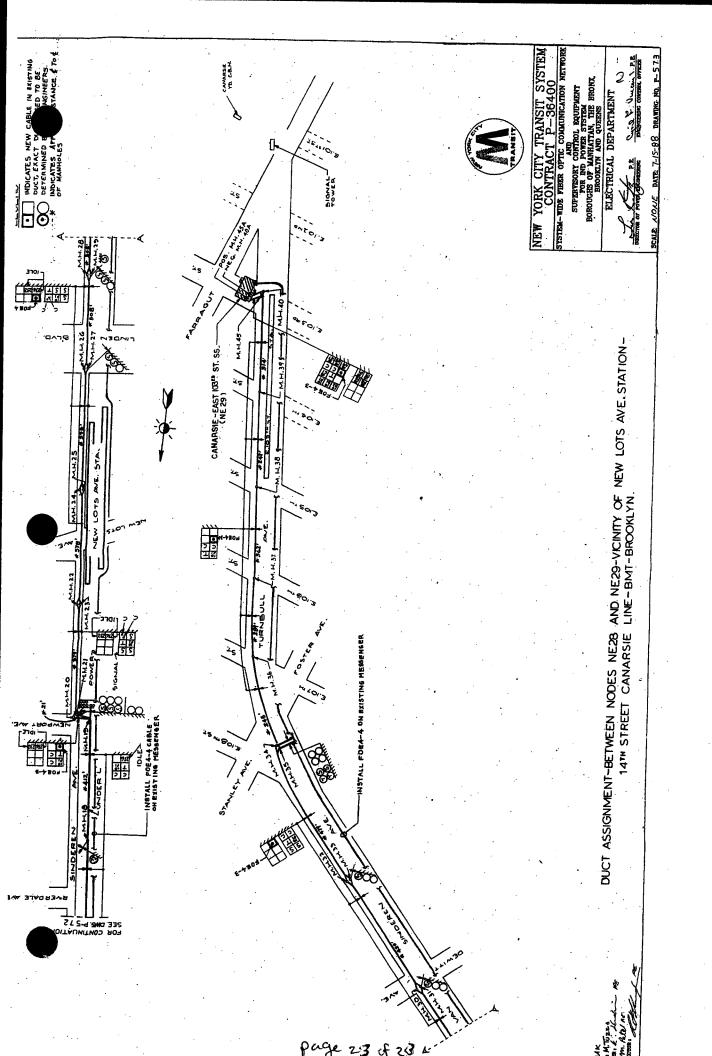
Ms. Sarah Wyss
Manager
New York City Transit
2 Broadway - Room A 17.82
New York, NY 10004
Tel. No. (646) 252-5517

 NYC Transit General Notes and Insurance Clauses (copies included) shall be incorporated in the Contract documents and transcribed on the contract drawings when submitted for NYC Transit review / approval.

The Contract Drawings and Documents showing NYC Transit facilities in plan and section shall clearly indicate the effect of all proposed work on these facilities. Included shall be construction procedures showing in detail how NYC Transit Facilities will be protected during construction of your project.

These Documents incorporating all the above comments shall be submitted for review and approval by the NYC Transit.

Should you have any questions, please call Ms. Alina Avadanei at (646) 252-3641.



I No Text

EP7 - PAGES

GAS COST SHARING (EP-7) STANDARD SPECIFICATIONS

NOTICE

THE PAGES CONTAINED IN THIS SECTION (EP7-PAGES) REPRESENT THE GAS COST SHARING WORK THAT SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.

(NO TEXT ON THIS PAGE)

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V - PRELIMINARY GAS WORK TO BE PERFORMED BY FACILITY OPERATOR

VI - LISTING OF APPROXIMATE LOCATIONS OF EP-7 BID ITEMS QUANTITIES

I - NOTICE TO ALL BIDDERS; GAS COST SHARING WORK

All prospective bidders are hereby advised that, pursuant to the "Gas Facility Cost Allocation Act", ("the Act"), the City of New York has entered into an agreement ("the Agreement") with the gas companies (Con Edison or National Grid (formerly KeySpan Energy Delivery)) operating in their respective areas of the City to "share" the cost of facility relocation and/or support and protection of facilities disturbed by proposed water and/or sewer and related City work specified in this contract. Therefore, bid items, specifications and estimated quantities for the incremental costs of support and protection of certain gas facilities have been included in this contract. The low bid for this contract shall be determined by examining each bid for all work to be performed under this contract including any work of support and protection of gas facilities to be performed. The Contractor shall not seek additional compensation from gas companies except as specifically set forth in its contract.

II - GENERAL PROVISIONS; GAS COST SHARING WORK

1. General:

The Contractor shall perform City work with interferences from existing live and abandoned gas facilities. This shall be defined as utility work. Therefore, this contract includes bid items, specifications and estimated quantities designed to fully compensate him/her for the incremental costs of supporting, protecting, providing accommodations and, avoiding disturbing gas facilities located in the streets shown on the contract drawings. In the event that any other provisions of this contract related to gas facilities (or private utilities) conflict with these provisions, these provisions shall supersede and govern all work related to gas facilities owned by the companies operating in the project area. All utility work, as defined in these specifications, including changes and additions thereto shall be paid solely by the City except when specified otherwise in this contract. Contractor hereby agrees that the facility operator shall not be liable to pay him/her for any work performed including extra utility work. Contractor agrees that its bid prices include all compensation for loss of productivity and efficiency, idle time, delays (including any delays occasioned by negotiation of a contract change), change in operations, mobilization, demobilization, remobilization, added cost or expense, lost of profit, other damages or impact costs that may be suffered by or because of utility work, or the presence of gas facilities in the proximity of City work and that it will not seek additional compensation for these items. All disputes shall be resolved as specified in the contract.

Pursuant to the Act, Agreement, and the New York City Administrative Code, the gas company(ies) has been directed by the Commissioner and is required to perform all maintenance, repairs, replacement, shifting, alteration, relocation, and/or removal work that are not part of this contract. By having bid on this contract, the Contractor understands and agrees that the Commissioner has preasserted any right the City has to require, including the issuance of any directives or so called "order outs" under the New York City Administrative Code, any or all gas companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove all gas facilities that are about to be disturbed by the City contract work. The issuance of additional such directives during the performance of the contract work, where necessary in the sole judgment of the Commissioner, shall be initiated by such Commissioner as set forth in the relevant sections of the Act and Agreement. Contractor further agrees to insert such requirements as set forth herein above into any contracts with its approved subcontractors so that its subcontractors also understand and agree to such contract requirements.

2. Gas Interferences And Accommodations:

During the performance of sewer and water main work funded by the New York City Department of Environmental Protection (NYCDEP), as instructed by the Engineer, the use of any applicable contract bid item is allowed in order to resolve and accommodate all gas facilities interferences with such City work, including the removal of contaminated soil in associated trench excavation. This is in addition to the specified EP-7 bid items in the contract. Payment for such accommodation shall be funded by EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" (F.S. Fixed Sum). The value of such accommodation shall be computed by multiplying the appropriate unit prices bid to the quantity of work performed, as determined by the Engineer, and applying the total amount thus to be paid

to EP-7 bid item "<u>UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS</u>". When EP-7 bid item "<u>UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS</u>" 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 (in cases of accommodations) or, Contractor (in cases of defective gas facilities) due to such gas work, if any, shall be the responsibility of the parties involved and not of the City. Such costs shall be a matter of adjustment between the Contractor and the facility operator.

10. Materials Furnished By Facility Operator:

It shall be the Contractor's responsibility to inspect material to be installed by him immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional costs to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

11. Liability And Insurance:

Notwithstanding the provisions of this contract, the existing division of liabilities to third parties shall remain the same as between the City and the company. Therefore, it is specifically agreed by the City, company and Contractor (by bidding on this contract) that for the purpose of any liabilities to third parties, that the City contractor performing work directly and physically relating to gas company facilities in this project, shall be deemed an agent of the company and not an agent of the City, the New York City Municipal Water Finance Authority, or the New York City Water Board. Contractor shall include the company as an additional insured on all insurance policies maintained to comply with the City's insurance requirements.

12. Width And Depth Of Excavation:

Contractor shall not be authorized to deliberately change trench or excavation widths and/or depth specified without Engineer's approval. Enlargement of any side of excavation up to eighteen (18) inches beyond pay limits (or inside face of sheeting) requested by the Contractor for the installation of certain types of sheeting may be granted. However, such enlargements or those greater than allowable shall not be approved when, in the sole judgment of the City, field conditions allow the water mains and sewer work to be performed within the limits specified and, the sole purpose of such enlargement request is to impact adjacent utilities (public or private) whose support and protection are part of this contract. Any approval shall be given at no additional cost to the City contract, including EP-7 funding, and all costs associated with unauthorized enlargements shall be the sole responsibility of the Contractor.

13. Depth And Crossing Angles Of Gas Facilities:

Where gas facilities are shown (or specified as) crossing proposed alignment of sewers, water mains, catch basins and chute connections or any other proposed excavations at specific angles (as measured off plans or sketches or specified in contract), it shall be understood that actual field measurements may deviate (plus or minus) forty-five (45) degrees from those shown or specified. The cover, or depth from street surface to top of facilities, shall be as shown or specified in contract documents, no deviation is to be assumed. Where gas facilities are not shown on contract documents, but their support and protection are otherwise included in this contract then, all references to facilities crossing at "various angles and depth" in the gas sections shall mean that such facilities are crossing sewer, water, catch basin and, catch basin chute, and other excavations at a ninety (90) degree angle to the proposed sheeting line or side of

excavation (for unsheeted trenches) with an allowable deviation of forty-five (45) degrees in any direction, except for catch basin chute excavation where the allowable deviation shall be sixty (60) degrees. Where the cover is not noted or specified, the bottom face of such facilities shall be assumed to be crossing catch basin chutes at a depth of three (3) foot eight (8) inches or less from the street surface. Paragraph No. 2 above shall apply in cases of distribution water main construction. Appropriate bid items and specifications are provided for cases where angle and depth are greater than stated above. This section also applies to work defined in "Emergency Reconstruction Contracts" or so-called "Where and When Contracts". These contracts are not pre-engineered and consequently have no drawings, sketches or determined locations and so, gas facilities encountered will be crossing existing and proposed sewer, water, catch basin/catch basin chutes and all appurtenances at various angles and depths.

14. Maintenance Of Traffic For Gas Work:

All work pertaining to gas bid items and specifications shall be performed within the contract maintenance of traffic plan as specified in the contract document. The bid price for the Maintenance and Protection of Traffic shall cover all work pertaining to gas items. The City shall make compensation for additional maintenance and protection of traffic items in connection with gas item of work only when such additional work is deemed reasonable and necessary by the Resident Engineer and is approved by him prior to its performance.

15. Relocated Gas And Temporary Systems Installation:

In cases where the Contractor is allowed to select the location for temporary construction such as, installation of dewatering headers, wells, well points, etc., he shall not disturb any gas facilities shown on sketches provided in this section. The only exception shall be, if the affected gas company agrees to such relocation and provided that the cost of such relocation is a matter of adjustment between the company and Contractor, and at no cost to the City.

16. Role Of Company Inspector:

In any case in which the City elects to perform some or all support and protection work with its own employees, personnel or contractors, the facility operator shall provide onsite inspectors to approve and certify such support and protection work (exclusive of City accommodations) performed by the City's own employees, personnel, and contractors. Facility operator's inspectors are not authorized to direct City contractor during the performance of contract work. They shall act through the City Resident Engineer and provide him/her required approvals and certifications, prior to preparing partial payments of EP-7 items, in a format and frequency to be prescribed by the appropriate City Head of Construction.

17. Coordination With Gas Company:

The Contractor shall be required to notify the gas company(ies), in writing, at least two (2) weeks prior to the start of final paving in order to allow companies to complete any unfinished gas work located within the area to be paved. Every effort shall be made to maintain gas service with minimum inconvenience to the public.

III - TECHNICAL SECTION

SECTION 6.01 - Trench Crossings; Support And Protection Of Gas Facilities And Services.

1. Description:

Under this section, the Contractor shall provide all labor, materials, equipment, and incidentals required to

support and/or protect the integrity of gas mains, services and appurtenances of any sizes, configurations, and operating pressures crossing trench excavations above subgrade for planned construction of sewers and water mains facilities. A gas service shall be defined as a gas pipe of three (3) inches in diameter or less branching from the main to a customer pick up point or property valve box. A gas main may be any size pipe that is part of a distribution or transmission network other than services described above. Crossings shall be defined as gas facilities spanning the width of excavation (one side to the other side). These crossings may be at various angles and depth as shown on "Gas Cost Sharing Work Standard Sketches Nos. 1 and 1A", and as specified in "General Provisions; Gas Cost Sharing Work Paragraph No. 13" and, at the locations shown or listed in contract documents. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with contract specifications, plans, and at the directions of the Resident Engineer in consultation with the authorized representatives of the facility operator.

2. Method Of Construction:

- A. Protection: In general, the gas facilities shall be protected as required by New York State Industrial Code 753. In particular, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the gas facilities (marked out by facility operators) and to ascertain the clearances and cover of the facilities with respect to the proposed excavation. Upon exposing the affected facilities sufficiently, at the discretion of the Resident Engineer, to ascertain the foregoing, Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, outside a zone of protection whose limit shall be defined as a perimeter located twelve (12) inches from the outside face of each gas facility crossings (See "Gas Cost Sharing Work Standard Sketch No. 2"). If the facilities are in direct interference with City work, meaning that "Minimum Clearances" described in "General Provisions; Gas Cost Sharing Work Paragraph No. 8" cannot be maintained, and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07, and "General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8".
- B. Support: Gas mains or services crossing excavations equal or less than four (4) feet wide are generally self supporting, unless field conditions as determined by the Resident Engineer require otherwise. The support requirements for gas mains and services crossing excavations greater than four (4) feet wide shall be as shown on the attached "Gas Cost Sharing Work Standard Sketch No. 1" and Contractor shall use sheeting methods that permit the maintenance of gas facilities in their existing locations and configurations. Alternate methods equivalent to those shown on the sketch or accommodations by the facility operator proposed by the Contractor in order to facilitate the execution of the specified work shall be allowable, provided that prior approval is obtained by the Contractor from the Engineer and the facility operator. The support and protection of gas facilities crossings shown on plans, drawings, listings or otherwise identified in this contract shall not be circumvented with the issuance of so called "order outs".

3. Method Of Measurement:

The Contractor shall be paid for supporting and/or protecting gas facilities crossing trench excavations under the appropriate bid items covered by this section. The Contractor shall be directly responsible to the facility operator for the total cost of using any alternate method requiring the use of resources owned by the facility operator. Regardless of the method used, the City shall pay the bid price for the appropriate support and/or protect item of work. The average rate charged by the facility operator for alternate support and protection work such as, disconnecting and reconnecting gas services is listed in attached "Schedule GCS-A".

4. Payment Restrictions:

These items shall not be paid for: gas services crossing unsheeted water main trench excavation; abandoned gas main/services identified by facility operator; gas mains/services crossing trench excavations for fire hydrant branch connections pipes, catch basins and/or chutes (sewer drain pipe), house sewer and/or water services; gas facilities encroaching any face of excavation for sewer and/or

water construction, all of which are covered under other contract sections. Also this item shall not be paid for new gas mains and services crossing water trenches when trenching for such new facilities has been performed by the Contractor in common with trench excavation for City work (overlapping trench limits). The cost of supporting and protecting such gas facilities crossings shall be deemed included in the cost of trench excavation for the new gas facilities. This payment restriction shall apply even if such common trench gas excavation is not part of the contract. The prices bid for items covered by this section represent full compensation to Contractor to completely perform the work described. No other bid items shall be combined with these items in order to pay for gas main and/or services crossing excavations specified herein.

5. Method Of Payment:

Each (Ea.) gas facility crossing trench excavation as described in these specifications shall be counted for payment.

6. Price To Cover:

The cost of timber/steel supports installed for gas facilities shall be included in the bid price. The bid price for each crossing shall also cover all additional supervision, labor, material (except those provided by the facility operator), equipment and insurance necessary to completely maintain the gas facilities without disruption of service to the customers and in accordance with contract plans, specifications and facility operator standards. The price shall also include: changes of method of operations; sheeting modifications where necessary to accommodate the gas facilities crossings; installation and removal of water pipe under gas facilities (so called "snaking"); extra care during excavation (including hand excavation under existing single and multiple gas facilities); extra backfilling and compaction around, over and under gas facilities; installation and removal of sheeting around gas facilities; associated maintenance and protection of traffic; barricades; and traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals for the extra excavation associated with the installation of catch basin sewer drain pipes (chute) under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents and also, for the support and protection of these facilities during associated excavation and backfill operations. The gas company operating in the area, (facility operator), owns these facilities.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation is required when catch basin sewer drain pipes are installed at an upstream invert depth lower than four (4) feet (up to a maximum of six (6) feet) from the proposed pavement grade because the bottom faces of interfering gas mains and appurtenances are located at a depth greater than three (3) foot eight (8) inches from proposed pavement surface (See "Gas Cost Sharing Work Standard Sketch No. 4").

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered starting from catch basin structure proper and that prevents the installation of the chute connection at an upstream cover less than or equal to three (3) feet or any other minimum cover required to avoid City facilities (e.g. water, sewer, etc.) as directed by the Resident Engineer.

4. Payment Restrictions:

This item shall not apply and related bid item shall not be paid in cases where:

- A. Upstream invert chute is more than six (6) feet deep because of gas facilities.
- B. Chute cannot be installed above existing gas facilities because of interferences with other private facilities that are not otherwise covered under this contract, regardless of upstream invert depth.

The above cases shall be at no cost to the City, but shall be a matter of adjustment between the Contractor and the facility operator(s).

5. Price To Cover:

The bid price shall cover the additional cost of all additional supervision, labor, materials, equipment and insurance, to complete the installation of catch basins and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities; backfilling and all other items necessary to perform all work incidental thereto including: installation and removal of drain pipe under gas facilities ("snaking"); widening of trenches to facilitate the above work; subsequent additional backfill and pavement restoration; modifying precast catch basin window to accommodate connection; changing sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work. The price shall not include removal of ledge rock and/or excavation of boulders in open cut.

SECTION 6.02.1 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Upstream Inverts Greater Than Six (6) Feet.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance and incidentals for the extra excavation of catch basin chutes where the upstream invert is greater than six (6) feet under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents or as determined by field conditions and also, for the support and protection of these facilities during the associated excavation, sheeting and backfilling operations.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation and sheeting is required when the catch basin chute installed at an upstream invert depth lower than six (6) feet from the proposed pavement grade because the bottom faces of the interfering gas mains and appurtenances are located at a greater depth than three foot eight inches from the proposed pavement surface only.

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered during such excavation when initiated from catch basin structure and that prevents the installation of the chute at an upstream cover less than or equal to three (3) feet or any other cover required to avoid City facilities as directed by the Resident Engineer.

4. Payment Restriction:

This item shall not apply and related bid item shall not be paid in cases where:

Upstream invert chute is less than or equal to six (6) feet deep because of gas facilities. Section 6.02 shall be paid.

5. Price To Cover:

The bid price shall cover the additional cost of all supervision, labor, materials, equipment and insurance to complete the installation of catch basin and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities incidental thereto; widening of trenches to facilitate the above work; subsequent additional backfilling and pavement restoration; modifying pre-cast basin window to accommodate connection; the installation of catch basin with deeper sumps as specified; additional sheeting and changes in sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.03 - Removal Of Abandoned Gas Facilities. All Sizes.

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services, or appurtenances thereof, located within the street shown on the contract plans, owned by gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work.

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any resulting from this choice shall be a matter of adjustment between the Contractor and facility operator only, and at no cost to the City.

3. Restrictions:

The facility operator shall be solely responsible for its contaminated gas facilities, surrounding contaminated soil and their disposal and abatement procedures, unless contract bid items are applicable and provided for such work. In such cases, the quantity removed shall be charged to EP-7 bid item "<u>UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS</u>" 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 stockpilling costs.

SECTION 6.03.1a - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For Con Edison Work Only)

1. Description:

Under this section the Contractor shall provide all labor, material, equipment, insurance and, incidentals required to prepare abandoned gas mains, services and appurtenances thereof located within the street shown on contract plans, owned by the gas company operating in the project area (facility operator), for removal due to interference with proposed City work. These abandoned gas facilities were, at one time, used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural, manufactured or a combination of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distribution or furnishing of gas in enclosed containers. Such preparation for removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work. These gas facilities may be coated with Coal Tar Wrap which may contain asbestos or PCB's and so, may require special handling and disposal methods as specified in Con Edison - ASBESTOS MANAGEMENT MANUAL, CHAPTER 6 - ASBESTOS WORK PROCEDURES, SECTION 06.04 - COAL TAR WRAP REMOVAL. For under 25' (feet) in length and an approved NYC-DEP variance for over 25' (feet).

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas Facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on the facility

operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities. However, the facility operator may prefer to make this test during performance of City work in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any, resulting from this choice shall be a matter of adjustment between the Contractor and the facility operator only, and at no cost the City contract. Should such investigation result in the determination that the abandoned gas facilities do not contain Coal Tar Warp then the removal of said facilities shall be covered under separate item (See Section 6.03).

3. Requirements:

The Contractor shall excavate abandoned gas facility sufficiently, either in it's entirety, or at locations determined by Contractor to allow the removal of Coal Tar Wrap (if present on the abandoned gas facility) and to facilitate the safe extraction of manageable lengths of abandoned pipe without damage to adjacent facilities, utilities or city structures either parallel to or crossing above or below abandoned gas facility. The Contractor is to allow access to the designated cutting points within the Contractors trench by authorized Con Edison personnel who will remove the Coal Tar Wrap as per Con Edison and/or NYC-DEP approved procedures. This access shall conform to all applicable codes, rules & regulations. This work by Con Edison personnel shall be performed in a timely fashion and shall not unduly impede the Contractors progress and/or productivity. Upon completion of the coating removal, the Contractor shall be allowed to cut, burn or grind the gas facility and remove the section of abandoned pipe. Contractor shall designate a specific site to stockpile those removed pipes. The facility operator will be responsible to provide trucking and disposal services with its own personnel and shall remove the stockpiled pipes during off hours or during such time as agreed to by the Contractor. Since the pipe removed will remain the property of the facility operator and is to be disposed of by the facility operator, the facility operator shall be responsible for any required notifications, filings, dump charges and incidentals associated with the disposal of abandoned gas facilities found to contain Coal Tar Wrap.

4. Method Of Measurement:

Abandoned gas facility removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment and insurance necessary to complete this work in accordance with the plans and specifications, including, but not limited to, excavation by hand around and under other City and facility operator owned properties and, where necessary, the support and protection of such properties. The cost shall also include hand excavation in the area(s) of proposed abandoned pipe cut(s), cutting and/or burning of abandoned gas pipes and stockpile of removed sections of abandoned pipe and associated maintenance of traffic, blocking and temporary fencing if required. The unit price shall also cover sealing open ends remaining in the excavation with concrete or end caps (end caps to be supplied by facility operator) and backfilling of the area where the abandoned pipeline has been removed with clean backfill material. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and/or restoration (temporary and permanent) associated with abandoned pipe removal ("lost trench"), all of which are covered under separate Section 6.06. The price shall also include allowance for any loss of productivity by the Contractor due to required facility operator work to remove pipe coating and prepare pipe for cutting as well as any change in Contractor excavation method, additional trucking and/or stockpiling costs.

SECTION 6.04 - Adjust Hardware To Grade Using Spacer Rings/Adaptors. (Street Repaying.)

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. 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.

Methods Of Construction:

The Contractor shall remove and reinstall existing castings or install new castings to the proposed grade. Setting and resetting the castings shall be done with mortar and brick according to the standards of the facility operator. Work shall be performed in a workmanlike manner. Castings that are deemed unacceptable for resetting shall remain the property of the facility operator and he shall be responsible for their removal and proper disposal from site. No traffic shall be allowed on adjusted street hardware until permitted by the Engineer.

4. Method Of Measurement:

The Contractor shall be paid for each gas hardware adjusted to grade regardless of size or adjustment height requirements (up or down).

5. Price To Cover:

The unit price bid for this item shall include all additional labor, supervision, insurance, equipment and, material (except those to be provided by the facility operator), required to adjust each gas hardware to grade as required in the contract plans and specifications. The bid price shall also include the removal of existing frames and covers from existing facilities; building up the existing installations with bricks and mortar, or lowering the existing installation by removing bricks and mortar; replacing damaged frames and/or covers with new frames and/or covers furnished by the facility operator; setting the frames and covers to the new elevations; protect existing installations; repair minor structural damages to existing installations prior to resetting frames; unloading of furnished castings at the Contractor's yard and transporting castings from the Contractor's yard to the job site as required; completing the work in accordance with the contract plans, specifications and, at the directions of the Engineer. In addition the bid price shall include "chipping" around existing gas facilities using appropriate means and methods where grinding is required.

SECTION 6.06 - Special Care Excavation And Backfilling.

1. Description:

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to support and protect the integrity of live gas facilities including mains, services, related structures and appurtenances during excavations. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in consultation with authorized

representatives of the facility operator.

2. Applicability Of Section:

This section shall apply to live gas facilities of various sizes located within two (2) feet of any face of unsheeted excavation, (unsheeted excavation refers to any excavation performed for city work and includes excavations performed that are to be subsequently sheeted using approved methods) and paralleling or, encroaching any face of excavation. Also, for crossings greater than forty-five (45) degrees and/or located at a cover depth greater than five (5) feet from existing street surface. Parallel facilities are not exposed at any time during excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). Encroaching facilities are partially exposed inside the limit of excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). This section shall also apply to gas facilities crossing catch basins excavation, and catch basins sewer connections (chutes) trench excavation only when extra depth (covered in other section), is not required for chutes installations because of such utilities interferences (See "Gas Cost Sharing Work Standard Sketch No. 3"). This section shall also apply to gas services (if shown or otherwise listed in contract documents) crossing unsheeted excavations for water mains, gas facilities crossing fire hydrant branch connections, house sewer and/or water service connections excavations. This section shall also apply for so called "loss trench", as described further, and for additional excavation (pavement and/or soil), backfilling, compaction, roadway base and pavement restoration due to abandoned gas facilities, only if removed by Contractor. If operating status of gas facilities cannot be determined prior to excavation then such facilities shall be considered live and this section shall fully apply. The excavation around fully exposed live gas facilities along and within limits of excavation (not crossings) shall be covered by this section also (not shown on "Gas Cost Sharing Work Standard Sketch No. 5"), however the support requirement, if any is required, of such facilities is beyond the scope of these specifications and therefore shall be the responsibility of facility operator to determine and prescribe, at no cost to the City contract, but shall be a matter of adjustment between the Contractor and facility operator.

3. Payment Restriction:

No special care excavation shall be paid for abandoned gas facilities paralleling and/or encroaching excavation and therefore are not in direct interference with City work. Except as allowed in this section, the bid item specified under this section shall not be used in combination with items covered under other sections for work done due to a particular gas facility. This item shall not be paid for new gas facilities when trenching for such new facilities has been performed by the Contractor of record in common with trench excavation for City Work (overlapping trench limits). The cost of excavating with care as defined in this section shall be deemed included in the cost of trench excavation for the new gas facilities. This restriction shall apply even if such gas common trench excavation is not part of the contract. If facilities are in direct interference with City work, meaning that "Minimum Clearances" described in "General Provisions; Gas Cost Sharing Work Paragraph No. 8" cannot be maintained and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07 and "General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8".

4. Method Of Construction:

All excavation in the vicinity of gas facilities shall be as required by NYS Industrial Code 753. Where these facilities are paralleling and located two (2) feet or less from the limits of the proposed excavation, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) to ascertain the clearances of these facilities with respect to the proposed excavation. Once the location of these facilities with respect to the proposed excavation is verified to the satisfaction of the Resident Engineer, the Contractor shall then proceed with a combination of hand and machine excavation as required preserving the integrity of the facilities. The installation of timber supports or underpinning, when soil foundation cannot fully support partially exposed pipes, may be required to prevent pipe movement as directed by the Resident Engineer.

5. Method Of Payment:

The unit price for this work item shall be based on cubic yard (CY) of average excavation with care and, is

to be considered as an incremental cost for performing City work with gas facilities interferences.

6. Method Of Measurement:

- A. For Paralleling Facilities: Volume calculated as: Depth as measured from existing street surface to the bottom of unsheeted trench excavation allowable by OSHA regulations, multiplied by, the width measured as one (1) foot from the face of excavation toward the center of excavation, multiplied by the length of parallel facility, divided by twenty-seven (27) cubic feet per cubic yard (See "Gas Cost Sharing Work Standard Sketch No. 5"). The gas facility is no longer considered to be in interference once sheeting has been installed, therefore no further compensation for paralleling facilities as described above will be made.
- B. For Encroaching Facilities: Volume calculated as: Depth of trench as allowable by OSHA, maximum up to five (5) feet multiplied by, the width of partially exposed pipe plus one (1) foot, multiplied by the length of facility encroachment, divided by twenty-seven (27) cubic feet per cubic yard (See "Gas Cost Sharing Work Standard Sketch No. 5").
- C. Fully Exposed Gas Facilities: (Not shown on "Gas Cost Sharing Work Standard Sketch No. 5") along and inside trench and/or crossing trench at an angle greater than forty-five (45) degrees and/or a cover depth greater than five (5) feet from the existing street surface. The volume shall be measured as the depth of trench excavation multiplied by the distance measured along the sheeting line between two (2) points of intersections of the gas facilities and the sides of trench excavation, multiplied by the width of trench excavation.
- D. For Additional Excavation And Restoration Due To So Called "Loss Trench", When The Integrity Of Pavement And Soil Above And Around Existing Live Gas Facilities Cannot Be Maintained Due To Its Lack Of Cohesiveness: Volume shall be calculated as: Depth of unsheeted trench excavation multiplied by width measured as distance of facility from closest edge of unsheeted excavation plus, width of facility proper plus, one (1) foot or a maximum width of three (3) feet multiplied by length of facility fully exposed divided by, twenty-seven (27) cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").
- E. For Facilities Crossing Excavation For Catch Basins, Or Chutes Installations (When NYCDEP Funded) Or Fire Hydrant Branch Connections, Or Unsheeted Water Main Trench, Or House Sewer And/Or Water Services: Volume calculated as: Depth as measured from existing street surface to the bottom of the trench excavation multiplied by, the width taken as the outside diameter of pipe or the width of structure plus one (1) foot on either side (two (2) feet), multiplied by, the length of exposed facility crossing the trench, divided by twenty-seven (27) cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").

Overlapping volume dimensions measured as described above may occur when multiple facilities are paralleling excavations, encroaching excavations or crossing catch basins and catch basin chute installations. In such cases, all such facilities shall be counted as one limited by the extreme pipes, faces (See "Gas Cost Sharing Work Standard Sketch No. 2"). The volume shall then be calculated as described above.

7. Price To Cover:

The bid price shall also cover all additional supervision, labor, material, equipment and insurance necessary to excavate while protecting and maintaining (excluding supports for fully exposed live gas) gas facilities without disruption of service to the public and in accordance with contract specifications. The price shall also include, changes of sheeting method and excavation width configuration where necessary to accommodate gas facilities in their existing locations; difficulties during the installation of catch basins, chute connections, hydrant branch, and house sewer and water connections under or over gas facilities; loss of productivity due to slower rate of excavation (special care) during excavation, including the use of such methods as: hand excavation around existing single and multiple facilities, extra excavation and backfilling due to lost trench because of existing and adjacent gas facilities, compaction, removal of

sheeting from the facilities, extra roadway base restoration and temporary pavement, associated maintenance and protection of traffic, barricades, and traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.07 - Test Pits For Gas Facilities.

1. Description:

Under this section, the Contractor shall furnish all labor, materials, insurance, equipment and appliances necessary to excavate, sheet and, maintain test pits at locations approved by the Resident Engineer in consultation with the facility operator. Test pits shall be dug in order to ascertain exact locations, cover and invert elevations, clearances, alignment and operating status (live or dead) of existing gas facilities. The Contractor shall inspect jointly with the Resident Engineer and facility operator, gas facilities and other structures uncovered, take all relevant measurements and elevations as directed by the Resident Engineer. Tests to determine operating status of gas facilities shall be performed by facility operator. The pits shall be covered with steel plates during daytime nonworking hours, and uncovered, as required, until the inspection work is completed. Testing of gas facilities may require a maximum of four (4) hours. Then, the pits shall be backfilled with clean fill, and resurfaced with temporary pavement. All traffic shall be maintained and all safety measures as stipulated shall be complied with.

2. Methods Of Construction:

- A. Excavation: Existing pavement to be removed shall be neatly cut along lines of removal with a saw or other approved equipment which leaves a neat straight joint line along the juncture with subsequently replaced pavement. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. Use of hand operated pneumatic and electric jackhammers will be permitted only for breaking pavement and removal of masonry, concrete and boulders, or as otherwise directed by the Resident Engineer. The Contractor shall properly dispose of all materials excavated from test pits away from site. Test pits shall be excavated at locations shown on the contract drawings or as directed by the Resident Engineer. Additional test pits may be required and shall be excavated where required, as ordered by the Resident Engineer. All test pits shall be excavated to a depth and size necessary to locate the existing facilities. Sheeting shall be used when depth of excavation exceeds five (5) feet. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Codes requirements and as specified in contract, whichever is more stringent. Care shall be taken that no existing gas facilities or other structures are broken or damaged. All broken or damaged facilities shall be reported immediately to facility operator who shall decide whether such facilities shall be repaired or replaced by company forces or by City contractor and in conformance with "General Provisions; Gas Cost Sharing Work Paragraph No. 9". Contractor shall excavate all material encountered, including large masses of concrete, cemented masonry and boulders, as directed by the Resident Engineer. Any type of excavation protection used, shall satisfy the following:
 - (a) Industrial Code Rule 753.
 - (b) Prevent injury to workers and the public, and avoid damage to existing water, sewer, and gas pipes or other structures, and to pavements and their foundations, through caving or sliding of the banks of the excavation.

Should it become necessary, as determined by the Resident Engineer, to enlarge any test pit in any dimension after sheeting has been placed, the Contractor shall remove portions of the sheeting, as necessary, enlarge the test pits as directed, and replace the sheeting without additional compensation for this work other than for the additional volume of material excavated.

B. Maintenance Of Test Pits: Excavated test pits shall be maintained free of debris and kept dry by the Contractor in order to permit the inspection and measurements and to determine the locations of facilities. In order to accomplish this, Contractor shall, upon completion of excavation and placement of sheeting (if depth greater than five (5) feet), furnish and install adequate steel plates and posting

over the excavated pits and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during nonworking hours. The Contractor shall then, at no additional cost, relocate such barricades, barrels, cones and other warning devices and remove steel plates, as and when directed by the Resident Engineer to facilitate the inspection of exposed facilities. When work is being performed and the pits are not covered with steel plates, the Contractor shall provide complete and safe access to the test pits as may be required, and he shall provide construction barricades and maintain traffic at all times as shown or as directed by the Resident Engineer. Upon completion of test pit inspection by the Resident Engineer, the pit shall be backfilled by the Contractor as specified in contract, except that backfill material shall conform to contract specifications for such purpose.

C. Pavement And Sidewalk Restoration: After backfilling is completed, the Contractor shall construct a temporary pavement consisting of a minimum of four (4) inches thick asphaltic concrete mixture in roadway areas or a two (2) inches thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent pavement and sidewalk replacement is constructed as specified in contract.

3. Measurements:

The quantity to be measured for payment shall be the number of cubic yards of material removed from within the limits of the pit dimensions as directed by the Resident Engineer. The volume occupied by existing pipes or other structures remaining within the maximum payment lines will not be deducted from the total volume measured except, where the cross sectional area of these facilities exceeds four (4) square feet. As determined by the Resident Engineer, the quantity measured for payment may be proportionate to a fair and reasonable estimate of gas responsibility in the total volume excavated.

4. Price To Cover:

The contract price bid per cubic yard for test pits shall cover all additional costs of labor, material, insurance, equipment, appliances and incidentals required to excavate test pits, including removal and disposal of excavated materials, sheeting, steel plating, backfill, compaction and temporary pavement and sidewalk restoration all in accordance with the specifications and as directed by the Resident Engineer. The price shall also include the cost of providing safe access to the excavation by facility operator for the performance of certain test to determine operating status of gas facilities prior to City work. The price shall also include support and protection of all gas facilities crossing excavation, paralleling and/or encroaching any face of excavation.

SECTION 6.09 - Trench Excavation and Backfill for New Gas Mains and Services (For National Grid Work Only)

1. Description:

Under this section, the contractor shall furnish all labor, materials, equipment, insurance, permits and incidentals required to break/remove roadway and sidewalk pavement, excavate, backfill and restore gas trenches. The trench to be excavated shall be determined by the size of the gas facility to be installed. The work shall be performed in accordance with applicable specifications, and/or at the direction of the Resident Engineer in consultation with the facility operator.

2. Materials:

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer.

3. Method of Construction:

Excavation - The Contractor shall saw cut and/or break and remove existing roadway which may include

but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. Prior to starting the trenching operation, the contractor shall excavate the appropriate gas main tie-in pits at the extremities of the gas main sections to be replaced. Test pits shall be excavated to determine exact location of all tie-in pits and at appropriate intervals along proposed trench excavation to verify lane and clearances as shown on the contract plans. The tie-in pits shall be adequately protected by the contractor using wood fencing or steel traffic plates until such time when the facility operator has completed the tie-in work. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant, and as directed by the facility operator. The trench shall be adjusted so as to provide for a nominal cover on the new gas facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator in consultation with the Resident Engineer. The width of the trench shall be as directed by the facility operator in consultation of the Resident Engineer. The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of clean sand and in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new gas facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new gas facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator in consultation with the Resident Engineer. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new gas facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator in consultation with the Resident Engineer. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator in consultation with the Resident Engineer. Care shall be taken that no existing gas facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new gas facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

Maintenance of Trench Excavation - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator in consultation with the Resident Engineer, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. National Grid forces will perform all live gas main connections, dead gas main cut-outs, and/or service work associated with disconnecting and reconnecting from old to new gas main The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator in consultation with the Resident Engineer to facilitate the installation of the new gas facilities. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator in consultation with the Resident Engineer. The contractor has the responsibility to maintain and set to grade all National Grid hardware during backfill and pavement restoration. Upon completion of installation of the new gas facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

Pavement and Sidewalk Restoration - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6") thick asphaltic concrete mixture in roadway areas or a two inches (2") thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract. Permanent pavement restoration shall be as required by the appropriate contract

specifications and as directed by the Resident Engineer.

4. Method of Measurement:

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated, including roadway pavement, base and/or sidewalk concrete removed within the limits of the trench as directed by the Resident Engineer in consultation with the facility operator. The volume occupied by existing pipes or other structures will be deducted from the total volume measured as shown on contract drawing(s) Title: EP-7 SECT. 6.09 GAS SPECIALTY CONTRACTOR WORK, or as encountered based on existing field conditions.

5. Price to Cover:

The unit price bid per cubic yard for excavation shall include the cost of all supervision, labor, material, equipment, insurance and incidentals necessary to complete excavation trenches, including backfill, compaction testing and restoration of trenches and tie-ins pits as specified or shown on the contract, plans. The bid price shall also include the cost of coordinating the sewer and water main work to be performed by the contractor with the gas installation work to be performed by others. The price shall also include, associated maintenance of traffic, and traffic plates and openings and closings of plates as may be required in order to provide access to the facility operator during the new gas facility installation, and installing, removing and maintaining tight sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand, furnish, place and compact, in compliance with DOT requirements, clean sand backfill following installation of the gas facility. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be deemed included in this item, as required and as directed by the Resident Engineer.

SECTION 6.09a Trench Excavation and Backfill for New Gas Mains and Services (For Con Edison Work Only)

1. Description:

Under this section, the contractor shall furnish all labor, materials, equipment, insurance, permits and incidentals required to break/remove roadway and sidewalk pavement, excavate, backfill and restore gas trenches. The trench to be excavated shall be determined by the size of the gas facility to be installed. The work shall be performed in accordance with applicable specifications, and/or at the direction of the Resident Engineer in consultation with the facility operator.

2. Materials:

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer. Clean sand backfill material shall be used and shall conform to Con Edison specification EO-1181-rev.6, General Specification for Backfilling of Trench and Small Openings.

3. Method of Construction:

Excavation – The Contractor shall saw cut and/or break and remove existing roadway which may include but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. Prior to starting the trenching operation, the contractor shall excavate the appropriate gas main tie-in pits at the extremities of the gas main sections to be replaced. Test pits shall be excavated to determine exact location of all tie-in pits and at appropriate intervals along proposed trench excavation to verify lane and clearances as shown on the contract plans. The tie-in pits shall be adequately protected by the contractor using wood fencing or steel traffic plates until such time when the facility operator has completed the tie-in work. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant, and as directed by the facility operator. The trench shall be adjusted so as to provide for a

nominal cover on the new gas facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator in consultation with the Resident Engineer. The width of the trench shall be as directed by the facility operator in consultation of the Resident Engineer. The width and depth of the trench shall conform to Con Edison Gas Operations drawing 309495 rev. 4, Trench Excavation for Gas Mains Up to 350 PSIG, or as directed by the facility operator in consultation of the Resident Engineer. The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of clean sand and in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new gas facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new gas facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator in consultation with the Resident Engineer. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new gas facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator in consultation with the Resident Engineer. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator in consultation with the Resident Engineer. Care shall be taken that no existing gas facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new gas facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

Maintenance of Trench Excavation - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator in consultation with the Resident Engineer, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. Con Edison forces will perform all live gas main connections, dead gas main cut-outs, and/or service work associated with disconnecting and reconnecting from old to new gas main The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator in consultation with the Resident Engineer to facilitate the installation of the new gas facilities. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator in consultation with the Resident Engineer. The contractor has the responsibility to maintain and set to grade all Con Edison hardware during backfill and pavement restoration. Upon completion of installation of the new gas facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

Pavement and Sidewalk Restoration - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6") thick asphaltic concrete mixture in roadway areas or a two inches (2") thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract. Permanent pavement restoration shall be as required by the appropriate contract specifications and as directed by the Resident Engineer.

4. Method of Measurement:

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated, including roadway pavement, base and/or sidewalk concrete removed within the limits of the trench as directed by the Resident Engineer in consultation with the facility operator. The volume occupied

by existing pipes or other structures will be deducted from the total volume measured as shown on contract drawing(s) Title: EP-7 SECT. 6.09 GAS SPECIALTY CONTRACTOR WORK, or as encountered based on existing field conditions.

5. Price to Cover:

The unit price bid per cubic yard for excavation shall include the cost of all supervision, labor, material, equipment, insurance and incidentals necessary to complete excavation trenches, including backfill, compaction testing and restoration of trenches and tie-ins pits as specified or shown on the contract, plans. The bid price shall also include the cost of coordinating the sewer and water main work to be performed by the contractor with the gas installation work to be performed by others. The price shall also include, associated maintenance of traffic, and traffic plates and openings and closings of plates as may be required in order to provide access to the facility operator during the new gas facility installation, and installing, removing and maintaining tight sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand, furnish, place and compact, in compliance with DOT requirements, clean sand backfill following installation of the gas facility. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be deemed included in this item, as required and as directed by the Resident Engineer.

GAS COST SHARING STANDARD SPECIFICATIONS SCHEDULE GCS-A

Average rate charged by utility companies to Disconnect and Reconnect Gas Services:

1. National Grid

- \$586.90 per Service/and Visit

2. Con Edison

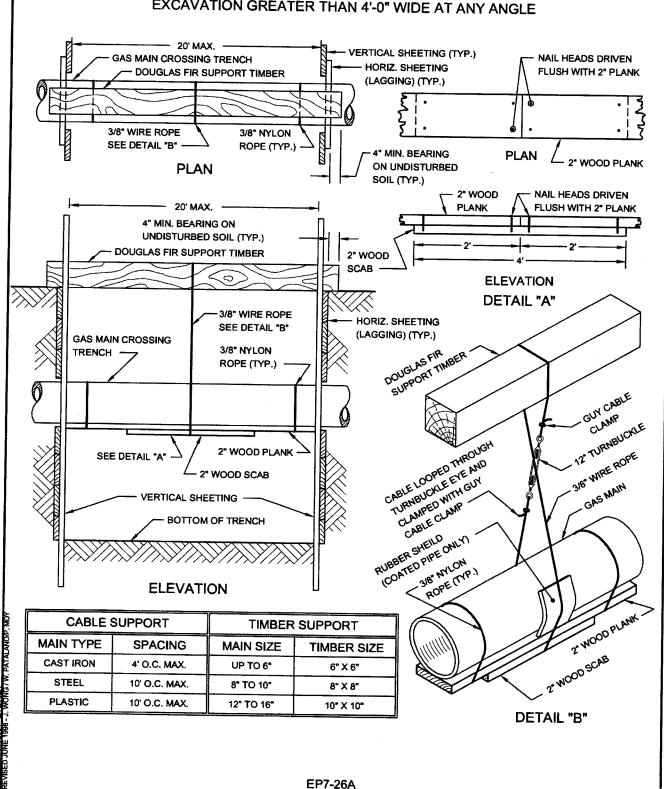
- \$524.00 per Service/and Visit

IV - STANDARD SKETCHES; GAS COST SHARING WORK

Hereinafter attached are the following Standard Sketches for Gas Cost Sharing Work:

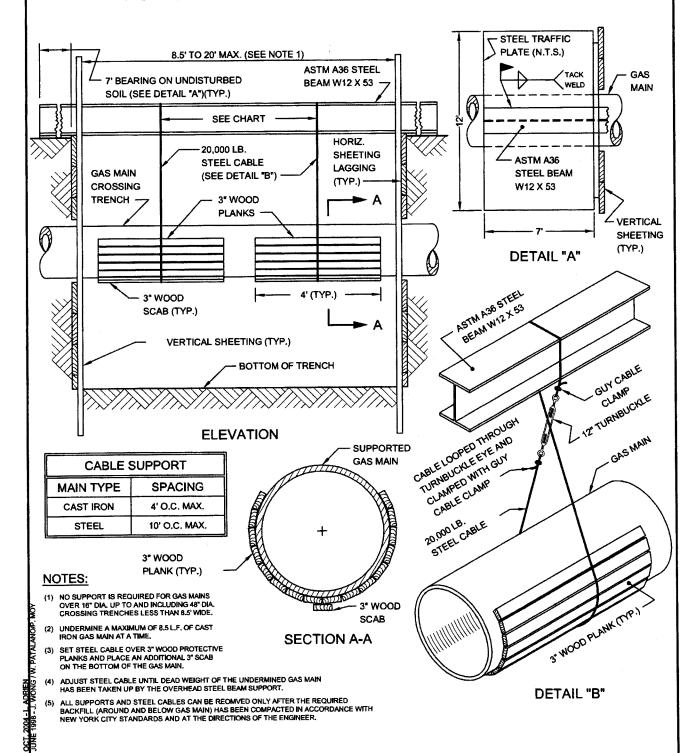
- Sketch No. 1 Support Requirements For Gas Mains And Services Crossing Excavation Greater Than 4' 0" Wide At Any Angle
- Sketch No. 1A Support Requirements For Gas Mains Over 16" Diameter Up To And Including 48" Diameter Crossing Excavation At Any Angle
- Sketch No. 2 Typical Methods Of Measurement For Gas Crossings
- Sketch No. 3 Utility Crossings During Catch Basin Chute Connection Pipe Installation
- Sketch No. 4 Utility Crossings During Catch Basin Chute Connection Pipe Installation (Extra Depth)
- Sketch No. 5 Gas Main Encroachment On And/Or Parallel To Excavation Of Unsheeted Trench

GAS COST SHARING WORK (SKETCH NO. 1) SUPPORT REQUIREMENTS FOR GAS MAINS AND SERVICES CROSSING EXCAVATION GREATER THAN 4'-0" WIDE AT ANY ANGLE

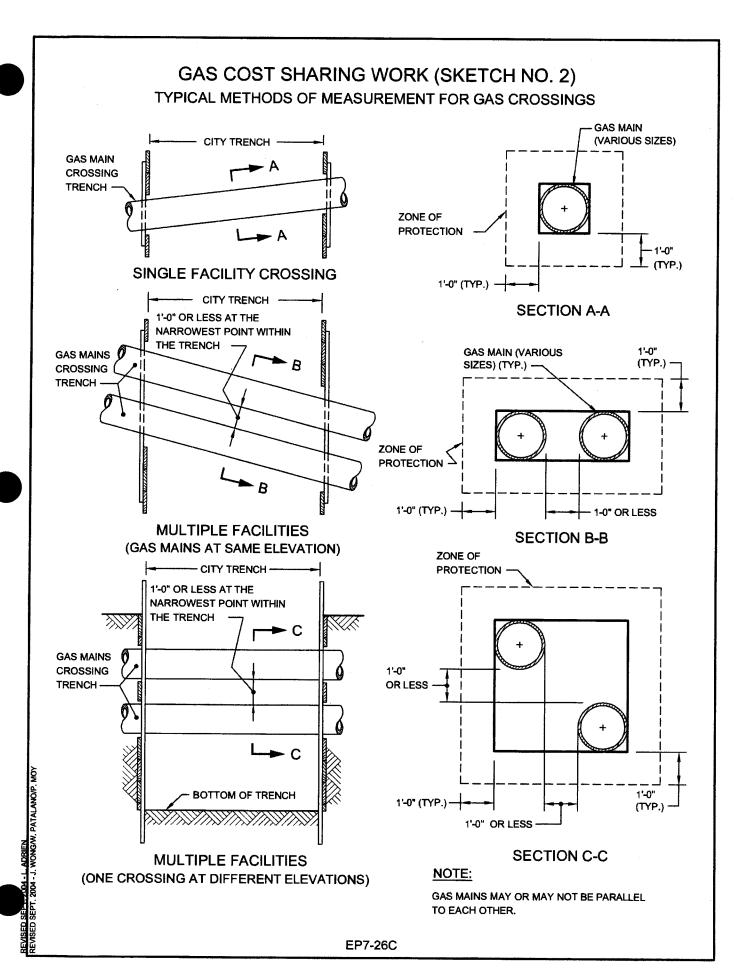


GAS COST SHARING WORK (SKETCH NO. 1A)

SUPPORT REQUIREMENTS FOR GAS MAINS OVER 16" DIAMETER UP TO AND INCLUDING 48" DIAMETER CROSSING EXCAVATION AT ANY ANGLE

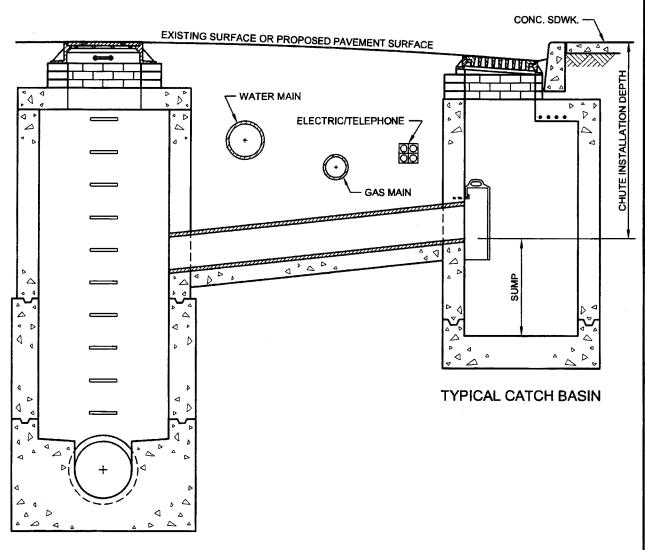


EP7-26B



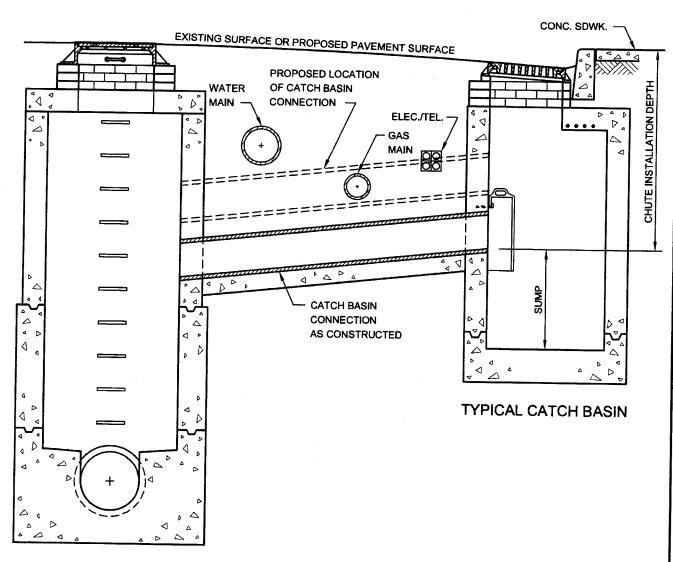
GAS COST SHARING WORK (SKETCH NO. 3)

UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION



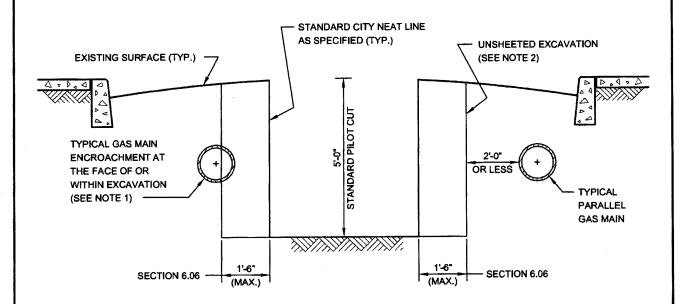
TYPICAL SEWER MANHOLE

GAS COST SHARING WORK (SKETCH NO. 4) UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION (EXTRA DEPTH)



TYPICAL SEWER MANHOLE

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 SECTION IS TO BE PERFORMED BY FACILITY OPERATOR.
- ALL SUPPORT AND PROTECTION WORK TO BE PERFORMED BY CITY CONTRACTOR
- IF ADDITIONAL INFORMATION IS NEEDED REGARDING THE FACILITY OPERATOR'S RELOCATION WORK, THE CONTRACTOR IS ADVISED TO CONTACT THE GAS COMPANY REPRESENTATIVE:

Neville Jacobs Jr.
National Grid Energy Delivery
287 Maspeth Avenue
Brooklyn, NY 11211
718-963-5612

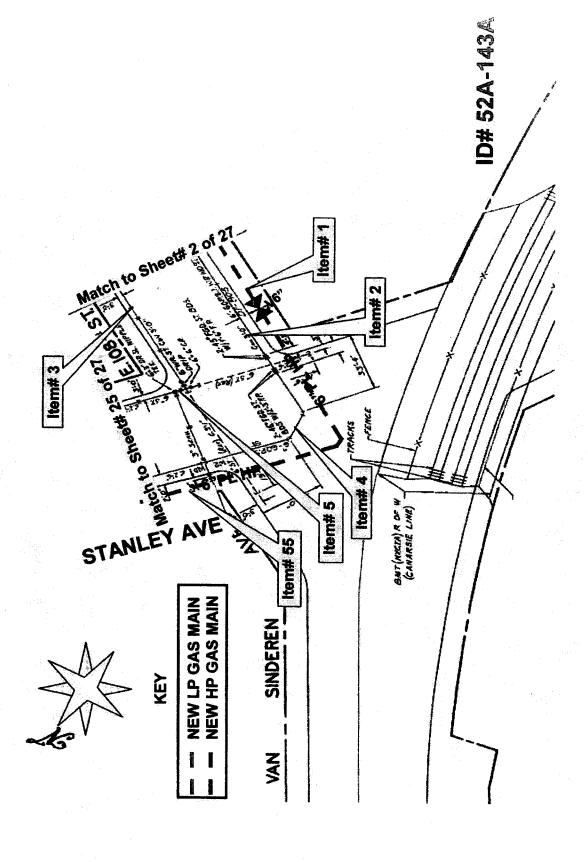
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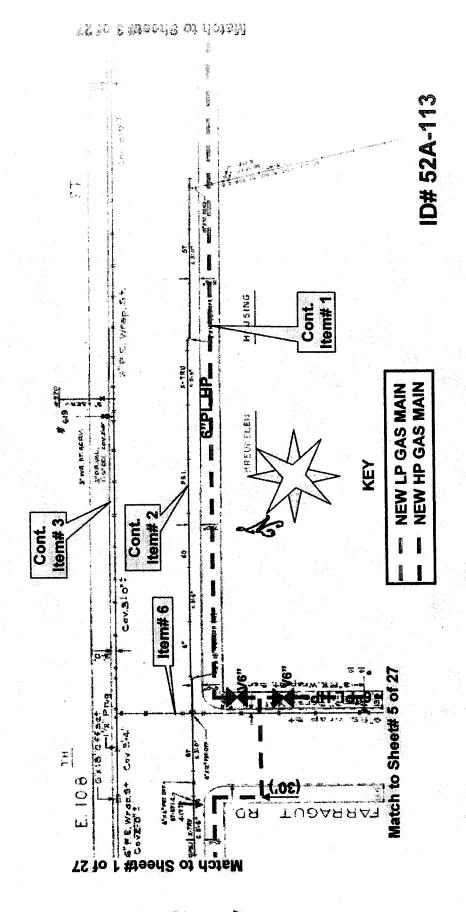
nationalgrid

		SE-85	SE-865 GAS MAIN RETIREMENT	TREN	ENT			
ITEM#:	ON STREET:	1ST X-STREET:	2ND X-STREET:	SIZE	MAT'L:	FOOTAGE:	PRESSURE:	REMB:
7	EAST 108 ST	STANLEY AVE	FLATLANDS AVE	9	SM	610	Ŧ	YES
က	EAST 108 ST	STANLEY AVE	FLATLANDS AVE	9	S/M	1605	ሷ	YES
4	STANLEY AVE	EAST 108 ST	WILLIAMS ST	 6.	WS	800	<u>-</u>	YES
လ	STANLEY AVE	EAST 108 ST	MILLIAMS ST	9	SM	300	£	YES
မ	FARRAGUT RD	EAST 108 ST	EAST 102 ST	6	WS	1600	_	YES
ω	GLENWOOD RD	EAST 108 ST	INTERSECTION	24"	MS	150	ድ	YES
5	GLENWOOD RD	EAST 108 ST	INTERSECTION	12"	MS	150	ባ	YES
13	EAST 107 ST	FARRAGUT RD	DEAD END	4	MS	200	ሷ	YES
15	EAST 105 ST	FARRAGUT RD	GLENWOOD RD	ģ	WS	700	LP	YES
17	EAST 104 ST	FARRAGUT RD	GLENWOOD RD	ģ	MS	900	٦	YES
19	EAST 103 ST	FARRAGUT RD	FLATLANDS AVE	ģ	SM	1200	ط	YES
20	FARRAGUT RD	EAST 102 ST	EAST 103 ST	12"	SM	225	-	YES
22	EAST 102 ST	FARRAGUT RD	GLENWOOD RD	ō	귙	700	LP	YES
73	EAST 105 ST	GLENWOOD RD	FLATLANDS AVE	4"	SM	165	LP	YES
25	GLENWOOD RD	EAST 105 ST	INTERSECTION	24"	SM	150	Ŧ	YES
27	GLENWOOD RD	EAST 105 ST	INTERSECTION	12"	WS	150	- L	YES
29	GLENWOOD RD	EAST 104 ST	INTERSECTION	24"	WS	250	유	YES
34	GLENWOOD RD	EAST 103 ST	INTERSECTION	16"	WS	200	Ŧ	YES
33	GLENWOOD RD	EAST 103 ST	INTERSECTION	24"	WS	200	4	YES
怒	EAST 102 ST	GLENWOOD RD	FLATLANDS AVE	<u>6</u>	SM	200	٦	YES
36	GLENWOOD RD	EAST 103 ST	INTERSECTION	12"	PL	50	무	YES
38	GLENWOOD RD	EAST 102 ST	INTERSECTION	24"	WS	150	НЪ	YES
40	GLENWOOD RD	EAST 102 ST	INTERSECTION	12"	WS	150	4	YES
42	GLENWOOD RD	EAST 100 ST	INTERSECTION	24"	WS	150	ΗÞ	YES
44	GLENWOOD RD	EAST 100 ST	INTERSECTION	6.	Ы	20	Η	YES
46	GLENWOOD RD	EAST 99 ST	INTERSECTION	24"	SM	150	Ҥ	YES
4 8	GLENWOOD RD	EAST 99 ST	INTERSECTION	4"	PL	50	HP	YES
20	GLENWOOD RD	EAST 98 ST	INTERSECTION	24"	WS	150	Ŧ	YES
52	GLENWOOD RD	EAST 98 ST	INTERSECTION	<u>*</u> 4	굽	20	무	YES
25	GLENWOOD RD	EAST 105 ST	INTERSECTION	30"	WS	150	HP(FAC)	YES
22	STANLEY AVE	MITTIWWS ST	INTERSECTION	12"	WS	200	무	YES
29	STANLEY AVE	WILLIAMS ST	INTERSECTION	12"	WS	150	LP	YES

national**grid**

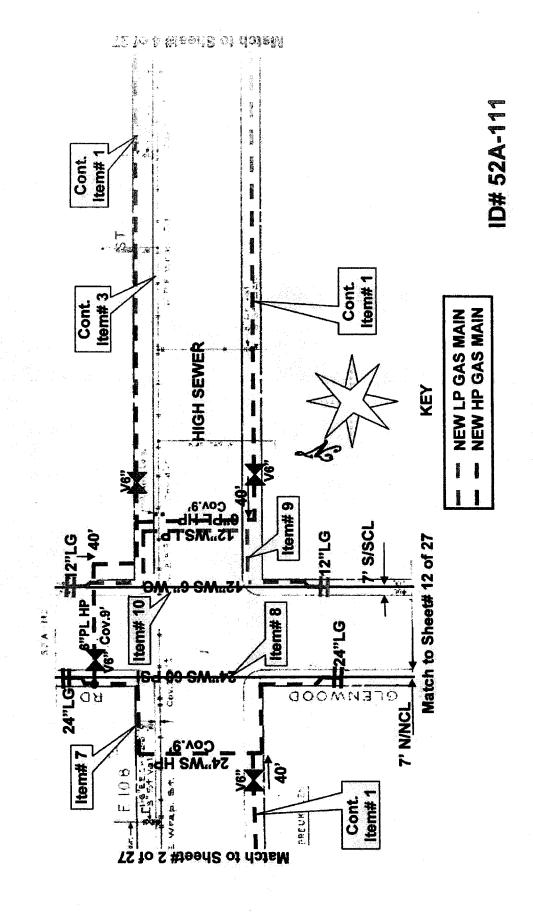
	REMB:	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
	PRESSURE:	H	1	a	웃	유	全	ድ	Ŧ	윺	유	ቧ	H.	4	ቷ	ቷ	4	<u></u>	우	H	무	오	£	土	HP(FAC)	무	ድ	٦٦
	FOOTAGE:	3175	300	300	1700	200	2400	200	1700	1300	300	300	200	200	200	20	400	400	150	20	150	20	150	20	200	006	300	250
TION:	MAT'L:	Ы	MS	WS	PL	귙	귑	Ъ.	PL	Ы	MS	SM	SM	WS	SM	굽	MS	WS	MS	చ	MS	귑	MS	ፈ	MS.	굽	MS	MS
ALLA	SIZE:	 6	24"	12"	6.	"4	ō	 O	9	9	24"	12"	24"	16"	24"	12"	24"	12"	24"	ģ	24"	4"	24"	4"	30"	ġ	12"	12"
SE-855 GAS MAIN INSTALLATION:	2ND X-STREET:	FLATLANDS AVE	INTERSECTION	INTERSECTION	EAST 102 ST	DEAD END	FLATLANDS AVE	GLENWOOD RD	FLATLANDS AVE	FLATLANDS AVE	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	INTERSECTION	WILLIAMS ST	INTERSECTION	INTERSECTION
SE-855	1ST X-STREET:	1	EAST 108 ST	EAST 108 ST	EAST 108 ST	FARRAGUT RD	RAGUT	FARRAGUT RD	FARRAGUT RD	FARRAGUT RD	EAST 105 ST	EAST 105 ST	S	S	ST 103	EAST 102 ST		S		S	EAST 99 ST	EAST 99 ST	EAST 98 ST	EAST 98 ST	FAST 105 ST	ST 108	WILLIAMS ST	LLIAMS
	ON STREET:	FAST 108 ST	GI ENWOOD RD	GI ENWOOD RD	FARRAGUT RD	FAST 107 ST	FAST 105 ST	FAST 104 ST	EAST 103 ST	FAST 102 ST	GI ENWOOD RD	GI ENWOOD RD	GI ENWOOD RD	GI ENWOOD RD	GI ENWOOD RD	GI FNWOOD RD	GI ENWOOD RD	STANI EY AVE	STANI EY AVE	STANLEY AVE								
	ITEM#			σ	7.	12	1 4	1 9	2 8	2.5	24	26	300	306	3 8	2 %	3 2	30	2 2	13	45	47	9	43	5 6	3 4	3 4	88



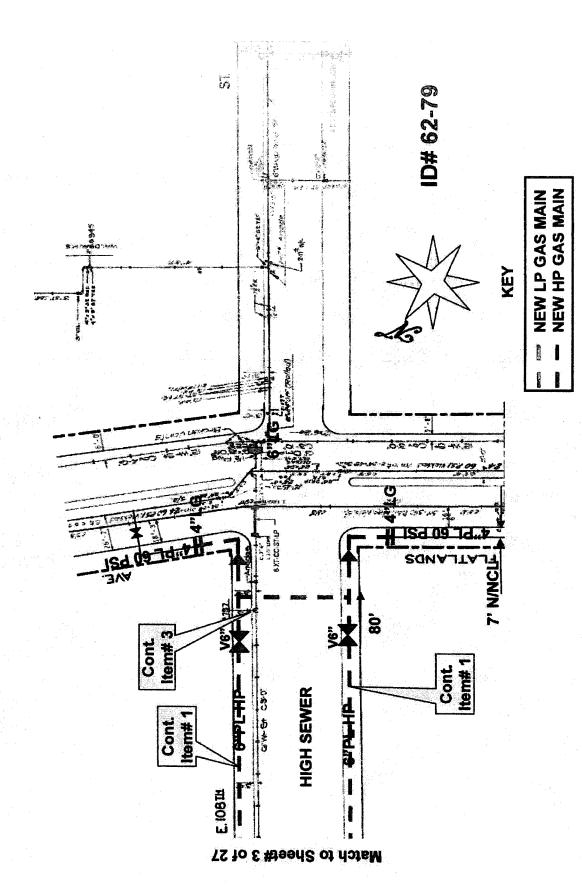


EP7-27D

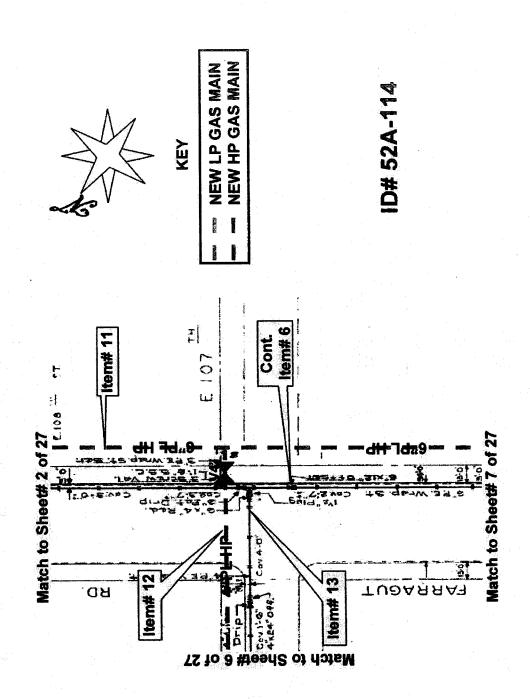
SE-855

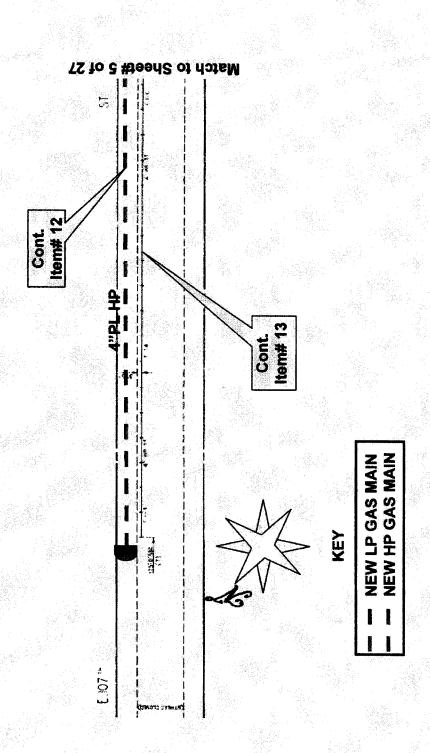


EP7-27E

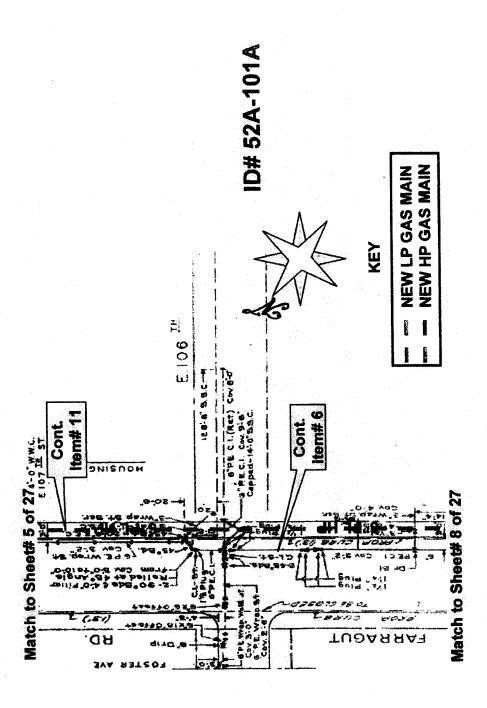


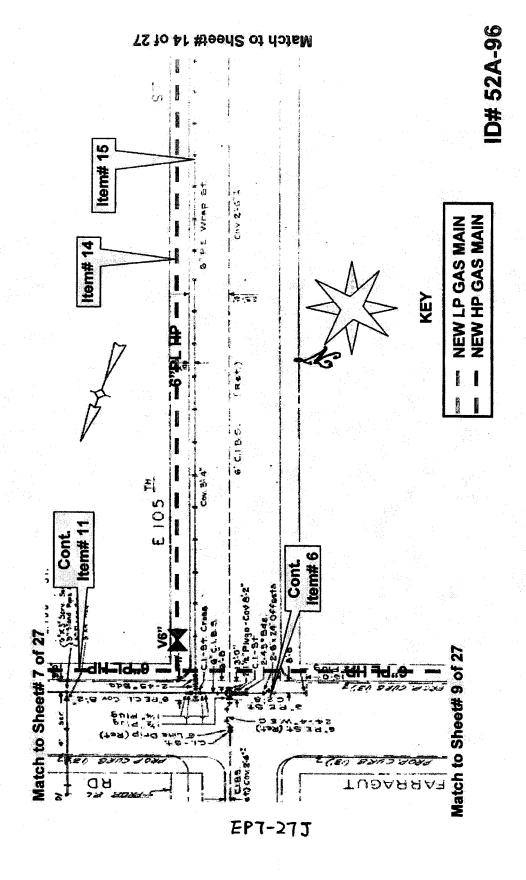
EP7-27F

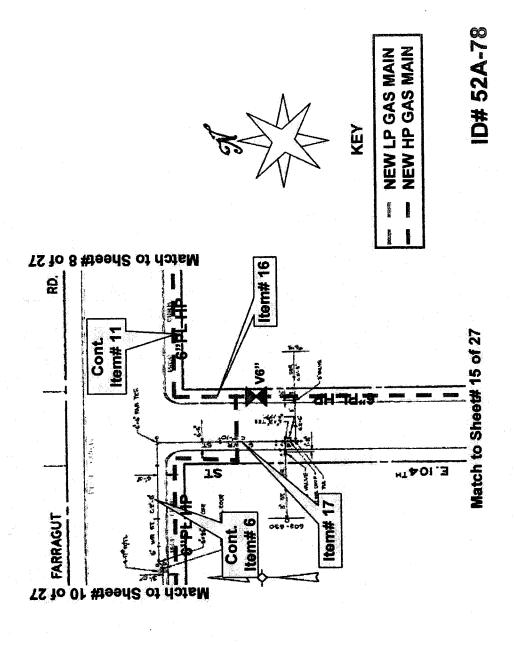


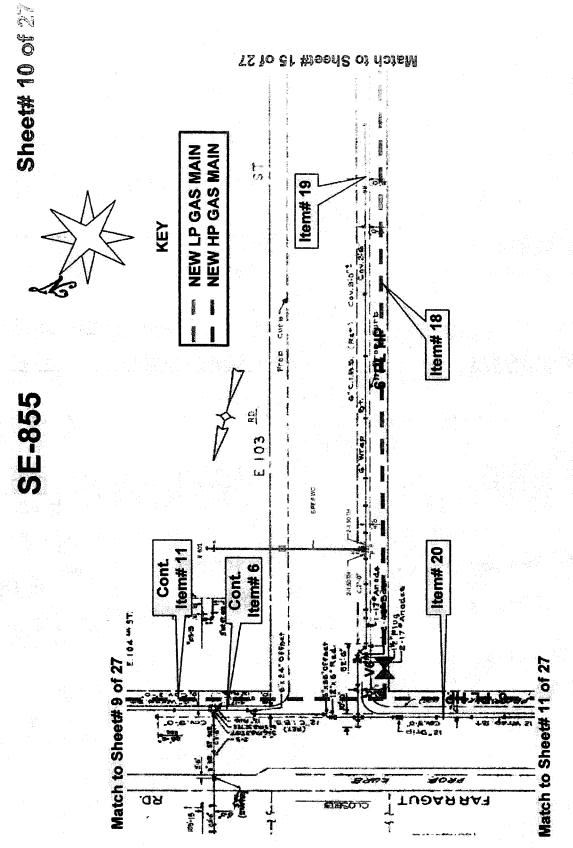


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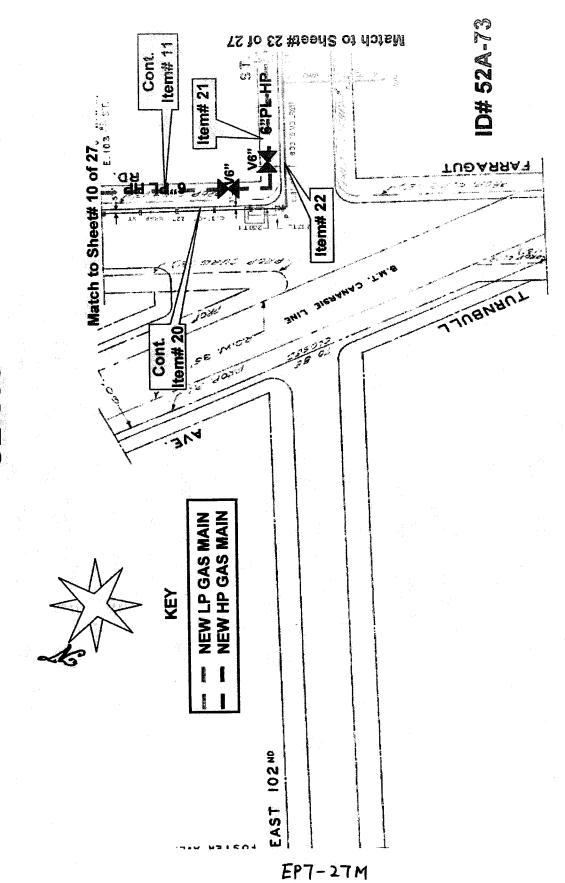




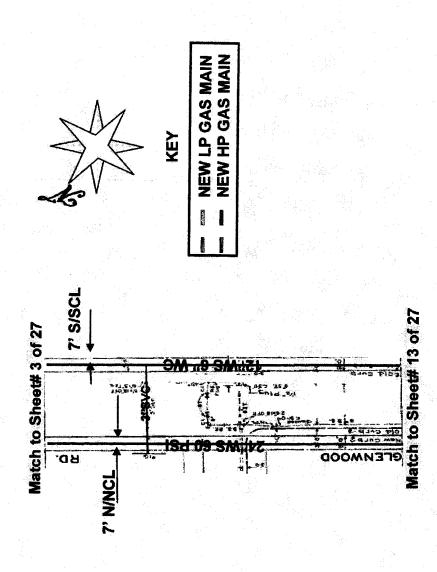


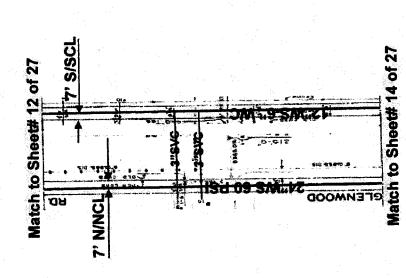


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NEW LP GAS MAIN NEW HP GAS MAIN

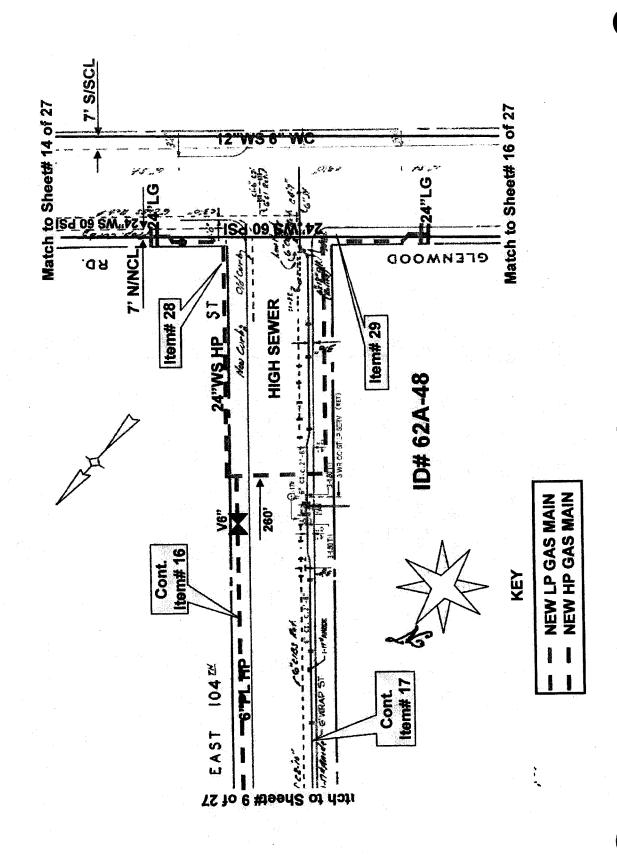
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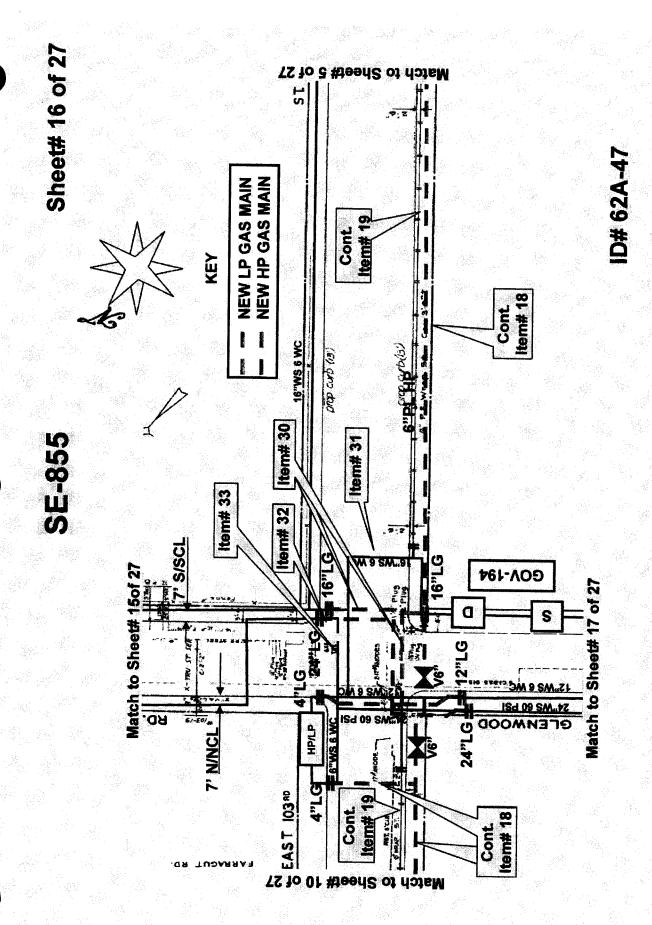
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Match to Sheet# 13 of 27

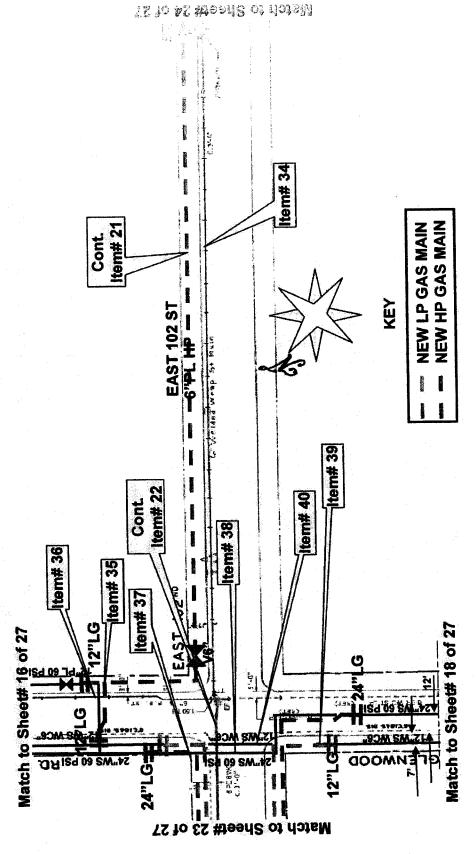
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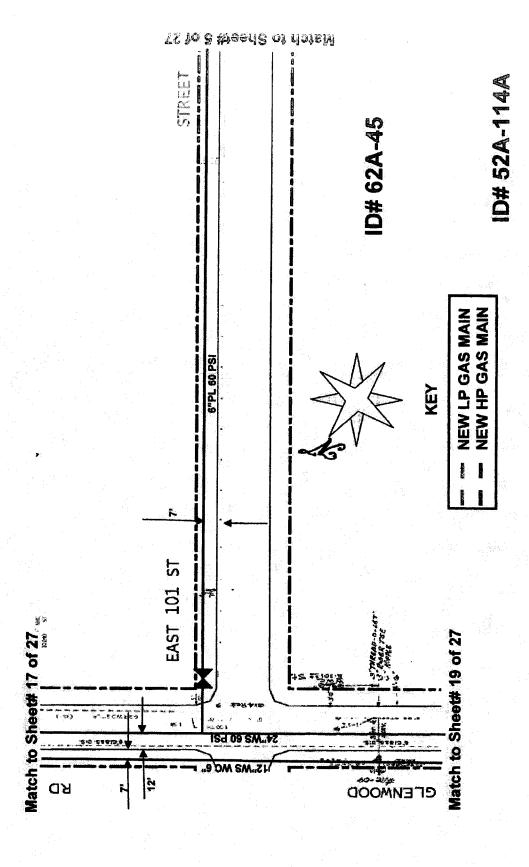
EP7-27Q

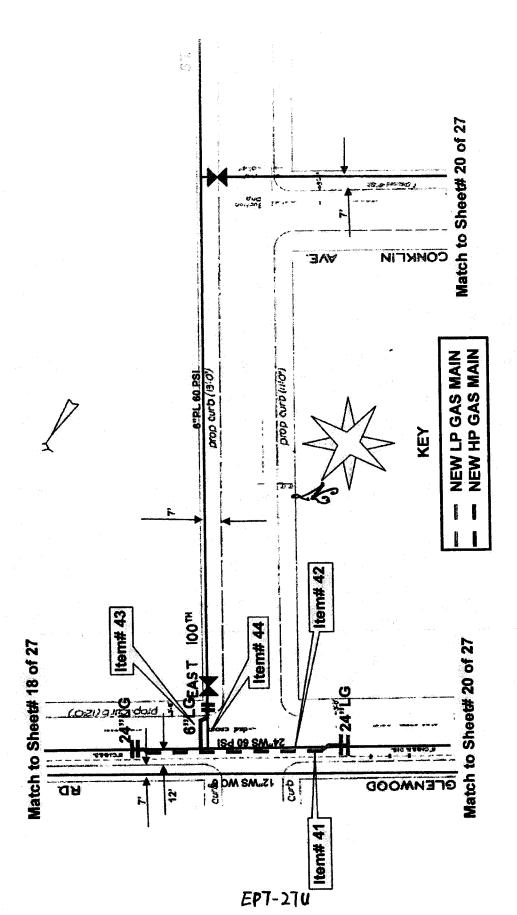


EP7-27R

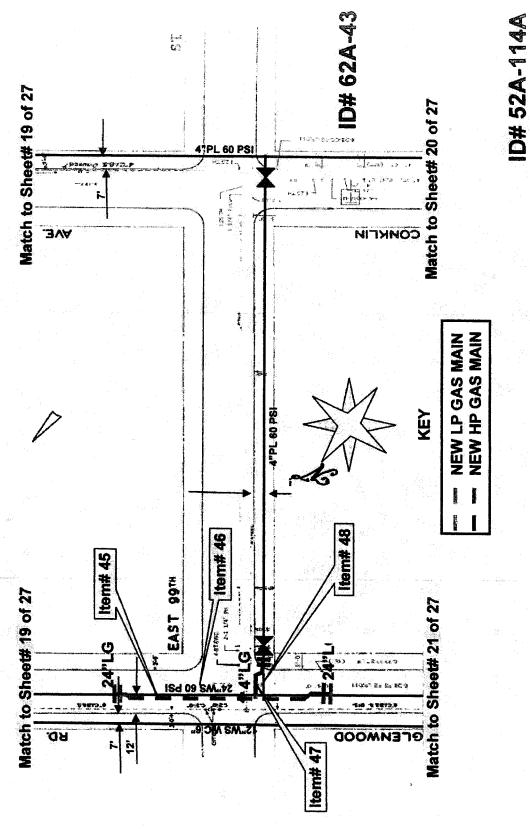


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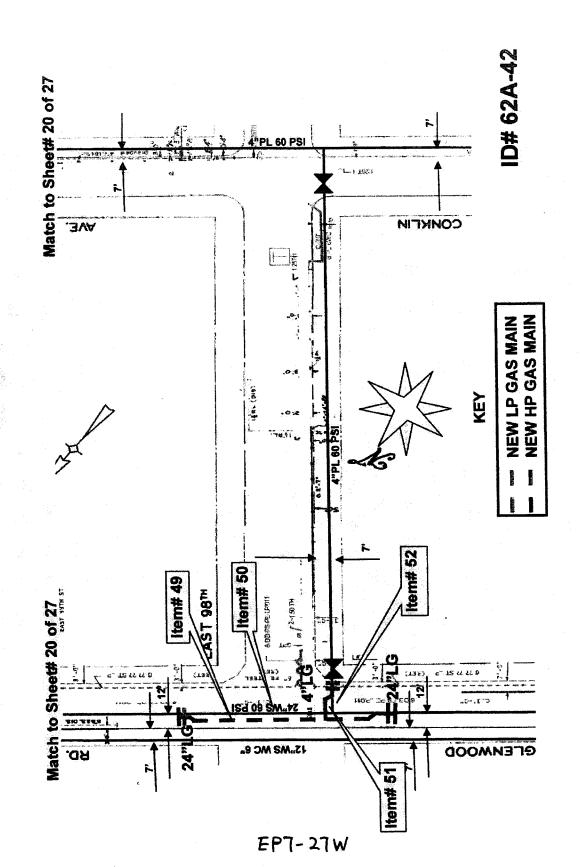


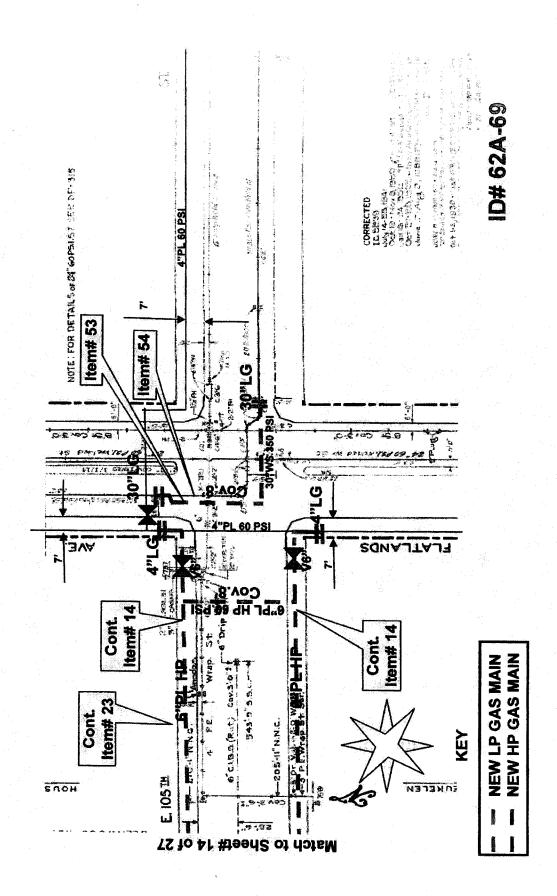
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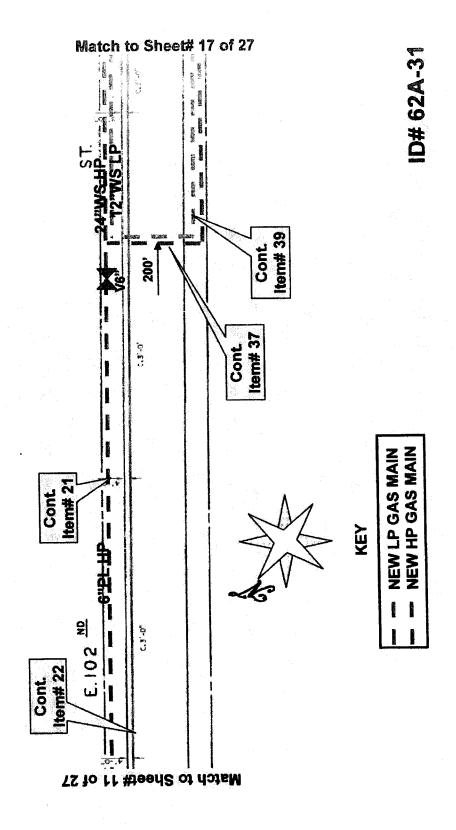
EP7-27V

SE-855

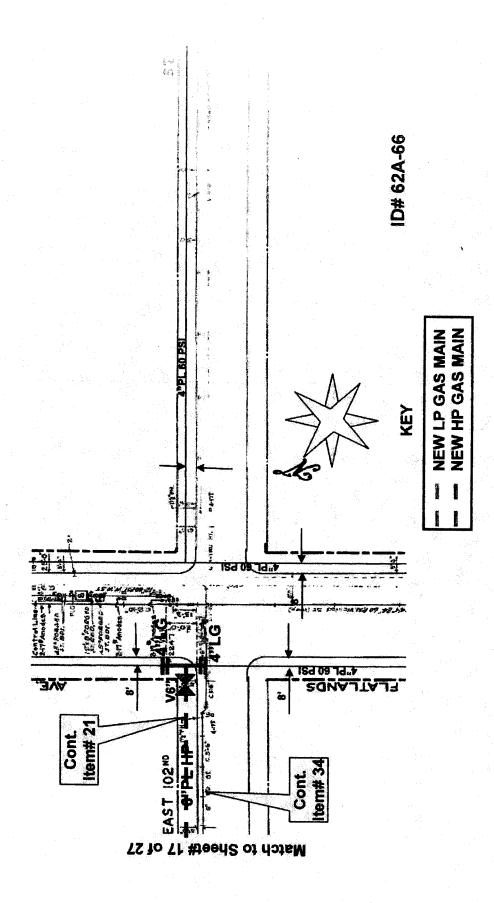




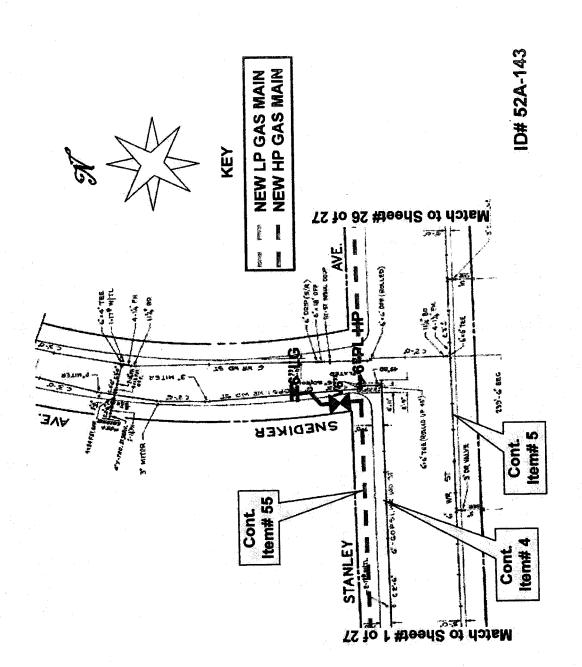
EP7- 27X

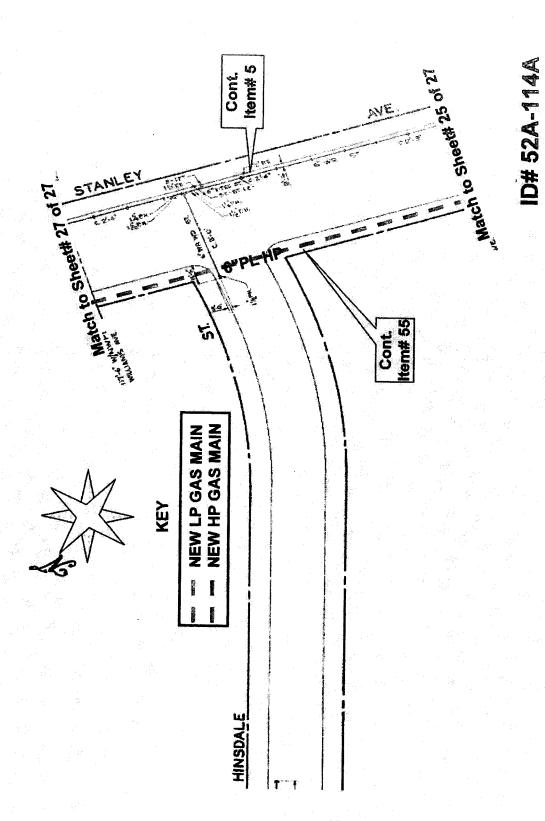


EP7-27Y

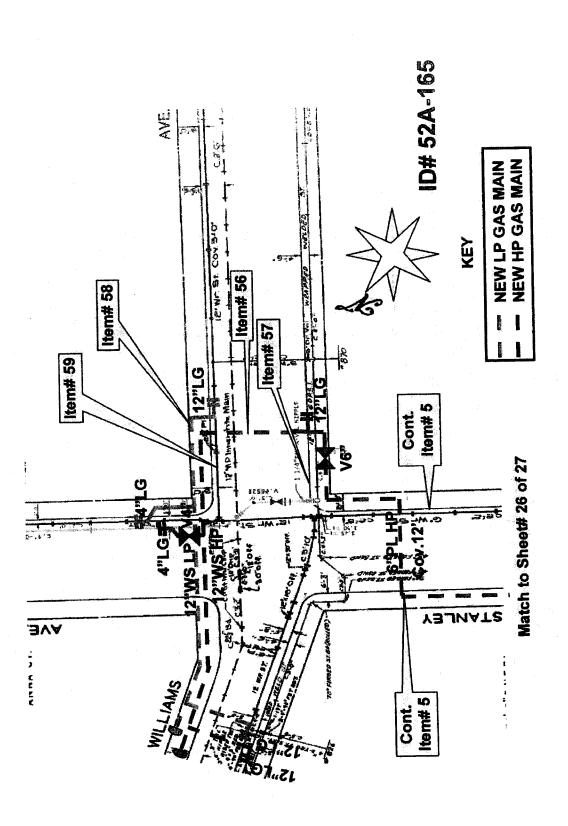


EP7-27Z





EP7-27BB



VI - LISTING OF APPROXIMATE LOCATIONS OF EP-7 BID ITEMS QUANTITIES.

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The City of New York Department of Design and Construction is proposing 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 - Gas Main Crossing Sewer Up To 24" In Diameter. (Ea.)

1 in E 103 St @ Glenwood Rd.

1 in E 102 St @ Glenwood Rd.

2 in E 105 St @ Farragut Rd.

3 in E 98 St @ Glenwood Rd.

2 in E 103 St @ Farragut Rd.

1 in E 105 St @ Glenwood Rd.

2 in E 104 St @ Glenwood Rd.

1 in E 99 St @ Glenwood Rd.

6.01.2 - Gas Main Crossing Sewer 30" In Diameter. (Ea.)

1 in E 105 St @ Flatlands Ave.

6.01.2A - Gas Main Crossing 38"W x 24"H H.E.R.C. Storm Sewer. (Ea.)

1 in E 102 St @ Glenwood Rd.

1 in Stanley Ave bet Hinsdale St & Williams Ave.

6.01.2B - Gas Main Crossing 30"W x 19"H H.E.R.C. Storm Sewer. (Ea.)

1 in E 99 St @ Glenwood Rd.

6.01.4A - Gas Main Crossing 4'-0"W x 2'-0"H F.T.R.C. Storm Sewer. (Ea.)

1 in Farragut Rd bet E 103 St & E 104 St.

6.01.4C - Gas Main Crossing 45"W x 29"H H.E.R.C. Storm Sewer. (Ea.)

1 in E 101 St @ Glenwood Rd.

1 in E 100 St @ Glenwood Rd.

The City of New York Department of Design and Construction is proposing 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.

6.01.4D - Gas Main Crossing 4'-0"W x 2'-6"H F.T.R.C. Storm Sewer. (Ea.)

1 in E 102 St @ Glenwood Rd.

1 in E 107 St @ Farragut Rd.

3 in E 103 St @ Glenwood Rd.

6.01.4N - Gas Main Crossing 4'-6"W x 2'-6"H F.T.R.C. Storm Sewer. (Ea.)

1 in Farragut Rd bet E 108 St & E 105 St.

6.01.5C - Gas Main Crossing 5'-0"W x 2'-6"H F.T.R.C. Storm Sewer. (Ea.)

1 in E 103 St @ Glenwood Rd.

6.01.5H - Gas Main Crossing 5'-0"W x 3'-0"H F.T.R.C. Storm Sewer. (Ea.)

1 in Glenwood Rd @ E 105 St.

6.01.700 - Gas Main Crossing 13'-0"W x 4'-0"H F.T.R.C. Storm Sewer. (Ea.)

3 in E 108 St bet Glenwood Rd & Flatlands Ave.

6.01.7VV - Gas Main Crossing 11'-6"W x 4'-0"H F.T.R.C. Storm Sewer. (Ea.)

1 in E 108 St bet Glenwood Rd & Farragut Rd.

1 in Stanley Ave bet Hinsdale St & Williams Ave.

6.01.8 - Gas Services Crossing Trenches And / Or Excavations. (Ea.)

90 in Various Locations as Required.

The City of New York Department of Design and Construction is proposing 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.

6.01.9 - Gas Main Crossing Water Main Up To 20" In Diameter. (Ea.)

1 in E 98 St @ Glenwood Rd.

2 in E 104 St @ Farragut Rd.

1 in E 102 St Flatlands Ave.

2 in E 103 St bet Glenwood Rd & Farragut Rd.

1 in E 100 St @ Glenwood Rd.

1 in E 105 St @ Flatlands Ave.

1 in E 101 St @ Glenwood Rd.

1 in E 102 St @ Glenwood Rd.

1 in E 104 St @ Glenwood Rd.

1 in E 105 St @ Farragut Rd.

3 in E 108 St bet Glenwood Rd & Flatlands Ave.

2 in E 108 St bet Glenwood Rd & Farragut Rd.

1 in Glenwood Rd bet E 108 St & Williams St.

1 in Farragut Rd bet E 108 St & E 105 St.

1 in E 99 St @ Glenwood Rd.

4 in E 103 St @ Glenwood Rd.

3 in E 105 St @ Glenwood Rd.

1 in E 103 St @ Farragut Rd.

1 in E 107 St @ Farragut Rd.

1 in Stanley Ave bet Hinsdale St & Williams Ave.

2 in Stanley Ave @ Williams Ave.

6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences. (Ea.)

4 in Various Locations as Required.

6.03 - Removal Of Abandoned Gas Facilities. All Sizes. (L.F.)

500 in Various Locations as Required.

The City of New York Department of Design and Construction is proposing 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.

6.03.1 - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (L.F.)
(For National Grid Work Only)

7500 in Various Locations as Required.

6.04 - Adjust Hardware To Grade Using Spacer Rings/Adaptors (Street Repaving). (Ea.)

175 in Various Locations as Required.

6.05 - Adjust Hardware To Grade By Resetting (Road Reconstruction). (Ea.)

175 in Various Locations as Required.

6.06 - Special Care Excavation And Backfilling. (C.Y.)

3500 in various locations as required, including but not limited to all gas services crossing unsheeted water main trenches.

6.06A - Special Care Excavation And Backfilling For Transmission Mains. (C.Y.)
(Transmission Main Is Described As Any Gas Main With A MAOP Greater Than 124-PSIG)

100 in Various Locations as Required.

6.07 - Test Pits For Gas Facilities. (C.Y.)

100 in Various Locations as Required.

SECTION 6.06A - Special Care Excavation and Backfilling for Transmission Mains. (Transmission Main is described as any gas main with a MAOP greater than 124 psig)

1. Description:

Under this section, the contractor shall provide all labor, materials (except for sand to be utilized for backfill of a one foot envelope around the facility to be furnished by the facility operator), equipment, and incidentals required to support and protect the integrity of Gas Transmission Main during excavations. This facility is owned by the gas company operating in the area, hereafter referred to as facility operator. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in consultation with authorized representatives of the facility operator.

2. Applicability of Section:

This section shall apply to Transmission Main of various sizes located within any excavation sheeted or unsheeted (excavation refers to any excavation performed for city work and includes excavations performed that are to be subsequently unsheeted/sheeted using approved shoring methods and paralleling, encroaching and crossing any excavation. Parallel facilities are not exposed at any time during excavation (within 2' of edge of excavation)). Encroaching facilities are partially/fully exposed inside the limit of excavation. This section shall also apply to gas facility crossing catch basins excavation and catch basins sewer connections (chutes), water mains, fire hydrant branch connections, sanitary sewer, storm sewer, combination sewer, house sewer and/or water service connections excavations. The excavation around fully exposed live gas facilities along and within limits of excavation shall be covered by this section also, however the support requirement, if any is required, of such facilities is beyond the scope of these specifications and therefore shall be the responsibility of facility operator to determine and prescribe, at no cost to the City contract, but shall be a matter of adjustment between the contractor and facility operator.

3. Payment Restriction:

The bid item specified under this section shall not be used in combination with items covered under other sections for work done due to a particular gas facility. This item shall not be paid for new gas facilities when trenching for such new facilities has been performed by the contractor of record in common with trench excavation for City Work (overlapping trench limits). The cost of excavation with care as defined in this section shall be deemed included in the cost of trench excavation for the new gas facilities. This restriction shall apply even if such gas common trench excavation is not part of the contract. If facilities are in direct interference with City work, meaning that "minimum clearances" described in the General Provisions for Gas Cost Sharing (Para. No.8) cannot be maintained, the excavation shall be abandoned and the contractor shall be compensated as per the provisions specified in Paragraphs Nos. 5 and 6 of this item (6.06A).

4. Method of Construction:

All excavations in the vicinity of gas facilities shall be as required by NYS Industrial Code 753. No saw cutting of pavement or masonry for gas mains having less than 2 feet of cover to break asphalt/concrete as determined by the facility operator. The contractor shall use power excavation for the removal of pavement or masonry but only to the depth of such pavement or masonry (breaking of pavement or masonry shall be done by means of hand held pneumatic breaking equipment). Upon removal of pavement or masonry the contractor shall use hand excavation methods only (pick and shovel; no power tools) to ascertain the clearances of these facilities with respect to the proposed excavation. Once the location of these facilities with respect to the proposed excavation is verified to the satisfaction of the Resident Engineer and the facility operator the contractor shall then proceed with hand only within the zone of protection described as 2 feet from the face of the facility in all directions of the facility as required to preserve the integrity of the facility. Once outside of the zone of protection as described above the contractor may use a combination of hand and machine to complete the excavation.

5. Method of Payment:

The unit price for this work item shall be based on cubic yard (CY) of average excavation with special care and, is to be considered as an incremental cost for performing City work with gas facilities interferences.

6. Method of Measurement:

A. For Paralleling Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multiplied by, the width measured as two (2) feet from the face of excavation toward the center of excavation, multiplied by the length of parallel facility, divided by twenty-seven (27) cubic feet per cubic yard Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face of facility, beyond 2 feet from the face of facility the contractor can use a combination of hand and machine.

B. For Encroaching Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multiplied by, the width measured as two (2) feet plus the exposed facility toward the center of excavation, multiplied by the length of the encroached facility, divided by twenty-seven (27) cubic feet per cubic yard Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face of facility, beyond 2 feet from the face of facility the contractor can use a combination of hand and machine.

C. Fully Exposed Gas Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multiplied by, the width measured as two (2) feet from the face of the facility on

either side plus the facility, multiplied by the length of the facility, divided by 27 cubic feet per cubic yard. Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face of facility in all directions, beyond 2 feet from the face of facility in all directions the contractor can use a combination of hand and machine.

D. For Additional Excavation And Restoration Due To So Called "Loss Trench", When The 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").

7. Price to Cover:

The bid price shall also cover all additional supervision, labor, material, equipment and insurance necessary to excavate while protecting and maintaining (excluding supports for fully exposed live gas) gas facilities without disruption of service to the public and in accordance with contract specifications. The price shall also include, changes of sheeting method and excavation width configuration where necessary to accommodate gas facilities in their existing locations; difficulties during the installation of catch basins, chute connections, hydrant branch, and house sewer, sanitary sewer, storm sewer, combination sewer and water connections under or over gas facilities; loss of productivity due to slower rate of excavation (special care) during excavation, compaction, removal of sheeting from the facilities, extra roadway base restoration and temporary pavement, associated maintenance of traffic, barricades, and traffic plates that may be required to temporarily close and/or complete the work. Breaking shall be done by means of hand held pneumatic breaking equipment. Inspection of exposed mains shall be performed by facility operator in a timely fashion and shall not unduly impede contractor's progress or productivity.

HAZ - PAGES

SPECIFICATIONS FOR HANDLING, TRANSPORTATION AND DISPOSAL OF NONHAZARDOUS AND POTENTIALLY HAZARDOUS CONTAMINATED MATERIALS

NOTICE

THE PAGES CONTAINED IN THIS SECTION ARE ISSUED FOR THE PURPOSE OF SPECIFYING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS.

(NO TEXT ON THIS PAGE)

SPECIFICATIONS FOR HANDLING, TRANSPORTATION AND DISPOSAL OF NON-HAZARDOUS AND POTENTIALLY HAZARDOUS CONTAMINATED MATERIALS

CONSTRUCTION OF HIGH LEVEL STORM SEWERS, COMBINED SEWERS AND WATER MAINS IN FRESH CREEK AREA

BOROUGH OF BROOKLYN CITY OF NEW YORK

Capital Project ID: SE855

Prepared By:



30-30 Thomson Avenue, 3rd Floor Long Island City, New York 11101

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ITEM 8.01 C1 HANDLING, TRANSPORTING, & DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOILS

8.01 C1.1 WORK TO INCLUDE

General: This work shall consist of the handling, transportation and disposal of non-hazardous contaminated soils. The materials covered by this specification are soils that are contaminated with petroleum or chemical products but cannot be classified as hazardous waste. For the purpose of this specification, soil shall be defined as any material excavated below the pavement and base for pavement.

Non-hazardous contaminated soils are defined as soils exhibiting one or more of the following characteristics:

- ♦ Elevated Photo-Ionization Detector (PID) readings, subsequently confirmed by lab analysis
- Visual evidence of contamination
- Petroleum and/or chemical odors
- Soils that have been documented as contaminated in previous environmental reports

Non-hazardous contaminated soils must be stockpiled at an off-site approved location or secured onsite by the Contractor, meeting all required Federal, State and Local stipulations. Sampling and laboratory analysis must be conducted to determine if the soils are hazardous, unless the alternative procedure as defined under subsection 8.01 C1.1 A.5 has been agreed upon by treatment facilities. Contaminated soils determined to be non-hazardous shall be handled in accordance with the specifications herein for Item 8.01 C1. Contaminated soils determined to be hazardous shall be handled in accordance with the specifications for Item 8.01 H – Handling, Transporting and Disposal of Hazardous Soils.

The Contractor shall retain the services of an independent Environmental Consultant, as specified under Item 8.01 S – Health and Safety, to oversee the work required under this Item.

Non-hazardous soils shall be delivered to the disposal or treatment facility within thirty (30) calendar days after excavation.

The Contractor shall conduct sampling and analysis of the impacted soils as specified under Item 8.01 C2 – Sampling and Testing of Contaminated/Potentially Hazardous Soils for Disposal Parameters. The laboratory results shall be forwarded to DDC Program Management, Office of Environmental and Geotechnical Services (OEGS) for review to determine if the soils will be handled and disposed of as contaminated regulated soils or hazardous waste. No other soils shall be sampled or tested without the DDC's approval or direction.

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation, and disposal of non-hazardous contaminated soils are in compliance with all applicable Federal, State, and City statutes and regulations.

The Contractor shall document the excavation, handling, transportation and disposal of non-hazardous contaminated soils. The Contractor shall supply all equipment, material and labor required to conduct the specified work of this Item.

A. <u>Material Handling Plan</u>: Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Management, OEGS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Management, OEGS, prior to the Contractor's commencement of work. The MHP shall, at a minimum, consist of:

- 1. The Contractor's procedures for identifying non-hazardous contaminated soils during excavation, including the specific model and manufacturer of intended organic vapor monitoring equipment and calibration procedures to be used. It should also include the training and experience of the personnel who will operate the equipment.
- 2. The Contractor's procedures for safely handling non-hazardous contaminated soils. The procedures must include personnel safety and health as well as environmental protection considerations.
- 3. Name, address, New York State Department of Health's (DOH) Environmental Laboratories Accreditation Program (ELAP) status and telephone number of the proposed laboratory for analysis of representative soil samples. The ELAP for the intended analysis must approve the laboratory.
- 4. Identification of the Contractor's proposed waste transporter(s). This information shall include:
 - a. Name and Waste Transporter Permit Number
 - b. Address
 - c. Name of responsible contact for the hauler
 - d. Telephone number for the contact
 - e. Any and all necessary permit authorizations for each type of waste transported
 - f. Previous experience in performing the type of work specified herein
- 5. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures may include, but are not limited to, agreements from the intended disposal or treatment facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility.
- 6. A backup facility should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
- 7. Identification of the Contractor's two proposed Treatment Storage or Disposal (TSD) facilities for non-hazardous contaminated soils (primary and back-up) for final disposal of the soils. The primary TSD shall be an approved soil recycling/treatment facility. The backup facility may be a recycling/treatment facility or a New York State Department of Environmental Conservation (DEC) approved lined landfill or other facility approved by DEC to accept this material. The information required for each facility shall include:
 - a. Facility name and the State identification number
 - (1) Facility location
 - (2) Name of responsible contact for the facility
 - (3) Telephone number for contact
 - (4) Signed letter of agreement to accept waste as specified in this contract
 - (5) Unit of measure utilized at facility for costing purposes
 - b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility.

- c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued.
- d. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
- e. The Contractor shall provide the date of the proposed facility's last compliance inspection.
- f. A list of all active (unresolved) compliance orders (or agreements), enforcement notices, or notices of violations issued to the proposed facility shall be provided. The source and nature of the cause of violation shall be stated, if known.
- 8. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

8.01 C1.2 MATERIALS

- A. Containers shall be as required in the United State Department of Transportation (DOT) regulations.
- B. Polyethylene to be placed under (20 mil. thickness minimum) and over (10 mil. thickness minimum) soil piles.
- C. The Contractor shall assure that the waste hauler's appropriate choice of vehicles and operating practices shall prevent spillage or leakage of contaminated material from occurring en route.
- D. The Contractor shall provide, install and maintain any temporary loading facilities on site as required until completion of material handling activities. The location and design of any facilities shall be included in the MHP and be approved by the Program Management, OEGS.

8.01 C1.3 CONSTRUCTION DETAILS

A. Material Handling

- 1. Immediately after excavation of non-hazardous contaminated soil the Contractor shall:
 - a. Load material directly onto trucks/tankers/roll offs for disposal off site; or
 - b. If interim stockpiling is required, place on a minimum of 20 mil. or equivalent plastic ground cloth and cover by minimum of 10 mil. polyethylene sheeting or equivalent to protect against leaching or runoff of contaminants into groundwater or stormwater. Weight or secure the sheeting by appropriate means and seal seams as approved by the DDC to prevent tearing or removal by weather. Grade surrounding surface to provide for positive drainage away from pile. Stockpile shall not exceed 100 cubic yards.
- Institute appropriate procedures and security measures to ensure the protection of site personnel and the public from contaminated materials as described in the approved MHP and Item 8.01 S - Health and Safety.
- 3. Any soil encountered that appears to contain unknown contaminants (based on visual, odor, or other observation), or that vary substantially from the material originally identified must be segregated in stockpiles and the independent Environmental Consultant promptly notified. Construct stockpiles to the same requirements as stated in subsection A.1.b above.

- 4. Provide any dewatering that is necessary to complete the work. Contaminated water shall be disposed of in accordance with Item 8.01 W1 Removal, Treatment and Discharge/Disposal of Contaminated Water.
- 5. Provide and operate field organic vapor test equipment, a PID or a flame ionization detector (FID), to detect general organic vapor levels at intervals of approximately fifty (50) cubic yards of soil excavated, when visual or odor observations indicate the material may substantially differ from the soil previously excavated and/or as directed by the independent Environmental Consultant.

B. Off-Site Transportation to Disposal or Treatment Facility

1. General

- a. The Contractor shall furnish all labor, equipment, supplies and incidental costs required to transport contaminated material from the work area to the off-site disposal or treatment facility, and any other items and services required for transporting contaminated material for disposal at an off-site facility.
- b. The Contractor shall submit the name and location of the facility where an off-site scale is located. The Contractor shall also submit a plan to the DDC for review outlining procedures on controlling trucks leaving the work site and en-route to the off-site scale. The Contractor shall be responsible for tracking all material/vehicles from the site to the off-site scale.
- c. The Contractor shall provide to the DDC certified tare and gross weight slips for each load received at the accepted facility which shall be attached to each returned manifest.
- d. The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule.
- e. The Contractor shall inspect all vehicles leaving the project site to ensure that contaminated soils adhering to the wheels or undercarriage are removed prior to the vehicle leaving the site.
- f. The Contractor shall obtain letters of commitment from the waste haulers and the treatment, disposal or recovery facility to haul and accept shipments. The letter shall indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed necessary.
- g. The Program Management, OEGS shall review and approve waste profiles before transportation to the TSD facility.

2. Hauling

- a. The Contractor shall coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the disposal or treatment facility. If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and to be resolved by the Contractor to the satisfaction of the DDC.
- b. The Contractor shall be held responsible, at its own cost for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.
- c. The Contractor shall ensure that trucks are protected against contamination by properly covering and lining them with compatible material (such as polyethylene) or by decontaminating them prior to and between acceptances of loads.

- d. The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
- e. The Contractor shall only use the transporter(s) identified in the MHP for the performance of work. Any use of substitute or additional transporters must have previous written approval from the Program Management, OEGS at no additional cost to the City.
- f. The Contractor shall develop, document, and implement a policy for accident prevention.
- g. The Contractor shall not combine contaminated materials from other projects with material from this project.
- h. No material shall be transported until approved by the DDC.

3. Off-Site Disposal

- a. The Contractor shall use only the facility(ies) identified in the MPH for the performance of the work. Substitutions or additions shall not be permitted without prior written approval from the Program Management, OEGS, and if approved shall be at no extra cost to the City.
- b. The Contractor shall be responsible for acceptance of the materials at an approved facility, for ensuring that the facility is properly permitted to accept the stated materials, and that the facility provides the stated treatment and/or disposal services.
- c. The DDC reserves the right to contact and visit the disposal or treatment facility and regulatory agencies to verify the agreement to accept the stated materials and to verify any other information provided.
- d. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The alternate facility(ies) must be approved in writing by the DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done at no extra cost or delay to the City.
- e. The Contractor shall obtain manifest forms, and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest shall be submitted to the DDC within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. Any manifest discrepancies shall be reported immediately to the DDC and be resolved by the Contractor to the satisfaction of the DDC.

4. Equipment and Vehicle Decontamination

- a. The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting from the exclusion zone. The cost for this work will be paid under Item 8.01 S Health and Safety.
- Water generated during the decontamination process shall be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

8.01 C1.4 METHOD OF MEASUREMENT

Quantities for non-hazardous contaminated soils shall be measured in tons. The tonnage will be determined by off-site truck scales, as per Subsection 8.01 C1.3.B1, that are capable of generating load tickets.

8.01 C1.5 PRICE TO COVER

- A. The unit bid price bid per ton for Item 8.01 C1 shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for excavation, handling, transportation, disposal, documentation, fees, permits, loading, stockpiling, hauling, and any other incidentals necessary to complete all the work as specified herein for handling, transporting, and disposal of non-hazardous contaminated soil.
- B. Final disposal of hazardous soil shall be paid for under Item 8.01 H Handling, Transporting and Disposal of Hazardous Soils. Disposal of decontamination water shall be paid for under Item 8.01 W1 Removal, Treatment and Discharge/Disposal of Contaminated Water.
- C. Backfill will be paid for under its respective item as specified in the contract document.
- D. The independent Environmental Consultant shall be paid under Item 8.01 S Health and Safety.

Payment will be made under:

ITEM NUMBER	ITEM	PAYMENT UNIT
8.01 C1	Handling, Transporting, and Disposal of Non-Hazardous Contaminated Soil	Tons

ITEM 8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/ POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PARAMETERS

8.01 C2.1 WORK TO INCLUDE

A. <u>Description</u>

The work shall consist of collecting and analyzing representative soil samples for parameters typically requested by the disposal facilities.

B. Sampling and Laboratory Analysis

- 1. At least thirty (30) days prior to the commencement of work, the Contractor's independent Environmental Consultant must submit a Soil Sampling Plan/Field Sampling Plan (SSP/FSP) to the Program Management, Office of Environmental and Geotechnical Services (OEGS) for review and approval. The plan shall include the name, address, DOH's ELAP status, and telephone numbers of the proposed laboratory. The plan shall also include training and experience of the personnel who will collect the samples.
- 2. The Contractor shall sample and analyze representative samples of the contaminated/potentially hazardous soils. For stockpiled soils, the Contractor shall collect and analyze one (1) composite sample per 500 cubic yards or fraction thereof. Each composite sample shall consist of a minimum of five (5) grab samples collected from greater than two (2) feet below the soil surface. For drummed soil, the Contractor shall collect one (1) composite sample per (ten) 10 drums or fraction thereof. Each composite sample shall consist of a grab sample from each of the ten (10) drums or fraction thereof. Each composite sample shall be analyzed for Resource Conservation and Recovery Act (RCRA) hazardous waste characteristics (Ignitability, Reactivity, Corrosivity), Full Toxicity Characteristic Leaching Procedure (TCLP) (including RCRA metals, volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), pesticides, herbicides), Total Petroleum Hydrocarbons (TPH) and Polychlorinated Biphenyls (PCBs). All samples collected should be analyzed on a five (5) calendar days turn around time and analytical results must be submitted to Program Management, OEGS upon receipt of the analytical results.
- 3. All sampling shall be conducted by a person trained in sampling protocols using standard accepted practices for obtaining representative samples.
- 4. The Contractor must also contact the disposal facility where the waste will be sent for permanent disposal, and arrange to collect any additional samples required by the facility. The cost associated with additional sampling and testing shall be included in the bid price of this Item.
- 5. The quality of the data from the sampling program is the Contractor's responsibility. The Contractor must furnish all qualified personnel, equipment and instruments necessary to carry out the sampling. Unless directed otherwise, all sampling procedures must follow the DEC sampling guidelines and protocols.
- 6. All sample containers shall be marked and identified with legible sample labels which shall indicate the project name, sample location and/or container, the sample number, the date and time of sampling, preservatives utilized and other information that may be useful in determining the character of the sample. Chain-of-custody shall be tracked from laboratory issuance of sample containers through laboratory receipt of the samples.
- 7. The Contractor shall maintain a bound sample logbook. The Contractor shall provide DDC access to it at all times and shall turn it over to the DDC in good condition at the

completion of the work. The following information, as a minimum shall be recorded to the log:

- 1. Sample identification number
- 2. Sample location
- 3. Field observation
- 4. Sample type
- 5. Analyses
- 6. Date/time of collection
- 7. Collector's name
- 8. Sample procedures and equipment utilized
- 9. Date sent to laboratory and name of laboratory
- 8. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described in subsection B2, if the situation warrants. The substitute sampling parameters shall be of equal or lesser monetary value than those described in subsection B2, as determined by industry laboratory pricing standards.
- 9. Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the sampling location, and must be properly disposed after use.
- 10. Soils exceeding any of the hazardous characteristic criteria meet the legal definition of hazardous soils (rather than non-hazardous contaminated soils) and shall be transported or disposed of under Item 8.01 H Handling, Transporting and Disposal of Hazardous Soils. All analyses must be done by a laboratory that has received approval from the ELAP for the methods to be used. The Contractor must specify the laboratory in the MHP.

8.01 C2.2 METHOD OF MEASUREMENT

Quantities for samples shall be measured as the number of sets of samples that are tested. A set shall be defined as one (1) composite sample analyzed for the full range of parameters as specified in subsection B2.

8.01 C2.3 PRICE TO COVER

The unit price bid per set for Item 8.01 C2 shall include the cost of furnishing all labor, materials, equipment, plan, and insurance necessary for sampling, handling, transporting, testing, documentation, fees, permits and any other incidentals necessary to complete the work as specified herein for sampling and testing of contaminated/potentially hazardous soil.

Payment will be made under:

ITEM NUMBER	ITEM	PAYMENT UNIT
8.01 C2	Sampling and Testing of Contaminated/ Potentially Hazardous Soil for Disposal Parameters	Set

ITEM 8.01 H HANDLING, TRANSPORTING, AND DISPOSAL OF HAZARDOUS SOILS

8.01 H.1 WORK TO INCLUDE

General: This work shall consist of the handling, transportation and disposal of soils or materials that are listed as hazardous wastes or exhibit any of the characteristics of a hazardous waste, namely ignitability, corrosivity, reactivity, and toxicity, as defined in 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261. For the purpose of this specification, soils shall be defined as any materials excavated below the pavement and base for pavement.

Contaminated soils determined to be hazardous under Item 8.01 C2 shall be handled, transported, and disposed of under Item 8.01 H in accordance with the specifications herein.

The independent Environmental Consultant retained by the Contractor, as specified under Item 8.01 S – Health and Safety, shall conduct sampling and analysis of above soils to determine which soils are hazardous.

All work under Item 8.01 H shall be performed under the direct supervision of the Contractor's Environmental Consultant, as approved by the Program Management, Office of Environmental and Geotechnical Services (OEGS).

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation, and disposal of hazardous materials are in compliance with the applicable Federal, State, and Local statutes and regulations.

The Contractor shall document the excavation, handling, sampling, and testing, transportation and disposal of hazardous soils. The City shall be listed in the disposal documents as the waste generator.

The Contractor shall supply all equipment, material and labor required to conduct the specified work of this section.

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation and disposal of hazardous soils are conducted in a manner to protect site personnel, the public and the environment, in accordance with all applicable Federal, State, and Local laws and regulations.

The Contractor shall decontaminate all equipment prior to its removal from the exclusion zone and/or following contact with hazardous materials, as detailed in Item 8.01 S - Health and Safety. Water generated during the decontamination process shall be disposed of under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

- A. <u>Material Handling Plan</u>: Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Management, OEGS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Management, OEGS, prior to the Contractor's commencement of work. The MHP shall, at a minimum, consist of:
 - 1. The Contractor's procedures for identifying contaminated/potentially hazardous soils during excavation, including instrumentation and calibration procedures to be used.
 - 2. The Contractor's procedures for safely handling hazardous soils or soils which have not yet been tested but are believed to be potentially hazardous.
 - 3. Identification of the Contractor's proposed waste transporter(s). This information shall include:
 - a. Name and waste transporter permit number
 - b. Address
 - c. Name of responsible contact for the hauler

- d. Telephone number for the contact
- e. Any and all necessary permit authorizations for each type of waste transported
- f. Previous experience in performing the type of work specified herein
- 4. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures could include, but are not limited to, agreements from the intended disposal or treatment facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility or the use of off-site stockpiling locations approved by the DEC.
- 5. A backup facility, should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
- 6. Identification of the Contractor's two proposed United State Environmental Protection Agency (EPA) or DEC approved RCRA TSD facilities for hazardous soils.
- 7. The Contractor shall submit the following information prior to any transportation of soils regarding the temporary and final off-site TSD or facilities where it is proposing to take hazardous soils. The expense of furnishing all information will be included in the Contractor's bid price:
 - a. General Information
 - (1) Facility name and the EPA identification number
 - (2) Facility location
 - (3) Name of responsible contact for the facility
 - (4) Telephone number for contact
 - (5) Signed letter of agreement to accept waste as specified in this contract
 - (6) Signed letter of agreement with a TSD for disposal of waste that may not be land-disposed
 - (7) Unit of measure utilized at each facility for costing purposes
 - b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility as they pertain to receipt and management of wastes derived from this Contract.
 - c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility.
 - d. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
 - e. The Contractor shall provide the date of the proposed facility(ies) last compliance inspection under RCRA.
 - f. A list of all active (unresolved) compliance orders, agreements, enforcement notices or notices of violations issued to the proposed facility shall be approved. The source and nature of the cause of violation shall be stated, if known.
- 8. Description of all sampling and analyses that will be needed to obtain disposal facility approval.

8.01 H.2 MATERIALS

- A. Containers shall be watertight as required in the DOT regulations and must meet all applicable regulations including but not limited to those in Attachment 2.
- B. Polyethylene (20 mil. thickness minimum) to be placed under and (10 mil. thickness minimum) over soil piles. If soils are placed in drums, polyethylene must be placed over the drums.

8.01 H1.3 CONSTRUCTION DETAILS

A. Material Handling

- The Contractor shall institute procedures to protect site personnel and the public from the non-hazardous and hazardous materials as described in Section 8.01 S - Health and Safety.
- The Contractor shall handle hazardous soil as approved in the MHP.
- 3. Stockpiled materials at the temporary TSD facility shall be handled according to the facility requirements but at a minimum: shall be drummed or placed on and covered with polyethylene to protect against erosion and leaching into surrounding soils, the stockpile area shall be graded for positive drainage away from the pile, and shall be labeled while being held for sampling prior to permanent disposal.
- 4. Provide any dewatering that is necessary to complete the work. Water shall be disposed of in accordance with Item 8.01 W1 Removal, Treatment and Discharge/Disposal of Contaminated Water.

B. Off-Site Transportation and Disposal

1. The Contractor shall furnish all labor, equipment and supplies required to transport hazardous materials from the work area to the off-site TSD facility(ies) and to acquire any other items and services required for transporting hazardous materials for storage and/or disposal at an approved off-site facility.

2. Weight Measurement

- a. The Contractor shall submit the name and location of the facility where an off-site scale is located. The Contractor shall also submit a plan to the DDC for review outlining procedures on controlling trucks leaving the work site and on-route to the off-site scale. The Contractor shall be responsible for tracking all materials/vehicles from the site to the off-site scale.
- b. The Contractor shall provide to the DDC certified tare and gross weight slips for each load received at the accepted facility which shall be attached to each returned manifest.

3. General

- a. Manifests: The Contractor shall organize and maintain the material shipment records/manifests required by law.
- b. The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule shall be compatible with the availability of equipment and personnel for material handling at the job site.

- c. The Contractor shall inspect all vehicles leaving the project site to ensure that hazardous soils adhering to the wheels or under carriage are removed prior to the vehicle leaving the site.
- d. The Contractor shall obtain letters of commitment from the waste haulers and the TSD facility to haul and accept shipments. The letter shall indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed as necessary.

4. Hauling

- a. The Contractor shall not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.
- b. The Contractor shall coordinate manifesting, placarding, of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the TSD facility. If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and to be resolved by the Contractor to the satisfaction of the DDC.
- c. The Contractor shall be held responsible, at its own expense, for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.
- d. The Contractor shall ensure that trucks are protected against contamination by properly covering and lining them with compatible material (such as polyethylene) or by decontaminating them prior to any use other than hauling hazardous materials.
- e. The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
- f. The Contractor shall only use the transporter(s) identified in the MHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from the DEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the DDC and such substitution or additional transporter shall be at no additional cost to the City.
- g. The Contractor shall develop, document, and implement a policy for accident prevention.
- h. The Contractor shall not combine hazardous materials from other projects with material from this project.
- The Contractor shall obtain for the City an EPA hazardous waste generator identification number and a representative of DDC Program Management OEGS will review and sign the manifest as the generator.
- J. No materials shall be transported until approved by the DDC.

5. Off-Site Disposal

- a. The Contractor shall be responsible for acceptance of the materials at an approved TSD facility, for ensuring that the facility is properly permitted to accept the stated materials, and that the facility provides the stated storage and/or disposal services.
- b. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials.

The Contractor is responsible for making the necessary arrangements to utilize the facility(ies), and the alternate facility(ies) must be approved in writing by the DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done with no extra cost or delay to the City.

- c. The Contractor shall submit all results and weights to the DDC.
- d. The Contractor is responsible to pay all fees associated with the generation and disposal of all excavated hazardous waste. These fees include, but are not limited to, the New York State Department of Finance and Taxation (DFT) quarterly fees for hazardous waste and the New York State DEC annual hazardous waste regulatory fee program. The Contractor shall submit a copy of proof of payment to the DDC and Program Management, OEGS.
- 6. Equipment and Vehicle Decontamination

The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting from the exclusion zone. The cost for this work shall be paid under Item 8.01 S - Health and Safety. Disposal of decontamination liquids is described under Item 8.01 W1 - Removal, Treatment and Discharge/Disposal of Contaminated Water.

7. Record Keeping

The Contractor shall obtain manifest forms, and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest shall be submitted to the DDC within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. Any manifest discrepancies shall be reported immediately to the DDC and be resolved by the Contractor to the satisfaction of the DDC.

8.01 H.4 METHOD MEASUREMENT

Quantities for hazardous soil shall be measured in tons satisfactorily delivered to the treatment, storage or disposal facility. The tonnage will be determined by off-site truck scales, as per subsection 8.01 H1.3.B.2, that are capable of generating load tickets.

8.01 H.5 PRICE TO COVER

- A. The unit price bid per ton for Item 8.01 H shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for excavation, handling, transportation, disposal, documentation, permits, fees, taxes, stockpiling, hauling, and any other incidentals necessary to complete the work as specified herein for handling, transporting and disposal of hazardous soils.
- B. Final disposal of non-hazardous materials shall be paid for under Item 8.01 C1 Handling, Transporting and Disposal of Non-Hazardous Soils. Disposal of decontamination water shall be paid under Item 8.01 W1 Removal, Treatment and Discharge/Disposal of Contaminated Water.
- C The independent Environmental Consultant shall be paid under Item 8.01 S Health and Safety.
- D. Backfill will be paid for under its respective item.

ITEM NUMBER

ITEM

PAYMENT UNIT

8.01 H

Handling, Transporting, and Disposal of Hazardous Soils

Tons

ITEM 8.01 S HEALTH AND SAFETY

8.01 S.1 WORK TO INCLUDE

Health and Safety Requirements

A. Scope of Work

It is the Contractor's responsibility to stage and conduct his work in a safe manner. The Contractor shall implement a Health and Safety Plan (HASP) for contaminated/hazardous soil intrusive activities as set forth in Occupational Safety and Health Administration (OSHA) Standards 1910.120 and 1926.650-652. The Contractor shall ensure that all workers have at a minimum hazard awareness training. The Contractor shall segregate contaminated work area in secured exclusion zones. These zones shall limit access to Contractor personnel specifically trained to enter the work area. The exclusion zone shall be set up to secure the area from the public and untrained personnel. The project health and safety program shall apply to all construction personnel including persons entering the work area. In addition, the Contractor shall protect the public from on-site hazards, including subsurface contaminants associated with on-site activities. The HASP shall be signed off by a Certified Industrial Hygienist and reviewed by Program Management, Office of Environmental and Geotechnical Services (OEGS).

Work shall include, but not be limited to:

- 1. Implementation of a baseline medical program.
- 2. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and providing all other health and safety measures.
- 3. Providing, installing, operating and maintaining on-site emergency medical first aid equipment as specified in this section for which payment is not provided under other pay items in this Contract.
- 4. Providing, installing, operating, maintaining and decommissioning all equipment and personnel decontamination facilities specified within this section, including, but not limited to, the decontamination pad, decontamination water supply, decontamination water collection equipment and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract.
- 5. Provide the minimum health and safety requirements for excavation activities within the limits of this Contract.
- 6. Implement and enforce a HASP: The HASP as presented in these specifications is dynamic with provisions for change to reflect new information, new practices or procedures, changing site environmental conditions or other situations which may affect site workers and the public. The HASP will also address measures for community protection, accident prevention, personnel protection, emergency response/contingency

planning, air monitoring, odor control and hazardous chemicals expected on site. Providing a Confined Space Entry Program as defined in the Occupational Safety and Health Act, Confined Space Entry Standard, 29 CFR 1910.146.

B. Environmental Consulting Services

The Contractor shall retain an independent Environmental Consultant to obtain all permits and perform all field screening, air monitoring, community air monitoring, soil sampling, and health and safety services. The independent Environmental Consultant shall at a minimum provide documentation to the Program Management, OEGS demonstrating the minimum requirements as set forth below:

- 1. The independent Environmental Consultant project supervisor on site and other designated key personnel shall have a minimum of three (3) years experience in the environmental field dealing with issues associated with contaminated soils. Such experience shall include oversight on environmental, specifically volatile organic compound and dust monitoring services as a routine part of its daily operations.
- 2. The independent Environmental Consultant must be experienced in work of this nature, size, and complexity and must have previous experience in working with the DEC.
- 3. The independent Environmental Consultant shall furnish a project listing identifying the location, nature of services provided, owner, owner's contact, contact's telephone number, project duration and value for at least five (5) projects within the last three (3) years.
- 4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its independent Environmental Consultant shall ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated materials shall have completed a minimum of forty (40) hours of Health and Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program shall be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the independent Environmental Consultant shall provide site specific training.
- 5. The Contractor shall ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations shall receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

C. Submittals

- 1. The Contractor shall submit, within forty-five (45) calendar days after the contract award, a written HASP as specified herein, to Program Management, OEGS for review and comment. The Contractor shall make all necessary revisions required by Program Management, OEGS and resubmit the HASP to the Program Management, OEGS for acceptance. Start-up work for the project will not be permitted until written acceptance has been issued by the Program Management, OEGS.
- 2. Daily safety logs shall be maintained by the Contractor and shall be submitted to the DDC either on request or on completion of the work. Training logs shall be maintained by the Contractor and submitted to the DDC either on request or on completion of the work. Daily logs on air monitoring during excavation activities shall be prepared and maintained by the Contractor and submitted to the DDC either on request or upon completion of the work.
- 3. A closeout report shall be submitted by the Contractor to the DDC upon completion of the work within the defined exclusion zones. This report shall summarize the daily safety

- and monitoring logs and provides an overview of the Contractor's performance regarding environmental and safety issues. The report shall carefully document all areas where contamination has been found including pictures, addresses of locations, and potential sources.
- 4. Medical Surveillance Examinations: The Contractor shall submit to the DDC the name, office address and telephone number of the medical consultant utilized. Evidence of baseline medical examinations together with the evidence of the ability to wear National Institute for Occupational Safety and Health (NIOSH) approved respirators (as specified in American National Standards Institute (ANSI) Z88.6) shall be provided to the DDC for all construction personnel who are to enter the exclusion zones.
- 5. Accident Reports: All accidents, spills, or other health and safety incidents shall be reported to the DDC.

D. Health and Safety Plan

The HASP shall comply with OSHA regulations 29 CFR 1910.120/1926.65. This document shall at a minimum contain the following:

- 1. Description of work to be performed
- 2. Site description
- 3. Key personnel
- 4. Worker training procedures
- 5. Work practices and segregation of work area
- 6. Hazardous substance evaluation
- 7. Hazard assessment
- 8. Personal and community air monitoring procedures and action levels
- 9. Personal protective equipment
- 10. Decontamination procedures
- 11. Safety rules
- 12. Emergency procedures
- 13. Spill control, dust control, vapor/odor suppression procedures
- 14. Identification of the nearest hospital and route
- 15. Confined space procedures
- 16. Excavation safety procedures

8.01 S.2 MEASUREMENT

Health and Safety Requirements

A. 25% of the lump sum price will be paid when the following items are implemented or mobilized:

Medical surveillance program

Health and safety training

Health and safety plan

Environmental and personnel monitoring

Instrumentation

Spill control

Dust control

Personnel and equipment decontamination facilities

Personnel protective clothing

Communications

Mobilization

B. 50% will be paid in proportional monthly amounts over the period of work.

C 25% will be paid when the operation is demobilized and removed from the project site.

8.01 S.3 PRICE TO COVER

Health and Safety Requirements

The lump sum price bid for the health and safety requirements shall include all labor, materials, equipment, and insurance necessary to complete the work in accordance with these specifications. The price bid shall include, but not be limited to, the following:

- A. Providing training, safety personnel, air monitoring and medical examinations as specified.
- B. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and all other health and safety activities or costs not paid for under other pay items in this Contract.
- C. Providing, installing, operating and maintaining on-site emergency medical and first aid equipment. This includes all furnishings, equipment, supplies and maintenance of all medical equipment, and all other health and safety items and services for which payment is not provided under other pay items in this Contract.
- D. Providing, installing, operating, maintaining, and decommissioning all personnel and equipment decontamination facilities, including decontamination pad, decontamination water supply, and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract. Vehicle decontamination pads shall be included in the price of this item. Disposal of decontamination fluid shall be paid for under Item 8.01 W1 Removal, Treatment and Discharge/Disposal of Contaminated Water.

E. Spill Control

- Payment shall account for furnishing, installing, and maintaining all spill control
 equipment and facilities. Payment will include equipment and personnel to perform
 emergency measures required to contain any spillage and to remove spilled materials and
 soils or liquids that become contaminated due to spillage during work within the
 exclusion zones and handling of excavated soils and liquids from these areas. This
 collected spill material will be properly disposed of.
- 2. Payment under this item shall not include testing, handling, transportation or disposal of petroleum-contaminated/potentially hazardous soils excavated during construction. The price for this work will be paid for under Items 8.01 C1 Handling, Transporting and Disposal of Non-Hazardous Contaminated Soils, 8.01 C2 Sampling and Testing of Contaminated/Potentially Hazardous Soil for Disposal Parameters or 8.01 H Handling, Transporting and Disposal of Hazardous Soils, as appropriate.

F. Dust Control

Payment shall account for furnishing, installing, and maintaining dust control equipment and facilities to be used whenever applicable dust levels are exceeded. Payment will include all necessary labor, equipment, clean water, foam, and all other materials required by the Dust Control Plan. The DOH Community Air Monitoring Plan (CAMP) may be used as guidance.

G. <u>Vapor/Odor Suppression</u>

Payment shall account for furnishing, installing and maintaining vapor/odor control equipment and facilities to be used whenever organic vapor monitoring or the presence of odors indicates that vapor suppression is required to protect workers or the public. Payment will include all

necessary labor, equipment, clean water, foam and all other materials required by the Vapor/Odor Suppression Plan.

H. Mobilization/Demobilization

1. Mobilization

Payment shall include but not be limited to:

- a. All work required to furnish, install and maintain all signs, fencing, support zone facilities, parking areas and all temporary utilities;
- b. All work required to furnish, install, and maintain an office space with phone and utilities for health and safety personnel;
- c. All work required for complete preparation of lay down area for roll-off containers, including sampling, and any required fencing;
- d. All direct invoiced cost from bonding companies and government agencies for permits and costs of insurance; and
- e. All other items and services required for mobilization and site preparation.

2. Demobilization

Payment shall include but not be limited to: All work required to sample the area; remove from the site all equipment, temporary utilities and supporting facilities; performance of necessary decontamination and repairs; disposal of disposable equipment and protective gear and other items and services required for complete demobilization.

Payment will be made under:

ITEM NUMBER	ITEM	PAYMENT UNIT
8.01 S	Health and Safety	Lump Sum

ITEM 8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER

8.01 W1.1 WORK TO INCLUDE

General: This work shall consist of the proper removal and disposal of all contaminated groundwater and decontamination water generated during construction operations. The Contractor shall be solely responsible for the proper disposal or discharge of all contaminated water generated at the job site. The Contractor will have the option of treating water on-site for discharge to the combined sanitary/storm sewer system or removing contaminated water for off-site disposal. The Contractor shall be responsible to choose a method compatible to the construction work and shall be compensated on a per day basis regardless of method employed. The Contractor will be compensated for only those days where the system is in full operation.

The Contractor shall retain a dewatering/water treatment Specialist (hereinafter the "Specialist") and laboratory as specified under Item 8.01 W2 – Sampling and Testing of Contaminated Water, to conduct any testing that may be required for disposal of impacted water.

The dewatering/water treatment Specialist is responsible to obtain all permits; perform all water sampling, testing; and provide ancillary services related to dewatering and water treatment. The Specialist shall at a minimum provide documentation to the Program Management, Office of Environmental and Geotechnical Services (OEGS) demonstrating the minimum requirements as set forth below:

- 1. The Specialist shall demonstrate that it has, at a minimum, three (3) years experience in the design of dewatering plans. The Specialist should demonstrate expertise dealing with issues associated with contaminated water. During that three (3) year period, the Specialist shall demonstrate that it provided dewatering and water treatment systems as a routine part of its daily operations.
- 2. The Specialist must be experienced in work of this nature, size, and complexity and must have previous experience in working with the DEC.
- 3. The Specialist shall furnish a project listing identifying the location, nature of services provided, owner, owner's contact, contact's telephone number, project duration and value for at least five (5) projects within the last three (3) years of a similar nature, size, and complexity to this one.
- 4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its independent Environmental Consultant shall ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated material shall have completed a minimum of forty (40) hours of Health and Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program shall be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the Specialist shall be responsible to provide site-specific training to its employees and other affected personnel.
- 5. The Contractor shall ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations shall receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

The Contractor shall document all operations associated with the handling, sampling and disposal of contaminated water, and ensure that they are in compliance with applicable Federal, State and Local statutes and regulations.

The Contractor shall supply all labor, equipment, transport, plant, material, treatment, and other incidentals required to conduct the specified work of this section.

If water will be disposed of into the combined sanitary/storm sewer system, the Contractor shall ensure the Specialist treats the water to comply with the New York City Department of Environmental Protection (DEP) Sanitary/Combined and Storm Sewer Effluent Limit concentrations prior to discharge. The Contractor is responsible for providing settling or filtering tanks and any other apparatus required by DEP. Alternatively, the Contractor can provide a plan for transport and disposal at an off-site waste disposal facility.

Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Management, OEGS for review, a Water Handling Plan (WHP). The WHP must be approved by the Program Management, OEGS, prior to the Contractor's commencement of work. The minimum requirements for the WHP are specified herein Item 8.01W 1.2, for each type of disposal (disposal into the combined sanitary/storm sewer or off-site disposal). The Contractor shall maintain a complete, up to date copy of the WHP on the job site at all times.

8.01 W1.2 CONSTRUCTION DETAILS

For each disposal method the Contractor proposes to utilize (disposal to combined sanitary/storm sewer or off-site disposal), the WHP shall include the information required in paragraphs A and B below, as appropriate.

- A. On-site treatment and discharge into New York City combined sanitary/storm sewers.
 - 1. Regulations: The Contractor shall comply with all applicable regulations. This includes but may not be limited to:
 - Title 15-New DEP Sewer Use Regulations.
 - 2. Permits: The Contractor is solely responsible to obtain all necessary and appropriate Federal, State and Local permits and approvals. The Contractor will be responsible for performing all and any system pilot tests required for permit approval. This includes but may not be limited to:
 - a. Industrial waste approval for the New York City sewer system.
 - b. Groundwater discharge permit for the New York City sewer system (DEP Division of Sewer Regulation and Control), if discharge to sewer exceeds 10,000 gallons per day.
 - c. The Contractor shall comply with DEC State Pollutant Discharge Elimination System (SPDES) Permit Number GP-0-10-001, General Permit for Stormwater Discharges.
 - d. Long Island well point permit for Brooklyn and Queens sites, if well points are used for dewatering.
 - e. Wastewater quality control application, DEP.
 - 3. The WHP for this portion of the work shall include at a minimum:

- a. Identification and design of Contractor's proposed treatment to assure that the water meets the DEP sewer use guidelines prior to discharge to the sewer, including identification of all materials, procedures, settling or filtering tanks, filters and other appurtenances proposed for treatment and disposal of contaminated water.
- b. The name, address and telephone number of the contact for the Contractor's proposed chemical laboratory, as well as the laboratory's certifications under Federal, State or non-governmental bodies.
- c. The name, address and telephone number of the contact for the Contractor's proposed independent Environmental Consultant.
- d. Copies of all submitted permit applications and approved permits the Contractor have received.

4. Materials

The Contractor shall supply all settling or filtering tanks, pumps, filters, treatment devices and other appurtenances for treatment, temporary storage and disposal of contaminated water. All equipment shall be suitable for the work described herein.

5. Execution

- a. The Contractor is solely responsible for disposal of all water, in accordance with all Federal, State and Local regulations.
- b. The Contractor is solely responsible for any treatment required to assure that water discharged into the sewer is in compliance with all permits and Federal, State and Local statutes and regulations.
- c. The Contractor is solely responsible for the quality of the water disposed of into the sewers.
- d. The Contractor is responsible for sampling and testing of water for the DEP Sanitary/Combined and Storm sewer Effluent Limit concentrations. The quality of the data is the Contractor's responsibility. Any sampling and testing shall be conducted and paid in accordance with Item 8.01 W2 Sampling and Testing of Contaminated Water.
- e. The Contractor shall be responsible to maintain the discharge rate to the sewer such that all permit requirements are met, the capacity of the sewer is not exceeded and no surcharging occurs downstream due to the Contractor's actions. Dewatering by means of well points or deep wells will not be allowed in the Boroughs of Brooklyn or Queens where the rate of pumping exceeds forty-five (45) gallons per minute unless the appropriate permit has been secured from the DEC.

f. Disposal of Treatment Media

- (1) The Contractor shall be responsible for disposal or recycling of treatment media in accordance with all Federal, State and Local regulations.
- (2) The Contractor shall provide the DDC with all relevant documentation concerning the disposal of treatment media, including manifests, bills of

- lading, certificates of recycling or destruction and other applicable documentation.
- (3) Disposal of treatment media shall not be considered as a separate pay item; instead it shall be considered as incidental work thereto and included in the unit price bid.

B. Off-Site Disposal

- 1. Regulations: The Contractor shall conform to all applicable Federal, State and Local regulations pertaining to the transportation, storage and disposal of any hazardous and/or non-hazardous materials as listed in Attachment 2.
- 2. The following shall be submitted to the DDC prior to initiating any off-site disposal:
 - a. (1) Name and waste transporter permit number
 - (2) Address
 - (3) Name of responsible contact for the hauler
 - (4) Any and all necessary permit authorizations for each type of waste transported
 - (5) Previous experience in performing the type of work specified herein
 - b. General information for each proposed treatment/disposal facility and at least one backup treatment/disposal facility
 - (1) Facility name and EPA identification number
 - (2) Facility location
 - (3) Name of responsible contact for the facility
 - (4) Telephone number for contact
 - (5) Unit of measure utilized at facility for costing purposes
 - c. A listing of all permits, licenses, letters of approval and other authorizations to operate, which are currently held and valid for the proposed facility as they pertain to receipt and management of the wastes derived from this Contract.
 - d. A listing of all permits, licenses, letters of approval and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued. Provide dates of application(s) submitted. Planned submittals shall also be noted.
 - e. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste and provide dates of construction and beginning of use, if applicable. Drawings may be provided. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
 - f. The Contractor shall provide the date of the proposed facility's last compliance inspection.

- g. A list of all active (unresolved) compliance orders, agreements, enforcement notices or notices of violations issued to the proposed facility shall be submitted. The source and nature of the cause of violation shall be stated, if known. If groundwater contamination is noted, details of the facility's groundwater monitoring program shall be provided.
- h. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

3. Materials

All vessels for temporary storage and transport to an off-site disposal facility shall be as required in DOT regulations.

4. Execution

a. General

- (1) The Contractor shall organize and maintain the material shipment records/manifests required by Federal, State and Local law. The Contractor shall include all bills of lading, certificates of destruction, recycling or treatment and other applicable documents.
- (2) The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule shall be compatible with the availability of equipment and personnel for material handling at the job site.
- (3) The Contractor shall inspect all vehicles leaving the project site to ensure that contaminated liquids are not spilling and are contained for transport.
- (4) The Contractor shall obtain letters of commitment from the waste haulers and the treatment, disposal or recovery facility to haul and accept shipment. The letter shall indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed as necessary.
- (5) The Contractor shall verify the volume of each shipment of water from the site.
- (6) The Contractor is responsible for sampling and testing of water for off-site disposal. The quality of the data is the Contractor's responsibility. Any sampling and testing shall be conducted and paid in accordance with Item 8.01 W2 Sampling and Testing of Contaminated Water.
- (7) The Contractor shall be responsible for any additional analyses required by the TSD facility, and for the acceptance of the water at an approved TSD facility.

b. Hauling

(1) The Contractor shall not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.

- (2) The Contractor shall coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the TSD facility(ies). If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and shall be resolved by the Contractor to the satisfaction of the DDC.
- (3) The Contractor shall be held responsible for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site. This cleanup shall be accomplished at the Contractor's expense.
- (4) The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance and weight restrictions.
- (5) The Contractor shall only use the transporter(s) identified in the WHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from DEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the DDC at no additional cost to the City.
- (6) The Contractor shall develop, document, and implement a policy for accident prevention.
- (7) The Contractor shall not combine waste materials from other projects with material from this project.
- (8) The Contractor shall obtain for the City a hazardous waste generator identification number and will sign the manifest as the generator, if necessary.
- (9) No material shall be transported until approved by the DDC.

c. Disposal Facilities

- (1) The Contractor shall use only the TSD facility(ies) identified in the WHP for the performance of the work. Substitutions or additions shall not be permitted without prior written approval from the Program Management, OEGS, and, if approved, shall be at no extra cost to the City.
- (2) The Contractor shall be responsible for acceptance of the material at an approved TSD facility, for ensuring that the facility is properly permitted to accept the stated material, and that the facility provides the stated storage and/or disposal services.
- (3) The DDC reserves the right to contact and visit the disposal facility and regulatory agencies to verify the agreement to accept the stated material and to verify any other information provided. This does not in any way relieve the Contractor of his responsibilities under this Contract.
- (4) In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The Contractor is responsible for making the necessary arrangements to utilize the facility(ies), and the alternate facility(ies) must be approved in writing by the DDC in the same manner and with the same

requirements as for the original facility(ies). This shall be done with no extra cost or delay to the City.

d. Equipment and Vehicle Decontamination

The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting the exclusion zone. The cost for this work shall be paid under Item 8.01 S – Health and Safety.

8.01 W1.3 METHOD OF MEASUREMENT

The quantity for on-site treatment and discharge or off-site disposal shall be on a per day basis.

8.01 W1.4 PRICE TO COVER

- A. The per day price bid for Item 8.01 W1 shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for handling, transportation, disposal, documentation, permits, hauling, mobilization and demobilization, and any other incidentals thereto to complete the work.
- B. The Contractor will not be paid for water that is within the DEP Sewer Discharge Limits.

Payment will be made under:

ITEM NUMBER ITEM

PAYMENT UNIT

8.01 W1

Removal, Treatment and Disposal/Discharge of Contaminated Water

Day

ITEM 8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER

8.01 W2.1 WORK TO INCLUDE

A. Description

The work shall consist of sampling and testing of potentially contaminated groundwater, surface runoff within the excavated area and all contaminated water generated during the decontamination process.

B. <u>Sampling and Testing</u>

- 1. The Contractor is responsible, at a minimum, for sampling and testing of contaminated water for the DEP Sanitary/Combined and Storm Sewer Effluent Limit concentrations as listed in Attachment 1. The quality of the data is the Contractor's responsibility. Any additional testing required by the Federal, State and/or disposal facilities shall be included in the bid price of this Item.
- 2. All sampling and testing shall be conducted by a person trained in sampling protocols using accepted standard practices and/or the DEC sampling guidelines and protocols.
- 3. All sample containers shall be marked with legible sample labels which shall indicate the project name, sample location and/or container, the sample number, the date and time of

- sampling, preservatives utilized, how the sample was chilled to 4 degrees Celsius, and other information that may be useful in determining the character of the sample.
- 4. Chain-of-custody shall be tracked from laboratory issuance of sample containers through receipt of the samples.
- 5. The Contractor shall maintain a bound sample log book. The Contractor shall provide the DDC access to it at all times and shall turn it over to the DDC in good condition at the completion of the work. The following information, as a minimum, shall be recorded to the log:
 - a. Sample identification number
 - b. Sample location
 - c. Field observation
 - d. Sample type
 - e. Analyses
 - f. Date/time of collection
 - g. Collector's name
 - h. Sample procedures and equipment used
 - i. Date sent to laboratory/name of laboratory
- 6. Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the site, and must be properly disposed of after use.
- 7. Samples shall be submitted to the Contractor's laboratory within the holding times for the parameters analyzed.
- 8. All analyses must be done by a laboratory that has received approval from the DOH's ELAP for the methods to be done. The Contractor must specify the laboratory in the WHP.
- 9. Analytical results for water discharged to the sewer and for off-site disposal must be submitted to the DDC no later than five (5) days after sample collection.
- 10. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described above, if the situation warrants. The substitute sampling parameters shall be of equal or lesser monetary value than those described above, as determined by industry laboratory pricing standards.

8.01 W2.2 METHOD OF MEASUREMENT

Quantities for samples shall be measured as the number of sets of samples that are tested for the DEP Sanitary/Combined and Storm Sewer Effluent Limit concentrations. A set shall be defined as one (1) representative sample analyzed for the full range of DEP parameters as specified in attachment 1.

8.01 W2.3 PRICE TO COVER

The unit price bid per set for Item 8.01 W2 shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for handling, transport, sampling, testing, documentation, permits, other incidentals necessary to complete the work of sampling and testing of contaminated water. Any additional costs incurred by the Contractor for sampling and testing of contaminated water shall be included in the bid price of this Item.

Payment will be made under:

ITEM NUMBER	ITEM	PAYMENT UNIT
8.01 W2	Sampling and Testing of Contaminated Water	Set

ATTACHMENT 1: NYCDEP LIMITATIONS FOR DISCHARGE TO STORM, SANITARY/COMBINED SEWER

NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTEWATER TREATMENT

Limitations for Effluent to Sanitary or Combined Sewers

Parameter ¹	Daily Limit	Units	Sample Type	Monthly Limit
Non-polar material ²	50	mg/l	Instantaneous	
рН	5-11	SU's	Instantaneous	
Temperature	< 150	Degree F	Instantaneous	
Flash Point	> 140	Degree F	Instantaneous	
Cadmium	2	mg/l	Instantaneous	
	0.69	mg/l	Composite	
Chromium (VI)	5	mg/l	Instantaneous	
Copper	5	mg/l	Instantaneous	
Lead	2	mg/l	Instantaneous	
Mercury	0.05	mg/l	Instantaneous	
Nickel	3	mg/l	Instantaneous	
Zinc	5	mg/l	Instantaneous	
Benzene	134	ppb	Instantaneous	57
Carbontetrachloride			Composite	
Chloroform			Composite	
1,4 Dichlorobenzene			Composite	
Ethylbenzene	380	ppb	Instantaneous	142
MTBE (Methyl-Tert- Butyl-Ether)	50	ppb	Instantaneous	
Naphthalene	47	ppb	Composite	19
Phenol			Composite	
Tetrachloroethylene (Perc)	20	ppb	Instantaneous	
Toluene	74	ppb	Instantaneous	28
1,2,4 Trichlorobenzene			Composite	
1,1,1 Trichloroethane			Composite	
Xylenes (Total)	74	ppb	Instantaneous	28
PCB's (Total) ³	1	ppb	Composite	
Total Suspended Solids (TSS)	350 ⁴	mg/l	Instantaneous	
CBOD ⁵			Composite	
Chloride ⁵			Instantaneous	
Total Nitrogen ⁵			Composite	

Total Solids ⁵ Instantaneous

- All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 C.F.R. pt. 136. If 40 C.F.R. pt. 136 does not cover the pollutant in question, the handling, preservation, and analysis must be performed in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater." All analyses shall be performed using a detection level less than the lowest applicable regulatory discharge limit. If a parameter does not have a limit, then the detection level is defined as the least of the Practical Quantitation Limits identified in NYSDEC's Analytical Detectability and Quantitation Guidelines for Selected Environmental Parameters, December 1988
- Analysis for *non-polar materials* must be done by EPA method 1664 Rev. A. Non-Polar Material shall mean that portion of the oil and grease that is not eliminated from a solution containing N-Hexane, or any other extraction solvent the EPA shall prescribe, by silica gel absorption.
- 3 Analysis for PCB=s is required if **both** conditions listed below are met:
 - 1) if proposed discharge \geq 10,000 gpd;
 - 2) if duration of a discharge > 10 days.
 - Analysis for PCB=s must be done by EPA method 608 with MDL=<65 ppt. PCB's (total) is the sum of PCB-1242 (Arochlor 1242), PCB-1254 (Arochlor 1254), PCB-1221 (Arochlor 1221), PCB-1232 (Arochlor 1232), PCB-1248 (Arochlor 1248), PCB-1260 (Arochlor 1260) and PCB-1016 (Arochlor 1016).
- For discharge ≥ 10,000 gpd, the TSS limit is 350 mg/l. For discharge < 10,000 gpd, the limit is determined on a case by case basis.
- Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids and Total Nitrogen are required if proposed discharge ≥ 10,000 gpd.

ATTACHMENT 2: APPLICABLE REGULATIONS

Applicable regulations include, but are not limited to:

- 1. 49 CFR 100 to 179 DOT Hazardous Materials Transport and Manifest System Requirements
- New York State Department of Environmental Conservation (DEC), Spills Technology and Remediation Series (STARS) Memo #1
- 3. 6 NYCRR 360-1 DEC Solid Waste Management Facilities
- 4. 6 NYCRR 364- Waste Transporter permits
- 5. Local restrictions on transportation of waste/debris
- 6. 40 CFR 260 to 272 Hazardous Waste Management (RCRA)
- 7. 6 NYCRR 371 Identification and Listing of Hazardous Wastes
- 8. 6 NYCRR 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities
- 9. 6 NYCRR 373-1 Hazardous Waste Treatment, Storage and Disposal Facility Permitting Requirements
- 10. 6 NYCRR 376 Land Disposal Restrictions
- 11. Posted weight limitations on roads or bridges
- 12. Transportation Skills Programs, Inc. 1985 Hazardous Materials and Waste Shipping Papers and Manifests
- 13. Other local restrictions on transportation of waste/debris
- Occupational Safety and Health Administration (OSHA), Standards and Regulations, 29
 CFR 1910 (General Industry)
- 15. OSHA 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response
- 16. OSHA Safety and Health Standards 29 CFR 1926 (Construction Industry)
- 17. OSHA 29 CFR 1910.146 Confined Space Entry Standard
- 18. Standard Operating Safety Guidelines, EPA Office of Emergency and Remedial Response Publication, 9285.1-03
- NIOSH / OSHA / USCG / EPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1986)
- U.S. Department of Health and Human Services (DHHS) "NIOSH Sampling and Analytical Methods," DHHS (NIOSH) Publication 84-100
- 21. ANSI, Practice for Respiratory Protection, Z88.2 (1980)
- 22. ANSI, Emergency Eyewash and Shower Equipment, Z41.1 (1983)
- 23. ANSI, Protective Footwear, Z358.1 (1981)
- 24. ANSI, Physical Qualifications for Respirator Use, Z88.6 (1984)
- 25. ANSI, Practice for Occupational and Educational Eye and Face Protection, Z87.1 (1968)
- 26. Water Pollution Control Federation "Manual of Practice No. 1, Safety in Wastewater Works"
- NFPA No. 327 "Standard Procedures for Cleaning and Safeguarding Small Tanks and Containers"

- 28. Occupational Safety and Health Act Confined Space Entry Standard 29 CFR 1910.146.87
- 29. Department of Transportation 49 CFR 100 through 179
- 30. Department of Transportation 49 CFR 387 (46 FR 30974, 47073)
- 31. Environmental Protection Agency 40 CFR 136 (41 FR 52779)
- 32. Environmental Protection Agency 40 CFR 262 and 761
- 33. Resource Conservation and Recovery Act (RCRA)
- 34. Any transporter of hazardous or non-hazardous materials shall be licensed in the State of New York and all other states traversed in accordance with all applicable regulations.

ATTACHMENT 3: DEFINITIONS

- Contaminated Groundwater and Decontamination Fluids: Groundwater within the excavation trench or decontamination water that contains regulated compounds above the NYCDEP Discharge to Sanitary/Combined Sewer Effluent limits.
- **Disposal or Treatment Facility:** A facility licensed to accept either non-hazardous regulated waste or hazardous waste for either treatment or disposal.
- **Exclusion Zone:** Work area that will be limited to access by Contractor personnel specifically trained to enter the work area only. The exclusion zone will be set up to secure the area from the public and untrained personnel. The project health and safety program will apply to all construction personnel including persons entering the work area.
- **Hazard Assessment:** An assessment of any physical hazards that may be encountered on a work site.
- **Hazardous Soils:** Soils that exhibit any of the characteristics of a hazardous waste, namely ignitability, corrosivity, reactivity, and toxicity, as defined in 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.
- Hazardous Substance Evaluation: An evaluation of the possible or known presence of any hazardous substances that may be encountered on a job site. This evaluation is included in the Health and Safety Plan and will include the identification and description of any hazardous substances expected to be encountered. Material Safety Data Sheets (MSDS) will be included for each substance.
- **Health and Safety Plan:** A plan employed at a work site that describes all the measures that will be taken to assure that all work is conducted in a safe manner, and that the health of the workers and the public will be insured.
- Material Handling Plan: A plan outlining the methods that will be employed to handle, transport and dispose of contaminated materials.
- Non-Hazardous Contaminated Soils: Soils which exhibit a distinct chemical or petroleum odor, or exhibit elevated photoionization detector readings but are not classified as hazardous waste under 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.
- New York State Health Department's Environmental Laboratory Approval Program: A program by which the state of New York approves and accredits environmental testing laboratories.
- **PCBs:** Polychlorinated biphenyls are a group of toxic compounds commonly used as a coolant in transformers and other electrical components.
- **Photoionization Detector:** A hand held instrument used to measure volatile organic compounds in air. The instrument ionizes the organic molecules through the use of an ultraviolet lamp.
- RCRA Hazardous Waste Characteristics: Characteristics of a material which may indicate the material is hazardous. These include: ignitability corrosivity, reactivity, and toxicity.
- **Total Petroleum Hydrocarbons:** An analytical procedure used to determine the total amount of petroleum compounds in a material.

ATTACHMENT 4: PHASE II SUB	SURFACE CORRIDOR INV	ESTIGATION REPORT
	SURFACE CORRIDOR INV	ESTIGATION REPORT
		ESTIGATION REPORT

- Final -

Phase II Subsurface Corridor Investigation Report

For

STORM AND COMBINED SEWERS AND WATER MAIN IN FRESH CREEK BASIN AREA

FARRAGUT ROAD, EAST 102ND STREET, ETC.

BROOKLYN, NEW YORK

DDC PROJECT NO. SE855
WORK ORDER NO. 9148-LIRO-2-8611
CONTRACT REGISTRATION NO. 20101417627

Prepared for:



Bureau of Environmental and Geotechnical Services 30-30 Thomson Avenue, Fifth Floor Long Island City, New York 11101

Prepared by:



LiRo Engineers, Inc. 703 Lorimer Street Brooklyn, New York 11211

PROJECT NO. 10-62-205 May 8, 2014



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New York City Department of Design and Construction Final Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. – Brooklyn, NY

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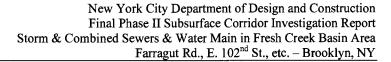
EXECUTIVE SUMMARY

On behalf of the New York City Department of Design and Construction (NYCDDC), LiRo Engineers, Inc. (LiRo) conducted a Phase II Subsurface Corridor Investigation (SCI) of the Fresh Creek Basin Area – Farragut Road, East 102^{nd} Street, etc. Corridor (hereinafter referred to as the Corridor). The Corridor is located within the Starrett City and Canarsie neighborhoods of Brooklyn, New York. This project is subject to additional review under City Environmental Quality Review (CEQR) by New York City Department of Environmental Protection (NYCDEP) since a portion of the proposed infrastructure work will include the construction of an outfall which may impact wetlands in the vicinity of Fresh Creek Basin. Excavation for the installation of storm and combined sewers and water main is proposed along the corridor. The Corridor is comprised of one (1) area and consists of the following 12 street segments in the Starrett City and Canarsie neighborhoods.

Corridor Area (10,500 linear feet):

- Glenwood Road between Rockaway Parkway and just east of East 108th Street (approximately 3,000 linear feet).
- Farragut Road between East 102nd Street and East 108th Street (approximately 1,550 linear feet).
- East 98th Street between Glenwood Road and just north of Conklin Avenue (approximately 350 linear feet).
- East 99th Street between Glenwood Avenue and just south of Glenwood Avenue (approximately 100 linear feet).
- East 101th Street between Glenwood Avenue and just south of Glenwood Avenue (approximately 100 linear feet).
- East 102nd Street just north of Glenwood Avenue to just south of Glenwood Avenue (approximately 200 linear feet).
- East 103rd Street between Farragut Road and just south of Glenwood Avenue (approximately 800 linear feet).
- East 104th Street between just south of Farragut Road and Glenwood Avenue (approximately 600 linear feet).
- East 105th Street between Dead End north of Farragut Road and just south of Farragut Road and then just north of Glenwood Avenue to just south of Glenwood Avenue (approximately 500 linear feet)
- East 108th Street between Stanley Avenue and Flatlands Avenue (approximately 2,200 linear feet).
- Stanley Avenue between East 108th Street and Williams Avenue (approximately 700 linear feet).
- Turnbull Avenue between just north of the dead end west of East 108th Street and East 108th Street (approximately 400 linear feet).

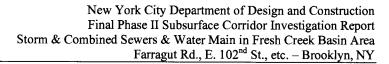
LiRo prepared a Phase I Corridor Assessment Report (Phase I CAR) dated August 2, 2013, which presented the results of a survey conducted along the Corridor to assess the presence of potential sources of subsurface contamination within, and in the immediate vicinity of, the Corridor. The Phase I CAR identified eight (8) sites that had a potential "High" risk and 20 sites that had a potential "Moderate" risk that may impact the subsurface (soil and/or groundwater) of the Corridor and provided recommendations that included the performance of a Phase II SCI. The objective of the Phase II SCI was to assess the presence of subsurface contamination that may potentially impact proposed construction activities. The proposed construction activities for the Corridor include infrastructure improvements consisting of the





installation and/or repair of storm and sanitary sewers. The Phase II SCI activities outlined in this report consisted of the following components:

- The advancement of 18 borings (SB-01 through SB-18) to a terminal depth of 20 feet below ground surface (ft bgs). Field screening consisted of classification and identification of soils from surface grade to the bottom of each boring. Soil samples were classified in the field using the Unified Soil Classification System (USCS), including photo-ionization detector (PID) readings and visual and olfactory indicators of contamination (staining, odors). Each boring was cleared to a depth of 6 ft bgs using a vacuum excavator and air knife combination;
- The collection of 18 soil samples and one (1) duplicate soil sample, which were analyzed for United States Environmental Protection Agency (USEPA) Target Compound List (TCL) volatile organic compounds (VOCs);
- The collection of 18 soil samples and one (1) duplicate soil sample, which were analyzed for the following parameters: (1) TCL Base Neutral/Acid (BN/A) extractable semi-volatile organic compounds (SVOCs); (2) Target Analyte List (TAL) metals; (3) TCL pesticides; (4) TCL Herbicides; and, (5) TCL polychlorinated biphenyls (PCBs);
- The collection of four (4) waste characterization soil samples, which were analyzed for: (1) the USEPA Full Toxicity Characteristics Leaching Procedure (TCLP) parameters, (2) TCL PCBs; (3) the Resource Conservation and Recovery Act (RCRA) Characteristics (ignitability, reactivity, and corrosivity); and, (4) Total Petroleum Hydrocarbons Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO);
- The installation of five (5) temporary well points (TWPs) and the collection of one (1) groundwater sample from each TWP. A sixth TWP (TWP-06/SB-09) was planned for the investigation; however the planned TWP was at a location common to a TWP sampled for the adjacent East 108th Street Corridor project (DDC Project No. SE-851). Therefore, results from the previously installed East 108th Street Corridor TWP (identified as TWP 108-01 for the purpose of this investigation) are included in this report. The laboratory analyses of all groundwater samples included the parameters published by the NYCDEP as Limitations for Effluent to Sanitary or Combined Sewers (NYCDEP Sewer Discharge Criteria), USEPA TCL VOCs by Method 8260, TCL BN/A extractable SVOCs by USEPA Method 8270, TAL metals by USEPA Method 6010B/7010, TCL pesticides by USEPA Method 8081A, TCL herbicides by Method 8151A, and TCL PCBs by USEPA Method 8082; and,
- As part of the sample collection and analytical process, Quality Assurance/Quality Control (QA/QC) samples were also collected to check the reproducibility of laboratory and field procedures and to check for contamination. The QA/QC samples included one (1) duplicate soil grab sample, one (1) duplicate soil composite sample, which were prepared in the field; one (1) laboratory supplied field blank for groundwater, and three (3) laboratory supplied volatile trip blanks of deionized water.
- The preparation of this report, which includes tables summarizing the laboratory analytical results and figures depicting boring locations, significant site features and, if applicable, contamination occurrence and distribution.





In order to evaluate the subsurface soil quality, laboratory analytical results for the soil samples were compared with the regulatory standards identified in: (1) New York State Department of Environmental Conservation (NYSDEC) CP-51 - Supplemental Soil Cleanup Levels (CP-51 SSCLs Table 1 Residential); (2) NYSDEC Subpart 375-6: Remedial Program Unrestricted and Restricted Use (Track 1 and Track 2) Soil Cleanup Objectives (SCOs); and, (3) the Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and NYSDEC Part 371. In order to evaluate the groundwater quality, the laboratory analytical results for the groundwater samples were compared to the NYCDEP Sewer Discharge Criteria and NYSDEC Technical and Operational Guidance Series (1.1.1) (TOGS) Ambient Water Quality Standards/Guidance Values (AWOSGVs) for Class GA Waters.

The subsurface soils encountered during this Phase II SCI consisted predominantly of brown, red-brown and grey, fine, medium and coarse grained sands with little clay, silt and peat. Anthropogenic materials (brick, concrete, cinders, ash, glass, etc.) and/or wood fragments, which are indicative of urban fill, were encountered in 9 of 18 soil boring locations at depths to 6 ft. bgs in seven (7) borings (SB-01, SB-05, SB-07, SB-08, SB-11, SB-12 and SB-16), at depths to 2 ft. bgs in two (2) borings (SB-04 and SB-14), and at depths to 11 ft. bgs in one (1) boring (SB-15). Bedrock was not encountered during the advancement of any of the 18 soil borings.

Field screening did not identify any visual, olfactory or PID evidence of petroleum-impacted soils within the Corridor. Groundwater was encountered at 10 or 15 ft bgs within the soil borings advanced along the Corridor. Grab and composite soil samples were collected from all 18 of the soil borings advanced and TWPs were installed at five (5) soil boring locations (SB-01, SB-03, SB-04, SB-07 and SB-10).

<u>Soil</u>

Iron was reported above the CP-51 SSCL in all 18 composite samples collected. Lead, mercury and zinc were reported at concentrations exceeding their Unrestricted Use (Track 1) SCOs in three (3) composite samples. One (1) pesticide (4'4'-DDT) was reported at a concentration of 9.1 ug/kg that exceeds the Unrestricted Use (Track 1) SCOs in the sample from SB-15-DUP (0-20 ft. bgs) which was located on Glenwood Avenue near East 101st Street Avenue. VOCs SVOCs, herbicides, or PCBs were not reported at concentrations exceeding Unrestricted Use (Track 1), Restricted Use (Track 2) SCOs, and/or CP-51 SSCLs.

DRO was detected in one (1) of the four (4) waste classification samples collected. There are no regulatory standards for DRO. The waste characterization soil samples did not exhibit evidence of hazardous waste characteristics.

Groundwater

Total Suspended Solids (TSS) was detected at concentrations above the NYCDEP Sewer Discharge Limitation of 350 mg/L in four (4) of the six (6) groundwater samples. One VOC (MTBE) was detected above the AWQSGV in the groundwater sample collected from TWP 108-01. The MTBE may be attributable to the numerous fuel stations along the Corridor. Total and dissolved metals were reported at concentrations above NYSDEC Technical and Operational Guidance Series (1.1.1) (TOGS) AWQSGVs for Class GA Waters in all six (6) groundwater samples collected. SVOCs were reported in three (3) of the six (6) groundwater samples above AWQSGVs for Class GA Waters. Pesticides, herbicides and PCBs were not reported in the six (6) groundwater samples above AWQSGVs for Class GA Waters.

Quality Assurance/Quality Control Data (QA/QC)

One (1) field duplicate soil sample was collected during this subsurface investigation. The pesticide 4',4'-DDT was detected in the duplicate sample, but not in the primary sample; all other results reported similar compounds of analytes detected. One (1) field blank water sample was submitted during this ES-3

LiRo Engineers, Inc. DDC CAPIS ID No. SE855

May 8, 2014



subsurface investigation. No VOCs, SVOCs, metals, pesticides, herbicides, or PCBs were detected in the field blank. Three (3) trip blank samples were submitted for analysis. No VOCs were detected in the trip blanks.

Conclusions

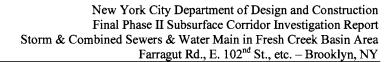
Based on the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following conclusions are presented:

- Field screening did not identify any visual, olfactory or PID evidence of petroleum-impacted soils within the Corridor.
- Laboratory analytical results identified impacted soils within the Corridor. The presence of elevated concentrations of a pesticide in the subsurface soils within a portion of the Corridor may be attributed to: (a) contaminants in historic fill material placed on the Corridor; (b) pesticide use within the Corridor.
- The presence of elevated concentrations of metals in the subsurface soils of the Corridor is attributed primarily to: (a) contaminants in historic fill material placed on the Corridor; and/or, (b) natural background levels (iron).
- The presence of DRO in a subsurface soil sample at the Corridor is attributed primarily to contaminants in historic fill material placed on the Corridor.
- The subsurface soils did not exhibit hazardous waste characteristics.
- Laboratory analytical results identified impacted groundwater within the Corridor. The presence of elevated concentrations of VOCs, SVOCs and metals in groundwater within the Corridor is likely attributed to: (a) residuals from releases from the "High" and "Moderate" risk sites identified on and within the vicinity of the Corridor; (b) contaminants or sediment from historic fill material placed on the Corridor.
- The groundwater within the Corridor does not meet the NYCDEP Sewer Discharge Criteria for sanitary, storm or combined sewers due to elevated concentrations of Total Suspended Solids (TSS) within four (4) of the six (6) TWPs. The presence of elevated levels of TSS in the groundwater is attributed to the fact that an unfiltered groundwater sample was collected from a TWP. However, the groundwater samples collected from TWPs are considered to be representative of conditions to be encountered during construction activities.

Based on the results of the field investigation and laboratory analytical results, LiRo recommends the following:

- The Contract documents should identify provisions for managing, handling, transporting, and disposing of non-hazardous impacted soils (pesticide and metals). The Contractor should be required to submit a Material Handling Plan (MHP), to identify the specific protocol and procedures that will be employed to manage the waste in accordance with applicable regulations;
- Due to the presence of metals and a pesticide within the proposed Corridor, dust control mitigation procedures are recommended during excavation activities to minimize the production and dispersion

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DDC CAPIS ID No. SE855





of fugitive airborne dust. The Contractor to minimize the release of potential airborne contaminants as a direct result of construction activities should develop and implement a Community Air Monitoring Plan (CAMP). The CAMP shall be developed in accordance with NYSDEC DER-10 Requirements. The CAMP requires real-time monitoring for particulates (i.e., dust) at the downwind perimeter of each designated work area when certain construction activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the surrounding community located downwind from potential airborne contaminant releases as a direct result of investigative and remedial work activities. Specific requirements shall be reviewed for each situation in consultation with NYSDOH to ensure proper applicability;

- Based on the findings of the Phase II SCI field activities, the depth to groundwater across the Corridor area ranged from 10 to 15 ft bgs. Dewatering may be necessary during construction activities within the Corridor. Since TSS was detected in groundwater samples at concentrations exceeding the NYCDEP Sewer Discharge Limitations, groundwater may require pre-treatment for this parameter prior to discharge. Therefore, should dewatering be necessary during construction activities within the Corridor to a sanitary or combined sewer, the contractor should be required to obtain NYCDEP sewer discharge permit;
- In addition, if discharge into storm sewers is required during dewatering, it may be done under the appropriate NYSDEC State Pollutant Discharge Elimination System (SPDES) permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and,
- Before beginning any excavation activity, the contractor shall submit a site-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety, and Health Administration (OSHA), the New York State Department of Health (NYSDOH), and any other applicable regulations. The HASP should identify the possible locations along the Corridor and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate environmental concerns (i.e., dust control procedures for metals and a pesticide).



1.0 INTRODUCTION

On behalf of the New York City Department of Design and Construction (NYCDDC), LiRo Engineers, Inc. (LiRo) conducted a Phase II Subsurface Corridor Investigation (Phase II SCI) of Fresh Creek Basin Area – Farragut Road, East 102nd Street Corridor (hereinafter referred to as the Corridor). The Corridor is located within the Starrett City and Canarsie neighborhoods of Brooklyn, New York. This project is subject to additional review under City Environmental Quality Review (CEQR) by New York City Department of Environmental Protection (NYCDEP) since a portion of the proposed infrastructure work will include the construction of an outfall which may impact wetlands in the vicinity of Fresh Creek Basin. Excavation for the installation of storm and combined sewers and water main is proposed along the corridor.

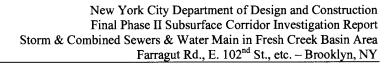
The Corridor is comprised of one (1) area and consists of the following 12 street segments in the Starrett City and Canarsie neighborhoods.

Corridor Area (10,500 linear feet):

- Glenwood Road between Rockaway Parkway and just east of East 108th Street (approximately 3,000 linear feet).
- Farragut Road between East 102nd Street and East 108th Street (approximately 1,550 linear feet).
- East 98th Street between Glenwood Road and north of Conklin Avenue (approximately 350 linear feet).
- East 99th Street between Glenwood Road and north of Conklin Avenue (approximately 100 linear feet).
- East 101th Street between Glenwood Road and north of Flatlands Avenue (approximately 100 linear feet).
- East 102nd Street between Glenwood Road and north of Flalands Avenue (approximately 200 linear feet).
- East 103rd Street between Farragut Road and just south of Glenwood Road (approximately 800 linear feet).
- East 104th Street between just south of Farragut Road and Glenwood Road (approximately 600 linear feet).
- East 105th Street between Dead End north of Farragut Road and just south of Farragut Road and then just north of Glenwood Avenue to just south of Glenwood Road (approximately 500 linear feet).
- East 108th Street between Stanley Avenue and Flatlands Avenue (approximately 2,200 linear feet).
- Stanley Avenue between East 108th Street and Williams Avenue (approximately 700 linear feet).
- Turnbull Avenue between just north of the dead end west of East 108th Street and East 108th Street (approximately 400 linear feet).

1.1 Summary of Previous Environmental Investigations

LiRo prepared a Phase I Corridor Assessment Report (Phase I CAR) dated August 2, 2013, which presented the results of a survey conducted along the Corridor to assess the presence of potential sources of subsurface contamination within, and in the immediate vicinity of, the Corridor. The survey also included a review of fire insurance maps to document historical use and a limited review of the New York State databases to identify sites that are known to be contaminated.





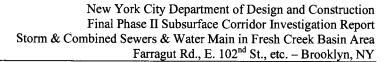
The Phase I CAR identified eight (8) sites that had a Final "High" risk and 20 sites that had a Final "Moderate" risk to impact the subsurface of the Corridor and recommended advancing a total of 20 borings, installing temporary well points (TWPs), and collecting soil and groundwater samples to assess potential impacts.

HIGH RISK SITES

- 1) Public School No. 260, 875 Williams Avenue (High Risk Site No. 1) SB-01
- 2) NYCHA Breukelen Houses, 618-650 E. 108th St. (High Risk Site No. 2) **SB-02 and SB-03**
- 3) River Manor Health Related Facility, 630 E. 104th Street (High Risk Site No. 3) **SB-04 and SB-17**
- 4) Amber Court of Brooklyn, 650 E. 104th Street (High Risk Site No. 4) SB-05 and SB-06
- 5) Former Filling Station, 10417-10423 Flatlands Avenue (High Risk Site No. 5) SB-07 and SB-8
- 6) Cumberland Farms No. 70226, Exxon Division of CFI No. 70226, currently Gulf Gas Station, 10802-10824 Flatlands Avenue (High Risk Site No. 6) **SB-09**
- 7) Plaza including Decent Dry Cleaners, a former Paint Store, I&Y Auto Sales and Georgetown Care and Limo Service, and Mr. Wash Laundry, 907-929 E. 107th Street (High Risk Site No. 7) **SB-09**
- 8) Dry Cleaners, currently VIP Electronics and Appliances, 1463 Rockaway Parkway (High Risk Site No. 8) SB-10

MODERATE RISK SITES

- 1) Tensor Corporation, Lamp Manufacturer, currently Rite Lite, Ltd., 333 Stanley Avenue (Moderate Risk Site No. 1) **SB-01**
- 2) Electronics Manufacturer, currently Lee Distributing, 814-848 Snediker Avenue, Metal Cabinet Manufacturer, TC Paratransit, currently TransCare Fleet Maintenance, 854 Snediker Avenue (Moderate Risk Site No. 2) SB-11 and SB-18
- 3) SB Flatlands LLC, 567 E. 105th Street, Duralab, 10523 Farragut Road, NY Telephone Company, Inc., 10501 Farragut Road (Moderate Risk Site No. 3) **SB-12**
- 4) NYCTA Canarsie Substation, 10301 Farragut Road (Moderate Risk Site No. 4) SB-13 and SB-17
- 5) Currently ChooChoo Laundry and Dry Cleaning, 604 E. 102nd Street (Moderate Risk Site No. 5) SB-13
- 6) NYCTA Canarsie Division Car Storage Yard, 10101 Glenwood Road (Moderate Risk Site No. 6) SB-14 and SB-15
- 7) M&M International Auto Center, Laudic Metal Finishing/Motor Repair, 9911-9915 Glenwood Road (Moderate Risk Site No. 7) SB-16
- 8) Greenpoint Savings Bank, currently Capital One Bank, 1425 Rockaway Parkway (Moderate Risk Site No. 8) SB-10
- 9) Holy Family School and Church, 9717-9719 Flatlands Avenue (Moderate Risk Site No. 9) SB-10
- 10) Detecto Scales, Inc., currently DMI, Inc. 10202 Foster Avenue, Arrow Lock and Webster, Inc. and Detecto Scales, Inc., currently NYC Children's Services, 10300-10424 Foster Avenue (Moderate Risk Site No. 10) SB-13 and SB-17
- 11) Currently Sharon's Dry Cleaning, 9619 Glenwood Road (Moderate Risk Site No. 11) SB-10
- 12) Jet Hardware Manufacturing, Manufacturing of Pharmaceuticals, currently Mercola Tile, 800 Hinsdale Street (Moderate Risk Site No. 12) SB-11





- 13) Glenmore Plastics Industries, Inc., Textile Printing, 807 Bank Street, 897 Van Sinderen Avenue (Moderate Risk Site No. 13) SB-18
- 14) Adult Retardates Center, LARC, 1121 E. 96th Street (Moderate Risk Site No. 14) SB-10
- 15) Getty No. 58053, Lukeoil No. 58053, filling station, 9616-9626 Flatlands Avenue (Moderate Risk Site No. 15) **SB-10**
- 16) Whalco Oil, Sunnydale Farms, Inc., MCA Parking Lot, currently L&M Bus Corporation and Service, 400-440 Stanley Avenue (Moderate Risk Site No. 16) **SB-01**
- 17) FDNY Engine Company 257, 1355-1361 Rockaway Parkway, 9702-9712 Farragut Road (Moderate Risk Site No. 17) SB-10
- 18) Fashion Cleaners, 1366 Rockaway Parkway (Moderate Risk Site No. 18) SB-10
- 19) Currently Smile Laundromat, 1360 Rockaway Parkway (Moderate Risk Site No. 19) SB-10
- 20) Broom Manufacturer, Parking Garage, Broadlea Dairies, Inc., 363-373 Dewitt Avenue, 755-777 Hinsdale Avenue (Moderate Risk Site No. 20) **SB-01**

1.2 Scope of Work

The Phase II SCI consisted of a field investigation, laboratory analyses, and the preparation of this report, which includes tables summarizing the laboratory analytical results and figures depicting boring locations, significant site features and, if applicable, contamination occurrence and distribution. The Scope of Work was based on the *Phase II SCI Work Plan* prepared by LiRo and dated August 28, 2013.

Drilling activities for the field investigation were performed by Associated Environmental Services, Limited (AES) of Hauppauge, New York. Oversight of drilling activities was performed by LiRo. Laboratory analyses were provided by Laboratory analyses were provided by Hampton-Clarke/Veritech (HCV) of Fairfield, New Jersey, a NYS Department of Health (NYSDOH) approved laboratory (No. 11408). Field derived Quality Assurance/Quality Control (QA/QC) samples (i.e., field blanks, trip blanks, duplicates) were also collected for this project.

The field investigation was conducted on March 24-28, 2014, March 31, 2014 and April 1 and 2, 2014 and consisted of the following components:

- The advancement of 18 borings (SB-01 through SB-18) to a terminal depth of 20 feet below ground surface (ft bgs). The borings were advanced using a Geoprobe® direct push drill rig. Prior to direct push advancement, borings were cleared to a depth of 6 ft bgs using a vacuum excavator and air knife combination. Soil samples were collected using 5-foot long, 2-inch diameter Macro Core stainless steel samplers equipped with clear plastic (acetate) liners. In addition, a site specific Health and Safety Plan (HASP) was prepared prior to commencing field work.
- Field screening, classification, and identification of soils from the ground surface to the bottom of each boring. Soil samples were visually classified in the field using the Unified Soil Classification System (USCS). Field screening consisted of visual and olfactory indicators of impacts as well as screening with a photoionization detector (PID).
- The collection of one (1) composite and one (1) grab sample from each of the 18 soil borings advanced. Duplicate QA/QC soil samples were also collected including one (1) duplicate grab sample and one (1) duplicate composite sample from soil boring SB-15. The composite samples were comprised of soil from the entire boring column. The grab samples were collected from the 6-inch interval above the saturation zone.



- Laboratory analysis of the composite samples for: (1) Target Compound List (TCL) Base Neutral/Acid (BN/A) extractable semi-volatile organic compounds (SVOCs) by United States Environmental Protection Agency (USEPA) Method 8270; (2) Target Analyte List (TAL) metals by USEPA Method 6010B/7010; (3) TCL pesticides by USEPA Method 8081A; (4) TCL herbicides by Method 8151A; and, (5) TCL polychlorinated biphenyls (PCBs) by USEPA Method 8082.
- Laboratory analysis of the grab samples for TCL volatile organic compounds (VOCs) by USEPA Method 8260.
- The installation of five (5) TWPs in borings SB-01, SB-03, SB-04, SB-07 and SB-10. A sixth TWP (TWP-06/SB-09) was planned for the investigation; however the planned TWP was at a location common to a TWP sampled for the adjacent East 108th Street Corridor project (DDC Project No. SE-851). The results from the previously installed East 108th Street Corridor TWP 108-01 are included in this report. The collection of one (1) groundwater sample from each TWP using direct push technology by installing a 20-slot PVC screen perpendicular to the groundwater table and riser pipe to grade. Dedicated PVC tubing was deployed in each TWP and connected to a check valve to extract the groundwater samples.
- Laboratory analysis of the groundwater samples for the parameters published by the NYCDEP as
 Limitations for Effluent to Sanitary or Combined Sewers (NYCDEP Sewer Discharge Criteria)
 and NYSDEC Technical and Operational Guidance Series (1.1.1) (TOGS) Ambient Water
 Ouality Standards/Guidance Values for Class GA Waters.
- The collection of four (4) composite waste characterization (WC) samples as follows:
 - o WC-01: composited of soil aliquots from borings SB-01, SB-11 and SB-18 (grade to bottom).
 - o WC-02: composited of soil aliquots from borings SB-02, SB-03, SB-09 and SB-12 (grade to bottom).
 - o WC-03: composited of soil aliquots from borings SB-04, SB-05, SB-06, SB-07, SB-08, SB-13, SB-14 and SB-17 (grade to bottom).
 - o WC-04: composited of soil aliquots from borings SB-10, SB-15 and SB-16 (grade to bottom).
- Laboratory analysis of the waste characterization samples for: (1) Full Toxicity Characteristics
 Leaching Procedure (TCLP) by USEPA Method SW846, (2) TCL PCBs; (3) Resource Conservation
 and Recovery Act (RCRA) Characteristics (ignitability, reactivity, and corrosivity) by USEPA
 Method SW846; and, (4) Total Petroleum Hydrocarbons Diesel Range Organics/Gasoline Range
 Organics (TPHC DRO/GRO) by USEPA Method 8015B.



2.0 CORRIDOR INFORMATION

2.1 Corridor Location, Description, and Use

The Corridor is located within the Starrett City and Canarsie neighborhoods of Brooklyn, New York. The Corridor consists of various streets within the Farragut Road and East 102^{nd} Street Fresh Creek Basin outfall project. The location is shown on Figure 1. The Corridor segments are characterized primarily by commercial and manufacturing operations and some residences. Properties of potential environmental concern noted during the site walk along the Corridor include the following.

- I&Y Auto Sales and Georgetown Care and Limo Service and Mr. Wash Laundry, 907-929 E. 107th Street (High Risk Site No. 7)
- Rite Lite, Ltd., 333 Stanley Avenue (Moderate Risk Site No. 1)
- TransCare Fleet Maintenance, 854 Snediker Avenue (Moderate Risk Site No. 2)
- NYCTA Canarsie Substation, 10301 Farragut Road (Moderate Risk Site No. 4)
- ChooChoo Laundry and Dry Cleaning, 604 E. 102nd Street (Moderate Risk Site No. 5)
- M&M International Auto Center, Laudic Metal Finishing/Motor Repair, 9911-9915 Glenwood Road (Moderate Risk Site No. 7)
- DMI, Inc. 10202 Foster Avenue, Arrow Lock, 10300-10424 Foster Avenue (Moderate Risk Site No. 10)

2.2 Description of Surrounding Properties

Properties located within the immediate area of the Corridor but not immediately adjacent to the Corridor consist primarily of commercial and manufacturing operations and some residences. Properties of potential environmental concern noted in the surrounding area include the following.

- VIP Electronics and Appliances, 1463 Rockaway Parkway (High Risk Site No. 8)
- Sharon's Dry Cleaning, 9619 Glenwood Road (Moderate Risk Site No. 11)
- Mercola Tile, 800 Hinsdale Street (Moderate Risk Site No. 12)
- Getty No. 58053, Lukeoil No. 58053, filling station, 9616-9626 Flatlands Avenue (Moderate Risk Site No. 15)
- L&M Bus Corporation and Service, 400-440 Stanley Avenue (Moderate Risk Site No. 16)
- FDNY Engine Company 257, 1355-1361 Rockaway Parkway, 9702-9712 Farragut Road (Moderate Risk Site No. 17)
- Fashion Cleaners, 1366 Rockaway Parkway (Moderate Risk Site No. 18)
- Currently Smile Laundromat, 1360 Rockaway Parkway (Moderate Risk Site No. 19)

2.3 Corridor and Regional Topographic Setting

Based on a review of the United States Geological Survey (USGS.) 7.5-Minute Quadrangle Map, Brooklyn, New York, dated 1975, the elevation of the Corridor ranges from 10 feet above mean sea level (msl) near the intersection of Flatlands Avenue and East 108th Street to 20 feet msl at the westerly end of the Corridor. Surface runoff is predominantly toward the northeast; however the direction is expected to vary across the Corridor due to slight changes in elevation and the location of storm sewer drains throughout the Corridor. A copy of the topographic map is presented in Figure 1.



2.4 Corridor and Regional Geology

Bedrock is of Precambrian and Paleozoic age. The thickness of the subsurface sedimentary sequence ranges from 0 to approximately 1,300 ft. from north to south. Outcrops of metamorphic bedrock can be found along the northwest portions of Queens. The uppermost unconsolidated unit consists of Pleistocene glacial till and moraine deposits in the northern portions of the Queens and Kings Counties and glaciofluvial sediments derived from melt-water of the retreating glaciers to the south. These deposits constitute the Upper Glacial Aquifer.

The overlying Cretaceous age sediments are characterized by three (3) periods of deposition separated by periods of erosion. The lowermost unit, known as the Raritan Formation, was deposited by streams and coalescing delta deposits. The formation has been divided into two (2) units, the Lloyd Sand Member and a conformable overlying clay unit (the Raritan Confining Unit). After a period of erosion, the Magothy Formation was deposited in an environment dominated by streams and coalescing deltas. The coarse basal unit indicates an environment of high energy that decreases rapidly, resulting in deposition of finer sands and silts that make up the majority of the formation.

Several episodes of Pleistocene glaciations by a southward advance from New England and the Hudson River valley eroded the Cretaceous deposits. The unconformity that extends across most of Queens and Kings Counties between the Cretaceous deposits and the overlying sediment, represents glacial scouring and glaciofluvial activity. Evidence of ice contact with the underlying Cretaceous deposits is absent in the southern portion of Queens and Kings Counties, indicating the southernmost limit of the advancing ice sheets.

The oldest Pleistocene deposit, represented only on western Long Island and Queens and Kings Counties is the Jameco Gravel (Jameco Aquifer). It is a channel filling of gravel and coarse sands which may represent a paleo Hudson River.

The terminal moraine of the last glacial advance is represented by the Harbor Hill Moraine. The Moraine trends southwest to northeast through central Kings and Queens Counties. The moraine deposits consist of poorly sorted silts, clays, sands and boulders and form the topographic highs in the area.

The subsurface soils encountered during this Phase II SCI consisted predominantly of brown, red-brown and grey, fine, medium and coarse grained sands with little clay, silt and peat. Anthropogenic materials (brick, concrete, cinders, ash, glass, etc.) and/or wood fragments, which are indicative of urban fill, were encountered in 9 of 18 soil boring locations at depths to 6 ft. bgs in seven (7) borings (SB-01, SB-05, SB-07, SB-08, SB-11, SB-12 and SB-16), at depths to 2 ft. bgs in two (2) borings (SB-04 and SB-14), and at depths to 11 ft. bgs in one (1) boring (SB-15). Bedrock was not encountered during the advancement of any of the 11 soil borings.

2.5 Corridor and Regional Hydrogeology

The first regional unconfined aquifer encountered is the upper glacial aquifer. The depth to the water table varies but generally follows the regional topography. At ground elevations closer to sea level, groundwater can occur at depths of five (5) to ten (10) ft bgs. The depth to groundwater may be significantly greater in areas of higher ground elevations. Generally, groundwater flow follows topography, with flow from higher to lower elevations. The terminal moraine deposits in the northern portions of Queens and Kings Countries act as a groundwater divide.



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Groundwater flow direction at the Site is likely to the south-southeast toward Fresh Creek and Jamaica Bay. The nearest surface water body is the Fresh Creek Basin which is located near the easterly end of the Corridor.

Based on the Phase II SCI field observations, groundwater was encountered at depths ranging between 10 and 15 ft. bgs within the borings advanced. Estimated groundwater levels and/or flow direction(s) may vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures, or dewatering operations.

Based on a review of the EDR database maps and the Topographic map for the Corridor, the Corridor is not located within the limits of the national wetland inventory (Federal Emergency Management Agency [FEMA]) or 100-year or 500-year flood zones.



3.0 CORRIDOR EVALUATION

Proposed construction activities at this site include soil excavation and may include dewatering, which inturn requires that soils and groundwater at the site be characterized to identify material handling requirements (i.e., use of protective equipment) and for material reuse, handling, and/or waste disposal requirements. LiRo provided oversight for the advancement of 18 soil borings by AES between March 24 and 28, 2014, March 31, 2014 and April 1 and 2, 2014, the installation of five (5) TWPs, and the collection of soil and groundwater samples during the field investigation at the designated areas in the vicinity of the planned construction. A summary of the field observations, including the location of the sites and the details of the soil borings, is provided in Table 1.

3.1 Soil Quality Investigation

Eighteen (18) borings (SB-01 through SB-18) were advanced to a terminal depth of 20 ft bgs using a Geoprobe® direct push drill rig. Prior to direct push advancement, borings were cleared to a depth of 6 ft bgs using a vacuum excavator and air knife combination. This equipment removes unconsolidated material by the use of compressed air to loosen the material and vacuum to remove it. Soil samples were collected using 5-foot long, 2-inch diameter Macro Core stainless steel samplers equipped with clear plastic (acetate) liners. Soil boring locations are shown on Figure 2. The designations and sampling intervals for the samples that were submitted to the laboratory are included in Table 1. Maps depicting each boring location are included in Appendix A. Boring logs are provided in Appendix B. The locations of each boring are described below:

- SB-01 Advanced in the vicinity of "High" risk site No. 1 and "Moderate" risk site Nos. 1, 16 and 20 and located on Stanley Avenue, 29 feet northeast of Williams Avenue and 8 feet southeast of Stanley Avenue.
- SB-02 Advanced in the vicinity of "High" risk site No. 2 and located on East 108th Street, 210 feet southeast of Farragut Avenue and 5 feet southwest of East 108th Street.
- SB-03 Advanced in the vicinity of "High" risk site No. 2 and located on Glenwood Road, 145 feet southwest of East 108th Street and 9 feet northwest of Glenwood Road.
- SB-04 Advanced in the vicinity of "High" risk site Nos. 3 and 4 and located on East 104th Street, 172 feet southeast of Farragut Avenue and 9 feet southwest of east 104th Street.
- SB-05 Advanced in the vicinity of "High" risk site No. 4 and located on East 104th Street, 143 feet northwest of Glenwood Road and 8 foot southwest of East 104th Street.
- SB-06 Advanced in the vicinity of "High" risk site No. 4 and located on East 103rd Street, 192 feet northwest of Glenwood Road and 9 feet northeast of East 103rd Street.
- SB-07 Advanced in the vicinity of "High" risk site Nos. 2 and 5 and located on Glenwood Road, 52 feet southwest of East 105th Street and 10 feet southeast of Glenwood Road.
- SB-08 Advanced in the vicinity of "Moderate" risk site No. 5 and located on Glenwood Road, 101 feet northeast of East 103rd Street and 10 feet southeast of Glenwood Road.

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- SB-09 Advanced in the vicinity of "High" risk site Nos. 6 and 7 and located on East 108th Street, 156 feet southeast of Flatlands Avenue and 9 feet northeast of East 108th Street.
- SB-10 Advanced in the vicinity of "High" risk site No. 10 and "Moderate" risk site Nos. 8, 11, 14, 15, 17, 18 and 19 and located on Glenwood Avenue, 70 feet east of Rockaway Parkway and 4 feet south of Glenwood Road.
- SB-11 Advanced in the vicinity of "Moderate" risk sites Nos. 2 and 12 and located on Stanley Avenue, 25 feet northeast of Snediker Avenue and 2 feet northwest of Stanley Avenue.
- SB-12 Advanced in the vicinity of "Moderate" risk site No. 3 and located on Farragut Road, 31 feet northeast of East 105th Street and 9 feet northwest of Farragut Road.
- SB-13 Advanced in the vicinity of "Moderate" risk sites Nos. 4, 5 and 10 and located on Farragut Road, 74 feet southwest of East 103rd Street and 10 feet northwest of Farragut Road.
- SB-14 Advanced in the vicinity of "Moderate" risk site No. 6 and located on Glenwood Road, 10 feet southwest of East 102nd Street and 4 feet southeast of Glenwood Road.
- SB-15 Advanced in the vicinity of "Moderate" risk site No. 6 and located on Glenwood Road, 20 feet northeast of East 101st Street and 5 feet southeast of Glenwood Road.
- SB-16 Advanced in the vicinity of "Moderate" risk site No. 7 and located on Glenwood Road, 35 feet southwest of East 100th Street and 3 feet southeast of Glenwood Road.
- SB-17 Advanced in the vicinity of "Moderate" risk sites Nos. 4 and 10 and located on Farragut Road, 100 feet southwest of East 104th Street and 6 feet southeast of Farragut Road.
- SB-18 Advanced in the vicinity of "Moderate" risk site Nos. 2 and 18 and located on East 108th Street, 45 feet southeast of Stanley Avenue and 3 feet southwest of East 108th Street.

Soil from each boring was classified and examined for visual evidence (i.e., staining, discoloration) and any olfactory indications (i.e., odors) of contamination. Continuous soil samples were collected from each of the borings at 5-foot intervals. In addition, a PID was used to screen the soil for VOC vapors.

In order to identify representative conditions relative to the presence of SVOCs, metals, pesticides, herbicides, and PCBs over the entire soil column in each boring, composite soil samples were collected by mixing the soil from the entire column in a stainless steel bowl. Boring composite samples were collected from each of the soil borings (SB-01 through SB-18). A QA/QC duplicate composite sample was collected at boring SB-15.

In order to identify representative conditions relative to the presence of VOCs, grab soil samples were collected from the 6-inch interval above the water table in each of the soil borings. A QA/QC duplicate grab sample was collected at boring SB-15.

In order to identify representative conditions for disposal purposes, waste classification (WC) samples were collected as follows:

o WC-01: composited of soil aliquots from borings SB-01, SB-11 and SB-18 (grade to bottom).



- WC-02: composited of soil aliquots from borings SB-02, SB-03, SB-09 and SB-12 (grade to bottom).
- WC-03: composited of soil aliquots from borings SB-04, SB-05, SB-06, SB-07, SB-08, SB-13, SB-14 and SB-17 (grade to bottom).
- o WC-04: composited of soil aliquots from borings SB-10, SB-15 and SB-16 (grade to bottom).

Soil classification information, including stratigraphy, is documented on the boring logs included in Appendix B. All boring equipment was cleaned by rinsing with tap water, scrubbed with Alconox, then rinsed with deionized water again between each sample interval. In addition, a clear plastic liner was used inside the sampler for neat recovery of the soil cores. Following the completion of each boring, the boreholes were back-filled with drill cuttings, and then sealed to the surface grade with cement grout.

3.2 Groundwater Quality Investigation

As groundwater may be encountered within the depths associated with the proposed excavation, five (5) groundwater samples (TWP-01 through TWP-05) were collected for screening and laboratory analysis during the soil boring activities. TWPs were installed in five (5) soil borings SB-01/TWP-01, SB-03/TWP-02, SB-04/TWP-04, SB-07/TWP-03, and SB-10/TWP-05. TWP-06 was planned for the SB-09 location during this investigation; however the planned TWP was at a location common to a TWP sampled for the adjacent East 108th Street Corridor project (DDC Project No. SE-851). Therefore, results from the previously installed East 108th Street Corridor TWP (identified as TWP 108-01 for the purpose of this investigation) are included in this report. TWP 108-01 is located closest to the area of the outfall.

Groundwater was encountered at depths ranging between 10 and 15 ft bgs. For the installation of the TWP, the Geoprobe® unit was advanced to a depth of 20 ft bgs, approximately 5' to 10' into the encountered water table. The TWPs consisted of 10-foot length section of 1-inch diameter schedule 40 PVC screen and 5' to 10' length of riser. A groundwater sample was collected from each TWP for screening and laboratory analysis via dedicated Teflon tubing and check valves. All tubing was new, clean, and unused and was properly disposed after use. Upon extraction, the samples were examined for visual evidence (i.e., discoloration, sheen) and any olfactory indications (i.e., odors) of contamination were noted.

A summary of the measurements taken from the TWPs is provided in Appendix B. The locations of the TWPs are provided in Figure 2.

3.3 Laboratory Analyses

The soil samples were submitted to Hampton-Clarke/Veritech (HCV), of Fairfield New Jersey, a NYS Department of Health (NYSDOH) approved laboratory (No. 11408). Field derived QA/QC samples (i.e., field blank, trip blank, duplicate) were also collected for this project. Laboratory analytical reports are included in Appendix C.

The grab soil samples were analyzed for USEPA TCL VOCs by Method 8260. The boring composite soil samples were analyzed for: (1) TCL BN/A extractable SVOCs by USEPA Method 8270; (2) TAL metals by USEPA Method 6010B/7010; (3) TCL pesticides by USEPA Method 8081A; (4) TCL herbicides by Method 8151A; and, (5) TCL PCBs by USEPA Method 8082.

The waste characterization soil samples were analyzed for: (1) the USEPA Full TCLP parameters, (2) TCL PCBs, (3) the RCRA Characteristics (ignitability, reactivity, and corrosivity), and, (4) TPHC DRO/GRO.



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In accordance with the stipulations and contingencies stated within the NYCDEP approval letter, six (6) groundwater samples were collected and analyzed for TCL VOCs, TCL SVOCs, TCL Pesticides, TCL Herbicides, PCBs, and TAL Metals (total and dissolved).

The groundwater samples were analyzed for parameters published by NYCDEP as Limitations for Effluent to Sanitary or Combined Sewers along with USEPA TCL VOCs by Method 8260, TCL BN/A extractable SVOCs by USEPA Method 8270, total and dissolved TAL metals by USEPA Method 6010B/7010, TCL pesticides by USEPA Method 8081A, and TCL PCBs by USEPA Method 8082.

3.4 Data Evaluation

In order to evaluate the subsurface soil quality, the laboratory analytical results of the grab and composite soil samples were compared with the regulatory standards identified in: (1) NYSDEC Subpart 375-6: Remedial Program Unrestricted and Restricted Use (Track 1 and Track 2) Soil Cleanup Objectives (SCOs); and, (2) NYSDEC CP-51 – Supplemental Soil Cleanup Levels (CP-51 SSCLs Table 1 Residential); laboratory analytical results of the waste classification soil samples were compared with the Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and NYSDEC Part 371. The analytical results of the groundwater samples were compared to the NYCDEP Sewer Discharge Criteria and NYSDEC Technical and Operational Guidance Series (1.1.1) (TOGS) Ambient Water Quality Standards/Guidance Values for Class GA Waters.



4.0 FINDINGS

This section discusses the analytical data and findings for the activities discussed in Section 3.0. Boring logs and well installation records can be found in Appendix B. Complete analytical data reports are included in Appendix C.

4.1 Field Screening

Field screening did not identify any visual, olfactory, or PID evidence of petroleum-impacted soils within the Corridor. Refer to Table 1 for a summary of environmental boring data.

4.2 Soil and Groundwater Laboratory Analytical Results

4.2.1 Volatile Organic Compounds (VOCs) in Soil

VOCs were reported in 17 of the 18 grab samples collected. Methylene chloride was detected in 17 samples at levels below the SCO. Methylene chloride is a common laboratory solvent and based on the relatively low levels and frequency of detection, the methylene chloride is likely due to laboratory contamination and not representative of environmental conditions. No other VOCs were detected in soil. Refer to Table 2 for a summary of TCL VOC detections.

4.2.2 Semi-Volatile Organic Compounds (SVOCs) in Soil

SVOCs were reported in 11 of the 18 composite samples collected. None of the concentrations detected exceed Unrestricted Use (Track 1), Restricted Use (Track 2) SCOs, and/or CP-51 SSCLs. QA/QC sample results from the SB-15 Duplicate sample were consistently higher than the primary sample results. Most of the reported SVOCs are polycyclic aromatic hydrocarbons (PAHs), and may be indicative of the presence of historic fill material placed at the Site. Refer to Table 3 for a summary of TCL SVOC detections.

4.2.3 Target Analyte List Metals (TAL Metals) in Soil

Metals were reported in all 18 composite samples collected. Lead (SB-01), mercury (SB-11), and zinc (SB-15-Dup) were reported above the Unrestricted Use (Track 1) SCOs. Iron was reported above the CP-51 SSCL (2,000 mg/kg) in all 18 composite samples collected. Based on their consistency, most of the reported iron concentrations are attributed to background levels. Lead and zinc are attributed to fill material. No additional metals concentrations detected exceed Unrestricted Use (Track 1), Restricted Use (Track 2) SCOs, and/or CP-51 SSCLs. QA/QC sample results from the SB-15 Duplicate sample were generally consistent with the primary sample results. Refer to Table 4 for a summary of TAL metals detections.

4.2.4 Pesticides in Soil

A pesticide was reported in 1 of the 18 samples collected. In the duplicate composite sample collected from zero to 20 ft. bgs at SB-15, 4,4'DDT was detected at a concentration of 9.1 ug/kg, which is above the Unrestricted Use (Track 1) SCO (3.3 ug/kg). However, 4', 4'-DDT was not detected in the corresponding primary environmental sample (SB-15). Detected pesticides may be attributed to the application and use of pesticides or fill material within the Corridor. No additional pesticides were detected. Refer to Table 5.



4.2.5 Herbicides in Soil

Herbicides were not reported in any of the 10 composite samples collected. Refer to Table 6.

PCBs in Soil 4.2.6

PCBs were not reported in any of the 10 composite samples collected. Refer to Table 7.

Waste Classification of Soil 4.2.7

Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity (pH) were within the acceptable RCRA ranges. TCLP VOCs, SVOCs, metals, herbicides, pesticides, and PCBs were not reported in the four (4) waste classification soil samples (WC-01 through WC-04) collected. DRO was reported at concentration of 38 mg/kg WC-04 and not detected in the remaining three (3) samples. GRO was not detected in the four (4) waste classification samples collected. There are no regulatory standards for DRO and GRO. Analytical results will need to be compared to levels acceptable by the chosen receiving facility to determine appropriate waste classification prior to off-site disposal. Refer to Table 8 for a summary of TCLP parameters, RCRA characteristics and DRO/GRO results.

Analysis of NYCDEP Parameters in Groundwater 4.2.8

The six (6) groundwater samples, TWP-01 through TWP-05 and TWP 108-01, were analyzed for the parameters required by the NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (Daily Limit). Total suspended solids (TSS) concentrations ranged from 410 to 1,500 mg/l, which exceeds the NYCDEP Sewer Discharge Limitation of 350 mg/l. No additional NYCDEP Sewer Discharge Limitation exceedances were reported. Refer to Table 9 for a summary of selected NYCDEP parameters in groundwater.

VOCs in Groundwater 4.2.9

MTBE was reported in the groundwater sample collected from TWP 108-01 at a concentration of 11 ug/l, which is above the AWQSGV for Class GA Waters (10 ug/l). Refer to Table 10.

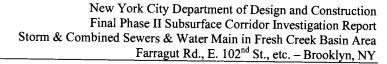
4.2.10 **SVOCs in Groundwater**

SVOCs were reported in three (3) of the six (6) groundwater samples collected. The concentrations reported were above the AWQSGV for Class GA Waters in TWP-01(SB-1), TWP-02(SB-3) and TWP05(SB-10) for bis(2-Ethtlhexl)phthalate. The phenanthrene concentration in TWP-02(SB-3) exceeds the AWQSGV. The concentrations reported were not above the NYCDEP Sewer Discharge Limitation. Refer to Table 11 for a summary of TCL SVOC detections in groundwater.

TAL Metals (Total and Dissolved) in Groundwater 4.2.11

Total metals were reported in all six (6) groundwater samples collected. Manganese was reported above the AWQSGV in all six (6) groundwater samples collected and sodium was reported above the AWQSGV in five (5) groundwater samples collected. Iron was reported above the AWQSGV in five (5) groundwater samples. Lead was detected above the AWQSGV in three (3) samples. Chromium was reported above the AWQSGV in three (3) samples; nickel and arsenic were reported above the AWQSGV

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in one (1) sample. Beryllium, copper, mercury and selenium were reported above the AWQSGV in one (1) sample (TWP-01). The reported concentrations are attributed to sediment from fill material placed at the Site or to background levels. Refer to Table 12 for a summary of TAL total metal detections.

Dissolved metals were reported in all six (6) groundwater samples collected. Manganese was reported above the AWQSGV in all six (6) groundwater samples collected. Iron and sodium were reported above the AWQSGVs in five (5) groundwater samples collected. Magnesium was reported above the AWQSGV in two (2) samples. The reported concentrations are attributed to leaching of metals from fill material placed at the Site or to background levels. Refer to Table 13 for a summary of TAL dissolved metal detections.

4.2.12 Pesticides in Groundwater

Pesticides were not reported in any of the six (6) groundwater samples collected. Refer to Table 14.

4.2.13 Herbicides in Groundwater

Herbicides were not reported in any of the six (6) groundwater samples collected. Refer to Table 15.

4.2.14 PCBs in Groundwater

PCBs were not reported in any of the six (6) groundwater samples collected. Refer to Table 16.

4.2.15 Quality Assurance/Quality Control Data

One (1) field duplicate soil sample was collected during this subsurface investigation to check reproducibility of laboratory and field procedures and to indicate non-homogeneity. Sample analysis results from the SB-15 duplicate sample were generally consistent with the primary sample results, with exception to SVOCs, which were consistently higher in the duplicate than in the primary sample results, and pesticides. DDT was detected in the duplicate sample, but not in the primary sample.

One (1) field blank water sample was submitted during this subsurface investigation to check cross contamination during sample collection, sample shipment, and in the laboratory, also to check sample containers. Concentrations of VOCs, SVOCs, metals, pesticides, herbicides, or PCBs were not detected, indicating cross contamination did not occur during sampling activities.

Three (3) trip blank samples were submitted for analysis to check contamination during sample handling and shipment from field to laboratory. No VOCs were reported indicating contamination did not occur during handling and shipment. Refer to Table 17 for a summary of the QA/QC data results.



5.0 CONCLUSIONS AND RECOMMENDATIONS

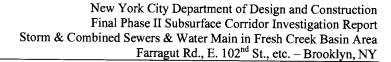
Based on the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following conclusions are presented:

- Field screening did not identify any visual, olfactory or PID evidence of petroleum-impacted soils within the Corridor.
- Laboratory analytical results identified impacted soils within the Corridor. The presence of elevated concentrations of a pesticide in the subsurface soils within a portion of the Corridor may be attributed to: (a) contaminants in historic fill material placed on the Corridor; (b) pesticide use within the Corridor.
- The presence of elevated concentrations of metals in the subsurface soils of the Corridor is attributed primarily to: (a) contaminants in historic fill material placed on the Corridor; and/or, (b) natural background levels (iron).
- The presence of DRO in a subsurface soil sample at the Corridor is attributed primarily to contaminants in historic fill material placed on the Corridor.
- The subsurface soils did not exhibit hazardous waste characteristics.
- Laboratory analytical results identified impacted groundwater within the Corridor. The presence of elevated concentrations of VOCs, SVOCs and metals in groundwater within the Corridor is likely attributed to: (a) residuals from releases from the "High" and "Moderate" risk sites identified on and within the vicinity of the Corridor; (b) contaminants or sediment from historic fill material placed on the Corridor.
- The groundwater within the Corridor does not meet the NYCDEP Sewer Discharge Criteria for sanitary, storm or combined sewers due to elevated concentrations of Total Suspended Solids (TSS) within four (4) of the six (6) TWPs. The presence of elevated levels of TSS in the groundwater is attributed to the fact that an unfiltered groundwater sample was collected from a TWP. However, the groundwater samples collected from TWPs are considered to be representative of conditions to be encountered during construction activities.

Based on the results of the field investigation and laboratory analytical results, LiRo recommends the following:

- The Contract documents should identify provisions for managing, handling, transporting, and disposing of non-hazardous impacted soils (pesticide and metals). The Contractor should be required to submit a Material Handling Plan (MHP), to identify the specific protocol and procedures that will be employed to manage the waste in accordance with applicable regulations;
- Due to the presence of metals and a pesticide within the proposed Corridor, dust control mitigation procedures are recommended during excavation activities to minimize the production and dispersion of fugitive airborne dust. The Contractor to minimize the release of potential airborne contaminants as a direct result of construction activities should develop and implement a Community Air Monitoring Plan (CAMP). The CAMP shall be developed in accordance with NYSDEC DER-10

LiRo Engineers, Inc.
DDC CAPIS ID No. SE855





Requirements. The CAMP requires real-time monitoring for particulates (i.e., dust) at the downwind perimeter of each designated work area when certain construction activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the surrounding community located downwind from potential airborne contaminant releases as a direct result of investigative and remedial work activities. Specific requirements shall be reviewed for each situation in consultation with NYSDOH to ensure proper applicability;

- Based on the findings of the Phase II SCI field activities, the depth to groundwater across the Corridor area ranged from 10 to 15 ft. bgs. Dewatering may be necessary during construction activities within the Corridor. Since TSS was detected in groundwater samples at concentrations exceeding the NYCDEP Sewer Discharge Limitations, groundwater may require pre-treatment for this parameter prior to discharge. Therefore, should dewatering be necessary during construction activities within the Corridor to a sanitary or combined sewer, the contractor should be required to obtain NYCDEP sewer discharge permit;
- In addition, if discharge into storm sewers is required during dewatering, it may be done under the appropriate NYSDEC State Pollutant Discharge Elimination System (SPDES) permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and,
- Before beginning any excavation activity, the contractor shall submit a site-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety, and Health Administration (OSHA), the New York State Department of Health (NYSDOH), and any other applicable regulations. The HASP should identify the possible locations along the Corridor and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate environmental concerns (i.e., dust control procedures for metals and a pesticide).

6.0 STATEMENT OF LIMITATIONS

The data presented and the opinions expressed in this report are qualified as stated in the attachment to this section of the report.

Report Prepared By:

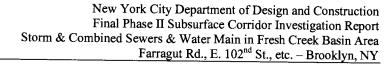
William Czelusta, Jr. CHMM Senior Environmental Analyst

Report Reviewed By:

Stephen Frank Senior Geologist

Report Reviewed By:

Robert Kreuzer Project Manager





STATEMENT OF LIMITATIONS

The data presented and the opinions expressed in this report are qualified as follows:

The sole purpose of the investigation and of this report is to assess the physical characteristics of the Site with respect to the presence or absence in the environment of oil or hazardous materials and substances as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the Site.

LiRo derived the data in this report primarily from visual inspections, examination of records in the public domain, interviews with individuals with information about the Site, and a limited number of subsurface explorations made on the dates indicated. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.

In preparing this report, LiRo has relied upon and presumed accurate certain information (or the absence thereof) about the Site and adjacent properties provided by governmental officials and agencies, the Client, and others identified herein. Except as otherwise stated in the report, LiRo has not attempted to verify the accuracy or completeness of any such information.

The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Services, including the extent of subsurface exploration and other tests. The Scope of Services was defined by the requests of the Client, the time and budgetary constraints imposed by the Client, and the availability of access to the Site.

Because of the limitations stated above, the findings, observations, and conclusions expressed by LiRo in this report are not, and should not be considered, an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or findings, observations, and conclusions expressed in this report. Further, such data, findings, observations, and conclusions are based solely upon site conditions in existence at the time of investigation.

This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the Agreement and the provisions thereof.



TABLES

TABLE 1 – SUMMARY OF ENVIRONMENTAL BORING DATA

TABLE 2 – SUMMARY OF TCL VOCs DETECTED IN SOIL

TABLE 3 – SUMMARY OF TCL SVOCs DETECTED IN SOIL

TABLE 4 – SUMMARY OF TAL METALS DETECTED IN SOIL

TABLE 5 – SUMMARY OF PESTICIDES DETECTED IN SOIL

TABLE 6 - SUMMARY OF HERBICIDES DETECTED IN SOIL

TABLE 7 – SUMMARY OF PCBs DETECTED IN SOIL

TABLE 8 – SUMMARY OF WASTE CHARACTERIZATION IN SOIL

TABLE 9 – SUMMARY OF GROUNDWATER QUALITY COMPARED TO NYCDEP SEWER

EFFLUENT PARAMETERS

TABLE 10 – SUMMARY OF TCL VOCs DETECTED IN GROUNDWATER
TABLE 11 – SUMMARY OF TCL SVOCs DETECTED IN GROUNDWATER
TABLE 12 – SUMMARY OF TAL METALS DETECTED IN GROUNDWATER
TABLE 13 – SUMMARY OF TAL DISSOLVED METALS DETECTED IN GROUNDWATER
TABLE 14 – SUMMARY OF PESTICIDES DETECTED IN GROUNDWATER
TABLE 15 – SUMMARY OF HERBICIDES DETECTED IN GROUNDWATER
TABLE 16 –SUMMARY OF PCBs DETECTED IN SOIL
TABLE 17 –SUMMARY OF QUALITY ASSURANCE/QUALITY CONTROL DATA



New York City Department of Design and Construction
Phase II Subsurface Corridor Investigation Report
Storm & Combined Sewers & Water Main in Fresh Creek Basin Area
Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Table 1. Summary of Environmental Boring Data
Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area
Farragut Rd., E. 102nd St., etc., Brooklyn, New York

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Sample Interval (ft bgs)	ž	9.5-10.0	0-20.0	0.01-0.0	9.5-10.0	0-20.0	9.5-10.0	0-20.0	9.5-10.0	0-20.0	9.5-10.0	0.02-0	0.20.0	9.5-10.0	0-20.0	9.5-10.0	0-20.0	0-20.0	9.5-10.0	0-20.0	9.5-10.0	9.5-10.0	0-20.0	9.5-10.0	0-20.0	9.5-10.0	9.5-10.0	0-20.0	0.20.0	9.5-10.0	0-50.0	9.5-10.0	0-20.0	9.5-10.0	0-20.0
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Sample ID	TWP-108-01	SB-01-9.5'-10'	SB-01-COMP	SB-02-COMP	SB-03-9.5'-10'	SB-03-COMP	SB-04-9.5'-10'	SB-04-COMP	SB-05-9.5-10	SD-03-COMP	01-0-90-90 01-0-90-90	SP 07 05: 40:	SB-07-COMP	SB-08-9.5'-10'	SB-08-COMP	SB-09-9.5'-10'	SB-09-COMP	SB-10-14.5'-15' SB-10-COMP	SB-11-9.5'-10'	SB-11-COMP	SB-12-9,5'-10'	SB-13-9,5'-10'	SB-13-COMP	SB-14-9,5'-10'	SB-14-COMP	SB-15-9.5'-10'	SB-15-9.5'-10'-DUP	SB-15-COMP	SB-15-COMP-DUP	SB-16-9.5'-10'	SB-16-COMP	SB-17-9.5'-10'	SB-17-COMP	SB-18-9.5'-10'	SB-18-COMP
Boring No. / TWP No.	TWP-108-	SB-01/	TWP-01	SB-02	SB-03 /	TWP-02	SB-04 /	TWP-04	SB-05		SB-06	SB.07 /	TWP-03	000	2B-08	SB-09	3	SB-10 / TWP-05	S 44	1-00	SB-12	5	20-02	SB-14			SB-15			SB-16		SB-17	1	SB-18	

1. Metals exceed Unrestricted Use (Track 1) SCOs, and/or Restricted Residential Use (Track 2) SCOs, and/or CP-51 SCLs.
Grab soil samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs)
Composers soil samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (SVOCs), Pesticides, PCBs, Herbicides, and Target Analyte List (TAL) Metals.

ppm = parts per million
TWP = Tamporary well point
Usy = Tamporary well point
Usy = Tamporary well point
Usy = Tamporary well point
Usy = Tamporary well point
Usy = Tamporary well point
Usy = Tamporary well point

ft bgs = feet below grade surface NA = Not Anafyzed/Not Applicable ND = Non detect

LiRo Engineers, Inc. DDC CAPIS ID No.: SE855



Page 1 of 1



Storm & Combined Sewers & Water Main in Fresh Creek Basin Area New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Table 2. Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Soil Farragut Rd., E. 102nd St., etc., Brooklyn, New York

	Part 375-6 8 (a)	Part 375-6.8	CP-51 Soil				Sample ID, Dat	Sample ID, Date Collected and Depth (ft bgs)	l Depth (ft bgs)			
TCL VOC	Unrestricted		b) Restricted Cleanup Jse (Track 2) Lovels (SCI s)	SB-01-9.5'-10'	SB-02-9.5'-10'	SB-03-9.5'-10'	SB-04-9.5'-10'	SB-05-9.5'-10'	B-01-9.5-10' SB-02-9.5-10' SB-03-9.5-10' SB-04-9.5-10' SB-05-9.5-10' SB-06-9.5-10' SB-07-9.5-10' SB-08-9.5-10' SB-09-9.5-10'	SB-07-9.5'-10'	SB-08-9.5'-10'	SB-09-9.5'-10'
	Ose (Hack I)		Residential	3/31/2014	3/28/2014	3/31/2014	4/1/2014	4/2/2014	4/2/2014	4/1/2014	3/31/2014	3/31/2014
	200	SCOs	isolicon de la contra del la contra de la contra del la contra del la contra de la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra d	9 5-10 0	9.5-10.0	9.5-10.0	9.5-10.0	9.5-10.0	9.5-10.0	9.5-10.0	9.5-10.0	9.5-10.0
			3			6.1	4.7	5.1	5	7.1	9.7	5.4
Methylene chloride	20	000,14	NS	ON N	NO.	5	-				7.0	F 4
Total 1/00's	UN N	SN.	SN	9	Q	6.1	4.7	5.1	9.1	1.7	0.7	1.0
10g VOC	2	2	2									

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg) ft bgs = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)
SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).
CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010) Supplemental (Table 1-Residential) Soil Cleanup Level.

Shaded = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential

Work Order Letter No. 9148-LIRO-2-8611



Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY New York City Department of Design and Construction

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York Table 2. Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Soil

Г	_	-	_		_	_	_	Т
		SB-18-9.5'-10	2/00/00/4	3/20/2014	9 5-10 0		3.7	3.7
		SB-17-9,5'-10'	213013044	3/20/2014	9.5-10.0		t. 4.	4.5
		SB-16-9.5'-10'	41412044	411/2014	9.5-10.0	į	9.5	9.5
1004	(ega)	-10' SB-15-9.5'-10' SB-16-9.5'-10' SB-17-9.5'-10' SB-18-9.5'-10'	4/3/2014	1000	9.5-10.0	10	0.7	6.7
Sample ID Date Collected and Donth (# Las)	indea alla cebal	3.5'-10' SB-11-9.5'-10' SB-12-9.5'-10' SB-13-9.5'-10' SB-14-9.5'-10' SB-15-9.5'-10'	4/2/2014		9.5-10.0	2.3	7.0	5.7
ID Date Collec	same and in	SB-14-9.5'-10'	4/2/2014		9.5-10.0	70	1.5	9.4
Samule		SB-13-9.5'-10'	3/28/2014	000	9.5-10.0	7.7		7.7
		SB-12-9.5'-10'	3/28/2014 3	0 0 2 7 0	9.5-10.0	4.2		4.2
		SB-11-9,5'-10'	3/28/2014	0 0 0	2.0-10.0	4.4		4.4
		SB-10-9.5'-10'	4/1/2014	0 6-10 0	0.01-0.0	-	,,,	
10 54 C. 11		٦.	Residential			SN	OIA	2
Part 375-6.8	(b) Restricted	Use (Track 2) Residential	Š	3		000,14	ON.	2
Part 375.6 8 (a)	Unrestricted	Use (Track 1)	SCOS	_		20	UN N	
		30A 73			Mothydone obleside	welligierie chiloride	Total VOCs	

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

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CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 — Soil Cleanup Guidance (CP-51) (October 21, 2010) Supplemental (Table 1-Residential) Soil Cleanup Level.

Shaded ≠ Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential

LiRo Engineers, Inc. DDC CAPIS ID No.: SE855

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Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report

Phase Il Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Table 3. Summary of Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) Detected in Soil Farragut Rd., E. 102nd St., etc., Brooklyn, New York

	Part 375-6.8	Part 375-6.8	CP-51 Soil				Sample ID.	Sample ID, Date Collected and Type	and Type			
TCL SVOC	(a) Unrestricted	(b) Kestricted Use (Track 2)	Cleanup	SB-01-COMP	SB-02-COMP	SB-03-COMP	SB-04-COMP	SB-05-COMP	SB-06-COMP	SB-07-COMP	SB-08-COMP	SB-09-COMP
	Use (Track 1)	Residential	Residential	3/31/2014	3/28/2014	3/31/2014	4/1/2014	4/2/2014	4/2/2014	4/1/2014	3/31/2014	3/31/2014
	scos	SCOS		Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite
2 4 6-Trichlorophenol	SN	SN	SN	Ą	QN	QN	ND	ON	Q	Q	2	2
2 4-Dimethylphenol	NS	SN	100,000	10	QN	ON	9	Q	2	Q!	2	2 2
2-Methylnaphthalene	NS	NS	NS	140	QN	Q	Q	2	2	2	2 2	2 2
3+4-Methylphenol	330	34,000	SN	17	DN	Q	Q	Q	Q	QV.	2 5	2 2
Acenaphthene	20.000	100,000	SN	280	ND	QN	Q	Q.	2	Q !	2	2 4
Anthracene	100 000	100,000	NS	450	QN	QN	Q	2	2	Q	Q.	3
Renzo(a)anthracene	1 000	1,000	NS	780	45	QN	QN	QV	42	2	Q.	38
Renzo(a)nvrene	1 000	1,000	SN	620	S	QN	ON	Q	2	2	Q.	SS.
Benzo(h)fluoranthene	1 000	1,000	SN	800	54	QN	QN	Q	62	2	QN	110
Benzo(a h i)perviene	100 000	100.000	NS	400	QΝ	QN	ND	Q	Q	2	Q.	99
Benzo(k)filioranthene	800	1.000	NS	300	QN	QN	Q	2	2	QN	ON.	84
Carbazole	SN	NS	NS	240	QV	QN	QN	Q	Q	2	QN	2
Chrysene	1 000	1.000	NS	720	41	QN	QN	Q	Q	Q	QN	8
Dibenzía hlanthracene	330	330	NS	130	ND	QN	Q	2	S	2	QN	2
Dibenzofuran	NS	NS	NS	230	QN	Q	S	Q	2	QN.		25
Flouranthene	100,000	100,000	SN	1,600	86	Q	Q	QV.	8	4 5	2 2	2
Fluorene	30,000	100,000	NS	270	2	QN	ON!	2 :	2 2		2 2	2 42
Indeno(1.2.3-cd)pyrene	L	200	NS	380	Q	Q	Q		2	2	2 2	35
Napthalene	12.000	100,000	SN	350	Q	2	Q	QN	Q :	2 5	2 2	2 2
Pentachtorophenol	800	2.400	SN	Q	ON	QN	Q	Q	2	2	2	2 8
Phenanthrene	100.000	100.000	SN	2,000	47	9	Q	Q	4	Q	Q !	200
Directo	100 000	100 000	SN	1,400	100	Q	2	QN	87	45	Q	160
Total SVOC	SIN SIN	SN	SN	11 117	385	QN	2	QN	355	88	Q	902
Total SVOCS												

All concentrations are reported in parts per biflion (ppb or ug/kg)

ft bgs = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)
SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).
CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010) Supplemental (Table 1-Residential) Soil Cleanup Level.

Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential Shaded - Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives



Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY New York City Department of Design and Construction

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Table 3. Summary of Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) Detected in Soil Farragut Rd., E. 102nd St., etc., Brooklyn, New York

Cleanup Levels (SCLs) SB-10-COMP A1/12014 SB-11-COMP 3/28/2014 SB-13-COMP 3/28/2014 SB-13-COMP 3/28/2014 SB-14-COMP 3/28/2014 SB-14-COMP 3/28/2014 SB-14-COMP 4/1/2014 SB-14-COMP 4/1/2014 SB-14-COMP 4/1/2014 SB-14-COMP 4/1/2014 SB-14-COMP 3/28/2014 SB-14-COMP 3/28/2014 SB-14-COMP 4/1/2014 SB-14-COMP 4/1/2		Part 375-6.8 (a)	Part 375-6.8 (b) Restricted	CP-51 Soil				Sam	nple ID, Date C	Sample ID, Date Collected and Type	pe			
SCOB SCOB SCOB Residential 41/12014 3728/12014 3728/12014 3728/12014 47/12014 NS NS NS NS NS NS ND	TCL SVOC	Use (Track 1)	Use (Track 2)	ユ		_	_		SB-14-COMP	SB-15-COMP	SB-15-COMP-	SB-16-COMP	SB-17-COMP	SB-18-COMP
NS NS NS NS NS NS NS NS		SCOS	SCOs		4/1/2014	3/28/2014	3/28/2014	3/28/2014	4/2/2014	4/2/2014	4/2/2014	4/1/2014	3/28/2014	3/28/2014
NS	1 0 0 0 0				Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Compeite
NS NS NS 100,000 ND ND ND ND ND ND ND	2,3,4,6-I richlorophenol	NS	NS		QN	QN	2	Ð	2	Q	CN	ON CIN	190	N CIN
NS	2,4-Dimethylphenol	NS	NS		QN	ą	S	Q	S	Ę	S CN	2	8 2	2 2
100 100	2-Methylnaphthalene	NS	NS		2	2	Q	Ę	Ş	2	200	2 2	2 2	2
20,000 100,000 NS ND ND ND ND ND 1e 1,000 1,000 NS ND	3+4-Methylphenols	330	34,000		QV	9	2	2	S	S	262	2 2	2 2	2 2
100,000 100,000 NS	Acenaphthene	20,000	100,000	П	QN	Ð	Ð	2	2	2	260	2 2	2 2	2 2
1,000	Anthracene	100,000	100,000	-	Q	Q	Ð	QN	Q	66	350	2	2	2 2
1,000	Benzo(a)anthracene	1,000	1,000		9	78	9	QN	S	200	670	2 2	2 4	2 2
1,000 1,000 1,000 NS	Benzo(a)pyrene	1,000	1,000		Q	72	2	S	2	160	0/0	2 2	130	2
The 100,000 100,000 NS	Benzo(b)fluoranthene	1,000	1,000		2	98	44	Ş	2 2	36	0/0	2 5	07	2
NS	Benzo(g,h,i)perylene	100,000	100,000		2	29	Ş	2	3 5	110	0/6	2	200	Q.
NS	Benzo(k)fluoranthene	800	1,000		S	2	2		2 2	2 8	nos	2	£	2
Ferre 330 1,000 NS ND 72 ND ND 45 ND ND 100,000 NS NS ND ND ND ND ND ND ND ND ND ND ND ND ND	Carbazole	SN	SN	Ī	2	2 5	2 2	2 5	2 9	3	200	2	61	2
Fine 330 330 NS ND ND <th< td=""><td>Chrysene</td><td>1 000</td><td>1 000</td><td>T</td><td>2 2</td><td>2</td><td></td><td>2</td><td>Q</td><td>2</td><td>2</td><td>Q</td><td>Q</td><td>ND</td></th<>	Chrysene	1 000	1 000	T	2 2	2		2	Q	2	2	Q	Q	ND
No.000	Dibenzía hlanthracene	330	2004	1		7/	2	2	45	180	730	2	120	N
100,000	Dibenzofuran	3	000	1	2	2	2	2	Q	Q	110	ON	QN	Q
12,000	Flouranthene	100 000	100,000	T	2 4		2	2	Q	28	40	QN	QN	2
Columbia C	Fluorene	30,000	100,000	Ī	2 2	200	24	2	9	380	1,100	QN	270	N N
12,000	Indeno(1.2.3-cd)nyrene	500	200,00	1				2	Q	46	320	ND	QN	Q
15,000	Nanthalana	12,000	300	1	2	848	Q	2	Q	100	320	Q.	76	Q.
100,000 100,000 NS ND 73 ND ND 61 ND 100,000 100,000 NS ND 150 45 ND 78 ND 78 ND 78 ND 78 NS NS NS ND 768 131 ND 369	Pentachlorophenol	2,000	000,001	1	2	QN	2	9	13	23	130	QN	₽ P	S
100,000 100,000 NS ND 73 ND 61 61 61 100,000 NS ND 150 45 ND 78 NS NS ND 768 131 ND 309	Phenanthrone	400,000	2,400	1	2	Q	2	Q	Q	QN	QN	Q	320	9
VOCs NS NS ND 768 45 ND 78 NO VOCs NS NS ND 768 131 ND 309	Director	200,000	100,000	1	2	73	Q	Q	61	430	1,900	2	180	Q
NS ND 768 131 ND 309	Total SVOCe	00,000	100,000	1	2	150	45	Q	78	380	1,700	Ð	250	S
	own over	2	2	1	ON N	768	131	Q.	309	2,419	9,640	QN	2,016	N

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

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CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 - Soil Cleanup Guidance (CP-51) (October 21, 2010) Supplemental (Table 1-Residential) Soil Cleanup Level. SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential

Shaded = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives

LiRo Engineers, Inc. DDC CAPIS ID No.: SE855



Storm & Combined Sewers & Water Main in Fresh Creek Basin Area New York City Department of Design and Construction Farragut Rd., E. 102nd St., etc. - Brooklyn, NY Phase II Subsurface Corridor Investigation Report

Table 4. Summary of Target Analyte List (TAL) Metals Detected in Soil Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York

							9	Potosilo O ato	and Tune			
	Part 375-6.8	Part 375-6.8	CP-51 Soil				Sample ID	Sample ID, Date Collected and Type	allu iybe			
Target Analyte List	(a) Unrestricted	(b) Restricted Use (Track 2)	Cleanup	SB-01-COMP	SB-02-COMP	SB-03-COMP	SB-04-COMP	SB-05-COMP	SB-06-COMP	SB-07-COMP	SB-08-COMP	SB-09-COMP
Metal	Use (Track 1)	Residential	Residential	3/31/2014	3/28/2014	3/31/2014	4/1/2014	4/2/2014	4/2/2014	4/1/2014	3/31/2014	3/31/2014
	SCOS	SCOS		Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite
Aliminim	SN	NS	SN	7,500	3,500	4,500	4,600	3,600	7,400	7,600	5,000	4,700
Antimony	SN	NS	NS	Q	QN	2	QN	ND	ND	9	QN	QN
Areanic	13	16	NS	Q.	QN	2	QN	ND	ND	S	Q	ON.
Bariim	350	350	SN	120	QN	19	14	QN	18	18	18	24
Bendlim	7.2	14	SN	0.67	QN	Ð	Q	Q	0.29	ND	Q	QN
Cadmin	2.5	2.5	NS.	QV	QN	ą	Q	QN	ND	ND	Q	QN
Calcium	SN	SN	NS	2,200	QN	Q	QN	ND	Q	ON	QN	3,100
Chromitim (total)	30	36	SNS	15	7.3	10	7.9	8.6	15	12	11	16
Cobat	SN	SN	30	Q	3.7	4.5	4.1	3.3	3.8	ND	3.7	3.8
Copper	20	270	NS	14	9.9	10	7.7	8.1	9.2	Q	8.6	9.9
in and and and and and and and and and an	SN	SN	2.000	7.100	009'6	11,000	7,900	10,000	10,000	8,300	13,000	11,000
Dea 1	63	400	NS	110	QN	QN	2	QN	ND	8.2	Q	14
Macnaeiim	SN	SN	SN	1.400	1,500	2,100	2,000	1,500	1,800	1,300	2,000	1,800
Mandanese	1 600	2,000	SN	64	59	260	250	65	65	52	120	120
Mercury	0.18	0.81	SN	S	QN	QN	ND	QN	QN	Q	QN	2
Nickel	30	140	SN	11	9.3	16	15	13	17	9.2	14	11
Potassium	SN	NS	SN	QN	QN	ND	Q	QN	Q	2	QV.	6/0
Selenium	3.9	36	NS	Q	QN	QN.	ND	Q	QN	Q	QN	2
Silver	2	36	SN	QN	QN	QN	ND	QN	Q.	Q	Q	2
Sodium	NS	NS	NS	QN	QN	QN	ND	Q	Q	2	Q	Q !
Thallium	SN	SN	NS	Q	QN	QV	ND	Q	Q	2	2	Q.
Vanadium	SN	NS	100	12	13	15	Ω	Q	21	15	1,	4 (
Zinc	109	2,200	SN	96	14	18	14	14	14	20	20	44

All concentrations are in parts per million (ppm or mg/kg)

ft bgs = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdf's)
SCOs = Soil Cleanup Objectives NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program (December 14, 2006).
CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010) Supplemental (Table 1-Residential) Soil Cleanup Level.

Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential Shaded = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives *Italicized* = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives



New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Table 4. Summary of Target Analyte List (TAL) Metals Detected in Soil
Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area
Farragut Rd, E. 102nd St, etc., Brooklyn, New York

	Part 375-6.8 (a)	Part 375-6.8	CP-51 Soil				Sar	nple ID, Date C	Sample ID, Date Collected and Type	- Lbe			
Target Analyte List 	Unrestricted Use (Track 1)	Use (Track 2) Residential	Cleanup Levels (SCLs)	SB-10-COMP	SB-11-COMP	SB-12-COMP	SB-13-COMP	SB-14-COMP	SB-15-COMP	SB-15-COMP- DUP	SB-16-COMP	SB-17-COMP	SB-18-COMP
	son son	scos	Residential	4/1/2014	3/28/2014	3/28/2014	3/28/2014	4/2/2014	4/2/2014	4/2/2014	4/1/2014	3/28/2014	3/28/2014
				Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Commonite	Commont
Aluminum	NS	SN	NS	2,500	11,000	4,000	4.200	4 700	4 000	2000	4 500	4 600	allegallo
Arsenic	13	16	SN	ΩN	5.1	Q	S	CN	2		000,4	4,000	3,800
Barium	350	350	NS	13	74	S	15	2.2	200	2	2	2	2
Beryllium	7.2	14	SN	QN	QN	S	2	2 2	27	6	2 5	17	27
Calcium	SN	SN	SN	Ę	2,700	2 2	2 2	2	2	2	Q	QN	Q.
Chromium (total)	ç	g.	2 2	2	2,700		Q	Q	QN	Q	ND	QN	2
Cohalt	3 2	9 5	2	5.6	۱٩	1.7	12	10	20	9	8.4	9.3	86
Comper	25	SN	08	2.8	7.9	3.1	QV	3.6	QN	2	3.0	0.4	3.9
ianon.	06	0/7	NS	6.8	17	8.9	7.3	8.3	18	+	63	ç	3 0
Iron	NS	NS	2,000	7,800	16,000	7.800	8.700	7.400	6 500	2 700	200	2 6	0.0
Lead	63	400	NS	S	62	Ş	CZ.		3	200,1	Onn's	9,000	9,300
Magnesium	SN	SN	V.	1 100	7007	25,		2	40	g	QN	9.5	Q
Manganese	1,600	0000	Q V	2,5	270	000,1	009	1,800	1,500	1,300	1,600	2,100	1,800
Mercury	0 18	280	2 2	8 2	370	n i	nel	2/	75	77	150	190	290
Nickel	Ç,	140	2 4	2	67.0	2	Q	Q.	Q	Q	QN	QV	QV
Dotassium	3 2	2 2	2			4	12	15	9.4	10	11	14	19
- Ordenius	2	2	S	2	Q	ND	QN	QN	QN	2	Q	S	S
Sodium:	SS	NS	NS	Q	290	9	Q	S	QN	CN	Ę	2	2
Vanadium	NS	NS	100	QN	22	2	14	7	S	2	2	ţ	2
Zinc	109	2,200	NS	12	89	17	18	22	36	22	1 0	7 32	10
											2	3	٥

All concentrations are in parts per million (ppm or mg/kg)

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Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential

Shaded = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives

LiRo Engineers, Inc. DDC CAPIS ID No∴ SE855

Work Order Letter No. 9148-LIRO-2-8611





Storm & Combined Sewers & Water Main in Fresh Creek Basin Area New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York Table 5. Summary of Pesticides Detected in Soil

				Sample ID	Sample ID, Date Collected and Type	and Type			
Unrestricted Use (Track 2) ovels (SC s)	l ig	SB-02-COMP	01-COMP SB-02-COMP SB-03-COMP SB-04-COMP SB-05-COMP SB-06-COMP SB-07-COMP SB-08-COMP SB-09-COMP	SB-04-COMP	SB-05-COMP	SB-06-COMP	SB-07-COMP	SB-08-COMP	SB-09-COMP
Residential	M	3/28/2014	3/31/2014	4/1/2014	4/2/2014	4/2/2014	4/1/2014	3/31/2014	3/31/2014
	Composite	Composite	Composite	П	Composite	Composite		Composite	Composite
914	CIV	CN.	S	ī	S		QN	Q	욷
SN	ND	ON.	2	2			2	2	2
SN	S	QN	ND	Q	QN	Q	Z	N	2
SN SN	\Box	Composite ND ND	Composite Composite ND ND ND	Composite Con	Composite Composite Composite Composite Composite ND ND ND ND ND ND ND ND	Composite Composite Composite Composite Composite Composite ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND	Composite Composite Composite Composite Composite Composite ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND	Composite Composite Composite Composite Composite Composite Composite Composite ND ND ND ND	Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite ND ND <th< td=""></th<>

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

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Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential Shadete: Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives *Italicized* = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives



New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York Table 5. Summary of Pesticides Detected in Soil

Γ		₽	T	7	,	Ţ		Γ	
		SB-18-CON	A108/2014	3/20/20	Composite		2	Į.	
		SB-17-COMP	3/28/2014	0/40/40 4	Composite		ND	GN	
		SB-16-COMP	4/1/2014		Composite	2	שמא	CN	
	ре	AP SB-16-COMP- SB-16-COMP SB-17-COMP SB-18-COMP	4/2/2014		Composite	1 4 Application	5.1%	6	
	ollected and Ty	SB-15-COMP	4/2/2014		Composite	Ş	2	2	
4	Sample ID, Date Collected and Type	SB-14-COMP	4/2/2014		Composite	٤	2	2	
	oau	SB-10-COMP SB-11-COMP SB-12-COMP SB-13-COMP SB-14-COMP SB-15-COMP S	3/28/2014		Composite	CN		2	
		SB-12-COMP	3/28/2014		composite	S		2	
		SB-11-COMP	3/28/2014	29,000,000	Composite	2		ND	
		SB-10-COMP	al 4/1/2014 3/28/2014	Composite	COIIIDOSITE	2	2	Q.	
	CP-61 Soil	Cleanup Levels (SCLs)	Residential			SN	014	2	
Part 375-6.8	(b) Restricted	Use (Track 2)	a Co	3		1,700	ON	2	
	Part 375-6.8 (a)	Use (Track 1)	SCOS			3.3	UN	2	
		Pesticides			F00 : 1	4,4-001	Total Pesticides	000000000000000000000000000000000000000	

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

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Work Order Letter No. 9148-LiRO-2-8611



Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report

Table 6. Summary of Herbicides Detected in Soil Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York

	Part 375-6.8	Part 375-6.8 Part 375-6.8 (a) (b) Restricted	CP-51 Soil				Sample ID	Sample ID, Date Collected and Type	and Type			
Herbicides	Unrestricted		<u> </u>	SB-01-COMP	SB-02-COMP	SB-03-COMP	SB-04-COMP	-01-COMP SB-02-COMP SB-03-COMP SB-04-COMP SB-05-COMP SB-06-COMP SB-07-COMP SB-08-COMP SB-09-COMP	SB-06-COMP	SB-07-COMP	SB-08-COMP	SB-09-COMP
	SCOS	SCOS	Residential	3/31/2014	3/28/2014	3/31/2014	4/1/2014	4/2/2014	4/2/2014	4/1/2014	3/31/2014	3/31/2014
				Composite	Composite	Composite	Composite	-	Composite	Composite	Composito	1
Herbicides	SN	SN	NS	2	S	S	Ş	C Z	No.	21100	aneodino.	
							2	2	2	2	2	2

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)
SCOs = Soil Cleanup Objectives NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program (December 14, 2006).
CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010) Supplemental (Table 1-Residential) Soil Cleanup Level.

Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential Shaded = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives

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Phase II Subsurface Comidor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area New York City Department of Design and Construction Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York Table 6. Summary of Herbicides Detected in Soil

	SB-15-COMP- SB-16-COMP SB-17-COMP SB-18-COMP DUP	4/1/2014 3/28/2014 3/28/2014 3/28/2014 4/2/2014 4/2/2014 4/1/2014 3/28/2014 3/28/2014 3/28/2014	posite Composite	QN QN
	1-16-COMP SB-1	4/1/2014 3/2	omposite Cor	Q.
90	SB-15-COMP- SB DUP	4/2/2014	Composite C	QN
Sample ID, Date Collected and Type	SB-10-COMP SB-11-COMP SB-12-COMP SB-13-COMP SB-14-COMP SB-15-COMP SI	4/2/2014	Composite	QN
mple ID, Date C	SB-14-COMP	4/2/2014	Composite	ND
Sar	SB-13-COMP	3/28/2014	Composite	QN
	SB-12-COMP	3/28/2014	Composite	ND
	SB-11-COMP	3/28/2014	Composite	QN
	SB-10-COMP	4/1/2014	Composite	S
CP-51 Soil	Cleanup Levels (SCLs)	Residential		SN
Part 375-6.8	(b) Restricted Use (Track 2)	Residential	SCOS	SN
Part 375-6.8 (a) Part 375-6.8 CI	Unrestricted Use (Track 2) Levels (SCLs) SB-	SCOS	}	NS
	Herbicides			Herbicides

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)
SCOs = Soil Cleanup Objectives NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program (December 14, 2006).
CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010) Supplemental (Table 1-Residential) Soil Cleanup Level.

Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential Shaded € Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives

LiRo Engineers, Inc. DDC CAPIS ID No.: SE855

Work Order Letter No. 9148-LIRO-2-8611



Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY New York City Department of Design and Construction

Table 7. Summary of Polychlorinated Biphenyls (PCBs) Detected in Soil
Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area
Farragut Rd., E. 102nd St., etc., Brooklyn, New York

ſ		₫	4	١	<u>.</u>
		SB-09-CO	3/31/2014	Companie	Sodinos
		SB-08-COMP	3/31/2014	opiocumo)	ON
		SB-07-COMP	4/1/2014	Composite	ND
	and Type	-01-COMP SB-02-COMP SB-03-COMP SB-04-COMP SB-06-COMP SB-06-COMP SB-08-COMP SB-09-COMP	3/28/2014 3/31/2014 4/1/2014 4/2/2014 4/2/2014 4/1/2014	Composite	CN
	Sample ID, Date Collected and Type	SB-05-COMP	4/2/2014	Composite	CN
	Sample ID	SB-04-COMP	4/1/2014	Composite	CN
		SB-03-COMP	3/31/2014	Composite	2
		SB-02-COMP	3/28/2014	Composite	Q
		SB-01-COMP	3/31/2014	Composite	Q
	CP-51 Soil		Residential		NS
	Part 375-6.8 Part 375-6.8 (a) (b) Restricted	Inrestricted Use (Track 2)	SCOs		1,000
	Part 375-6.8	Unrestricted Use (Track 2)	SCOs		100
		PCBs			Total PCBs

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

SCOs = Soil Cleanup Objectives NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program (December 14, 2006).

SCOs = Soil Cleanup Objectives NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program (December 14, 2006).

CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010) Supplemental (Table 1-Residential) Soil Cleanup Level.

Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential Shaded Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives

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New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Table 7. Summary of Polychlorinated Biphenyls (PCBs) Detected in Soil Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd, E. 102nd St., etc., Brooklyn, New York

SB-10-COMP SB-11-COMP SB-12-COMP SB-13-COMP SB-16-COMP SB-16-COMP SB-16-COMP SB-16-COMP SB-17-COMP SB-18-COMP SB-	1	Part 375-6.8	CP-64 Soil				San	nple ID, Date C	Sample ID, Date Collected and Type	-jbe		ē	
4/1/2014 3/28/2014 3/28/2014 3/28/2014 4/2/2014 4/2/2014 4/1/2014 3/28/2014 3/28/2014 Composite ND ND <td> Compared to the control of the con</td> <td>Clear</td> <td>oup SCLs)</td> <td>SB-10-COMP</td> <td>SB-11-COMP</td> <td>SB-12-COMP</td> <td>SB-13-COMP</td> <td>SB-14-COMP</td> <td>SB-15-COMP</td> <td>SB-15-COMP- DUP</td> <td>SB-16-COMP</td> <td>SB-17-COMP</td> <td>SB-18-CON</td>	Compared to the control of the con	Clear	oup SCLs)	SB-10-COMP	SB-11-COMP	SB-12-COMP	SB-13-COMP	SB-14-COMP	SB-15-COMP	SB-15-COMP- DUP	SB-16-COMP	SB-17-COMP	SB-18-CON
Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite Composite ND ND </td <td>Residential Residential</td> <td>Reside</td> <td>tial</td> <td>4/1/2014</td> <td>3/28/2014</td> <td>3/28/2014</td> <td>3/28/2014</td> <td>4/2/2014</td> <td>4/2/2014</td> <td>4/2/2014</td> <td>4/1/2014</td> <td>3/28/2014</td> <td>3/28/2014</td>	Residential Residential	Reside	tial	4/1/2014	3/28/2014	3/28/2014	3/28/2014	4/2/2014	4/2/2014	4/2/2014	4/1/2014	3/28/2014	3/28/2014
ON ON ON ON ON ON ON ON ON ON ON	SCOS		•	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite
	1.000 NS	NS	T	S	Q	QV	Q	ND	ND	QN	QV	QN	Q

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)
SCOs = Soil Cleanup Objectives NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program (December 14, 2006).
CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010) Supplemental (Table 1-Residential) Soil Cleanup Level.

Bold = Concentration exceeds NYSDEC Supplemental CP-51 SCLs Table 1 Residential Shaded ≅ Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives

LiRo Engineers, Inc. DDC CAPIS ID No∴ SE855

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Work Order Letter No. 9148-LIRO-2-8611



Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area New York City Department of Design and Construction Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd, E. 102nd St., etc., Brooklyn, New York Table 8. Summary of Waste Characterization in Soil

	6 NYCRR Part 371 and	Sample ID	Sample ID (Locations that make up composite) and Date Collected	p composite) and Date	S Collected
Parameter	RCRA Hazardous Waste	WC-01 (SB-1, 11, 18)	WC-01 (SB-1, 11, 18) WC-02 (SB-2, 3, 9, 12)	WC-03 (SB-4, 5, 6, 7, 8, 13, 14, 17)	WC-03 (SB-4, 5, 6, 7, WC-04 (SB-10, 15, 16)
		4/2/2014	4/2/2014	4/2/2014	4/2/2014
VOCs.	mg/L	QN	QN	QN	ON
-00/0	•				
SVOCS	ng/L	Q	Q	QN	QN
Pesticides	1/011	CN	CN	CIA	2
	1			Q.	ON .
Herbicides ⁷	ng/L	Q	Q	QN	QN
Metals'	ng/L				
Arsenic	5,000	Q	Ð	Q	Q
Barium	100,000	QN	9	9	280
Cadmium	1,000	2	QN	9	QN
Chromium	5,000	QN	Q	<u>Q</u>	Q
Lead	5,000	QN	QN	QN	Q
Mercury	200.0	QN	QN	Q	QN
Selenium	1,000	QN	Q	QN	QN
Silver	5,000	ND	9	QN	QN
PCBs ²	mg/Kg				
Total - PCBs	50	ND	Ð	Q	QN
MISC. PARAMETERS (units)					
Reactivity Sulfide (mg/kg)	500	ND	Q	Q	QN
Reactivity Cyanide (mg/kg)	250	ND	QN	QN	QN
pH (SU)	2-12.5	8.5	7.2	7.7	7.5
Ignitability	>140 °F	Negative	Negative	Negative	Negative
Paint Filter	NS	Negative	Negative	Negative	Negative
IPHC Diesel Range Organics (mg/kg)	SN	QN	QN	QN	38
IPHC Gasoiline Range Organics (mg/kg)	NS	QN	QN	ND	QN

Notes:

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

SU = Standard unit

^{&#}x27;Sample prepared using Total Characteristic Leaching Procedure (TCLP)

² Sample analyzed using SW-846 8082A [gas chromatography /electron capture detection (GC/ECD)]

NS = No Standard

mg/Kg = milligram per kilogram

ug/L = microgram per liter

ug/Kg = microgram per kilogram °F = Degrees Fahrenheit

Shaded = Concentration exceeds 6 NYCRR Part 371 and RCRA Toxicity Characteristic Regulatory Levels for Hazardous Waste.



New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Table 9. Summary of Groundwater Quality Compared to NYCDEP Sewer Effluent Parameters
Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area
Farragut Rd., E. 102nd St., etc., Brooklyn, New York

	NYCDEP	NYCDEP Limitations			Well ID and D	Well ID and Date Collected		
Parameter	to San	to Sanitary or	TWP-108-01	TWP-01 (SB-1)	TWP-02 (SB-3)	TWP-03 (SB-7)	TWP-04 (SB-4)	TWP-05 (SB-10)
	Combine	Combined Sewers	3/17/2014	3/31/2014	3/31/2014	4/1/2014	4/1/2014	4/1/2014
CBOD⁴	SN	mg/L	11	QN	ND	ND	ND	Q
Chloride4	SN	mg/L	280	350	59	760	77	300
Flash Point - Liquid/Solid	> 140	÷	>141	>141	>141	>141	>141	>141
Nitrate+Nitrite	NS	mg/L	QN	QN	ND	ND	S	8.7
Non-Polar Material ²	20	mg/L	S	QN	ND	ND	ND	ON
Ha	5-12	舌		7.4	6.9	9.2	7.5	7.2
Phenolics	SN	mg/L	Q	QN	ND	QN	ND	Q
Temperature	150	Fah.	AN	NA	NA	NA	NA	NA
TKN	SN	mg/L	7.36	14.2	7.28	7.36	2.89	2.69
Total Nitrogen	SN	mg/L	ΨV	AN	NA	NA	NA	AN
Total Solids*	SN	mg/L	1,600	2,300	2,200	2,400	420	006
Total Suspended Solids (TSS) ³	350	mg/L	410	069	1,500	009	7.6	QV
Cadmium (instantaneous/composite)	2 / 0.69	mg/L	Q	QN	ND	QN	QN	QN
Chromium Hexavalent (VI)	2	mg/L	Q	QN	ND	QN	QN	QN
Copper	2	mg/L	0.1	0.05	0.091	0.058	ND	2
Lead	2	mg/L	0.023	0.37	0.27	0.040	QN	S
Mercury	0.05	mg/L	QN	0.00034	0.00047	QN	Q	Q
Nickel	3	mg/L	0.062	0.016	0.083	0.052	Q	0.012
Zinc	2	mg/L	0.098	0.56	0.36	0.087	QN	Q
Benzene	134	ng/L	QN	QN	ON	QN	Q	2
Carbontetrachloride	SN	ug/L	QN	QN	QN	QN	Q	Q
Chloroform	NS	ng/L	QN	QN	QN	QN	2	QN
1,4 Dichlorobenzene	NS	ng/L	QN	QN	QN	Q	Q	9
Ethylbenzene	380	T/6n	QN	ND	QN	Q	9	2
Methyl-Tert-Butyl-Ether (MTBE)	99	ng/L	13	QN	QN	99.0	Q	Q
Naphthalene	47	T/6n	QN	QN	ND	Q	2	2
Tetrachloroethylene (Perc)	20	ng/L	QN	QN	ND	Q	9	2
Toluene	74	ng/L	QN	ND	Q	Q	Q	Q
1,2,4 Trichlorobenzene	SN	ng/L	QN	ND	ND	QV	Q	Ð
1,1,1 Trichloroethane	NS	ng/L	QN	ND	QN	Q	Q	9
Xylenes (Total)	74	ng/L	Q	ND	Q	2	2	2
PCBs (Total)	1	ng/L	QN	0.10	QN	Q	Q	2

Notes:

NS = No Standard/Not Sampled

NA = Not Analyzed

ND = Parlameter not detected above minimum detection limits (MDL) value reported in the MDL for that parameter. mg/L = militram per liter

ug/L = microgram per liter

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Shaded = Concentration exceeds NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (daily limit).

All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136. ² Analysis for non-polar materials was performed by USEPA method 1664.

² For discharge >= 10,000 galtons per day (gpd), the TSS limit is 350 mg/l. For discharge < 10,000 gpd, the limit is determined on a case by case basis.

⁴ Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids, and Total Nitrogen are required if proposed discharge >= 10,000 gpd.

³ For discharge >= 10,000 gpd, the TSS limit is 350 mg/l. For discharge < 10,000 gpd, the limit is determined on a case by case basis.



New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Table 10. Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Groundwater Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York

	WP-05 (SB-10)	4/1/2014	S	2
	TWP-108-01 TWP-01 (SB-1) TWP-02 (SB-3) TWP-03 (SB-7) TWP-04 (SB-4) TWP-05 (SB-10)	4/1/2014	Ş	Q
Date Collected	TWP-03 (SB-7)	4/1/2014	S	Q.
Sample ID and Date Collected	TWP-02 (SB-3)	3/31/2014	Q	Q
	TWP-01 (SB-1)	3/31/2014	2	QV
	TWP-108-01	3/17/2014	11	11
NYS Ambient Water	Standards/Guidance	Values	10	NS
NYCDEP Limitations	to Sanitary or Combined Sewers		50	SN
	TCL VOC		Methyl-tert-butyl ether	Total VOCs

Notes:

All concentrations are reported in parts per billion (ppb or ug/L)
NYS Ambient Water Quality Standards/Guidance Values for GA Waterbody Classifications

NS = No Standard/Not Sampled

NA = Not Analyzed

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

Shaded = Concentration exceeds NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (daily limit) Bold = Concentration exceeds NYS Ambient Water Quality Standards/Guidance Values ¹ All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136.



New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Table 11. Summary of Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) Detected in Groundwater Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York

tyOC¹ to Sanitary or Combined Sewers Standards/Guidance TWP-108-01 Cyl)phthalate NS 5 ND salate NS 50 ND NS 50 ND NS 50 ND NS 50 ND NS 1.5 ND NS 50 ND		NYCDEP Limitations	NYS Ambient Water			Sample ID and	Sample ID and Date Collected		
Values 3/17/2014 cyl)phthalate NS 5 ND nalate NS 50 ND s NS 50 ND s NS 1.5 ND s NS 50 ND NS 50 ND	TCL SVOC1	to Sanitary or	Quality Standards/Guidance	TWP-108-01	TWP-01 (SB-1)	TWP-01 (SB-1) TWP-02 (SB-3)	TWP-03 (SB-7) TWP-04 (SB-4) TWP-05 (SB-10)	TWP-04 (SB-4)	TWP-05 (SB-10)
vJ)phthalate NS 5 ND ralate NS 50 ND NS 50 ND NS 1.5 ND NS 50 ND NS 50 ND NS 50 ND			. Nalues	3/17/2014	3/31/2014	3/31/2014	4/1/2014	4/1/2014	4/1/2014
NS 50 ND NS 50 ND ND NS 50 ND ND ND NS 50 ND ND NS 50 ND ND NS 50	-Ethylhexyl)phthalate	NS	5	9	13	14	QN	ND	13
NS 50 50 NS 1.5 S0 NS 50	hitylinhthalate	SZ	50	2	S	0.73	QN	QN	Q
NS 1.5	anthene	SZ	50	Q	QN	3.3	Q	QN	QN
NS SN	anthrene	SN	1.5	2	QN	2.4	QN	QN	QN
	90	NS	50	Q.	Q	2.7	QN	QN	QN
2	SOOCS	NS	SN	QN	13	23.13	QN	ND	13

Notes:

All concentrations are reported in parts per billion (ppb or ug/L)

NYS Ambient Water Quality Standards/Guidance Values for GA Waterbody Classifications

NS = No Standard/Not Sampled

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

Shaded = Concentration exceeds NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (daily limit)

Bold = Concentration exceeds NYS Ambient Water Quality Standards/Guidance Values

1 All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136.

LiRo Engineers, Inc. DDC CAPIS ID No.: SE855



New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Table 12. Summary of Target Analyte List (TAL) Total Metals Detected in Groundwater Farragut Rd., E. 102nd St., etc., Brooklyn, New York

Target Analyte List	NYCDEP Limitations	NYS Ambient Water			Sample ID and	Sample ID and Date Collected		
Metal	to Sanitary or Combined Sewers	Standards/Guidance	TWP-108-01	TWP-01 (SB-1)	TWP-02 (SB-3)	TWP-03 (SB-7)	TWP-04 (SB-4)	TWP-05 (SB-10)
		Aaines	3/17/2014	3/31/2014	3/31/2014	4/1/2014	4/1/2014	4/1/2014
Aluminum	SN	NS	7,400	19,000	240,000	43,000	210	QN
Antimony	SN	3	ND	2.6	Q	Q	QN	QN
Arsenic	NS	25	2.4	12	58	19	QV	Q
Barium	SN	1,000	140	910	840	200	QN	96
Beryllium	NS	3	ND	QN	7.7	1.9	Q	Ð
Cadmium	2 / 0.69	2.7	ON	QN	QN	QN	Q	Q.
Calcium Metal	NS	NS	140,000	280,000	87,000	130,000	86,000	83,000
Chromium	5,000	50	52	QN	009	150	Q	Ð
Cobalt	SN	NS	5.3	5.9	75	26	6.1	2.1
Copper	5,000	200	29	26	380	91	QN	QN
Iron	SN	300	20,000	33,000	220,000	78,000	740	Q
Lead	2,000	25	20	270	590	57	ON	QN
Magnesium	SN	35,000	34,000	33,000	44,000	22,000	16,000	12,000
Manganese	NS	300	1,500	1,400	2,200	1,600	1,000	380
Mercury	NS	0.0007	ND	QN	0.89	9	Q	Q
Nickel	3,000	100	30	QN	310	78	QN	S
Potassium	SN	SN	20,000	24,000	15,000	13,000	7,000	006'9
Selenium	NS	10	ND	QN	19	2	QN	QN
Sodium	NS	20,000	200,000	250,000	29,000	490,000	18,000	170,000
Vanadium	NS	SN	43	QN	560	100	QN	Q
Zinc	5,000	2,000	51	550	850	140	QN	QV

lotes:

All concentrations are reported in parts per billion (ppb or ug/L)

NYS Ambient Water Quality Standards/Guidance Values for GA Waterbody Classifications

NS = No Standard/Not Sampled

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

Shaded = Concentration exceeds NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (daily limit)

Bold = Concentration exceeds NYS Ambient Water Quality Standards/Guidance Values

¹ All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136.



New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooktyn, NY

Table 13. Summary of Target Analyte List (TAL) Dissolved Metals Detected in Groundwater Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York

Topology A	NYCDEP Limitations	NYS Ambient Water			Sample ID and	Sample ID and Date Collected		
Metal	to Sanitary or Combined Sewers	Standards/Guidance	TWP-108-01	TWP-01 (SB-1)	TWP-02 (SB-3)	TWP-03 (SB-7)	TWP-04 (SB-4)	TWP-05 (SB-10)
		Nalues	3/17/2014	3/31/2014	3/31/2014	4/1/2014	4/1/2014	4/1/2014
Aluminum	SN	SN	Q	QN	ND	QN	DN	S
Antimony	SN	3	Q	3.6	QN	QN	QN	ND
Arsenic	NS	25	2	7.9	2.7	QN	QN	QN
Barium	NS	1,000	110	280	ND	7.2	QN	91
Cadmium	2 / 0.69	2.7	₽	QN	QN	QN	ND	Q
Calcium Metal	NS	SN	160,000	220,000	83,000	140,000	85,000	79,000
Chromium	5,000	20	Q	QN	ND	QN	QN	Q
Cobalt	NS	NS	2	QN	7.1	7.2	5.1	2.2
Copper	5,000	200	9	QN	ND	QN	QN	ND
Iron	NS	300	3,900	6,500	16,000	12,000	330	Q
Lead	2,000	25	Q	QN	ON	QN	QN	Q
Magnesium	NS	35,000	35,000	40,000	14,000	15,000	16,000	12,000
Manganese	NS	300	1,600	1,100	1,100	1,200	1,000	360
Mercury	SN	2000:0	ND	ND	ND	Q	Q	Q
Nickel	3,000	100	QN	ND	ND	Q	QN	QN
Potassium	NS	SN	20,000	20,000	5,800	12,000	7,000	6,500
Selenium	SN	10	QN	QN	ND	ND	QN	Q
Silver	SN	50	QN	QN	ND	ND	QN	Q
Sodium	NS	20,000	210,000	210,000	32,000	520,000	18,000	160,000
Thallium	NS	0.5	ND	ND	ND	QN	QN	9
Vanadium	SN	SN	ND	ND	ON	Q	Q	Q
Zinc	5,000	2,000	QN	ND	QN	QN	QN	9

Notes:

All concentrations are reported in parts per billion (ppb or ug/L)

NYS Ambient Water Quality Standards/Guidance Values for GA Waterbody Classifications

NS = No Standard/Not Sampled

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

Shaded = Concentration exceeds NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (daily limit) Bold = Concentration exceeds NYS Ambient Water Quality Standards/Guidance Values

1 All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136.

LiRo Engineers, Inc. DDC CAPIS ID No.: SE855



5/8/2014 Work Order Letter No. 9148-LIRO-2-8611





New York City Department of Design and Construction Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Phase II Subsurface Corridor Investigation Report Farragut Rd., E. 102nd St., etc. - Brooklyn, NY

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Table 14. Summary of Pesticides Detected in Groundwater Farragut Rd., E. 102nd St., etc., Brooklyn, New York

•	NYCDEP Limitations	NYS Ambient Water			Sample ID and	Sample ID and Date Collected			
'esticdes'	to Sanitary or Combined Sewers	idance	TWP-108-01	TWP-108-01 TWP-01 (SB-1) TWP-02 (SB-3) TWP-03 (SB-7) TWP-04 (SB-4) TWP-05 (SB-10)	TWP-02 (SB-3)	TWP-03 (SB-7)	TWP-04 (SB-4)	TWP-05 (SB-10)	
		Sanna	3/17/2014	3/31/2014	3/34/2014	N FOCI FIN	41410044	7 700/7/7	
900		014			40112014	1	4/1/2014	4/1/2014	
223	NS NS	SS	ON N	2	S	S	CN		

Notes:

All concentrations are reported in parts per billion (ppb or ug/L)

NYS Ambient Water Quality Standards/Guidance Values for GA Waterbody Classifications

NS = No Standard/Not Sampled

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

Straded = Concentration exceeds NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (daily limit) **Bold** = Concentration exceeds NYS Ambient Water Quality Standards/Guidance Values ¹ All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136.

Work Order Letter No. 9148-LIRO-2-8611



Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY New York City Department of Design and Construction

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Table 15. Summary of Herbicides Detected in Groundwater Farragut Rd., E. 102nd St., etc., Brooklyn, New York

	NYCDEP Limitations	NYS Ambient Water	i		Sample ID and	Sample ID and Date Collected		
Herbicdes ¹	to Sanitary or	Standards/Guidance	TWP-108-01	TWP-108-01 TWP-01 (SB-1) TWP-02 (SB-3) TWP-03 (SB-7) TWP-04 (SB-4) TWP-05 (SB-10)	TWP-02 (SB-3)	TWP-03 (SB-7)	TWP-04 (SB-4)	TWP-05 (SB-10)
		Values	3/17/2014	3/31/2014	3/31/2014	4/1/2014	4/1/2014	4/1/2014
Total Herbicides	NS	NS	Q	QN	QN	QN	Q	9

All concentrations are reported in parts per billion (ppb or ug/L)
NYS Ambient Water Quality Standards/Guidance Values for GA Waterbody Classifications

NS = No Standard/Not Sampled

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

Shaded = Concentration exceeds NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (daily limit)

Bold = Concentration exceeds NYS Ambient Water Quality Standards/Guidance Values

1 All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136.

LIRo Engineers, Inc. DDC CAPIS ID No.: SE855

Page 1 of 1

Work Order Letter No. 9148-LIRO-2-8611



Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report

Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Table 16. Summary of Polychlorinated Biphenyls (PCBs) Detected in Groundwater Farragut Rd., E. 102nd St., etc., Brooklyn, New York

	NYCDEP Limitations	NYS Ambient Water			Sample ID and Date Collected	Date Collected		
12		Quality						
PCBS	to Sanitary or Combined Sewers	Standards/Guidance	TWP-108-01	TWP-108-01 TWP-01 (SB-1) TWP-02 (SB-3) TWP-03 (SB-7) TWP-04 (SB-4) TWP-05 (SB-10)	TWP-02 (SB-3)	TWP-03 (SB-7)	TWP-04 (SB-4)	TWP-05 (SB-10)
		Sanie	3/17/2014	3/31/2014	3/31/2014	4/1/2014	41412014	A141204A
Total PCRs		000	02	4				11071
100		60.0	Ş	2	2		2	_
							•	2

Notes:

All concentrations are reported in parts per billion (ppb or ug/L)

NYS Ambient Water Quali NYS Ambient Water Quality Standards/Guidance Values for GA Waterbody Classifications

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

Shaded = Concentration exceeds NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (daily limit) Bold = Concentration exceeds NYS Ambient Water Quality Standards/Guidance Values

¹ All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136.

² Analysis for PCBs was performed according to EPA method 608 with method detection limit =<65 parts per trillion. Analysis for PCBs is required if discharge =>10,000 gallons per day (gpd) and duration of discharge > 10 days. Work Order Letter No. 9148-LIRO-2-8611



Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. - Brooklyn, NY New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report

Table 17. Summary of Quality Assurance/Quality Control Data Phase II Subsurface Corridor Investigation for the Storm and Combined Sewers and Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc., Brooklyn, New York

		Sample ID & D	Sample ID & Date Submitted	
Parameters	TRIP BLANK-01	TRIP BLANK-02	TRIP BLANK-03	Field Blank U
-	3/31/2014	4/1/2014	4/3/2014	4/1/2014
TCL VOCs (ug/L)	QN	ND	ND	QN
SVOCs (ug/L)	ΑN	NA	NA	QN
TAL Metals (ug/L)	VΑ	NA	NA	QN
Dissolved Metals (ug/L)	VΑ	NA	NA	QN
Pesticides (ug/L)	ΝΑ	AN	NA	QN
Herbicides (ug/L)	NA	NA	ΑN	QN
PCBs (ug/L)	NA	NA	NA	QN

Notes:

ft bgs = feet below grade surface

ug/L = microgram per liter NA = Not analyzed ND = Compound not detected above method detection limit (see attached lab report for mdl's)

LIRo Engineers, Inc. DDC CAPIS ID No.: SE855

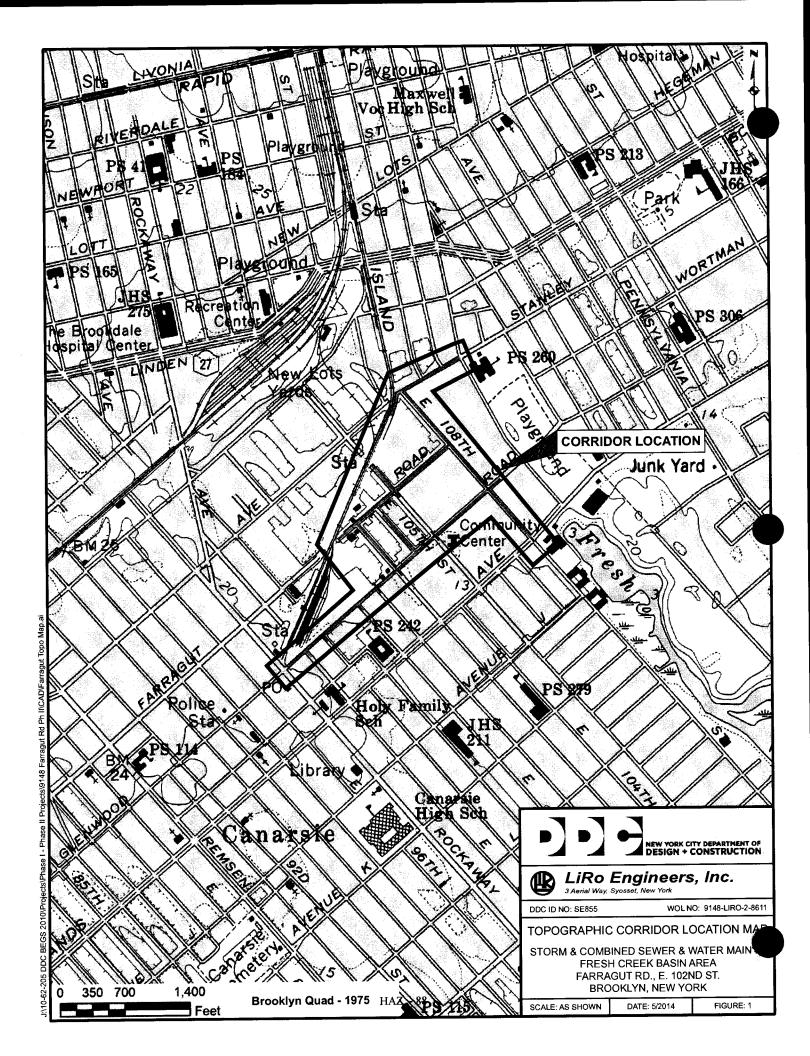
Page 1 of 1

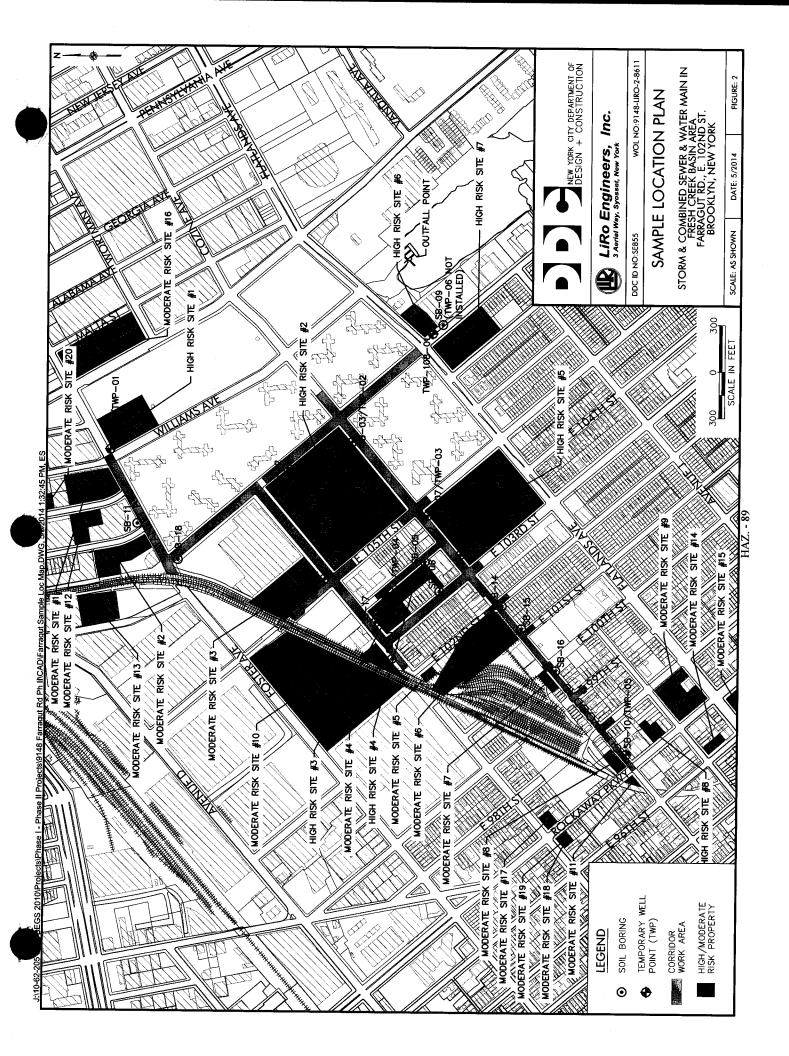
5/8/2014 Work Order Letter No. 9148-LIRO-2-8612

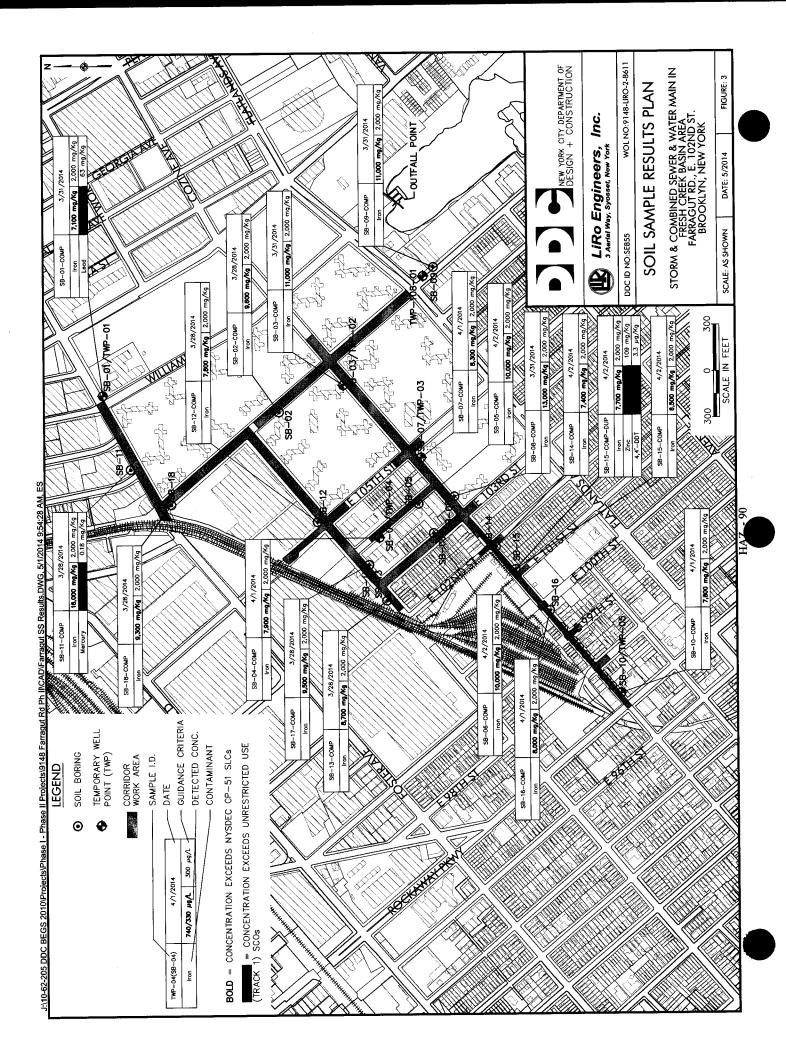


New York City Department of Design and Construction Final Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. – Brooklyn, NY

FIGURE 1 – TOPOGRAPHIC CORRIDOR LOCATION MAP FIGURE 2 – SAMPLE LOCATION PLAN FIGURE 3 - SOIL SAMPLE RESULTS PLAN FIGURE 4 - GROUNDWATER SAMPLE RESULTS PLAN





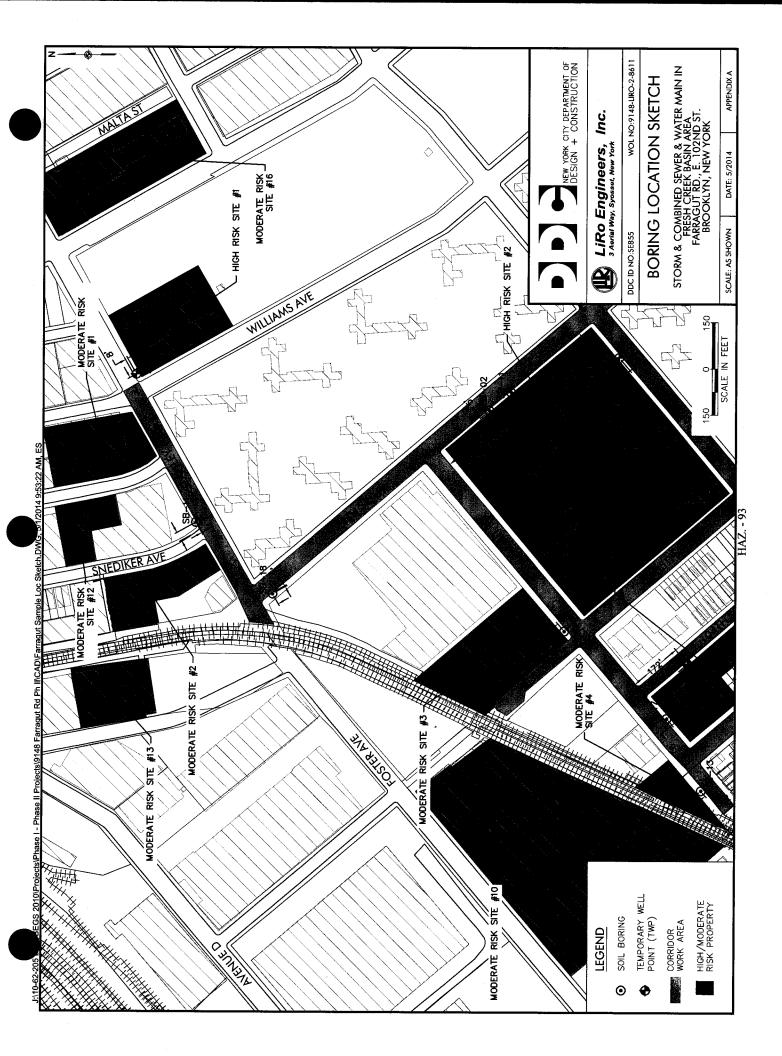


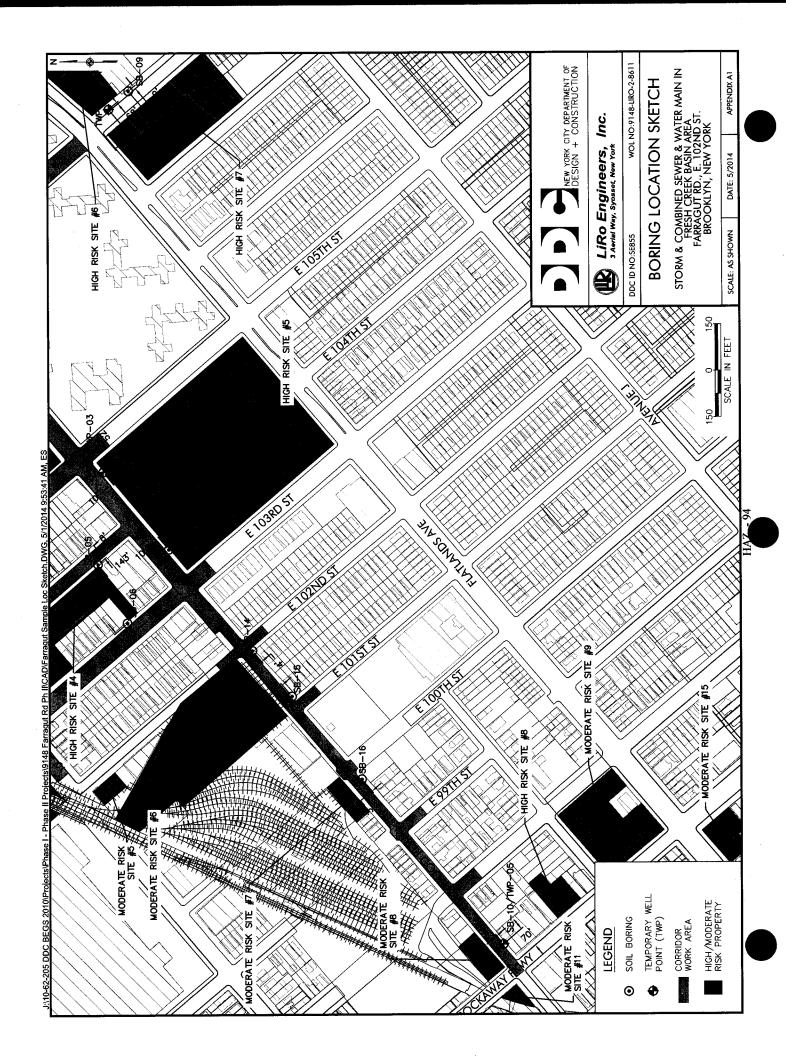
z						COTY DEPARTMENT OF + CONSTRUCTION	Ss, Inc.	R MAIN IN
	350 mg/L 5 µg/L		"	100 µg/L 10 µg/L 10 µg/L 10 µg/L	THE POINT	NEW YORK CITY DEF	work Inc.	FE & WATEI ASIN AREA 102ND ST EW YORK
	3/31/2014	24 μg/L 38 μg/L 77 μg/L 800 μg/L 380 μg/L	222.000/16,000 µg/L 560 µg/L 44,000 µg/L 2.200/1,100 µg/L	310 µg/L 19 µg/L 28,000/32,000 µg/L	COUTFAL	NEW	LiRo Engineers, 3 Aeiral Way, Synssel, New York D.SE855 WO NDWATER SAMPLE	ABINED SEWER SH CREEK BASII AGUT RD., E. 14 OOKLYN, NEW
A DESCRIPTION OF THE PROPERTY	TWP-02(SB-03) TSS Bis(2-eth/hex/v)ohthalate	 	C .	Nickel Selenium Sodium	60-98-08		JRO END ENGINEERS, Inc. 3 Acrial Way, Syosset, New York DDC ID NO.SE855 WOLNO:918-JRO-2-8611 GROUNDWATER SAMPLE RESULTS PLAN	STORM & COMBINED SEWER & WATER MAIN IN FRESH CREEK BASIN AREA FARRAGUT RD., E. 102ND ST. BROOKLYN, NEW YORK SCALE. AS SHOWN DATE: 5/2014 HGURE. 4
IO-dwb-		SAJE	E Control				300 µg/L 20,000 µg/L	300 FEET
6.8			88		3/17/204	11 µg/L 52 µg/L 20,000/3,900 µg/L	1,500,1,500 ps/. 200,000/210,000 ps/.	300 0 SCALE IN
	1 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8				0-801-801-801-801-801-801-801-801-801-80	TSS WIBE Chromium (VI) Iron	Manganese	14 5 µg/L 300 µg/L 300 µg/L
31/2014	40,000 µg/l. 1,400/1,100 µg/l. 280,000/210,000 µg/l. 280,000/210,000 µg/l.							13 pg/L 17/2014 180/380 pg/L 170,000/180,000
								TWP-05(58-10) TWP-05(58-10) Bis(2-etrylhexy)phtholate Manganese Sodium
TWP-01(SB TSS (2-ethylhexyl) Antimon Iron Iron	Manganese Manganese Sodium				300 µg/L 300 µg/L 300 µg/L	350 mg/L 50 μg/L 300 μg/L 25 μg/L	300 µg/L 20,000 µg/L	Black
LEGEND EGS 2010/Projects/Phase I. Phase II Projects/Phase I. Phase II Projects/Phase I. Phase II Projects/Phase II Projects/Phase II Projects/Phase II Phase II Projects/Phase II Phase DATE GUIDANCE CRITERIA DETECTED CONC.	CONCENTRATION EXCEEDS NYCDEP LIMITATIONS FOR TO SANITARY OR COMBINED SEWERS (DAILY LIMITS) ONCENTRATION EXCEEDS NYS AMBIENT WATER TANDARDS/GUIDANCE VALUES.			1,000/1,000 Mg/L	150 µg/L 78,000/12,000 µg/L 57 µg/L	1,800.1/200 Jg./.		
SC TE Prince III		SEEDS NYCDER IBINED SEWER DS NYS AMBIE VALUES.			TWP-04(SB-04) Iron Manganese Manganese TWP-03(SB-07)	TSS Chromlum (M) Iron Lead	Manganese	
A ZUTUN-TDIECES with	4/1/2014 740/330 µg/L 300 µg/L	EFFLUENT TO SANITARY OR COMBINED SEWERS (DAILY LIBOLD = CONCENTRATION EXCEEDS NYS AMBIENT WATER QUALITY STANDARDS/GUIDANCE VALUES.	A LANGE OF THE PARTY OF THE PAR					
2057	TWP-04(SB-04)	EFFLUENT TO SAN BOLD = CONCENT QUALITY STANDARI						
20-017.0	0-4ML	BOLD = QUALITY						



New York City Department of Design and Construction Final Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. – Brooklyn, NY

APPENDIX A BORING LOCATION SKETCHES







New York City Department of Design and Construction Final Phase II Subsurface Corridor Investigation Report Storm & Combined Sewers & Water Main in Fresh Creek Basin Area Farragut Rd., E. 102nd St., etc. – Brooklyn, NY

APPENDIX B GEOLOGIC BORING LOGS AND TEMPORARY WELL CONSTRUCTION DETAILS

(IIR				LiRo	Engi	neers	, Inc.		TEST BOR	ING LC	G	
							,		LOCATION:	SB-01 /	TWP-0	1
PROJECT:	Storm &	Combine	d Sew	ers & Wate	rmain in Fres	sh Creek Bas	in Area, Farragut R	d.	SHEET:	1 of	1	
CLIENT:				sign and Co					JOB NO.:	SE855		
BORING C	ONTRAC	TOR:		Associated	Environmen	ital Services,	Inc.		LOCATION:	See Cor	mments	3
GROUNDY	VATER:	10				CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LEV	EL	TYPE	TYPE		Macro Core	5'	DATE STARTED:	March 2	5. 2014	
03/31/14		10		NA	DIA.		2"		DATE FINISHED:	March 3		
					WT.	<u> </u>	NA		DRILLER:	Marty A		
					FALL		NA		GEOLOGIST:	Eva Jak		
									REVIEWED BY:	W. Czel		
			SAN	IPLE	•			DESCRIF		au		
DEPTH		"S"	"N"	BLOWS	REC%		CONSISTENCY	1	MATERIAL	USCS		REMARKS
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION			
1221		140.	110.	TERU	KQD70	OULUK	TIMEDIE		DEGGENT TION		-	
1					ľ							
-	1++++-				1						1	
]				_	1		Boring w	as cleared to a depth of 6 ft. bgs			
					ľ			using a v	acuum excavator and air knife		1	
	###				NA NA	Dark	Medium	combina			Dry	PID 0.0 ppm
					1	Brown		0'-0.5' Co	oncrete edium to coarse sand, with gravel, re	ا ا	´]
	╫╪┼┼				1			brick, Fill		"l		
5										l		
	####				1					FILL		
				l					·			
	T ####											
	╟┼┼┼┼				1							
											<u>.</u> .	
	 				30%	Brown	Hard	6'-10' Fin	e sand, with gravel, red brick, Fill		Dry to Wet	PID 0.0 ppm
		SB-01- 9.5'-10'								İ	***	
	 				1							
10										1		
	100000											
					1					SM		
										0,,,,		
	(1) (1) (1)				4	Dia ali da		10'-12' F	ne sand, trace clay		4	
	XXXX				60%	Black to Grey	Hard	12'-13' P		PT	Sat.	PID 0.0 ppm
	~~~~				1	0.0,		13'-15' F	ne sand, trace silt		1	
					1							
15												
								1		1		I
					4 .							
					1					SM		
					1						l _	l
					90%	Brown	Medium	15'-20' F	ne to medium sand		Sat.	PID 0.0 ppm
	(0.000)				1					}	1	
					_							
					1						1	
20						1			END OF BOSINS		<u> </u>	
									END OF BORING			
COMMENT	rs:								PROJECT NO.:		1	0-62-205-180
							I "Moderate" risk sit		BORING NO.:		SE	3-01 / TWP-01
							northeast of William					
							es were classified i). Groundwater was					
							a depth of 20 ft. bg	_				
		soil san	iples w	rere collecte	ed and sent f	or laboratory	analysis, a grab sa	mple (SB-				
							er level and a com					
							A portion of the com					
						zation sample	WC-01. A ground	water	•			

MD	<u> </u>			T .D	F	•			TEST BOI	EING I ()G	
1-K				LiKo	Engl	ineers	, Inc.		1201 001	VIIIO EC		
									LOCATION:	SB-02		
	: Storm &	Combin	ed Sew	ers & Wate	rmain in Fre	sh Creek Bas	in Area, Farragut F	₹d.	SHEET:	1 of	1	
CLIENT:			t of De	sign and Co	nstruction				JOB NO.:	SE855		
BORING C	ONTRAC	TOR:		Associated	Environme	ntal Services,	Inc.		LOCATION:	See Cor	mment	3
GROUND	NATER:	10	ı			CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LE\	/EL	TYPE	TYPE		Macro Core	5'	DATE STARTED:	March 2	4, 201	4
03/28/14		10	1	NA	DIA.		2"		DATE FINISHED:	March 2	8, 2014	1
					WT.		NA		DRILLER:	Marty A	moscat	0
					FALL		. NA		GEOLOGIST:	Eva Jak	ubows	ka
									REVIEWED BY:	W. Czel	usta	
			SAN	IPLE				DESCRIF	PTION			
DEPTH FEET	STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC%	COLOR	CONSISTENCY HARDNESS		MATERIAL DESCRIPTION	USCS		REMARKS
						1						T
11]										
		1										
		1			ł			_	as cleared to a depth of 6 ft. bgs			
	3000000							using a v	acuum excavator and air knife			
		1			NA NA	Brown	Medium	0-0.5' Co		SP	Dry	PID 0.0 ppm
									edium sand, some gravel			
	1				1				lium sand			
5	1											
						1 1						
	(1,1,1,1,1,1,	1				 						
·		ĺ								1		
					30%	Red Brown	Madicus	01.401.51	- A		Dry to	
		SB-02-			30%	Red Blowin	Medium	10-10 FIN	e to medium sand, trace clay		Wet	PID 0.0 ppm
		9.5'-10'										
10												
- 10						 				⊣ '	<u> </u>	
						1		1		SM		
					1							
					50%	Red Brown	Medium	10'-15' M	edium to coarse sand		Sat.	PID 0.0 ppm
								1.0 .0	odiam to course sand		Jai.	r ib o.o ppin
			H									
15												
						1		 		\dashv		——————————————————————————————————————
]						
					90%	Red Brown	Medium	15'-20' C	parse sand	SP	Sat.	PID 0.0 ppm
			 									
								1				
								1				
20	18:8:8:8:8							<u> </u>				
									END OF BORING			
COMMENT	S:								PROJECT NO.:		10	-62-205-9145
		Advance	ad in 41-	o violaite - *	- :- « احتاله	ita Na O	lanatad E	104	BORING NO.:		-	\$B-02
		Advance Street 2	ea in th	e vicinity of	High" risk s	Site No. 2 and	located on East 10 feet southwest of	18th Fast				
		108th St	treet. S	oil samples	were classif	fied in the field	using the Unified	Soil				
		Classific	ation S	ystem (USC	S). Ground	water was er	countered at 10 ft.	bgs. The				
		boring w	/as driv	en to a dep	th of 20 ft. b	gs. Two (2) so	oil samples were co	ollected_				j
		<u>aแบ sen</u> iust abก	ve the	roundwate	iysis, a grat r level and a	composite es	02-9,5'-10') from thample (SB-02-COM	ne area				į
							ple was used for w					
				sample W								ſ

1R			_	LiRo	Engi	neers	. Inc.		TEST BO	RING LO	G	
							,		LOCATION:	SB-03 /	TWP-0	2
PROJECT:	Storm & 0	Combine	d Sew	ers & Wate	ermain in Fres	h Creek Bas	sin Area, Farragut R	ld.	SHEET:	1 of	1	
					onstruction				JOB NO.:	SE855		
BORING C					d Environmen	tal Services,	Inc.		LOCATION:	See Cor	nments	
GROUNDW	VATER:	10	-			CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LEV	EL	TYPE	TYPE		Macro Core	5'	DATE STARTED:	March 2	4, 2014	
03/31/14		10		NA	DIA.		2"		DATE FINISHED:	March 3	1, 2014	
					WT.		NA		DRILLER:	Marty A	moscat	0
					FALL		NA		GEOLOGIST:	Eva Jak	ubowsl	a
									REVIEWED BY:	W. Czel	usta	*****
			SAN	IPLE				DESCRI	PTION			
DEPTH		"S"	"N"	BLOWS	REC%]	CONSISTENCY	1	MATERIAL	USCS		REMARKS
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION			
5					NA	Brown	Soft	using a v combina 0'-0.5' C		SM	Dry	PID 0.0 ppm
10		SB-03- 9.5'-10'			50%	Brown	Hard	6'-8' Fine 8-10' Fir	e sand ne sand, trace clay	SP	Dry to Wet	PID 0.0 ppm
15			t L		50%	Light Brown	Hard	10'-15' F	ine to medium sand, trace clay	SM	Sat.	PID 0.0 ppm
20					100%	Brown	Medium	15'-20' N	Medium to coarse sand		Sat.	PID 0.0 ppm
20	<u> </u>		<u> </u>			1	<u> </u>		END OF BORING			•
COMMENT	TS:	145 fee Soil sar System driven t laborate ground	nples (USC to a de ory and water	nwest of Ea were class S). Ground opth of 20 ft alysis, a gradevel and a	ast 108th Stre ified in the fiel lwater was er bgs. Two (2) ab sample (SI composite sa	et and 9 feet Id using the Uncountered a) soil sample: B-03-9.5'-10' Imple (SB-03	nd located on Glenw northwest of Glenw Juffied Soil Classificat at 10 ft. bgs. The bo s were collected an from the area just B-COMP) of the enti	vood Road cation ring was d sent for above the ire boring				10-62-205-18 B-03 / TWP-0
		ground length.	water A port WC-0	evel and a ion of the c 2. A groun	composite sa omposite san	imple (SB-03	B-COMP) of the enti- ed for waste characted from a temporal	re boring terization				

IR				LiRo	Eng	ineers	, Inc.		TEST BO	RING LC	G	
	7				0	,			LOCATION:	SB-04		
PROJECT:	: Storm & 0	Combine	ed Sew	ers & Wate	rmain in Fre	sh Creek Basi	in Area, Farragut F	₹d.	SHEET:	1 of	1	~ .
CLIENT:				sign and Co					JOB NO.:	SE855		-
BORING C	ONTRAC	TOR:		Associated	Environme	ntal Services.	Inc.		LOCATION:	See Cor	nments	
GROUNDY		10				CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LEV		TYPE	TYPE	U/LO.	Macro Core	5'	DATE STARTED:	March 2	7 201/	
04/01/14	111111	10		NA NA	DIA.		2"	+ 	DATE STARTED:	April 1, 2		
0-70171-1				13/3	WT.	1	NA	+	DRILLER:	Marty A		
	1				FALL	+	NA NA	+	GEOLOGIST:	Eva Jak	•	
<u> </u>					TALL	<u>i </u>	11/4	<u> </u>	REVIEWED BY:	W. Czel		ча
-	\vdash		CAN	IDI F				DECODIE		W. CZEI	usia	
DEDT		11011		IPLE		- 		DESCRIP		┥	l .	
DEPTH		"S"	"N"	BLOWS	REC%	- !	CONSISTENCY		MATERIAL	USCS		REMARKS
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION			
5					- NA	Dark Red Brown	Medium	using a v combinat 0'-0.5' Co 0.5-2' Gr		FILL	Dry	PID 0.0 ppm
10		SB-04- 9.5'-10'			30%	Red Brown	Medium	6'-10' Fin	e sand, with gravel	SP	Dry to Wet	PID 0.0 ppm
15					60%	Red Brown	Medium	10'-15' M	ledium to coarse sand	SM	Sat.	PID 0.0 ppm
20					90%	Red Brown	Medium	15'-20' C	oarse sand	SP	Sat.	PID 0.0 ppm
									END OF BORING			
COMMENT	· ·								DDO IECT NO .			0 60 005 400
COMMENT		104th Si east 104 Classific boring wand sen just abo entire bo	treet, 1 4th Street on Section	72 feet sou eet. Soil sar System (US ven to a der coratory an groundwate ingth. A por n sample V	theast of Fa imples were of CS). Ground oth of 20 ft. ballysis, a gra ar level and a tion of the co VC-03. A gro	rragut Avenue classified in the dwater was er ogs. Two (2) se b sample (SB- a composite sam omposite sam oundwater sam	d 4 and located on a and 9 feet southwe e field using the Un countered at 10 ft oil samples were c 04-9.5'-10') from the ample (SB-04-CON ple was used for wanted and Blank) was sub-	East rest of nified Soil bgs. The ollected ne area MP) of the aste from a	PROJECT NO.: BORING NO.:		1	0-62-205-180 SB-04

11P	LiRo Engineers, Inc.								TEST BOR	ING LC	G	
				Lino	Lits	iteers	, 1110.		LOCATION:	SB-05		
PROJECT	Storm & (Combine	ed Sew	ers & Wate	rmain in Fre	sh Creek Basi	n Area, Farragut R	d.	SHEET:	1 of	1	
CLIENT:				sign and Co		on Orook Bao	in raida, rainagat r		JOB NO.:	SE855	•	
BORING C			0.000	_		ntal Services,	Inc.		LOCATION:	See Cor	nments	
ROUNDY		10				CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LEV	/FI	TYPE	TYPE		Macro Core	5'	DATE STARTED:	March 2	7. 2014	
04/02/14	111112	10		NA.	DIA.		2"	 	DATE FINISHED:	April 2, 2		'
04/02/14				14/1	WT.		NA	1	DRILLER:	Marty A		<u> </u>
					FALL		NA	1	GEOLOGIST:	Eva Jak		
					 			<u> </u>	REVIEWED BY:	W. Czel		
			SAN	/PLE		1		DESCRIF		T		
DEPTH		"S"	"N"	BLOWS	REC%		CONSISTENCY	1	MATERIAL	uscs		REMARKS
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION	****	i '	
FELT	IIII	NO.	NO.	PERU	KQD/0	COLOR	TIARDITESS	 	DESCRIPTION	+		
1												
	1####				7							
				<u> </u>	4				as cleared to a depth of 6 ft. bgs			
						Dark Dark			acuum excavator and air knife		l	
	1				- NA	Dark Red Brown	Medium	combina 0'-0.5' Co		FILL	Dry	PID 0.0 ppm
						l Biowiii			ne to medium sand, trace clay, red			
	17777				1			brick, gra	ivel, Fill			
5												
					1							
					<u> </u>							
			l							1		
			l		-							
		SB-05-			30%	Red Brown	Medium	6'-10' Fir	e sand, some gravel		Wet	PID 0.0 ppm
		9.5'-10'		1 1								
					1							1
10							,			_	<u> </u>	
										sм	1	
				<u> </u>							1	
					┥	Dark					l	DID 0.0
					60%	Brown to Red	Medium	10'-15' N	ledium to coarse sand, some gravel		Wet	PID 0.0 ppm
	10000000				1	Red						
15	*********					-		+			<u> </u>	
			ĺ		1							
					70%	Red Brown	Medium	15'-20' 0	oarse sand	SP	Sat	PID 0.0 ppm
						Lea Blowill	Wediaiii	113-20 0	oarse sariu	"	Oat.	0.0 pp
	Addici			\vdash	4						1	
20	800000											
	1,1,1,1,1,1,1,		<u> </u>	<u> </u>	1			1	END OF BORING		_	<u> </u>
							·		Tana			
OMMEN	'S :								PROJECT NO.:			10-62-205-180 SB 04
		Advanc	ed in t	he vicinity o	f "High" risk	site No. 4 and	l located on East 10	04th	BORING NO.:			SB-0
							foot southwest of]			
		Street.	Soil sa	mples were	classified in	the field usin	g the Unified Soil					
							ncountered at 10 ft		ł			
							oil samples were c -05-9.5'-10') from t					
							-05-9.5 - 10)					
							ple was used for w		l			
				on comple \		UNIDUSIE SAII	INIO TIGO DOGU IVI M		I			

IR				LiRo	Engi	ineers	, Inc.		TEST BO	ORING LO)G	
									LOCATION:	SB-06		
PROJECT	: Storm &	Combine	ed Sew	ers & Wate	rmain in Fre	sh Creek Bas	sin Area, Farragut F	₹d.	SHEET:	1 of	1	
CLIENT:	NYC Dep	partment	t of Des	sign and Co	nstruction				JOB NO.:	SE855		
BORING C	ONTRAC	TOR:		Associated	Environme	ntal Services,	Inc.		LOCATION:	See Co	nments	3
GROUNDY	NATER:	10				CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LE	/EL	TYPE	TYPE		Macro Core	5'	DATE STARTED:	March 2	7, 2014	1
04/02/14		10		NA	DIA.		2"		DATE FINISHED:	April 2,	2014	
					WT.		NA		DRILLER:	Marty A	moscat	0
	<u> </u>				FALL	<u> </u>	NA NA		GEOLOGIST:	Eva Jak		ka
	1			101 5	<u> </u>				REVIEWED BY:	W. Czel	usta	
DEPTH	<u> </u>	"S"		IPLE DI OWE	DECO:		CONCICTENCY	DESCRIF			l .	
FEET	STRATA	NO.	NO.	BLOWS PER 6"	REC%	COLOR	CONSISTENCY HARDNESS		MATERIAL DESCRIPTION	uscs	'	REMARKS
	THE STREET	110.	140.	TERU	KQD/8	COLOR	HARDIVESS		DESCRIPTION			
5					NA	Dark Red Brown	Medium	using a v	as cleared to a depth of 6 ft. bgs acuum excavator and air knife tion. sand, trace clay, trace gravel	SM	Dry	PID 0.0 ppm
10		SB-06- 9.5'-10'			- 20%	Brown	Medium	6'-10' Me	dium sand, some gravel	SP	Dry to Wet	PID 0.0 ppm
15	**************************************				90%	Light Brown / Black / Brown	Hard	11'-12' P	edium sand, some gravel eat ne sand, trace clay	PT	Sat.	PID 0.0 ppm
20					90%	Brown	Medium	15'-20' M	edium to coarse sand	SM	Sat.	PID 0.0 ppm
									END OF BORING	•		
COMMENT		Street, 1 Street. S Classific boring w and sen just abore entire bore	92 fee Soil san cation S vas driv t for lat ve the oring le	t northwest nples were system (US en to a dep poratory and groundwate	of Glenwood classified in CS). Ground th of 20 ft. be alysis, a grab ir level and a tion of the co	Road and 9 the field using water was er gs. Two (2) so sample (SB- composite sa	located on East 10 feet northeast of E g the Unified Soil ncountered at 10 ft bil samples were co 06-9.5'-10') from th ample (SB-06-CON ple was used for w	bgs. The ollected ne area	PROJECT NO.: BORING NO.:		1	0-62-205-180 SB-06

LiRo Engineers, Inc.								TEST BO	RING LO)G		
			-	Lino	Ligi	iicer 5	, 1110.		LOCATION:	SB-07 /	TWP-0:	3
OPO JECT.	Storm 9 (`ombine	d Con	oro 9 Moto	rmain in Erac	h Crook Bas	in Area, Farragut R	d	SHEET:	1 of		
				sign and Co		II CIEEK Das	mi Alea, i aliaguti	.u.	JOB NO.:	SE855	<u> </u>	
BORING C			OI Des		Environmen	tal Services	Inc		LOCATION:	See Cor	nments	
GROUNDY		10		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2	CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LEV	FI	TYPE	TYPE	07.07	Macro Core	5'	DATE STARTED:	March 2	5. 2014	ļ
04/01/14		10		NA.	DIA.		2"	1 -	DATE FINISHED:	April 1,		
04/01/14					WT.		NA	 	DRILLER:	Marty A		<u> </u>
					FALL		NA		GEOLOGIST:	Eva Jak		
									REVIEWED BY:	W. Czel	usta	
			SAN	IPLE	•			DESCRIP	PTION			
DEPTH		"S"	"N"	BLOWS	REC%		CONSISTENCY	T	MATERIAL	USCS	F	REMARKS
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION			
5					NA	Brown	Soft	using a v combina 0'-0.5' Co		FILL	Dry	PID 0.0 ppm
10		SB-07- 9.5'-10'	ļ		50%	Brown	Soft	6'-10' Me	edium to coarse sand	SM	Dry to Wet	PID 0.0 ppm
15					90%	Brown	Medium		ine sand, trace clay coarse sand		Sat.	PID 0.0 ppm
					100%	Brown	Medium	15'-20' C	Coarse sand	SP	Sat.	PID 0.0 ppm
20						<u> </u>	<u> </u>					<u> </u>
				-					END OF BORING			
COMMENT	rs:				1.00				PROJECT NO.:			10-62-205-18
		Glenwo Glenwo Classifi boring v and ser just abo entire b	od Ros od Ros cation was dri nt for la ove the oring l	ad, 52 feet ad. Soil sar System (U: iven to a de aboratory a groundwa ength. A po	southwest of mples were classes. Ground epth of 20 ft. b nalysis, a grater level and a portion of the co	East 105th S assified in the lwater was endos. Two (2) to sample (SE a composite composite sar	nd 5 and located on Street and 10 feet so e field using the Une encountered at 10 fis soil samples were of 3-07-9.5'-10') from the sample (SB-07-CO nple was used for we mple was collected	outheast of iffied Soil t. bgs. The collected he area MP) of the vaste			SI	3-07 / TWP-0:

CLIENT: NYC Department of Design and Construction JOB NO.: SE8 BORING CONTRACTOR: Associated Environmental Services, Inc. LOCATION: See GROUNDWATER: 10 CAS. SAMPLER TUBE GROUND ELEVATION: DATE TIME LEVEL TYPE Macro Core 5' DATE STARTED: Mar 03/31/14 10 NA DIA. 2" DATE FINISHED: Mar WT. NA DRILLER: Mar FALL NA GEOLOGIST: Eva	1 of 1	014 014
PROJECT: Storm & Combined Sewers & Watermain in Fresh Creek Basin Area, Farragut Rd. SHEET: CLIENT: NYC Department of Design and Construction JOB NO.: SE8 BORING CONTRACTOR: Associated Environmental Services, Inc. LOCATION: See GROUNDWATER: 10 CAS. SAMPLER TUBE GROUND ELEVATION: DATE STARTED: Man Macro Core 5' DATE STARTED: Man DATE FINISHED:	55 Commer ch 26, 20 ch 31, 20 y Amosc Jakubow	014 014
CLIENT: NYC Department of Design and Construction JOB NO.: SE8 BORING CONTRACTOR: Associated Environmental Services, Inc. LOCATION: See GROUNDWATER: 10 CAS. SAMPLER TUBE GROUND ELEVATION: DATE STARTED: Man 03/31/14 10 NA DIA. 2" DATE FINISHED: Man Mart NA DRILLER: Man Man MAIL NA GEOLOGIST: Eva REVIEWED BY: W. C DEPTH "S" "N" BLOWS REC% CONSISTENCY MATERIAL US FEET STRATA NO. NO. PER 6" RQD% COLOR HARDNESS DESCRIPTION US	55 Commer ch 26, 20 ch 31, 20 y Amosc Jakubow	014 014
BORING CONTRACTOR:	Commer ch 26, 20 ch 31, 20 y Amosc Jakubow	014 014
CAS. SAMPLER TUBE GROUND ELEVATION:	ch 26, 20 ch 31, 20 y Amosc Jakubow	014 014
DATE TIME LEVEL TYPE TYPE Macro Core 5' DATE STARTED: Mark Macro Core 10 NA DIA. 2" DATE FINISHED: Mark Macro Core 5' DATE STARTED: Mark Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core 5' DATE STARTED: Macro Core DATE STARTED: Macro	sh 31, 20 y Amosc Jakubow	014
03/31/14	sh 31, 20 y Amosc Jakubow	014
WT. NA DRILLER: Mark FALL NA GEOLOGIST: Evaluation	y Amosc Jakubow	
FALL NA GEOLOGIST: Eva REVIEWED BY: W. C	Jakubow	
REVIEWED BY: W. CO SAMPLE DEPTH STRATA NO. NO. PER 6" RQD% COLOR HARDNESS DESCRIPTION US PET STRATA NO. NO. PER 6" RQD% COLOR HARDNESS DESCRIPTION		
SAMPLE DESCRIPTION DEPTH STRATA NO. NO. PER 6" RQD% COLOR HARDNESS DESCRIPTION US REC% CONSISTENCY MATERIAL US RECM COLOR HARDNESS DESCRIPTION		
DEPTH "S" "N" BLOWS REC% CONSISTENCY MATERIAL US FEET STRATA NO. NO. PER 6" RQD% COLOR HARDNESS DESCRIPTION		· · · · · · · · · · · · · · · · · · ·
FEET STRATA NO. NO. PER 6" RQD% COLOR HARDNESS DESCRIPTION	۰,	REMARKS
	۱,	REMPIRES
	+	
		, <u> </u>
├ ──[॓]── ├ ──┼ ──┤		,
Boring was cleared to a depth of 6 ft. bgs		
using a vacuum excavator and air knife		
NA Dark Red Medium combination.	L Dr	ry PID 0.0 ppm
	<u> </u>	/
0.5-2' Fine to medium sand, some gravel, red brick, Fill		1
5 HIII		1
┝ ─°─┟┼┼┼ ┤ ┃ ├─├─ ┤ ┃ │		1
 		1
	1	
		1
		1
50% Brown Soft 6'-10' Fine to medium sand, trace silt SI	u Dry	
[:[:]:[:]: SB-08-	We We	
[1,1,1,1,1,1,1] 9.5:-10'		1
		l
10 (1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	——	
]
├ ──]
		ļ
10'-15' Coarse sand, some small round		1
50% Brown Medium pebbles Si	Sat	it. PID 0.0 ppm
		1
		I
		I
15		
 		I
		I
		1
100% Red Brown Medium 15'-20' medium to coarse sand SI	/I Sat	it. PID 0.0 ppm
		I
		I
		I
20 [3] [3] [4] [4]		
END OF BORING		
COMMENTS: PROJECT NO.:		10-62-205-180
BORING NO.:		SB-08
Advanced in the vicinity of "Moderate" risk site No. 5 and located on Glenwood		
Road, 101 feet northeast of East 103rd Street and 10 feet southeast of		
Glenwood Road. Soil samples were classified in the field using the Unified Soil Classification System (LISCS). Groundwater was encountered at 10 ft has The		
Classification System (USCS). Groundwater was encountered at 10 ft. bgs. The boring was driven to a depth of 20 ft. bgs. Two (2) soil samples were collected		
and sent for laboratory analysis, a grab sample (SB-08-9.5'-10') from the area		
and sent for laboratory analysis, a grab sample (SB-08-9.5'-10') from the area just above the groundwater level and a composite sample (SB-08-COMP) of the entire boring length. A portion of the composite sample was used for waste		

1R				LiRo	Engi	neers		TEST BO	RING LO	G		
							,		LOCATION:	SB-09		-
PROJECT:	Storm &	Combine	d Sew	ers & Wate	rmain in Fres	h Creek Bas	sin Area, Farragut R	d.	SHEET:	1 of	1	,
				ign and Co			, ,		JOB NO.:	SE855		
BORING C				 	Environmen	tal Services.	Inc.		LOCATION:	See Co	nments	3
GROUNDW		10				CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LEV	ΈI	TYPE	TYPE		Macro Core	5'	DATE STARTED:	March 2	4 2014	1
03/31/14		10		NA.	DIA.		2"	1	DATE FINISHED:	March 3		
00,01,11		- 10	_	177	WT.		NA NA		DRILLER:	Marty A		
					FALL		NA NA		GEOLOGIST:	Eva Jak		
					1755		1 101		REVIEWED BY:	W. Czel		Nu
			SAN	IPLE				DESCRIP		1	T T	
DEPTH	<u> </u>	"S"	"N"	BLOWS	REC%	<u> </u>	CONSISTENCY	T DESCRIP	MATERIAL	USCS		REMARKS
	CTDATA					001.00				0363		KEMAKKS
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS	ļ	DESCRIPTION		<u> </u>	
5					- NA	Brown	Soft to Medium	using a v combinat 0-0.5' Co		SP	Dry	PID 0.0 ppm
10		SB-09- 9.5'-10'			40%	Brown	Medium	6'-10' Me	dium to coarse sand, some grave		Wet	PID 0.0 ppm
15					0%			No recov	rery	SM		
20					10%	Brown	Medium	15'-20' M	edium to coarse sand		Sat.	PID 0.0 ppm
-20	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>				1	I	1	<u> </u>	END OF BORING			<u> </u>
									T			
COMMENT	S:								PROJECT NO.:		10	0-62-205-914
		108th S East 10 Classific boring v and ser just abouentire b	treet, 1 8th Str cation (was dri nt for la ove the oring le	56 feet so eet. Soil sa System (US ven to a de boratory ar groundwa	utheast of Fla imples were condi- GCS). Ground opth of 20 ft. bonalysis, a grater ler level and a portion of the condi-	tlands Avenu lassified in the water was egs. Two (2) so sample (SE a composite s	nd 7 and located on ue and 9 feet northe he field using the Ut encountered at 10 ft soil samples were c 8-09-9.5'-10') from the sample (SB-09-COM mple was used for v	ast of nified Soil bgs. The ollected ne area MP) of the	BORING NO.:			SB-09

IR.				LiRo	Engi	ineers		TEST BO	RING LO	G		
			-			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 2		LOCATION:	SB-10 /	TWP-0	5
PRO JECT	Storm & (Combine	nd Sew	ors & Wate	rmain in Fre	sh Crook Ras	in Area, Farragut F	54	SHEET:	1 of		
CLIENT:				ign and Co		SII OICEK Das	in Alea, i allaguti	····	JOB NO.:	SE855		
BORING C						ntal Services.	Inc		LOCATION:	See Coi	nmente	,
GROUNDY		15		Associated	LIMITOTINIE	CAS.	SAMPLER	TUBE	GROUND ELEVATION:	366 001	mineria	<u>'</u>
DATE	TIME	LEV	e.	TYPE	TYPE	CAS.	Macro Core	5'	DATE STARTED:	March 2	7 204	1
04/01/14	LHAIE	15		NA NA	DIA.	+	2"	+ -		March 2 April 1, 3		
04/01/14		13		IVA	WT.	-	NA NA	+	DATE FINISHED: DRILLER:			
	 				FALL	 	NA NA	+	GEOLOGIST:	Marty A		
					FALL		19/1		REVIEWED BY:	W. Czel		ча
			CAN	IPLE		1	•	DECCDIE	•	VV. CZEI	usia	
DERTH		"0"			T 5500/	<u> </u>	0010107511011	DESCRI		—	Ι.	SELLA DIVO
DEPTH		"S"	"N"	BLOWS	REC%	4	CONSISTENCY		MATERIAL	USCS	'	REMARKS
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION			
5					NA	Dark Brown Red	Medium	using a v combina 0'-0.5' Co		SM	Dry	PID 0.0 ppm
10					- 100%	Dark Brown Red	Medium	6'-8' Med	lium sand	SP	Dry	PID 0.0 ppm
15		SB-10- 14.5'-15'			90%	Brown	Medium	10'-15' M	edium to coarse sand	SM	Moist	PID 0.0 ppm
20					50%	Brown	Medium	15'-20' C	oarse sand	SP	Wet	PID 0.0 ppm
					•	 			END OF BORING			
									· = - · · · · · -			
COMMENT	re.								PROJECT NO.:			0.62.205.400
COMMEN		11, 14, Rockaw classifie Ground 20 ft. bg a grab s and a co	15, 17, ray Par ed in the water w is. Two sample omposi posite	18 and 19 kway and 4 e field using vas encour (2) soil sar (SB-10-14. te sample (sample was	and located feet south of the Unified htered at 15 inples were of 5'-15') from SB-10-COM is used for wi	on Glenwood of Glenwood R Soil Classifica ft. bgs. The bo collected and s the area just a P) of the entire	d "Moderate" risk s Avenue, 70 feet es Road, Soil samples ation System (USC oring was driven to sent for laboratory above the groundw e boring length. A rization sample WC	ast of were S). a depth of analysis, vater level portion of C-04. A	BORING NO.:			0-62-205-180 3-10 / TWP-05

IR				LiRo	Engi	ineers,		TEST BOR	NG LC	G		
					2.08	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 2.000		LOCATION:	\$B-11		
ROJECT	Storm &	Combine	od Sov	ore & Wate	rmain in Fre	sh Creek Basi	in Area, Farragut F	24	SHEET:	1 of	: 1	
CLIENT:				sign and Co		SIT CIEEK DAS	in Alea, i allaguti	\u.	JOB NO.:	SE855		
	ONTRAC		OI De	·		ntal Services,	Inc		LOCATION:	See Co	mmente	•
ROUND		101		Associated	LIVIONING	CAS.	SAMPLER	TUBE	GROUND ELEVATION:	0ee C01	milent	•
			·		T	CAS.		_	· · · · · · · · · · · · · · · · · · ·		4 004	
DATE	TIME	LEV	EL	TYPE	TYPE	1	Macro Core	5'	DATE STARTED:	March 2		
03/28/14		10		NA NA	DIA.	-	2"	-	DATE FINISHED:	March 2		
					WT.		NA NA		DRILLER:	Marty A		
		ļ			FALL		NA		GEOLOGIST:	Eva Jak		ka
									REVIEWED BY:	W. Czel	usta	
			SAM	/IPLE				DESCRIP	TION		l	
DEPTH FEET	STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC%	COLOR	CONSISTENCY HARDNESS		MATERIAL DESCRIPTION	USCS		REMARKS
		110.	NO.	IERU	NQD 70	OOLOK	HANDRESS	+	DESCRIPTION			
1	<u> </u>											
								1				
	 			 	-			Borina w	as cleared to a depth of 6 ft. bgs			
									acuum excavator and air knife			
	 				- NA	Brown	Medium	combina		FILL	Dry	PID 0.0 ppr
]			to medium sand, some gravel, trace			
	 				1			clay, red	brick, Fill			
5						1						
	111111					1		i				
									_	į.		
								1				
								1				
					40%	Red Brown	Medium	6'-10' Fir	e to medium sand, some gravel	1	Wet	PID 0.0 ppn
		SB-11- 9.5'-10'								-		''
		9.5-10						}		1		
10						1		İ				
10						+ -		+		┪		<u> </u>
						!				1		
						1				1		
						1		1				
					30%	Greyish	Medium	10' 15' 5	ine sand, trace clay	l	Sat.	PID 0.0 ppr
						Brown	Wediam	10-131	nie sand, nace clay	sм	Çat.	l ib olo ppi
						1				0.11		
					_							
						1		1		1		
15					ļ	4				4	<u> </u>	
										1		
						1						
								1				
					┪			1		1		
					60%	Grey	Medium	15'-20' F	ine sand, trace silt	1	Sat.	PID 0.0 ppr
						[1		1		
								1 .				
20	ը փիկիկ									1	<u> </u>	
									END OF BORING			
OMMENT	re.								PROJECT NO.:			10-62-205-18
MINEN	5:											
		Advanc	ed in f	ne vicinity o	f "Moderate"	risk sites Nos	s. 2 and 12 and loc	ated on	BORING NO.:			SB-1
							ue and 2 feet nort					
							field using the Uni					
							ncountered at 10 ft					
							oil samples were o					
							-11-9.5'-10') from t					
							ample (SB-11-COI					
				on sample V		VIIIDOSHE SAIII	ipie was useu ioi W	10310				

IR.				LiRa	Engi	ineers		TEST BOR	ING LC	G		
	7				G	•			LOCATION:	SB-12		
PROJECT	: Storm &	Combine	ed Sew	ers & Wat	ermain in Fre	sh Creek Bas	in Area, Farragut F	Rd.	SHEET:	1 of	1	
CLIENT:					onstruction	<u> </u>			JOB NO.:	SE855		
BORING C			0, 500	•		ntal Services,	Inc.		LOCATION:	See Cor	nments	
GROUND		10		7100001010	a Environno	CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
	_				In/or	CAS.	Macro Core	_		14 C	5 004	
DATE	TIME	LEV		TYPE	TYPE	_	2"	5'	DATE STARTED:	March 2		
03/28/14	-	10		NA NA	DIA.	-			DATE FINISHED:	March 2		
	ļ				WT.		NA NA		DRILLER:	Marty A		-
		<u> </u>			FALL	<u></u>	NA		GEOLOGIST:	Eva Jak		ка
		L			<u> </u>				REVIEWED BY:	W. Czel	usta	
	<u></u>		_	IPLE .	_	L		DESCRIP		_		
DEPTH	1	"S"	"N"	BLOWS	REC%		CONSISTENCY		MATERIAL	USCS	1	REMARKS
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION			
										1		
1												
	<u> </u>								as cleared to a depth of 6 ft. bgs			
								1 -	acuum excavator and air knife			
	4				NA NA	Red Brown	Medium	combina		FILL	Dry	PID 0.0 ppm
	$\mathbf{H}\mathbf{H}$	İ						0'-0.5' Co	oncrete edium to fine sand, some gravel, tra		ĺ ´	
	44444				_			silt, Fill	edium to fine sand, some graver, tra-	,e		
5	###							3.10, 7				
- 3	╂╀┼┼┼	ł			_							
		1				1		+		+		
										SM		
		i			┪						1	
					500/	Dark		6'-7' Fine	sand, trace silt		14/-4	DID 0 0
		SB-12-			50%	Brown / Red Brown	Medium	7'-10' Fir	e sand	SP	wet	PID 0.0 ppm
		9.5'-10'				INEG BIOWII				35		
10											<u> </u>	
					_							
	400000			\vdash	-						1	
]		70%	Brown	Medium	10'-15' M	ledium to coarse sand	SM	Sat.	PID 0.0 ppm
	/ (444)			\vdash	4						1	
	100000				\dashv						İ	
15												
.,	00000000	1			1	1		 				
	I				1							
	<u> </u>			$oxedsymbol{oxed}$	_							
					100%	Brown	Medium	15'-20' C	oarse sand	SP	Sat	PID 0.0 ppm
L	.	1										
]			1							
				$\vdash \vdash$	-							
20	 										ĺ	
- 20	peconomic	L	L	LL_		<u> </u>		1	END OF BORING			<u> </u>
									LIAD OF BORING			
COMMEN.	TS:								PROJECT NO.:			10-62-205-180
									BORING NO.:			SB-12
							3 and located on Fa					
							feet northwest of Factorial feet northwest of Factorial feet for the feet feet feet feet feet feet feet	arragut	194			
							ncountered at 10 ft	bas The				
							oil samples were c		1			
ĺ							-12-9.5'-10') from t					
							sample (SB-12-COI					
						omposite sam	ple was used for w	<u>raste</u>				
li.		charact	erizatio	n sample	WC-02.							

IR				LiRa	Engi	neers	, Inc.		TEST BOR	ING LO	G		
	*						,		LOCATION:	SB-13			1
PROJECT:	Storm &	Combine	d Sew	ers & Wate	ermain in Fre	sh Creek Bas	in Area, Farragut R	d.	SHEET:	1 o	1		1
CLIENT:					onstruction				JOB NO.:	SE855			1
BORING C	ONTRAC	TOR:		Associate	Environmer	ntal Services,	Inc.		LOCATION:	See Co	mments	3	1
GROUNDY		10				CAS.	SAMPLER	TUBE	GROUND ELEVATION:				1
DATE	TIME	LEV	EL	TYPE	TYPE		Macro Core	5'	DATE STARTED:	March 2	25, 2014	1	1
03/28/14		10		NA	DIA.		2*		DATE FINISHED:	March 2			1
					WT.	i .	NA	1	DRILLER:	Marty A			1
					FALL	<u> </u>	NA	1	GEOLOGIST:	Eva Jal			1
								<u>'</u>	REVIEWED BY:	W. Cze			1
			SAN	IPLE .			·	DESCRIP	<u> </u>	T			1
DEPTH		"S"	"N"	BLOWS	REC%		CONSISTENCY	T	MATERIAL	uscs		REMARKS	ı
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION				ı
5					- NA	Brown to Red Brown	Medium	using a v	as cleared to a depth of 6 ft. bgs acuum excavator and air knife tion. ium sand, some round rocks	SP	Dry	PID 0.0 ppm	
10		SB-13- 9.5'-10'			50% 	Light Red Brown	Medium	6'-10' Fin pebbles	e sand, trace clay, trace small roun	d 	Wet	PID 0.0 ppm	
15					60%	Light Red Brown	Medium	10'-15' M	ledium to coarse sand	SM	Wet	PID 0.0 ppm	1
20					90%	Light Red Brown	Medium	15'-20' C	oarse sand	SP	Sat.	PID 0.0 ppm	
									END OF BORING				1
COMMENT		Farragu Farragu Classific boring v and sen	t Road t Road cation s vas dri t for la	, 74 feet so I. Soil samp System (US ven to a de boratory ar	outhwest of E oles were class SCS). Ground pth of 20 ft. b nalysis, a gral	ast 103rd Stressified in the f lwater was e gs. Two (2) so o sample (SB	s. 4, 5 and 10 and keet and 10 feet nortifield using the Unifier nocuntered at 10 ft. ooil samples were considered to the consideration of the consideration	hwest of ed Soil bgs. The ollected ne area	PROJECT NO.: BORING NO.:		1	0-62-205-180 SB-13	•
		entire be	orina le		rtion of the c		ample (SB-13-CON nple was used for w						

IR				LiRo	Engi	ineers	, Inc.		TEST BOR	ING LC)G	
									LOCATION:	SB-14		
PROJECT	: Storm &	Combine	ed Sew	ers & Wate	ermain in Fre	sh Creek Bas	sin Area, Farragut F	Rd	SHEET:	1 of	1	
CLIENT:				sign and Co					JOB NO.:	SE855		
BORING C	ONTRAC	TOR:		Associated	d Environmer	ntal Services,	Inc.		LOCATION:	See Cor	mments	3
GROUND\	WATER:	10				CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LEV	/EL	TYPE	TYPE		Macro Core	5'	DATE STARTED:	March 2	6, 2014	4
04/02/14		10		NA	DIA.		2"		DATE FINISHED:	April 2, 2		
					WT.		NA		DRILLER:	Marty A	moscat	.0
					FALL		NA		GEOLOGIST:	Eva Jak	ubows	ка
									REVIEWED BY:	W. Czel	usta	
			SAN	IPLE				DESCRIF	PTION			
DEPTH		"S"	"N"	BLOWS	REC%		CONSISTENCY	T	MATERIAL	uscs	'	REMARKS
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION		l	
	Ш				1	1		1		1		
1	###				_					FILL		
	 			- -	-		ĺ	Boring w	ras cleared to a depth of 6 ft. bgs		ł	
]	1	Dark			vacuum excavator and air knife			_
	┧‱‱				→ NA	Brown / Brown	Hard	combina			Dry	PID 0.0 ppm
						Brown			dium sand, some gravel, red bricks dium to coarse sand, some rocks			
	1				7			-	adil to obaroo barra, como recina			
5	J			$\vdash \vdash$	4							
											1	
				 	+	+ +		+		\dashv	<u> </u>	
										SP		
	1				┪]						
					30%	Red Brown / Dark	Medium		dium sand	İ	Wet	PID 0.0 ppm
		SB-14-			7 ~~~	Brown	Medium	8'-10' Fir	ne sand and rocks		7700	FID 0.0 ppiii
		9.5'-10'			_						1	
10												
- '`					+	+		- 	·····	\dashv	\vdash	
				ł								ļ
	33333				1					PT	1	
ļ	2222				_	1 !		10'-11' F	ine sand]	
					30%	Grey / Black	Medium	11'-12' P			Wet	PID 0.0 ppm
				\vdash	-	Diack		12'-15' F	ine sand, trace clay			
						1						
					┥							
15								<u> </u>			l	
										7		
				igsquare	-					SM		
<u> </u>				 	4							
					30%	Light Grey	Medium	15'-20' M	ledium to coarse sand		Sat.	PID 0.0 ppm
					1			1				
					_							
]							
20	<u>[iddebter</u>								END OF PODING			
l									END OF BORING			
COMMENT	rs:			_		_			PROJECT NO.:		1	10-62-205-180
		Advanc	ed in th	ne vicinity c	of "Moderate"	riek eite No. 6	6 and located on G	lenwood	BORING NO.:			\$B-14
							feet southeast of					
							the Unified Soil					
							ncountered at 10 ft					
1							oil samples were c					
ł							-14-9.5'-10') from to sample (SB-14-COI					
1							ple was used for w					
*		charact	orizatio	n sample V	N/C-U3							

AIR				LiRa	Engi	ineers	. Inc.		TEST BOR	ING LO	G	
			•			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 1		LOCATION:	SB-15		
PROJECT	: Storm &	Combine	ed Sew	ers & Wate	ermain in Fre	sh Creek Bas	in Area, Farragut R	d.	SHEET:	1 of	1	
CLIENT:	NYC Dep	partment	of Des	sign and Co	onstruction				JOB NO.:	SE855		
BORING C	ONTRAC	TOR:		Associate	d Environme	ntal Services,	Inc.		LOCATION:	See Co	nments	3
GROUND		10		•		CAS.	SAMPLER	TUBE	GROUND ELEVATION:			
DATE	TIME	LEV	EL	TYPE	TYPE		Macro Core	5'	DATE STARTED:	March 2	6. 2014	1
04/02/14		10		NA.	DIA.		2"		DATE FINISHED:	April 2,		
					WT.		NA		DRILLER:	Marty A		0
					FALL		NA	 	GEOLOGIST:	Eva Jak		
					1				REVIEWED BY:	W. Czel		<u> </u>
	 	<u> </u>	SAN	MPLE				DESCRIF		1	T	
DEPTH		"S"	"N"	BLOWS	REC%		CONSISTENCY	T	MATERIAL	Uscs		REMARKS
FEET	CTDATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION	0303	! '	KLMAKKS
FEET	STRATA	NO.	NO.	PERO	KQD%	COLOR	HARDNESS	+	DESCRIPTION			
4	\mathbf{H}									1		
1	177777			\vdash	-{			1				
				[]								
					1				as cleared to a depth of 6 ft. bgs			
	/				→ NA	Denv	C-4		acuum excavator and air knife		D=-	BID 0 0
	HHH				7 NA	Brown	Soft	combina 0'-6' Med	lion. lium to fine sand, some rocks, red		Dry	PID 0.0 ppm
	,###				_				od, glass, Fill			
_		İ							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
5	HHH	ł		\vdash	4							
	\square									FILL		
	╂┼┼┼┼┼	ł		\vdash	+			_		_	-	
											Į.	
	╂╪╪╪	1		\vdash	-							
				1 1	1	Dark		6'-10' Fir	e sand, trace clay, trace rocks, red			l
	14444	SB-15-			30%	Brown to	Medium		od pieces, glass, Fill		Wet	PID 0.0 ppm
		9.5'-10'				Grey					1	
]####										1	
10				igspace							<u> </u>	
	 			 	4						1	
	XXXX	1								PT		
		1		 	-	Black to		10'-12' P	eat, trace clav	-		
					20%	Dark Grey	Medium	12'-15' F			Wet	PID 0.0 ppm
	1	1			7							
								1			1	
15				igsquare		<u> </u>		 				
					1							
	┨ःःःःःः			 	-					SP		
								ł				
					┪	1		I			١	
					80%	Light Grey	Medium	15'-20' M	ledium sand		Sat.	PID 0.0 ppm
					1			1				
				oxdot	_							
-								1				
20	3888888				I			J	END OF BOSING			L .
									END OF BORING			
COMMENT	rs:			 					PROJECT NO.:			10-62-205-180
							=		BORING NO.:			SB-19
							and located on G					
							eet southeast of G the Unified Soil	enwood				
							ncountered at 10 ft	, bgs. The				
							soil samples were o					
		and ser	t for la	boratory a	nalysis, a gra	b sample (SB	-15-9.5'-10' and SE	3-15-9.5-				
							level, a composite					
						_	e boring length. A prization sample WC					
		THE COR	Afterna	Sample W/S	IN THE PART TOT WA	SEID CHOCOCIO	amme amme W/(. ml 141				

LiRo Engineers, Inc.								TEST BORING LOG						
					G	LOCATION:	SB-16							
PROJECT:	Storm &	Combine	ed Sew	ers & Wate	rmain in Fre	SHEET:	1 of 1							
									JOB NO.:	SE855				
BORING C	BORING CONTRACTOR: Associated Environmental Services, Inc.								LOCATION:	See Comments				
GROUNDY	VATER:	10	'			CAS.	SAMPLER	TUBE	GROUND ELEVATION:					
DATE	TIME	LEV		TYPE	TYPE		Macro Core	5'	DATE STARTED: March 26, 2014					
04/01/14	1							DATE FINISHED: April 1, 2014						
0 110 1111	<u> </u>	<u> </u>		147.	WT.		NA	1	DRILLER:	Marty Amoscato Eva Jakubowska				
			***		FALL		NA	 	GEOLOGIST:					
										Szelusta				
			SAN	IPLE		1		DESCRIF		1	1			
DEPTH		"S"	"N"	BLOWS	REC%	1	CONSISTENCY	T	MATERIAL	USCS		DEMARKS		
FEET	STRATA	NO.	NO.	PER 6"	RQD%					USCS	REMARKS			
FEET	31KATA	IVO.	NO.	PERO	RQD%	COLOR	HARDNESS	- 	DESCRIPTION			·		
1														
											Dry PI			
	111111				4			Boring w	as cleared to a depth of 6 ft. bgs	1		y PID 0.0 ppm		
					İ				acuum excavator and air knife					
	1				- NA	Red Brown	Medium	combina		FILL				
	$\mathbf{H}\mathbf{H}$]			lium sand, some gravel, red brick, blacktop, Fill					
	$\mathbf{H}\mathbf{H}$				1			aspiration	asphanic blacktop, i in					
5					1			1						
							1 1					ĺ		
	300000000							+				ļ		
				+	1									
					4000/	Red Brown	Medium		C! 10! Modium and some real					
		SB-16-			100%			6'-10' Me	dium sand, some rock	SP	Wet	PID 0.0 ppm		
		9.5'-10'			-									
40														
10						ļ	744		*****					
						1			*					
							1	1						
							1							
				60%	Light Brown / Black	Medium	10'-12' M	10'-12' Medium sand, trace clay			PID 0.0 ppm			
							12'-15' Fine sand, trace clay			Wet				
					1	5.001								
					4	1 1								
15														
15						 				— sм				
		ĺ			1									
					_	1 1						DID 0.0		
					100%	Red Brown	Medium	15'-20' M	edium to coarse sand		Sat.			
					1 100%	I ted Blowin	Medium	13-20 W	edidin to coarse sailo		Sal.	PID 0.0 ppm		
					1			1						
20								1						
								-	END OF BORING		<u> </u>			
COMMENT	е.								DD0 1507 N.C					
COMMENT	3 :								PROJECT NO.:		1	0-62-205-180		
		<u>Advan</u> ce	ed in th	e vicinity of	f "Moderate"	risk site No. 7	and located on Gi	lenwood	BORING NO.:			SB-16		
		Road, 3	5 feet s	outhwest c	f East 100th	Street and 3	feet southeast of G							
							the Unified Soil		:					
							ncountered at 10 ft bil samples were c							
		and sen	ras unv t for lai	oratory an	<u>λιτοι 20 π. Ι</u> alvsis, a ora	h sample (SR.	oil samples were con 16-9.5'-10') from the	Uilected						
							ample (SB-16-CON							
		entire bo	oring le		tion of the c		ole was used for w							

LiRo Engineers, Inc.								TEST BORING LOG						
									LOCATION: SB-17					
PROJECT: Storm & Combined Sewers & Watermain in Fresh Creek Basin Area, Farragut Rd.									SHEET: 1 of 1					
LIENT: NYC Department of Design and Construction								JOB NO.: SE855						
BORING CO	<u> </u>					ital Services,	Inc.		LOCATION: See Comments					
GROUNDW		10				CAS.	SAMPLER	TUBE	GROUND ELEVATION:			44.00		
	DATE TIME LEVEL TYPE TYPE Macro Core 5' DATE STARTED:									March 2	5 2014	l		
03/28/14	THAIL	10		NA.	DIA.	1	2"	l 	DATE FINISHED:	8, 2014				
03/26/14	 			INA	WT.		NA NA	 	DRILLER:	Marty A				
					+		NA NA	-	GEOLOGIST:	Eva Jak				
									\a					
	REVIEWED BY: W. Czelusta													
			SAM		·	<u> </u>		DESCRIP			١.	SELLA DIVE		
DEPTH		"S"	"N"	BLOWS	REC%	4	CONSISTENCY		MATERIAL	USCS	REMARKS			
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HARDNESS		DESCRIPTION					
5					NA Brow Red E		Medium	using a v	as cleared to a depth of 6 ft. bgs acuum excavator and air knife tion. sand, trace clay, some small rounded	SM	Dry	PID 0.0 ppm		
10		SB-17- 9.5'-10'			40% Light Red Brown Medium 6'-10' Medium sand, trace clay, some ro		dium sand, trace clay, some rocks		Wet	PID 0.0 ppm				
15			70% Brown Medium 10'-15' Coarse sand	oarse sand	05	Wet								
20					30%	Brown	Medium	15'-20' C	oarse sand	SP	Sat.	PID 0.0 ppm		
20	I consequence.		L		1	.1		1	END OF BORING	1		1		
COMMENT	rs:								PROJECT NO.:		10	0-62-205-914		
		Farragu Farragu Classifi boring v and ser just abo	ut Road ut Road cation was dri nt for la	I, 100 feet I. Soil sam System (U) ven to a de boratory a groundwa	southwest of oles were cla SCS). Groun- opth of 20 ft. I nalysis, a gra ter level and	East 104th St ssified in the f dwater was e ogs. Two (2) s b sample (SB a composite s	s. 4 and 10 and loc reet and 6 feet sou field using the Unifi ncountered at 10 ft oil samples were c -17-9.5'-10') from to sample (SB-17-CO) nple was used for v	theast of ed Soil bgs. The ollected he area MP) of the			· ·	SB-17		

LiRo Engineers, Inc.								TEST BORING LOG						
			-	20210	27.08.		, 11000		LOCATION: SB-18					
PROJECT	Storm & 0	Combine	d Sew	ers & Wate	rmain in Fres	sh Creek Bas	in Area, Farragut R	d.	SHEET:	1 of	1			
CLIENT:	NYC Dep	artment	of Des	ign and Co	nstruction				JOB NO.:					
BORING C	ONTRAC	TOR:		Associated	Environmen	tal Services,	Inc.		LOCATION:	See Cor	nments			
GROUNDY	VATER:	10				CAS.	SAMPLER	TUBE	GROUND ELEVATION:					
DATE TIME LEVEL TYPE TYPE Macro Core 5' DATE STARTED:									DATE STARTED:	March 24, 2014				
03/28/14							DATE FINISHED:	March 28, 2014						
	ļ				WT.		NA NA		DRILLER:	Marty A				
					FALL	L		GEOLOGIST:	Eva Jak		(a			
					L	····		DECODIE	REVIEWED BY:	W. Czel	usta			
DEDTU	<u> </u>	"S"	_	PLE	I DEON		CONCICTENCY	DESCRIP		uscs		REMARKS		
DEPTH	CTDATA	_	"N"	BLOWS	REC%	COLOD	CONSISTENCY HARDNESS		MATERIAL Description	0363		KEMAKNS		
FEET	STRATA	NO.	NO.	PER 6"	RQD%	COLOR	HAKDNESS		DESCRIPTION		ļ			
5					- NA	Brown	Soft to Medium	using a v	oring was cleared to a depth of 6 ft. bgs sing a vacuum excavator and air knife ombination. 6' Medium sand, some rocks		Dry	PID 0.0 ppm		
10		SB-18- 9.5'-10'			- - 40%	Brown	Medium	6'-10' Me	dium sand		Wet	PID 0.0 ppm		
15							50%	Brown	Medium	10'-15' M	ledium to coarse sand	SM	Wet	
20			100%	Brown Medium 15		15'-20' M	15'-20' Medium to fine sand		Sat.	PID 0.0 ppm				
					*				END OF BORING					
COMMENT	ΓS:				•				PROJECT NO.:		1	0-62-205-180		
		East 10 East 10 Classification boring vand seriust aborentire beginning to the continuous continuou	8th Str 8th Str cation : was dri nt for la ove the oring le	eet, 45 feet eet. Soil sa System (US ven to a de boratory an groundwat	southeast of mples were of GCS). Ground oth of 20 ft. b alvsis, a grater level and a rtion of the c	Stanley Ave classified in the water was egs. Two (2) so sample (SE a composite s	. 2 and 18 and local nue and 3 feet sout ne field using the Ur nocountered at 10 ft. soil samples were of 1-18-9.5'-10") from the sample (SB-18-COM nuple was used for w	hwest of niffed Soil bgs. The ollected ne area MP) of the	BORING NO.:			\$B-18		

DRILLING	SUMMARY	TEMPORARY WELL CONSTRUCTION DETAIL									
Geologist:						Open Tempora					
Eva Jakubov											
Drilling Com	pany:							:			
Associated Env	ironmental Services, Ltd.							1			
		_	Elevation			<u> </u>	Ground Level	_			
Driller:		1 .					BOREHO	LE			
Marty Amoso	cato						2	_inch dia.			
Rig Make/Mo	odel:						20	feet length			
GeoProbe								_			
Date:			5			6110.4 4 2000.4					
3/31/2014								N .			
	-			•							
GEOLOGIC	CLOG	D		Water							
				Level			PVC CASING				
Depth(ft.)	Description	 ⊨	10	▼			1	inch dia.			
Dopar(ia.)	Decempation	- -	10	· · · · · · · · · · · · · · · · · · ·	+		5	feet length			
		Р						_ leet length			
		٦									
		_									
	*	Τ									
·			15	Natural							
	See Log	Н		Material		L	PVC SCR	EEN			
				Around			1	_inch dia.			
				Screen			10	_feet length			
		İ	20								
•											
WELL DES	SIGN										
	CASING MATERIAL		S	CREEN MATER	IAL		ER MATERI				
0 (A.I		_	411 50 40		Type: NA	Setting:	NA			
Surface:	None		Туре:	1" PVC							
						SEAL MATE	RIAL				
Monitor:	1" PVC		Slot Size:	0.010"		Type: NA	Setting:	NA			
						Type: NA	Setting:	NA			
		·									
COMMENTS	s:						LEGEND				
Temporary w	vell.										
	r noted at approximate	ly 10 ft. l	ogs.			Natural Material					
	,,	-					Section 1				
						<u> </u>					
Client:			Location:			Project No.:					
NYCDDC- B	EGS			e./ Williams Ave.	. Brooklyn	10-62-205-180					
				ONITORING WE		Well Number					
LiRo	o Engineers, In	C.	1	STARUCTION DE		TWP-01 (SB-01)					

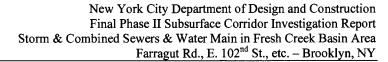
DRILLING SUMMARY		TEMPO	RARY WE	LL CON	STRUCTION	ON DETAIL
Geologist:				<u></u>	Open Tempora	rily
Eva Jakubowska				•		
Drilling Company:					·	
Associated Environmental Services, Ltd.						
		Elevation				Ground Level
Driller:						BOREHOLE
Marty Amoscato						inch dia.
Rig Make/Model:						20 feet length
GeoProbe						
Date:		5				
3/31/2014	,					
GEOLOGIC LOG	D		Water			
			Level			PVC CASING
Depth(ft.) Description	E	10	▼			<u>1</u> inch dia.
						5 feet length
	Р					
	Т					
		15	Natural			
See Log	Н		Material	3975		PVC SCREEN
			Around			1 inch dia.
			Screen			10 feet length
		20				
						
J						
						•
WELL DESIGN						
		1 62		2/4/		TED MATERIAL
CASING MATERIAL		50	CREEN MATER	KIAL		TER MATERIAL
l		_	4" DV/O		Type: NA	Setting: NA
Surface: None		Type:	1" PVC		SEAL MATE	DIAL
		1			SEAL MATE	KIAL
			0.04011		L	o
Monitor: 1" PVC		Slot Size:	0.010"		Type: NA	Setting: NA
					Type: NA	Setting: NA
0014151150					 	LEGEND
COMMENTS:					1	LEGEND
Temporary well.						
Groundwater noted at approximate	ery 10 ft. b	gs.				Natural Material
			ANT-			
Client:		Location:			Project No.:	
NYCDDC- BEGS			Rd. / E. 108th S	st Brooklyn	10-62-205-1	
INTODO- BEGG			ONITORING W		Well Number	
LiRo Engineers, Ir	ıc.	1	STARUCTION D		TWP-02 (SB	

DRILLING SUMMARY TEMPORARY WELL CONSTRUCTION DETAIL					ON DETAIL			
Geologist:						Open Tempora	arily	
Eva Jakubo								
Drilling Con	npany:							
Associated En	vironmental Services, Ltd.	1						
		_	Elevation				Ground Level	
Driller:							BOREHOLE	
Marty Amos							2 inch dia	.
Rig Make/M	lodel:						20 feet leng	gth
GeoProbe	7,4-0							
Date:			5					l
4/1/2014								ı
	0100	_						
GEOLOGI	C LOG	D		Water				
	<u></u>	_		Level		1 L	PVC CASING	
Depth(ft.)	Description	_ E	10	▼			1 inch dia	.
-							5feet leng	jth
		Р						
		T						
			15	Natural				ļ
	See Log	H		Material			PVC SCREEN	
				Around			1 inch dia.	
				Screen			10feet leng	ıth
								- 1
			20					
								4
						•		
		1						
		ľ						
	*****	4						i
WELL DES	SICN	i						
AAELL DES	DIGN							
	CASING MATERIAL		S	CREEN MATER	MAL	FILT	TER MATERIAL	_
				7.000		Type: NA	Setting: NA	
Surface:	None		Туре:	1" PVC		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	g	
			"		•	SEAL MATE	RIAL	
								- 1
Monitor:	1" PVC		Slot Size:	0.010"		Type: NA	Setting: NA	
						Type: NA	Setting: NA	
						.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	50tmig. 1171	i
COMMENT	S:						LEGEND	\dashv
Temporary v	vell.							
	r noted at approximate	lv 10 ft. b	as.				Natural Material	
	• •	•	J			20.388		
								- 1
			·			•		
Client:			Location:			Project No.:		
NYCDDC- B	EGS		Glenwood	Rd. / E. 105th St	., Brooklyn	10-62-205-18	0	
	_			ONITORING WE		Well Number		
LiR	o Engineers, In	С	CON	STRUCTION DE	TAILS	TWP-03 (SB-		

DRILLING	SUMMARY		TEMPO	RARY WE	LL CON	STRUCTION	ON DETAIL
Geologist:						Open Tempora	rily
Eva Jakubow	vska						
Drilling Comp							
	ronmental Services, Ltd.						
A3300lated Ellivi	ioninental ociviocs, Etc.		Elevation				Ground Level
Driller:		-	Lievation				BOREHOLE
							2 inch dia.
Marty Amoso		-			1 1 1		20 feet length
Rig Make/Mo	odei:						ZU reet lengtil
GeoProbe	- maria	_	_	•			
Date:			5				
4/1/2014		_					
GEOLOGIC	CLOG	D		Water Level			PVC CASING
Depth(ft.)	Description	d _E	10	V			1 inch dia. 5 feet length
WELL DES	See Log	P T H	20	Matural Material Around Screen			PVC SCREEN 1 inch dia. 10 feet length
	CASING MATERIAL		S	CREEN MATER	RIAL	FIL	TER MATERIAL
						Type: NA	Setting: NA
Surface:	None		Туре:	1" PVC		SEAL MATE	RIAL.
Monitor:	4" D\/C		Clat Cim	0.010"		Tune: NA	Cottings NA
Monitor:	1" PVC		Slot Size:	0.010"		Type: NA	Setting: NA
						Type: NA	Setting: NA
COMMENTS	S:		_L				LEGEND
Temporary w							-
	r noted at approximate		าตร				Natural Material
Giodilawatei	i noted at approximate	ay 10 it. L	ogs.				1 vatoral iviaterial
<u> </u>			·····			la	
Client:			Location:			Project No.:	
NYCDDC- B	EGS			./Farragut Rd.,		10-62-205-1	
LiRe	o Engineers, Ir	ıc.		ONITORING W STARUCIDION D		Well Number TWP-04 (SB	

DRILLING	RILLING SUMMARY TEMPORARY WELL CONSTRUCTION DETAIL					AIL		
Geologist: Eva Jakubo Drilling Com						Open Tempor	arily	
I -	cato odel:	D E P T H	5 10 15 20	Water Level ▼ Natural Material Around Screen			PVC CAS 1 10 PVC SCR 1 10	inch dia. feet length ING inch dia. feet length
WELL DES						1		
	CASING MATERIAL		St	CREEN MATER	IAL	Type: NA	TER MATERI Setting:	AL NA
Surface:	None		Туре:	1" PVC	•	SEAL MATE		
Monitor:	1" PVC		Slot Size:	0.010"		Type: NA Type: NA	Setting: Setting:	NA NA
COMMENTS Temporary w Groundwater		ly 15 ft. b	gs.				LEGEND Natural Mate	rial
Client: NYCDDC- B				Rd./ Rockaway F		Project No.: 10-62-205-18 Well Numbe	30	
LiRe	o Engineers, In	C.	1	TRUCTION DE		TWP-05 (SB		

DRILLING	SUMMARY		TEMPO	DRARY WELL CO	ONSTRUCTION	ON DETAIL
Geologist:					Open Tempora	rily
Eva Jakubo		_				
Drilling Com		ľ				
Associated Env	vironmental Services, Ltd.					
		_	Elevation		1 A S S S S S S S	Ground Level
Driller:						BOREHOLE
Ryan Jense		4				inch dia.
Rig Make/M	1odel:					feet length
GeoProbe		4	_			
Date:			5			
3/17/2014		_				
CEOLOGI	10.1.00					
GEOLOGI	C LOG	D				T1/0 040010
D - 11-/64 \	In	\dashv_{-}	10			PVC CASING
Depth(ft.)	Description	E	10		4 1	1 inch dia.
r					_	10feet length
		P		-	- 1	
		_		_	4 1	
		T	4-	_ -		
	See Log	l.,	15	—		5VO CODEEN
	See Log	H		Natural Meterial		PVC SCREEN
				Material	_	1inch dia.
				Around		10feet length
			20	Screen	_	
			20			
				*		
		•				
		\dashv				
WELL DES	SIGN					
					· · · · · · · · · · · · · · · · · · ·	
	CASING MATERIAL		So	CREEN MATERIAL		TER MATERIAL
Curtona	Nama		T	411 00 / 0	Type: NA	Setting: NA
Surface:	None		Type:	1" PVC	0541 14475	3744
-					SEAL MATER	KIAL
Manitan.	4" DVO			0.040#	<u>_</u>	
Monitor:	1" PVC		Slot Size:	0.010"	Type: NA	Setting: NA
			ĺ		Type: NA	Setting: NA
COMMENT	·O.					LEOSNID
COMMENT						LEGEND
Temporary v		4.454 h.	=-=			
Groundwate	er noted at approximate	ly 15 π. ος	gs.			Natural Material
Client:			Location:		Project No.:	
NYCDDC- B	REGS		1	./Flatlands Ave., Brookly	_	Λ
NTODDO- D	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		*****	ONITORING WELL	Well Number	
LiR	o Engineers, In	C.		STRUCTION DETAILS	TWP-108-1	•
	g,	••	1 00110	THE CHICK DEIVIE		





APPENDIX C LABORATORY ANALYTICAL RESULTS

Included on Attached CD



176 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004 2 MADISON ROAD, FAIRFIELD, NJ 07004 800-426-9992 · 973-244-9770 FAX: 973-244-9787

WWW.HCVLAB.COM

Project: NYCDDC BEGS Farragut Rd

Client PO: Not Available

Report To: LIRO Engineers, Inc.

703 Lorimer Street Brooklyn, NY 11211

Attn: Amy Hewson

Received Date: 3/31/2014

Report Date:

Deliverables: NYDOH-CatA

Lab ID: AC77867

Lab Project No: 4033119

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director

OR

Stanley Gilewicz - Laboratory Director

NJ (07071)

PA (68-00463)

NY (ELAP11408)

KY (90124)

CT (PH-0671)



(07071 and 07069)

(ELAP11408 and 11939)

(68-00463 and 68-04409) (353)WV

(90124)KY

MA (NJ386)

CT (PH-0671)

veritech laboratories **USACE**

Amy Hewson

Date Submitted: 3/31/2014

Report Of Analysis

To: LIRO Engineers, Inc.

Attention: Project:

703 Lorimer Street		Project:	<u>-</u>		Date Submitted: 3/31/2 Date Reported: 4/10/2	
Brooklyn	NY	11211				
C77865-001	Sampl	elD: TWP-01 (SB-0	1)			
TestGroup		Analyte	DF	Units	MDL/PQL/RL	Resul
77865-001	WP-01 (SB	-01)		Date (Collected 3/31/2014	
Carbonaceous Bo	OD-5 Day (S	SM5210 B-01)				
(Carbonaceo	us Bod, 5 Day	1	MG/L	6	ND
Chloride (Water)	300.0					
(Chloride		10	mg/L	20	350
Cr (Hexavalent) 3	500-Cr D					
(Cr (Hexaval	ent)	1	mg/l	0.025	ND
Flash Point 1010						
F	Flash Point		1	Deg. F		>141
Mercury (Water)	245.1					
	Mercury		1	ug/L	0.20	0.34
Metals-Five 200.7	,					
(Cadmium		1	ug/L	2.0	ND
(Copper		1	ug/L	25	50
I	_ead		1	ug/L	5.0	370
ı	Nickel		1	ug/L	10	16
2	Zinc		1	ug/L	25	560
Nitrate-N (Water)	300.0					
1	Nitrate		1	mg/L	1.0	ND

1

1

1

mg/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

pН

ug/L

ug/L

ug/L

MG/L

mg/l

1.0

0.052

0.052

0.052

0.052 0.052

0.052

0.052 0.052

0.052

0.052

2.2

0.54

2.2

5.7

1.60

Total Kjeldahl Nitrogen EPA 351

Nitrite-N (Aqueous) 300.0

PCB 608

pH 150.1

Nitrite

Aroclor (Total)

Aroclor-1016

Aroclor-1221

Aroclor-1232

Aroclor-1242

Aroclor-1248

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

Naphthalene

Phenol SGT-HEM (Non-Polar Material) 1664B

1,2,4-Trichlorobenzene

Total Kjeldahl Nitrogen

SGT-HEM (Non-Polar Material)

pН Semivolatile Organics (no search) 625

1

1

ND

0.1

ND

ND

ND

ND

0.10

ND

ND

ND

ND

7.4

ND

ND

ND

ND

14.2

ab#: AC77865-001	SampleID: TWP-01 (SB-01)				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Total Solids (SM2540B-97)				
	Total Solids @ 103-105 C	1	mg/l	40	2300
Total Suspen	ded Solids (SM 2540D-97)				
•	Total Suspended Solids @ 103-105 C	1	mg/l	10	690
Volatile Orga	nics (no search) 624				
	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	Benzene	1	ug/L	0.50	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	Xvienes (Total)	1	ua/L	1.0	ND

Lab#: AC77865-002	SampleID: TWP-02 (SB-03)				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77865-002	TWP-02 (SB-03)		Date C	ollected 3/31/2014	
Carbonaceou	us BOD-5 Day (SM5210 B-01)				
	Carbonaceous Bod, 5 Day	1	MG/L	6	ND
Chloride (Wa	ter) 300.0				
•	Chloride	2	mg/L	4.0	59
Cr (Hexavale	nt) 3500-Cr D				
J. (1.5.1.1.1.1	Cr (Hexavalent)	1	mg/l	0.025	ND
Flash Point 1	·				
r iasii roint i	Flash Point	1	Deg. F		>141
Maraum, OMa		•	D 0g		
Mercury (Wa		1	1101l	0.20	0.47
	Mercury	•	ug/L	0.20	0.41
Metals-Five 2		4		0.0	ND
	Cadmium	1	ug/L	2.0	ND
	Copper	1 1	ug/L	25 5.0	91 270
	Lead Nickel	1	ug/L ug/L	10	83
	Zinc	1	ug/L	25	360
ANY 4 AL GAZ		•	ug/L	20	000
Nitrate-N (Wa		4		1.0	ND
	Nitrate	1	mg/L	1.0	ND
Nitrite-N (Aqı					
	Nitrite	1	mg/L	1.0	ND
PCB 608					
	Aroclor (Total)	1	ug/L	0.054	ND
	Aroclor-1016	1	ug/L	0.054	ND
	Aroclor-1221	1	ug/L	0.054	ND
	Aroclor-1232	1	ug/L	0.054	ND
	Aroclor-1242	1	ug/L	0.054	ND
	Aroclor-1248	1	ug/L	0.054	ND
	Aroclor-1254	1	ug/L	0.054	ND .
	Aroclor-1260	1	ug/L	0.054 0.054	ND ND
	Aroclor-1262 Aroclor-1268	1 1	ug/L ug/L	0.054	ND
	A1000-1208	ı	ug/L	0.034	ND
pH 150.1	-11	4	-11		6.0
	рН	1	pН		6.9
Semivolatile	Organics (no search) 625				
	1,2,4-Trichlorobenzene	1	ug/L	2.0	ND
	Naphthalene	1	ug/L	0.50	ND
	Phenol	1	ug/L	2.0	ND
SGT-HEM (N	on-Polar Material) 1664B				
	SGT-HEM (Non-Polar Material)	1	MG/L	5.5	ND
Total Kjeldal	ni Nitrogen EPA 351				
	Total Kjeldahl Nitrogen	2	mg/l	0.800	7.28
Total Solids	(SM 2540B-97)				
	Total Solids @ 103-105 C	1	mg/l	40	2200
Total Susper	nded Solids (SM 2540D-97)				
i ouri ouspei	Total Suspended Solids @ 103-105 C	1	mg/l	20	1500
	Total Suspended Solids @ 103-103 C	ı	mg/i	20	1000

Lab#: AC77865-002	SampleID: TWP-02 (SB-03)	DF			Result
TestGroup	Analyte		Units	MDL/PQL/RL	
Volatile Organ	ics (no search) 624				
	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	Benzene	1	ug/L	0.50	ND -
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	Xvienes (Total)	1	ua/L	1.0	ND

Lab#: AC77867-001	SampleID: TWP-01 (SB-01) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77867-001	TWP-01 (SB-01) U		Date C	ollected 3/31/2014	
	lerbicides 8151				_
	2,4,5-T	1	ug/L	0.53	ND
	2,4-D	1	ug/L	0.53	ND
	Dicamba	1	ug/L	0.53	ND
	Silvex	1	ug/L	0.53	ND
Mercury (Wat	er) 7470A		_		
Mercury (**at	Mercury	1	ug/L	0.70	ND
Organochlori	ne Pesticides 8081				
Organochion	Aldrin	1	ug/L	0.010	ND
	Alpha-BHC	1	ug/L	0.010	ND
	beta-BHC	1	ug/L	0.010	ND
	Chlordane	1	ug/L	0.10	ND
	delta-BHC	1	ug/L	0.010	ND
	Dieldrin	1	ug/L	0.010	ND
	Endosulfan i	1	ug/L	0.010	ND
	Endosulfan II	1	ug/L	0.010	ND
	Endosulfan Sulfate	1	ug/L	0.010	ND
	Endrin	1	ug/L	0.010	ND
	Endrin Aldehyde	1	ug/L	0.010	ND
	Endrin Ketone	1	ug/L	0.010	ND
	gamma-BHC	1	ug/L	0.010	ND
	Heptachlor	1	ug/L	0.010	ND
	Heptachlor Epoxide	1	ug/L	0.010	ND
	Methoxychlor	1	ug/L	0.010	ND
	p,p'-DDD	. 1	ug/L	0.010	ND
	p,p'-DDE	1	ug/L	0.010	ND
	p,p'-DDT	1	ug/L	0.010	ND
	Toxaphene	1	ug/L	0.25	ND
PCB 8082			·		
100000	Aroclor (Total)	1	ug/L	0.25	ND
	Aroclor-1016	1	ug/L	0.25	ND
	Aroclor-1221	1	ug/L	0.25	ND
	Aroclor-1232	1	ug/L	0.25	ND
	Aroclor-1242	1	ug/L	0.25	ND
	Aroclor-1248	1	ug/L	0.25	ND
	Aroclor-1254	1	ug/L	0.25	ND
	Aroclor-1260	1	ug/L	0.25	ND
	Aroclor-1262	1	ug/L	0.25	ND
	Aroclor-1268	1	ug/L	0.25	ND

Lab#: AC77867-001	SampleID: TWP-01 (SB-01) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Organi	ics (no search) 8270				
1,1	'-Biphenyl	1	ug/L	2.0	ND
1,2	,4,5-Tetrachlorobenzene	1	ug/L	2.0	ND
2,3	,4,6-Tetrachlorophenol	1	ug/L	2.0	ND
	,5-Trichlorophenol	1	ug/L	2.0	ND
	,6-Trichlorophenol	1.	ug/L	2.0	ND
	-Dichlorophenol	1	ug/L	2.0	ND
	-Dimethylphenol	1	ug/L	0.50	ND
	-Dinitrophenol	1	ug/L	10	ND
	-Dinitrotoluene	1	ug/L	2.0	ND
•	-Dinitrotoluene	1	ug/L	2.0	ND
	Chloronaphthalene	1	ug/L	2.0	ND
	Chlorophenol	1	ug/L	2.0	ND
	fethylnaphthalene	1	ug/L	2.0	ND
	lethylphenol	1	ug/L	0.50	ND
	litroaniline	1	· ·		
	litrophenol	1	ug/L	2.0 2.0	ND ND
	iitrophenoi 4-Methylphenoi	1	ug/L	2.0 0.50	ND ND
	• •	-	ug/L		
	'-Dichlorobenzidine	1	ug/L	2.0	ND
	litroaniline	1	ug/L	2.0	ND
	-Dinitro-2-methylphenol	1	ug/L	10	ND
	romophenyl-phenylether	1	ug/L	2.0	ND
	hloro-3-methylphenol	1	ug/L	2.0	ND
	Chloroaniline	1	ug/L	0.50	ND
	hlorophenyl-phenylether	1	ug/L	2.0	ND
	litroaniline	1	ug/L	2.0	ND
	litrophenol	1	ug/L	2.0	ND
	enaphthene	1	ug/L	2.0	ND
	enaphthylene	1	ug/L	2.0	ND
	etophenone	1	ug/L	2.0	ND
	hracene	1	ug/L	2.0	ND
	azine	1	ug/L	2.0	ND
Ber	nzaldehyde	1	ug/L	2.0	ND
Ber	nzo[a]anthracene	1	ug/L	2.0	ND
Ber	nzo[a]pyrene	1	ug/L	2.0	ND
Ber	nzo[b]fluoranthene	1	ug/L	2.0	ND
Ber	zo[g,h,i]perylene	1	ug/L	2.0	ND
Ber	nzo[k]fluoranthene	1	ug/L	2.0	ND
bis(2-Chloroethoxy)methane	1	ug/L	2.0	ND
bis(2-Chloroethyl)ether	1	ug/L	0.50	ND
bis(2-Chloroisopropyl)ether	1	ug/L	2.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/L	2.0	13
But	ylbenzylphthalate	1	ug/L	2.0	ND
Cap	prolactam	1	ug/L	2.0	ND
Car	bazole	1	ug/L	2.0	ND
Chr	ysene	1	ug/L	2.0	ND
Dib	enzo(a,h)anthracene	1	ug/L	2.0	ND
	enzofuran	1	ug/L	0.50	ND
	thylphthalate	1	ug/L	2.0	ND
	ethylphthalate	1	ug/L	2.0	ND
	n-butylphthalate	1	ug/L	0.50	ND
	n-octylphthalate	1	ug/L	2.0	ND
	pranthene	1	ug/L ug/L	2.0	ND
	prene	1		2.0	
*	achlorobenzene	1	ug/L		ND ND
			ug/L	2.0	ND
нех	achlorobutadiene	1	ug/L	2.0	ND

b#: AC77867-001	SampleID: TWP-01 (SB-01) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	ug/L	10	ND
	Hexachloroethane	1	ug/L	2.0	ND
	Indeno[1,2,3-cd]pyrene	1	ug/L	2.0	ND
	Isophorone	1	ug/L	2.0	ND
	Naphthalene	1	ug/L	0.50	ND
	Nitrobenzene	1	ug/L	2.0	ND
	N-Nitroso-di-n-propylamine	1	ug/L	0.50	ND
	N-Nitrosodiphenylamine	1	ug/L	2.0	ND
	Pentachlorophenol	1	ug/L	10	ND
	Phenanthrene	1	ug/L	2.0	ND
	Phenol	1	ug/L	2.0	ND
	Pyrene	1	ug/L	2.0	ND
TAL Metals 6	010				
	Aluminum	1	ug/L	200	19000
	Barium	1	ug/L	50	910
	Calcium	1	ug/L	5000	280000
	Chromium	1	ug/L	50	ND
	Copper	1	ug/L	50	56
	Iron	1	ug/L	300	33000
	Magnesium	1	ug/L	5000	33000
	Manganese	1	ug/L	40	1400
	Nickel	1	ug/L	50	ND
	Potassium	1	ug/L	5000	24000
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	250000
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	550
TAL Metals 6	020				
	Antimony	1	ug/L	2.0	2.6
	Arsenic	1	ug/L	2.0	12
	Beryllium	1	ug/L	1.0	ND
	Cadmium	1	ug/L	2.0	ND
	Cobalt	1	ug/L	2.0	5.9
	Lead	1	ug/L	3.0	270
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

TestGroup Volatile Organi	Analyte	DF			
Volatile Organi		DF	Units	MDL/PQL/RL	Result
	ics (no search) 8260				
	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,1,2,2-Tetrachloroethane	1	ug/L	1.0	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	1.0	ND
	1,1,2-Trichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethene	1	ug/L	1.0	ND
	1,2,3-Trichlorobenzene	1	ug/L	1.0	ND
	1,2,4-Trichlorobenzene	1	ug/L	1.0	ND
	1,2-Dibromo-3-chloropropane	1	ug/L	1.0	ND
	1,2-Dibromoethane	1	ug/L	1.0	ND
	1,2-Dichlorobenzene	1	ug/L	1.0	ND
	1,2-Dichloroethane	1	ug/L	0.50	ND
	1,2-Dichloropropane	1	ug/L	1.0	ND
	1,3-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L ug/L	1.0	ND
	1,4-Dioxane	1	ug/L ug/L	50	ND ND
	2-Butanone	1	•	1.0	
	2-Hexanone	1	ug/L		ND
	4-Methyl-2-pentanone	•	ug/L	1.0	ND
	Acetone	1	ug/L	1.0	ND
		1	ug/L	10	ND
	Benzene	1	ug/L 	0.50	ND
	Bromochloromethane	1	ug/L	1.0	ND
	Bromodichloromethane	1	ug/L	1.0	ND
	Bromoform	1	ug/L	1.0	ND
	Bromomethane	1	ug/L	1.0	ND
	Carbon disulfide	1	ug/L	1.0 ·	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chlorobenzene	1	ug/L	1.0	ND
	Chloroethane	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Chloromethane	1	ug/L	1.0	ND
	cis-1,2-Dichloroethene	1	ug/L	1.0	ND
	cis-1,3-Dichloropropene	1	ug/L	1.0	ND
	Cyclohexane	1	ug/L	. 1.0	ND
	Dibromochloromethane	1	ug/L	1.0	ND
	Dichlorodifluoromethane	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	Isopropylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl Acetate	1	ug/L	1.0	ND
	Methylcyclohexane	1	ug/L	1.0	ND
	Methylene chloride	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	i	ug/L	1.0	ND ND
	Styrene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	-		
	trans-1,2-Dichloroethene	1	ug/L	1.0	ND ND
	trans-1,3-Dichloropropene	4	ug/L	1.0	ND
	Trichloroethene	1	ug/L	1.0	ND
	· -	1	ug/L	1.0	ND
	Trichlorofluoromethane	1	ug/L	1.0	ND
	Vinyl chloride Xylenes (Total)	1	ug/L ug/L	1.0 1.0	ND ND

Lab#: AC77867-002	SampleID: TWP-01 (SB-01) F				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77867-002	TWP-01 (SB-01) F		Date C	ollected 3/31/2014	l
Mercury (W	ater) 7470A				
	Mercury	1	ug/L	0.70	ND
TAL Metals	- 6010				
IAL Mewis	Aluminum	1	ug/L	200	ND
	Barium	1	ug/L	50	280
	Calcium	1	ug/L	5000	220000
	Chromium	1	ug/L	50	ND
	Copper	1	ug/L	50	ND
	Iron	1	ug/L	300	6500
	Magnesium	1	ug/L	5000	40000
	Manganese	1	ug/L	40	1100
	Nickel	1	ug/L	50	ND
	Potassium	1	ug/L	5000	20000
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	210000
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	ND
TAL Metals	6020				
TAL MOUNTS	Antimony	1	ug/L	2.0	3.6
	Arsenic	1	ug/L	2.0	7.9
	Beryllium	1	ug/L	1.0	ND
	Cadmium	1	ug/L	2.0	ND
	Cobalt	1	ug/L	2.0	ND
	Lead	1	ug/L	3.0	ND
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

b#: AC77867-003	SampleID: TWP-02 (SB-03) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
C77867-003	TWP-02 (SB-03) U		Date C	Collected 3/31/2014	
Chlorinated I	Herbicides 8151		,		
	2,4,5-T	1	ug/L	0.56	ND
	2,4-D	1	ug/L	0.56	ND
	Dicamba	1	ug/L	0.56	ND
	Silvex	1	ug/L	0.56	ND
Mercury (Wat	ter) 7470A		-		
	Mercury	1	ug/L	0.70	0.89
Organochlori	ine Pesticides 8081		J		
	Aldrin	1	ug/L	0.010	ND
	Alpha-BHC	1	ug/L	0.010	ND
	beta-BHC	1	ug/L	0.010	ND
	Chlordane	1	ug/L	0.10	ND
	delta-BHC	1	ug/L	0.010	ND
	Dieldrin	1	ug/L	0.010	ND
	Endosulfan I	1	ug/L	0.010	ND
	Endosulfan II	1	ug/L	0.010	ND
	Endosulfan Sulfate	1	ug/L	0.010	ND
	Endrin	1	ug/L	0.010	ND
	Endrin Aldehyde	1	ug/L	0.010	ND
	Endrin Ketone	1	ug/L	0.010	ND
	gamma-BHC	1	ug/L	0.010	ND
	Heptachlor	1	ug/L	0.010	ND
	Heptachlor Epoxide	1	ug/L	0.010	ND
	Methoxychlor	1	ug/L	0.010	ND
	p,p'-DDD	1	ug/L	0.010	ND
	p,p'-DDE	1	ug/L	0.010	ND
	p,p'-DDT	1	ug/L	0.010	ND
	Toxaphene	1	ug/L	0.25	ND
PCB 8082				•	
	Aroclor (Total)	1	ug/L	0.25	ND
	Aroclor-1016	1	ug/L	0.25	ND
	Aroclor-1221	1	ug/L	0.25	ND
	Aroclor-1232	1	ug/L	0.25	ND
	Aroclor-1242	1	ug/L	0.25	ND
	Aroclor-1248	1	ug/L	0.25	ND
	Arocior-1254	1	ug/L	0.25	ND
	Aroclor-1260	1	ug/L	0.25	ND
	Aroclor-1262	1	ug/L	0.25	ND
	Aroclor-1268	1	ug/L	0.25	ND

Lab#: AC77867-003	SampleID: TWP-02 (SB-03) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Orga	nics (no search) 8270				
1,	,1'-Biphenyl	1	ug/L	2.1	ND
1,	2,4,5-Tetrachlorobenzene	1	ug/L	2.1	ND
2,	,3,4,6-Tetrachiorophenol	1	ug/L	2.1	ND
2,	,4,5-Trichlorophenol	1	ug/L	2.1	ND
2,	,4,6-Trichlorophenol	1	ug/L	2.1	ND
2,	,4-Dichlorophenol	1	ug/L	2.1	ND
2,	,4-Dimethylphenol	1	ug/L	0.52	ND
2	,4-Dinitrophenol	1	ug/L	10	ND
2	,4-Dinitrotoluene	1	ug/L	2.1	ND
2	,6-Dinitrotoluene	1	ug/L	2.1	ND
2-	-Chloronaphthalene	1	ug/L	2.1	ND
2-	-Chlorophenol	1	ug/L	2.1	ND
	-Methylnaphthalene	1	ug/L	2.1	ND
	-Methylphenol	1	ug/L	0.52	ND
	-Nitroaniline	1	ug/L	2.1	ND
2	-Nitrophenol	1	ug/L	2.1	ND
	&4-Methylphenol	1	ug/L	0.52	ND
	,3'-Dichlorobenzidine	1	ug/L	2.1	ND
	-Nitroaniline	1	ug/L	2.1	ND
=	,6-Dinitro-2-methylphenol	1	ug/L	10	ND
	-Bromophenyl-phenylether	1	ug/L	2.1	ND
	-Chloro-3-methylphenol	1	ug/L	2.1	ND
	-Chloroaniline	1	ug/L	0.52	ND
	-Chlorophenyl-phenylether	1	ug/L	2.1	ND
	-Nitroaniline	1	ug/L	2.1	ND
	-Nitrophenol	1	ug/L	2.1	ND
	Acenaphthene	1	ug/L	2.1	ND
	•	1	ug/L	2.1	ND
	Acenaphthylene Acetophenone	1	ug/L	2.1	ND
	Anthracene	1	ug/L	2.1	ND
•	Atrazine	1	ug/L	2.1	ND
		1	ug/L	2.1	ND
	Benzaldehyde	1	ug/L	2.1	ND
	Benzo[a]anthracene	1	ug/L ug/L	2.1	ND
_	Benzo[a]pyrene	1		2.1	ND
	Benzo[b]fluoranthene	1	ug/L	2.1	ND
	Benzo[g,h,i]perylene	1	ug/L	2.1	ND
	Benzo[k]fluoranthene	1	ug/L	2.1	ND
	ois(2-Chloroethoxy)methane	1	ug/L		ND
	ois(2-Chloroethyl)ether	1	ug/L	0.52	ND
	ois(2-Chloroisopropyl)ether	1	ug/L	2.1	
	ois(2-Ethylhexyl)phthalate	1	ug/L	2.1	14 ND
	Butylbenzylphthalate	1	ug/L	2.1	ND
	Caprolactam	1	ug/L	2.1	ND
	Carbazole	1	ug/L	2.1	ND
	Chrysene	1	ug/L	2.1	ND
	Dibenzo[a,h]anthracene	1	ug/L	2.1	ND
	Dibenzofuran	1	ug/L	0.52	ND
	Diethylphthalate	1	ug/L	2.1	ND
Ι	Dimethylphthalate	1	ug/L	2.1	ND
Ι	Di-n-butylphthalate	1	ug/L	0.52	0.73
ι	Di-n-octylphthalate	1	ug/L	2.1	ND
F	luoranthene	1	ug/L	2.1	3.3
F	Fluorene	1	ug/L	2.1	ND
H	Hexachlorobenzene	. 1	ug/L	2.1	ND
	-lexachlorobutadiene	1	ug/L	2.1	ND

TestGroup	Analyte				
	···••	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1 .	ug/L	10	ND
	Hexachloroethane	1	ug/L	2.1	ND
	Indeno[1,2,3-cd]pyrene	1	ug/L	2.1	ND
	Isophorone	1	ug/L	2.1	ND
	Naphthalene	1	ug/L	0.52	ND
	Nitrobenzene	1	ug/L	2.1	ND
	N-Nitroso-di-n-propylamine	1	ug/L	0.52	ND
	N-Nitrosodiphenylamine	1	ug/L	2.1	ND
	Pentachlorophenol	1	ug/L	10	ND
	Phenanthrene	1	ug/L	2.1	2.4
	Phenol	1	ug/L	2.1	ND
	Pyrene	1	ug/L	2.1	2.7
TAL Metals 601	0		· ·		
	Aluminum	1	ug/L	. 200	240000
	Barium	1	ug/L	50	840
	Calcium	1	ug/L	5000	87000
	Chromium	1	ug/L	50	600
	Copper	1	ug/L	50	380
	Iron	1	ug/L	300	220000
	Magnesium	1	ug/L	5000	44000
	Manganese	1	ug/L	40	2200
	Nickel	1	ug/L	50	310
	Potassium	1	ug/L	5000	15000
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	29000
	Vanadium	1	ug/L	50	560
	Zinc	1	ug/L	50	850
TAL Metals 602	n	-	- 9	oo -	000
TAL III COULD OUT	Antimony	1	//	0.0	ND
	Arsenic	1	ug/L	2.0	ND
	Beryllium		ug/L	2.0	58
	Cadmium	3 1	ug/L	3.0	7.7
	Cobalt	2	ug/L	2.0	ND
	Lead	1	ug/L	4.0	75 500
	Selenium	-	ug/L	3.0	590
	Thallium	1 1	ug/L ug/L	10 2.0	19 ND

_ab#: AC77867-003	SampleID: TWP-02 (SB-03) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organics	s (no search) 8260	, and the second			
	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,1,2,2-Tetrachloroethane	1	ug/L	1.0	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	1.0	ND
	1,1,2-Trichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethene	1	ug/L	1.0	ND
	1,2,3-Trichlorobenzene	1	ug/L	1.0	ND
	1,2,4-Trichlorobenzene	1	ug/L	1.0	ND
	1,2-Dibromo-3-chloropropane	1	ug/L	1.0	ND
	1,2-Dibromoethane	1	ug/L	1.0	ND
	1,2-Dichlorobenzene	1	ug/L	1.0	ND
	1,2-Dichloroethane	1	ug/L	0.50	ND
	1,2-Dichloropropane	1	ug/L	1.0	ND
	1,3-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dioxane	1	ug/L	50	ND
	2-Butanone	1	ug/L	1.0	ND
	2-Hexanone	1	ug/L	1.0	ND
	4-Methyl-2-pentanone	1	ug/L	1.0	ND
	Acetone	1	ug/L	10	ND
		1	ug/L	0.50	ND
	Benzene Bromochloromethane	1	ug/L	1.0	ND
		1	ug/L	1.0	ND
	Bromodichloromethane	1	ug/L	1.0	ND
	Bromoform	1	ug/L ug/L	1.0	ND
	Bromomethane		ug/L ug/L	1.0	ND
	Carbon disulfide	1	-	1.0	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chlorobenzene	1	ug/L		ND
	Chloroethane	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Chloromethane	1	ug/L	1.0	ND ND
	cis-1,2-Dichloroethene	1	ug/L	1.0	
	cis-1,3-Dichloropropene	1	ug/L	1.0	ND
	Cyclohexane	1	ug/L	1.0	ND
	Dibromochloromethane	1	ug/L 	1.0	ND
	Dichlorodifluoromethane	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	Isopropylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl Acetate	1	ug/L	1.0	ND
	Methylcyclohexane	1	ug/L	1.0	ND
	Methylene chloride	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1	ug/L	1.0	ND
	Styrene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	trans-1,2-Dichloroethene	1	ug/L	1.0	ND
	trans-1,3-Dichloropropene	1	ug/L	1.0	ND
	Trichloroethene	1	ug/L	1.0	ND
	Trichlorofluoromethane	1	ug/L	1.0	ND
	Vinyl chloride	1	ug/L	1.0	ND

Lab#: AC77867-004	SampleID: TWP-02 (SB-03) F				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77867-004	TWP-02 (SB-03) F		Date C	ollected 3/31/2014	
Mercury (Wa	ter) 7470A				
	Mercury	1	ug/L	0.70	ND
TAL Metals 6	010		Ū		
	Aluminum	1	ug/L	200	ND
	Barium	1	ug/L	50	ND
	Calcium	1	ug/L	5000	83000
	Chromium	1	ug/L	50	ND
	Copper	1	ug/L	50	ND
	Iron	1	ug/L	300	16000
	Magnesium	1	ug/L	5000	14000
	Manganese	1	ug/L	40	1100
	Nickel	1	ug/L	50	ND
	Potassium	1	ug/L	5000	5800
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	32000
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	ND
TAL Metals 6	020				
	Antimony	1	ug/L	2.0	ND
	Arsenic	1	ug/L	2.0	2.7
	Beryllium	1	ug/L	1.0	ND
	Cadmium	1	ug/L	2.0	ND
	Cobalt	1	ug/L	2.0	7.1
	Lead	1	ug/L	3.0	ND
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

Lab#: AC77867-005	SampleID: Trip Blank-01				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77867-005	Trip Blank-01		Date C	ollected 3/31/2014	
	ics (no search) 8260		, ,		_
Volatile Organi	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,1,2,2-Tetrachloroethane	1	ug/L	1.0	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	1.0	ND
	1,1,2-Trichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethene	1	ug/L	1.0	ND
	1,2,3-Trichlorobenzene	1	ug/L	1.0	ND
	1,2,4-Trichlorobenzene	1	ug/L	1.0	ND
	1,2-Dibromo-3-chloropropane	1	ug/L	1.0	ND
	1,2-Dibromoethane	1	ug/L	1.0	ND
	1,2-Dichlorobenzene	1	ug/L	1.0	ND
	1,2-Dichloroethane	1	ug/L	0.50	ND
	1,2-Dichloropropane	1	ug/L	1.0	ND
	1,3-Dichlorobenzene	1	ug/L	1.0	ND
•	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dioxane	1	ug/L	50	ND
	2-Butanone	1	ug/L	1.0	ND
	2-Hexanone	1	ug/L	1.0	ND
	4-Methyl-2-pentanone	1	ug/L	1.0	ND
	Acetone	1	ug/L	10	ND
	Benzene	1	ug/L	0.50	ND
	Bromochloromethane	1	ug/L	1.0	ND
	Bromodichloromethane	1	ug/L	1.0	ND
	Bromoform	1	ug/L	1.0	ND
	Bromomethane	1	ug/L	1.0	ND
	Carbon disulfide	1	ug/L	1.0	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chlorobenzene	1	ug/L	1.0	ND
	Chloroethane	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Chloromethane	1	ug/L	1.0	ND
	cis-1,2-Dichloroethene	1	ug/L	1.0	ND
	cis-1,3-Dichloropropene	1	ug/L	1.0	ND
	Cyclohexane	1	ug/L	1.0	ND
	Dibromochloromethane	1	ug/L	1.0	ND
	Dichlorodifluoromethane	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	Isopropylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl Acetate	1	ug/L	1.0	ND
	Methylcyclohexane	1	ug/L	1.0	ND
	Methylene chloride	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1	ug/L	1.0	ND
	-	1	ug/L	1.0	ND
	Styrene Tetrachloroethene	1	ug/L	1.0	ND
		1	ug/L ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	trans-1,2-Dichloroethene	1	ug/L ug/L	1.0	ND
	trans-1,3-Dichloropropene	1	ug/L ug/L	1.0	ND
	Trichloroethene	1	ug/L ug/L	1.0	ND
	Trichlorofluoromethane	1	=	1.0	ND
	Vinyl chloride	•	ug/L		ND
	Xylenes (Total)	. 1	ug/L	1.0	NU

SampleID: AC77867-005 Trip Blank-01 **TestGroup Analyte** DF Units MDL/PQL/RL Result RL = Reporting Limit ND = Not Detected **RL Definitions:** SW846 Inorganics reported to PQL Clean Water Act Inorganics reported to PQL SW846 Organics reported to PQL CLP Organics reported to CRQL

CLP Inorganics reported to CRQL

This report is a true report of results obtained from our tests of this material. In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Clean Water Act Organics reported to PQL

Robin Cousineau - Quality Assurance Director Stanley Gilewicz - Laboratory Director

al work may be delayed.	note NUMBERED items. If not completed your analytical work may be delayed. A fee of 50 sumple will be assessed for storage would sample not be activated for any analysis.) Items. If not c	NUMBERED	Piesse note A fae o		£; ■	urrent T	₹S; II) C	2008 SF	S E	HC-V summary) Specific	Please circle required parameter list (refer to HC-V summary): i) NJ 2008 SRS; ii) Current TCL; iii) HC-V 2010 Merged; iv) PA; v) NY; vi) Project-Specific	le required Merged; iv)	Please circ HC-V 2010
to: 33 N	EUA JAKUBONS/Mate:	EUA J	(print name):	11) Sampler (p	11)8					•				
Copier Temperature		Check if applicable: Project-Specific Reporting Limits High Confaminant Concentrations	ecific Reparation	Project-Specific Project-Specific Project-Specific Project-Specific Project Pr				-			L			1
		8011) 8 or 6020)	VOC (8260B SIM or 8011) Metals (ICP-MS 200.8 or 6020)	VOC (826) Metals (IC		1650	Billy	(CV			100	7	多人	
stenderds in NJ of PA	Note: Check if low-level groundwater methods required to meet current standards in NJ of PA: BN or BNA (8270C SIM)	water methods iiM)	Check if low-level groundwate BN or BNA (8270C SIM)	Sheck if low BN or BN/		133	MIKK	, -Vr			166	uboush	mh	Eva
HAZARDS	Comments, Notes, Special Requirements, HAZARDS	Notes, Spe	omments.	10		Time	Date			epted by:	Accepte		uished by:	10) Relinquished by:
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	5				X	X	X	X	XX		13/31/14/0930	OI (58-01) GA	#	100 -1
9b) Comments	NaOH HCI H2SO4 HNO3 Other:	None MeOH En Cor		EPH (TKN-S Chlori			Compo	6) Sample × Date Time	4) Customer Sample ID Metrix		Lab Sample #
Numbers (if Applicable)	8) # of Bottles	# of	Cat 2 Scre	Cat 1	TS/TSS	NPN/pH Hg,Cd,Cu	iub de/FlashP	/Cr+6/NO	/OA(Shor		A - Air OT - Other	DW - Drinking Water 8 - Soil GW - Ground Water SL - Sludge WW - Waste Water OL - Oil	,	Batch # AC 77-865
9a) Methanol Bottle					,,: -,-	Ph Ni 7	oint	2/NO3/		Sample		Matrix Codes		+ ONLY
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							4		1					***************************************
Other:	Expedited TAT Not Always Available (Please Check with Lab)!	> CULLY					able):	! (If Applic	2d) Quote/POI# (If Applicable):		1 1	TOWNE	• • •	1d) Send Report to
PDF PA Act 2	Other:	1 %	10 Days (10%) 2 Weeks	E Z	NO KILAN	Fariado	(CV)	Annicod	2c) Project Location (City/State): OX (I NINTOOC)	_	Ace Buffalo. N	Memsone Dela Constant	sil/Fax/Ph:	1b) Email/Cell/Fax/Ph. 1c) Send Invoice to:
Excel - NY TAGM	Full / Category B	5%; EPH)	4 Days (35%; IPH) 1 Week (25%; EPH)		Hewson	1. 14	13 F		2b) Project Mgr.	2b) Pi	-11	oklym NY 112	103 103	Address:
EQuis EZ	Red - NJ / NY / PA	50%)	48 Hours (75%) W72 Hours (50%)	ET.	sewer) iDed	K 7 13	S Wild	plect: St	2a) Pr	akc.	Singh Nee	LIR.	1a) Customer:
Hazsite/CSV	Data Summary	100%)	24 Hours (100%)		9124	1 X 2	SER AM LE	68-0446	8-00463 ~	PA #	NY #11408 & 1193	NELACALJ #07071 & 07069 CT #PH-0871 NY #11408 & 11939 PA #68-00463 & 68-04409 WY #353 KY #90124	NELACALJ IK	
Electronic Deliv.	Report Type	Turnaround	Tum								9	Ph: 800-426-9992 Fax: 973-439-1458	Ph: 800	
lease Circle)	3) Reporting Requirements (Please Circle)	3) Reportin			RECORD	REC		!	り	Ţ		198 Route 46 East, Fairfield, NJ 07004	198 Rou	
1 0 4	Page	3119	4037		CHAIN OF CUSTODY	ž Q	울(Clarke 07004	710ech/Division of Hampton-Clarke 175 US Hwy 46 West, Fairfield, New Jersey 07004	175 US Hwy 4	
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tee of Streample will be assessed for storage should sample not be activated for any analys	not be activi	and a	hould s	e e	for at		F	y elding	9	2		H									fic	Spec	oject	'; vi) Pı	Y N	ged; iv) PA; v) NY; vi) Project-Specific	ged;	2010	HC-V 2016
ore NUMBERED items. If not completed your analytical work may be in and.	malviica	Ď,					3		Ę	5 3	Please	†		핡		[SS	뒿				刮	計			Par.		Please circle required parameter list (refer to HC-V summary); I) NJ 2008 SRS; II) Current TCL: III)	
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IDM-level groundwater methods required to meet current standards in NJ or FA. BNA (8270C SIM) 250B SIM or 8011)	at Children	ā	9	a red			MIS:	270C	× (8:	BN or BNA (8270C SIM)	BN or i		133	-	H/RK	_L.				1	B	X)	1	Oh	jan	The state of the s		an.	Ce
Comments, Notes, Special Requirements, HAZARDS	nents. I	liren	Requ	Cial	Spe	otes	18 2	men	Com			 -	Time	+	Date	+			epted by:	檀	1		T			Ä	Smed by	10) Relinquished by:) S
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9b) Comments	HNO3 Other: _	H2804	HCI	NaOH	En Core	MeOH	EPH C	ED! 0	EDH C	EPH C				Chlorid HEM-N	TKN-S		BNA/ V	Grab (G)	Compos	Time	6) Sample Date Tir		5) Matrix	5	er Samp	4) Customer Sample ID		ab Sampie #	Lab Su
9a) Methanol Bottle Numbers (If Applicable)			Hes	8) # of Bottles	*		at ∠ Fraction	at 1 at 2 Screen/ at 2 Fraction	at 2 Screen/	et 1	,	rs/TSS	ig,Cd,Cu,Pb	e/FlashPoin		Cr+6/NO2/N	OA(Short Li		ite (C)	4	A - Air OT - Other		rix Codes S - Soil SL - Sludge OL - Oil	Mat	ng Wate Id Wate B Water	DW - Drinking Water GW - Ground Water WW - Waste Weter		Batch # AC 77 %S	£
		-					iation	· viai	Total			,,, v ,,∠	Ni 7	nt		103/	ist)	\$ \$	Sample					,				↓ PLY	٥
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Excel - PA Act 2	. y	A GO	Category A	<u>Ω</u> 2		بر 1	1 (10% 1 (10%	10 Days (10%)	<u> </u>	2	_ F	Brooklyn	۶I.		2C) Project Location (City/State):	<u>වූ</u>	# Locat	2C) Project Loca	20	MG	5	<u>-</u> =	2 =	BUSDIES IL		T DOCK		1b) Email/Cell/Fav/Ph:	<u>.</u>
Excel - NJCC	; •		ر ا	. Ω		TPH)	(35%;	4 Days (35%; TPH)		1	3	• }	ج ح		MARIOCOLI	OOK OOK	Γ α		<u> </u>			100g) JOY	roug LA		ġ	Address:	>
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Hazsite/CSV	3		Data Summary	P		96)	7 (10	24 Hours (100%)	2			0124	3	18363	18	80	200	88.0	\ <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	1193	71408	TANT	PH-08:	NELACAJ 407071 & 07089 CT 5PH-0871 NY 511408 & 11939 PA 568-00463 & 68-04409 WY 5353 KY 590124	2 070	J #07071	ELAC/N.	z	
Electronic Deliv	ype	Report Type	Rep			ğ	Tumaround	뒫											۲,			8	439-14	Ph: 800-426-9982 Fax: 973-439-1458	9982 F	800-426	Ph:		
3) Reporting Requirements (Please Circle)	ents (P	3	equi	2	2	\(\frac{1}{R}\)	ان				Ū	RECORD	REC				11	¥				Z	NJ 070	198 Route 46 East, Fairfield, NJ 07004	East, F	Route 46	198		
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	1		10)Relinquished by			-003	_	·		-001/-002	Lab Sample #	AC77867	←	ONIX	FOR LAB	175 Robustow WPh: 800-125-991 Service Center: Ph (Serv Ph (Serv Address: 2 1b) Email/Cell/Fax/Ph: 1c) Send Invoice to: (1d) Send Report to:
	7	MILLOUMEN				TRIP DAME OF	2027 12	0.		TNP-01(5B-01)	4)Customer Sample ID	WW - Waste Water OL - Oil OT - Other (please specify under item 9, Comments)		Bath		West and 2 Madison 1 202 973-244-9770 202 973-244-9770 203 955-78 204 955-78 205 955-78 206 955-78 207 9
	(W)	TO AN	Accept			Di Acilo	-	+		(G) 133 M (930	5) 6)Sample Marrix Data Time	OL - Oil cify under Item 9, Comments)	S Soil A - Air	Check if Cordin		Son Road, Fairfield, New Jerney: 07004 70 Fair: 973-244-9787 973-439-1458 170-5057 Fair: 956-780-6056 NELACIAL #070771 PA #88-00463 NY #11408 CT #PH-0671 KY #00124 91 Information Project Signature: Signatu
			ed by:					† X X	XXX	XXX	Composi Grab (G) TCL TCL	VOC:	Cs.	-19	40.00	Hours Course Verific 1. A Women Owned Dissolvening Street Information 1. Kr. 200124 Project Information (Chylisters): Can Dissolvening Course Cours
	13/14/1650	19/14/1300) B					XXX	XXX	XXX	PCE	bicid S			7)Analysis Requ	State of the committee
Note: Check if applicable: Project-Specific R High Confaminan NJ LSRP Project 11) Sampler (print name):	Ш		Note						^		TAL	Heto	als T		s Request	RECORD RECORD MAN Saver LXXX April Record NY Record
Check if applicable: Project-Specific Reporting Limits High Contaminant Concentrations NJ LSRP Project ampler (print name):	Metals (ICP-MS 200.8 or 6020) Metals-Soil (ICP-MS 6020 for Be & Ag)	BN or BNA (8270C SIM)	Comments, No	***				9	٥	 q	None			\\		Turn 24 Hours () 48 Hours () 72 Hours () 4 Days (35' 1 Week (25' 2) Weeks 2 Weeks
idons	20) r Be & Ag)		tes. Special Regulation methods required to m			 ပ	2				MeOH En Core NaOH	8) # of Bottles		<=== Check If Contingent		3)Reporting Requirem around Report 100%) Data Summ 75%) Waste 50%) Red - NJ / N 7%; TPH) CLP 7%; EPH) Cutegory A Category A City Category A Ci
ntions Coder			Comments, Notes, Special Regularyments, HAZARDS Check If low-level groundwater methods required to meet current standards in NJ or PA:				12.11			8	H2SO4 HNO3 Other:					Type Please Cf
oder Temperature			n NJ or PA:			DI MODEL					9)Comments					Circle) Electronic Delix. Hazsite/CSV EQuis 4-File / EZ / NYS EQuis EPA Region 2 or 5 Excel - NJ Regulatory Excel - NY Regulatory Excel - PA Regulatory PDF Other:



175 ROUTE 48 WEST, UNIT D · FAIRFIELD, NJ 07004 2 MADISON ROAD, FAIRFIELD, NJ 07004 800-428-9992 · 973-244-9770 FAX: 973-244-9787

WWW.HCVLAB.COM

Project: NYCDDC BEGS Farragut Rd

Client PO: Not Available

Report To: LIRO Engineers, Inc.

703 Lorimer Street Brooklyn, NY 11211

Attn: Amy Hewson

Received Date: 4/1/2014

Report Date:

Deliverables: NYDOH-CatA

Lab ID: AC77891

Lab Project No: 4040122

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director

OR

Stanley Gilewicz - Laboratory Director

NJ (07071)

PA (68-00463)

NY (ELAP11408)

KY (90124)

CT (PH-0671)



NJ (07071 and 07069)

NY (ELAP11408 and 11939)

PA (68-00463 and 68-04409) KY (90124)

MA (NJ386)

CT (PH-0671) USACE

Report Of Analysis

veritech laboratories

To: LIRO Engineers, Inc.

703 Lorimer Street

Project:

Attention: Amy Hewson

NYCDDC BEGS Farragut Rd

Date Submitted: 4/1/2014

Date Reported:

4/11/2014

NY

#: AC77891-001	SampleID: TWP-03 (SB-7)				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
77891-001	TWP-03 (SB-7)		Date C	Collected 4/1/2014	
Carbonaceous	BOD-5 Day (SM5210 B-01)				-
	Carbonaceous Bod, 5 Day	1	mg/L	3.0	ND
Chloride (Wate	r) 300.0				
	Chloride	20	mg/L	40	760
Cr (Hexavalent) 3500-Cr D		_		
	Cr (Hexavalent)	1	mg/l	0.025	ND
Flash Point 101	10		•		
	Flash Point	1	Deg. F		>141
Mercury (Water	r) 245 1	-			
	Mercury	1	ug/L	0.20	ND
Metals-Five 200	•	•	- 9 , -	0.20	ND
Wetais-i ive 200	Cadmium	1	ug/L	2.0	ND
	Copper	1	ug/L	25	58
	Lead	1	ug/L	5.0	40
	Nickel	1	ug/L	10	52
	Zinc	1	ug/L	25	87
Nitrate-N (Wate	r) 300.0		_		
•	Nitrate	1	mg/L	1.0	ND
Nitrite-N (Aque	ous) 300.0		•		
	Nitrite	1	mg/L	1.0	ND
PCB 608					
1 05 000	Aroclor (Total)	1	ug/L	0.052	ND
	Aroclor-1016	1	ug/L	0.052	ND
	Aroclor-1221	1	ug/L	0.052	ND
	Aroclor-1232	1	ug/L	0.052	ND
	Aroclor-1242	1	ug/L	0.052	ND
	Aroclor-1248	1	ug/L	0.052	ND
	Aroclor-1254	1	ug/L	0.052	ND
	Aroclor-1260	1	ug/L	0.052	ND
	Aroclor-1262	1	ug/L	0.052	ND
	Aroclor-1268	1	ug/L	0.052	ND
pH 150.1					
	pH	1	рН		7.6
Semivolatile Or	ganics (no search) 625				
	1,2,4-Trichlorobenzene	1	ug/L	2.1	ND
	Naphthalene	1	ug/L	0.52	ND
	Phenol	1	ug/L	2.1	ND
SGT-HEM (Non	-Polar Material) 1664B				
	SGT-HEM (Non-Polar Material)	1	MG/L	5.7	ND .
Total Kjeldahi N	litrogen EPA 351				
·	Total Kjeldahl Nitrogen	2	mg/l	0.800	7.36

Lab#: AC77891-001	SampleID: TWP-03 (SB-7) Analyte	DF		MDL/PQL/RL	Result
TestGroup			Units		
Total Solids (SI	M2540B-97)				
	Total Solids @ 103-105 C	1	mg/l	40	2400
Total Suspende	ed Solids (SM 2540D-97)				
·	Total Suspended Solids @ 103-105 C	1	mg/l	10	600
Volatile Organi	cs (no search) 624				
•	1,1,1-Trichloroethane	1	ug/L	1.0	ND
•	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	Benzene	1	ug/L	0.50	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	0.66
	o-Xylene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	Xylenes (Total)	1	ug/L	1.0	ND

Lab#: AC77891-0	02 SampleID: TWP-04 (SB-4)				·
TestGrou	p Analyte	DF	Units	MDL/PQL/RL	Result
AC77891-002	TWP-04 (SB-4)		Date C	ollected 4/1/2014	
	eous BOD-5 Day (SM5210 B-01)			·····	
	Carbonaceous Bod, 5 Day	1	mg/L	2.0	ND
Chlorida ((Water) 300.0	•	g. L	2.0	ND
Cinoriae (Chloride	2	mg/L	4.0	77
0- (11		_	mg/L	4.0	′′
Cr (Hexav	ralent) 3500-Cr D	4	2		
	Cr (Hexavalent)	1	mg/l	0.025	ND
Flash Poir					
	Flash Point	1	Deg. F		>141
Mercury (Water) 245.1				
	Mercury	1	ug/L	0.20	ND
Metals-Fiv	ve 200.7				
	Cadmium	1	ug/L	2.0	ND
	Copper	1	ug/L	25	ND
	Lead	1	ug/L	5.0	ND
	Nickel	1	ug/L	10	ND
	Zinc	1	ug/L	25	ND
Nitrate-N ((Water) 300.0				
	Nitrate	1	mg/L	1.0	ND
Nitrite-N (Aqueous) 300.0		-		
	Nitrite	1	mg/L	1.0	ND
PCB 608		·	g , _		.,,
PCB 600	Aroclor (Total)	4		0.050	ND
	Aroclor-1016	1 1	ug/L	0.050 0.050	ND ND
	Aroclor-1221	1	ug/L ug/L	0.050	
	Aroclor-1232	1	ug/L ug/L	0.050	ND ND
	Aroclor-1242	i	ug/L ug/L	0.050	ND
	Aroclor-1248	1	ug/L	0.050	ND
	Aroclor-1254	1	ug/L	0.050	ND
	Aroclor-1260	1	ug/L	0.050	ND
	Arocior-1262	1	ug/L	0.050	ND
	Aroclor-1268	1	ug/L	0.050	ND
pH 150.1			Ü		
p 100	рН	1	pН		7.5
Somivolet	ile Organics (no search) 625	•	μ		7.0
Sellivolat	1,2,4-Trichlorobenzene	1	ua/l	2.2	ND
	Naphthalene	1	ug/L ug/L	2.2 0.54	ND
	Phenol	1	ug/L ug/L	2.2	ND ND
COT HEM		•	ug/L	2.2	ND
SGI-HEM	(Non-Polar Material) 1664B				
	SGT-HEM (Non-Polar Material)	1	MG/L	5.7	ND
Total Kjeld	dahl Nitrogen EPA 351				
	Total Kjeldahl Nitrogen	1	mg/i	0.400	2.89
Total Solid	ds (SM2540B-97)				
	Total Solids @ 103-105 C	1	mg/l	40	420
Total Susp	pended Solids (SM 2540D-97)				
	Total Suspended Solids @ 103-105 C	1	mg/l	4	7.6

ab#: AC77891-002	SampleID: TWP-04 (SB-4)	DF	Units	MDL/PQL/RL	Result
TestGroup	Analyte				
Volatile Organics	s (no search) 624				
	1,1,1-Trichloroethane	· 1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	Benzene	1	ug/L	0.50	ND
(Carbon tetrachloride	1	ug/L	1.0	ND
(Chloroform	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
1	m&p-Xylenes	1	ug/L	1.0	ND
1	Methyl-t-butyl ether	1	ug/L	0.50	ND
	p-Xylene	1	ug/L	1.0	ND
•	Tetrachloroethene	1	ug/L	1.0	ND
•	Toluene	1	ug/L	1.0	ND
,	Kylenes (Total)	1	ug/L	1.0	ND

Lab#: AC7	7891-003	SampleID: TWP-05 (SB-10)				
T	estGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77891-0	03	TWP-05 (SB-10)		Date C	ollected 4/1/2014	
		BOD-5 Day (SM5210 B-01)		 _		
J		Carbonaceous Bod, 5 Day	1	mg/L	2.0	ND
_	hloride (Water					
·	illoride (viacei	Chloride	10	mg/L	20	300
^	- (Hoveyslant)			_		
C	r (Hexavalent)	Cr (Hexavalent)	1	mg/l	0.025	ND
_		·	•			
F	lash Point 101		1	Deg. F		>141
		Flash Point	ı	Deg. F		. 141
N	lercury (Water) 245.1				ND
		Mercury	1	ug/L	0.20	ND
N	etals-Five 200	.7				
		Cadmium	1	ug/L	2.0	ND
		Copper	1	ug/L	25	ND
		Lead	1	ug/L	5.0	ND
		Nickel	1	ug/L	10	12
		Zinc	1	ug/L	25	ND
N	litrate-N (Wate	r) 300.0				
		Nitrate	1	mg/L	1.0	8.7
	litrite-N (Aqued	ous) 300.0				
•	tici to it (riquot	Nitrite	1	mg/L	1.0	ND
-	PCB 608					
•	CB 600	Aroclor (Total)	1	ug/L	0.050	ND
		Aroclor-1016	1	ug/L	0.050	ND
		Aroclor-1221	1	ug/L	0.050	ND
		Aroclor-1232	1	ug/L	0.050	ND
		Aroclor-1242	1	ug/L	0.050	ND
		Aroclor-1248	1	ug/L	0.050	ND
		Aroclor-1254	1	ug/L	0.050	ND
		Aroclor-1260	1	ug/L	0.050	ND
		Aroclor-1262	1	ug/L	0.050	ND
		Aroclor-1268	1	ug/L	0.050	ND
-	pH 150.1					
•	511 100.1	рН	1	pН		7.2
	O a mais and a file. Or	rganics (no search) 625		•		
•	oemivolatile Ol	fganics (no search) 625 1,2,4-Trichlorobenzene	1	ug/L	2.2	ND
		Naphthalene	1	ug/L	0.54	ND
		Phenol	1	ug/L	2.2	ND
			•	0		
;	SGT-HEM (Nor	n-Polar Material) 1664B	1	MG/L	5.8	ND
		SGT-HEM (Non-Polar Material)	'	WIG/L	0.0	
	Total Kjeldahi I	Nitrogen EPA 351			0.400	2.69
		Total Kjeldahl Nitrogen	1	mg/l	0.400	2.09
•	Total Solids (S	M2540B-97)				
		Total Solids @ 103-105 C	1	mg/l	40	900
•	Total Suspend	ed Solids (SM 2540D-97)				
		Total Suspended Solids @ 103-105 C	1	mg/l	4	ND

Lab#: AC77891-003	SampleID: TWP-05 (SB-10)				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organ	ics (no search) 624				
	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	Benzene	- 1	ug/L	0.50	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	-1	ug/L	1.0	ND
	Xvienes (Total)	1	ug/L	1.0	ND

Lab#: AC77892-001	SampleID: TWP-04 (SB-04) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77892-001	TWP-04 (SB-04) U		Date C	ollected 4/1/2014	
Chlorinated	Herbicides 8151				
	2,4,5-T	1	ug/L	0.51	ND
	2,4-D	1	ug/L	0.51	ND
	Dicamba	1	ug/L	0.51	ND
	Silvex	1	ug/L	0.51	ND
Mercury (Wa	nter) 7470A		•		
	Mercury	1	ug/L	0.70	ND
Organochlor	ine Pesticides 8081	-	- g -	5 5	,,,,
Organochio	Aldrin	1	ug/L	0.010	ND
	Alpha-BHC	1	ug/L	0.010	ND ND
	beta-BHC	1	ug/L ug/L	0.010	ND ND
	Chlordane	1	ug/L	0.10	ND
	delta-BHC	1	ug/L	0.010	ND
	Dieldrin	1	ug/L	0.010	ND
	Endosulfan I	1	ug/L	0.010	ND
	Endosulfan II	1	ug/L	0.010	ND
	Endosulfan Sulfate	1	ug/L	0.010	ND
	Endrin	1	ug/L	0.010	ND
	Endrin Aldehyde	1	ug/L	0.010	ND
	Endrin Ketone	1	ug/L	0.010	ND
	gamma-BHC	1	ug/L	0.010	ND
	Heptachlor	1	ug/L	0.010	ND
	Heptachlor Epoxide	1	ug/L	0.010	ND
	Methoxychlor	1	ug/L	0.010	ND
	p,p'-DDD	1	ug/L	0.010	ND
	p,p'-DDE	1	ug/L	0.010	ND
	p,p'-DDT	1	ug/L	0.010	ND
	Toxaphene	1	ug/L	0.25	ND
PCB 8082					
	Aroclor (Total)	1	ug/L	0.25	ND
	Aroclor-1016	1	ug/L	0.25	ND
	Aroclor-1221	1	ug/L	0.25	ND
	Aroclor-1232	1	ug/L	0.25	ND
	Aroclor-1242	1	ug/L	0.25	ND
	Aroclor-1248	1	ug/L	0.25	ND
	Aroclor-1254	1	ug/L	0.25	ND
	Aroclor-1260	1	ug/L	0.25	ND
	Aroclor-1262	1	ug/L	0.25	ND
	Aroclor-1268	1	ug/L	0.25	ND

ab#: AC77892-001	SampleID: TWP-04 (SB-04) U						
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result		
Semivolatile Org	anics (no search) 8270						
	1,1'-Biphenyl	1	ug/L	2.1	ND		
	1,2,4,5-Tetrachlorobenzene	1	ug/L	2.1	ND		
	2,3,4,6-Tetrachlorophenol	1	. ug/L	2.1	ND		
'	2,4,5-Trichlorophenol	1	ug/L	2.1	ND		
	2,4,6-Trichlorophenol	1	ug/L	2.1	ND		
	2,4-Dichlorophenol	1	ug/L	2.1	ND		
	2,4-Dimethylphenol	1	ug/L	0.52	ND		
	2,4-Dinitrophenol	1	ug/L	10	ND		
	2,4-Dinitrotoluene	1	ug/L	2.1	ND		
	2,6-Dinitrotoluene	1	ug/L	2.1	ND		
	2-Chloronaphthalene	1	ug/L	2.1	ND		
	2-Chlorophenol	1	ug/L	2.1			
	2-Methylnaphthalene	1	=	2.1	ND		
	2-Methylphenol	1	ug/L		ND		
	2-Nitroaniline	-	ug/L	0.52	ND		
	z-Nitrophenol	1	ug/L	2.1	ND		
		1	ug/L	2.1	ND		
	3&4-Methylphenol	1	ug/L	0.52	ND		
	3,3'-Dichlorobenzidine	1	ug/L	2.1	ND		
	3-Nitroaniline	1	ug/L	2.1	ND		
	4,6-Dinitro-2-methylphenol	1	ug/L	2.1	ND		
	4-Bromophenyl-phenylether	1	ug/L	2.1	ND		
	4-Chloro-3-methylphenol	1	ug/L	2.1	ND		
	1-Chloroaniline	1	ug/L	0.52	ND		
4	L-Chlorophenyl-phenylether	1	ug/L	2.1	ND		
	I-Nitroaniline	1	ug/L	2.1	ND		
4	l-Nitrophenol	1	ug/L	2.1	ND		
Į.	Acenaphthene	1	ug/L	2.1	ND		
A	Acenaphthylene	1	ug/L	2.1	ND		
A	Acetophenone	1	ug/L	2.1	ND		
A	Anthracene	1	ug/L	2.1	ND		
Į.	Atrazine	1	ug/L	2.1	ND		
E	Benzaldehyde	1	ug/L	2.1	ND		
	Benzo[a]anthracene	1	ug/L	2.1	ND		
E	Benzo[a]pyrene	1	ug/L	2.1	ND		
	Benzo[b]fluoranthene	1	ug/L	2.1	ND		
	Benzo[g,h,i]perylene	1	ug/L	0.52	ND		
	Benzo[k]fluoranthene	1	ug/L	2.1	ND		
	is(2-Chloroethoxy)methane	1	ug/L	2.1	ND		
	is(2-Chloroethyl)ether	•	ug/L	0.52			
	is(2-Chloroisopropyl)ether				ND		
	is(2-Ethylhexyl)phthalate	,	ug/L	2.1	ND		
	Butylbenzylphthalate	4	ug/L	2.1	ND		
		1	ug/L	2.1	ND		
	Caprolactam	1	ug/L	2.1	ND		
	Carbazole	1	ug/L 	2.1	ND		
	Chrysene	1	ug/L	2.1	ND		
	Dibenzo[a,h]anthracene	1	ug/L	2.1	ND		
	Dibenzofuran	1	ug/L	0.52	ND		
	Piethylphthalate	1	ug/L	2.1	ND		
	imethylphthalate	1	ug/L	2.1	ND		
	i-n-butylphthalate	1	ug/L	0.52	ND		
	i-n-octylphthalate	1	ug/L	2.1	ND		
F	luoranthene	1	ug/L	2.1	ND		
F	luorene	1	ug/L	2.1	ND		
Н	exachiorobenzene	1	ug/L	2.1	ND		
	exachlorobutadiene	1	ug/L	2.1	ND		

ab#: AC77892-001	SampleID: TWP-04 (SB-04) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
W	Hexachlorocyclopentadiene	1	ug/L	2.1	ND
	Hexachloroethane	1	ug/L	2.1	ND
	Indeno[1,2,3-cd]pyrene	1	ug/L	2.1	ND
	Isophorone	1	ug/L	2.1	ND
	Naphthalene	1	ug/L	0.52	ND
	Nitrobenzene	1	ug/L	2.1	ND
	N-Nitroso-di-n-propylamine	1	ug/L	0.52	ND
	N-Nitrosodiphenylamine	1	ug/L	2.1	ND
	Pentachlorophenol	1	ug/L	10	ND
	Phenanthrene	1	ug/L	2.1	ND
	Phenol	1	ug/L	2.1	ND
	Pyrene	1	ug/L	2.1	ND
TAL Metals 6	010				
	Aluminum	1	ug/L	200	210
	Barium	1	ug/L	50	ND
	Calcium	1	ug/L	5000	86000
	Chromium	1	ug/L	50	ND
	Copper	1	ug/L	50	ND
	Iron	1	ug/L	300	740
	Magnesium	1	ug/L	5000	16000
	Manganese	1	ug/L	40	1000
	Nickel	1	ug/L	50	ND
	Potassium	1	ug/L	5000	7000
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	18000
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	ND
TAL Metals 6	020				
	Antimony	1	ug/L	2.0	ND
	Arsenic	1	ug/L	2.0	ND
	Beryllium	1	ug/L	1.0	ND
	Cadmium	1	ug/L	2.0	ND
	Cobalt	1	ug/L	2.0	6.1
	Lead	1	ug/L	3.0	ND
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

ab#: AC77892-001	SampleID: TWP-04 (SB-04) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Volatile Organi	cs (no search) 8260				- rtooui
	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,1,2,2-Tetrachloroethane	1	ug/L	1.0	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	1.0	ND
	1,1,2-Trichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethene	1	ug/L	1.0	ND
	1,2,3-Trichlorobenzene	1	ug/L	1.0	ND
	1,2,4-Trichlorobenzene	1	ug/L	1.0	ND
	1,2-Dibromo-3-chloropropane	1	ug/L	1.0	ND
	1,2-Dibromoethane	1	ug/L	1.0	ND
	1,2-Dichlorobenzene	1	ug/L	1.0	ND
	1,2-Dichloroethane	1	ug/L	0.50	ND
	1,2-Dichloropropane	1	ug/L	1.0	ND
	1,3-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dioxane	1	ug/L	50	ND
	2-Butanone	1	ug/L	1.0	ND ND
	2-Hexanone	1 ,	ug/L	1.0	
	4-Methyl-2-pentanone	1	-		ND
	Acetone	1	ug/L	1.0	ND
	Benzene	1	ug/L	10	ND
	Bromochloromethane	-	ug/L	0.50	ND
	Bromodichloromethane	1	ug/L	1.0	ND
	Bromoform	1	ug/L 	1.0	ND
	Bromomethane	1	ug/L	1.0	ND
		1	ug/L	1.0	ND
	Carbon disulfide	1	ug/L	1.0	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chlorobenzene	1	ug/L	1.0	ND
	Chloroethane	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Chloromethane	1	ug/L	1.0	ND
	cis-1,2-Dichloroetheпе	1	ug/L	1.0	ND
	cis-1,3-Dichloropropene	1	ug/L	1.0	ND
	Cyclohexane	1	ug/L	1.0	ND
	Dibromochloromethane	1	ug/L	1.0	ND
	Dichlorodifluoromethane	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	Isopropylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl Acetate	1	ug/L	1.0	ND
	Methylcyclohexane	1 .	ug/L	1.0	ND
	Methylene chloride	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1	ug/L	1.0	ND
	Styrene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	trans-1,2-Dichloroethene	1	ug/L	1.0	ND
	trans-1,3-Dichloropropene	1	ug/L	1.0	ND
	Trichloroethene	1	ug/L ug/L	1.0	
	Trichlorofluoromethane	1	•		ND
	Vinyl chloride	1	ug/L	1.0	ND
	Xylenes (Total)		ug/L	1.0	ND
•	Nyiones (Total)	1	ug/L	1.0	ND

Lab#: AC77892-002	SampleID: TWP-04 (SB-04) F				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77892-002	TWP-04 (SB-04) F		Date C	ollected 4/1/2014	
Mercury (Wat	ter) 7470A				
• •	Mercury	1	ug/L	0.70	ND
TAL Metals 6	010				
1712 11100010	Aluminum	1	ug/L	200	ND
	Barium	1	ug/L	50	ND
	Calcium	1	ug/L	5000	85000
	Chromium	1	ug/L	50	ND
	Copper	1	ug/L	50	ND
	Iron	1	ug/L	300	330
	Magnesium	1	ug/L	5000	16000
	Manganese	1	ug/L	40	1000
	Nickel	1	ug/L	50	ND
	Potassium	1	ug/L	5000	7000
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	18000
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	ND
TAL Metals 6	5020				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Antimony	1	ug/L	2.0	ND
	Arsenic	1	ug/L	2.0	ND
	Beryllium	1	ug/L	1.0	ND
	Cadmium	1	ug/L	2.0	ND
	Cobalt	1	ug/L	2.0	5.1
	Lead	1	ug/L	3.0	ND
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

Lab#: AC77892-003	SampleID: TWP-05 (SB-10) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77892-003	TWP-05 (SB-10) U		Date C	Collected 4/1/2014	
Chlorinated I	Herbicides 8151				
	2,4,5-T	1	ug/L	0.51	ND
	2,4-D	1	ug/L	0.51	ND
	Dicamba	1	ug/L	0.51	ND
	Silvex	1	ug/L	0.51	ND
Mercury (Wa	ter) 7470A	•	-5	0.01	ND
moroury (via	Mercury	1	ua/l	0.70	ND
Organochlau	•	•	ug/L	0.70	ND
Organochion	ine Pesticides 8081		_	_	
	Aldrin	1	ug/L	0.010	ND
	Alpha-BHC	1	ug/L	0.010	ND
	beta-BHC	1	ug/L	0.010	ND
	Chlordane delta-BHC	1	ug/L	0.10	ND
	· · · · - · · -	1	ug/L	0.010	ND
	Dieldrin	1	ug/L	0.010	ND
	Endosulfan I	1	ug/L	0.010	ND
	Endosulfan II	1	ug/L	0.010	ND
	Endosulfan Sulfate	1	ug/L	0.010	ND
	Endrin	1	ug/L	0.010	ND
	Endrin Aldehyde	1	ug/L	0.010	ND
	Endrin Ketone	1	ug/L	0.010	ND
	gamma-BHC	1	ug/L	0.010	ND
	Heptachlor	1	ug/L	0.010	ND
	Heptachlor Epoxide	1	ug/L	0.010	ND
	Methoxychlor	. 1	ug/L	0.010	ND
	p,p'-DDD	1	ug/L	0.010	ND
	p,p'-DDE	1	ug/L	0.010	ND
	p,p'-DDT	1	ug/L	0.010	ND
	Toxaphene	1	ug/L	0.25	ND
PCB 8082					
	Arocior (Total)	1	ug/L	0.25	ND
	Aroclor-1016	1	ug/L	0.25	ND
	Arocior-1221	1	ug/L	0.25	ND
	Aroclor-1232	1	ug/L	0.25	ND
	Aroclor-1242	1	ug/L	0.25	ND
	Aroclor-1248	1	ug/L	0.25	ND
	Aroclor-1254	1	ug/L	0.25	ND
	Aroclor-1260	1	ug/L	0.25	ND
	Aroclor-1262	1	ug/L	0.25	ND
	Aroclor-1268	1	ug/L	0.25	ND

Lab#: AC77892-003	SampleID: TWP-05 (SB-10) U						
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result		
Semivolatile Orga	nics (no search) 8270						
1	,1'-Biphenyl	1	ug/L	2.2	ND		
1	,2,4,5-Tetrachlorobenzene	1	ug/L	2.2	ND		
2	,3,4,6-Tetrachlorophenol	1	ug/L	2.2	ND		
2	,4,5-Trichlorophenol	1	ug/L	2.2	ND		
2	,4,6-Trichlorophenol	1	ug/L	2.2	ND		
	,4-Dichlorophenol	1	ug/L	2.2	ND		
2	,4-Dimethylphenol	1	ug/L	0.54	ND		
2	,4-Dinitrophenol	1	ug/L	11	ND		
2	,4-Dinitrotoluene	1	ug/L	2.2	ND		
2	,6-Dinitrotoluene	1	ug/L	2.2	ND		
2	-Chloronaphthalene	1	ug/L	2.2	ND		
	-Chlorophenol	1	ug/L	2.2	ND		
	-Methylnaphthalene	1	ug/L	2.2	ND		
	-Methylphenol	1	ug/L	0.54	ND		
	-Nitroaniline	1	ug/L	2.2	ND		
	-Nitrophenol	1	ug/L	2.2	ND		
	8&4-Methylphenol	1	ug/L	0.54	ND		
	3,3'-Dichlorobenzidine	1	ug/L	2.2	ND		
	3-Nitroaniline	1	ug/L	2.2	ND		
	I,6-Dinitro-2-methylphenol	1	ug/L	11	ND		
	l-Bromophenyl-phenylether	1	ug/L	2.2	ND		
	i-Chloro-3-methylphenol	1	ug/L	2.2	ND		
	I-Chloroaniline	1	ug/L	0.54	ND		
	I-Chlorophenyl-phenylether	1	ug/L	2.2	ND		
	- Chlorophenyl-phenylether - Nitroaniline	1	ug/L	2.2	ND		
	I-Nitrophenol	1	ug/L	2.2	ND		
	Acenaphthene	1	ug/L	2.2	ND		
	Acenaphthylene	1	ug/L	2.2	ND		
		1	ug/L	2.2	ND		
	Acetophenone Anthracene	1	ug/L	2.2	ND		
	Anunacene Atrazine	1	ug/L	2.2	ND		
		1	ug/L	2.2	ND		
	Benzaldehyde	i	ug/L	2.2	ND		
	Benzo[a]anthracene	•	ug/L	2.2	ND		
	Benzo(a)pyrene	1		2.2	ND		
	Benzo[b]fluoranthene	•	ug/L	2.2	ND		
	Benzo[g,h,i]perylene	1	ug/L	2.2	ND		
	Benzo[k]fluoranthene	1	ug/L	2.2	ND		
	bis(2-Chloroethoxy)methane	1	ug/L	0.54	ND		
	bis(2-Chloroethyl)ether	1	ug/L	2.2	ND		
	bis(2-Chloroisopropyl)ether	1	ug/L		13		
	bis(2-Ethylhexyl)phthalate	1	ug/L	2.2	ND		
	Butylbenzylphthalate	1	ug/L	2.2			
	Caprolactam	1	ug/L	2.2	ND		
	Carbazole	1	ug/L 	2.2	ND		
	Chrysene	1	ug/L "	2.2	ND		
	Dibenzo[a,h]anthracene	1	ug/L 	2.2	ND		
	Dibenzofuran	1	ug/L	0.54	ND		
	Diethylphthalate	1	ug/L	2.2	ND		
I	Dimethylphthalate	1	ug/L	2.2	ND		
	Di-n-butyiphthalate	1	ug/L	0.54	ND		
	Di-n-octylphthalate	1	ug/L	2.2	ND		
	Fluoranthene	1	ug/L	2.2	ND		
	Fluorene	1	ug/L	2.2	ND		
	Hexachlorobenzene	1	ug/L	2.2	ND		
	Hexachlorobutadiene	1	ug/L	2.2	ND		

-ab#: AC77892-003	SampleID: TWP-05 (SB-10) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	ug/L	11	ND
	Hexachloroethane	1	ug/L	2.2	ND
	Indeno[1,2,3-cd]pyrene	1	ug/L	2.2	ND
	Isophorone	1	ug/L	2.2	ND
	Naphthalene	1	ug/L	0.54	ND
	Nitrobenzene	1	ug/L	2.2	ND
	N-Nitroso-di-n-propylamine	1	ug/L	0.54	ND
	N-Nitrosodiphenylamine	1	ug/L	2.2	ND
	Pentachiorophenol	1	ug/L	11	ND
	Phenanthrene	1	ug/L	2.2	ND
	Phenol	1	ug/L	2.2	ND
	Pyrene	1	ug/L	2.2	ND
TAL Metals 601	10		•		
•	Aluminum	1	ug/L	200	ND
	Barium	1	ug/L	50	96
	Calcium	1	ug/L	5000	83000
	Chromium	1	ug/L	5000	ND
	Copper	1	ug/L	50	ND ND
	Iron	1	ug/L	300	ND
	Magnesium	1	ug/L	5000	12000
	Manganese	1	ug/L	40	380
	Nickel	1	ug/L	50	ND
	Potassium	1	ug/L	5000	6900
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	170000
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	ND
TAL Metals 602	2	•	ug/L	30	ND
IAL MEGAS 002	Antimony				
	Arsenic	1	ug/L	2.0	ND
	Beryllium	1	ug/L	2.0	ND
	Cadmium	1	ug/L	1.0	ND
	Cobalt	1	ug/L	2.0	ND
	Lead	1	ug/L	2.0	2.1
	Selenium	1	ug/L	3.0	ND
		1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

Lab#: AC77892-003	SampleID: TWP-05 (SB-10) U						
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul		
Volatile Organics	s (no search) 8260		***				
-	1,1,1-Trichloroethane	1	ug/L	1.0	ND		
	1,1,2,2-Tetrachloroethane	1	ug/L	1.0	ND		
	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	1.0	ND		
	1,1,2-Trichloroethane	1	ug/L	1.0	ND		
	1,1-Dichloroethane	1	ug/L	1.0	ND		
	1,1-Dichloroethene	1	ug/L	1.0	ND		
	1,2,3-Trichlorobenzene	1	ug/L	1.0	ND		
	1,2,4-Trichlorobenzene	1	ug/L	1.0	ND		
	1,2-Dibromo-3-chloropropane	1	ug/L	1.0	ND		
	1,2-Dibromoethane	1	ug/L	1.0	ND		
	1,2-Dichlorobenzene	1	ug/L	1.0	ND		
	1,2-Dichloroethane	1	ug/L	0.50	ND		
	•	1	ug/L	1.0	ND		
	1,2-Dichloropropane	1	ug/L	1.0	ND		
	1,3-Dichlorobenzene	1	•	1.0	ND		
	1,4-Dichlorobenzene	1	ug/L ug/L	50	ND		
	1,4-Dioxane	-	-	1.0	ND		
	2-Butanone	1	ug/L	1.0	ND		
	2-Hexanone	1	ug/L		ND		
	4-Methyl-2-pentanone	1	ug/L	1.0	ND		
	Acetone	1	ug/L	10			
	Benzene	1	ug/L	0.50	ND		
	Bromochloromethane	1	ug/L	1.0	ND		
	Bromodichloromethane	1	ug/L	1.0	ND		
	Bromoform	1	ug/L	1.0	ND		
	Bromomethane	1	ug/L	1.0	ND		
	Carbon disulfide	1	ug/L	1.0	ND		
	Carbon tetrachloride	1	ug/L	1.0	ND		
	Chlorobenzene	1	ug/L	1.0	ND		
	Chloroethane	1	ug/L	1.0	ND		
	Chloroform	1	ug/L	1.0	ND		
	Chloromethane	1	ug/L	1.0	ND		
	cis-1,2-Dichloroethene	1	ug/L	1.0	ND		
	cis-1,3-Dichloropropene	1	ug/L	1.0	ND		
	Cyclohexane	1	ug/L	1.0	ND		
	Dibromochloromethane	1	ug/L	1.0	ND		
	Dichlorodifluoromethane	1	ug/L	1.0	ND		
	Ethylbenzene	1	ug/L	1.0	ND		
	Isopropylbenzene	1	ug/L	1.0	ND		
	m&p-Xylenes	1	ug/L	1.0	ND		
	Methyl Acetate	1	ug/L	1.0	ND		
	Methylcyclohexane	1	ug/L	1.0	ND		
	Methylene chloride	1	ug/L	1.0	ND		
	Methyl-t-butyl ether	1	ug/L	0.50	ND		
	o-Xylene	1	ug/L	1.0	ND		
	Styrene	1	ug/L	1.0	ND		
	Tetrachioroethene	1	ug/L	1.0	ND		
		1	ug/L	1.0	ND		
	Toluene	1	ug/L ug/L	1.0	ND		
	trans-1,2-Dichloroethene	1		1.0	ND		
	trans-1,3-Dichloropropene	1	ug/L		ND		
	Trichloroethene	1	ug/L	1.0			
	Trichlorofluoromethane	1	ug/L	1.0	ND		
	Vinyl chloride	1	ug/L	1.0	ND		
	Xylenes (Total)	1	ug/L	1.0	ND		

Lab#: AC77892-004	SampleID: TWP-05 (SB-10) F				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77892-004	TWP-05 (SB-10) F		Date C	ollected 4/1/2014	
Mercury (Wat	ter) 7470A				
	Mercury	1	ug/L	0.70	ND
TAL Metals 6	010				
.,	Aluminum	1	ug/L	200	ND
	Barium	1 .	ug/L	50	91
	Calcium	1	ug/L	5000	79000
	Chromium	1	ug/L	50	ND
	Copper	1	ug/L	50	ND
	Iron	1	ug/L	300	ND
	Magnesium	1	ug/L	5000	12000
	Manganese	1	ug/L	40	360
	Nickel	1	ug/L	50	ND
	Potassium	1	ug/L	5000	6500
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	160000
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	ND
TAL Metals 6	020				
	Antimony	1	ug/L	2.0	ND
	Arsenic	1	ug/L	2.0	ND
	Beryllium	1	ug/L	1.0	ND
	Cadmium	1	ug/L	2.0	ND
	Cobalt	1	ug/L	2.0	2.2
	Lead	1	ug/L	3.0	ND
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

ab#: AC77892-005	SampleID: Field Blank U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
C77892-005	Field Blank U		Date C	ollected 4/1/2014	Ī
Chlorinated H	lerbicides 8151				
	2,4,5-T	1	ug/L	0.54	ND
	2,4-D	1	ug/L	0.54	ND
	Dicamba	1	ug/L	0.54	ND
	Silvex	1	ug/L	0.54	ND
Mercury (Wat	er) 7470A				
, , , , , , , , , , , , , , , , , , , ,	Mercury	1	ug/L	0.70	ND
Organochlori	ne Pesticides 8081		- - -		
	Aldrin	1	ug/L	0.010	ND
	Alpha-BHC	1	ug/L	0.010	ND
	beta-BHC	1	ug/L	0.010	ND
	Chlordane	1	ug/L	0.10	ND
	delta-BHC	1	ug/L	0.010	ND
	Dieldrin	1	ug/L	0.010	ND
	Endosulfan I	1	ug/L	0.010	ND
	Endosulfan II	1	ug/L	0.010	ND
	Endosulfan Sulfate	1	ug/L	0.010	ND
	Endrin	1	ug/L	0.010	ND
	Endrin Aldehyde	1	ug/L	0.010	ND
	Endrin Ketone	1	ug/L	0.010	ND
	gamma-BHC	1	ug/L	0.010	ND
	Heptachlor	1	ug/L	0.010	ND
	Heptachlor Epoxide	1	ug/L	0.010	ND
	Methoxychlor	1	ug/L	0.010	ND
	p,p'-DDD	1	ug/L	0.010	ND
	p,p'-DDE	1	ug/L	0.010	ND
	p,p'-DDT	1	ug/L	0.010	ND
	Toxaphene	1	ug/L	0.25	ND
PCB 8082					
	Aroclor (Total)	1	ug/L	0.25	ND
	Aroclor-1016	1	ug/L	0.25	ND
	Aroclor-1221	1	ug/L	0.25	ND
	Aroclor-1232	1	ug/L	0.25	ND
	Aroclor-1242	1	ug/L	0.25	ND
	Aroclor-1248	1	ug/L	0.25	ND
	Aroclor-1254	1	ug/L	0.25	ND
	Aroclor-1260	1	ug/L	0.25	ND
	Aroclor-1262	1	ug/L	0.25	ND
	Aroclor-1268	1	ug/L	0.25	ND

Lab#: AC77892-005	SampleID: Field Blank U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Orga	anics (no search) 8270				
1	1,1'-Biphenyl	1	ug/L	2.2	ND
•	1,2,4,5-Tetrachlorobenzene	1	ug/L	2.2	ND
2	2,3,4,6-Tetrachlorophenol	1	ug/L	2.2	ND
	2,4,5-Trichlorophenol	1	ug/L	2.2	ND
:	2,4,6-Trichlorophenol	1	ug/L	2.2	ND
:	2,4-Dichlorophenol	1	ug/L	2.2	ND
·	2,4-Dimethylphenol	1	ug/L	0.56	ND
:	2,4-Dinitrophenol	1	ug/L	11	ND
:	2,4-Dinitrotoluene	1	ug/L	2.2	ND
2	2,6-Dinitrotoluene	1	ug/L	2.2	ND
2	2-Chloronaphthalene	1	ug/L	2.2	ND
:	2-Chlorophenol	1	ug/L	2.2	ND
:	2-Methylnaphthalene	1	ug/L '	2.2	ND
:	2-Methylphenol	1	ug/L	0.56	ND
:	2-Nitroaniline	1	ug/L	2.2	ND
:	2-Nitrophenol	1	ug/L	2.2	ND
;	3&4-Methylphenol	1	ug/L	0.56	ND
;	3,3'-Dichlorobenzidine	1	ug/L	2.2	ND
;	3-Nitroaniline	1	ug/L	2.2	ND
	4,6-Dinitro-2-methylphenol	1	ug/L	2.2	ND
	4-Bromophenyl-phenylether	1	ug/L	2.2	ND
	4-Chioro-3-methylphenol	1	ug/L	2.2	ND
	4-Chloroaniline	1	ug/L	0.56	ND
	4-Chlorophenyl-phenylether	1	ug/L	2.2	ND
	4-Nitroaniline	1	ug/L	2.2	ND
	4-Nitrophenol	1	ug/L	2.2	ND
	Acenaphthene	1	ug/L	2.2	ND
	Acenaphthylene	1	ug/L	2.2	ND
	Acetophenone	1	ug/L	2.2	ND
	Anthracene	· 1	ug/L	2.2	ND
	Atrazine	1	ug/L	2.2	ND
	Benzaldehyde	1	ug/L	2.2	ND
	Benzo[a]anthracene	1	ug/L	2.2	ND
	Benzo[a]pyrene	1	ug/L	2.2	ND
	Benzo[b]fluoranthene	1	ug/L	2.2	ND
	Benzo[g,h,i]perylene	1	ug/L	0.56	ND
	Benzo[k]fluoranthene	1	ug/L	2.2	ND
	bis(2-Chloroethoxy)methane	1	ug/L	2.2	ND
	bis(2-Chloroethyl)ether	1	ug/L	0.56	ND
	bis(2-Chloroisopropyl)ether	1	ug/L	2.2	ND
	bis(2-Ethylhexyl)phthalate	1	ug/L	2.2	ND
	Butylbenzylphthalate	1	ug/L	2.2	ND
	Caprolactam	1	ug/L	2.2	ND
	Carbazole	1	ug/L	2.2	ND
	Chrysene	1	ug/L	2.2	ND
	Dibenzo[a,h]anthracene	1	ug/L	2.2	ND
	Dibenzofuran	1	ug/L	0.56	ND
	Diethylphthalate	1	ug/L	2.2	ND
	Dimethylphthalate	1	ug/L	2.2	ND
	Di-n-butylphthalate	1	ug/L	0.56	ND
	Di-n-octylphthalate	1	ug/L	2.2	ND
	Fluoranthene	1	ug/L	2.2	ND
	Fluorene	1	ug/L	2.2	ND
	Hexachlorobenzene	. 1	ug/L	2.2	ND
	Hexachlorobutadiene	1	ug/L	2.2	ND

Veritech Project: 4040122

#: AC77892-005	SampleID: Field Blank U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	ug/L	2.2	ND
	Hexachloroethane	1	ug/L	2.2	ND
	Indeno[1,2,3-cd]pyrene	1	ug/L	2.2	ND
	Isophorone	1	ug/L	2.2	ND
	Naphthalene	1	ug/L	0.56	ND
	Nitrobenzene	1	ug/L	2.2	ND
	N-Nitroso-di-n-propylamine	1	ug/L	0.56	ND
	N-Nitrosodiphenylamine	1	ug/L	2.2	ND
	Pentachlorophenol	1	ug/L	11	ND
	Phenanthrene	1	ug/L	2.2	ND
	Phenol	1	ug/L	2.2	ND
	Pyrene	. 1	ug/L	2.2	ND
TAL Metals 60	010		•		
	Aluminum `	1	ug/L	200	ND
	Barium	1	ug/L	50	ND
	Calcium	1	ug/L	5000	ND
	Chromium	1	ug/L	50	ND
	Copper	1	ug/L	50	ND
	Iron	1	ug/L	300	ND
	Magnesium	1	ug/L	5000	ND
	Manganese	1	ug/L	40	ND
	Nickel	1	ug/L	50	ND
	Potassium	1	ug/L	5000	ND
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	ND
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	ND
TAL Metals 60	220		-		
	Antimony	1	ug/L	2.0	ND
	Arsenic	1	ug/L	2.0	ND
	Beryllium	1	ug/L	1.0	ND
	Cadmium	1	ug/L	2.0	ND
	Cobalt	1	ug/L	2.0	ND
	Lead	1	ug/L	3.0	ND
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

77892-005	SampleID: Field Blank U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organ	ics (no search) 8260				
	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,1,2,2-Tetrachloroethane	1	ug/L	1.0	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	1.0	ND
	1,1,2-Trichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethene	1	ug/L	1.0	ND
	1,2,3-Trichlorobenzene	1	ug/L	1.0	ND
	1,2,4-Trichiorobenzene	1	ug/L	1.0	ND
	1,2-Dibromo-3-chloropropane	1	ug/L	1.0	ND
	1,2-Dibromoethane	1	ug/L	1.0	ND
	•	1	ug/L	1.0	ND
	1,2-Dichlorobenzene		-	0.50	ND
	1,2-Dichloroethane	1	ug/L		ND
	1,2-Dichloropropane	1	ug/L	1.0	
	1,3-Dichlorobenzene	1	ug/L 	1.0	ND.
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dioxane	1	ug/L	50	ND
	2-Butanone	1	ug/L	1.0	ND
	2-Hexanone	1	ug/L	1.0	ND
	4-Methyl-2-pentanone	1	ug/L	1.0	ND
	Acetone	1	ug/L	10	ND
	Benzene	1	ug/L	0.50	ND
	Bromochloromethane	1	ug/L	1.0	ND
	Bromodichloromethane	1	ug/L	1.0	ND
	Bromoform	1	ug/L	1.0	ND
	Bromomethane	1	ug/L	1.0	ND
	Carbon disulfide	1	ug/L	1.0	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chlorobenzene	1	ug/L	1.0	ND
	Chloroethane	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Chloromethane	1	ug/L	1.0	ND
	cis-1,2-Dichloroethene	1	ug/L	1.0	ND
	cis-1,3-Dichloropropene	1	ug/L	1.0	ND
	Cyclohexane	1	ug/L	1.0	ND
	Dibromochloromethane	1	ug/L	1.0	ND
		1	ug/L	1.0	ND
	Dichlorodifluoromethane	_	ug/L	1.0	ND
	Ethylbenzene	1	_	1.0	ND
	Isopropylbenzene	1	ug/L		ND
	m&p-Xylenes	1	ug/L	1.0	
	Methyl Acetate	1	ug/L	1.0	ND
	Methylcyclohexane	1	ug/L 	1.0	ND
	Methylene chloride	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1	ug/L	1.0	ND
	Styrene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	trans-1,2-Dichloroethene	1	ug/L	1.0	ND
	trans-1,3-Dichloropropene	1	ug/L	1.0	ND
	Trichloroethene	1	ug/L	1.0	ND
	Trichlorofluoromethane	1	ug/L	1.0	ND
	Vinyl chloride	1	ug/L	1.0	ND
	Xylenes (Total)	1	ug/L	1.0	ND

ab#: AC77892-006	SampleID: Field Blank F				······
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
C77892-006	Field Blank F		Date C	ollected 4/1/2014	
Mercury (Wate	er) 7470A				
	Mercury	1	ug/L	0.70	ND
TAL Metals 60	010				
	Aluminum	1	ug/L	200	ND
	Barium	1	ug/L	50	ND
	Calcium	1	ug/L	5000	ND
	Chromium	1	ug/L	50	ND
	Copper	1	ug/L	50	ND
	Iron	1	ug/L	300	ND
	Magnesium	1	ug/L	5000	ND
	Manganese	1	ug/L	40	ND
	Nickel	1	ug/L	50	ND
	Potassium	1	ug/L	5000	ND
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	NĎ
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	ND
TAL Metals 60	20				
	Antimony	1	ug/L	2.0	ND
	Arsenic	1	ug/L	2.0	ND
	Beryllium	1	ug/L	1.0	ND
	Cadmium	1	ug/L	2.0	ND
	Cobalt	1	ug/Ĺ	2.0	ND
	Lead	1	ug/L	3.0	ND
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

o#: AC77892-007	SampleID: TRIP Blank-02	55		44P1 /P.A. 1-1-1	_
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu
77892-007	TRIP Blank-02		Date C	Collected 4/1/2014	
	ics (no search) 8260				_
•	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,1,2,2-Tetrachloroethane	1	ug/L	1.0	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1 ,	ug/L	1.0	ND
	1,1,2-Trichloroethane	1	ug/L	1.0	ND
	1.1-Dichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethene	1	ug/L	1.0	ND
	1,2,3-Trichlorobenzene	1	ug/L	1.0	ND
	1,2,4-Trichlorobenzene	1	ug/L	1.0	ND
	1,2-Dibromo-3-chloropropane	1	ug/L	1.0	ND
	1,2-Dibromoethane	1	ug/L	1.0	ND
	1,2-Dichlorobenzene	1	ug/L	1.0	ND
	1.2-Dichloroethane	1	ug/L	0.50	ND
	1,2-Dichloropropane	1	ug/L	1.0	ND
	1,3-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dioxane	1	ug/L	50	ND
	2-Butanone	1	ug/L	1.0	ND
	2-Hexanone	1	ug/L	1.0	ND
	4-Methyl-2-pentanone	1	ug/L	1.0	ND
	Acetone	1	ug/L	10	ND
	Benzene	1	ug/L	0.50	ND
	Bromochloromethane	1	ug/L	1.0	ND
	Bromodichloromethane	1	ug/L	1.0	ND
	Bromoform	1	ug/L	1.0	ND
	Bromomethane	1	ug/L	1.0	ND
	Carbon disulfide	1	ug/L	1.0	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chlorobenzene	1	ug/L	1.0	ND
	Chloroethane	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Chloromethane	1	ug/L	1.0	ND
	cis-1,2-Dichloroethene	1	ug/L	1.0	ND
	cis-1,3-Dichloropropene	1	ug/L ug/L	1.0	ND
	Cyclohexane	1	ug/L	1.0	ND
	Dibromochloromethane	1	ug/L	1.0	ND
	Dichlorodifluoromethane	1	ug/L ug/L	1.0	ND
	Ethylbenzene	1	ug/L ug/L	1.0	ND
	Isopropylbenzene	1	ug/L ug/L	1.0	ND
	m&p-Xylenes	1	ug/L ug/L	1.0	ND .
	Methyl Acetate	1	ug/L	1.0	ND
	•				
	Methylcyclohexane	1	ug/L	1.0	ND
	Methylene chloride	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1 1	ug/L	0.50 1.0	ND ND
	o-Xylene		ug/L		
	Styrene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	trans-1,2-Dichloroethene	1	ug/L	1.0	ND
	trans-1,3-Dichloropropene	1	ug/L	1.0	ND
	Trichloroethene	1	ug/L	1.0	ND
				4.6	
	Trichlorofluoromethane Vinyl chloride	1	ug/L ug/L	1.0 1.0	ND ND

#: AC77892-008	SampleID: TWP-03 (SB-7) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
77892-008	TWP-03 (SB-7) U		Date C	ollected 4/1/2014	
Chlorinated H	erbicides 8151				_
	2,4,5-T	1	ug/L	0.51	ND
	2,4-D	1	ug/L	0.51	ND
	Dicamba t	1	ug/L	0.51	ND
	Silvex	1	ug/L	0.51	ND
Mercury (Wate	er) 7470A				
, (Mercury	1	ug/L	0.70	ND
Organochloric	ne Pesticides 8081	•	-3-	•	
Organocino ii	Aldrin	1	ug/L	0.010	ND
	Alpha-BHC	1	ug/L ug/L	0.010	ND
	beta-BHC	1	ug/L	0.010	ND
	Chlordane	1	ug/L	0.10	ND
	delta-BHC	1	ug/L	0.010	ND
	Dieldrin	1	ug/L ·	0.010	ND
	Endosulfan I	1	ug/L	0.010	ND
	Endosulfan II	1	ug/L	0.010	ND
	Endosulfan Sulfate	1	ug/L	0.010	ND
	Endrin	1	•	0.010	ND
	Endrin Aldehyde	1	ug/L ug/L	0.010	ND
	Endrin Adenyoe Endrin Ketone	1	•	0.010	ND ND
	gamma-BHC	1	ug/L	0.010	ND ND
	Heptachlor	1	ug/L	0.010	ND ND
	Heptachlor Epoxide	1	ug/L	0.010	ND ND
	•	1	ug/L	0.010	
	Methoxychlor p,p'-DDD	1	ug/L	0.010	ND
	p,p'-DDE	1	ug/L	0.010	ND ND
	• • •	1	ug/L	0.010	ND ND
	p,p'-DDT Toxaphene	1	ug/L ug/L	0.25	ND
DOD 2000	Toxaphene	•	ug/L	0.25	ND
PCB 8082	A				
	Aroclor (Total)	1	ug/L	0.25	ND
	Arocior-1016	1	ug/L	0.25	ND
	Aroclor-1221	1	ug/L	0.25	ND
	Aroclor-1232	1	ug/L	0.25	ND
	Aroclor-1242	1	ug/L	0.25	ND
	Aroclor-1248	1 .	ug/L	0.25	ND
	Aroclor-1254	1	ug/L	0.25	ND
	Aroclor-1260	1	ug/L	0.25	ND
	Aroclor-1262 Aroclor-1268	1 1	ug/L ug/L	0.25 0.25	ND ND

Lab#: AC77892-008	SampleID: TWP-03 (SB-7) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Organ	nics (no search) 8270				
1,	1'-Biphenyl	1	ug/L	2.0	ND
1,	2,4,5-Tetrachlorobenzene	1	ug/L	2.0	ND
2,	3,4,6-Tetrachlorophenol	1	ug/L	2.0	ND
2,	4,5-Trichlorophenol	1	ug/L	2.0	ND
2,	4,6-Trichlorophenol	1	ug/L	2.0	ND
2,	4-Dichlorophenol	1	ug/L	2.0	ND
2,4	4-Dimethylphenol	1	ug/L	0.50	ND
2,4	4-Dinitrophenol	1	ug/L	10	ND
2,4	4-Dinitrotoluene	1	ug/L	2.0	ND
2,0	6-Dinitrotoluene	1	ug/L	2.0	ND
2-	Chloronaphthalene	· 1	ug/L	2.0	ND
2-	Chlorophenol	1	ug/L	2.0	ND
2-1	Methylnaphthalene	1	ug/L	2.0	ND
2-	Methylphenol	1	ug/L	0.50	ND
2-1	Nitroaniline	1	ug/L	2.0	ND
	Nitrophenol	1	ug/L	2.0	ND
	4-Methylphenol	1	ug/L	0.50	ND
	B'-Dichlorobenzidine	1	ug/L	2.0	ND
	Nitroaniline	1	ug/L	2.0	ND
	3-Dinitro-2-methylphenol	1	ug/L	2.0	
	Bromophenyl-phenylether	1	ug/L ug/L	2.0	ND
	Chloro-3-methylphenol	1	-	2.0	ND
	Chloroaniline	1	ug/L	0.50	ND
	Chlorophenyl-phenylether	1	ug/L		ND
	Nitroaniline	-	ug/L	2.0	ND.
	Nitrophenol	1	ug/L	2.0	ND
	enaphthene	1	ug/L	2.0	ND
**	enaphthylene	1	ug/L	2.0	ND
	etophenone	1	ug/L	2.0	ND
	thracene	1	ug/L	2.0	ND
	azine	1	ug/L	2.0	ND
		1	ug/L	2.0	ND
	nzaldehyde	1	ug/L	2.0	ND
	nzo[a]anthracene	1	ug/L	2.0	ND
_	nzo[a]pyrene	1	ug/L	2.0	ND
	nzo[b]fluoranthene	1	ug/L	2.0	ND
	nzo[g,h,i]perylene	1	ug/L	0.50	ND
	nzo[k]fluoranthene	1	ug/L	2.0	ND
	(2-Chloroethoxy)methane	1	ug/L	2.0	ND
	(2-Chloroethyl)ether	1	ug/L	0.50	ND
	(2-Chloroisopropyl)ether	1	ug/L	2.0	ND
	(2-Ethylhexyl)phthalate	1	ug/L	2.0	ND
	tylbenzylphthalate	1	ug/L	2.0	ND
	prolactam	1	ug/L	2.0	ND
	rbazole	. 1	ug/L	2.0	ND
	rysene	1	ug/L	2.0	ND
Dib	enzo[a,h]anthracene	1	ug/L	2.0	ND
	enzofuran	1	ug/L	0.50	ND
	thylphthalate	1	ug/L	2.0	ND
Din	nethylphthalate	1	ug/L	2.0	ND
Di-ı	n-butylphthalate	1	ug/L	0.50	ND
Di-r	n-octylphthalate	1	ug/L	2.0	ND
Flu	oranthene	1	ug/L	2.0	ND
	orene	1	ug/L	2.0	ND
Hex	achlorobenzene	1	ug/L	2.0	ND
	achlorobutadiene	1	ug/L	2.0	ND

ab#: AC77892-008	SampleID: TWP-03 (SB-7) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	ug/L	2.0	ND
	Hexachloroethane	1	ug/L	2.0	ND
	Indeno[1,2,3-cd]pyrene	1	ug/L	2.0	ND
	Isophorone	1	ug/L	2.0	ND
	Naphthalene	1	ug/L	0.50	ND
	Nitrobenzene	1	ug/L	2.0	ND
	N-Nitroso-di-n-propylamine	1	ug/L	0.50	ND
	N-Nitrosodiphenylamine	1	ug/L	2.0	ND
	Pentachlorophenol	1	ug/L	10	ND
	Phenanthrene	1	ug/L	2.0	ND
	Phenoi	1	ug/L	2.0	ND
	Pyrene	1	ug/L	2.0	ND
TAL Metals 6	010				
	Aluminum	1	ug/L	200	43000
	Barium	1	ug/L	50	200
	Calcium	1	ug/L	5000	130000
	Chromium	1	ug/L	50	150
	Copper	1	ug/L	50	91
	Iron	1	ug/L	300	78000
	Magnesium	1	ug/L	5000	22000
	Manganese	1	ug/L	40	1600
	Nickel	1	ug/L	50	78
	Potassium	1	ug/L	5000	13000
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	490000
	Vanadium	1	ug/L	50	100
	Zinc	1	ug/L	50	140
TAL Metals 6	020				
	Antimony	1	ug/L	2.0	ND
	Arsenic	1	ug/L	2.0	19
	Beryllium	1	ug/L	1.0	1.9
	Cadmium	1	ug/L	2.0	ND
	Cobalt	1	ug/L	2.0	26
	Lead	1	ug/L	3.0	57
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

Veritech Project: 4040122

Lab#: AC77892-008	SampleID: TWP-03 (SB-7) U				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organ	nics (no search) 8260				IXESUI
	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,1,2,2-Tetrachioroethane	1	ug/L	1.0	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	1.0	ND
	1,1,2-Trichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethene	1	ug/L	. 1.0	ND
	1,2,3-Trichlorobenzene	1	ug/L	1.0	
	1,2,4-Trichlorobenzene	1	ug/L	1.0	ND
	1,2-Dibromo-3-chloropropane	1	ug/L	1.0	ND
	1,2-Dibromoethane	1	ug/L	1.0	ND
	1,2-Dichlorobenzene	1		1.0	ND
	1,2-Dichloroethane	1	ug/L		ND
	1,2-Dichloropropane	1	ug/L	0.50	ND
	1,3-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	•	ug/L	1.0	ND
	1,4-Dioxane	-1	ug/L	1.0	ND
	2-Butanone	1	ug/L	50	ND
	2-Hexanone	1	ug/L 	1.0	ND
		1	ug/L	1.0	ND
	4-Methyl-2-pentarione	1	ug/L	1.0	ND
	Acetone	1	ug/L	10	ND
	Benzene	1	ug/L	0.50	ND
	Bromochloromethane	1	ug/L	1.0	ND
	Bromodichloromethane	1	ug/L	1.0	ND
	Bromoform	1	ug/L	1.0	ND
	Bromomethane	1	ug/L	1.0	ND
	Carbon disulfide	1	ug/L	1.0	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chlorobenzene	1	ug/L	1.0	ND
	Chloroethane	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Chloromethane	1	ug/L	1.0	ND
	cis-1,2-Dichloroethene	1	ug/L	1.0	ND
	cis-1,3-Dichloropropene	1	ug/L	1.0	ND
	Cyclohexane	1	ug/L	1.0	ND
	Dibromochloromethane	1	ug/L	1.0	ND
	Dichlorodifluoromethane	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	Isopropylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl Acetate	1	ug/L	1.0	ND
	Methylcyclohexane	1	ug/L	1.0	ND
	Methylene chloride	1	ug/L	1.0	
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1			ND
	Styrene	1	ug/L ug/L	1.0 1.0	ND
	Tetrachloroethene	1	-		ND
	Toluene	1	ug/L	1.0	ND
	trans-1,2-Dichloroethene	1	ug/L	1.0	ND
	trans-1,3-Dichloropropene		ug/L	1.0	ND
	Trichloroethene	1	ug/L	1.0	ND
	Trichlorofluoromethane	1	ug/L	1.0	ND
		1	ug/L	1.0	ND
	Vinyl chloride	1	ug/L	1.0	ND
	Xylenes (Total)	1	ug/L	1.0	ND

Lab#: AC77892-009	SampleID: TWP-03 (SB-7) F		·		
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77892-009	TWP-03 (SB-7) F		Date C	ollected 4/1/2014	ĺ
Mercury (Wate	r) 7470A				
indically (italia	Mercury	1	ug/L	0.70	ND
TAL Metals 60	•				
IAL MELAIS OU	Aluminum	1	ug/L	200	ND
	Barium	1	ug/L	50	77
	Calcium	1	ug/L	5000	140000
	Chromium	1	ug/L	50	ND
	Copper	1	ug/L	50	ND
	Iron	. 1	ug/L	300	12000
	Magnesium	1	ug/L	5000	15000
	Manganese	1	ug/L	40	1200
	Nickel	. 1	ug/L	50	ND
	Potassium	1	ug/L	5000	12000
	Silver	1	ug/L	20	ND
	Sodium	1	ug/L	5000	520000
	Vanadium	1	ug/L	50	ND
	Zinc	1	ug/L	50	ND
TAL Metals 60					
1 AL Metals 60	Antimony	1	ug/L	2.0	ND
	Arsenic	1	ug/L	2.0	ND
	Beryllium	1	ug/L	1.0	ND
	Cadmium	1	ug/L	2.0	ND
	Cabalt	1	ug/L	2.0	7.2
	Lead	1	ug/L	3.0	ND
	Selenium	1	ug/L	10	ND
	Thallium	1	ug/L	2.0	ND

RL = Reporting Limit

ND = Not Detected

RL Definitions:

SW846 Inorganics reported to PQL

SW846 Organics reported to PQL

Clean Water Act Organics reported to PQL

Clean Water Act Inorganics reported to PQL

CLP Organics reported to CRQL

CLP Inorganics reported to CRQL

This report is a true report of results obtained from our tests of this material. In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Or	
Robin Cousineau - Quality Assurance Director	Stanley Gilewicz - Laboratory Director

9a) Methanol Bottle Electronic Deliv. 9b) Comments Numbers (if Applicable) Please note NUMBERED Items. If not completed your analytical work may be delayed. Note: Check if low-level groundwater methods required to meet current standards in NJ or PA: Excel - NY TAGM Expedited TAT-Mot Always Available (Please Check with Lab)! Excel - PA Act 2 Excel - NJCC 3) Reporting Requirements (Please Circle) Hazsite/CSV EQuIS 4-File A fee of \$8/nample will be assessed for storage alrould sample not be authoried for any analysis. EQuIS EZ Comments, Notes, Special Requirements, HAZARDS 5 11) Sampler (print name): FUA JAKU BONSCADate: Page :tertiO Red - NJ / NY / PA Report Type Full / Category B CONH Data Summary Category A POSZH Other # of Bottles σ 5 HCI Project# (Lab Use Only) 4040155 HOP High Contaminant Concentrations Project-Specific Reporting Limits 5 day En Cor Metals (ICP-MS 200.8 or 6020) 1 Week (25%; EPH) Tumaround 4 Days (35%; TPH) HOOM 24 Hours (100%) 48 Hours (75%) Hours (50%) 10 Days (10%) VOC (8260B SIM or 8011) BN or BNA (8270C SIM) EPH Cat 2 Fractionation For EPH Analysis: Other Note: Check if applicable: EPH Cat 2 Screen/Total 2a) Project Storing & Combined Sewer In **CHAIN OF CUSTODY** EPH Cat 1 3 Ruson Burnast 1 7) Analysis Request RECORD PCB*/ TS/TSS NELAC/NJ #07071 & 07069 | CT #PH-0671 | NY #11408 & 11939 | PA #68-00463 & 68-04409 | WY #363 | KY #80124 Metal-Hg, Cd, Cu, Pb, Ni, Z Project Information Bridsklyn, Amy Please circle required parameter list (refer to HC-V summary): I) NJ 2008 SRS; II) Current TCL; III) 2c) Project Location (City/State): Chloride/FlashPoint 2d) Quotel PO # (if Applicable): Date CHENNOOG CBOD/CL+6/NO2/NO3/ 2b) Project Mgr. (tsi_ hode)AOV VANB Check If Contingent ===> (5) dan (Sample Type composite (C) Accepted by: hewsonag ling.com 640 Delaware the Buffalor 8 1500 Ē 41114 10915 6) Sample OT - Other ₹-4 ritech/Division of Hampton-Clarke Same as above HC-V 2010 Merged; iv) PA; v) NY; vi) Project-Specific 175 US Hwy 48 West, Fairfield, New Jersey 07004 198 Route 46 East, Fairfield, NJ 07004 Ph: 800-426-9992 Fax: 973-439-1458 Metrix 3 **Matrix Codes** St. - Sludge ଚ 3 JO 01-95 Customer Information 180 Engineers DW - Drinking Water S - Soil GW - Ground Water SL - Slur 일 Smoklyn NY DVINDER 8-4 56-7 4) Customer Sample ID WW - Waste Water IMP - 05 TAP-03 Q Q 10) Relinquished by: 1b) Email/Cell/Fax/Ph: 1c) Send Invoice to: 1d) Send Report to: 1a) Customer. Address: -001 to Sample # 8 FOR LAB ONLY Batch # SE gg

5	ise Circle)	Electronic Deliv.	Hazsite/CSV	EQUIS 4-File / EZ / NYS EQUIS EPA Region 2 or 5	Excel - NJ Regulatory	Excel - NY Regulatory	Excel - PA Regulation		Check with Leb.							Ommonth of the state of the sta			at water	or with				ZARDS	andards in NJ or PA:			Cooler Termoerature	10 F	Date: 4/1/0X/// Shipting the stayed.	Grated for a bysis.
29 40401 3 Juliet	3)Reporting Requirements (Please Circle)	Report_Type	Data Summary	Red - NJ / NY / PA	đ	Full / Category B	Category A		TXT Not Always Available. Place		Check if Contrigein			8	# of Bottles	INO3 ISBOT ICI INOH INOH IN COLO			est 1	3	6			Commands Notes Special Recultements HAZARDS	Note: Check if low-level groundwater methods required to meet current standards in NJ or PA:		& Ag)			TAKUISONSCH Date: A	ed for storage should eample not be ad
Project # (Lab Use Orby)	3)Repx	Tumaround	24 Hours (100%)	48 Hours (75%) 72 Hours (50%)		1 Week (25%; EPH)	-	10 VV			CIPO					HOPI		2	6		0			Comments Notes S	weievel groundwater method	VOC (8260B SIM or 8011)	Metals-Sol (ICP-MS 6020 for Be & Ag)	Project-Specific Reporting Limits	Concer		A fee of \$5/sample will be sessened for
CHAIN OF CUSTODY	RECORD	Small Bushoes Erstefreba		ing Co. or With	N. D.	osma	Brocklyn Aly	6 Fandout Pal	1	7) Analysis Request		<u>.</u> s	40	3M	l ′ ×⊱	141 101	 		XXX		X				Note: Check If k			Project Specific	High Co NJ LSR	11) Sampler (print name):	Atto
き >(AMES VENTECH	7		Striken & couching		9 Am	ocation (City/State):	8	2d) Quote/PO# (If Applicable):	2			5)	200 00 00 00 100)V 2 2 3(0)	CL 7251 7251	コンコン	ベスペス	XXXX	×	XXXX				Date Date	collec	411111				
		y 08054 L A B O B	-00463 NY #11408 C				COM 20) Project L	Buffabo M	2d) Quot		Check if Confingent sens		A		၁) ရ	Sar		+=	7=	-	X Supple				Accepted by:	1					
eritech Laboratori	Fax: 973-244-9787 973-4.	Center: 137-D Gaither Drive, Mount Laurel, New Jersey	NELACINJ #07071 PA #6	•	2 Covinsor street	<u>ئے</u> ۔ د	hae liro	Are	SOME		ਹ	S	Vater S-Soll A-Air	. 8	o io more parin (mode per	(2)	A TO	₹		3 6	350				7	wem					
HamptonClarke-Verifiech Laboratories	Ph. 800-426-8992 973-244-9770 Fax: 973-244-9787 973-439-1458	Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054	rn (Selvice Center), 930-	1,0	3 %	Brook	1b) Email/Cell/Fax/Ph: heuls	1c) Sand Invoice to: 640 Dela LUDITA		9			DW - Drinking Water	Ι.			Comp Comp		CO INI DOS	Dio o'at	Kraye-Osy				quished by:		1000				
	Ph. 8	Servic			Address:		1b) Emailt	1c) Send It	1d) Send Report to:	FOR LAB	asn _	ONITA	→	Batch #	HC77892	H	# edmbe #		3		3 2	+			10) Reim						



175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004 2 MADISON ROAD, FAIRFIELD, NJ 07004 800-426-9992 · 973-244-9770 FAX: 973-244-9787

WWW.HCVLAB.COM

Project: NYCDDC BEGS Farragut Rd

Client PO: Not Available

Report To: LIRO Engineers, Inc.

703 Lorimer Street Brooklyn, NY 11211

Attn: Amy Hewson

Received Date: 4/2/2014

Report Date:

Deliverables: NYDOH-CatA

Lab ID: AC77929

Lab Project No: 4040237

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director

OR

Stanley Gilewicz - Laboratory Director

NJ (07071)

PA (68-00463)

NY (ELAP11408)

KY (90124)

CT (PH-0671)



(07071 and 07069) NJ

NY (ELAP11408 and 11939)

PΑ

(68-00463 and 68-04409) KY (90124)

(353)

MA (NJ386)

(PH-0671) CT

USACE

Report Of Analysis

veritech laboratories

To: LIRO Engineers, Inc.

703 Lorimer Street

Attention: Project:

Amy Hewson

NYCDDC BEGS Farragut Rd

Date Submitted: 4/2/2014

Brooklyn NY 11211

Date Reported:

4/14/2014

Lab#: AC77929-001

SampleID:

Analyte

SB-01-9.5-10.0

DF

Units

MDL/PQL/RL

AC77929-001

SB-01-9.5-10.0

Date Collected 3/31/2014

Result

% Solids SM2540G

TestGroup

% Solids

1

Percent

78

7929-001					
estGroup	Analyte	DF	Units	MDL/PQL/RL	Result
/olatile Orgar	nics (no search) 8260				
	1,1,1-Trichloroethane	0.977	mg/Kg	0.0025	ND
	1,1,2,2-Tetrachloroethane	0.977	mg/Kg	0.0025	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.977	mg/Kg	0.0025	ND
	1,1,2-Trichloroethane	0.977	mg/Kg	0.0025	ND
	1,1-Dichloroethane	0.977	mg/Kg	0.0025	ND
	1,1-Dichloroethene	0.977	mg/Kg	0.0025	ND
	1,2,3-Trichlorobenzene	0.977	mg/Kg	0.0025	ND
· ·	1,2,4-Trichlorobenzene	0.977	mg/Kg	0.0025	ND
	1,2-Dibromo-3-chloropropane	0.977	mg/Kg	0.0025	ND
	1,2-Dibromoethane	0.977	mg/Kg	0.0025	ND
	1,2-Dichlorobenzene	0.977	mg/Kg	0.0025	ND
	1,2-Dichloroethane	0.977	mg/Kg	0.0013	ND
	1,2-Dichloropropane	0.977	mg/Kg	0.0025	ND
	1,3-Dichlorobenzene	0.977	mg/Kg	0.0025	ND
	1,4-Dichlorobenzene	0.977	mg/Kg	0.0025	ND
	1.4-Dioxane	0.977	mg/Kg	0.13	ND
	2-Butanone	0.977	mg/Kg	0.0025	ND
		0.977		0.0025	ND
	2-Hexanone		mg/Kg	0.0025	ND
	4-Methyl-2-pentanone	0.977	mg/Kg		ND
	Acetone	0.977	mg/Kg	0.013	
	Benzene	0.977	mg/Kg	0.0013	ND
	Bromochloromethane	0.977	mg/Kg	0.0025	ND
	Bromodichloromethane	0.977	mg/Kg	0.0025	ND
	Bromoform	0.977	mg/Kg	0.0025	ND
	Bromomethane	0.977	mg/Kg	0.0025	ND
	Carbon disulfide	0.977	mg/Kg	0.0025	ND
	Carbon tetrachloride	0.977	mg/Kg	0.0025	ND
	Chlorobenzene	0.977	mg/Kg	0.0025	ND
	Chloroethane	0.977	mg/Kg	0.0025	ND
	Chloroform	0.977	mg/Kg	0.0025	ND
	Chloromethane	0.977	mg/Kg	0.0025	ND
	cis-1,2-Dichloroethene	0.977	mg/Kg	0.0025	ND
	cis-1,3-Dichloropropene	0.977	mg/Kg	0.0025	ND
	Cyclohexane	0.977	mg/Kg	0.0025	ND
	Dibromochloromethane	0.977	mg/Kg	0.0025	ND
	Dichlorodifluoromethane	0.977	mg/Kg	0.0025	ND
	Ethylbenzene	0.977	mg/Kg	0.0013	ND
	Isopropylbenzene	0.977	mg/Kg	0.0013	ND
	m&p-Xylenes	0.977	mg/Kg	0.0013	ND
	Methyl Acetate	0.977	mg/Kg	0.0025	ND
	Methylcyclohexane	0.977	mg/Kg	0.0025	ND
	Methylene chloride	0.977	mg/Kg	0.0025	ND
	Methyl-t-butyl ether	0.977	mg/Kg	0.0013	ND
	o-Xylene	0.977	mg/Kg	0.0013	ND
	•	0.977		0.0015	ND
	Styrene		mg/Kg	0.0025	ND
	Tetrachloroethene	0.977	mg/Kg		ND
	Toluene	0.977	mg/Kg	0.0013	
	trans-1,2-Dichloroethene	0.977	mg/Kg	0.0025	ND
	trans-1,3-Dichloropropene	0.977	mg/Kg	0.0025	ND
	Trichloroethene	0.977	mg/Kg	0.0025	ND
	Trichlorofluoromethane	0.977	mg/Kg	0.0025	ND
	Vinyl chloride	0.977	mg/Kg	0.0025	ND
	Xylenes (Total)	0.977	mg/Kg	0.0013	ND

Lab#: AC77929-002	SampleID: SB-01-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77929-002	SB-01-COMP		Date C	ollected 3/31/2014	
% Solids SM	12540G				
	% Solids	1	Percent		85
Chlorinated	Herbicides 8151				
	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Mercury (Sc	pil/Waste) 7471A		5 5		
morodry (oc	Mercury	1	mg/Kg	0.098	ND
Oraanaahla	•	•	mg/ng	0.030	ND
Organochio	rine Pesticides 8081 Aldrin	4		0.0050	ND
	Alpha-BHC	1	mg/Kg	0.0059	ND
	beta-BHC	1	mg/Kg	0.0012	ND
	Chlordane	1	mg/Kg	0.0012 0.029	ND
	delta-BHC	1	mg/Kg mg/Kg	0.029	ND ND
	Dieldrin	1	mg/Kg	0.0039	ND
	Endosulfan I	1	mg/Kg	0.0012	ND
	Endosulfan II	1	mg/Kg	0.0059	ND
	Endosulfan Sulfate	1	mg/Kg	0.0059	ND
	Endrin	1	mg/Kg	0.0059	ND
	Endrin Aldehyde	1	mg/Kg	0.0059	ND
	Endrin Ketone	1	mg/Kg	0.0059	ND
	gamma-BHC	1	mg/Kg	0.0012	ND
	Heptachlor	1	mg/Kg	0.0059	ND
	Heptachlor Epoxide	1	mg/Kg	0.0059	ND
	Methoxychlor	1	mg/Kg	0.0059	ND
	p,p'-DDD	1	mg/Kg	0.0029	ND
	p,p'-DDE	1	mg/Kg	0.0029	ND
	p,p'-DDT	1	mg/Kg	0.0029	ND
	Toxaphene	1	mg/Kg	0.029	ND
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.029	ND
	Aroclor-1016	1	mg/Kg	0.029	ND
	Aroclor-1221	1	mg/Kg	0.029	ND
	Aroclor-1232	1	mg/Kg	0.029	ND
	Aroclor-1242	1	mg/Kg	0.029	ND
	Aroclor-1248	1	mg/Kg	0.029	ND
	Aroclor-1254	1	mg/Kg	0.029	ND
	Aroclor-1260	1	mg/Kg	0.029	ND
	Aroclor-1262	1	mg/Kg	0.029	ND
	Aroclor-1268	1	mg/Kg	0.029	ND

Lab#: AC77929-002	SampleID: SB-01-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Org	ganics (no search) 8270				
	1,1'-Biphenyl	1	mg/Kg	0.039	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.039	ND
	2,3,4,6-Tetrachlorophenoi	1	mg/Kg	0.039	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.039	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.039	ND
	2,4-Dichlorophenol	1	mg/Kg	0.0098	ND
	2,4-Dimethylphenol	1	mg/Kg	0.0098	0.010
	2,4-Dinitrophenol	1	mg/Kg	0.20	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.039	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.039	ND
	2-Chloronaphthalene	1	mg/Kg	0.039	ND
	2-Chiorophenol	1	mg/Kg	0.039	ND
	2-Methylnaphthalene	1	mg/Kg	0.039	0.14
	2-Methylphenol	1	mg/Kg	0.0098	ND
	2-Nitroaniline	1	mg/Kg	0.039	ND
	2-Nitrophenol	1	mg/Kg	0.039	ND
	3&4-Methylphenol	1	mg/Kg	0.0098	0.017
	3,3'-Dichlorobenzidine	1	mg/Kg	0.039	ND
	3-Nitroaniline	1	mg/Kg	0.039	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.20	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.039	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.039	ND
	4-Chloroaniline	1	mg/Kg	0.019	ND
		-			
	4-Chlorophenyl-phenylether	1	mg/Kg	0.039	ND
	4-Nitroaniline	1	mg/Kg	0.039	ND
	4-Nitrophenol	1	mg/Kg	0.039	ND
	Acenaphthene	1	mg/Kg	0.039	0.28
	Acenaphthylene	1	mg/Kg	0.039	ND
	Acetophenone	1	mg/Kg	0.039	ND
	Anthracene	1	mg/Kg	0.039	0.45
	Atrazine	1	mg/Kg	0.039	ND
	Benzaldehyde	1	mg/Kg	0.039	ND
	Benzo[a]anthracene	1	mg/Kg	0.039	0.78
	Benzo[a]pyrene	1	mg/Kg	0.039	0.62
	Benzo[b]fluoranthene	1	mg/Kg	0.039	0.80
	Benzo[g,h,i]perylene	1	mg/Kg	0.039	0.40
	Benzo[k]fluoranthene	1	mg/Kg	0.039	0.30
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.039	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.0098	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.039	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.039	ND
	Butylbenzylphthalate	1	mg/Kg	0.039	ND
	Caprolactam	1	mg/Kg	0.039	ND
	Carbazole	1	mg/Kg	0.039	0.24
	Chrysene	1	mg/Kg	0.039	0.72
	Dibenzo[a,h]anthracene	1	mg/Kg	0.039	0.13
•	Dibenzofuran	1	mg/Kg	0.0098	0.23
	Diethylphthalate	1	mg/Kg	0.039	ND
	Dimethylphthalate	1	mg/Kg	0.039	ND
	Di-n-butylphthalate	1	mg/Kg	0.020	ND
	Di-n-octylphthalate	1	mg/Kg	0.039	ND
	Fluoranthene	1	mg/Kg	0.039	1.6
	Fluorene	1	mg/Kg	0.039	0.27
	Hexachlorobenzene	1	mg/Kg	0.039	ND
1	Hexachlorobutadiene	1	mg/Kg	0.039	ND
			my/r\y	0.008	NU

#: AC77929-002	SampleID: SB-01-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.20	ND
	Hexachloroethane	1	mg/Kg	0.039	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.039	0.38
	Isophorone	1	mg/Kg	0.039	ND
	Naphthalene	1	mg/Kg	0.0098	0.35
	Nitrobenzene	1	mg/Kg	0.039	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0098	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.039	ND
	Pentachiorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.039	2.0
	Phenol	1	mg/Kg	0.039	ND
	Pyrene	1	mg/Kg	0.039	1.4
TAL Metals 66	010				
	Aluminum	1	mg/Kg	240	7500
	Arsenic	1	mg/Kg	4.7	ND
	Barium	1	mg/Kg	12	120
	Calcium	1	mg/Kg	1200	2200
	Chromium	1	mg/Kg	5.9	15
	Cobalt	1	mg/Kg	2.9	ND
	Copper	1	mg/Kg	5.9	14
	Iron	1	mg/Kg	240	7100
	Lead	1	mg/Kg	5.9	110
	Magnesium	1	mg/Kg	590	1400
	Manganese	1	mg/Kg	12	64
	Nickel	1	mg/Kg	5.9	11
	Potassium	1	mg/Kg	590	ND
	Sodium	1	mg/Kg	290	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	12
	Zinc	1	mg/Kg	12	96
TAL Metals 6	020				
	Antimony	· 1	mg/Kg	0.94	ND
	Beryllium	1	mg/Kg	0.24	0.67
	Cadmium	1	mg/Kg	0.47	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

SampleID: AC77929-003 SB-02-9.5-10.0 TestGroup Analyte DF Units MDL/PQL/RL Result SB-02-9.5-10.0 AC77929-003 Date Collected 3/28/2014 % Solids SM2540G % Solids 1 Percent 89

ab#: AC77929-003	SampleID: SB-02-9.5-10.0						
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result		
Volatile Organic	cs (no search) 8260			-			
	1,1,1-Trichloroethane	0.929	mg/Kg	0.0021	ND		
	1,1,2,2-Tetrachloroethane	0.929	mg/Kg	0.0021	ND		
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.929	mg/Kg	0.0021	ND		
	1,1,2-Trichloroethane	0.929	mg/Kg	0.0021	ND		
	1.1-Dichloroethane	0.929	mg/Kg	0.0021	ND		
	1,1-Dichloroethene	0.929	mg/Kg	0.0021	ND		
	1.2.3-Trichlorobenzene	0.929	mg/Kg	0.0021	ND		
	1,2,4-Trichlorobenzene	0.929	mg/Kg	0.0021	ND		
	1,2-Dibromo-3-chloropropane	0.929	mg/Kg	0.0021	ND		
	1,2-Dibromoethane	0.929	mg/Kg	0.0021	ND		
	1,2-Dichlorobenzene	0.929	mg/Kg	0.0021	ND		
	1,2-Dichloroethane	0.929	mg/Kg	0.0010	ND		
	1,2-Dichloropropane	0.929	mg/Kg	0.0021	ND		
	1,3-Dichlorobenzene	0.929	mg/Kg	0.0021	ND		
	• • •	0.929	mg/Kg	0.0021	ND		
	1,4-Dichlorobenzene	0.929	mg/Kg	0.10	ND		
	1,4-Dioxane	0.929	mg/Kg	0.0021	ND		
	2-Butanone	0.929		0.0021	ND		
	2-Hexanone		mg/Kg	0.0021	ND		
	4-Methyl-2-pentanone	0.929	mg/Kg	0.010	ND		
	Acetone	0.929	mg/Kg	0.010	ND		
	Benzene	0.929	mg/Kg		ND		
	Bromochloromethane	0.929	mg/Kg	0.0021			
	Bromodichloromethane	0.929	mg/Kg	0.0021	ND		
	Bromoform	0.929	mg/Kg	0.0021	ND		
	Bromomethane	0.929	mg/Kg	0.0021	ND		
	Carbon disulfide	0.929	mg/Kg	0.0021	ND		
	Carbon tetrachloride	0.929	mg/Kg	0.0021	ND		
	Chlorobenzene	0.929	mg/Kg	0.0021	ND		
	Chloroethane	0.929	mg/Kg	0.0021	ND		
	Chloroform	0.929	mg/Kg	0.0021	ND		
	Chloromethane	0.929	mg/Kg	0.0021	ND		
	cis-1,2-Dichloroethene	0.929	mg/Kg	0.0021	ND		
	cis-1,3-Dichloropropene	0.929	mg/Kg	0.0021	ND		
	Cyclohexane	0.929	mg/Kg	0.0021	ND		
	Dibromochloromethane	0.929	mg/Kg	0.0021	ND		
	Dichlorodifluoromethane	0.929	mg/Kg	0.0021	ND		
	Ethylbenzene	0.929	mg/Kg	0.0010	ND		
	Isopropylbenzene	0.929	mg/Kg	0.0010	ND		
	m&p-Xylenes	0.929	mg/Kg	0.0010	ND		
	Methyl Acetate	0.929	mg/Kg	0.0021	ND		
	Methylcyclohexane	0.929	mg/Kg	0.0021	ND		
	Methylene chloride	0.929	mg/Kg	0.0021	ND		
	Methyl-t-butyl ether	0.929	mg/Kg	0.0010	ND		
	o-Xylene	0.929	mg/Kg	0.0010	ND		
	Styrene	0.929	mg/Kg	0.0021	ND		
	Tetrachloroethene	0.929	mg/Kg	0.0021	ND		
	Toluene	0.929	mg/Kg	0.0010	ND		
	trans-1,2-Dichloroethene	0.929	mg/Kg	0.0021	ND		
		0.929	mg/Kg	0.0021	ND		
	trans-1,3-Dichloropropene			0.0021	ND		
	Trichloroethene	0.929	mg/Kg	0.0021	ND		
	Trichlorofluoromethane	0.929	mg/Kg		ND ND		
	Vinyl chloride	0.929	mg/Kg	0.0021			
	Xylenes (Total)	0.929	mg/Kg	0.0010	ND		

.ab#: AC77929-004	SampleID: SB-02-COMP			·	
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
C77929-004	SB-02-COMP		Date C	ollected 3/28/2014	
% Solids SM2	540G				
	% Solids	1	Percent		86
Chlorinated Ho	erbicides 8151				00
	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Mercury (Soil/	Waste) 7471Δ			0.0.2	115
moreary (com	Mercury	1	mg/Kg	0.097	ND
Organochlerin	•	•	mg/kg	0.097	ND
Organochiorin	e Pesticides 8081 Aldrin	4			
	Alpha-BHC	1	mg/Kg	0.0058	ND
	beta-BHC	1	mg/Kg	0.0012	ND
	Chlordane	1	mg/Kg	0.0012	ND
	delta-BHC	1	mg/Kg	0.029	ND
	Dieldrin	1	mg/Kg	0.0058	ND
	Endosulfan i	1	mg/Kg	0.0012	ND
	Endosulfan II	1	mg/Kg	0.0058	ND
	Endosulfan Sulfate	1	mg/Kg	0.0058	ND
	Endrin Sulfate	1	mg/Kg	0.0058	ND
	Endrin Aldehyde	1	mg/Kg	0.0058	ND
	Endrin Aldenyde Endrin Ketone	1	mg/Kg	0.0058	ND
		1	mg/Kg	0.0058	ND
	gamma-BHC Heptachlor	1	mg/Kg	0.0012	ND
		1	mg/Kg	0.0058	ND
	Heptachlor Epoxide	1	mg/Kg	0.0058	ND
	Methoxychior p,p'-DDD	1	mg/Kg	0.0058	ND
	p,p'-DDE	1	mg/Kg	0.0029	ND
	p,p'-DDE p,p'-DDT	1	mg/Kg	0.0029	ND
	Toxaphene	1	mg/Kg	0.0029	ND
BCB 8888	Тохарпене	1	mg/Kg	0.029	ND
PCB 8082	Arealas (Tatal)				
	Aroclor (Total)	1	mg/Kg	0.029	ND
	Aroclor-1016	1	mg/Kg	0.029	ND
	Aroclor-1221	1	mg/Kg	0.029	ND
	Arcelor 1242	1	mg/Kg	0.029	ND
	Aroclor-1242	1	mg/Kg	0.029	ND
	Aroclor-1248	1	mg/Kg	0.029	ND
	Aroclor-1254	1	mg/Kg	0.029	ND
	Arcelor 1260	1	mg/Kg	0.029	ND
	Aroclor-1262	1	mg/Kg	0.029	ND
	Aroclor-1268	1	mg/Kg	0.029	ND

_ab#: AC77929-004	SampleID: SB-02-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Orga	nics (no search) 8270			-	-
1	,1'-Biphenyl	1	mg/Kg	0.039	ND
1	,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.039	ND
2	,3,4,6-Tetrachlorophenol	1 .	mg/Kg	0.039	ND
2	,4,5-Trichlorophenol	1	mg/Kg	0.039	ND
2	,4,6-Trichlorophenol	1	mg/Kg	0.039	ND
2	,4-Dichlorophenol	1	mg/Kg	0.0097	ND
2	,4-Dimethylphenol	1	mg/Kg	0.0097	ND
2	,4-Dinitrophenol	1	mg/Kg	0.19	ND
2	,4-Dinitrotoluene	1	mg/Kg	0.039	ND
2	,6-Dinitrotoluene	1	mg/Kg	0.039	ND
2	-Chioronaphthalene	1	mg/Kg	0.039	ND
2	-Chlorophenol	1	mg/Kg	0.039	ND
2	-Methylnaphthalene	1	mg/Kg	0.039	ND
2	P-Methylphenol	. 1	mg/Kg	0.0097	ND
	-Nitroaniline	1	mg/Kg	0.039	ND
2	2-Nitrophenol	1	mg/Kg	0.039	ND
	3&4-Methylphenol	1	mg/Kg	0.0097	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.039	ND
	3-Nitroaniline	1	mg/Kg	0.039	ND
	I,6-Dinitro-2-methylphenol	1	mg/Kg	0.19	ND
	l-Bromophenyl-phenylether	1	mg/Kg	0.039	ND
	I-Chloro-3-methylphenol	1	mg/Kg	0.039	ND
	I-Chloroaniline	1	mg/Kg	0.018	ND
	- Chlorophenyl-phenylether	1	mg/Kg	0.039	ND
	-Nitroaniline	1	mg/Kg	0.039	ND
	4-Nitrophenol	1	mg/Kg	0.039	ND
	Acenaphthene	1	mg/Kg	0.039	ND
	Acenaphthylene	1	mg/Kg	0.039	ND
	Acetophenone	1	mg/Kg	0.039	ND
	Anthracene	1	mg/Kg	0.039	ND
	Atrazine	1	mg/Kg	0.039	ND
	Benzaldehyde	1	mg/Kg	0.039	ND
	Benzo[a]anthracene	1	mg/Kg	0.039	0.045
		1	mg/Kg	0.039	ND
	Benzo[a]pyrene	1	mg/Kg	0.039	0.054
	Benzo[b]fluoranthene	1	mg/Kg	0.039	ND
	Benzo[g,h,i]perylene	1	mg/Kg	0.039	ND
	Benzo[k]fluoranthene bis(2-Chloroethoxy)methane	1	mg/Kg	0.039	ND
		1	mg/Kg	0.0097	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.039	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.039	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.039	ND
	Butylbenzylphthalate		mg/Kg	0.039	ND
	Caprolactam	1		0.039	ND
	Carbazole	1	mg/Kg mg/Kg	0.039	0.041
	Chrysene	1	mg/Kg	0.039	ND
	Dibenzo[a,h]anthracene	1		0.0097	ND
	Dibenzofuran	1	mg/Kg	0.0097	ND
	Diethylphthalate	1	mg/Kg		ND
	Dimethylphthalate	1	mg/Kg	0.039	
	Di-n-butylphthalate	1	mg/Kg	0.019	ND ND
	Di-n-octylphthalate	1	mg/Kg	0.039	ND 0.000
	Fluoranthene	1	mg/Kg	0.039	0.098
	Fluorene	1	mg/Kg	0.039	ND
	Hexachlorobenzene	1	mg/Kg	0.039	ND
	Hexachlorobutadiene	1	mg/Kg	0.039	ND

b#: AC77929-004	SampleID: SB-02-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.19	ND
	Hexachloroethane	1	mg/Kg	0.039	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.039	ND
	Isophorone	1	mg/Kg	0.039	ND
	Naphthalene	1	mg/Kg	0.0097	ND
	Nitrobenzene	1	mg/Kg	0.039	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0097	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.039	ND
	Pentachlorophenol	1	mg/Kg	0.19	ND
	Phenanthrene	1	mg/Kg	0.039	0.047
	Phenol	1	mg/Kg	0.039	ND
	Pyrene	1	mg/Kg	0.039	0.10
TAL Metals 60	010				
	Aluminum	1	mg/Kg	230	3500
	Arsenic	1	mg/Kg	4.7	ND
	Barium	1	mg/Kg	12	ND
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	5.8	7.3
	Cobalt	1	mg/Kg	2.9	3.7
	Copper	1	mg/Kg	5.8	6.6
	Iron	1	mg/Kg	230	9600
	Lead	1	mg/Kg	5.8	ND
	Magnesium	1	mg/Kg	580	1500
	Manganese	1	mg/Kg	12	59
	Nickel	1	mg/Kg	5.8	9.3
	Potassium	1	mg/Kg	580	ND
	Sodium	1	mg/Kg	290	ND
	Thallium	1	mg/Kg	1.7	ND
	Vanadium	1	mg/Kg	12	13
	Zinc	1	mg/Kg	12	14
TAL Metals 60	020				
	Antimony	1	mg/Kg	0.93	ND
	Beryllium	1	mg/Kg	0.23	ND
	Cadmium	1	mg/Kg	0.47	ND
	Selenium	1	mg/Kg	2.3	ND
	Silver	1	mg/Kg	0.23	ND

SB-03-9.5-10.0 Lab#: AC77929-005 SampleID: TestGroup Analyte DF Units MDL/PQL/RL Result SB-03-9.5-10.0 Date Collected 3/31/2014 AC77929-005 % Solids SM2540G % Solids Percent 86

1,1,2,2-T 1,1,2-Tric 1,1,2-Tric 1,1,2-Tric 1,1-Dichle 1,1-Dichle 1,2,3-Tric 1,2,4-Tric 1,2-Dibro 1,2-Dichle 1,2-Dichle 1,2-Dichle 1,3-Dichle 1,4-Dioxa 2-Butanon 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromoforn Bromome Carbon di Carbon te Chlorober Chlorober Chloroforn Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylei Methyl Ac	Analyte	DF	0.0 . 24 .		
1,1,1-Tric 1,1,2,2-T 1,1,2-Tric 1,1,2-Tric 1,1,2-Tric 1,1-Dichle 1,1-Dichle 1,2,3-Tric 1,2-Dibro 1,2-Dibro 1,2-Dichle 1,2-Dichle 1,3-Dichle 1,3-Dichle 1,4-Dichle 1,4-Dioxa 2-Butanor 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromoforr Bromome Carbon di Carbon te Chlorober Chlorofer Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylet Methyl-Ac Methyl-t-b o-Xylene Styrene			Units	MDL/PQL/RL	Resul
1,1,2,2-Trice 1,1,2-Trice 1,1,2-Trice 1,1,2-Trice 1,1,1-Dichler 1,2-Dichler 1,2-Dibroe 1,2-Dichler 1,2-Dichler 1,2-Dichler 1,2-Dichler 1,2-Dichler 1,3-Dichler 1,4	arch) 8260				
1,1,2-Tric 1,1,2-Tric 1,1,2-Tric 1,1-Dichli 1,1-Dichli 1,2,3-Tric 1,2-Dibro 1,2-Dibro 1,2-Dichli 1,2-Dichli 1,2-Dichli 1,2-Dichli 1,3-Dichli 1,4-Dioxa 2-Butanoi 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromofori Bromofori Bromome Carbon di Carbon te Chlorober Chlorober Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylei Methyl-t-b o-Xylene Styrene	richloroethane	0.917	mg/Kg	0.0021	ND
1,1,2-Tric 1,1-Dichle 1,1-Dichle 1,2,3-Tric 1,2,4-Tric 1,2-Dibro 1,2-Dibro 1,2-Dichle 1,2-Dichle 1,2-Dichle 1,3-Dichle 1,4-Dichle 1,4-Dioxa 2-Butanor 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromoforn Bromome Carbon di Carbon te Chlorober Chlorober Chloroforn Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylen Methyl-t-b o-Xylene Styrene	Tetrachioroethane	0.917	mg/Kg	0.0021	ND
1,1-Dichli 1,2,3-Tric 1,2,4-Tric 1,2-Dibro 1,2-Dibro 1,2-Dibro 1,2-Dichli 1,2-Dichli 1,2-Dichli 1,3-Dichli 1,4-Dioxa 2-Butanor 2-Hexano 4-Methyl-Acetone Benzene Bromochl Bromofort Bromome Carbon di Carbon te Chlorober Chlorober Chlorofort Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylet Methyl-t-b o-Xylene Styrene	richloro-1,2,2-trifluoroethane	0.917	mg/Kg	0.0021	ND
1,1-Dichli 1,2,3-Tric 1,2,4-Tric 1,2-Dibro 1,2-Dibro 1,2-Dichli 1,2-Dichli 1,2-Dichli 1,3-Dichli 1,4-Dichli 1,4-Dichli 1,4-Dioxa 2-Butanoi 2-Hexano 4-Methyl-Acetone Benzene Bromochl Bromodic Bromofori Bromome Carbon di Carbon te Chlorober Chlorober Chloroth Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylei Methyl-t-b o-Xylene Styrene	richloroethane	0.917	mg/Kg	0.0021	ND
1,2,3-Tric 1,2,4-Tric 1,2-Dibro 1,2-Dibro 1,2-Dichle 1,2-Dichle 1,2-Dichle 1,3-Dichle 1,4-Dichle 1,4-Dichle 1,4-Dichle 1,4-Dioxa 2-Butanor 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromoforn Bromome Carbon di Carbon te Chlorober Chlorober Chloroforn Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylen Methyl-t-b o-Xylene Styrene	nloroethane	0.917	mg/Kg	0.0021	ND
1,2,4-Trice 1,2-Dibroe 1,2-Dibroe 1,2-Dichle 1,2-Dichle 1,2-Dichle 1,3-Dichle 1,4-Dioxa 2-Butanoe 2-Hexanoe 4-Methyl- Acetone Benzene Bromochl Bromodic Bromofore Carbon di Carbon te Chlorober Chlorober Chlorofore Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylet Methyl-t-b o-Xylene Styrene	nloroethene	0.917	mg/Kg	0.0021	ND
1,2-Dibro 1,2-Dibro 1,2-Dichle 1,2-Dichle 1,2-Dichle 1,3-Dichle 1,4-Dioxa 2-Butanor 2-Hexanor 4-Methyl- Acetone Benzene Bromochl Bromodic Bromofor Bromome Carbon di Carbon te Chlorober Chlorober Chlorofor Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xyler Methyl-t-b o-Xylene Styrene	richlorobenzene	0.917	mg/Kg	0.0021	ND
1,2-Dibro 1,2-Dichle 1,2-Dichle 1,2-Dichle 1,3-Dichle 1,4-Dioxa 2-Butanor 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromofor Bromome Carbon di Carbon te Chlorober Chlorofor Chlorofor Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylen Methyl-t-b o-Xylene Styrene	ichlorobenzene	0.917	mg/Kg	0.0021	ND
1,2-Dichle 1,2-Dichle 1,2-Dichle 1,3-Dichle 1,4-Dichle 1,4-Dioxa 2-Butanon 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromoforn Bromome Carbon di Carbon te Chlorober Chlorober Chloroforn Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylen Methyl-t-b o-Xylene Styrene	romo-3-chioropropane	0.917	mg/Kg	0.0021	ND
1,2-Dichle 1,2-Dichle 1,3-Dichle 1,4-Dichle 1,4-Dioxa 2-Butanoi 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromofori Bromofori Bromome Carbon di Carbon te Chlorober Chloroferi Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene	omoethane	0.917	mg/Kg	0.0021	ND
1,2-Dichle 1,3-Dichle 1,4-Dioxa 2-Butanor 2-Hexanor 4-Methyl- Acetone Benzene Bromochl Bromodic Bromofor Bromome Carbon di Carbon te Chlorober Chlorofor Chlorofor Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylen Methyl-t-b o-Xylene Styrene	nlorobenzene	0.917	mg/Kg	0.0021	ND
1,2-Dichle 1,3-Dichle 1,4-Dioxa 2-Butanor 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromofor Bromome Carbon di Carbon te Chlorober Chlorofor Chlorofor Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylen Methyl-t-b o-Xylene Styrene	nloroethane	0.917	mg/Kg	0.0011	ND
1,3-Dichle 1,4-Dichle 1,4-Dioxa 2-Butanon 2-Hexano 4-Methyl-Acetone Benzene Bromochl Bromodic Bromoforn Bromome Carbon di Carbon te Chlorober Chlorober Chloroforn Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylen Methyl-t-b o-Xylene Styrene	nloropropane	0.917	mg/Kg	0.0021	ND
1,4-Dichle 1,4-Dichle 1,4-Dioxa 2-Butanon 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromoforn Bromome Carbon di Carbon te Chlorober Chlorober Chloroforn Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylen Methyl-t-b o-Xylene Styrene	nlorobenzene	0.917	mg/Kg	0.0021	ND
1,4-Dioxa 2-Butanor 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromoforr Bromome Carbon di Carbon te Chlorober Chloroforr Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xyler Methyl-t-b o-Xylene Styrene	nlorobenzene	0.917	mg/Kg	0.0021	ND
2-Butanoi 2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromofori Bromome Carbon di Carbon te Chlorober Chlorofori Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylei Methyl-t-b o-Xylene Styrene	-	0.917	mg/Kg	0.0021	ND
2-Hexano 4-Methyl- Acetone Benzene Bromochl Bromodic Bromofori Bromome Carbon di Carbon te Chlorober Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylei Methyl-t-b o-Xylene Styrene		0.917	mg/Kg	0.0021	ND
4-Methyl-Acetone Benzene Bromochl Bromodic Bromofori Bromome Carbon di Carbon te Chlorober Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexe Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylei Methyl-t-b o-Xylene Styrene		0.917		0.0021	
Acetone Benzene Bromochl Bromodic Bromofori Bromome Carbon di Carbon te Chlorober Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene		0.917	mg/Kg		ND
Benzene Bromochl Bromodic Bromofori Bromome Carbon di Carbon te Chlorober Chloroeth Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexe Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylen Methyl-t-b o-Xylene Styrene	•		mg/Kg	0.0021	ND
Bromochi Bromodic Bromofori Bromome Carbon di Carbon te Chlorober Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylei Methyl Ac Methyl-t-b o-Xylene Styrene		0.917	mg/Kg	0.011	ND
Bromodic Bromoforn Bromome Carbon di Carbon te Chlorober Chloroforn Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylen Methyl-t-b o-Xylene Styrene		0.917	mg/Kg	0.0011	ND
Bromoforn Bromome Carbon di Carbon te Chlorober Chloroeth Chloroforn Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene		0.917	mg/Kg	0.0021	ND
Bromome Carbon di Carbon te Chlorober Chloroeth Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexe Dibromodi Dichlorodi Ethylbenz Isopropylb m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene		0.917	mg/Kg	0.0021	ND
Carbon di Carbon te Chlorober Chloroeth Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexe Dibromoci Dichtorodi Ethylbenz Isopropylt m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene		0.917	mg/Kg	0.0021	ND
Carbon te Chlorober Chloroeth Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexe Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene	* **	0.917	mg/Kg	0.0021	ND
Chlorober Chloroeth Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexe Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene		0.917	mg/Kg	0.0021	ND
Chloroeth Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexa Dibromoci Dichlorodi Ethylbenz: Isopropylt m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene	tetrachloride	0.917	mg/Kg	0.0021	ND
Chlorofori Chlorome cis-1,2-Di cis-1,3-Di Cyclohexe Dibromoci Dichlorodi Ethylbenz: Isopropylt m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene		0.917	mg/Kg	0.0021	ND
Chlorome cis-1,2-Di cis-1,3-Di Cyclohexe Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene		0.917	mg/Kg	0.0021	ND
cis-1,2-Di cis-1,3-Di Cyclohexe Dibromoci Dichlorodi Ethylbenz Isopropylb m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene	rm	0.917	mg/Kg	0.0021	ND
cis-1,3-Di Cyclohexe Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene	ethane	0.917	mg/Kg	0.0021	ND
Cyclohexe Dibromoci Dichlorodi Ethylbenz Isopropylt m&p-Xylei Methyl Ac Methylcyc Methyl-t-b o-Xylene Styrene	Dichloroethene	0.917	mg/Kg	0.0021	ND
Dibromoci Dichlorodi Ethylbenz: Isopropylt: m&p-Xylen Methyl Ac Methylcyc Methylene Methyl-t-b o-Xylene Styrene	Dichloropropene	0.917	mg/Kg	0.0021	ND
Dichlorodi Ethylbenz Isopropylt m&p-Xylei Methyl Ac Methylcyc Methylene Methyl-t-b o-Xylene Styrene	cane	0.917	mg/Kg	0.0021	ND
Ethylbenz Isopropylt m&p-Xylei Methyl Ac Methylcyc Methylene Methyl-t-b o-Xylene Styrene	chloromethane	0.917	mg/Kg	0.0021	ND
Isopropylt m&p-Xylei Methyl Ac Methylcyc Methyl-te Methyl-t-b o-Xylene Styrene	difluoromethane	0.917	mg/Kg	0.0021	ND
m&p-Xyler Methyl Ac Methylcyc Methylene Methyl-t-b o-Xylene Styrene	zene	0.917	mg/Kg	0.0011	ND
Methyl Ac Methylcyc Methylene Methyl-t-b o-Xylene Styrene	lbenzene	0.917	mg/Kg	0.0011	ND
Methylcyc Methylene Methyl-t-b o-Xylene Styrene	enes	0.917	mg/Kg	0.0011	ND
Methylene Methyl-t-b o-Xylene Styrene	cetate	0.917	mg/Kg	0.0021	ND
Methyl-t-b o-Xylene Styrene	clohexane	0.917	mg/Kg	0.0021	ND
Methyl-t-b o-Xylene Styrene	e chloride	0.917	mg/Kg	0.0021	0.0061
o-Xylene Styrene		0.917	mg/Kg	0.0011	ND
Styrene		0.917	mg/Kg	0.0011	ND ND
-		0.917	mg/Kg	0.0011	ND ND
. 00 40 110	proethene	0.917	mg/Kg	0.0021	ND ND
Toluene		0.917			
	:-Dichloroethene		mg/Kg mg/Kg	0.0011	ND
	-Dichloroethene -Dichloropropene	0.917	mg/Kg	0.0021	ND
Trichloroe	• •	0.917	mg/Kg	0.0021	ND
		0.917	mg/Kg	0.0021	ND
	fluoromethane	0.917	mg/Kg	0.0021	ND
Vinyl chlor Xylenes (T		0.917 0.917	mg/Kg mg/Kg	0.0021 0.0011	ND ND

Lab#: AC77929-006	SampleID: SB-03-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77929-006	SB-03-COMP		Date C	ollected 3/31/2014	
% Solids SM2	2540G				
	% Solids	1	Percent		77
Chlorinated I	Herbicides 8151				
Omormatou .	2,4,5-T	1	mg/Kg	0.013	ND
	2,4-D	1	mg/Kg	0.013	ND
	Dicamba	1	mg/Kg	0.013	ND
	Silvex	1	mg/Kg	0.013	ND
Moroumy (Soi	il/Waste) 7471A				
mercury (50	Mercury	1	mg/Kg	0.11	ND
	•	•	mgritg	0.11	
Organochlor	ine Pesticides 8081		malka	0.0065	ND
	Aldrin	1	mg/Kg	0.0003	ND
	Alpha-BHC	1	mg/Kg	0.0013	ND
	beta-BHC	1	mg/Kg mg/Kg	0.0013	ND
	Chlordane	1 1	mg/Kg	0.0065	ND
	delta-BHC	1	mg/Kg	0.0003	ND
	Dieldrin	1	mg/Kg	0.0065	ND
	Endosulfan I Endosulfan II	1	mg/Kg	0.0065	ND
	Endosulfan Sulfate	1	mg/Kg	0.0065	ND
	Endosulian Sulfate Endrin	1	mg/Kg	0.0065	ND
		1	mg/Kg	0.0065	ND
	Endrin Aldehyde Endrin Ketone	1	mg/Kg	0.0065	ND
	gamma-BHC	1	mg/Kg	0.0013	ND
	•	1	mg/Kg	0.0065	ND
	Heptachlor Heptachlor Epoxide	1	mg/Kg	0.0065	ND
	Methoxychlor	1	mg/Kg	0.0065	ND
	p,p'-DDD	1	mg/Kg	0.0032	ND
	p,p'-DDE	1	mg/Kg	0.0032	ND
	p,p'-DDT	1	mg/Kg	0.0032	ND
	Toxaphene	1	mg/Kg	0.032	ND
	Toxapheno	•			
PCB 8082	Assolate (Tatal)	4	malKa	0.032	ND
	Aroclor (Total)	1 1	mg/Kg mg/Kg	0.032	ND
	Aroclor 4224	-	mg/Kg mg/Kg	0.032	ND
	Aroclor-1221	1		0.032	ND
	Aroclor 1232	1 1	mg/Kg mg/Kg	0.032	ND
	Aroclor 1242	1	mg/Kg mg/Kg	0.032	ND
	Aroclor 1254	1	mg/Kg mg/Kg	0.032	ND
	Aroclor-1254 Aroclor-1260	1	mg/Kg	0.032	ND
		1	mg/Kg	0.032	ND
	Aroclor 1269	1	mg/Kg	0.032	ND
	Aroclor-1268	1	mg/Ng	U.U32	HU

AC77929-006	SampleID: SB-03-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu
Semivolatile Org	anics (no search) 8270				
	1,1'-Biphenyl	1	mg/Kg	0.043	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.043	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.043	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.043	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.043	ND
	2,4-Dichlorophenol	1	mg/Kg	0.011	ND
	2,4-Dimethylphenol	1	mg/Kg	0.011	ND
	2,4-Dinitrophenol	1	mg/Kg	0.22	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.043	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.043	ND
	2-Chloronaphthalene	1	mg/Kg	0.043	ND
	2-Chlorophenol	1	mg/Kg	0.043	ND
	2-Methylnaphthalene	1	mg/Kg	0.043	ND
	2-Methylphenol	1	mg/Kg	0.011	ND
	2-Metryphenol 2-Nitroaniline	1	mg/Kg	0.043	ND .
	2-Nitrophenol	1	mg/Kg	0.043	ND
	2-Nitrophenol 3&4-Methylphenol	1	mg/Kg	0.043	ND
	* '	1	mg/Kg	0.043	ND
	3,3'-Dichlorobenzidine			0.043	ND
	3-Nitroaniline	1	mg/Kg		ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.22	
	4-Bromophenyl-phenylether	1	mg/Kg	0.043	ND
	4-Chioro-3-methylphenol	1	mg/Kg	0.043	ND
	4-Chloroaniline	1	mg/Kg	0.021	ND
	4-Chlorophenyl-phenylether	1	mg/Kg	0.043	ND
	4-Nitroaniline	. 1	mg/Kg	0.043	ND
	4-Nitrophenol	1	mg/Kg	0.043	ND
	Acenaphthene	1	mg/Kg	0.043	ND
	Acenaphthylene	1	mg/Kg	0.043	ND
	Acetophenone	1	mg/Kg	0.043	ND
	Anthracene	1	mg/Kg	0.043	ND
	Atrazine	1	mg/Kg	0.043	ND
	Benzaldehyde	1	mg/Kg	0.043	ND
	Benzo[a]anthracene	1	mg/Kg	0.043	ND
	Benzo[a]pyrene	1	mg/Kg	0.043	ND
	Benzo[b]fluoranthene	1	mg/Kg	0.043	ND
	Benzo[g,h,i]perylene	· 1	mg/Kg	0.043	ND
	Benzo[k]fluoranthene	1	mg/Kg	0.043	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.043	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.011	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.043	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.043	ND
	Butylbenzylphthalate	1	mg/Kg	0.043	ND
	Caprolactam	1	mg/Kg	0.043	ND
	Carbazole	1	mg/Kg	0.043	ND
	Chrysene	1	mg/Kg	0.043	ND
	. •	1	mg/Kg	0.043	ND
	Dibenzo[a,h]anthracene	1	mg/Kg	0.043	ND
	Dibenzofuran Diethylahtholote			0.043	ND
	Diethylphthalate Diesethylphthalate	1	mg/Kg		
	Dimethylphthalate	1	mg/Kg	0.043	ND ND
	Di-n-butylphthalate	1	mg/Kg	0.022	ND
	Di-n-octylphthalate	1	mg/Kg	0.043	ND
	Fluoranthene	1	mg/Kg	0.043	ND
	Fluorene	1	mg/Kg	0.043	ND
	Hexachlorobenzene	1	mg/Kg	0.043	ND
	Hexachlorobutadiene	1	mg/Kg	0.043	ND

Veritech Project: 4040237

ab#: AC77929-006	SampleID: SB-03-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.043	ND
	Hexachloroethane	1	mg/Kg	0.043	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.043	ND
	Isophorone	1	mg/Kg	0.043	ND
	Naphthalene	1	mg/Kg	0.011	ND
	Nitrobenzene	1	mg/Kg	0.043	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.011	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.043	ND
	Pentachlorophenol	1	mg/Kg	0.22	ND
	Phenanthrene	1	mg/Kg	0.043	ND
	Phenol	1	mg/Kg	0.043	ND
	Pyrene	1	mg/Kg	0.043	ND
TAL Metals 6	010				
	Aluminum	1	mg/Kg	260	4500
	Arsenic	1	mg/Kg	5.2	ND
	Barium	1	mg/Kg	13	19
	Calcium	1	mg/Kg	1300	ND
	Chromium	1	mg/Kg	6.5	10
	Cobalt	1	mg/Kg	3.2	4.5
	Copper	1	mg/Kg	6.5	10
	Iron	1	mg/Kg	260	11000
	Lead	1	mg/Kg	6.5	ND
	Magnesium	1	mg/Kg	650	2100
	Manganese	1	mg/Kg	13	260
	Nickel	1	mg/Kg	6.5	16
	Potassium	1	mg/Kg	650	ND
	Sodium	1	mg/Kg	320	ND
	Thallium	1	mg/Kg	1.9	ND
	Vanadium	1	mg/Kg	13	15
	Zinc	1	mg/Kg	13	18
TAL Metals 60	020				
	Antimony	1	mg/Kg	1.0	ND
	Beryllium	1	mg/Kg	0.26	ND
	Cadmium	1	mg/Kg	0.52	ND
	Selenium	1	mg/Kg	2.6	ND
	Silver	1	mg/Kg	0.26	ND

Lab#: AC77929-007 SampleID: SB-04-9.5-10.0 TestGroup Analyte DF Units MDL/PQL/RL Result SB-04-9.5-10.0 Date Collected AC77929-007 4/1/2014 % Solids SM2540G 88 % Solids 1 Percent

-ab#: AC77929-007	SampleID: SB-04-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organics	(no search) 8260				
1	,1,1-Trichloroethane	0.975	mg/Kg	0.0022	ND
1	,1,2,2-Tetrachloroethane	0.975	mg/Kg	0.0022	ND
1	,1,2-Trichloro-1,2,2-trifluoroethane	0.975	mg/Kg	0.0022	ND
1	,1,2-Trichloroethane	0.975	mg/Kg	0.0022	ND
1	,1-Dichloroethane	0.975	mg/Kg	0.0022	ND
1	,1-Dichloroethene	0.975	mg/Kg	0.0022	ND
	,2,3-Trichlorobenzene	0.975	mg/Kg	0.0022	ND
	,2,4-Trichlorobenzene	0.975	mg/Kg	0.0022	ND
	,2-Dibromo-3-chloropropane	0.975	mg/Kg	0.0022	ND
	,2-Dibromoethane	0.975	mg/Kg	0.0022	ND
	,2-Dichlorobenzene	0.975	mg/Kg	0.0022	ND
	,2-Dichloroethane	0.975	mg/Kg	0.0011	ND
	,2-Dichloropropane	0.975	mg/Kg	0.0022	ND
	,3-Dichlorobenzene	0.975	mg/Kg	0.0022	ND
	.4-Dichlorobenzene	0.975	mg/Kg	0.0022	ND
	,4-Dioxane	0.975	mg/Kg	0.11	ND
	-Butanone	0.975	mg/Kg	0.0022	ND
	2-Hexanone	0.975	mg/Kg	0.0022	ND
	-Methyl-2-pentanone	0.975	mg/Kg	0.0022	ND
	Acetone	0.975	mg/Kg	0.0022	ND
	Benzene	0.975	mg/Kg	0.0011	ND
	Bromochloromethane	0.975		0.0022	ND
	Bromodichloromethane	0.975	mg/Kg	0.0022	ND
	Bromoform	0.975 0.975	mg/Kg	0.0022	
	Bromomethane		mg/Kg	0.0022	ND
_	Sarbon disulfide	0.975 0.975	mg/Kg	0.0022	ND
			mg/Kg		ND
	Carbon tetrachloride	0.975	mg/Kg	0.0022	ND
	Chlorobenzene	0.975	mg/Kg	0.0022	ND
	Chloroethane	0.975	mg/Kg	0.0022	ND
	Chloroform	0.975	mg/Kg	0.0022	ND
	Chloromethane	0.975	mg/Kg	0.0022	ND
	is-1,2-Dichloroethene	0.975	mg/Kg	0.0022	ND
	is-1,3-Dichloropropene	0.975	mg/Kg	0.0022	ND
	Cyclohexane	0.975	mg/Kg	0.0022	ND
	Dibromochloromethane	0.975	mg/Kg	0.0022	ND
	Dichlorodifluoromethane	0.975	mg/Kg	0.0022	ND
	thylbenzene	0.975	mg/Kg	0.0011	ND
	sopropylbenzene	0.975	mg/Kg	0.0011	ND
	n&p-Xylenes	0.975	mg/Kg	0.0011	ND
	Methyl Acetate	0.975	mg/Kg	0.0022	ND
N	Methylcyclohexane	0.975	mg/Kg	0.0022	ND
· N	lethylene chloride	0.975	mg/Kg	0.0022	0.0047
N	lethyi-t-butyl ether	0.975	mg/Kg	0.0011	ND
0	-Xylene	0.975	mg/Kg	0.0011	ND
S	styrene	0.975	mg/Kg	0.0022	ND
Т	etrachloroethene	0.975	mg/Kg	0.0022	ND
Т	oluene	0.975	mg/Kg	0.0011	ND
tr	ans-1,2-Dichloroethene	0.975	mg/Kg	0.0022	ND
tr	ans-1,3-Dichloropropene	0.975	mg/Kg	0.0022	ND
Т	richloroethene	0.975	mg/Kg	0.0022	ND
Т	richlorofluoromethane	0.975	mg/Kg	0.0022	ND
V	'inyl chloride	0.975	mg/Kg	0.0022	ND

ab#: AC77929-008	SampleID: SB-04-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
C77929-008	SB-04-COMP		Date C	ollected 4/1/2014	
% Solids SM2	2540G				
	% Solids	1	Percent		85
Chlorinated H	lerbicides 8151				
• • • • • • • • • • • • • • • • • • • •	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Mercury (Soil	/Waste) 7471A				
mercury (con	Mercury	1	mg/Kg	0.098	ND
Ourana ahlari	•	•	mg/Ng	0.030	NU
Organochiori	ne Pesticides 8081 Aldrin			0.0050	ND
	Alpha-BHC	1	mg/Kg	0.0059	ND
	beta-BHC	1	mg/Kg	0.0012	ND
	Chlordane	1	mg/Kg	0.0012	ND
	delta-BHC	1 1	mg/Kg	0.029	ND
	Dieldrin	1	mg/Kg	0.0059	ND
	Endosulfan I	-	mg/Kg	0.0012	ND
	Endosulfan II	1	mg/Kg	0.0059	ND
	Endosulfan Sulfate	1	mg/Kg	0.0059	ND
	Endosulian Sullate Endrin	1	mg/Kg	0.0059	ND
		1	mg/Kg	0.0059	ND
	Endrin Aldehyde	1	mg/Kg	0.0059	ND
	Endrin Ketone	1	mg/Kg	0.0059	ND
	gamma-BHC	1	mg/Kg	0.0012	ND
	Heptachlor	1	mg/Kg	0.0059	ND
	Heptachlor Epoxide	1	mg/Kg	0.0059	ND
	Methoxychlor	1	mg/Kg	0.0059	ND
	p,p'-DDD	1	mg/Kg	0.0029	ND
	p,p'-DDE	1	mg/Kg	0.0029	ND
	p,p'-DDT	1	mg/Kg	0.0029	ND
	Toxaphene	1	mg/Kg	0.029	ND
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.029	ND
	Aroclor-1016	1	mg/Kg	0.029	ND
	Aroclor-1221	1	mg/Kg	0.029	ND
	Aroclor-1232	1	mg/Kg	0.029	ND
	Aroclor-1242	1	mg/Kg	0.029	ND
	Aroclor-1248	1	mg/Kg	0.029	ND
	Aroclor-1254	1	mg/Kg	0.029	ND
	Aroclor-1260	1	mg/Kg	0.029	ND
	Aroclor-1262	1	mg/Kg	0.029	ND
	Aroclor-1268	1	mg/Kg	0.029	ND

h#: AC77929-008	SampleID: SB-04-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Semivolatile Or	ganics (no search) 8270				
	1,1'-Biphenyl	1	mg/Kg	0.039	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.039	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.039	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.039	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.039	ND
	2,4-Dichlorophenol	1	mg/Kg	0.0098	ND
	2,4-Dimethylphenol	1	mg/Kg	0.0098	ND
	2,4-Dinitrophenol	1	mg/Kg	0.20	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.039	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.039	ND
	2-Chioronaphthalene	1	mg/Kg	0.039	ND
	2-Chlorophenol	1	mg/Kg	0.039	ND
	2-Methylnaphthalene	1	mg/Kg	0.039	ND
	2-Methylphenol	1	mg/Kg	0.0098	ND
	2-Nitroaniline	i	mg/Kg	0.039	ND
	2-Nitrophenol	1	mg/Kg	0.039	ND
	3&4-Methylphenol	1	mg/Kg	0.0098	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.039	ND
	3-Nitroaniline	1		0.039	ND
		-	mg/Kg	0.20	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.039	ND
	4-Bromophenyl-phenylether	1	mg/Kg		
	4-Chloro-3-methylphenol	1	mg/Kg	0.039	ND
	4-Chloroaniline	1	mg/Kg	0.019	ND
	4-Chlorophenyl-phenylether	1	mg/Kg	0.039	ND
	4-Nitroaniline	1	mg/Kg	0.039	ND
	4-Nitrophenol	1	mg/Kg	0.039	ND
	Acenaphthene	1	mg/Kg	0.039	ND
	Acenaphthylene	1	mg/Kg	0.039	ND
	Acetophenone	1	mg/Kg	0.039	ND
	Anthracene	1	mg/Kg	0.039	ND
	Atrazine	1	mg/Kg	0.039	ND
	Benzaldehyde	1	mg/Kg	0.039	ND
	Benzo[a]anthracene	1	mg/Kg	0.039	ND
	Benzo[a]pyrene	1	mg/Kg	0.039	ND
	Benzo[b]fluoranthene	1	mg/Kg	0.039	ND
	Benzo[g,h,i]perylene	1	mg/Kg	0.039	ND
	Benzo[k]fluoranthene	1	mg/Kg	0.039	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.039	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.0098	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.039	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.039	ND
	Butylbenzylphthalate	1	mg/Kg	0.039	ND
	Caprolactam	1	mg/Kg	0.039	ND
	Carbazole	1	mg/Kg	0.039	ND
	Chrysene	1	mg/Kg	0.039	ND
	Dibenzo[a,h]anthracene	1	mg/Kg	0.039	ND
	Dibenzofuran	1	mg/Kg	0.0098	ND
	Diethylphthalate	1	mg/Kg	0.039	ND
	Dimethylphthalate	1	mg/Kg	0.039	ND
	Di-n-butylphthalate	1	mg/Kg	0.020	ND
	Di-n-octylphthalate	1	mg/Kg	0.039	ND
	Fluoranthene	1	mg/Kg	0.039	ND
	Fluorene	1	mg/Kg	0.039	ND
	i idolollo	•			
	Hexachlorobenzene	4	mg/Kg	0.039	ND

#: AC77929-008	SampleID: SB-04-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.039	ND
	Hexachioroethane	1	mg/Kg	0.039	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.039	ND
	Isophorone	1	mg/Kg	0.039	ND
	Naphthalene	1	mg/Kg	0.0098	ND
	Nitrobenzene	1	mg/Kg	0.039	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0098	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.039	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.039	ND
	Phenol	1	mg/Kg	0.039	ND
	Pyrene	1	mg/Kg	0.039	ND
TAL Metals 60	10				
	Aluminum	1	mg/Kg	240	4600
	Arsenic	1	mg/Kg	4.7	ND
	Barium	1	mg/Kg	12	14
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	5.9	7.9
	Cobalt	1	mg/Kg	2.9	4.1
	Copper	1	mg/Kg	5.9	7.7
	Iron	1	mg/Kg	240	7900
	Lead	1	mg/Kg	5.9	ND
	Magnesium	1	mg/Kg	590	2000
	Manganese	1	mg/Kg	12	250
	Nickel	1	mg/Kg	5.9	15
	Potassium	1	mg/Kg	590	ND
	Sodium	1	mg/Kg	290	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	ND
	Zinc	1	mg/Kg	12	14
TAL Metals 602	20		0 0	_	• •
	Antimony	1	mg/Kg	0.94	ND
	Beryllium	1	mg/Kg	0.24	ND
	Cadmium	1	mg/Kg	0.47	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

SB-05-9.5-10.0 SampleID: Lab#: AC77929-009 DF Analyte MDL/PQL/RL TestGroup **Units** Result Date Collected 4/2/2014 SB-05-9.5-10.0 AC77929-009 % Solids SM2540G 88 % Solids 1 Percent

TestGroup	Analyte	DF	1114-	MDI INC. IN	_
······································	· · · · · · · · · · · · · · · · · · ·		Units	MDL/PQL/RL	Res
Volatile Orga	nics (no search) 8260				
	1,1,1-Trichloroethane	0.956	mg/Kg	0.0022	ND
	1,1,2,2-Tetrachloroethane	0.956	mg/Kg	0.0022	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.956	mg/Kg	0.0022	ND
	1,1,2-Trichloroethane	0.956	mg/Kg	0.0022	ND
	1,1-Dichloroethane	0.956	mg/Kg	0.0022	ND
	1,1-Dichloroethene	0.956	mg/Kg	0.0022	ND
	1,2,3-Trichlorobenzene	0.956	mg/Kg	0.0022	ND
	1,2,4-Trichlorobenzene	0.956	mg/Kg	0.0022	ND
	1,2-Dibromo-3-chloropropane	0.956	mg/Kg	0.0022	ND
	1,2-Dibromoethane	0.956	mg/Kg	0.0022	ND
	1,2-Dichlorobenzene	0.956	mg/Kg	0.0022	ND
	1,2-Dichloroethane	0.956	mg/Kg	0.0011	ND
	1,2-Dichloropropane	0.956	mg/Kg	0.0022	ND
	1,3-Dichlorobenzene	0.956	mg/Kg	0.0022	ND
	1,4-Dichlorobenzene	0.956	mg/Kg	0.0022	ND
	1,4-Dioxane	0.956	mg/Kg	0.11	ND
	2-Butanone	0.956	mg/Kg	0.0022	ND
	2-Hexanone	0.956	mg/Kg	0.0022	ND
	4-Methyl-2-pentanone	0.956	mg/Kg	0.0022	ND
	Acetone	0.956	mg/Kg	0.011	ND
	Benzene	0.956	mg/Kg	0.0011	ND
	Bromochloromethane	0.956	mg/Kg	0.0022	ND
	Bromodichloromethane	0.956	mg/Kg	0.0022	ND
	Bromoform	0.956	mg/Kg	0.0022	ND
	Bromomethane	0.956	mg/Kg	0.0022	ND
	Carbon disulfide	0.956	mg/Kg	0.0022	ND
	Carbon tetrachloride	0.956	mg/Kg	0.0022	ND
	Chlorobenzene	0.956	mg/Kg	0.0022	ND
	Chloroethane	0.956	mg/Kg	0.0022	ND
	Chloroform	0.956	mg/Kg	0.0022	ND
	Chloromethane	0.956	mg/Kg	0.0022	ND
	cis-1,2-Dichloroethene	0.956	mg/Kg	0.0022	ND
	cis-1,3-Dichloropropene	0.956	mg/Kg	0.0022	ND
	Cyclohexane	0.956	mg/Kg	0.0022	ND
	Dibromochloromethane	0.956	mg/Kg	0.0022	ND
	Dichlorodifluoromethane	0.956	mg/Kg	0.0022	ND
	Ethylbenzene	0.956	mg/Kg	0.0011	ND
	Isopropylbenzene	0.956	mg/Kg	0.0011	ND
	m&p-Xylenes	0.956	mg/Kg	0.0011	ND
	Methyl Acetate	0.956	mg/Kg	0.0022	ND
	Methylcyclohexane	0.956	mg/Kg	0.0022	ND
	Methylene chloride	0.956	mg/Kg	0.0022	0.0051
	Methyl-t-butyl ether	0.956	mg/Kg	0.0011	ND
	o-Xylene	0.956	mg/Kg	0.0011	ND
	Styrene	0.956	mg/Kg	0.0022	ND
	Tetrachloroethene	0.956	mg/Kg	0.0022	ND
	Toluene	0.956	mg/Kg	0.0011	ND
	trans-1,2-Dichloroethene	0.956	mg/Kg	0.0022	ND
	trans-1,3-Dichloropropene	0.956	mg/Kg	0.0022	ND
	Trichloroethene	0.956	mg/Kg	0.0022	ND
	Trichlorofluoromethane Vinyl chloride	0.956	mg/Kg	0.0022	ND
	VIIIVI COTOTION	0.956	mg/Kg	0.0022	ND

b#: AC77929-010	SampleID: SB-05-COMP	<u></u>			
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
C77929-010	SB-05-COMP		Date C	ollected 4/2/2014	
% Solids SM2	540G				
	% Solids	1	Percent		82
Chlorinated H	erbicides 8151				
Omormatou	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Marcury (Soil	Waste) 7471A				
Wercury (oon	Mercury	1	mg/Kg	0.10	ND
0		-			
Urganochiorii	ne Pesticides 8081	1	mg/Kg	0.0061	ND
	Aldrin Alpha-BHC	1	mg/Kg	0.0012	ND
	beta-BHC	1	mg/Kg	0.0012	ND
	Chiordane	1	mg/Kg	0.030	ND
	delta-BHC	1	mg/Kg	0.0061	ND
	Dieldrin	1	mg/Kg	0.0012	ND
	Endosulfan I	1	mg/Kg	0.0061	ND
	Endosulfan li	1	mg/Kg	0.0061	ND
	Endosulfan Sulfate	1	mg/Kg	0.0061	ND
	Endrin	1	mg/Kg	0.0061	ND
	Endrin Aldehyde	1	mg/Kg	0.0061	ND
	Endrin Ketone	1	mg/Kg	0.0061	ND
	gamma-BHC	1	mg/Kg	0.0012	ND
	Heptachlor	1	mg/Kg	0.0061	ND
	Heptachlor Epoxide	1	mg/Kg	0.0061	ND
	Methoxychlor	1	mg/Kg	0.0061	ND
	p,p'-DDD	1	mg/Kg	0.0030	ND
	p,p'-DDE	1	mg/Kg	0.0030	ND
	p,p'-DDT	1	mg/Kg	0.0030	ND
	Toxaphene	1	mg/Kg	0.030	ND
PCB 8082	•				
	Aroclor (Total)	1	mg/Kg	0.030	ND
	Aroclor-1016	1	mg/Kg	0.030	ND
	Aroclor-1221	1	mg/Kg	0.030	ND
	Aroclor-1232	1	mg/Kg	0.030	ND
	Aroclor-1242	1	mg/Kg	0.030	ND
	Aroclor-1248	1	mg/Kg	0.030	ND
	Aroclor-1254	1	mg/Kg	0.030	ND
	Aroclor-1260	1	mg/Kg	0.030	ND
	Aroclor-1262	1	mg/Kg	0.030	ND
	Arocior-1268	1	mg/Kg	0.030	ND

Lab#: AC77929-010	SampleID: SB-05-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile O	rganics (no search) 8270				-
	1,1'-Biphenyl	1	mg/Kg	0.041	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.041	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.041	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4-Dichlorophenol	1	mg/Kg	0.010	ND
	2,4-Dimethylphenol	1	mg/Kg	0.010	ND
	2,4-Dinitrophenol	1	mg/Kg	0.20	ND
	2,4-Dinitrotoluene	. 1	mg/Kg	0.041	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.041	ND
	2-Chloronaphthalene	1	mg/Kg	0.041	ND
	2-Chlorophenol	1	mg/Kg	0.041	ND
	2-Methylnaphthalene	1	mg/Kg	0.041	ND
	2-Methylphenol	1	mg/Kg	0.010	ND
	2-Nitroaniline	1	mg/Kg	0.041	ND
	2-Nitrophenol	1	mg/Kg	0.041	ND
	3&4-Methylphenol	1	mg/Kg	0.010	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.041	ND
	3-Nitroaniline	1	mg/Kg	0.041	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.20	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.041	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.041	ND
	4-Chloroaniline	1	mg/Kg	0.041	ND
	4-Chlorophenyl-phenylether	1	mg/Kg	0.041	ND
	4-Nitroaniline	1	mg/Kg	0.041	
	4-Nitrophenol	1	mg/Kg	0.041	ND ND
	Acenaphthene	1		0.041	ND
	Acenaphthylene	1	mg/Kg	0.041	ND
v	Acetophenone	1	mg/Kg		ND
	Anthracene	1	mg/Kg	0.041	ND
	Atrazine	1	mg/Kg	0.041	ND
•	Benzaldehyde	1	mg/Kg	0.041	ND
	Benzo[a]anthracene	1	mg/Kg	0.041	ND
	Benzo[a]pyrene		mg/Kg	0.041	ND
	D 0.00	1	mg/Kg	0.041	ND
	Benzo[b]fluoranthene Benzo[g,h,i]perylene	1	mg/Kg	0.041	ND
	Benzo[k]fluoranthene	1	mg/Kg	0.041	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.041	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.041	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.010	ND
		1	mg/Kg	0.041	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.041	ND
	Butylbenzylphthalate	1	mg/Kg	0.041	ND
	Caprolactam	1	mg/Kg	0.041	ND
	Carbazole	1	mg/Kg	0.041	ND
	Chrysene	1	mg/Kg	0.041	ND
	Dibenzo[a,h]anthracene	1	mg/Kg	0.041	ND
	Dibenzofuran Diathydalata	1	mg/Kg	0.010	ND
	Diethylphthalate	1	mg/Kg	0.041	ND
	Dimethylphthalate	1	mg/Kg	0.041	ND
	Di-n-butylphthalate	1	mg/Kg	0.020	ND
	Di-n-octylphthalate	1	mg/Kg	0.041	ND
	Fluoranthene	1	mg/Kg	0.041	ND
	Fluorene	1	mg/Kg	0.041	ND
	Hexachlorobenzene	1	mg/Kg	0.041	ND
	Hexachlorobutadiene	1	mg/Kg	0.041	ND

hb#: AC77929-010	SampleID: SB-05-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.041	ND
	Hexachloroethane	1	mg/Kg	0.041	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.041	ND
	Isophorone	1	mg/Kg	0.041	ND
	Naphthalene	1	mg/Kg	0.010	ND
	Nitrobenzene	1	mg/Kg	0.041	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.010	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.041	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.041	ND
	Phenol	1	mg/Kg	0.041	ND
	Pyrene	1	mg/Kg	0.041	ND
TAL Metals 6	010				
	Aluminum	1	mg/Kg	240	3600
	Arsenic	1	mg/Kg	4.9	ND
	Barium	1	mg/Kg	12	ND
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	6.1	8.6
	Cobalt	1	mg/Kg	3.0	3.3
	Copper	1	mg/Kg	6.1	8.1
	Iron	1	mg/Kg	240	10000
	Lead	1	mg/Kg	6.1	ND
	Magnesium	1	mg/Kg	610	1500
	Manganese	1	mg/Kg	12	65
	Nickel	1	mg/Kg	6.1	13
	Potassium	1	mg/Kg	610	ND
	Sodium	1	mg/Kg	300	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	ND
	Zinc	1	mg/Kg	12	14
TAL Metals 6					
	Antimony	1	mg/Kg	0.98	ND
	Beryllium	1	mg/Kg	0.24	ND
	Cadmium	1	mg/Kg	0.49	ND
	Selenium	. 1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

AC77929-011 SampleID: SB-06-9.5-10.0 TestGroup Analyte DF Units MDL/PQL/RL Result AC77929-011 SB-06-9.5-10.0 Date Collected 4/2/2014 % Solids SM2540G % Solids 1 Percent 84

C77929-011	Analyst-	DF	11!4-	MDI /DOI /DI	D
TestGroup	Analyte		Units	MDL/PQL/RL	Res
Volatile Orga	nics (no search) 8260				
	1,1,1-Trichloroethane	0.969	mg/Kg	0.0023	ND
	1,1,2,2-Tetrachloroethane	0.969	mg/Kg	0.0023	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.969	mg/Kg	0.0023	ND
	1,1,2-Trichloroethane	0.969	mg/Kg	0.0023	ND
	1,1-Dichloroethane	0.969	mg/Kg	0.0023	ND
	1,1-Dichloroethene	0.969	mg/Kg	0.0023	ND
	1,2,3-Trichlorobenzene	0.969	mg/Kg	0.0023	ND
	1,2,4-Trichlorobenzene	0.969	mg/Kg	0.0023	ND
	1,2-Dibromo-3-chloropropane	0.969	mg/Kg	0.0023	ND
	1,2-Dibromoethane	0.969	mg/Kg	0.0023	ND
	1,2-Dichlorobenzene	0.969	mg/Kg	0.0023	ND
	1,2-Dichloroethane	0.969	mg/Kg	0.0012	ND
	1,2-Dichloropropane	0.969	mg/Kg	0.0023	ND
	1,3-Dichlorobenzene	0.969	mg/Kg	0.0023	ND
	1,4-Dichlorobenzene	0.969	mg/Kg	0.0023	ND
	1,4-Dioxane	0.969	mg/Kg	0.12	ND
	2-Butanone	0.969	mg/Kg	0.0023	ND
	2-Hexanone	0.969	mg/Kg	0.0023	ND
	4-Methyl-2-pentanone	0.969	mg/Kg	0.0023	ND
	Acetone	0.969	mg/Kg	0.012	ND
	Benzene	0.969	mg/Kg	0.0012	ND
	Bromochloromethane	0.969	mg/Kg	0.0023	ND
	Bromodichloromethane	0.969	mg/Kg	0.0023	ND
	Bromoform	0.969	mg/Kg	0.0023	ND
	Bromomethane	0.969	mg/Kg	0.0023	ND
	Carbon disulfide	0.969	mg/Kg	0.0023	ND
	Carbon tetrachloride	0.969	mg/Kg	0.0023	ND
	Chlorobenzene	0.969	mg/Kg	0.0023	ND
	Chloroethane	0.969	mg/Kg	0.0023	ND
	Chloroform	0.969	mg/Kg	0.0023	ND
	Chloromethane	0.969	mg/Kg	0.0023	ND
	cis-1,2-Dichloroethene	0.969	mg/Kg	0.0023	ND
	cis-1,3-Dichloropropene	0.969	mg/Kg	0.0023	ND
	Cyclohexane	0.969	mg/Kg	0.0023	ND
	Dibromochloromethane	0.969	mg/Kg	0.0023	ND
	Dichlorodifluoromethane	0.969	mg/Kg	0.0023	ND
	Ethylbenzene	0.969	mg/Kg	0.0012	ND
	Isopropylbenzene	0.969	mg/Kg	0.0012	ND
	m&p-Xylenes	0.969	mg/Kg	0.0012	ND
	Methyl Acetate	0.969	mg/Kg	0.0023	ND
	Methylcyclohexane	0.969	mg/Kg	0.0023	ND
	Methylerie chloride	0.969	mg/Kg	0.0023	0.009
	Methyl-t-butyl ether	0.969	mg/Kg	0.0012	ND
	o-Xylene	0.969	mg/Kg	0.0012	ND
	Styrene	0.969	mg/Kg	0.0023	ND
	Tetrachloroethene	0.969	mg/Kg	0.0023	ND
	Toluene	0.969	mg/Kg	0.0012	ND
	trans-1,2-Dichloroethene	0.969	mg/Kg	0.0023	ND
	trans-1,3-Dichloropropene	0.969	mg/Kg	0.0023	ND
	Trichloroethene	0.969	mg/Kg	0.0023	ND
	Trichlorofluoromethane	0.969	mg/Kg	0.0023	ND
	Vinyl chloride	0.969	mg/Kg	0.0023	ND
	Xylenes (Total)	0.969	mg/Kg	0.0012	ND

Lab#: AC77929-012	SampleID: SB-06-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77929-012	SB-06-COMP		Date C	ollected 4/2/2014	
% Solids SM2	540G				
	% Solids	1	Percent		82
Chlorinated H	lerbicides 8151				
Omorniated	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Maraum (Call	/Waste) 7471A				
Mercury (30)	Mercury	1	mg/Kg	0.10	ND
	·	•			
Organochlori	ne Pesticides 8081	1	mg/Kg	0.0061	ND
	Aldrin	1	mg/Kg	0.0012	ND
	Alpha-BHC	1	mg/Kg	0.0012	ND
	beta-BHC	1	mg/Kg	0.030	ND
	Chlordane	1	mg/Kg	0.0061	ND
	delta-BHC	1	mg/Kg	0.0012	ND
	Dieldrin	1	mg/Kg	0.0061	ND
	Endosulfan I	1	mg/Kg	0.0061	ND
	Endosulfan II	1	mg/Kg	0.0061	ND
	Endosulfan Sulfate	1	mg/Kg	0.0061	ND
	Endrin	1	mg/Kg	0.0061	ND
	Endrin Aldehyde		mg/Kg	0.0061	ND
	Endrin Ketone	1		0.0012	ND
	gamma-BHC	1	mg/Kg	0.0061	ND
	Heptachior	1	mg/Kg	0.0061	ND
	Heptachlor Epoxide	1	mg/Kg	0.0061	ND
	Methoxychlor	1	mg/Kg	0.0030	ND
	p,p'-DDD	1 ,	mg/Kg	0.0030	ND
	p,p'-DDE	1	mg/Kg	0.0030	ND
	p,p'-DDT	1	mg/Kg	0.030	ND
	Toxaphene	1	mg/Kg	0.030	ND
PCB 8082					ND
	Aroclor (Total)	1	mg/Kg	0.030	ND
	Aroclor-1016	1	mg/Kg	0.030	ND
	Aroclor-1221	1	mg/Kg	0.030	ND
	Aroclor-1232	1	mg/Kg	0.030	ND
	Aroclor-1242	1	mg/Kg	0.030	ND
	Aroclor-1248	1	mg/Kg	0.030	ND
	Aroclor-1254	1	mg/Kg	0.030	ND
	Aroclor-1260	1	mg/Kg	0.030	ND
	Aroclor-1262	1	mg/Kg	0.030	ND
	Aroclor-1268	1	mg/Kg	0.030	ND

Veritech Project: 4040237

Lab#: AC77929-012	SampleID: SB-06-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Or	rganics (no search) 8270				1,000
	1,1'-Biphenyl	1	mg/Kg	0.041	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.041	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.041	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4-Dichlorophenol	1	mg/Kg	0.010	ND
	2,4-Dimethylphenol	1	mg/Kg	0.010	ND
	2,4-Dinitrophenol	1	mg/Kg	0.20	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.041	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.041	ND
	2-Chloronaphthalene	1	mg/Kg	0.041	ND
	2-Chlorophenol	1	mg/Kg	0.041	ND
	2-Methylnaphthalene	1	mg/Kg	0.041	ND
	2-Methylphenol	1	mg/Kg	0.010	ND
	2-Nitroaniline	1	mg/Kg	0.041	ND
	2-Nitrophenol	1	mg/Kg	0.041	ND
	3&4-Methylphenol	1	mg/Kg	0.010	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.041	ND
	3-Nitroaniline	1	mg/Kg	0.041	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.20	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.041	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.041	ND
	4-Chloroaniline	1	mg/Kg	0.019	ND
	4-Chlorophenyl-phenylether	1	mg/Kg	0.041	ND
	4-Nitroaniline	1	mg/Kg	0.041	ND
	4-Nitrophenol	1	mg/Kg	0.041	ND
	Acenaphthene	1	mg/Kg	0.041	ND
	Acenaphthylene	1	mg/Kg	0.041	ND
	Acetophenone	1	mg/Kg	0.041	ND
	Anthracene	1	mg/Kg	0.041	ND
	Atrazine	1	mg/Kg	0.041	ND
	Benzaldehyde	1	mg/Kg	0.041	ND
	Benzo[a]anthracene	1	mg/Kg	0.041	
	Benzo[a]pyrene	1	mg/Kg	0.041	0.042
	Benzo[b]fluoranthene	1			ND
	Benzo[g,h,i]perylene	1	mg/Kg	0.041	0.062
	Benzo[k]fluoranthene	1	mg/Kg	0.041	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.041	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.041	ND
	bis(2-Chloroisopropyl)ether		mg/Kg	0.010	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.041	ND
	Butylbenzylphthalate	1	mg/Kg	0.041	ND
	• • • •	1	mg/Kg	0.041	ND
	Caprolactam	1	mg/Kg	0.041	ND
	Carbazole	1	mg/Kg	0.041	ND
	Chrysene	1	mg/Kg	0.041	ND
	Dibenzo[a,h]anthracene	1	mg/Kg	0.041	ND
	Dibenzofuran	1	mg/Kg	0.010	ND
	Diethylphthalate	1	mg/Kg	0.041	ND
	Dimethylphthalate	1	mg/Kg	0.041	ND
	Di-n-butylphthalate	1	mg/Kg	0.020	ND
	Di-n-octylphthalate	1	mg/Kg	0.041	ND
!	Fluoranthene	1	mg/Kg	0.041	0.087
!	Fluorene	1	mg/Kg	0.041	ND
!	Hexachlorobenzene	1	mg/Kg	0.041	ND
,	Hexachlorobutadiene	1	mg/Kg	0.041	ND

o#: AC77929-012	SampleID: SB-06-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.041	ND
	Hexachloroethane	1	mg/Kg	0.041	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.041	ND
	Isophorone	1	mg/Kg	0.041	ND
	Naphthalene	1	mg/Kg	0.010	ND
	Nitrobenzene	1	mg/Kg	0.041	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.010	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.041	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.041	0.077
	Phenol	, 1	mg/Kg	0.041	ND
	Pyrene	1	mg/Kg	0.041	0.087
TAL Metals 60	910				
	Aluminum	1	mg/Kg	240	7400
	Arsenic	1	mg/Kg	4.9	ND
	Barium	1	mg/Kg	12	18
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	6.1	15
	Cobalt	1	mg/Kg	3.0	3.8
	Copper	1	mg/Kg	6.1	9.2
	Iron	1	mg/Kg	240	10000
	Lead	1	mg/Kg	6.1	ND
	Magnesium	1	mg/Kg	610	1800
	Manganese	1	mg/Kg	12	65
	Nickel	1	mg/Kg	6.1	17
	Potassium	1	mg/Kg	610	ND
	Sodium	1	mg/Kg	300	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	21
	Zinc	1	mg/Kg	12	17
TAL Metals 6	020				
	Antimony	1	mg/Kg	0.98	ND
	Beryllium	1	mg/Kg	0.24	0.29
	Cadmium	1	mg/Kg	0.49	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND ·

SampleID: SB-07-9.5-10.0 AC77929-013 TestGroup Analyte DF Units MDL/PQL/RL Result AC77929-013 SB-07-9.5-10.0 Date Collected 4/1/2014 % Solids SM2540G % Solids Percent 88

77929-013	SampleID: SB-07-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organic	cs (no search) 8260	*			
•	1,1,1-Trichloroethane	0.98	mg/Kg	0.0022	ND
	1,1,2,2-Tetrachloroethane	0.98	mg/Kg	0.0022	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.98	mg/Kg	0.0022	ND
	1,1,2-Trichloroethane	0.98	mg/Kg	0.0022	ND
	1,1-Dichloroethane	0.98	mg/Kg	0.0022	ND
	1.1-Dichloroethene	0.98	mg/Kg	0.0022	ND
	1,2,3-Trichlorobenzene	0.98	mg/Kg	0.0022	ND
	1,2,4-Trichlorobenzene	0.98	mg/Kg	0.0022	ND
	1,2-Dibromo-3-chloropropane	0.98	mg/Kg	0.0022	ND
	1,2-Dibromoethane	0.98	mg/Kg	0.0022	ND
	1,2-Dichlorobenzene	0.98	mg/Kg	0.0022	ND
	1,2-Dichloroethane	0.98	mg/Kg	0.0011	ND
	1,2-Dichloropropane	0.98	mg/Kg	0.0022	ND
	1,3-Dichlorobenzene	0.98	mg/Kg	0.0022	ND
	1.4-Dichlorobenzene	0.98	mg/Kg	0.0022	ND
	.,	0.98	mg/Kg	0.11	ND
	1,4-Dioxane 2-Butanone	0.98	mg/Kg	0.0022	ND
		0.98	mg/Kg	0.0022	ND
	2-Hexanone	0.98	mg/Kg	0.0022	ND
	4-Methyl-2-pentanone		0 0	0.0022	ND
	Acetone	0.98	mg/Kg	0.0011	ND ND
	Benzene	0.98	mg/Kg	0.0022	ND
	Bromochloromethane	0.98	mg/Kg		ND
	Bromodichloromethane	0.98	mg/Kg	0.0022	
	Bromoform	0.98	mg/Kg	0.0022	ND
	Bromomethane	0.98	mg/Kg	0.0022	ND
	Carbon disulfide	0.98	mg/Kg	0.0022	ND
	Carbon tetrachloride	0.98	mg/Kg	0.0022	ND
	Chlorobenzene	0.98	mg/Kg	0.0022	ND
	Chloroethane	0.98	mg/Kg	0.0022	ND
	Chloroform	0.98	mg/Kg	0.0022	ND
	Chloromethane	0.98	mg/Kg	0.0022	ND
	cis-1,2-Dichloroethene	0.98	mg/Kg	0.0022	ND
	cis-1,3-Dichloropropene	0.98	mg/Kg	0.0022	ND
	Cyclohexane	0.98	mg/Kg	0.0022	ND
	Dibromochloromethane	0.98	mg/Kg	0.0022	ND
	Dichlorodifluoromethane	0.98	mg/Kg	0.0022	ND
	Ethylbenzene	0.98	mg/Kg	0.0011	ND
	Isopropylbenzene	0.98	mg/Kg	0.0011	ND
	m&p-Xvlenes	0.98	mg/Kg	0.0011	ND
	Methyl Acetate	0.98	mg/Kg	0.0022	ND
	Methylcyclohexane	0.98	mg/Kg	0.0022	ND
	Methylene chloride	0.98	mg/Kg	0.0022	0.0071
	Methyl-t-butyl ether	0.98	mg/Kg	0.0011	ND
	o-Xylene	0.98	mg/Kg	0.0011	ND
	o-Aylene Styrene	0.98	mg/Kg	0.0022	ND
	Tetrachloroethene	0.98	mg/Kg	0.0022	ND
		0.98	mg/Kg	0.0011	ND
	Toluene			0.0022	ND
	trans-1,2-Dichloroethene	0.98	mg/Kg	0.0022	ND
	trans-1,3-Dichloropropene	0.98	mg/Kg		ND
	Trichloroethene	0.98	mg/Kg	0.0022	
	Trichlorofluoromethane	0.98	mg/Kg	0.0022	ND
	Vinyl chloride	0.98	mg/Kg	0.0022	ND
	Xylenes (Total)	0.98	mg/Kg	0.0011	ND

Veritech Project: 4040237

.ab#: AC77929-014	SampleID: SB-07-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
AC77929-014	SB-07-C OMP		Date C	ollected 4/1/2014	
% Solids SM2	540G				
	% Solids	1	Percent		83
Chlorinated H	erbicides 8151				00
	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Mercury (Soil		•	mg/rtg	0.012	ND
Mercury (301)	Mercury				
	•	1	mg/Kg	0.10	ND
Organochlorin	ne Pesticides 8081				
	Aldrin	1	mg/Kg	0.0060	ND
	Alpha-BHC	1	mg/Kg	0.0012	ND
	beta-BHC	1	mg/Kg	0.0012	ND
	Chlordane	1	mg/Kg	. 0.030	ND
	delta-BHC	1	mg/Kg	0.0060	ND
	Dieldrin	1	mg/Kg	0.0012	ND
	Endosulfan I	1	mg/Kg	0.0060	ND
	Endosulfan II	1	mg/Kg	0.0060	ND
	Endosulfan Sulfate	1	mg/Kg	0.0060	ND
	Endrin	1	mg/Kg	0.0060	ND
	Endrin Aldehyde	1	mg/Kg	0.0060	ND
	Endrin Ketone	1	mg/Kg	0.0060	ND
	gamma-BHC	1	mg/Kg	0.0012	ND
	Heptachlor	1	mg/Kg	0.0060	ND
1	Heptachlor Epoxide	1	mg/Kg	0.0060	ND
	Methoxychlor	1	mg/Kg	0.0060	ND
	p,p'-DDD	1	mg/Kg	0.0030	ND
	p,p'-DDE	1	mg/Kg	0.0030	ND
	p,p'-DDT	1	mg/Kg	0.0030	ND
	Toxaphene	1	mg/Kg	0.030	ND
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.030	ND
	Aroclor-1016	1	mg/Kg	0.030	ND
	Aroclor-1221	1	mg/Kg	0.030	ND
	Aroclor-1232	1	mg/Kg	0.030	ND
	Aroclor-1242	1	mg/Kg	0.030	ND
	Aroclor-1248	1	mg/Kg	0.030	ND
	Aroclor-1254	1	mg/Kg	0.030	ND
	Aroclor-1260	1	mg/Kg	0.030	
	Aroclor-1262	1	mg/Kg	0.030	ND ND
	Aroclor-1268	1	mg/Kg	0.030	ND ND

ab#: AC77929-014	SampleID: SB-07-COMP							
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result			
Semivolatile Orga	nics (no search) 8270							
	,1'-Biphenyl	1	mg/Kg	0.040	ND			
	,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.040	ND			
2	,3,4,6-Tetrachlorophenol	1	mg/Kg	0.040	ND			
	,4,5-Trichlorophenol	1	mg/Kg	0.040	ND			
2	,4,6-Trichlorophenol	1	mg/Kg	0.040	ND			
	,4-Dichlorophenol	. 1	mg/Kg	0.010	ND			
2	4-Dimethylphenol	1	mg/Kg	0.010	ND			
2	,4-Dinitrophenol	1	mg/Kg	0.20	ND			
	4-Dinitrotoluene	1	mg/Kg	0.040	ND			
	,6-Dinitrotoluene	1	mg/Kg	0.040	ND			
	-Chloronaphthalene	1	mg/Kg	0.040	ND			
	-Chlorophenol	1	mg/Kg	0.040	ND			
	-Methylnaphthalene	1	mg/Kg	0.040	ND			
	-Methylphenol	1	mg/Kg	0.010	ND			
	-Nitroaniline	1	mg/Kg	0.040	ND			
	P-Nitrophenol	1	mg/Kg	0.040	ND			
	&4-Methylphenol	1	mg/Kg	0.010	ND			
	3,3'-Dichlorobenzidine	1	mg/Kg	0.040	ND			
	-Nitroaniline	1	mg/Kg	0.040	ND			
		1	mg/Kg	0.20	ND			
	I,6-Dinitro-2-methylphenol	1	mg/Kg	0.040	ND			
	I-Bromophenyl-phenylether	1	mg/Kg	0.040	ND			
	I-Chloro-3-methylphenol	1		0.019	ND			
	I-Chloroaniline		mg/Kg	0.040	ND			
	I-Chlorophenyl-phenylether	1	mg/Kg		ND			
	l-Nitroaniline	. 1	mg/Kg	0.040				
	I-Nitrophenol	1	mg/Kg	0.040	ND ND			
	Acenaphthene	1	mg/Kg	0.040				
	Acenaphthylene	1	mg/Kg	0.040	ND			
	Acetophenone	1	mg/Kg	0.040	ND			
	Anthracene	1	mg/Kg	0.040	ND			
	Atrazine	1	mg/Kg	0.040	ND			
I	Benzaldehyde	1	mg/Kg	0.040	ND			
I	Benzo[a]anthracene	1	mg/Kg	0.040	ND			
1	Benzo[a]pyrene	1	mg/Kg	0.040	ND			
ĺ	Benzo[b]fluoranthene	1	mg/Kg	0.040	ND			
1	Benzo[g,h,i]perylene	1	mg/Kg	0.040	ND			
	Benzo[k]fluoranthene	1	mg/Kg	0.040	ND			
1	ois(2-Chloroethoxy)methane	1	mg/Kg	0.040	ND			
ļ	ois(2-Chloroethyl)ether	1	mg/Kg	0.010	ND			
I	ois(2-Chloroisopropyl)ether	1	mg/Kg	0.040	ND			
1	ois(2-Ethylhexyl)phthalate	1	mg/Kg	0.040	ND			
ĺ	Butylbenzylphthalate	1	mg/Kg	0.040	ND			
(Caprolactam	1	mg/Kg	0.040	ND			
	Carbazole	1	mg/Kg	0.040	ND			
(Chrysene	1	mg/Kg	0.040	ND			
	Dibenzo[a,h]anthracene	1	mg/Kg	0.040	ND			
	Dibenzofuran	1	mg/Kg	0.010	ND			
	Diethylphthalate	1	mg/Kg	0.040	ND			
	Dimethylphthalate	1	mg/Kg	0.040	ND			
	Di-n-butylphthalate	1	mg/Kg	0.020	ND ·			
	Di-n-octylphthalate	1	mg/Kg	0.040	ND			
	Fluoranthene	1	mg/Kg	0.040	0.044			
· ·	Fluorene	1	mg/Kg	0.040	ND			
	INVIERE	•	-					
	Hexachlorobenzene	1	mg/Kg	0.040	ND			

b#: AC77929-014	SampleID: SB-07-COMP				· · · · · · · · · · · · · · · · · · ·
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.20	ND
	Hexachloroethane	1	mg/Kg	0.040	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.040	ND
	Isophorone	1	mg/Kg	0.040	ND
	Naphthalene	1	mg/Kg	0.010	ND
	Nitrobenzene	1	mg/Kg	0.040	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.010	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.040	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.040	ND
	Phenol	1	mg/Kg	0.040	ND
	Pyrene	1 .	mg/Kg	0.040	0.045
TAL Metals 6	010				
	Aluminum	1	mg/Kg	240	7600
	Arsenic	1	mg/Kg	4.8	ND
	Barium	1	mg/Kg	12	18
	Calcium	1	mg/Kg	1200 -	ND
	Chromium	1	mg/Kg	6.0	12
	Cobalt	1	mg/Kg	3.0	ND
	Copper	1	mg/Kg	6.0	ND
	Iron	1	mg/Kg	240	8300
	Lead	1	mg/Kg	6.0	8.2
	Magnesium	1	mg/Kg	600	1300
	Manganese	1	mg/Kg	12	52
	Nickel	1	mg/Kg	6.0	9.2
	Potassium	1	mg/Kg	600	ND
	Sodium	1	mg/Kg	300	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	15
	Zinc	1	mg/Kg	12	20
TAL Metals 60)20		5 .4.4 5		
	Antimony	1	mg/Kg	0.96	ND
	Beryllium	1	mg/Kg	0.24	ND
	Cadmium	1	mg/Kg	0.48	ND
	Selenium	1	mg/Kg	2.4	ND ND
	Silver	1	mg/Kg	0.24	ND ND

SB-08-9.5-10.0 SampleID: AC77929-015 TestGroup Analyte DF MDL/PQL/RL Result Units SB-08-9.5-10.0 Date Collected 3/31/2014 AC77929-015 % Solids SM2540G 93 1 Percent % Solids

.ab#: AC77929-015	SampleID: SB-08-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organics	(no search) 8260				
, 1	I,1,1-Trichloroethane	0.98	mg/Kg	0.0021	ND
1	I,1,2,2-Tetrachloroethane	0.98	mg/Kg	0.0021	ND
1	,1,2-Trichloro-1,2,2-trifluoroethane	0.98	mg/Kg	0.0021	ND
1	,1,2-Trichloroethane	0.98	mg/Kg	0.0021	ND .
1	,1-Dichloroethane	0.98	mg/Kg	0.0021	ND
1	,1-Dichloroethene	0.98	mg/Kg	0.0021	ND
· 1	,2,3-Trichlorobenzene	0.98	mg/Kg	0.0021	ND
1	,2,4-Trichlorobenzene	0.98	mg/Kg	0.0021	ND
1	,2-Dibromo-3-chloropropane	0.98	mg/Kg	0.0021	ND
1	,2-Dibromoethane	0.98	mg/Kg	0.0021	ND
1	,2-Dichlorobenzene	0.98	mg/Kg	0.0021	ND
1	,2-Dichloroethane	0.98	mg/Kg	0.0011	ND
1	,2-Dichloropropane	0.98	mg/Kg	0.0021	ND
1	,3-Dichlorobenzene	0.98	mg/Kg	0.0021	ND
1	,4-Dichlorobenzene	0.98	mg/Kg	0.0021	ND
1	,4-Dioxane	0.98	mg/Kg	0.11	ND
2	2-Butanone	0.98	mg/Kg	0.0021	ND
2	-Hexanone	0.98	mg/Kg	0.0021	ND
4	-Methyl-2-pentanone	0.98	mg/Kg	0.0021	ND
A	Acetone	0.98	mg/Kg	0.011	ND
В	Benzene	0.98	mg/Kg	0.0011	ND
В	Bromochloromethane	0.98	mg/Kg	0.0021	ND
В	Bromodichloromethane	0.98	mg/Kg	0.0021	ND
В	Bromoform	0.98	mg/Kg	0.0021	ND
В	Bromomethane	0.98	mg/Kg	0.0021	ND
C	Carbon disulfide	0.98	mg/Kg	0.0021	ND
C	Carbon tetrachloride	0.98	mg/Kg	0.0021	ND
C	Chlorobenzene	0.98	mg/Kg	0.0021	ND
C	chloroethane	0.98	mg/Kg	0.0021	ND
C	chloroform	0.98	mg/Kg	0.0021	ND
C	chloromethane	0.98	mg/Kg	0.0021	ND
С	is-1,2-Dichloroethene	0.98	mg/Kg	0.0021	ND
	is-1,3-Dichloropropene	0.98	mg/Kg	0.0021	ND
	yclohexane	0.98	mg/Kg	0.0021	ND
D	Dibromochloromethane	0.98	mg/Kg	0.0021	ND
	Pichlorodifluoromethane	0.98	mg/Kg	0.0021	ND
E	thylbenzene	0.98	mg/Kg	0.0011	ND
	sopropylbenzene	0.98	mg/Kg	0.0011	ND
	n&p-Xylenes	0.98	mg/Kg	0.0011	ND
	lethyl Acetate	0.98	mg/Kg	0.0021	ND
	lethylcyclohexane	0.98	mg/Kg	0.0021	ND
	lethylene chloride	0.98	mg/Kg	0.0021	0.0076
	lethyl-t-butyl ether	0.98	mg/Kg	0.0011	ND
	-Xylene	0.98	mg/Kg	0.0011	ND
	tyrene	0.98	mg/Kg	0.0021	ND
	etrachloroethene	0.98	mg/Kg	0.0021	ND
	oluene	0.98	mg/Kg	0.0011	ND
	ans-1,2-Dichloroethene	0.98	mg/Kg	0.0011	ND
	ans-1,3-Dichloropropene	0.98	mg/Kg	0.0021	ND
	richloroethene	0.98	mg/Kg	0.0021	ND
	richlorofluoromethane	0.98	mg/Kg	0.0021	ND ND
•	i ivinoi viitavi viitati tal la				ND
V	inyl chloride	0.98	mg/Kg	0.0021	ND

AC77929-016	SampleID: SB-08-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
29-016	SB-08-COMP		Date C	ollected 3/31/2014	
% Solids SM25	540G				
	% Solids	1	Percent		82
Chlorinated He	erbicides 8151				
Omormacara	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Mercury (Soil/	Wasto\ 7471				
Welcary (Soll)	Mercury	1	mg/Kg	0.10	ND
	•	•	99		
Organochlorin	ne Pesticides 8081	1	mg/Kg	0.0061	ND
	Aldrin	1		0.0012	ND
	Alpha-BHC		mg/Kg	0.0012	ND
	beta-BHC	1	mg/Kg	0.030	ND
	Chlordane	1	mg/Kg		ND
	delta-BHC	1	mg/Kg	0.0061 0.0012	ND
	Dieldrin	1	mg/Kg		ND
	Endosulfan I	1	mg/Kg	0.0061	
	Endosulfan II	1	mg/Kg	0.0061	ND
	Endosulfan Sulfate	1	mg/Kg	0.0061	ND
	Endrin	1	mg/Kg	0.0061	ND
	Endrin Aldehyde	1	mg/Kg	0.0061	ND
	Endrin Ketone	1	mg/Kg	0.0061	ND
	gamma-BHC	1	mg/Kg	0.0012	ND
	Heptachlor	1	mg/Kg	0.0061	ND
	Heptachlor Epoxide	1	mg/Kg	0.0061	ND
	Methoxychlor	1	mg/Kg	0.0061	ND
	p,p'-DDD	1	mg/Kg	0.0030	ND
	p,p'-DDE	1	mg/Kg	0.0030	ND
	p,p'-DDT	1	mg/Kg	0.0030	ND
	Toxaphene	1	mg/Kg	0.030	ND
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.030	ND
	Aroclor-1016	1	mg/Kg	0.030	ND
	Aroclor-1221	1	mg/Kg	0.030	ND
	Aroclor-1232	1	mg/Kg	0.030	ND
	Aroclor-1242	1	mg/Kg	0.030	ND
	Arocior-1248	1	mg/Kg	0.030	ND
	Aroclor-1254	1	mg/Kg	0.030	ND
	Aroclor-1260	1	mg/Kg	0.030	ND
	Aroclor-1262	1	mg/Kg	0.030	ND
			111741179	0.000	

.ab#: AC77929-016	SampleID: SB-08-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Semivolatile O	rganics (no search) 8270			-	
	1,1'-Biphenyl	1	mg/Kg	0.041	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.041	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.041	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4-Dichlorophenol	1	mg/Kg	0.010	ND
	2,4-Dimethylphenol	1	mg/Kg	0.010	ND
	2,4-Dinitrophenol	1	mg/Kg	0.20	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.041	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.041	ND
	2-Chloronaphthalene	1	mg/Kg	0.041	ND
	2-Chlorophenol	1	mg/Kg	0.041	ND
	2-Methylnaphthalene	1	mg/Kg	0.041	ND
	2-Methylphenol	1	mg/Kg	0.010	ND
	2-Nitroaniline	1	mg/Kg	0.041	ND
	2-Nitrophenol	1	mg/Kg	0.041	ND
	3&4-Methylphenol	1	mg/Kg	0.010	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.041	ND
	3-Nitroaniline	1	mg/Kg	0.041	ND
	4,6-Dinitro-2-methylphenol	i	mg/Kg	0.20	
	4-Bromophenyl-phenylether	1		0.20	ND
	4-Chloro-3-methylphenol	1	mg/Kg		ND
	4-Chloroaniline		mg/Kg	0.041	ND
		1	mg/Kg	0.019	ND
	4-Chlorophenyl-phenylether 4-Nitroaniline	1	mg/Kg	0.041	ND
		1	mg/Kg	0.041	ND
	4-Nitrophenol	1	mg/Kg	0.041	ND
	Acenaphthene	1	mg/Kg	0.041	ND
	Acenaphthylene	1	mg/Kg	0.041	ND
	Acetophenone	1	mg/Kg	0.041	ND
	Anthracene	1	mg/Kg	0.041	ND
	Atrazine	1	mg/Kg	0.041	ND
	Benzaldehyde	1	mg/Kg	0.041	ND
	Benzo[a]anthracene	1	mg/Kg	0.041	ND
	Benzo[a]pyrene	1	mg/Kg	0.041	ND
	Benzo[b]fluoranthene	1	mg/Kg	0.041	ND
	Benzo[g,h,i]perylene	1	mg/Kg	0.041	ND
	Benzo[k]fluoranthene	1	mg/Kg	0.041	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.041	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.010	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.041	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.041	ND
	Butylbenzylphthalate	1	mg/Kg	0.041	ND
	Caprolactam	1	mg/Kg	0.041	ND
	Carbazole	1	mg/Kg	0.041	ND
	Chrysene	1	mg/Kg	0.041	ND
	Dibenzo[a,h]anthracene	1	mg/Kg	0.041	ND
	Dibenzofuran	1	mg/Kg	0.010	ND
	Diethylphthalate	1	mg/Kg	0.041	ND
	Dimethylphthalate	1	mg/Kg	0.041	
	Di-n-butylphthalate	1			ND
	Di-n-octylphthalate		mg/Kg	0.020	ND
	Fluoranthene	1	mg/Kg	0.041	ND
	Fluorene	1	mg/Kg	0.041	ND
		1	mg/Kg	0.041	ND
	Hexachlorobenzene	1	mg/Kg	0.041	ND
	Hexachlorobutadiene	1	mg/Kg	0.041	ND

b#: AC77929-016	SampleID: SB-08-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1 .	mg/Kg	0.20	ND
	Hexachloroethane	1	mg/Kg	0.041	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.041	ND
	Isophorone	1	mg/Kg	0.041	ND
	Naphthalene	1	mg/Kg	0.010	ND
	Nitrobenzene	1	mg/Kg	0.041	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.010	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.041	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.041	ND
	Phenol	1	mg/Kg	0.041	ND
	Pyrene	1	mg/Kg	0.041	ND
TAL Metals 60	010				
	Aluminum	1	mg/Kg	240	5000
	Arsenic	1	mg/Kg	4.9	ND
	Barium	1	mg/Kg	12	18
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	6.1	11
	Cobalt	1	mg/Kg	3.0	3.7
	Copper	1	mg/Kg	6.1	8.6
	Iron	1	mg/Kg	240	13000
	Lead	1	mg/Kg	6.1	ND
	Magnesium	1	mg/Kg	610	2000
	Manganese	1	mg/Kg	12	120
	Nickel	1	mg/Kg	6.1	14
	Potassium	1	mg/Kg	610	ND
	Sodium	1	mg/Kg	300	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	17
	Zinc	1	mg/Kg	12	19
TAL Metals 6					
	Antimony	1	mg/Kg	0.98	ND
	Beryllium	1	mg/Kg	0.24	ND
	Cadmium	1	mg/Kg	0.49	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

AC77929-017 SampleID: SB-09-9.5-10.0 TestGroup Analyte DF Units MDL/PQL/RL Result SB-09-9.5-10.0 AC77929-017 Date Collected 3/31/2014 % Solids SM2540G 1

% Solids

Percent

84

77929-017	SampleID: SB-09-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Volatile Organ	nics (no search) 8260	***			
	1,1,1-Trichloroethane	0.951	mg/Kg	0.0023	ND
	1,1,2,2-Tetrachloroethane	0.951	mg/Kg	0.0023	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.951	mg/Kg	0.0023	ND
	1,1,2-Trichloroethane	0.951	mg/Kg	0.0023	ND
	1,1-Dichloroethane	0.951	mg/Kg	0.0023	ND
	1,1-Dichloroethene	0.951	mg/Kg	0.0023	ND
	1,2,3-Trichlorobenzene	0.951	mg/Kg	0.0023	ND
	1,2,4-Trichlorobenzene	0.951	mg/Kg	0.0023	ND
	1,2-Dibromo-3-chloropropane	0.951	mg/Kg	0.0023	ND
	1,2-Dibromoethane	0.951	mg/Kg	0.0023	ND
	1,2-Dichlorobenzene	0.951	mg/Kg	0.0023	ND
	1,2-Dichloroethane	0.951	mg/Kg	0.0023	ND
	1,2-Dichloropropane	0.951	mg/Kg	0.0023	ND
	1,3-Dichlorobenzene	0.951	mg/Kg	0.0023	ND
	1,4-Dichloroberizene	0.951		0.0023	
	1,4-Dioxane	0.951	mg/Kg		ND
	2-Butanone	0.951	mg/Kg	0.11	ND
	2-Hexanone		mg/Kg	0.0023	ND
	· · · · · · · · · · · · · · · · · · ·	0.951	mg/Kg	0.0023	ND
	4-Methyl-2-pentanone Acetone	0.951	mg/Kg	0.0023	ND
		0.951	mg/Kg	0.011	ND
	Benzene	0.951	mg/Kg	0.0011	ND
	Bromochloromethane	0.951	mg/Kg	0.0023	ND
	Bromodichloromethane	0.951	mg/Kg	0.0023	ND
	Bromoform	0.951	mg/Kg	0.0023	ND
	Bromomethane	0.951	mg/Kg	0.0023	ND
	Carbon disulfide	0.951	mg/Kg	0.0023	ND
	Carbon tetrachloride	0.951	mg/Kg	0.0023	ND
	Chlorobenzene	0.951	mg/Kg	0.0023	ND
	Chloroethane	0.951	mg/Kg	0.0023	ND
	Chloroform	0.951	mg/Kg	0.0023	ND
	Chloromethane	0.951	mg/Kg	0.0023	ND
	cis-1,2-Dichloroethene	0.951	mg/Kg	0.0023	ND
	cis-1,3-Dichloropropene	0.951	mg/Kg	0.0023	ND
	Cyclohexane	0.951	mg/Kg	0.0023	ND
	Dibromochloromethane	0.951	mg/Kg	0.0023	ND
	Dichlorodifluoromethane	0.951	mg/Kg	0.0023	ND
	Ethylbenzene	0.951	mg/Kg	0.0011	ND
	Isopropylbenzene	0.951	mg/Kg	0.0011	ND
	m&p-Xylenes	0.951	mg/Kg	0.0011	ND
	Methyl Acetate	0.951	mg/Kg	0.0023	ND
	Methylcyclohexarie	0.951	mg/Kg	0.0023	ND
	Methylene chloride	0.951	mg/Kg	0.0023	0.0054
	Methyl-t-butyl ether	0.951	mg/Kg	0.0023	
	o-Xylene	0.951			ND
	Styrene	0.951	mg/Kg mg/Kg	0.0011	ND ND
	Tetrachloroethene	0.951 0.951	mg/Kg	0.0023	ND
	Toluene		mg/Kg mg/Ka	0.0023	ND
		0.951	mg/Kg	0.0011	ND
	trans-1,2-Dichloroethene	0.951	mg/Kg	0.0023	ND
	trans-1,3-Dichloropropene	0.951	mg/Kg	0.0023	ND
	Trichloroethene	0.951	mg/Kg	0.0023	ND
	Trichlorofluoromethane	0.951	mg/Kg	0.0023	ND
	Vinyl chloride	0.951	mg/Kg	0.0023	ND
	Xylenes (Total)	0.951	mg/Kg	0.0011	ND

Lab#: AC77	929-018	SampleID: SB-09-COMP				
Te	stGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77929-01	8	SB-09-COMP		Date C	ollected 3/31/2014	
%:	Solids SM254	0G				
		% Solids	1	Percent		92
Ch	nlorinated Her	bicides 8151				
.		2,4,5-T	1	mg/Kg	0.011	ND
		2,4-D	1	mg/Kg	0.011	ND
		Dicamba	1	mg/Kg	0.011	ND
		Silvex	1	mg/Kg	0.011	ND
Ma	ercury (Soil/M	/aste) 7471A				
	croary (com	Mercury	1	mg/Kg	0.091	ND
0-	raana ahlarina	Pesticides 8081				
Or	yanocino ine	Aldrin	1	mg/Kg	0.0054	ND
		Alpha-BHC	1	mg/Kg	0.0011	ND
		beta-BHC	1	mg/Kg	0.0011	ND
		Chlordane	1	mg/Kg	0.027	ND
		delta-BHC	1	mg/Kg	0.0054	ND
		Dieldrin	1	mg/Kg	0.0011	ND
		Endosulfan I	1	mg/Kg	0.0054	ND
		Endosulfan II	1	mg/Kg	0.0054	ND
		Endosulfan Sulfate	1	mg/Kg	0.0054	ND
		Endrin	1	mg/Kg	0.0054	ND
		Endrin Aldehyde	1	mg/Kg	0.0054	ND
		Endrin Ketone	1	mg/Kg	0.0054	ND
		gamma-BHC	1	mg/Kg	0.0011	ND
		Heptachlor	1	mg/Kg	0.0054	ND
		Heptachlor Epoxide	1	mg/Kg	0.0054	ND
		Methoxychlor	1	mg/Kg	0.0054	ND
		p,p'-DDD	1	mg/Kg	0.0027	ND
		p,p'-DDE	1	mg/Kg	0.0027	ND
		p,p'-DDT	1	mg/Kg	0.0027	ND
		Toxaphene	1	mg/Kg	0.027	ND
P	CB 8082					
		Aroclor (Total)	1	mg/Kg	0.027	ND
		Aroclor-1016	1	mg/Kg	0.027	ND
		Aroclor-1221	1	mg/Kg	0.027	ND
		Aroclor-1232	1	mg/Kg	0.027	ND
		Aroclor-1242	1	mg/Kg	0.027	ND
		Aroclor-1248	1	mg/Kg	0.027	ND
		Aroclor-1254	1	mg/Kg	0.027	ND
		Aroclor-1260	1	mg/Kg	0.027	ND
		Aroclor-1262	1	mg/Kg	0.027	· ND
		Aroclor-1268	1	mg/Kg	0.027	ND

Lab#: AC77929-018	SampleID: SB-09-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Semivolatile O	rganics (no search) 8270	****			
	1,1'-Biphenyl	1	mg/Kg	0.036	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.036	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.036	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.036	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.036	ND
	2,4-Dichlorophenol	1	mg/Kg	0.0091	ND
	2,4-Dimethylphenol	1	mg/Kg	0.0091	ND
	2,4-Dinitrophenol	1	mg/Kg	0.18	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.036	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.036	ND
	2-Chloronaphthalene	1	mg/Kg	0.036	ND
	2-Chlorophenol	1	mg/Kg	0.036	ND
	2-Methylnaphthalene	1	mg/Kg	0.036	ND
	2-Methylphenol	1	mg/Kg	0.0091	ND
	2-Nitroaniline	1	mg/Kg	0.036	ND
	2-Nitrophenol	1	mg/Kg	0.036	ND
	3&4-Methylphenol	1	mg/Kg	0.0091	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.036	ND
	3-Nitroaniline	1	mg/Kg	0.036	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.18	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.036	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.036	ND
	4-Chloroaniline	1	mg/Kg	0.017	ND
	4-Chlorophenyi-phenylether	1	mg/Kg	0.036	ND
	4-Nitroaniline	1	mg/Kg	0.036	ND
	4-Nitrophenol	1	mg/Kg	0.036	ND
	Acenaphthene	1	mg/Kg	0.036	ND
	Acenaphthylene	1	mg/Kg	0.036	ND
	Acetophenone	1	mg/Kg	0.036	ND
	Anthracene	1	mg/Kg	0.036	ND
	Atrazine	1	mg/Kg	0.036	ND
	Benzaldehyde	1	mg/Kg	0.036	ND
	Benzo[a]anthracene	1	mg/Kg	0.036	0.092
	Benzo[a]pyrene	1	mg/Kg	0.036	0.089
	Benzo[b]fluoranthene	1	mg/Kg	0.036	0.11
	Benzo[g,h,i]perylene	1.	mg/Kg	0.036	0.066
	Benzo[k]fluoranthene	1	mg/Kg	0.036	0.048
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.036	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.0091	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.036	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.036	ND
	Butylbenzylphthalate	1	mg/Kg	0.036	ND
	Caprolactam	1	mg/Kg	0.036	ND
	Carbazole	1	mg/Kg	0.036	ND
	Chrysene	1	mg/Kg	0.036	0.078
	Dibenzo[a,h]anthracene	1	mg/Kg	0.036	ND
	Dibenzofuran	1	mg/Kg	0.0091	ND
	Diethylphthalate	1	mg/Kg	0.036	ND
	Dimethylphthalate	. 1	mg/Kg	0.036	ND
	Di-n-butylphthalate	1	mg/Kg	0.018	ND
	Di-n-octylphthalate	1	mg/Kg	0.036	ND
	Fluoranthene	1	mg/Kg	0.036	0.14
	Fluorene	1	mg/Kg	0.036	ND
	Hexachlorobenzene	1	mg/Kg	0.036	ND
			~ ~		

#: AC77929-018	SampleID: SB-09-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.18	ND
	Hexachloroethane	1	mg/Kg	0.036	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.036	0.056
	Isophorone	1	mg/Kg	0.036	ND
	Naphthalene	1	mg/Kg	0.0091	ND
	Nitrobenzene	1	mg/Kg	0.036	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0091	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.036	ND
	Pentachlorophenol	1	mg/Kg	0.18	ND
	Phenanthrene	1	mg/Kg	0.036	0.063
	Phenol	1	mg/Kg	0.036	ND
	Pyrene	1	mg/Kg	0.036	0.16
TAL Metals 6	010				
	Aluminum	1	mg/Kg	220	4700
	Arsenic	1	mg/Kg	4.3	ND
	Barium	1 ,	mg/Kg	11	24
	Calcium	1	mg/Kg	1100	3100
	Chromium	1	mg/Kg	5.4	16
	Cobalt	1	mg/Kg	2.7	3.8
	Copper	1	mg/Kg	5.4	9.9
	Iron	1	mg/Kg	220	11000
	Lead	1	mg/Kg	5.4	14
	Magnesium	1	mg/Kg	540	1800
	Manganese	1	mg/Kg	11	120
	Nickel	1	mg/Kg	5.4	11
	Potassium	1	mg/Kg	540	670
	Sodium	1	mg/Kg	270	ND
	Thallium	1	mg/Kg	1.6	ND
	Vanadium	1	mg/Kg	11	14
	Zinc	1	mg/Kg	11	42
TAL Metals 6	020				
	Antimony	1	mg/Kg	0.87	ND
	Beryllium	1	mg/Kg	0.22	ND
	Cadmium	1	mg/Kg	0.43	ND
	Selenium	1	mg/Kg	2.2	ND
	Silver	1	mg/Kg	0.22	ND

AC77929-019 SampleID: SB-10-14.5-15.0 **TestGroup** Analyte DF Units MDL/PQL/RL Result AC77929-019 SB-10-14.5-15.0 4/1/2014 Date Collected % Solids SM2540G % Solids 1 Percent 79

ab#: AC77929-019	SampleID: SB-10-14.5-15.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organics	s (no search) 8260	****			
•	1,1,1-Trichloroethane	0.975	mg/Kg	0.0025	ND
	1,1,2,2-Tetrachloroethane	0.975	mg/Kg	0.0025	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.975	mg/Kg	0.0025	ND
	1,1,2-Trichloroethane	0.975	mg/Kg	0.0025	ND
	1,1-Dichloroethane	0.975	mg/Kg	0.0025	ND
	1,1-Dichloroethene	0.975	mg/Kg	0.0025	ND
	1,2,3-Trichlorobenzene	0.975	mg/Kg	0.0025	ND
	1,2,4-Trichlorobenzene	0.975	mg/Kg	0.0025	ND
	1,2-Dibromo-3-chloropropane	0.975	mg/Kg	0.0025	ND
	1,2-Dibromoethane	0.975	mg/Kg	0.0025	ND
	1,2-Dichlorobenzene	0.975	mg/Kg	0.0025	ND
	1,2-Dichloroethane	0.975	mg/Kg	0.0012	ND
	1,2-Dichloropropane	0.975	mg/Kg	0.0025	ND
	1,3-Dichlorobenzene	0.975	mg/Kg	0.0025	ND
	1,4-Dichlorobenzene	0.975	mg/Kg	0.0025	ND
	1,4-Dioxane	0.975	mg/Kg	0.12	ND
	2-Butanone	0.975	mg/Kg	0.0025	ND
	2-Hexanone	0.975	mg/Kg	0.0025	ND
	4-Methyl-2-pentanone	0.975	mg/Kg	0.0025	ND
	Acetone	0.975	mg/Kg	0.012	ND
	Benzene	0.975	mg/Kg	0.0012	ND
	Bromochloromethane	0.975	mg/Kg	0.0025	ND
	Bromodichioromethane	0.975	mg/Kg	0.0025	ND
	Bromoform	0.975	mg/Kg	0.0025	ND
	Bromomethane	0.975	mg/Kg	0.0025	ND
	Carbon disulfide	0.975	mg/Kg	0.0025	ND
	Carbon tetrachloride	0.975	mg/Kg	0.0025	ND
	Chlorobenzene	0.975	mg/Kg	0.0025	ND
	Chloroethane	0.975	mg/Kg	0.0025	ND
	Chloroform	0.975	mg/Kg	0.0025	ND
	Chloromethane	0.975	mg/Kg	0.0025	ND
	cis-1,2-Dichloroethene	0.975	mg/Kg	0.0025	ND
	cis-1,3-Dichloropropene	0.975	mg/Kg	0.0025	ND
	Cyclohexane	0.975	mg/Kg	0.0025	ND
	Dibromochloromethane	0.975	mg/Kg	0.0025	ND
	Dichlorodifluoromethane	0.975	mg/Kg	0.0025	ND
	Ethylbenzene	0.975	mg/Kg	0.0012	ND
	Isopropylbenzene	0.975	mg/Kg	0.0012	ND
	m&p-Xylenes	0.975	mg/Kg	0.0012	ND
	Methyl Acetate	0.975	mg/Kg	0.0025	ND
	Methylcyclohexane	0.975	mg/Kg	0.0025	ND
	Methylene chloride	0.975	mg/Kg	0.0025	0.011
	Methyl-t-butyl ether	0.975	mg/Kg	0.0012	ND
	o-Xylene	0.975	mg/Kg	0.0012	ND
	Styrene	0.975	mg/Kg	0.0025	ND
	Tetrachloroethene	0.975	mg/Kg	0.0025	ND
	Toluene	0.975	mg/Kg	0.0012	ND
	trans-1,2-Dichloroethene	0.975	mg/Kg	0.0025	ND
	trans-1,3-Dichloropropene	0.975	mg/Kg	0.0025	ND
	Trichloroethene	0.975	mg/Kg	0.0025	ND
	Trichlorofluoromethane	0.975	mg/Kg	0.0025	ND
	Vinyl chloride	0.975	mg/Kg	0.0025	ND
		0.975	mg/Kg	0.0012	ND

	929-020	SampleID: SB-10-COMP				
Te	stGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
AC77929-02	929-020 SB-10-COMP			Date C	ollected 4/1/2014	
% !	Solids SM25400	3				-
	%	Solids	1	Percent		92
Ch	nlorinated Herbi	cides 8151				
		,4,5-T	1	mg/Kg	0.011	ND
	2	,4-D	1	mg/Kg	0.011	ND
	D	icamba	1	mg/Kg	0.011	ND
	s	ilvex	1	mg/Kg	0.011	ND
Μe	ercury (Soil/Was	ste) 7471A		5 5		
		lercury	1	mg/Kg	0.091	ND
Or	ganochlorine Po	· ·	•	g./\g	0.001	ND
J1;	•	idrin	1	malka	0.0054	ND
		Ipha-BHC	1	mg/Kg mg/Kg	0.00 54 0.0011	ND ND
		eta-BHC	1	mg/Kg	0.0011	ND
		hlordane	1	mg/Kg	0.0011	ND
		elta-BHC	1	mg/Kg	0.0054	ND ND
		ieldrin	1	mg/Kg	0.0034	ND
		ndosulfan i	1	mg/Kg	0.0011	ND
		ndosulfan II	1	mg/Kg	0.0054	ND
	_	ndosulfan Sulfate	1	mg/Kg	0.0054	ND
		ndrin	1	mg/Kg	0.0054	ND
		ndrin Aldehyde	1	mg/Kg	0.0054	ND
		ndrin Ketone	1	mg/Kg	0.0054	ND
		amma-BHC	1	mg/Kg	0.0034	ND
	•	eptachlor	1	mg/Kg	0.0054	ND
		eptachlor Epoxide	1	mg/Kg	0.0054	ND
		ethoxychlor	1	mg/Kg	0.0054	ND
		p'-DDD	1	mg/Kg	0.0027	ND
	=	p'-DDE	1	mg/Kg	0.0027	ND
	• •	p'-DDT	1	mg/Kg	0.0027	ND
	•	oxaphene	1	mg/Kg	0.027	ND
PC	B 8082					
		rocior (Total)	1	mg/Kg	0.027	ND
		roclor-1016		mg/Kg	0.027	ND
		oclor-1221	i	mg/Kg	0.027	ND
		roclor-1232	1	mg/Kg	0.027	ND
		ocior-1242	1	mg/Kg	0.027	ND
		oclor-1248	1	mg/Kg	0.027	ND
		oclor-1254	1	mg/Kg	0.027	ND
		ocior-1260	1	mg/Kg	0.027	ND
		oclor-1262	1	mg/Kg	0.027	ND
		oclor-1268	1	mg/Kg	0.027	ND ND

Lab#: AC77929-020	SampleID: SB-10-COMP					
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result	
Semivolatile Organ	nics (no search) 8270	· · · · · · · · · · · · · · · · · · ·				
1,	1'-Biphenyl	1	mg/Kg	0.036	ND	
	2,4,5-Tetrachlorobenzene	1	mg/Kg	0.036	ND	
2,	3,4,6-Tetrachlorophenol	1	mg/Kg	0.036	ND	
2,	4,5-Trichlorophenol	1	mg/Kg	0.036	ND	
2,	4,6-Trichlorophenol	1	mg/Kg	0.036	ND	
2,	4-Dichlorophenol	1	mg/Kg	0.0091	ND	
2,	4-Dimethylphenol	1	mg/Kg	0.0091	ND	
2,	4-Dinitrophenol	1	mg/Kg	0.18	ND	
. 2,	4-Dinitrotoluene	1	mg/Kg	0.036	ND	
2,	6-Dinitrotoluene	1	mg/Kg	0.036	ND	
2-	-Chioronaphthalene	1	mg/Kg	0.036	ND	
2-	-Chlorophenol	1	mg/Kg	0.036	ND	
2-	-Methylnaphthalene	1	mg/Kg	0.036	ND	
2-	-Methylphenol	1	mg/Kg	0.0091	ND	
2-	-Nitroaniline	1	mg/Kg	0.036	ND	
2-	-Nitrophenol	1	mg/Kg	0.036	ND	
38	&4-Methylphenol	1	mg/Kg	0.0091	ND	
3,	3'-Dichlorobenzidine	1	mg/Kg	0.036	ND	
3-	-Nitroaniline	1	mg/Kg	0.036	ND	
4,	6-Dinitro-2-methylphenol	1	mg/Kg	0.18	ND	
4-	-Bromophenyl-phenylether	1	mg/Kg	0.036	ND	
4-	-Chloro-3-methylphenol	1	mg/Kg	0.036	ND	
4-	-Chloroaniline	1	mg/Kg	0.017	ND	
4-	-Chlorophenyi-phenylether	1	mg/Kg	0.036	ND	
4-	-Nitroaniline	1	mg/Kg	0.036	ND	
4-	-Nitrophenol	1	mg/Kg	0.036	ND	
A	cenaphthene	1	mg/Kg	0.036	ND	
A	cenaphthylene	1	mg/Kg	0.036	ND	
A	cetophenone	1	mg/Kg	0.036	ND	
A	nthracene	1	mg/Kg	0.036	ND	
A	trazine	1	mg/Kg	0.036	ND	
В	enzaldehyde	1	mg/Kg	0.036	ND	
В	enzo[a]anthracene	1	mg/Kg	0.036	ND	
	enzo[a]pyrene	1	mg/Kg	0.036	ND	
В	enzo[b]fluoranthene	1	mg/Kg	0.036	ND	
В	enzo[g,h,i]perylene	1	mg/Kg	0.036	ND	
В	enzo[k]fluoranthene	1	mg/Kg	0.036	ND	
bi	is(2-Chloroethoxy)methane	1	mg/Kg	0.036	ND	
bi	is(2-Chloroethyl)ether	1	mg/Kg	0.0091	ND	
bi	is(2-Chloroisopropyl)ether	1	mg/Kg	0.036	ND	
b	is(2-Ethylhexyl)phthalate	1	mg/Kg	0.036	ND	
В	utylbenzylphthalate	1	mg/Kg	0.036	ND	
C	aprolactam	1 '	mg/Kg	0.036	ND	
C	carbazole	1	mg/Kg	0.036	ND	
C	chrysene	1	mg/Kg	0.036	ND	
D	ibenzo[a,h]anthracene	1	mg/Kg	0.036	ND	
	Dibenzofuran	1	mg/Kg	0.0091	ND	
D	Piethylphthalate	1	mg/Kg	0.036	ND	
D	pimethylphthalate	1	mg/Kg	0.036	ND	
D	i-n-butylphthalate	1	mg/Kg	0.018	ND	
D	oi-n-octylphthalate	1	mg/Kg	0.036	ND	
F	luoranthene	1	mg/Kg	0.036	ND	
F	luorene	1	mg/Kg	0.036	ND	
	lexachlorobenzene	1	mg/Kg	0.036	ND	
L	lexachlorobutadiene	1	mg/Kg	0.036	ND	

ab#: AC77929-020	SampleID: SB-10-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.18	ND
	Hexachloroethane	1	mg/Kg	0.036	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.036	ND
	Isophorone	1	mg/Kg	0.036	ND
0	Naphthalene	1	mg/Kg	0.0091	ND
	Nitrobenzene	1	mg/Kg	0.036	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0091	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.036	ND
	Pentachlorophenol	1	mg/Kg	0.18	ND
	Phenanthrene	1	mg/Kg	0.036	ND
	Phenol	1	mg/Kg	0.036	ND
	Pyrene	1	mg/Kg	0.036	ND
TAL Metals 60	010				
	Aluminum	1	mg/Kg	220	2500
	Arsenic	1	mg/Kg	4.3	ND
	Barium	1	mg/Kg	11	13
	Calcium	1	mg/Kg	1100	ND
	Chromium	1	mg/Kg	5.4	5.8
	Cobalt	1	mg/Kg	2.7	2.8
	Copper	1	mg/Kg	5.4	6.8
	Iron	1	mg/Kg	220	7800
	Lead	1	mg/Kg	5.4	ND
	Magnesium	1	mg/Kg	540	1100
	Manganese	1	mg/Kg	11	190
	Nickel	1	mg/Kg	5.4	11
	Potassium	1	mg/Kg	540	ND
	Sodium	1	mg/Kg	270	ND
	Thallium	1	mg/Kg	1.6	ND
	Vanadium	1	mg/Kg	11	ND
	Zinc	1	mg/Kg	11	12
TAL Metals 60	20				
	Antimony	1	mg/Kg	0.87	ND
	Beryllium	1	mg/Kg	0.87	
	Cadmium	1	mg/Kg		ND
	Selenium	1		0.43 2.2	ND
	Silver	1	mg/Kg mg/Kg	2.2 0.22	ND ND

 Lab#:
 AC77929-021
 SampleID:
 SB-11-9.5-10.0

 TestGroup
 Analyte
 DF
 Units
 MDL/PQL/RL
 Result

 AC77929-021
 SB-11-9.5-10.0
 Date Collected
 3/28/2014

 % Solids SM2540G
 SM2540G
 Date Collected
 3/28/2014

% Solids

1 Percent

88

estGroup /olatile Organio	Analyte CS (no search) 8260 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	DF	Units	MDL/PQL/RL	Resu
/olatile Organic	1,1,1-Trichloroethane				
	• •				
	1.1.2.2-Tetrachloroethane	0.994	mg/Kg	0.0023	ND
		0.994	mg/Kg	0.0023	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.994	mg/Kg	0.0023	ND
	1,1,2-Trichioroethane	0.994	mg/Kg	0.0023	ND
	1,1-Dichloroethane	0.994	mg/Kg	0.0023	ND
	1,1-Dichloroethene	0.994	mg/Kg	0.0023	ND
	1,2,3-Trichlorobenzene	0.994	mg/Kg	0.0023	ND
	1,2,4-Trichlorobenzene	0.994	mg/Kg	0.0023	ND
	1,2-Dibromo-3-chloropropane	0.994	mg/Kg	0.0023	ND
	1,2-Dibromoethane	0.994	mg/Kg	0.0023	ND
	1,2-Dichlorobenzene	0.994	mg/Kg	0.0023	ND
	1,2-Dichloroethane	0.994	mg/Kg	0.0023	ND
	1,2-Dichloropropane	0.994	mg/Kg	0.0023	
	1,3-Dichlorobenzene	0.994			ND
	1,4-Dichlorobenzene		mg/Kg	0.0023	ND
	1.4-Dioxane	0.994 0.994	mg/Kg	0.0023	ND
	2-Butanone		mg/Kg	0.11	ND
	2-Hexanone	0.994	mg/Kg	0.0023	ND
		0.994	mg/Kg	0.0023	ND
	4-Methyl-2-pentanone	0.994	mg/Kg	0.0023	ND
	Acetone	0.994	mg/Kg	0.011	ND
	Benzene	0.994	mg/Kg	0.0011	ND
	Bromochloromethane	0.994	mg/Kg	0.0023	ND
	Bromodichloromethane	0.994	mg/Kg	0.0023	ND
	Bromoform	0.994	mg/Kg	0.0023	ND
	Bromomethane	0.994	mg/Kg	0.0023	ND
	Carbon disulfide	0.994	mg/Kg	0.0023	ND
	Carbon tetrachloride	0.994	mg/Kg	0.0023	ND
	Chlorobenzene	0.994	mg/Kg	0.0023	ND
	Chloroethane	0.994	mg/Kg	0.0023	ND
	Chloroform	0.994	mg/Kg	0.0023	ND
	Chloromethane	0.994	mg/Kg	0.0023	ND
	cis-1,2-Dichloroethene	0.994	mg/Kg	0.0023	ND
	cis-1,3-Dichloropropene	0.994	mg/Kg	0.0023	ND
	Cyclohexane	0.994	mg/Kg	0.0023	ND
	Dibromochloromethane	0.994	mg/Kg	0.0023	ND
	Dichlorodifluoromethane	0.994	mg/Kg	0.0023	ND
	Ethylbenzene	0.994	mg/Kg	0.0011	ND
	Isopropylbenzene	0.994	mg/Kg	0.0011	ND
	m&p-Xylenes	0.994	mg/Kg	0.0011	ND
	Methyl Acetate	0.994	mg/Kg	0.0023	ND
	Methylcyclohexane	0.994	mg/Kg	0.0023	ND
	Methylene chloride	0.994	mg/Kg	0.0023	0.0044
	Methyl-t-butyl ether	0.994	mg/Kg	0.0023	ND
	o-Xylene	0.994	mg/Kg	0.0011	
	Styrene	0.994	0 0	0.0011	ND ND
	Tetrachloroethene	0.994	mg/Kg mg/Kg		ND
	Toluene	0.994	mg/Kg	0.0023	ND
	trans-1,2-Dichloroethene		mg/Kg	0.0011	ND
	·	0.994	mg/Kg	0.0023	ND
	trans-1,3-Dichloropropene	0.994	mg/Kg	0.0023	ND
	Trichloroethene	0.994	mg/Kg	0.0023	ND
	Trichlorofluoromethane	0.994	mg/Kg	0.0023	ND
	Vinyl chloride Xylenes (Total)	0.994 0.994	mg/Kg mg/Kg	0.0023 0.0011	ND

b#: AC77929-022	SampleID: SB-11-COMP				_
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
C77929-022	SB-11-COMP		Date C	ollected 3/28/2014	
% Solids SM2	540G				
	% Solids	1	Percent		88
Chlorinated H	erbicides 8151				
•	2,4,5-T	1	mg/Kg	0.011	ND
	2,4-D	1	mg/Kg	0.011	ND
	Dicamba	1	mg/Kg	0.011	ND
	Silvex	1	mg/Kg	0.011	ND
Mercury (Soil	/Waste) 7471A				
	Mercury	1	mg/Kg	0.095	0.23
Organochloris	ne Pesticides 8081				
Organicalion	Aldrin	1	mg/Kg	0.0057	ND -
	Alpha-BHC	1	mg/Kg	0.0011	ND
	beta-BHC	1	mg/Kg	0.0011	ND
	Chlordane	1	mg/Kg	0.028	ND
	delta-BHC	1	mg/Kg	0.0057	ND
	Dieldrin	1	mg/Kg	0.0011	ND
	Endosulfan I	1	mg/Kg	0.0057	ND
	Endosulfan II	1	mg/Kg	0.0057	ND
	Endosulfan Sulfate	1	mg/Kg	0.0057	ND
	Endrin	1	mg/Kg	0.0057	ND
	Endrin Aldehyde	1	mg/Kg	0.0057	ND
	Endrin Ketone	1	mg/Kg	0.0057	ND
	gamma-BHC	1	mg/Kg	0.0011	ND
	Heptachlor	1	mg/Kg	0.0057	ND
	Heptachlor Epoxide	1	mg/Kg	0.0057	ND
	Methoxychlor	1	mg/Kg	0.0057	ND
	p,p'-DDD	1	mg/Kg	0.0028	ND
	p,p'-DDE	1	mg/Kg	0.0028	ND
	p,p'-DDT	1	mg/Kg	0.0028	ND
	Toxaphene	1	mg/Kg	0.028	ND
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.028	ND
	Aroclor-1016	1	mg/Kg	0.028	ND
	Aroclor-1221	1	mg/Kg	0.028	ND
	Aroclor-1232	1	mg/Kg	0.028	ND
	Aroclor-1242	1	mg/Kg	0.028	ND
	Aroclor-1248	1	mg/Kg	0.028	ND
	Aroclor-1254	1	mg/Kg	0.028	ND
	Aroclor-1260	1	mg/Kg	0.028	ND
	Aroclor-1262	1	mg/Kg	0.028	ND
	Aroclor-1268	1	mg/Kg	0.028	ND

Lab#: AC77929-022	SampleID: SB-11-COMP			,	
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Orga	anics (no search) 8270				
1	I,1'-Biphenyl	1	mg/Kg	0.038	ND
1	I,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.038	ND
2	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.038	ND
2	2,4,5-Trichlorophenol	1	mg/Kg	0.038	ND
2	2,4,6-Trichlorophenol	1	mg/Kg	0.038	ND
2	2,4-Dichlorophenol	1	mg/Kg	0.0095	ND
2	2,4-Dimethylphenol	1	mg/Kg	0.0095	ND
2	2,4-Dinitrophenol	1	mg/Kg	0.19	ND
2	2,4-Dinitrotoluene	1	mg/Kg	0.038	ND
2	2,6-Dinitrotoluene	1	mg/Kg	0.038	ND
2	2-Chloronaphthalene	1	mg/Kg	0.038	ND
2	2-Chlorophenol	1	mg/Kg	0.038	ND
2	2-Methylnaphthalene	1	mg/Kg	0.038	ND
2	2-Methylphenol	1	mg/Kg	0.0095	ND
2	2-Nitroaniline	1	mg/Kg	0.038	ND
2	2-Nitrophenol	1	mg/Kg	0.038	ND
3	3&4-Methylphenol	1	mg/Kg	0.0095	ND
3	3,3'-Dichlorobenzidine	1	mg/Kg	0.038	ND
3	3-Nitroaniline	1	mg/Kg	0.038	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.19	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.038	ND
4	4-Chloro-3-methylphenol	1	mg/Kg	0.038	ND
4	4-Chloroaniline	1 .	mg/Kg	0.018	ND
4	4-Chlorophenyl-phenylether	1	mg/Kg	0.038	ND
4	4-Nitroaniline	1	mg/Kg	0.038	ND
4	4-Nitrophenol	1	mg/Kg	0.038	ND
	Acenaphthene	1	mg/Kg	0.038	ND
	Acenaphthylene	1	mg/Kg	0.038	ND
	Acetophenone	1	mg/Kg	0.038	ND
	Anthracene	1	mg/Kg	0.038	ND
,	Atrazine	1	mg/Kg	0.038	ND
Į.	Benzaldehyde	1	mg/Kg	0.038	ND
I	Benzo[a]anthracene	1	mg/Kg	0.038	0.078
	Benzo[a]pyrene	1	mg/Kg	0.038	0.072
i	Benzo[b]fluoranthene	1	mg/Kg	0.038	0.086
	Benzo[g,h,i]perylene	1	mg/Kg	0.038	0.059
	Benzo[k]fluoranthene	1	mg/Kg	0.038	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.038	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.0095	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.038	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.038	ND
	Butylbenzylphthalate	1	mg/Kg	0.038	ND
	Caprolactam	1	mg/Kg	0.038	ND
	Carbazole	1	mg/Kg	0.038	ND
	Chrysene	1	mg/Kg	0.038	0.072
	Dibenzo[a,h]anthracene	1	mg/Kg	0.038	ND
	Dibenzofuran	1	mg/Kg	0.0095	ND
	Diethylphthalate	1	mg/Kg	0.038	ND
	Dimethylphthalate	1	mg/Kg	0.038	ND
	Di-n-butylphthalate	1	mg/Kg	0.019	ND
	Di-n-octylphthalate	1	mg/Kg	0.038	ND
	Fluoranthene	1	mg/Kg	0.038	0.13
	Fluorene	1	mg/Kg	0.038	ND
	Hexachlorobenzene	1	mg/Kg	0.038	ND

ab#: AC77929-022	SampleID: SB-11-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
7,038	Hexachlorocyclopentadiene	1	mg/Kg	0.19	ND
	Hexachloroethane	1	mg/Kg	0.038	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.038	0.048
	Isophorone	1	mg/Kg	0.038	ND
	Naphthalene	1	mg/Kg	0.0095	ND
	Nitrobenzene	1	mg/Kg	0.038	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0095	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.038	ND
	Pentachlorophenol	1	mg/Kg	0.19	ND
	Phenanthrene	1	mg/Kg	0.038	0.073
	Phenol	1	mg/Kg	0.038	ND
	Pyrene	1	mg/Kg	0.038	0.15
TAL Metals 6	010				
	Aluminum	1	mg/Kg	230	11000
	Arsenic	1	mg/Kg	4.5	5.1
N .	Barium	1	mg/Kg	11	74
	Calcium	1	mg/Kg	1100	2700
	Chromium	1	mg/Kg	5.7	16
	Cobalt	1	mg/Kg	2.8	7.9
	Copper	1	mg/Kg	5.7	17
	Iron	1	mg/Kg	230	16000
	Lead	1	mg/Kg	5.7	62
	Magnesium	1	mg/Kg	570	2400
	Manganese	1	mg/Kg	11	370
	Nickel	1	mg/Kg	5.7	11
	Potassium	1	mg/Kg	570	ND
	Sodium	1	mg/Kg	280	290
	Thallium	1	mg/Kg	1.7	ND
	Vanadium	1	mg/Kg	11	22
	Zinc	1	mg/Kg	11	68
TAL Metals 6	020			-	
	Antimony	1	mg/Kg	0.91	ND
	Beryllium	1	mg/Kg	0.23	ND
	Cadmium	1	mg/Kg	0.45	ND
	Selenium	1	mg/Kg	2.3	ND
	Silver	1	mg/Kg	0.23	ND

SampleID: AC77929-023 SB-12-9.5-10.0 TestGroup Analyte DF Units MDL/PQL/RL Result AC77929-023 SB-12-9.5-10.0 3/28/2014 Date Collected % Solids SM2540G % Solids 1 Percent 90

AC77929-023	SampleID: SB-12-9.5-10.0	DF	11	MDI /BOL /BI	_
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu
Volatile Orga	nics (no search) 8260				
	1,1,1-Trichloroethane	0.951	mg/Kg	0.0021	ND
	1,1,2,2-Tetrachloroethane	0.951	mg/Kg	0.0021	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.951	mg/Kg	0.0021	ND
	1,1,2-Trichloroethane	0.951	mg/Kg	0.0021	ND
	1,1-Dichloroethane	0.951	mg/Kg	0.0021	ND
	1,1-Dichloroethene	0.951	mg/Kg	0.0021	ND
	1,2,3-Trichlorobenzene	0.951	mg/Kg	0.0021	ND
	1,2,4-Trichlorobenzene	0.951	mg/Kg	0.0021	ND
	1,2-Dibromo-3-chloropropane	0.951	mg/Kg	0.0021	ND
	1,2-Dibromoethane	0.951	mg/Kg	0.0021	ND
	1,2-Dichlorobenzene	0.951	mg/Kg	0.0021	ND
	1,2-Dichloroethane	0.951	mg/Kg	0.0011	ND
	1,2-Dichloropropane	0.951	mg/Kg	0.0021	ND
	1,3-Dichlorobenzene	0.951	mg/Kg	0.0021	ND
	1,4-Dichlorobenzene	0.951	mg/Kg	0.0021	ND
	1,4-Dioxane	0.951	mg/Kg	0.11	ND
	2-Butanone	0.951	mg/Kg	0.0021	ND
	2-Hexanone	0.951	mg/Kg	0.0021	ND
	4-Methyl-2-pentanone	0.951	mg/Kg	0.0021	ND
	Acetone	0.951	mg/Kg	0.011	ND
	Benzene	0.951	mg/Kg	0.0011	ND
	Bromochloromethane	0.951	mg/Kg	0.0021	ND
	Bromodichloromethane	0.951	mg/Kg	0.0021	ND
	Bromoform	0.951	mg/Kg	0.0021	ND
	Bromomethane	0.951	mg/Kg	0.0021	ND
	Carbon disulfide	0.951	mg/Kg	0.0021	ND
	Carbon tetrachloride	0.951	mg/Kg	0.0021	ND
	Chlorobenzene	0.951	mg/Kg	0.0021	ND
	Chloroethane	0.951	mg/Kg	0.0021	ND
	Chloroform	0.951	mg/Kg	0.0021	ND
	Chloromethane	0.951	mg/Kg	0.0021	ND
	cis-1,2-Dichloroethene	0.951	mg/Kg	0.0021	ND
	• • •	0.951	mg/Kg	0.0021	ND
	cis-1,3-Dichloropropene	0.951	mg/Kg	0.0021	ND
	Cyclohexane				
	Dibromochloromethane	0.951	mg/Kg	0.0021 0.0021	ND ND
	Dichlorodifluoromethane	0.951	mg/Kg	0.0021	ND
	Ethylbenzene	0.951	mg/Kg	0.0011	ND
	isopropylbenzene	0.951	mg/Kg	0.0011	ND
	m&p-Xylenes	0.951	mg/Kg		
	Methyl Acetate	0.951	mg/Kg	0.0021	ND ND
	Methylcyclohexane	0.951	mg/Kg	0.0021	ND 0.0042
	Methylene chloride	0.951	mg/Kg	0.0021	
	Methyl-t-butyl ether	0.951	mg/Kg	0.0011	ND
	o-Xylene	0.951	mg/Kg	0.0011	ND
	Styrene	0.951	mg/Kg	0.0021	ND
	Tetrachloroethene	0.951	mg/Kg	0.0021	ND
	Toluene	0.951	mg/Kg	0.0011	ND
	trans-1,2-Dichloroethene	0.951	mg/Kg	0.0021	ND
	trans-1,3-Dichloropropene	0.951	mg/Kg	0.0021	ND
	Trichloroethene	0.951	mg/Kg	0.0021	ND
	Trichlorofluoromethane	0.951	mg/Kg	0.0021	ND
	Vinyl chloride	0.951	mg/Kg	0.0021	ND
	Xylenes (Total)	0.951	mg/Kg	0.0011	ND

TestGroup	Lab#: AC77929-024	SampleID: SB-12-COMP				
% Solids 1 Percent 85 Chlorinated Herbicides 8151 3 mg/Kg 0.012 ND 2,4-5 T 1 mg/Kg 0.012 ND Dloamba 1 mg/Kg 0.012 ND Slivex 1 mg/Kg 0.012 ND Mercury (Soli/Waste) 7471A mg/Kg 0.098 ND Mercury Seticides 8081 Aldrin 1 mg/Kg 0.0059 ND Aldrin 1 mg/Kg 0.0012 ND Aldrin 1 mg/Kg 0.0012 ND Aldrin 1 mg/Kg 0.0012 ND Aldrin 1 mg/Kg 0.0012 ND Bela-BHC 1 mg/Kg 0.0012 ND Deledrin 1 mg/Kg 0.0059 ND Endosulfan I 1 mg/Kg 0.0059 ND Endosulfan Sulfate 1 mg/Kg 0.0059 ND Endrin Aldehyde	TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
% Solids 1 Percent 85 Chlorinated Herbicides 81911 3 mg/Kg 0.012 ND 2,4-D 1 mg/Kg 0.012 ND Dicamba 1 mg/Kg 0.012 ND Mercury (Soli/Waste) 7471A mg/Kg 0.098 ND Mercury (Seli/Waste) 7471A mg/Kg 0.098 ND Organochlorine Pesticides 881 mg/Kg 0.0059 ND Aldrin 1 mg/Kg 0.0012 ND Alpha-BHC 1 mg/Kg 0.0012 ND beta-BHC 1 mg/Kg 0.0012 ND chlar-BHC 1 mg/Kg 0.0012 ND delta-BHC 1 mg/Kg 0.0012 ND Endosulfan I 1 mg/Kg 0.0012 ND Endosulfan I 1 mg/Kg 0.0059 ND Endrin Aldehyde 1 mg/Kg 0.0059 ND Endrin Aldehyde 1 m	AC77929-024	SB-12-COMP		Date C	ollected 3/28/2014	
Chlorinated Herbicides 8151 2,4,5-T	% Solids SM2	540G				
Chlorinated Herbicides \$151 2,4,5-T		% Solids	1	Percent		85
2,4,5-T	Chlorinated H	lerbicides 8151		-		
2,4-D Dicamba	•		1	ma/Ka	0.012	ND
Dicamba 1 mg/Kg 0.012 ND						
Mercury (Soli/Waste) 7471A Mercury (Soli/Waste) 7471A Mercury 1 mg/Kg 0.098 ND		Dicamba	1			
Mercury (Soli/Waste) 7471A Mercury 1 mg/Kg 0.098 ND Organochlorine Pesticides 8081 Aldrin 1 mg/Kg 0.0059 ND Alpha-BHC 1 mg/Kg 0.0012 ND beta-BHC 1 mg/Kg 0.029 ND chlordane 1 mg/Kg 0.0059 ND delta-BHC 1 mg/Kg 0.0059 ND Dieldrin 1 mg/Kg 0.0059 ND Endosulfan II 1 mg/Kg 0.0059 ND Endosulfan Sulfate 1 mg/Kg 0.0059 ND Endrin Aldehyde 1 mg/Kg 0.0059 ND Endrin Aldehyde 1 mg/Kg 0.0059 ND Endrin Aldehyde 1 mg/Kg 0.0059 ND Endrin Extone 1 mg/Kg 0.0059 ND Heptachlor 1 mg/Kg 0.0059 ND Heptachlor Epoxide 1		Silvex	1			
Mercury 1 mg/Kg 0.098 ND	Mercury (Soil	Waste) 7471Δ		3.0		
Aldrin	mercury (con		1	ma/Ka	0.000	. ND
Aldrin 1 mg/Kg 0.0059 ND Alpha-BHC 1 mg/Kg 0.0012 ND beta-BHC 1 mg/Kg 0.0012 ND Chlordane 1 mg/Kg 0.0029 ND delta-BHC 1 mg/Kg 0.0059 ND Dieldrin 1 mg/Kg 0.0059 ND Endosulfan I 1 mg/Kg 0.0059 ND Endosulfan II 1 mg/Kg 0.0059 ND Endosulfan II 1 mg/Kg 0.0059 ND Endosulfan Sulfate 1 mg/Kg 0.0059 ND Endrin 1 mg/Kg 0.0059 ND Endrin 1 mg/Kg 0.0059 ND Endrin 1 mg/Kg 0.0059 ND Endrin 1 mg/Kg 0.0059 ND Endrin Aldehyde 1 mg/Kg 0.0059 ND Endrin Ketone 1 mg/Kg 0.0059 ND Endrin Ketone 1 mg/Kg 0.0059 ND Heptachlor 1 mg/Kg 0.0059 ND Heptachlor 1 mg/Kg 0.0059 ND Methoxychlor 1 mg/Kg 0.0059 ND Methoxychlor 1 mg/Kg 0.0059 ND Methoxychlor 1 mg/Kg 0.0059 ND P,P'-DDD 1 mg/Kg 0.0059 ND P,P'-DDE 1 mg/Kg 0.0029 ND P,P'-DDT 1 mg/Kg 0.0029 ND P,P'-DDT 1 mg/Kg 0.0029 ND P,P'-DDT 1 mg/Kg 0.0029 ND P,P'-DDT 1 mg/Kg 0.0029 ND Aroclor-1211 1 mg/Kg 0.0029 ND Aroclor-1221 1 mg/Kg 0.029 ND Aroclor-1232 1 mg/Kg 0.029 ND Aroclor-1242 1 mg/Kg 0.029 ND Aroclor-1248 1 mg/Kg 0.029 ND Aroclor-1248 1 mg/Kg 0.029 ND Aroclor-1248 1 mg/Kg 0.029 ND Aroclor-1248 1 mg/Kg 0.029 ND Aroclor-1254 1 mg/Kg 0.029 ND Aroclor-1254 1 mg/Kg 0.029 ND Aroclor-1254 1 mg/Kg 0.029 ND Aroclor-1254 1 mg/Kg 0.029 ND Aroclor-1254 1 mg/Kg 0.029 ND Aroclor-1254 1 mg/Kg 0.029 ND	Onne ne ables!	•	•	mg/Ag	0.090	ND
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Aroclor-1260 1 mg/Kg 0.029 ND						
			1			
			1			
Aroclor-1268 1 mg/Kg 0.029 ND						

Lab#: AC77929-024	SampleID: SB-12-COMP							
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result			
Semivolatile Orga	anics (no search) 8270							
	I,1'-Biphenyl	1	mg/Kg	0.039	ND			
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.039	ND			
2	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.039	ND			
	2,4,5-Trichlorophenol	1	mg/Kg	0.039	ND			
2	2,4,6-Trichlorophenol	1	mg/Kg	0.039	ND			
2	2,4-Dichlorophenol	1	mg/Kg	0.0098	ND			
2	2,4-Dimethylphenol	1	mg/Kg	0.0098	ND			
	2,4-Dinitrophenol	1	mg/Kg	0.20	ND			
	2,4-Dinitrotoluene	1	mg/Kg	0.039	ND			
	2,6-Dinitrotoluene	1	mg/Kg	0.039	ND			
	2-Chloronaphthalene	1	mg/Kg	0.039	ND			
	2-Chlorophenol	1	mg/Kg	0.039	ND			
2	2-Methylnaphthalene	1	mg/Kg	0.039	ND			
	2-Methylphenol	1	mg/Kg	0.0098	ND			
2	2-Nitroaniline	1	mg/Kg	0.039	ND			
2	2-Nitrophenol	1	mg/Kg	0.039	ND			
;	3&4-Methylphenol	1	mg/Kg	0.0098	ND			
;	3,3'-Dichlorobenzidine	1	mg/Kg	0.039	ND			
;	3-Nitroaniline	1	mg/Kg	0.039	ND			
4	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.20	ND			
•	4-Bromophenyl-phenylether	1	mg/Kg	0.039	ND			
•	4-Chloro-3-methylphenol	1	mg/Kg	0.039	ND			
•	4-Chloroaniline	1	mg/Kg	0.019	ND			
•	4-Chlorophenyl-phenylether	1	mg/Kg	0.039	ND			
•	4-Nitroaniline	1	mg/Kg	0.039	ND			
•	4-Nitrophenol	1	mg/Kg	0.039	ND			
	Acenaphthene	1	mg/Kg	0.039	ND			
	Acenaphthylene	1	mg/Kg	0.039	ND			
	Acetophenone	1	mg/Kg	0.039	ND			
	Anthracene	1	mg/Kg	0.039	ND			
	Atrazine	1	mg/Kg	0.039	ND			
Į	Benzaldehyde	1	mg/Kg	0.039	ND			
	Benzo[a]anthracene	1	mg/Kg	0.039	ND			
	Benzo[a]pyrene	1	mg/Kg	0.039	ND			
1	Benzo[b]fluoranthene	1	mg/Kg	0.039	0.044			
1	Benzo[g,h,i]perylene	1	mg/Kg	0.039	ND			
	Benzo[k]fluoranthene	1	mg/Kg	0.039	ND			
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.039	ND			
	bis(2-Chloroethyl)ether	1	mg/Kg	0.0098	ND			
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.039	ND			
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.039	ND			
	Butylbenzylphthalate	1	mg/Kg	0.039	ND			
	Caprolactam	1	mg/Kg	0.039	ND			
	Carbazole	1	mg/Kg	0.039	ND			
	Chrysene	1	mg/Kg	0.039	ND			
	Dibenzo[a,h]anthracene	1	mg/Kg	0.039	ND			
	Dibenzofuran	1	mg/Kg	0.0098	ND			
	Diethylphthalate	1	mg/Kg	0.039	ND			
	Dimethylphthalate	1	mg/Kg	0.039	ND			
	Di-n-butylphthalate	1	mg/Kg	0.020	ND			
	Di-n-octylphthalate	1	mg/Kg	0.039	ND			
	Fluoranthene	1	mg/Kg	0.039	0.042			
	Fluorene	1	mg/Kg	0.039	ND			
	Hexachlorobenzene	1	mg/Kg	0.039	ND			
	Hexachlorobutadiene	1	mg/Kg	0.039	ND			

o#: AC77929-024	SampleID: SB-12-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.20	ND
	Hexachloroethane	1	mg/Kg	0.039	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.039	ND
	Isophorone	1	mg/Kg	0.039	ND
	Naphthalene	1	mg/Kg	0.0098	ND
	Nitrobenzene	1	mg/Kg	0.039	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0098	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.039	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.039	ND
	Phenol	1	mg/Kg	0.039	ND
	Pyrene	1	mg/Kg	0.039	0.045
TAL Metals 60	010				
	Aluminum	1	mg/Kg	240	4000
	Arsenic	1	mg/Kg	4.7	ND
	Barium	1	mg/Kg	12	ND
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	5.9	7.7
	Cobalt	1	mg/Kg	2.9	3.1
	Copper	1	mg/Kg	5.9	6.8
	Iron	1	mg/Kg	240	7800
	Lead	1	mg/Kg	5.9	ND
	Magnesium	1	mg/Kg	590	1500
	Manganese	1	mg/Kg	12	59
	Nickel	1	mg/Kg	5.9	11
	Potassium	1	mg/Kg	590	ND
	Sodium	1	mg/Kg	290	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	ND
	Zinc	1	mg/Kg	12	17
TAL Metals 60	020				
	Antimony	1	mg/Kg	0.94	ND
	Beryllium	1	mg/Kg	0.24	ND
	Cadmium	1	mg/Kg	0.47	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

 Lab#:
 AC77929-025
 SampleID:
 SB-13-9.5-10.0

 TestGroup
 Analyte
 DF
 Units
 MDL/PQL/RL
 Result

 AC77929-025
 SB-13-9.5-10.0
 Date Collected
 3/28/2014

 % Solids SM2540G
 SM2540G
 Date Collected
 3/28/2014

1

% Solids

Percent

87

ab#: AC77929-025	SampleID: SB-13-9.5-10.0						
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu		
Volatile Organic	cs (no search) 8260						
	1,1,1-Trichloroethane	0.896	mg/Kg	0.0021	ND		
	1,1,2,2-Tetrachloroethane	0.896	mg/Kg	0.0021	ND		
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.896	mg/Kg	0.0021	ND		
	1,1,2-Trichloroethane	0.896	mg/Kg	0.0021	ND		
	1,1-Dichloroethane	0.896	mg/Kg	0.0021	ND		
	1,1-Dichloroethene	0.896	mg/Kg	0.0021	ND		
	1,2,3-Trichlorobenzene	0.896	mg/Kg	0.0021	ND		
	1,2,4-Trichlorobenzene	0.896	mg/Kg	0.0021	ND		
	1,2-Dibromo-3-chloropropane	0.896	mg/Kg	0.0021	ND		
	1,2-Dibromoethane	0.896	mg/Kg	0.0021	ND		
	1,2-Dichlorobenzene	0.896	mg/Kg	0.0021	ND		
	1,2-Dichloroethane	0.896	mg/Kg	0.0010	ND		
	1,2-Dichloropropane	0.896	mg/Kg	0.0021	ND		
	1,3-Dichlorobenzene	0.896	mg/Kg	0.0021	ND		
	1,4-Dichlorobenzene	0.896	mg/Kg	0.0021	ND		
	1,4-Dioxane	0.896	mg/Kg	0.10	ND		
	2-Butanone	0.896	mg/Kg	0.0021	ND		
	2-Hexanone	0.896	mg/Kg	0.0021	ND		
	4-Methyl-2-pentanone	0.896	mg/Kg	0.0021	ND		
	Acetone	0.896	mg/Kg	0.010	ND		
	Benzene	0.896	mg/Kg	0.0010	ND		
	Bromochloromethane	0.896	mg/Kg	0.0021	ND		
	Bromodichloromethane	0.896	mg/Kg	0.0021	ND		
	Bromoform	0.896	mg/Kg	0.0021	ND		
	Bromomethane	0.896	mg/Kg	0.0021	ND		
	Carbon disulfide	0.896	mg/Kg	0.0021	ND		
	Carbon tetrachloride	0.896	mg/Kg	0.0021	ND		
	Chlorobenzene	0.896	mg/Kg	0.0021	ND		
	Chloroethane	0.896	mg/Kg	0.0021	ND		
	Chloroform	0.896	mg/Kg	0.0021	ND		
	Chloromethane	0.896	mg/Kg	0.0021	ND		
	cis-1,2-Dichloroethene	0.896	mg/Kg	0.0021	ND		
	cis-1,3-Dichloropropene	0.896	mg/Kg	0.0021	ND		
	Cyclohexane	0.896	mg/Kg	0.0021	ND		
	Dibromochloromethane	0.896	mg/Kg	0.0021	ND		
	Dichlorodifluoromethane	0.896	mg/Kg	0.0021	ND		
	Ethylbenzene	0.896	mg/Kg	0.0010	ND		
	Isopropylbenzene	0.896	mg/Kg	0.0010	ND		
	m&p-Xylenes	0.896	mg/Kg	0.0010	ND ND		
	Methyl Acetate	0.896	mg/Kg	0.0021			
	Methylcyclohexane	0.896	mg/Kg	0.0021	ND 0.007		
	Methylene chloride	0.896	mg/Kg	0.0021			
	Methyl-t-butyl ether	0.896	mg/Kg	0.0010	ND		
	o-Xylene	0.896	mg/Kg	0.0010	ND		
	Styrene	0.896	mg/Kg	0.0021	ND ND		
	Tetrachloroethene	0.896	mg/Kg	0.0021			
	Toluene	0.896	mg/Kg	0.0010	ND ND		
	trans-1,2-Dichloroethene	0.896	mg/Kg	0.0021	ND.		
	trans-1,3-Dichloropropene	0.896	mg/Kg	0.0021			
	Trichloroethene	0.896	mg/Kg	0.0021	ND		
	Trichlorofluoromethane	0.896	mg/Kg	0.0021	ND		
	Vinyl chloride	0.896	mg/Kg	0.0021	ND		
	Xylenes (Total)	0.896	mg/Kg	0.0010	ND		

Lab#:	AC77929-026	SampleID: SB-13-COMP				
	TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC7792	29-026	SB-13-COMP		Date C	ollected 3/28/2014	
	% Solids SM25	40G				
		% Solids	1	Percent		82
	Chlorinated He	rbicides 8151				UL.
		2,4,5-T	1	mg/Kg	0.012	ND
		2,4-D	1	mg/Kg	0.012	ND
		Dicamba	1	mg/Kg	0.012	ND
		Silvex	1	mg/Kg	0.012	ND
	Mercury (Soil/\	Vaste) 7471A				110
		Mercury	1	malKa	0.10	ND
	Organochlorica	Pesticides 8081	•	mg/Kg	0.10	ND
	Organiounid III	Aldrin				
		Alpha-BHC	1	mg/Kg	0.0061	ND
		beta-BHC	1	mg/Kg	0.0012	ND
		Chlordane	1	mg/Kg	0.0012	ND
			1	mg/Kg	0.030	ND
		delta-BHC Dieldrin	1	mg/Kg	0.0061	ND
			1	mg/Kg	0.0012	ND
		Endosulfan I	1	mg/Kg	0.0061	ND
		Eridosulfan II	1	mg/Kg	0.0061	ND
		Endosulfan Sulfate	1	mg/Kg	0.0061	ND
		Endrin	1	mg/Kg	0.0061	ND
		Endrin Aldehyde	1	mg/Kg	0.0061	ND
		Endrin Ketone	1	mg/Kg	0.0061	ND
		gamma-BHC	1	mg/Kg	0.0012	ND
		Heptachlor	1	mg/Kg	0.0061	ND
		Heptachlor Epoxide	1	mg/Kg	0.0061	ND
		Methoxychlor	1	mg/Kg	0.0061	ND
		p,p'-DDD	1	mg/Kg	0.0030	ND
		p,p'-DDE	1	mg/Kg	0.0030	ND
		p,p'-DDT	1	mg/Kg	0.0030	ND
		Toxaphene	1	mg/Kg	0.030	ND
	PCB 8082					
		Aroclor (Total)	1	mg/Kg	0.030	ND
		Aroclor-1016	1	mg/Kg	0.030	
		Aroclor-1221	1	mg/Kg	0.030	ND ND
		Aroclor-1232	1	mg/Kg	0.030	ND
		Aroclor-1242	1	mg/Kg	0.030	ND
		Aroclor-1248	1	mg/Kg	0.030	ND
		Aroclor-1254	1	mg/Kg	0.030	ND
		Arocior-1260	1	mg/Kg	0.030	ND
		Aroclor-1262	1	mg/Kg	0.030	ND
		Aroclor-1268	1	mg/Kg	0.030	ND ND

.ab#: AC77929-026	SampleID: SB-13-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu
Semivolatile Or	ganics (no search) 8270				
	1,1'-Biphenyl	1	mg/Kg	0.041	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.041	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.041	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4-Dichlorophenol	1	mg/Kg	0.010	ND
	2,4-Dimethylphenol	1	mg/Kg	0.010	ND
	2,4-Dinitrophenol	1	mg/Kg	0.20	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.041	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.041	ND
	2-Chloronaphthalene	1	mg/Kg	0.041	ND
	2-Chlorophenol	1	mg/Kg	0.041	ND
	2-Methylnaphthalene	1	mg/Kg	0.041	ND
	2-Methylphenol	1	mg/Kg	0.010	ND
	2-Nitroaniline	1	mg/Kg	0.041	ND
	2-Nitrophenol	1	mg/Kg	0.041	ND
	3&4-Methylphenol	1	mg/Kg	0.010	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.041	ND
	3-Nitroaniline	1	mg/Kg	0.041	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.20	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.041	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.041	ND
	4-Chloroaniline	1	mg/Kg	0.019	ND
	4-Chlorophenyl-phenylether	1	mg/Kg	0.041	ND
	4-Nitroaniline	1	mg/Kg	0.041	ND
	4-Nitrophenol	1	mg/Kg	0.041	ND
	Acenaphthene	1	mg/Kg	0.041	ND
	Acenaphthylene	1	mg/Kg	0.041	ND
	Acetophenone	1	mg/Kg	0.041	ND
	Anthracene	1	mg/Kg	0.041	ND
	Atrazine	1	mg/Kg	0.041	ND
	Benzaidehyde	1	mg/Kg	0.041	ND
	Benzo[a]anthracene	1	mg/Kg	0.041	ND
	Benzo[a]pyrene	1	mg/Kg	0.041	ND
	Benzo[b]fluoranthene	1	mg/Kg	0.041	ND
	Benzo[g,h,i]perylene	1	mg/Kg	0.041	ND
	Benzo[k]fluoranthene	1	mg/Kg	0.041	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.041	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.010	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.041	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.041	ND
	Butylbenzylphthalate	1	mg/Kg	0.041	ND
	Caprolactam	1	mg/Kg	0.041	ND
	Carbazole	1	mg/Kg	0.041	ND
	Chrysene	1	mg/Kg	0.041	ND
	Dibenzo[a,h]anthracene	1	mg/Kg	0.041	ND
	Dibenzofuran	1	mg/Kg	0.010	ND
	Diethylphthalate	1	mg/Kg	0.041	ND
	Dimethylphthalate	1	mg/Kg	0.041	ND
	Di-n-butylphthalate	1	mg/Kg	0.020	ND
	Di-n-octylphthalate	1	mg/Kg	0.041	ND
	Fluoranthene	1	mg/Kg	0.041	ND
	Fluorene	1	mg/Kg	0.041	ND
	Hexachlorobenzene	1	mg/Kg	0.041	ND
	Hexachlorobutadiene	1	mg/Kg	0.041	ND

b#: AC77929-026	SampleID: SB-13-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.20	ND
	Hexachloroethane	1	mg/Kg	0.041	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.041	ND
	Isophorone	1	mg/Kg	0.041	ND
	Naphthalene	1	mg/Kg	0.010	ND
	Nitrobenzene	1	mg/Kg	0.041	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.010	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.041	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.041	ND
	Phenol	1	mg/Kg	0.041	ND
	Pyrene	1	mg/Kg	0.041	ND
TAL Metals 60	10				
	Aluminum	1	mg/Kg	240	4200
	Arsenic	1	mg/Kg	4.9	ND
	Barium	1	mg/Kg	12	15
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	6.1	12
	Cobalt	1	mg/Kg	3.0	ND
	Copper	1	mg/Kg	6.1	7.3
	Iron	1	mg/Kg	240	8700
	Lead	1	mg/Kg	6.1	ND
	Magnesium	1	mg/Kg	610	1600
	Manganese	1	mg/Kg	12	150
	Nickel	1	mg/Kg	6.1	12
	Potassium	1	mg/Kg	610	ND
	Sodium	1	mg/Kg	300	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	· 1	mg/Kg	12	14
	Zinc	1	mg/Kg	12	18
TAL Metals 602	20		- -	•	
	Antimony	1	mg/Kg	0.98	ND
	Beryllium	1	mg/Kg	0.24	ND
	Cadmium	1	mg/Kg	0.49	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

Lab#: AC77929-027	SampleID: SB-14-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77929-027	SB-14-9.5-10.0		Date C	ollected 4/2/2014	
% Solids SM2	540G % Solids	1	Percent		88

.ab#: AC77929-027	SampleID: SB-14-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Orga	nics (no search) 8260				INCOUN
	1,1,1-Trichloroethane	0.898	mg/Kg	0.0020	ND
	1,1,2,2-Tetrachloroethane	0.898	mg/Kg	0.0020	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.898	mg/Kg	0.0020	ND
	1,1,2-Trichloroethane	0.898	mg/Kg	0.0020	ND
	1,1-Dichloroethane	0.898	mg/Kg	0.0020	ND
	1,1-Dichloroethene	0.898	mg/Kg	0.0020	ND
	1,2,3-Trichlorobenzene	0.898	mg/Kg	0.0020	ND
	1,2,4-Trichlorobenzene	0.898	mg/Kg	0.0020	ND
	1,2-Dibromo-3-chloropropane	0.898	mg/Kg	0.0020	ND
	1,2-Dibromoethane	0.898	mg/Kg	0.0020	ND
	1,2-Dichlorobenzene	0.898	mg/Kg	0.0020	ND
	1,2-Dichloroethane	0.898	mg/Kg	0.0010	ND
	1,2-Dichloropropane	0.898	mg/Kg	0.0020	ND
	1,3-Dichlorobenzene	0.898	mg/Kg	0.0020	ND
	1,4-Dichlorobenzene	0.898	mg/Kg	0.0020	ND
	1,4-Dioxane	0.898	mg/Kg	0.10	ND
	2-Butanone	0.898	mg/Kg	0.0020	ND
	2-Hexanone	0.898	mg/Kg	0.0020	ND
	4-Methyl-2-pentanone	0.898	mg/Kg	0.0020	ND
	Acetone	0.898	mg/Kg	0.010	ND
	Benzene	0.898	mg/Kg	0.0010	ND
	Bromochloromethane	0.898	mg/Kg	0.0010	ND
	Bromodichloromethane	0.898	mg/Kg	0.0020	ND
	Bromoform	0.898	mg/Kg	0.0020	ND ND
	Bromomethane	0.898	mg/Kg	0.0020	
	Carbon disulfide	0.898	mg/Kg	0.0020	ND
	Carbon tetrachloride	0.898	mg/Kg	0.0020	ND
	Chlorobenzene	0.898	mg/Kg	0.0020	ND
	Chloroethane	0.898	mg/Kg	0.0020	ND
	Chloroform	0.898	mg/Kg	0.0020	ND
	Chloromethane	0.898	mg/Kg	0.0020	ND
	cis-1,2-Dichloroethene	0.898	mg/Kg	0.0020	ND
	cis-1,3-Dichloropropene	0.898	mg/Kg	0.0020	ND
	Cyclohexane	0.898	mg/Kg	0.0020	ND
	Dibromochloromethane	0.898			ND
	Dichlorodifluoromethane	0.898	mg/Kg mg/Kg	0.0020	ND
	Ethylbenzene	0.898		0.0020	ND
	Isopropylbenzene	0.898	mg/Kg mg/Kg	0.0010	ND
	m&p-Xylenes	0.898	mg/Kg	0.0010	ND
	Methyl Acetate	0.898		0.0010	ND
	Methylcyclohexane	0.898	mg/Kg	0.0020	ND
	Methylene chloride	0.898	mg/Kg	0.0020	ND
	Methyl-t-butyl ether	0.898	mg/Kg	0.0020	0.0094
	o-Xylene	0.898	mg/Kg	0.0010	ND
	Styrene	0.898	mg/Kg	0.0010	ND
	Tetrachloroethene	0.898	mg/Kg	0.0020	ND
	Toluene	0.898	mg/Kg mg/Ka	0.0020	ND
	trans-1,2-Dichloroethene	0.898	mg/Kg mg/Kg	0.0010	ND
	trans-1,3-Dichloropropene		mg/Kg	0.0020	ND
	Trichloroethene	0.898	mg/Kg	0.0020	ND
	Trichlorofluoromethane	0.898	mg/Kg	0.0020	ND
	Vinyl chloride	0.898	mg/Kg	0.0020	ND
	-	0.898	mg/Kg	0.0020	ND
	Xylenes (Total)	0.898	mg/Kg	0.0010	ND

#: AC77929-028	SampleID: SB-14-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu
77929-028	SB-14-COMP		Date C	ollected 4/2/2014	
% Solids SM2	540G				
	% Solids	1	Percent		84
Chlorinated H	erbicides 8151				
Omormateari	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
M (C -!!					
Mercury (Soil	Waste) 7471A	1	mg/Kg	0.099	ND
	Mercury	1	mg/r/g	0.000	
Organochlorii	ne Pesticides 8081	4	W	0.0060	ND
	Aldrin	1	mg/Kg	0.0060	ND
	Alpha-BHC	1	mg/Kg	0.0012	ND ND
	beta-BHC	1	mg/Kg	0.0012	
	Chlordane	1	mg/Kg	0.030	ND
	delta-BHC	1	mg/Kg	0.0060	ND
	Dieldrin	1	mg/Kg	0.0012	ND
	Endosulfan I	1	mg/Kg	0.0060	ND
	Endosulfan II	1	mg/Kg	0.0060	ND
	Endosulfan Sulfate	1	mg/Kg	0.0060	ND
	Endrin	1	mg/Kg	0.0060	ND
	Endrin Aldehyde	1	mg/Kg	0.0060	ND
	Endrin Ketone	1	mg/Kg	0.0060	ND
	gamma-BHC	1	mg/Kg	0.0012	ND
	Heptachlor	1	mg/Kg	0.0060	ND
	Heptachlor Epoxide	1	mg/Kg	0.0060	ND
	Methoxychlor	1	mg/Kg	0.0060	ND
	p,p'-DDD	1	mg/Kg	0.0030	ND
	p,p'-DDE	1	mg/Kg	0.0030	ND
	p,p'-DDT	1	mg/Kg	0.0030	ND
	Toxaphene	1	mg/Kg	0.030	ND
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.030	ND
	Aroclor-1016	1	mg/Kg	0.030	ND
	Aroclor-1221	1	mg/Kg	0.030	ND
	Aroclor-1232	1	mg/Kg	0.030	ND
	Aroclor-1242	1	mg/Kg	0.030	ND
	Aroclor-1248	1	mg/Kg	0.030	ND
	Aroclor-1254	1	mg/Kg	0.030	ND
	Aroclor-1260	1	mg/Kg	0.030	ND
	Aroclor-1262	1	mg/Kg	0.030	ND
	Aroclor-1268	1	mg/Kg	0.030	ND

Lab#: AC77929-028	SampleID: SB-14-COMP		· · · · · · · · · · · · · · · · · · ·		
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Org	janics (no search) 8270		·M*		
	1,1'-Biphenyl	1	mg/Kg	0.040	ND
	1,2,4,5-Tetrachlorobenzene	1 .	mg/Kg	0.040	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.040	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.040	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.040	ND
	2,4-Dichlorophenol	1	mg/Kg	0.0099	ND
:	2,4-Dimethylphenol	1	mg/Kg	0.0099	ND
:	2,4-Dinitrophenol	1	mg/Kg	0.20	ND
:	2,4-Dinitrotoluene	1	mg/Kg	0.040	ND
;	2,6-Dinitrotoluene	1	mg/Kg	0.040	ND
:	2-Chloronaphthalene	1	mg/Kg	0.040	ND
:	2-Chlorophenol	1	mg/Kg	0.040	ND
:	2-Methylnaphthalene	1	mg/Kg	0.040	ND
:	2-Methylphenol	1	mg/Kg	0.0099	ND
:	2-Nitroaniline	1	mg/Kg	0.040	ND
:	2-Nitrophenol	1	mg/Kg	0.040	ND
;	3&4-Methylphenoi	1	mg/Kg	0.0099	ND
;	3,3'-Dichlorobenzidine	1	mg/Kg	0.040	ND
;	3-Nitroaniline	1	mg/Kg	0.040	ND
•	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.20	ND
•	4-Bromophenyl-phenylether	1	mg/Kg	0.040	ND .
•	4-Chloro-3-methylphenol	1	mg/Kg	0.040	ND
•	4-Chloroaniline	1	mg/Kg	0.019	ND
•	4-Chlorophenyl-phenylether	1	mg/Kg	0.040	ND
4	4-Nitroaniline	1	mg/Kg	0.040	ND
4	4-Nitrophenol	1	mg/Kg	0.040	ND
,	Acenaphthene	1	mg/Kg	0.040	ND
	Acenaphthylene	1	mg/Kg	0.040	ND
	Acetophenone	1	mg/Kg	0.040	ND
,	Anthracene	1	mg/Kg	0.040	ND
A	Atrazine	1	mg/Kg	0.040	ND
E	3enzaldehyde	1	mg/Kg	0.040	ND
E	Benzo[a]anthracene	1	mg/Kg	0.040	ND
E	Benzo[a]pyrene	1	mg/Kg	0.040	ND
_	Benzo[b]fluoranthene	1	mg/Kg	0.040	0.052
· E	Benzo[g,h,i]perylene	1	mg/Kg	0.040	ND
E	Benzo[k]fluoranthene	1	mg/Kg	0.040	ND
b	ois(2-Chloroethoxy)methane	1	mg/Kg	0.040	ND
	pis(2-Chloroethyl)ether	1	mg/Kg	0.0099	ND
b	pis(2-Chloroisopropyl)ether	1	mg/Kg	0.040	ND
b	pis(2-Ethylhexyl)phthalate	1	mg/Kg	0.040	ND
E	Butylbenzylphthalate	1	mg/Kg	0.040	ND
C	Caprolactam	1	mg/Kg	0.040	ND
C	Carbazole	1	mg/Kg	0.040	ND
c	Chrysene	1	mg/Kg	0.040	0.045
	Dibenzo[a,h]anthracene	1	mg/Kg	0.040	ND
	Dibenzofuran	1	mg/Kg	0.0099	ND
	Diethylphthalate	1	mg/Kg	0.040	ND
	Dimethylphthalate	1	mg/Kg	0.040	ND
	Di-n-butylphthalate	1	mg/Kg	0.020	ND .
	Di-n-octylphthalate	1	mg/Kg	0.040	ND ND
	luoranthene	1	mg/Kg	0.040	0.060
	luorene	1	mg/Kg	0.040	ND
	lexachlorobenzene	1	mg/Kg	0.040	
	lexachlorobutadiene				ND
	ionavi iivi obuladici ic	1	mg/Kg	0.040	ND

hb#: AC77929-028	SampleID: SB-14-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.20	ND
	Hexachloroethane	1	mg/Kg	0.040	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.040	ND -
	Isophorone	1	mg/Kg	0.040	ND
	Naphthalene	1	mg/Kg	0.0099	0.013
	Nitrobenzene	1	mg/Kg	0.040	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0099	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.040	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.040	0.061
	Phenol	1	mg/Kg	0.040	ND
	Pyrene	1	mg/Kg	0.040	0.078
TAL Metals 60	010				
	Aluminum	1	mg/Kg	240	4700
	Arsenic	1	mg/Kg	4.8	ND
	Barium	1	mg/Kg	12	21
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	6.0	10
	Cobalt	1	mg/Kg	3.0	3.6
	Copper	1	mg/Kg	6.0	8.3
	Iron	1	mg/Kg	240	7400
	Lead	1	mg/Kg	6.0	ND
	Magnesium	1	mg/Kg	600	1800
	Manganese	1	mg/Kg	12	57
	Nickel	1	mg/Kg	6.0	15
	Potassium	1	mg/Kg	600	ND
	Sodium	1	mg/Kg	300	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	21
	Zinc	1	mg/Kg	12	22
TAL Metals 60	020				
	Antimony	1	mg/Kg	0.95	ND
	Beryllium	1	mg/Kg	0.24	ND
	Cadmium	1	mg/Kg	0.48	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

Lab#: AC77929-029 SampleID: SB-15-9.5-10.0 TestGroup Analyte DF Units MDL/PQL/RL Result SB-15-9.5-10.0 AC77929-029 Date Collected 4/2/2014 % Solids SM2540G % Solids Percent 85

#: AC77929-029	SampleID: SB-15-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu
Volatile Organ	ics (no search) 8260				
	1,1,1-Trichloroethane	0.965	mg/Kg	0.0023	ND
	1,1,2,2-Tetrachloroethane	0.965	mg/Kg	0.0023	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.965	mg/Kg	0.0023	ND
	1,1,2-Trichloroethane	0.965	mg/Kg	0.0023	ND
	1,1-Dichloroethane	0.965	mg/Kg	0.0023	ND
	1,1-Dichloroethene	0.965	mg/Kg	0.0023	ND
	1,2,3-Trichlorobenzene	0.965	mg/Kg	0.0023	ND
	1,2,4-Trichlorobenzene	0.965	mg/Kg	0.0023	ND
	1,2-Dibromo-3-chloropropane	0.965	mg/Kg	0.0023	ND
	1,2-Dibromoethane	0.965	mg/Kg	0.0023	ND
	1,2-Dichlorobenzene	0.965	mg/Kg	0.0023	ND
	1,2-Dichloroethane	0.965	mg/Kg	0.0011	ND
	1,2-Dichloropropane	0.965	mg/Kg	0.0023	ND
	1,3-Dichlorobenzene	0.965	mg/Kg	0.0023	ND
	1,4-Dichlorobenzene	0.965	mg/Kg	0.0023	ND
	1,4-Dioxane	0.965	mg/Kg	0.11	ND
	2-Butanone	0.965	mg/Kg	0.0023	ND
	2-Hexanone	0.965	mg/Kg	0.0023	ND
	4-Methyl-2-pentanone	0.965	mg/Kg	0.0023	ND
	Acetone	0.965	mg/Kg	0.011	ND
	Benzene	0.965	mg/Kg	0.0011	ND
	Bromochloromethane	0.965	mg/Kg	0.0023	ND
	Bromodichloromethane	0.965	mg/Kg	0.0023	ND
	Bromoform	0.965	mg/Kg	0.0023	ND
	Bromomethane	0.965	mg/Kg	0.0023	ND
	Carbon disulfide	0.965	mg/Kg	0.0023	ND
	Carbon tetrachloride	0.965	mg/Kg	0.0023	ND
	Chlorobenzene	0.965	mg/Kg	0.0023	ND
	Chloroethane	0.965	mg/Kg	0.0023	ND
	Chloroform	0.965	mg/Kg	0.0023	ND
	Chloromethane	0.965	mg/Kg	0.0023	ND
	cis-1,2-Dichloroethene	0.965	mg/Kg	0.0023	ND
	cis-1,3-Dichloropropene	0.965	mg/Kg	0.0023	ND
	Cyclohexane	0.965	mg/Kg	0.0023	ND
	Dibromochloromethane	0.965	mg/Kg	0.0023	ND -
	Dichlorodifluoromethane	0.965	mg/Kg	0.0023	ND
	Ethylbenzene	0.965	mg/Kg	0.0011	ND
	Isopropylbenzene	0.965	mg/Kg	0.0011	ND
	m&p-Xylenes	0.965	mg/Kg	0.0011	ND
	Methyl Acetate	0.965	mg/Kg	0.0023	ND
	Methylcyclohexane	0.965	mg/Kg	0.0023	ND
	Methylene chloride	0.965	mg/Kg	0.0023	0.0057
	Methyl-t-butyl ether	0.965	mg/Kg	0.0011	ND
	o-Xylene	0.965	mg/Kg	0.0011	ND
	Styrene	0.965	mg/Kg	0.0023	ND
	Tetrachloroethene	0.965	mg/Kg	0.0023	ND
	Toluene	0.965	mg/Kg	0.0011	ND
	trans-1,2-Dichloroethene	0.965	mg/Kg	0.0023	ND
	trans-1,3-Dichloropropene	0.965	mg/Kg	0.0023	ND
	Trichloroethene	0.965	mg/Kg	0.0023	ND
	Trichlorofluoromethane	0.965	mg/Kg	0.0023	ND
	Vinyl chloride	0.965	mg/Kg	0.0023	ND
	THIS CHICHUC	0.900	myrry	0.0020	שוו

Lab#: AC77929-0	30 SampleID: SB-15-COMP				
TestGrou	p Analyte	DF	Units	MDL/PQL/RL	Result
AC77929-030	SB-15-COMP		Date C	ollected 4/2/2014	I
% Solids	SM2540G			-	
	% Solids	1	Percent		84
Chlorinat	ed Herbicides 8151				
	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Mercury	(Soil/Waste) 7471A				
	Mercury	1	mg/Kg	0.099	ND
Organosi	nlorine Pesticides 8081	•	99		
Organioci	Aldrin	1	mg/Kg	0.0060	ND
	Alpha-BHC	1	mg/Kg	0.0000	ND
	beta-BHC	1	mg/Kg	0.0012	ND
	Chlordane	1	mg/Kg	0.030	ND
	delta-BHC	1	mg/Kg	0.0060	ND
	Dieldrin	1	mg/Kg	0.0012	ND
	Endosulfan I	1	mg/Kg	0.0060	ND
	Endosulfan II	1	mg/Kg	0.0060	ND
	Endosulfan Sulfate	1	mg/Kg	0.0060	ND
	Endrin	1	mg/Kg	0.0060	ND
	Endrin Aldehyde	1	mg/Kg	0.0060	ND
	Endrin Ketone	1	mg/Kg	0.0060	ND
	gamma-BHC	1	mg/Kg	0.0012	ND
	Heptachlor	1	mg/Kg	0.0060	ND
	Heptachlor Epoxide	1	mg/Kg	0.0060	ND
	Methoxychlor	1	mg/Kg	0.0060	ND
	p,p'-DDD	1	mg/Kg	0.0030	ND
	p,p'-DDE	1	mg/Kg	0.0030	ND
	p,p'-DDT	1	mg/Kg	0.0030	ND
	Toxaphene	1	mg/Kg	0.030	ND
PCB 8082	!				
	Aroclor (Total)	1	mg/Kg	0.030	ND
	Aroclor-1016	1	mg/Kg	0.030	ND
	Aroclor-1221	1	mg/Kg	0.030	ND
	Aroclor-1232	1	mg/Kg	0.030	ND
	Aroclor-1242	1	mg/Kg	0.030	ND
	Aroclor-1248	1	mg/Kg	0.030	ND
	Aroclor-1254	1	mg/Kg	0.030	ND
	Aroclor-1260	1	mg/Kg	0.030	ND
	Aroclor-1262	1	mg/Kg	0.030	ND
	Aroclor-1268	1	mg/Kg	0.030	ND

p#: AC77929-030	SampleID: SB-15-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Organ	ics (no search) 8270	,		3400.40 (h)	
1,1	l'-Biphenyl	1	mg/Kg	0.040	ND
1,2	2,4,5-Tetrachlorobenzene	1	mg/Kg	0.040	ND
2,3	3,4,6-Tetrachlorophenol	1	mg/Kg	0.040	ND
	1,5-Trichlorophenol	1	mg/Kg	0.040	ND
	1,6-Trichlorophenol	1	mg/Kg	0.040	ND
	4-Dichlorophenol	1	mg/Kg	0.0099	ND
	I-Dimethylphenol	1	mg/Kg	0.0099	ND
	I-Dinitrophenol	1	mg/Kg	0.20	ND
	1-Dinitrotoluene	1	mg/Kg	0.040	ND
	3-Dinitrotoluene	1	mg/Kg	0.040	ND
•	Chloronaphthalene	1	mg/Kg	0.040	ND
	Chlorophenol	1	mg/Kg	0.040	ND
	Methylnaphthalene	1	mg/Kg	0.040	ND
	Methylphenol	1	mg/Kg	0.0099	ND
	Nitroaniline	1		0.040	
	Nitrophenol	1	mg/Kg		ND
	4-Methylphenol		mg/Kg	0.040	ND
	4-Metryphenor 3'-Dichlorobenzidine	1	mg/Kg	0.0099	ND
		1	mg/Kg	0.040	ND
	Nitroaniline	1	mg/Kg	0.040	ND
	3-Dinitro-2-methylphenol	1	mg/Kg	0.20	ND
	Bromophenyl-phenylether	1	mg/Kg	0.040	ND
	Chloro-3-methylphenol	1	mg/Kg	0.040	ND
	Chloroaniline	1	mg/Kg	0.019	ND
	Chlorophenyl-phenylether	1	mg/Kg	0.040	ND
	Vitroaniline	1	mg/Kg	0.040	ND
	Nitrophenol	1	mg/Kg	0.040	ND
	enaphthene	1	mg/Kg	0.040	ND
	enaphthylene	1	mg/Kg	0.040	ND
	etophenone	1	mg/Kg	0.040	ND
An	thracene	1	mg/Kg	0.040	0.099
	azine	1	mg/Kg	0.040	ND
	nzaldehyde	1	mg/Kg	0.040	ND
Ве	nzo[a]anthracene	1	mg/Kg	0.040	0.20
Ве	nzo[a]pyrene	1	mg/Kg	0.040	0.16
Ве	nzo[b]fluoranthene	1	mg/Kg	0.040	0.22
Be	nzo[g,h,i]perylerie	1	mg/Kg	0.040	0.11
Ве	nzo[k]fluoranthene	1	mg/Kg	0.040	0.063
bis	(2-Chloroethoxy)methane	1	mg/Kg	0.040	ND
bis	(2-Chloroethyl)ether	1	mg/Kg	0.0099	ND
bis	(2-Chloroisopropyl)ether	1	mg/Kg	0.040	ND
bis	(2-Ethylhexyl)phthalate	1	mg/Kg	0.040	ND
Bu	lylbenzylphthalate	1	mg/Kg	0.040	ND
Ca	prolactam	1	mg/Kg	0.040	ND
Ca	rbazole	1	mg/Kg	0.040	ND
Ch	rysene	1	mg/Kg	0.040	0.18
Dib	enzo[a,h]anthracene	1	mg/Kg	0.040	ND
	enzofuran	1	mg/Kg	0.0099	0.028
	thylphthalate	1	mg/Kg	0.040	ND
	nethylphthalate	1	mg/Kg	0.040	ND
	n-butylphthalate	1	mg/Kg	0.020	ND
	n-octylphthalate	1	mg/Kg	0.040	ND ND
	oranthene	1		0.040	
	orene	1	mg/Kg mg/Kg		0.38
	kachlorobenzene		mg/Kg	0.040	0.046
		1	mg/Kg	0.040	ND
He	cachlorobutadiene	1	mg/Kg	0.040	ND

o#: AC77929-030	SampleID: SB-15-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.20	ND
	Hexachloroethane	1	mg/Kg	0.040	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.040	0.10
	Isophorone	1	mg/Kg	0.040	ND:
	Naphthalene	. 1	mg/Kg	0.0099	0.023
	Nitrobenzene	1	mg/Kg	0.040	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0099	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.040	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.040	0.43
	Phenol	1	mg/Kg	0.040	ND
	Pyrene	1	mg/Kg	0.040	0.38
TAL Metals 60	010				
	Aluminum	1	mg/Kg	240	4000
	Arsenic	1	mg/Kg	4.8	ND
	Barium	1	mg/Kg	12	23
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	6.0	20
	Cobalt	1	mg/Kg	3.0	ND
	Copper	1	mg/Kg	6.0	18
	Iron	1	mg/Kg	240	6500
	Lead	1	mg/Kg	6.0	54
	Magnesium	1	mg/Kg	600	1500
	Manganese	1	mg/Kg	12	75
	Nickel	1	mg/Kg	6.0	9.4
	Potassium	1	mg/Kg	600	ND
•	Sodium	1	mg/Kg	300	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	ND
	Zinc	1	mg/Kg	12	39
TAL Metals 6	020				
	Antimony	1	mg/Kg	0.95	ND
	Beryllium	1	mg/Kg	0.24	ND
	Cadmium	1	mg/Kg	0.48	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

Lab#: SampleID: SB-16-9.5-10.0 AC77929-031 **TestGroup** DF Analyte MDL/PQL/RL Units Result SB-16-9.5-10.0 Date Collected AC77929-031 4/1/2014 % Solids SM2540G 1 86 % Solids Percent

ab#: AC77929-031	SampleID: SB-16-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Volatile Organics	(no search) 8260				
1	I,1,1-Trichloroethane	0.978	mg/Kg	0.0023	ND
1	I,1,2,2-Tetrachloroethane	0.978	mg/Kg	0.0023	ND
1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.978	mg/Kg	0.0023	ND
1	I,1,2-Trichloroethane	0.978	mg/Kg	0.0023	ND
1	I,1-Dichloroethane	0.978	mg/Kg	0.0023	ND
1	I,1-Dichloroethene	0.978	mg/Kg	0.0023	ND
1	1,2,3-Trichlorobenzene	0.978	mg/Kg	0.0023	ND
1	1,2,4-Trichlorobenzene	0.978	mg/Kg	0.0023	ND
1	1,2-Dibromo-3-chloropropane	0.978	mg/Kg	0.0023	ND
· 1	1,2-Dibromoethane	0.978	mg/Kg	0.0023	ND
1	1,2-Dichlorobenzene	0.978	mg/Kg	0.0023	ND
1	1,2-Dichloroethane	0.978	mg/Kg	0.0011	ND
1	I,2-Dichloropropane	0.978	mg/Kg	0.0023	ND
	I,3-Dichlorobenzene	0.978	mg/Kg	0.0023	ND
	I,4-Dichlorobenzene	0.978	mg/Kg	0.0023	ND
	I,4-Dioxane	0.978	mg/Kg	0.11	ND
	2-Butanone	0.978	mg/Kg	0.0023	ND
2	2-Hexanone	0.978	mg/Kg	0.0023	ND
	I-Methyl-2-pentanone	0.978	mg/Kg	0.0023	ND
	Acetone	0.978	mg/Kg	0.011	ND
E	Benzene	0.978	mg/Kg	0.0011	ND
E	Bromochloromethane	0.978	mg/Kg	0.0023	ND
	Bromodichloromethane	0.978	mg/Kg	0.0023	ND
	Bromoform	0.978	mg/Kg	0.0023	ND
	Bromomethane	0.978	mg/Kg	0.0023	ND
	Carbon disulfide	0.978	mg/Kg	0.0023	ND
	Carbon tetrachloride	0.978	mg/Kg	0.0023	ND
	Chlorobenzene	0.978	mg/Kg	0.0023	ND
	Chloroethane	0.978	mg/Kg	0.0023	ND
	Chloroform	0.978	mg/Kg	0.0023	ND
	Chloromethane	0.978	mg/Kg	0.0023	ND
	sis-1,2-Dichloroethene	0.978	mg/Kg	0.0023	ND
	cis-1,3-Dichloropropene	0.978	mg/Kg	0.0023	ND
	Cyclohexane	0.978	mg/Kg	0.0023	ND
	Dibromochloromethane	0.978	mg/Kg	0.0023	ND
	Dichlorodifluoromethane	0.978	mg/Kg	0.0023	ND
	Ethylbenzene	0.978	mg/Kg	0.0011	ND
	sopropylbenzene	0.978	mg/Kg	0.0011	ND
	n&p-Xylenes	0.978	mg/Kg	0.0011	ND
	Methyl Acetate	0.978	mg/Kg	0.0023	ND
	Methylcyclohexane	0.978	mg/Kg	0.0023	ND
	Methylene chloride	0.978	mg/Kg	0.0023	0.0095
	Methyl-t-butyl ether	0.978	mg/Kg	0.0011	ND
	-Xylene	0.978	mg/Kg	0.0011	ND
	Styrene	0.978	mg/Kg	0.0023	ND
	Tetrachloroethene	0.978	mg/Kg	0.0023	ND
	Toluene	0.978	mg/Kg	0.0011	ND
	raris-1,2-Dichloroethene	0.978	mg/Kg	0.0023	ND
	rans-1,3-Dichloropropene	0.978	mg/Kg	0.0023	ND
	Frichloroethene	0.978	mg/Kg	0.0023	ND
	Trichlorofluoromethane	0.978	mg/Kg	0.0023	ND
•					
1	/inyl chloride	0.978	mg/Kg	0.0023	ND

#: AC77929-032	SampleID: SB-16-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
77929-032	SB-16-COMP		Date C	ollected 4/1/2014	
% Solids SM2	540G				_
	% Solids	1	Percent		85
Chlorinated H	lerbicides 8151				
Omormated in	2,4,5-T	1	mg/Kg	0.012	ND
	2,4-D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Moreum (Soil	Waste) 7471A	•	33		
Mercury (501	Mercury	1	mg/Kg	0.098	ND
Oblasi	•	•	99	0.000	.,_
Organochiofi	ne Pesticides 8081 Aldrin	1	mg/Kg	0.0059	ND
	Alpha-BHC	1	mg/Kg	0.0039	ND
	beta-BHC	1	mg/Kg	0.0012	ND
	Chlordane	1	mg/Kg	0.029	ND
	delta-BHC	1	mg/Kg	0.0059	ND
	Dieldrin	1	mg/Kg	0.0039	ND
	Endosulfan I	1	mg/Kg	0.0012	ND
	Endosulfan II	1	mg/Kg	0.0059	ND
	Endosulfan Sulfate	1	mg/Kg	0.0059	ND
	Endrin	1	mg/Kg	0.0059	ND
	Endrin Aldehyde	1	mg/Kg	0.0059	ND
	Endrin Ketone	1	mg/Kg	0.0059	ND
	gamma-BHC	1	mg/Kg	0.0038	ND
	Heptachlor	1	mg/Kg	0.0059	ND
	Heptachlor Epoxide	1	mg/Kg	0.0059	ND
	Methoxychlor	1	mg/Kg	0.0059	ND
	p,p'-DDD	1	mg/Kg	0.0029	ND
	p,p'-DDE	1	mg/Kg	0.0029	ND
	p,p'-DDT	1	mg/Kg	0.0029	ND
	Toxaphene	i 1	mg/Kg	0.029	ND
DCD 9093		•	99	5.425	
PCB 8082	Aradar (Tatal)	1	malVa	0.029	ND
	Aroclor (Total) Aroclor-1016		mg/Kg	0.029	ND
	Aroclor-1221	. 1 1	mg/Kg mg/Kg	0.029	ND
	Aroclor-1232	1	mg/Kg	0.029	ND
	Aroclor-1242	1	mg/Kg	0.029	ND
	Aroclor-1248	1	mg/Kg	0.029	ND
	Aroclor-1254	1	mg/Kg	0.029	ND
	Aroclor-1260	1	mg/Kg	0.029	ND
	Aroclor-1262	1	mg/Kg	0.029	ND
	Aroclor-1268	1	mg/Kg	0.029	ND

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Lab#: AC77929-032	SampleID: SB-16-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Org	ganics (no search) 8270				
	1,1'-Biphenyl	1	mg/Kg	0.039	ND
	1,2,4,5-Tetrachiorobenzene	1	mg/Kg	0.039	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.039	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.039	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.039	ND
	2,4-Dichlorophenol	1	mg/Kg	0.0098	ND
	2,4-Dimethylphenol	1	mg/Kg	0.0098	ND
	2,4-Dinitrophenol	1	mg/Kg	0.20	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.039	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.039	ND
	2-Chloronaphthalene	1	mg/Kg	0.039	ND
	2-Chlorophenol	1	mg/Kg	0.039	ND
	2-Methylnaphthalene	1	mg/Kg	0.039	ND
	2-Methylphenol	1	mg/Kg	0.0098	ND
	2-Nitroaniline	1	mg/Kg	0.039	ND
	2-Nitrophenol	1	mg/Kg	0.039	ND
	3&4-Methylphenol	1	mg/Kg	0.0098	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.039	ND
	3-Nitroaniline	1	mg/Kg	0.039	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.20	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.039	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.039	ND
	4-Chloroaniline	1	mg/Kg	0.019	ND
	4-Chlorophenyl-phenylether	1	mg/Kg	0.039	ND
	4-Nitroaniline	1	mg/Kg	0.039	ND
	4-Nitrophenol	1	mg/Kg	0.039	ND
	Acenaphthene	1	mg/Kg	0.039	ND
	Acenaphthylene	1	mg/Kg	0.039	ND
	Acetophenone	1	mg/Kg	0.039	ND
	Anthracene	1	mg/Kg	0.039	ND
	Atrazine	1	mg/Kg	0.039	ND
	Benzaldehyde	1	mg/Kg	0.039	ND
	Benzo[a]anthracene	1	mg/Kg	0.039	ND
	Benzo[a]pyrene	1	mg/Kg	0.039	ND
	Benzo[b]fluoranthene	1	mg/Kg	0.039	ND
	Benzo[g,h,i]perylene	1	mg/Kg	0.039	ND
	Benzo[k]fluoranthene	1	mg/Kg	0.039	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.039	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.0098	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.039	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.039	ND
	Butylbenzylphthalate	1 .	mg/Kg	0.039	ND
	Caprolactam	1	mg/Kg	0.039	ND
	Carbazole	1	mg/Kg	0.039	ND
	Chrysene	1	mg/Kg	0.039	ND
	Dibenzo[a,h]anthracene	1	mg/Kg	0.039	ND
	Dibenzofuran	1	mg/Kg	0.0098	ND
	Diethylphthalate	1	mg/Kg	0.039	ND
	Dimethylphthalate	1	mg/Kg	0.039	ND
	Di-n-butylphthalate	1	mg/Kg	0.020	ND
	Di-n-octylphthalate	1	mg/Kg	0.039	ND
	Fluoranthene	1	mg/Kg	0.039	ND
	Fluorene	1	mg/Kg	0.039	ND
	Hexachlorobenzene	1	mg/Kg	0.039	ND
	Hexachlorobutadiene	1	mg/Kg	0.039	ND

b#: AC77929-032	SampleID: SB-16-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.20	ND
	Hexachloroethane	1	mg/Kg	0.039	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.039	ND
	Isophorone	1	mg/Kg	0.039	ND
	Naphthalene	1	mg/Kg	0.0098	ND
	Nitrobenzene	1	mg/Kg	0.039	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0098	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.039	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.039	ND
	Phenol	1	mg/Kg	0.039	ND
	Pyrene	1	mg/Kg	0.039	ND
TAL Metals 60	010				
	Aluminum	1 .	mg/Kg	240	4500
	Arsenic	1	mg/Kg	4.7	ND
	Barium	1	mg/Kg	12	13
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	5.9	8.4
	Cobalt	1	mg/Kg	2.9	3.0
	Copper	1	mg/Kg	5.9	6.3
	Iron	1	mg/Kg	240	8000
	Lead	1	mg/Kg	5.9	ND
	Magnesium	1	mg/Kg	590	1600
	Manganese	1	mg/Kg	12	150
	Nickel	1	mg/Kg	5.9	11
	Potassium	1	mg/Kg	590	ND
	Sodium	1	mg/Kg	290	ND
	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1 ,	mg/Kg	12	14
	Zinc	1	mg/Kg	12	19
TAL Metals 6					
	Antimony	1	mg/Kg	0.94	ND
	Beryllium	1	mg/Kg	0.24	ND
	Cadmium	1	mg/Kg	0.47	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

Lab#: AC77929-033 SampleID: SB-17-9.5-10.0 TestGroup Analyte DF Units MDL/PQL/RL Result AC77929-033 SB-17-9.5-10.0 Date Collected 3/28/2014 % Solids SM2540G % Solids 1 Percent 87

77929-033	SampleID: SB-17-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Volatile Organi	ics (no search) 8260				
	1,1,1-Trichloroethane	0.919	mg/Kg	0.0021	ND
	1,1,2,2-Tetrachloroethane	0.919	mg/Kg	0.0021	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.919	mg/Kg	0.0021	ND
	1,1,2-Trichloroethane	0.919	mg/Kg	0.0021	ND
	1,1-Dichloroethane	0.919	mg/Kg	0.0021	ND
	1,1-Dichloroethene	0.919	mg/Kg	0.0021	ND
	1,2,3-Trichlorobenzene	0.919	mg/Kg	0.0021	ND
	1,2,4-Trichlorobenzene	0.919	mg/Kg	0.0021	ND
	1,2-Dibromo-3-chloropropane	0.919	mg/Kg	0.0021	ND
	1,2-Dibromoethane	0.919	mg/Kg	0.0021	ND
	1,2-Dichlorobenzene	0.919	mg/Kg	0.0021	ND
	1,2-Dichloroethane	0.919	mg/Kg	0.0011	ND
	1,2-Dichloropropane	0.919	mg/Kg	0.0021	ND
	1,3-Dichlorobenzene	0.919	mg/Kg	0.0021	ND
	1,4-Dichlorobenzene	0.919	mg/Kg	0.0021	ND
	1,4-Dichlorobenzene 1,4-Dioxane	0.919		0.0021	ND
	1,4-Dioxane 2-Butanone	0.919	mg/Kg mg/Kg	0.11	ND
		0.919 0.919	mg/Kg	0.0021	ND
	2-Hexanone		mg/Kg		
	4-Methyl-2-pentanone	0.919	mg/Kg	0.0021	ND
	Acetone	0.919	mg/Kg	0.011	ND
	Benzene	0.919	mg/Kg	0.0011	ND
	Bromochloromethane	0.919	mg/Kg	0.0021	ND
	Bromodichloromethane	0.919	mg/Kg	0.0021	ND
	Bromoform	0.919	mg/Kg	0.0021	ND
	Bromomethane	0.919	mg/Kg	0.0021	ND
	Carbon disulfide	0.919	mg/Kg	0.0021	ND
	Carbon tetrachloride	0.919	mg/Kg	0.0021	ND
	Chlorobenzene	0.919	mg/Kg	0.0021	ND
	Chloroethane	0.919	mg/Kg	0.0021	ND
	Chloroform	0.919	mg/Kg	0.0021	ND
	Chloromethane	0.919	mg/Kg	0.0021	ND
	cis-1,2-Dichloroethene	0.919	mg/Kg	0.0021	ND
	cis-1,3-Dichioropropene	0.919	mg/Kg	0.0021	ND
	Cyclohexane	0.919	mg/Kg	0.0021	ND
	Dibromochloromethane	0.919	mg/Kg	0.0021	ND
	Dichlorodifluoromethane	0.919	mg/Kg	0.0021	ND
	Ethylbenzene	0.919	mg/Kg	0.0011	ND
	Isopropylbenzene	0.919	mg/Kg	0.0011	ND
	m&p-Xylenes	0.919	mg/Kg	0.0011	ND
	Methyl Acetate	0.919	mg/Kg	0.0021	ND
	Methylcyclohexane	0.919	mg/Kg	0.0021	ND
	Methylene chloride	0.919	mg/Kg	0.0021	0.0045
	Methyl-t-butyl ether	0.919		0.0021	0.0045 ND
			mg/Kg		ND
	o-Xylene Shrana	0.919	mg/Kg	0.0011	
	Styrene	0.919	mg/Kg	0.0021	ND ND
	Tetrachloroethene	0.919	mg/Kg	0.0021	ND
	Toluene	0.919	mg/Kg	0.0011	ND
	trans-1,2-Dichloroethene	0.919	mg/Kg	0.0021	ND
	trans-1,3-Dichloropropene	0.919	mg/Kg	0.0021	ND
	Trichloroethene	0.919	mg/Kg	0.0021	ND
	Trichlorofluoromethane	0.919	mg/Kg	0.0021	ND
	Vinyl chloride	0.919	mg/Kg	0.0021	ND
	Xylenes (Total)	0.919	mg/Kg	0.0011	ND

Lab#: AC77929-034	SampleID: SB-17-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77929-034	SB-17-COMP		Date C	ollected 3/28/2014	
% Solids SM2	540G				_
	% Solids	1	Percent		88
Chlorinated H	erbicides 8151				
Omorniaco n	2,4,5-T	1	mg/Kg	0.011	ND
	2,4-D	1	mg/Kg	0.011	ND
	Dicamba	1	mg/Kg	0.011	ND
	Silvex	1	mg/Kg	0.011	ND
Marcuny (Soil	Waste) 7471A				
Welculy (50)	Mercury	1	mg/Kg	0.095	ND
<u> </u>	•	•	mg/Ng	0.080	NU
Organochiorii	ne Pesticides 8081			0.0057	MD
	Alcho Buc	1	mg/Kg	0.0057	ND
	Alpha-BHC	1	mg/Kg	0.0011	ND
	beta-BHC	1	mg/Kg	0.0011	ND
	Chlordane	1	mg/Kg	0.028	ND
	delta-BHC Dieldrin	1	mg/Kg	0.0057	ND
			mg/Kg	0.0011	ND
	Endosulfan i	1	mg/Kg	0.0057	ND
	Endosulfan il	1	mg/Kg	0.0057	ND
	Endosulfan Sulfate	1	mg/Kg	0.0057	ND
	Endrin	1	mg/Kg	0.0057	ND
	Endrin Aldehyde	1	mg/Kg	0.0057	ND
	Endrin Ketone	1	mg/Kg	0.0057	ND
	gamma-BHC	1	mg/Kg	0.0011	ND
	Heptachlor	1	mg/Kg	0.0057	ND
	Heptachlor Epoxide	1	mg/Kg	0.0057	ND
	Methoxychlor	1	mg/Kg	0.0057	ND
	p,p'-DDD	1	mg/Kg	0.0028 0.0028	ND
	p,p'-DDE	1	mg/Kg	0.0028	ND ND
	p,p'-DDT Toxaphene	1	mg/Kg mg/Kg	0.028	ND
	1 Oxaphene	•	mg/Ng	0.020	ND
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.028	ND
	Aroclor-1016	1	mg/Kg	0.028	ND
	Aroclor-1221	1	mg/Kg	0.028	ND
	Aroclor-1232	1	mg/Kg	0.028	ND
	Aroclor-1242	1	mg/Kg	0.028	ND
	Aroclor-1248	1	mg/Kg	0.028	ND
	Aroclor-1254	1	mg/Kg	0.028	ND
	Aroclor-1260	1	mg/Kg	0.028	ND
	Aroclor-1262	1	mg/Kg	0.028	ND
	Aroclor-1268	1	mg/Kg	0.028	ND

Lab#: AC77929-034	SampleID: SB-17-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Org	anics (no search) 8270				
	1,1'-Biphenyl	1	mg/Kg	0.038	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.038	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.038	0.19
	2,4,5-Trichlorophenol	1	mg/Kg	0.038	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.038	ND
	2,4-Dichlorophenol	1	mg/Kg	0.0095	ND
	2,4-Dimethylphenol	1	mg/Kg	0.0095	ND
	2,4-Dinitrophenol	1	mg/Kg	0.19	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.038	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.038	ND
	2-Chloronaphthalene	1	mg/Kg	0.038	ND
	2-Chlorophenol	1	mg/Kg	0.038	ND
	2-Methylnaphthalene	1	mg/Kg	0.038	ND
	2-Methylphenol	1	mg/Kg	0.0095	ND
	2-Nitroaniline	1	mg/Kg	0.038	ND
	2-Nitrophenol	1	mg/Kg	0.038	ND
	3&4-Methylphenol	1	mg/Kg	0.0095	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.038	ND
	3-Nitroaniline	1	mg/Kg	0.038	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.19	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.038	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.038	ND
	4-Chloroaniline	1	mg/Kg	0.018	ND
	4-Chlorophenyl-phenylether	1	mg/Kg	0.038	ND
	4-Nitroaniline	1	mg/Kg	0.038	ND
	4-Nitrophenol	1	mg/Kg	0.038	ND
	Acenaphthene	1	mg/Kg	0.038	ND
	Acenaphthylene	1	mg/Kg	0.038	ND
	Acetophenone	1	mg/Kg	0.038	ND
	Anthracene	1	mg/Kg	0.038	0.043
	Atrazine Benzaldehyde	1	mg/Kg	0.038	ND ND
	-	1 1	mg/Kg mg/Kg	0.038	ND 0.14
	Benzo[a]anthracene	1	mg/Kg	0.038 0.038	0.14
	Benzo[a]pyrene Benzo[b]fluoranthene	1	mg/Kg	0.038	0.12
	Benzo[g,h,i]perylene	1	mg/Kg mg/Kg	0.038	0.18
	Benzo[k]fluoranthene	1	mg/Kg	0.038	0.061
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.038	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.0095	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.038	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.038	ND
	Butylbenzylphthalate	1	mg/Kg	0.038	ND
	Caprolactam	1	mg/Kg	0.038	ND
	Carbazole	1	mg/Kg	0.038	ND
	Chrysene	1	mg/Kg	0.038	0.12
	Dibenzo[a,h]anthracene	1	mg/Kg	0.038	ND
	Dibenzofuran	1	mg/Kg	0.0095	ND
	Diethylphthalate	1	mg/Kg	0.038	ND
	Dimethylphthalate	1	mg/Kg	0.038	ND
	Di-n-butylphthalate	1	mg/Kg	0.019	ND
	Di-n-octylphthalate	1	mg/Kg	0.038	ND
	Fluoranthene	1	mg/Kg	0.038	0.27
	Fluorene	1	mg/Kg	0.038	ND
	Hexachlorobenzene	1	mg/Kg	0.038	ND
	Hexachlorobutadiene		mg/Kg	0.038	

		<u> </u>			
.ab#: AC77929-034	SampleID: SB-17-COMP			,	
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.19	ND
	Hexachloroethane	1	mg/Kg	0.038	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.038	0.076
	Isophorone	1	mg/Kg	0.038	ND
	Naphthalene	1	mg/Kg	0.0095	ND
	Nitrobenzene	1	mg/Kg	0.038	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0095	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.038	ND
	Pentachlorophenol	1	mg/Kg	0.19	0.32
	Phenanthrene	1	mg/Kg	0.038	0.18
	Phenol	1	mg/Kg	0.038	ND
	Pyrene	1	mg/Kg	0.038	0.25
TAL Metals 60	010				
	Aluminum	1	mg/Kg	230	4600
	Arsenic	1	mg/Kg	4.5	ND
	Barium	1	mg/Kg	11	21
	Calcium	1	mg/Kg	1100	ND
	Chromium	1	mg/Kg	5.7	9.3
	Cobalt	1	mg/Kg	2.8	4.0
	Copper	1	mg/Kg	5.7	10
	Iron	1	mg/Kg	230	9500
	Lead	1	mg/Kg	5.7	9.5
	Magnesium	1	mg/Kg	570	2100
	Manganese	1	mg/Kg	11	190
	Nickel	1	mg/Kg	5.7	17
	Potassium	1	mg/Kg	570	ND
	Sodium	1	mg/Kg	280	ND
	Thallium	1	mg/Kg	1.7	ND
	Vanadium	1	mg/Kg	11	12
	Zinc	1	mg/Kg	11	35
TAL Metals 60)20				
	Antimony	1	mg/Kg	0.91	ND
	Beryllium	1	mg/Kg	0.23	ND
	Cadmium	1	mg/Kg	0.45	ND
	Selenium	1	mg/Kg	2.3	ND
	Silver	1	mg/Kg	0.23	ND

Lab#: AC77929-035 SampleID: SB-18-9.5-10.0 DF MDL/PQL/RL TestGroup Analyte Units Result Date Collected SB-18-9.5-10.0 3/28/2014 AC77929-035 % Solids SM2540G 84 % Solids 1 Percent

Lab#: AC77929-035	SampleID: SB-18-9.5-10.0				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organ	ics (no search) 8260	-			
	1,1,1-Trichloroethane	0.938	mg/Kg	0.0022	ND
	1,1,2,2-Tetrachloroethane	0.938	mg/Kg	0.0022	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.938	mg/Kg	0.0022	ND
	1,1,2-Trichloroethane	0.938	mg/Kg	0.0022	ND
	1,1-Dichloroethane	0.938	mg/Kg	0.0022	ND
	1,1-Dichloroethene	0.938	mg/Kg	0.0022	ND
	1,2,3-Trichlorobenzene	0.938	mg/Kg	0.0022	ND
	1,2,4-Trichlorobenzene	0.938	mg/Kg	0.0022	ND
	1,2-Dibromo-3-chloropropane	0.938	mg/Kg	0.0022	ND
	1,2-Dibromoethane	0.938	mg/Kg	0.0022	ND
	1,2-Dichlorobenzene	0.938	mg/Kg	0.0022	ND
	1,2-Dichloroethane	0.938	mg/Kg	0.0011	ND
	1,2-Dichloropropane	0.938	mg/Kg	0.0022	ND
	1,3-Dichlorobenzene	0.938	mg/Kg	0.0022	ND
	1,4-Dichlorobenzene	0.938	mg/Kg	0.0022	ND
	1,4-Dioxane	0.938	mg/Kg	0.11	ND
	2-Butanone	0.938	mg/Kg	0.0022	ND
	2-Hexanone	0.938	mg/Kg	0.0022	ND
	4-Methyl-2-pentanone	0.938	mg/Kg	0.0022	ND
	Acetone	0.938	mg/Kg	0.011	ND
	Benzene	0.938	mg/Kg	0.0011	ND
	Bromochloromethane	0.938	mg/Kg	0.0022	ND
	Bromodichloromethane	0.938	mg/Kg	0.0022	ND
	Bromoform	0.938	mg/Kg	0.0022	ND
	Bromomethane	0.938	mg/Kg	0.0022	ND
	Carbon disulfide	0.938	mg/Kg	0.0022	ND
	Carbon tetrachloride	0.938	mg/Kg	0.0022	ND
	Chlorobenzene	0.938	mg/Kg	0.0022	ND
	Chloroethane	0.938	mg/Kg	0.0022	ND
	Chloroform	0.938	mg/Kg	0.0022	ND
	Chloromethane	0.938	mg/Kg	0.0022	ND
	cis-1,2-Dichloroethene	0.938	mg/Kg	0.0022	ND
	cis-1,3-Dichloropropene	0.938	mg/Kg	0.0022	ND
	Cyclohexane	0.938	mg/Kg	0.0022	ND
	Dibromochloromethane	0.938			
	Dichlorodifluoromethane	0.938	mg/Kg mg/Kg	0.0022 0.0022	ND ND
	Ethylbenzene	0.938	mg/Kg	0.0022	ND
	Isopropylbenzene	0.938	mg/Kg	0.0011	
	m&p-Xylenes	0.938	mg/Kg	0.0011	ND ND
	Methyl Acetate	0.938			
	Methylcyclohexane		mg/Kg	0.0022	ND
	Methylene chloride	0.938	mg/Kg	0.0022	ND
	•	0.938	mg/Kg	0.0022	0.0037
	Methyl-t-butyl ether	0.938	mg/Kg	0.0011	ND
	o-Xylene	0.938	mg/Kg	0.0011	ND
	Styrene	0.938	mg/Kg	0.0022	ND
	Tetrachloroethene	0.938	mg/Kg	0.0022	ND
	Toluene	0.938	mg/Kg	0.0011	ND
	trans-1,2-Dichloroethene	0.938	mg/Kg	0.0022	ND
	trans-1,3-Dichloropropene	0.938	mg/Kg	0.0022	ND
	Trichloroethene	0.938	mg/Kg	0.0022	ND
	Trichlorofluoromethane	0.938	mg/Kg	0.0022	ND
	Vinyl chloride	0.938	mg/Kg	0.0022	ND
	Xylenes (Total)	0.938	mg/Kg	0.0011	ND

b#: AC77929-036	SampleID: SB-18-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu
C77929-036	SB-18-COMP		Date C	ollected 3/28/2014	
% Solids SM2	540G				
	% Solids	1	Percent		86
Chlorinated H	erbicides 8151				
	2,4,5-T	1	mg/Kg	0.012	ND
	2, 4- D	1	mg/Kg	0.012	ND
	Dicamba	1	mg/Kg	0.012	ND
	Silvex	1	mg/Kg	0.012	ND
Mercury (Soil	/Waste) 7471A				
morodry (oon	Mercury	1	mg/Kg	0.097	ND
Organochlori	ne Pesticides 8081	•			
Organicinion	Aldrin	1	mg/Kg	0.0058	ND
	Alpha-BHC	1	mg/Kg	0.0012	ND
	beta-BHC	1	mg/Kg	0.0012	ND
	Chlordane	1	mg/Kg	0.029	ND
	delta-BHC	1	mg/Kg	0.0058	ND
	Dieldrin	1	mg/Kg	0.0012	ND
	Endosulfan I	1	mg/Kg	0.0058	ND
	Endosulfan II	1	mg/Kg	0.0058	ND
	Endosulfan Sulfate	1	mg/Kg	0.0058	ND
	Endrin	1	mg/Kg	0.0058	ND
	Endrin Aldehyde	1	mg/Kg	0.0058	ND
	Endrin Ketone	1	mg/Kg	0.0058	ND
	gamma-BHC	1	mg/Kg	0.0012	ND
	Heptachlor	1	mg/Kg	0.0058	ND
	Heptachlor Epoxide	1	mg/Kg	0.0058	ND
	Methoxychlor	1	mg/Kg	0.0058	ND
	p,p'-DDD	1	mg/Kg	0.0029	ND
	p,p'-DDE	1	mg/Kg	0.0029	ND
	p,p'-DDT	1	mg/Kg	0.0029	ND
	Toxaphene	1	mg/Kg	0.029	ND
PCB 8082	· · · · · · · · · · · · · · · · · · ·	-		***-*	
PCB 0002	Aroclor (Total)	1	mg/Kg	0.029	ND
	· · ·	4		0.029	ND
	Aroclor-1016 Aroclor-1221	1	mg/Kg mg/Kg	0.029	ND
	Aroclor-1232	1	mg/Kg	0.029	ND
	Aroclor-1232 Aroclor-1242	1	mg/Kg	0.029	ND
	Aroclor-1248	1	mg/Kg	0.029	ND
	Aroclor-1254	1	mg/Kg	0.029	ND
	Aroclor-1260	1	mg/Kg	0.029	ND
	Arocior-1260 Arocior-1262		mg/Kg	0.029	ND
	Aroclor-1268	1 1	mg/Kg mg/Kg	0.029	ND

Lab#: AC77929-036	. SampleID: SB-18-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Organ	nics (no search) 8270				
1,	1'-Biphenyl	1	mg/Kg	0.039	ND
1,	2,4,5-Tetrachlorobenzene	1	mg/Kg	0.039	ND
2,	3,4,6-Tetrachlorophenol	1	mg/Kg	0.039	ND
2,	4,5-Trichlorophenol	1	mg/Kg	0.039	ND
2,	4,6-Trichlorophenol	1	mg/Kg	0.039	ND
2,	4-Dichlorophenol	1	mg/Kg	0.0097	ND
2,	4-Dimethylphenol	1	mg/Kg	0.0097	ND
2,	4-Dinitrophenol	1	mg/Kg	0.19	ND
2,	4-Dinitrotoluene	1	mg/Kg	0.039	ND
2,	6-Dinitrotoluene	1	mg/Kg	0.039	ND
2-	Chloronaphthalene	1	mg/Kg	0.039	ND
2-	Chlorophenol	1	mg/Kg	0.039	ND
2-	Methylnaphthalene	1	mg/Kg	0.039	ND
2-	Methylphenol	1	mg/Kg	0.0097	ND
2-	Nitroaniline	1	mg/Kg	0.039	ND
2-	Nitrophenol	1	mg/Kg	0.039	ND
38	&4-Methylphenol	1	mg/Kg	0.0097	ND
3,	3'-Dichlorobenzidine	1	mg/Kg	0.039	ND
3-	Nitroaniline	1	mg/Kg	0.039	ND
4,	6-Dinitro-2-methylphenol	1	mg/Kg	0.19	ND
4-	Bromophenyl-phenylether	, 1	mg/Kg	0.039	ND
4-	Chloro-3-methylphenol	1	mg/Kg	0.039	ND
4-	Chloroaniline	1	mg/Kg	0.018	ND
4-	Chlorophenyl-phenylether	1	mg/Kg	0.039	ND
4-	Nitroaniline	1	mg/Kg	0.039	ND
4-	Nitrophenol	1	mg/Kg	0.039	ND
Ac	cenaphthene	1	mg/Kg	0.039	ND
Ac	cenaphthylene	1	mg/Kg	0.039	ND
Ad	cetophenone	1	mg/Kg	0.039	ND
Ar	nthracene	1	mg/Kg	0.039	ND
At	razine	1	mg/Kg	0.039	ND
Be	enzaldehyde	1	mg/Kg	0.039	ND
B€	enzo[a]anthracene	1	mg/Kg	0.039	ND
Be	enzo[a]pyrene	1	mg/Kg	0.039	ND
Be	enzo[b]fluoranthene	1	mg/Kg	0.039	ND
Be	enzo[g,h,i]perylene	1	mg/Kg	0.039	ND
	enzo[k]fluoranthene	1	mg/Kg	0.039	ND
bis	s(2-Chloroethoxy)methane	1	mg/Kg	0.039	ND
bis	s(2-Chloroethyl)ether	1	mg/Kg	0.0097	ND
bis	s(2-Chloraisopropyl)ether	1	mg/Kg	0.039	ND
bis	s(2-Ethylhexyl)phthalate	1	mg/Kg	0.039	ND
В	utylbenzylphthalate	1	mg/Kg	0.039	ND
Ca	aprolactam	1	mg/Kg	0.039	ND
Ca	arbazole	1	mg/Kg	0.039	ND
CI	nrysene	1	mg/Kg	0.039	ND
Di	benzo[a,h]anthracene	1	mg/Kg	0.039	ND
Di	benzofuran	1	mg/Kg	0.0097	ND
	ethylphthalate	1	mg/Kg	0.039	ND
Di	methylphthalate	1	mg/Kg	0.039	ND
	-n-butylphthalate	1	mg/Kg	0.019	ND
Di	-n-octylphthalate	1	mg/Kg	0.039	ND
Fl	uoranthene	1	mg/Kg	0.039	ND
Fl	uorene	1	mg/Kg	0.039	ND
He	exachlorobenzene	1	mg/Kg	0.039	ND
LI,	exachlorobutadiene	1	mg/Kg	0.039	ND

b#: AC77929-036	SampleID: SB-18-COMP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.19	ND
	Hexachloroethane	1	mg/Kg	0.039	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.039	ND
	Isophorone	1	mg/Kg	0.039	ND
	Naphthalene	1	mg/Kg	0.0097	ND
	Nitrobenzene	1	mg/Kg	0.039	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.0097	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.039	ND
	Pentachlorophenol	1	mg/Kg	0.19	ND
	Phenanthrene	1	mg/Kg	0.039	ND
	Phenol	1	mg/Kg	0.039	ND
	Pyrene	1	mg/Kg	0.039	ND
TAL Metals 60	010				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Aluminum	1	mg/Kg	230	3800
	Arsenic	1	mg/Kg	4.7	ND
	Barium	1	mg/Kg	12	27
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	5.8	9.8
	Cobalt	1	mg/Kg	2.9	3.9
	Copper	1	mg/Kg	5.8	8.6
	Iron	1	mg/Kg	230	9300
	Lead	1	mg/Kg	5.8	ND
	Magnesium	1	mg/Kg	580	1800
	Manganese	1	mg/Kg	12	290
	Nickel	1	mg/Kg	5.8	19
	Potassium	1	mg/Kg	580	ND
	Sodium	1	mg/Kg	290	ND
	Thallium	1	mg/Kg	1.7	ND
	Vanadium	1	mg/Kg	12	16
	Zinc	1	mg/Kg	12	16
TAL Metals 60		-	J - J		
I AL MEIGIS OF	Antimony	1	mg/Kg	0.93	ND
	Beryllium	1	mg/Kg	0.23	ND
	Cadmium	1	mg/Kg	0.47	ND
	Selenium	1	mg/Kg	2.3	ND
	Silver	1	mg/Kg	0.23	ND

Veritech Project: 4040237

SB-15-9.5-10.0 DUP Lab#: SampleID: AC77929-037 **TestGroup** Analyte DF **Units** MDL/PQL/RL Result AC77929-037 SB-15-9.5-10.0 DUP Date Collected 4/2/2014 % Solids SM2540G % Solids 1 Percent 82

b#: AC77929-037	SampleID: SB-15-9.5-10.0 DUP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Volatile Organi	cs (no search) 8260				
	1,1,1-Trichloroethane	0.984	mg/Kg	0.0024	ND
	1,1,2,2-Tetrachloroethane	0.984	mg/Kg	0.0024	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.984	mg/Kg	0.0024	ND
	1,1,2-Trichloroethane	0.984	mg/Kg	0.0024	ND
	1,1-Dichloroethane	0.984	mg/Kg	0.0024	ND
	1,1-Dichloroethene	0.984	mg/Kg	0.0024	ND
	1,2,3-Trichlorobenzene	0.984	mg/Kg	0.0024	ND
	1,2,4-Trichlorobenzene	0.984	mg/Kg	0.0024	ND
	1,2-Dibromo-3-chloropropane	0.984	mg/Kg	0.0024	ND
	1,2-Dibromoethane	0.984	mg/Kg	0.0024	ND
	1,2-Dichlorobenzene	0.984	mg/Kg	0.0024	ND
	1,2-Dichloroethane	0.984	mg/Kg	0.0012	ND
	1,2-Dichloropropane	0.984	mg/Kg	0.0024	ND
	1,3-Dichlorobenzene	0.984	mg/Kg	0.0024	ND
	1,4-Dichlorobenzene	0.984	mg/Kg	0.0024	ND
	1,4-Dioxane	0.984	mg/Kg	0.12	ND
	2-Butanone	0.984	mg/Kg	0.0024	ND
	2-Hexanone	0.984	mg/Kg	0.0024	ND
	4-Methyl-2-pentanone	0.984	mg/Kg	0.0024	ND
	Acetone	0.984	mg/Kg	0.012	ND
	Benzene	0.984	mg/Kg	0.0012	ND
	Bromochloromethane	0.984	mg/Kg	0.0024	ND
	Bromodichloromethane	0.984	mg/Kg	0.0024	ND
	Bromoform	0.984	mg/Kg	0.0024	ND
	Bromomethane	0.984	mg/Kg	0.0024	ND
	Carbon disulfide	0.984	mg/Kg	0.0024	ND
	Carbon tetrachloride	0.984	mg/Kg	0.0024	ND
	Chlorobenzene	0.984	mg/Kg	0.0024	ND
	Chloroethane	0.984	mg/Kg	0.0024	ND
	Chloroform	0.984	mg/Kg	0.0024	ND
	Chloromethane	0.984	mg/Kg	0.0024	ND
	cis-1,2-Dichloroethene	0.984	mg/Kg	0.0024	ND
	cis-1,3-Dichloropropene	0.984	mg/Kg	0.0024	ND
	Cyclohexane	0.984	mg/Kg	0.0024	ND
	Dibromochloromethane	0.984	mg/Kg	0.0024	ND
	Dichlorodifluoromethane	0.984	mg/Kg	0.0024	ND
	Ethylbenzene	0.984	mg/Kg	0.0012	ND
	Isopropylbenzene	0.984	mg/Kg	0.0012	ND
	m&p-Xylenes	0.984	mg/Kg	0.0012	ND
	Methyl Acetate	0.984	mg/Kg	0.0024	ND
	Methylcyclohexane	0.984	mg/Kg	0.0024	ND
	Methylene chloride	0.984	mg/Kg	0.0024	0.0067
	Methyl-t-butyl ether	0.984	mg/Kg	0.0012	ND
	o-Xylene	0.984	mg/Kg	0.0012	ND
	Styrene	0.984	mg/Kg	0.0024	ND
	Tetrachioroethene	0.984	mg/Kg	0.0024	ND
	Toluene	0.984	mg/Kg	0.0012	ND
	trans-1,2-Dichloroethene	0.984	mg/Kg	0.0024	ND
	trans-1,3-Dichloropropene	0.984	mg/Kg	0.0024	ND
	Trichloroethene	0.984	mg/Kg	0.0024	ND
	Trichlorofluoromethane	0.984	mg/Kg	0.0024	ND
	Vinyl chloride	0.984	mg/Kg	0.0024	ND
	Xylenes (Total)	0.984	mg/Kg	0.0012	ND

Lab#:	AC77929-038	SampleID: SB-15-COMP-DUP				
	TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC7792	29-038	SB-15-COMP-DUP		Date C	ollected 4/2/2014	
	% Solids SM2	540G				•
		% Solids	1	Percent	*	81
	Chlorinated H	lerbicides 8151				
		2,4,5-T	1	mg/Kg	0.012	ND
		2,4-D	1	mg/Kg	0.012	ND
		Dicamba	1	mg/Kg	0.012	ND
		Silvex	1	mg/Kg	0.012	ND
	Mercury (Soil	Waste) 7471A				
	Mercury (301)	Mercury	1	mg/Kg	0.10	ND
		•	'	mg/Kg	0.10	ND
	Organochlorii	ne Pesticides 8081	4		0.000	ND
		Aldrin	1	mg/Kg	0.0062	ND
		Alpha-BHC	1	mg/Kg	0.0012	ND:
		beta-BHC	1	mg/Kg	0.0012	ND
		Chlordane	1	mg/Kg	0.031	ND
		delta-BHC	1	mg/Kg	0.0062	ND
		Dieldrin	1	mg/Kg	0.0012	ND
		Endosulfan I	1	mg/Kg	0.0062	ND
		Endosulfan II	1	mg/Kg	0.0062	ND
		Endosulfan Sulfate	1	mg/Kg	0.0062	ND
		Endrin	1	mg/Kg	0.0062	ND
		Endrin Aldehyde	1	mg/Kg	0.0062	ND
		Endrin Ketone	1	mg/Kg	0.0062	ND
		gamma-BHC	1	mg/Kg	0.0012	ND
		Heptachior	1	mg/Kg	0.0062	ND
		Heptachlor Epoxide	1	mg/Kg	0.0062	ND
		Methoxychlor	1	mg/Kg	0.0062	ND
		p,p'-DDD	1	mg/Kg	0.0031	ND
		p,p'-DDE	1	mg/Kg	0.0031	ND
		p,p'-DDT	1	mg/Kg	0.0031	0.0091
		Toxaphene	1	mg/Kg	0.031	ND
	PCB 8082			•		
		Aroclor (Total)	1	mg/Kg	0.031	ND
		Aroclor-1016	1	mg/Kg	0.031	ND
		Aroclor-1221	1	mg/Kg	0.031	ND
		Aroclor-1232	1	mg/Kg	0.031	ND
		Aroclor-1242	1	mg/Kg	0.031	ND
		Aroclor-1248	1	mg/Kg	0.031	ND
		Aroclor-1254	1	mg/Kg	0.031	ND
		Aroclor-1260	1	mg/Kg	0.031	ND
		Aroclor-1262	1	mg/Kg	0.031	ND
		Aroclor-1268	1	mg/Kg	0.031	ND

ab#: AC77929-038	SampleID: SB-15-COMP-DUP						
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul		
Semivolatile Org	anics (no search) 8270		ę.				
=	1,1'-Biphenyl	1	mg/Kg	0.041	ND		
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.041	ND		
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.041	ND		
	2,4,5-Trichlorophenol	1	mg/Kg	0.041	ND		
	2,4,6-Trichlorophenol	1	mg/Kg	0.041	ND		
	2,4-Dichlorophenol	1	mg/Kg	0.010	ND		
	2,4-Dimethylphenol	1	mg/Kg	0.010	ND		
		1		0.21	ND		
	2,4-Dinitrophenol		mg/Kg		ND		
	2,4-Dinitrotoluene	, 1	mg/Kg	0.041			
	2,6-Dinitrotoluene	1	mg/Kg	0.041	ND		
:	2-Chloronaphthalene	1	mg/Kg	0.041	ND		
2	2-Chlorophenol	1	mg/Kg	0.041	ND		
:	2-Methylnaphthalene	1	mg/Kg	0.041	0.29		
:	2-Methylphenol	1	mg/Kg	0.010	ND		
	2-Nitroaniline	1	mg/Kg	0.041	ND		
:	2-Nitrophenol	1	mg/Kg	0.041	ND		
;	3&4-Methylphenol	1	mg/Kg	0.010	ND		
	3,3'-Dichlorobenzidine	1	mg/Kg	0.041	ND		
	3-Nitroaniline	1	mg/Kg	0.041	ND		
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.21	ND.		
		1	mg/Kg	0.041	ND		
	4-Bromophenyl-phenylether	1	mg/Kg	0.041	ND		
	4-Chloro-3-methylphenol						
	4-Chloroaniline	1	mg/Kg	0.020	ND		
	4-Chlorophenyl-phenylether	1	mg/Kg	0.041	ND		
	4-Nitroaniline	1	mg/Kg	0.041	ND		
•	4-Nitrophenol	1	mg/Kg	0.041	ND		
	Acenaphthene	1	mg/Kg	0.041	0.26		
·	Acenaphthylene	1	mg/Kg	0.041	ND		
•	Acetophenone	1	mg/Kg	0.041	ND		
	Anthracene	1	mg/Kg	0.041	0.35		
	Atrazine	1	mg/Kg	0.041	ND		
	Benzaldehyde	1	mg/Kg	0.041	ND		
	Benzo[a]anthracene	1	mg/Kg	0.041	0.67		
	Benzo[a]pyrene	1	mg/Kg	0.041	0.57		
				0.041	0.57		
	Benzo[b]fluoranthene	1	mg/Kg	0.041	0.38		
	Benzo[g,h,i]perylene	-	mg/Kg				
	Benzo[k]fluoranthene	1	mg/Kg	0.041	0.20		
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.041	ND		
	bis(2-Chloroethyl)ether	1	mg/Kg	0.010	ND		
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.041	ND		
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.041	ND		
	Butylbenzylphthalate	1	mg/Kg	0.041	ND		
	Caprolactam	1	mg/Kg	0.041	ND		
	Carbazole	1	mg/Kg	0.041	ND		
	Chrysene	1	mg/Kg	0.041	0.73		
	Dibenzo[a,h]anthracene	1	mg/Kg	0.041	0.11		
	Dibenzofuran	1	mg/Kg	0.010	0.040		
	Diethylphthalate	1	mg/Kg	0.041	ND		
	Dimethylphthalate	1	mg/Kg	0.041	ND		
	• •	1	mg/Kg	0.021	ND		
	Di-n-butylphthalate	1		0.021	ND		
	Di-n-octylphthalate	1	mg/Kg				
	Fluoranthene	1	mg/Kg	0.041	1.1		
	Fluorene	1	mg/Kg	0.041	0.32		
	Hexachlorobenzene	1	mg/Kg	0.041	ND		
	Hexachlorobutadiene	1	mg/Kg	0.041	ND		

h#: AC77929-038	SampleID: SB-15-COMP-DUP				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.21	ND
	Hexachloroethane	1	mg/Kg	0.041	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.041	0.32
	Isophorone	1	mg/Kg	0.041	ND
	Naphthalene	1	mg/Kg	0.010	0.13
	Nitrobenzene	1	mg/Kg	0.041	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.010	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.041	ND
	Pentachiorophenol	1	mg/Kg	0.21	ND
	Phenanthrene	1	mg/Kg	0.041	1.9
	Phenol	1	mg/Kg	0.041	ND
	Pyrene	1	mg/Kg	0.041	1.7
TAL Metals 60	010				
	Aluminum	1	mg/Kg	250	5000
	Arsenic	1	mg/Kg	4.9	ND
	Barium	1	mg/Kg	12	35
	Calcium	1	mg/Kg	1200	ND
	Chromium	1	mg/Kg	6.2	10
	Cobait	1	mg/Kg	3.1	ND
	Copper	1	mg/Kg	6.2	11
	Iron	1	mg/Kg	250	7700
	Lead	1	mg/Kg	6.2	36
	Magnesium	1	mg/Kg	620	1300
	Manganese	1	mg/Kg	12	77
	Nickel	1	mg/Kg	6.2	10
	Potassium	1	mg/Kg	620	ND
	Sodium	1	mg/Kg	310	ND
	Thallium	1	mg/Kg	1.9	ND
	Vanadium	1	mg/Kg	12	ND
	Zinc	1	mg/Kg	12	170 ·
TAL Metals 60	020				
	Antimony	1	mg/Kg	0.99	ND
	Beryllium	1	mg/Kg	0.25	ND
	Cadmium	1	mg/Kg	0.49	ND
	Selenium	1	mg/Kg	2.5	ND
	Silver	1	mg/Kg	0.25	ND

ab#: AC77929-039	SampleID: Trip Blank-03				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu
C77929-039	Trip Blank-03		Date C	ollected 3/28/2014	
Volatile Organ	nics (no search) 8260				
	1,1,1-Trichloroethane	1	ug/L	1.0	ND
	1,1,2,2-Tetrachloroethane	1	ug/L	1.0	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	1.0	ND
	1,1,2-Trichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethene	1	ug/L	1.0	ND
	1,2,3-Trichlorobenzene	1	ug/L	1.0	ND
	1,2,4-Trichlorobenzene	1	ug/L	1.0	ND
	1,2-Dibromo-3-chloropropane	1	ug/L	1.0	ND
	1,2-Dibromoethane	1	ug/L	1.0	ND
	1,2-Dichlorobenzene	1	ug/L	1.0	ND
	1,2-Dichloroethane	1	ug/L	0.50	ND
	1,2-Dichloropropane	1	ug/L	1.0	ND
	1,3-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dioxane	1	ug/L	50	ND
	2-Butanone	1	ug/L	1.0	ND
	2-Hexanone	1	ug/L	1.0	ND
	4-Methyl-2-pentanone	1	ug/L	1.0	ND
	Acetone	1	ug/L	10	ND
	Benzene	1	ug/L	0.50	ND
	Bromochloromethane	1	ug/L	1.0	ND
	Bromodichloromethane	1	ug/L	1.0	ND
	Bromoform	1	ug/L	1.0	ND
	Bromomethane	1	ug/L	1.0	ND
	Carbon disulfide	1	ug/L	1.0	ND
	Carbon tetrachloride	1	ug/L	1.0	ND
	Chlorobenzene	1	ug/L	1.0	ND
	Chloroethane	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Chloromethane	1	ug/L	1.0	ND
	cis-1,2-Dichloroethene	1	ug/L	1.0	ND
	cis-1,3-Dichloropropene	1	ug/L	1.0	ND
	Cyclohexane	1	ug/L	1.0	ND
	Dibromochloromethane	1	ug/L	1.0	ND
	Dichlorodifluoromethane	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	Isopropylbenzene	1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl Acetate	1	ug/L	1.0	ND
	Methylcyclohexane	1	ug/L	1.0	ND
	Methylene chloride	1	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1	ug/L	1.0	ND
	Styrene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	trans-1,2-Dichloroethene	1	ug/L	1.0	ND
	trans-1,3-Dichloropropene	1	ug/L	1.0	ND
	Trichloroethene	1	ug/L	1.0	ND
	Trichlorofluoromethane	1	ug/L	1.0	ND
	Vinyl chloride	1	ug/L	1.0	ND
	Xylenes (Total)	1	ug/L	1.0	ND

Lab#: AC77929-040	SampleID: WC-01				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77929-040	WC-01		Date C	ollected 4/2/2014	Ī
% Solids SM2	540G				_
	% Solids	1	Percent		90
Diesel Range	Organics 8015B				
·	Diesel Range Organics	1	mg/Kg	67	ND
Gasoline rano	ge organics 8260C				
Q 40011110 14119	Gasoline Range Organics	79.2	mg/Kg	44	ND
lanitabilita (El			9/1/9	77	110
Ignitability (El	Burning Rate (mm/sec)	1			NA
	Flame Propagation (POS/NEG)	1			NA NA
	Ignitability Screen (POS/NEG)	1			NEG
		1			NEG
Mercury (TCL			_		
	Mercury	1	mg/L	0.00070	ND
Paint Filter Te					
	Paint Filter Test	1			NEG
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.028	ND
	Aroclor-1016	1	mg/Kg	0.028	ND
	Aroclor-1221	1	mg/Kg	0.028	ND
	Aroclor-1232	1	mg/Kg	0.028	ND
	Aroclor-1242	1	mg/Kg	0.028	ND
	Aroclor-1248	. 1	mg/Kg	0.028	ND
	Aroclor-1254	1	mg/Kg	0.028	ND
	Aroclor-1260	1	mg/Kg	0.028	ND
	Aroclor-1262	1	mg/Kg	0.028	ND
	Aroclor-1268	1	mg/Kg	0.028	ND
pH 9040C/904	5D				
•	рH	1	рН		8.5
Reactive Cyar	•		•		
Reactive Cyar	Cyanide (Reactive)	1	mg/Kg	0.50	ND
		•	ilig/Ng	0.50	ND
Reactive Sulfi			_		
	Sulfide (Reactive)	1	mg/kg	100	ND
TCLP Herbicion	des 8151				
	2,4-D	1	mg/L	0.0050	ND
	Silvex	1	mg/L	0.0050	ND
TCLP Metals	6010				
	Arsenic	1	mg/L	0.10	ND
	Barium	1	mg/L	0.25	ND
	Cadmium	1	mg/L	0.050	ND
	Chromium	1	mg/L	0.10	ND
	Lead	1	mg/L	0.050	ND
	Nickel	1	mg/L	0.10	ND
	Selenium	1	mg/L	0.10	ND
	Silver	1	mg/L	0.050	ND
TCLP Metals I	Extraction 1311				
	TCLP Metals Extraction	1	N/A		Complete
TOLD One!-		•	· ··· •		
ICLP Organic	ES Extraction 1311	4	NI/A		Commisée
	TCLP Organics Extraction	1	N/A		Complete

AC77929-040	SampleID: WC-01				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
TCLP Pesticion	des 8081			The second secon	
	Chlordane	1	mg/L	0.0010	ND
	Endrin	1	mg/L	0.00010	ND
	gamma-BHC	1	mg/L	0.00010	ND
	Heptachlor	1	mg/L	0.00010	ND
	Heptachlor Epoxide	1	mg/L	0.00010	ND
	Methoxychlor	1	mg/L	0.00010	ND
	Toxaphene	1	mg/L	0.0025	ND
TCLP Semivo	olatiles 8270				
	2,4,5-Trichlorophenol	1	mg/L	0.0080	ND
	2,4,6-Trichlorophenol	1	mg/L	0.0080	ND
	2,4-Dinitrotoluene	1	mg/L	0.0080	ND
	2-Methylphenol	1	mg/L	0.0020	ND
	3&4-Methylphenol	1	mg/L	0.0020	ND
	Hexachlorobenzene	1	mg/L	0.0080	ND
	Hexachlorobutadiene	1	mg/L	0.0080	ND
	Hexachloroethane	1	mg/L	0.0080	ND
	Nitrobenzene	1	mg/L	0.0080	ND
	Pentachlorophenol	1	mg/L	0.040	ND
	Pyridine	1	mg/L	0.040	ND
TCLP Volatile	es 8260				
	1,1-Dichloroethene	1	mg/L	0.0010	ND
	1,2-Dichloroethane	1	mg/L	0.00050	ND
	1,4-Dichlorobenzene	1	mg/L	0.0010	ND
	2-Butanone	1	mg/L	0.0010	ND
	Benzene	1	mg/L	0.00050	ND
	Carbon tetrachloride	1	mg/L	0.0010	ND
	Chlorobenzene	1	mg/L	0.0010	ND
	Chloroform	1	mg/L	0.0010	ND
	Tetrachioroethene	1	mg/L	0.0010	ND
	Trichloroethene	1	mg/L	0.0010	ND
	Vinyl chloride	1	mg/L	0.0010	ND
TCLP Zero He	eadspace Extraction				
	Zero Headspace Extraction	1	•		

Lab#: AC77929-041	SampleID: WC-02				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC77929-041	WC-02		Date C	ollected 4/2/2014	
% Solids SM:	2540G	*			_
	% Solids	1	Percent		85
Diesel Range	Organics 8015B				
•	Diesel Range Organics	1	mg/Kg	71	ND
Gasoline ran	ge organics 8260C				
	Gasoline Range Organics	81	mg/Kg	48	ND
Ignitability (E	* *	•	99		
iginiability (L	Burning Rate (mm/sec)	1			NA
	Flame Propagation (POS/NEG)	1			NA
	Ignitability Screen (POS/NEG)	1			NEG
Moroury /TC		•			1120
Mercury (TC		4	ma/l	0.00070	ND
a	Mercury	1	mg/L	0.00070	ND
Paint Filter T	** *	4			NEO
	Paint Filter Test	1			NEG
PCB 8082			¥		
	Aroclor (Total)	1	mg/Kg	0.029	ND
	Aroclor-1016	1	mg/Kg	0.029	ND
	Aroclor-1221	1	mg/Kg	0.029	ND
	Aroclor-1232	1	mg/Kg	0.029	ND
	Arcelor 1248	1	mg/Kg	0.029	ND
	Aroclor-1248 Aroclor-1254	1	mg/Kg	0.029 0.029	ND
	Aroclor-1260	1	mg/Kg mg/Kg	0.029	ND ND
	Aroclor-1260 Aroclor-1262	1	mg/Kg	0.029	ND
	Aroclor-1268	1	mg/Kg	0.029	ND
÷U 00400/00		•	g.r.tg	0.020	NO
pH 9040C/90		1	- LJ		7.2
	pH	ı	рН		7.2
Reactive Cya					
	Cyanide (Reactive)	1	mg/Kg	0.50	ND
Reactive Sul					
	Sulfide (Reactive)	1	mg/kg	100	ND
TCLP Herbic	ides 8151				
	2,4-D	1	mg/L	0.0050	ND
	Silvex	1	mg/L	0.0050	ND
TCLP Metals	6010				
	Arsenic	1	mg/L	0.10	ND
	Barium	1	mg/L	0.25	ND
	Cadmium	1	mg/L	0.050	ND
	Chromium	1	mg/L	0.10	ND
	Lead	1	mg/L	0.050	ND
	Nickel	1	mg/L	0.10	ND
	Selenium	1	mg/L	0.10	ND
	Silver	1	mg/L	0.050	ND
TCLP Metals	Extraction 1311				
	TCLP Metals Extraction	1	N/A		Complete
TCLP Organi	cs Extraction 1311			*	
	TCLP Organics Extraction	1	N/A		Complete

AC77929-041	SampleID: WC-02				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
TCLP Pesticion	les 8081				
	Chlordane	1	mg/L	0.0010	ND
	Endrin	1	mg/L	0.00010	ND
	gamma-BHC	1	mg/L	0.00010	ND
	Heptachlor	1	mg/L	0.00010	ND
	Heptachlor Epoxide	1	mg/L	0.00010	ND
	Methoxychlor	1	mg/L	0.00010	ND
	Toxaphene	1	mg/L	0.0025	ND
TCLP Semivo	latiles 8270				
	2,4,5-Trichlorophenol	1	mg/L	0.0080	ND
	2,4,6-Trichlorophenol	1	mg/L	0.0080	ND
	2,4-Dinitrotoluene	1	mg/L	0.0080	ND
	2-Methylphenol	1	mg/L	0.0020	ND
	3&4-Methylphenol	1	mg/L	0.0020	ND
	Hexachlorobenzene	1	mg/L	0.0080	ND
	Hexachlorobutadiene	1	mg/L	0.0080	ND
	Hexachloroethane	1	mg/L	0.0080	ND
	Nitrobenzene	1	mg/L	0.0080	ND
	Pentachlorophenol	1	mg/L	0.040	ND
	Pyridine	1	mg/L	0.040	ND
TCLP Volatile	s 8260				
	1,1-Dichloroethene	1	mg/L	0.0010	ND
	1,2-Dichloroethane	1	mg/L	0.00050	ND
	1,4-Dichlorobenzene	1	mg/L	0.0010	ND
	2-Butanone	1	mg/L	0.0010	ND
	Benzene	1	mg/L	0.00050	ND
	Carbon tetrachloride	1	mg/L	0.0010	ND
	Chlorobenzene	1	mg/L	0.0010	ND
	Chloroform	1	mg/L	0.0010	ND
	Tetrachloroethene	1	mg/L	0.0010	ND
	Trichloroethene	1	mg/L	0.0010	ND
	Vinyl chloride	1	mg/L	0.0010	ND
TCLP Zero H	eadspace Extraction				
	Zero Headspace Extraction	1			

Veritech Project: 4040237

Lab#: AC77929-042	SampleID: WC-03						
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result		
AC77929-042	WC-03		Date C	ollected 4/2/2014			
% Solids SM	2540G						
	% Solids	1	Percent		88		
Diesel Range	e Organics 8015B						
	Diesel Range Organics	1	mg/Kg	68	ND		
Gasoline ran	ige organics 8260C						
	Gasoline Range Organics	84	mg/Kg	48	ND		
Ignitability (E		04	mg/itg	40	ND		
igintability (E	Burning Rate (mm/sec)	1			NIA		
	Flame Propagation (POS/NEG)	1			NA NA		
	Ignitability Screen (POS/NEG)	i			NEG		
Masoure (TC		•			NEG		
Mercury (TC		4	21				
<u>-</u>	Mercury	1	mg/L	0.00070	ND		
Paint Filter T							
	Paint Filter Test	1 ·			NEG		
PCB 8082							
	Aroclor (Total)	1	mg/Kg	0.028	ND		
	Aroclor-1016	1	mg/Kg	0.028	ND		
	Aroclor-1221	1	mg/Kg	0.028	ND		
	Aroclor-1232	1	mg/Kg	0.028	ND		
	Aroclor-1242	1	mg/Kg	0.028	ND		
	Aroclor-1248	1	mg/Kg	0.028	ND		
	Aroclor-1254	1	mg/Kg	0.028	ND		
	Aroclor-1260	1	mg/Kg	0.028	ND		
	Aroclor-1262	1	mg/Kg	0.028	ND		
	Aroclor-1268	1	mg/Kg	0.028	ND		
pH 9040C/90	45D						
	pН	1	рH		7.7		
Reactive Cya	anide						
	Cyanide (Reactive)	1	mg/Kg	0.50	ND		
Reactive Sul	fide						
	Sulfide (Reactive)	1	mg/kg	100	ND		
TCLP Herbic	,						
TOLI TIETDIO	2,4-D	1	mg/L	0.0050	ND		
	Silvex	1	mg/L	0.0050	ND ND		
TCI D Metale		•	mg/L	0.0000	ND		
TCLP Metals		_	· · · · · ·	0.40			
	Arsenic	1	mg/L	0.10	ND		
	Barium	1	mg/L	0.25	ND		
	Chromium	1	mg/L	0.050	ND		
	Chromium	1	mg/L	0.10	ND		
	Lead Nickel	1	mg/L	0.050	ND		
	Selenium	1	mg/L	0.10	ND		
	Silver	1 1	mg/L	0.10	ND ND		
TAIL		1	mg/L	0.050	ND		
TCLP Metals	Extraction 1311				_		
	TCLP Metals Extraction	1	N/A		Complete		
TCLP Organi	cs Extraction 1311						
	TCLP Organics Extraction	1	N/A		Complete		

#: AC77929-042	SampleID: WC-03					
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result	
TCLP Pesticio	des 8081					
	Chlordane	1	mg/L	0.0010	ND	
	Endrin	1	mg/L	0.00010	ND	
	gamma-BHC	1	mg/L	0.00010	ND	
	Heptachlor	1	mg/L	0.00010	ND	
	Heptachlor Epoxide	1	mg/L	0.00010	ND	
	Methoxychlor	1	mg/L	0.00010	ND	
	Toxaphene	1	mg/L	0.0025	ND	
TCLP Semivo	olatiles 8270					
	2,4,5-Trichlorophenol	1	mg/L	0.0080	ND	
	2,4,6-Trichlorophenol	1	mg/L	0.0080	ND	
	2,4-Dinitrotoluene	1	mg/L	0.0080	ND	
	2-Methylphenol	1 .	mg/L	0.0020	ND	
	3&4-Methylphenol	1	mg/L	0.0020	ND	
	Hexachlorobenzene	1	mg/L	0.0080	ND	
	Hexachlorobutadiene	1	mg/L	0.0080	ND	
	Hexachloroethane	1	mg/L	0.0080	ND	
	Nitrobenzene	1	mg/L	0.0080	ŅD	
	Pentachlorophenol	1	mg/L	0.040	ND	
	Pyridine	1	mg/L	0.040	ND	
TCLP Volatile	es 8260					
	1,1-Dichloroethene	1	mg/L	0.0010	ND	
	1,2-Dichloroethane	1	mg/L	0.00050	ND	
	1,4-Dichlorobenzene	1	mg/L	0.0010	ND	
	2-Butanone	1	mg/L	0.0010	ND	
	Benzene	1	mg/L	0.00050	ND	
	Carbon tetrachloride	1	mg/L	0.0010	ND	
	Chlorobenzene	1	mg/L	0.0010	ND	
	Chloroform	1	mg/L	0.0010	ND	
	Tetrachloroethene	1	mg/L	0.0010	ND	
	Trichloroethene	1	mg/L	0.0010	ND	
	Vinyl chloride	1	mg/L	0.0010	ND	
TCLP Zero He	eadspace Extraction					
	Zero Headspace Extraction	1				

Veritech Project: 4040237

ab#: AC77929-043	SampleID: WC-04					
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul	
C77929-043	WC-04		Date C	ollected 4/2/2014		
% Solids SM2	540G				•	
	% Solids	1	Percent		88	
Diesel Range	Organics 8015B					
-	Diesel Range Organics	1	mg/Kg	68	ND	
Gasoline rang	e organics 8260C					
	Gasoline Range Organics	81.7	mg/Kg	46	ND	
Ignitability (EF	· ·				11.5	
iginaziity (£1	Burning Rate (mm/sec)	1			NA	
	Flame Propagation (POS/NEG)	1			NA NA	
	Ignitability Screen (POS/NEG)	1			NEG	
Mercury (TCL	•				.,	
Mercury (1 CL	Mercury	1	mg/L	0.00070	ND	
Paint Filter Te	•	•	mg/L	0.00070	ND	
Paint Filter 1e	St 9095A Paint Filter Test	4				
	ranitrine rest	1			NEG	
PCB 8082	A (T - 4 - B					
	Aroclor (Total)	1	mg/Kg	0.028	ND	
	Arcelor 4 224	1	mg/Kg	0.028	ND	
	Aroclor-1221 Aroclor-1232	1	mg/Kg	0.028	ND	
	Aroclor-1232 Aroclor-1242	1 1	mg/Kg	0.028	ND	
	Aroclor-1248	1	mg/Kg mg/Kg	0.028 0.028	ND ND	
	Aroclor-1254	1	mg/Kg	0.028	ND ND	
	Aroclor-1260	1	mg/Kg	0.028	ND	
	Aroclor-1262	1	mg/Kg	0.028	ND	
	Aroclor-1268	1	mg/Kg	0.028	ND	
pH 9040C/9045	5D			******		
p 00 100/00-10	pH	1	pН		7.5	
Reactive Cyan	•	•	Pii		7.0	
Reactive Cyan	Cyanide (Reactive)	1	malVa	0.50	ND	
	•	•	mg/Kg	0.50	ND	
Reactive Sulfic		4		400		
	Sulfide (Reactive)	1	mg/kg	100	ND	
TCLP Herbicid						
	2,4-D	1	mg/L	0.0050	ND	
	Silvex	1	mg/L	0.0050	ND	
TCLP Metals 6	* · ·					
	Arsenic	1	mg/L	0.10	ND	
	Barium	1	mg/L	0.25	0.28	
	Cadmium	1	mg/L	0.050	ND	
	Chromium	1	mg/L	0.10	ND	
	Lead Nickel	1	mg/L	0.050	ND	
	Nickei Selenium	1 1	mg/L	0.10	ND ND	
	Silver	1	mg/L mg/L	0.10 0.050	ND ND	
TOLDM-4-1		•	mg/∟	U.UOU	ND	
TCLP Metals E		<u>,</u>	N/A			
	TCLP Metals Extraction	1	N/A		Complete	
TCLP Organics	Extraction 1311	_		•		
	TCLP Organics Extraction	1	N/A		Complete	

_ab#: AC77929-043	SampleID: WC-04						
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result		
TCLP Pesticio	ies 8081						
	Chlordane	1	mg/L	0.0010	ND		
	Endrin	·1	mg/L	0.00010	ND		
	gamma-BHC	1	mg/L	0.00010	ND		
	Heptachlor	1	mg/L	0.00010	ND		
	Heptachlor Epoxide	1	mg/L	0.00010	ND		
	Methoxychlor	1	mg/L	0.00010	ND		
	Toxaphene	1	mg/L	0.0025	ND		
TCLP Semivo	elatiles 8270						
	2,4,5-Trichlorophenol	1	mg/L	0.0080	ND		
	2,4,6-Trichlorophenol	1	mg/L	0.0080	ND		
	2,4-Dinitrotoluene	1	mg/L	0.0080	ND		
	2-Methylphenol	1	mg/L	0.0020	ND		
	3&4-Methylphenol	1	mg/L	0.0020	ND		
	Hexachlorobenzene	1	mg/L	0.0080	ND		
	Hexachlorobutadiene	1	mg/L	0.0080	ND		
	Hexachioroethane	1	mg/L	0.0080	ND		
	Nitrobenzene	1	mg/L	0.0080	ND		
	Pentachlorophenol	1	mg/L	0.040	ND		
	Pyridine	1	mg/L	0.040	ND		
TCLP Volatile	es 8260						
	1,1-Dichloroethene	1	mg/L	0.0010	ND		
	1,2-Dichloroethane	1	mg/L	0.00050	ND		
	1,4-Dichlorobenzene	1	mg/L	0.0010	ND		
	2-Butanone	1	mg/L	0.0010	ND		
	Benzene	1	mg/L	0.00050	ND		
	Carbon tetrachloride	1	mg/L	0.0010	ND		
	Chlorobenzene	1	mg/L	0.0010	ND		
	Chloroform	1	mg/L	0.0010	ND		
	Tetrachloroethene	1	mg/L	0.0010	ND		
	Trichloroethene	1	mg/L	0.0010	ND		
	Vinyl chloride	1	mg/L	0.0010	ND		
TCLP Zero H	eadspace Extraction						
	Zero Headspace Extraction	1					

RL = Reporting Limit

ND = Not Detected

RL Definitions:

SW846 Inorganics reported to PQL

Clean Water Act Inorganics reported to PQL

SW846 Organics reported to PQL

CLP Organics reported to CRQL

Clean Water Act Organics reported to PQL

CLP Inorganics reported to CRQL

This report is a true report of results obtained from our tests of this material. In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

_____ Or _____

Robin Cousineau - Quality Assurance Director

Stanley Gilewicz - Laboratory Director

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UI - PAGES UTILITY INTERFERENCES SECTION

NOTICE

THE PAGES CONTAINED IN THIS SECTION (UI - PAGES) REPRESENT ADDITIONAL CONTRACT REQUIREMENTS APPLYING TO WORK PERFORMED IN THE PRESENCE OF PRIVATELY OWNED UTILITY FACILITIES.

UTILITY INTERFERENCES (UI) SECTION

DATED: November 15, 2016

- 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. "UI SECTION: Additional Contract Requirements Applying to Work Performed in the Presence of Privately Owned Utility Facilities" (Pages UI-3 through UI-11).
 - B. Schedule U-1 (Page UI-13).
 - Schedule U-2 (Con Edison Pages UI-14 through UI-33, Verizon Pages UI-34 through UI-42).
 - D. Schedule U-3 Page UI-23 (as per the Private Utilities reference document for UI SECTION called "CET SPECIFICATIONS AND SKETCHES", dated November 2010), in this Section UI-Pages; and,
 - E. Utility drawings (29 Sheets) consisting of:
 - * Con Edison Conduit & Duct Occupancy Plates (9 sheets)
 - * Con Edison Low Tension Mains & Service Plates (9 sheets)
 - * Verizon Existing Facility Plates (11 sheets)

All twenty nine (29) drawings are 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 UI Section:
 - A. UI Section, Paragraph 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. UI Section, Paragraph 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. UI Section informs the Contractor that the City has entered into an Interference 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 Section, a sample of the Utility Agreement letter as executed by the Companies is annexed on page UI-12, as an Exhibit to the Contract. Signed copies of those Utility Agreement letters are on file with New York City Department of Design and Construction (DDC).
- 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 UI Section, Paragraph 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. UI Section, Paragraph 14, provides that the provisions of UI Section are material provisions of the Contract and that the Contractor's failure to comply with the procedures set forth in UI Section are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract.

Pursuant to this Section, 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.

Utility Interferences Section - 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 August 1, 2015; and/or Articles 10.15 through 10.18 of the Standard Sewer and Water Main Specifications of the New York City Department of Environmental Protection, Dated July 1, 2014; 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 Schedule 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 lines on poles carrying electric, telecommunication and cable system, the Contractor understands and by bidding for this contract agrees that he/she has reviewed the schedule of estimated quantities by type of interference expected to be encountered within the limits of this project and that he/she will be required to perform the public work in the presence of these 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, 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, delay, lost profit, increased overhead, or any other impact costs which are deemed to be included in cost agreement between the Contractor and private utility company affected by such work. 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 within the competence of general construction contractors.

5. Interference Agreement:

- a) The Companies have provided estimate of the quantity of each type of interferences expected to be encountered in the contract in Schedule U-2. The parties may negotiate an Interference Agreement in any format or manner they deem fit based on quantities and types of Interferences expected to be encountered on this Contract as stated in Schedule U-2.
- b) Furthermore, in Schedule 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 on an Interference Agreement, otherwise the unit of work measurement, and payment provisions set forth in Schedule 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 will issue to private utility company (ies) in a written "48 Hours' notice to Public Corporation" in accordance with the Administrative Code of the City of New York. Construction will then proceed as ordered and the Contractor will be directed by the Resident Engineer (RE) 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 the 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 Construction Assistant Commissioner.

- a) 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 the Contractor and affected company (ies) are submitted to Binding Arbitration process described in Paragraph 10.
- b) 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 or delay claims against the City. 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.
- c) 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.
- d) The Contractor will notify the Resident Engineer when utility capital work not specified in Schedule U-2 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 DDC Deputy Commissioner regarding the issuance of a "48 Hours' notice to Public Corporation" to the concerned utility company as authorized by the New York City Administrative Code Section 19-143 and/or Section 24-521 as applicable.
- e) Utility delays caused by utility capital work not listed in Schedule U-2 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 is 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 Interference 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:

- a) 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;
- b) 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;
- c) 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.
- d) 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.b, or 7.d, 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.

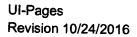
9. Disputed utility work covered by an interference agreement:

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 that is not certified by DDC. 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 the 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, the Contractor and/or representatives shall have 3 ½ hrs to make a presentation of its claim to the arbitrator. During its presentation, the Contractor shall not be permitted to produce any documents or cost records which have not already been provided to the Company. The Contractor shall be permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
- e) Company and/or its representatives shall have two hours to ask the Contractor questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask the 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) The 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 7th day after receipt of the arbitrator's decision, or on the 30th day after completion of the work, whichever is later. Payment for work not yet completed at the time of the arbitrator's decision shall be paid within 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.

- I) The arbitrator's fees and any other costs of the arbitration shall be initially shared equally by Company and the 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 participating in design alignment meetings and submitting their scope of Utility Interferences Work to the City, have agreed to perform their obligations described in this Section. It is expressly understood that the cost of Utility Work or any delays caused by such 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

UI-Pages Revision 10/24/2016 third party beneficiaries of this Section of the contract, if an Interference 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 and/or, Davis-Bacon Act if federally funded, applies to public work. The work described in this Utility Interferences Section 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 UI Section apply to: (i) additional Companies, if any, who were not named in Schedule "A" but which have executed an Interference 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 Interference Agreement between the Contractor and such utility company (ies).

(End of Section)

"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: <u>City Work Performed in the Preser</u> Project No:	nce of Private Utility Facilities
Dear (Name):	
This letter is to certify thatinclusion of the attached "Utility Interferences (Ul requirements applying to work performed in the putility." The company agrees to abide by the term company's own expenses due to their facilities in work.	presence of privately owned ns of this UI Section at the
Sincerely,	
By: Authorized Company Representative	
Title	
Title	
NOTARY PUBLIC	
CERTIFIED AS TO FORM AND LEGAL AUTHORITY:	
Ву:	
	

SCHEDULE U-1

LISTING OF COMPANY (IES) NAMED FOR THIS CONTRACT

COMPANY NAME

CONTACT NAME

CONTACT TELEPHONE

CON EDISON

THERESA KONG

212-460-4834

VERIZON

AUBREY MAKHANLALL 718-977-8165

SCHEDULE U-2

SCHEDULE U-2

FOR INFORMATION ONLY

ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE FOR CONSOLIDATED EDISON

SE-855

FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

DESCRIPTION	UNITS	ESTIMATE QUANTIT
		QUANTII
UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .2)	EA	11
UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .1)	FA	
	+	15
	EA	2
	EA	2
	EA	2
	EA	6
UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .2)	EA	2
UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12"	EA	48
UTILITIES CROSSING TRENCH FOR WA		
		20
	EA	10
	EA	1
	EA	13
UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" (TYPE .2)	EA	1
UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 48" AND UP TO 54"	EA	
		2
		13
	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .2)	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR EA UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR EA UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR EA UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER EA UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER EA UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER EA UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER EA UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER EA UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER EA UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" EA UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 48" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 54" EA

SCHEDULE U-2 FOR INFORMATION ONLY ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE FOR CONSOLIDATED EDISON

SE-855

FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE $2\mathsf{B}$

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
CET 200.2	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTIONS (INVER'DEPTH 5' TO 6' FOR TYPE 2 OR > 5'-6" TO 6'-6" FOR TYPE 3)	r lf	348
CET 225.1A	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	5
CET 225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	3
CET 225.1C	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	1
CET 300	SPECIAL CARE EXCAVATION AND BACKFILING	СУ	35
CET 304 A	FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE	СУ	28
CET 305	FURNISH AND INSTALL ASPHALT PAVING MIXTURE	TONS	19
CET 330E-A.1	SUPPORT & PROTECT ELEC, GAS & STEAM FAC. DURING EXCAVATION OF CITY TRENCH WHEN FAC. LIE WIN TRENCH LIMITS W/O SHEETING (TYPE .1)	LF	7
CET 330E-A.2	SUPPORT & PROTECT ELEC, GAS & STEAM FAC. DURING EXCAVATION OF CITY TRENCH WHEN FAC. LIE W/IN TRENCH LIMITS W/O SHEETING(TYPE .2)	LF	55
CET 350.	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES AND APPURTENANCES	LS	1
CET 351	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	EA	9
CET 353E	SPECIAL CARE OPERATION - TREE PRUNING	EA	1
CET 400	TEST PITS FOR UTILITY FACILITIES	CY	50
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	СУ	133
CET 402.2	EXISTING OCCUPIED NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	LF	833
CET 403	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	SF	16
CET 450.1	CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE SIZE SURVEY CREW PERFORMING TYPICAL SURVEY FUNCTIONS (TYPE .1)	CRHRS	I

SCHEDULE U-2 FOR INFORMATION ONLY ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE FOR CONSOLIDATED EDISON

SE-855

FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET ITEM	DESCRIPTION	UNITS	ESTIMATE
CET 450.2	CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE SMALL SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS (TYPE .2)	CRHRS	1
CET 450.3	CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE MEDIUM SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS (TYPE .3)	CRHRS	1
CET 500	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	LF	4,367
CET 501	REMOVAL OF ABANDONED MASONRY FOR ELEC. AND TEL. FACILITIES	CY	35
CET 601.1	INSTALL CONDUIT IN PAVED AREA (1 EA. 2", 4" OR 5" CONDUIT - ALL TYPES)	LF	653
CET 636 EA RD	ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (UNDER 7" WIDTH)	EA	1
CET 636 ED RD	ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (30" TO UNDER 34" WIDTH)	EA	8
ET 636 MD	MOD. OF WORK METHODS TO ACCOMM. UTILITY STREET HARDWARE DURING PAVE MILL. & RESURF. OPS. (30" TO UNDER 34" WIDTH)	EA	32
ET 636 MG	MOD. OF WORK METHODS TO ACCOMM. UTILITY STREET HARDWARE DURING PAVE MILL. & RESURF. OPS. (41" TO UNDER 75" WIDTH)	EA	2
ET 636 MI	MOD. OF WORK METHODS TO ACCOMM. UTILITY STREET HARDWARE DURING PAVE MILL. & RESURF. OPS. (125" TO UNDER 170" WIDTH)	EA	4
ET 710.1	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/PLASTIC, UP TO AND INCL. 12" DIAMETER PIPES	LF	610
ET 1006V	6" VERTICAL OR ROLLED WATER MAIN OFFSET	EA	
ET 1012V	12" VERTICAL OR ROLLED WATER MAIN OFFSET	EA	

PROJECT ID: SE855

CON EDISON SCOPE OF WORK SUPPORT AND PROTECTION

SE-855

FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .1) At the following locations:

CET 100.1

N/S Stanley Ave. 22' W/W/C of Hinsdale St. (Sh. 3)

S/S Farragut Rd., 19' W/W/C of 105 St. (Sh. 9) S/S Farragut Rd., 16' E/E/C of 105 St. (Sh. 9)

S/S Farragut Rd., 229' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 125' E/E/C of 102 St. (Sh. 10)

N/S Glenwood Rd., 15' E/E/C of 104 St. (Sh. 13)

Total Quantity for CET 100.1

CET 100.2 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .2)

EA

At the following locations:

N/S Stanley Ave., 25' W/W/C of Snediker Ave. (Sh. 4)

N/S Stanley Ave., 14' E/E/C of Van Sinderen Ave. (Sh. 4)

W/S 108 St., 288' S/S/C of Stanley Ave. (Sh. 05)

W/S 108 St., 19' S/S/C of Stanley Ave. (Sh. 05)

W/S 108 St., 217' N/N/C of Flatlands Ave. (Sh. 8)

N/S Farragut Rd., 14' W/W/C of 105 St. (Sh. 9)

N/S Farragut Rd., 206' W/W/C of 108 St. (Sh. 9)

N/E/C of Farragut Rd. and 103 St. (Sh. 10)

E/S 104 St., 15' S/S/C of Farragut Rd. (Sh. 10) N/S Glenwood Rd., 254' E/E/C of 105 St. (Sh. 12)

N/S Glenwood Rd., 11' W/W/C of 104 St. (Sh. 13)

Total Quantity for CET 100.2 11

SE-855

FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 101.1	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .I)	
	At the following locations:	E.
	N/S Int. of 108 St. and Farragut Rd. (Sh. 5) N/S Int. of 108 St. and Farragut Rd. (Sh. 5) W/S 108 St., 85' N/N/C of Farragut Rd. (Sh. 5) W/S 108 St., 85' N/N/C of Farragut Rd. (Sh. 5) W/S 108 St., 295' N/N/C of Farragut Rd. (Sh. 5)	
•	E/S 108 St., 147' S/S/C of Stanley Ave. (Sh. 05) S/S Int. of Farragut Rd. and 105 St. (Sh. 9)	
	N/E/C of Glenwood Rd. and 103 St. (Sh. 13)	
	E/S 105 St., 532' N/N/C of Glenwood Rd. (Sh. 16)	
	W/S 105 St., 542' N/N/C of Glenwood Rd. (Sh. 16)	
	W/S 104 St., 198' N/N/C of Glenwood Rd. (Sh. 17)	
	E/S 104 St., 198' N/N/C of Glenwood Rd. (Sh. 17)	
	Total Quantity for CET 101.1 = 15	
ET 101.2	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .2)	
	At the following locations:	EA
	N/W/C of Glenwood Rd. and 104 St. (Sh. 13) N/S Int. of 105 St. and Glenwood Rd. (Sh. 16)	
	Total Quantity for CET 101.2 = 2	
ET 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	
	At the following locations:	EA
	S/S Stanley Ave., 56' E/E/C of Snediker Ave. (Sh. 4) S/S Stanley Ave., 113' E/E/C of Van Sinderen Ave. (Sh. 4)	
•	Total Quantity for CET 102.1 = 2	
T 103.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1)	
	At the following locations:	EA
	N/W/C of Stanley Ave. and Williams Ave. (Sh. 3) E/S Int. of Stanley Ave. and Hinsdale St. (Sh. 3)	,
	Total Quantity for CET 103.1 = 2	₩%

SE-855

FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 105.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .1)	EA
	At the following locations:	
	S/S Glenwood Rd., 144' E/E/C of 105 St. (Sh. 12)	
	N/S Glenwood Rd., 308' E/E/C of 105 St. (Sh. 12)	
	N/S Glenwood Rd., 430' E/E/C of 105 St. (Sh. 12)	
	S/E/C of Glenwood Rd. and 103 St. (Sh. 13)	
	S/S Glenwood Rd., 91' E/E/C of 103 St. (Sh. 13)	•
	S/S Int. of Glenwood Rd. and 104 St. (Sh. 13)	
	Total Quantity for CET 105.1 = 6	
CET 105.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .2)	EA
	At the following locations:	
	W/S Int. of Glenwood Rd. and 108 St. (Sh. 11)	
	S/W/C of Glenwood Rd. and 105 St. (Sh. 12)	
	Total Quantity for CET 105.2 = 2	

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CET 108.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)
•	At the following locations:

EA

N/E/C of Stanley Ave. and Hinsdale St. (Sh. 3)

N/W/C of Stanley Ave. and Hinsdale St. (Sh. 3)

N/S Stanley Ave., 130' W/W/C of Hinsdale St. (Sh. 3)

N/S Stanley Ave., 56' E/E/C of Snediker Ave. (Sh. 4)

N/S Stanley Ave., 23° E/E/C of Snediker Ave. (Sh. 4)

N/E/C of Stanley Ave. and Snediker Ave. (Sh. 4)

N/S Stanley Ave., 101' E/E/C of Van Sinderen Ave. (Sh. 4)

S/W/C of 108 St. and Farragut Rd. (Sh. 5)

W/S Int. of 108 St. and Farragut Rd. (Sh. 5)

W/S 108 St., 181' N/N/C of Farragut Rd. (Sh. 5)

W/S 108 St., 237' S/S/C of Stanley Ave. (Sh. 05)

W/S 108 St., 383' N/N/C of Glenwood Rd. (Sh. 7)

W/S 108 St., 160' N/N/C of Glenwood Rd. (Sh. 7)

W/S 108 St., 376' N/N/C of Flatlands Ave. (Sh. 8)

W/S 108 St., 245' N/N/C of Flatlands Ave. (Sh. 8)

W/S 108 St., 90' N/N/C of Flatlands Ave. (Sh. 8)

S/W/C of Farragut Rd. and 105 St. (Sh. 9)

N/W/C of Farragut Rd. and 105 St. (Sh. 9)

N/S Farragut Rd., 117' E/E/C of 105 St. (Sh. 9)

N/S Farragut Rd., 177' E/E/C of 105 St. (Sh. 9)

N/S Farragut Rd., 197' E/E/C of 105 St. (Sh. 9)

N/S Farragut Rd., 278' E/E/C of 105 St. (Sh. 9)

N/S Farragut Rd., 285' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 229' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 190' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 88' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 20 E/E/C of 102 St. (Sh. 10)

N/S Farragut Rd., 54' E/E/C of 102 St. (Sh. 10)

N/S Farragut Rd., 125' E/E/C of 102 St. (Sh. 10)

N/E/C of Farragut Rd. and 104 St. (Sh. 10)

N/S Glenwood Rd., 144' E/E/C of 105 St. (Sh. 12)

N/S Glenwood Rd., 170' E/E/C of 105 St. (Sh. 12)

N/S Glenwood Rd., 308' E/E/C of 105 St. (Sh. 12)

N/S Glenwood Rd., 430' E/E/C of 105 St. (Sh. 12)

N/W/C of Glenwood Rd. and 103 St. (Sh. 13)

N/E/C of Glenwood Rd. and 103 St. (Sh. 13)

N/S Glenwood Rd., 91' E/E/C of 103 St. (Sh. 13)

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N/S Glenwood Rd., 32' W/W/C of 104 St. (Sh. 13)

N/W/C of Glenwood Rd. and 104 St. (Sh. 13)

N/S Glenwood Rd., 111' E/E/C of 104 St. (Sh. 13)

W/S 105 St., 2271 N/N/C of Glenwood Rd. (Sh. 16)

W/S 105 St., 542' N/N/C of Glenwood Rd. (Sh. 16)

W/S 104 St., 198' N/N/C of Glenwood Rd. (Sh. 17)

W/S 104 St., 65' S/S/C of Farragut Rd. (Sh. 17)

Total Quantity for CET 108.1

UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE 2)

EA

At the following locations:

N/W/C of Stanley Ave. and Hinsdale St. (Sh. 3)

N/S Stanley Ave., 27' E/E/C of Van Sinderen Ave. (Sh. 4)

W/S 108 St., 303' N/N/C of Flatlands Ave. (Sh. 8)

N/S Farragut Rd., 19' W/W/C of 105 St. (Sh. 9)

N/S Int. of Farragut Rd. and 105 St. (Sh. 9)

N/S Farragut Rd., 50' E/E/C of 105 St. (Sh. 9)

N/S Farragut Rd., 278' E/E/C of 105 St. (Sh. 9)

N/S Farragut Rd., 190' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 34' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 101' E/E/C of 103 St. (Sh. 10)

N/E/C of Farragut Rd. and 104 St. (Sh. 10)

N/S Glenwood Rd., 48' W/W/C of 108 St. (Sh. 11)

N/W/C of Gienwood Rd. and 108 St. (Sh. 11)

N/S Glenwood Rd., 33' W/W/C of 105 St. (Sh. 12)

N/W/C of Glenwood Rd. and 105 St. (Sh. 12)

N/S Glenwood Rd., 430' E/E/C of 105 St. (Sh. 12)

N/W/C of Glenwood Rd. and 104 St. (Sh. 13)

N/W/C of 105 St. and Glenwood Rd. (Sh. 16)

W/S 104 St., 31' S/S/C of Farragut Rd. (Sh. 17)

Total Quantity for CET 108.2 = 20

CET 108.2

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FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 109.1	UTILITIES CROSSING TRENCH FOR WATER	
	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" (TYPE .1)	EA
	At the following locations:	
•	N/S Int. of Stanley Ave. and Snediker Ave. (Sh. 4)	
	N/S Stanley Ave., 101' E/E/C of Van Sinderen Ave. (Sh. 4) N/W/C of 108 St. and Farragut Rd. (Sh. 5)	
	W/S 108 St., 85' N/N/C of Farragut Rd. (Sh. 5)	
	W/S 108 St., 295' N/N/C of Farragut Rd. (Sh. 5)	
	W/S 108 St., 147' S/S/C of Stanley Ave. (Sh. 05)	
	W/S 108 St., 524' N/N/C of Glenwood Rd. (Sh. 7)	
•	W/S 108 St., 413' N/N/C of Glenwood Rd. (Sh. 7) W/S 108 St., 103' N/N/C of Glenwood Rd. (Sh. 7)	
	Total Quantity for CET 109.1 = 10	
CET 109.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" (TYPE .2)	_
	At the following locations:	EA
	N/S Int. of Stanley Ave. and Snediker Ave. (Sh. 4)	
·	Total Quantity for CET 109.2 = 1	
CET 111.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" (TYPE .1)	
	At the following locations:	EA
	S/W/C of Farragut Rd. and 105 St. (Sh. 9)	
	S/S Farragut Rd., 117' E/E/C of 105 St. (Sh. 9)	
	S/S Farragut Rd., 177' E/E/C of 105 St. (Sh. 9)	
	S/S Farragut Rd., 183' E/E/C of 105 St. (Sh. 9) S/S Farragut Rd., 278' E/E/C of 105 St. (Sh. 9)	
•	S/S Farragut Rd., 285' W/W/C of 108 St. (Sh. 9)	
	S/S Farragut Rd., 229' W/W/C of 108 St. (Sh. 9)	
	S/S Farragut Rd., 88' W/W/C of 108 St. (Sh. 9)	
	S/S Farragut Rd., 54' E/E/C of 102 St. (Sh. 10)	
•	S/S Farragut Rd., 125' E/E/C of 102 St. (Sh. 10) E/S Int. of Farragut Rd. and 103 St. (Sh. 10)	
	S/W/C of Farragut Rd. and 104 St. (Sh. 10)	
	S/E/C of Farragut Rd. and 104 St. (Sh. 10)	
	Total Quantity for CET 111.1 = 13	

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FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 111.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" (TYPE .2)	EA
	At the following locations:	
	S/E/C of Farragut Rd. and 104 St. (Sh. 10)	
	Total Quantity for CET 111.2 = 1	
CET 112.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 48" AND UP TO 54" (TYPE .1)	EA
	At the following locations:	
	W/S Int. of 108 St. and Farragut Rd. (Sh. 5)	
	Total Quantity for CET 112.1 = 2	
CET 116.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OR SEWER 84" DIAMETER AND OVER (TYPE .1)	EA
	At the following locations:	
	N/W/C of Stanley Ave. and Williams Ave. (Sh. 3)	
	S/E/C of Stanley Ave. and Hinsdale St. (Sh. 3)	
	S/S Stanley Ave., 120' W/W/C of Hinsdale St. (Sh. 3)	
	S/S Stanley Ave., 56' E/E/C of Snediker Ave. (Sh. 4)	
	E/S Int. of Stanley Ave. and Snediker Ave. (Sh. 4)	
	N/S Int. of 108 St. and Farragut Rd. (Sh. 5)	
•	W/S 108 St., 85' N/N/C of Farragut Rd. (Sh. 5)	
	W/S 108 St., 295' N/N/C of Farragut Rd. (Sh. 5)	
	W/S 108 St., 147' S/S/C of Stanley Ave. (Sh. 05)	
	W/S 108 St., 524' N/N/C of Glenwood Rd. (Sh. 7)	
	W/S 108 St., 245' N/N/C of Flatlands Ave. (Sh. 8)	
	W/S 108 St., 90' N/N/C of Flatlands Ave. (Sh. 8)	
	Total Quantity for CET 116.1 = 13	
CET 116.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OR SEWER 84" DIAMETER AND OVER (TYPE .2)	EA
	At the following locations:	
•	S/S Stanley Ave., 113' E/E/C of Van Sinderen Ave. (Sh. 4)	
	Total Quantity for CET 116.2 = 1	

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FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 200.2	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTIONS (INVERT DEPTH 5' TO 6' FOR TYPE 2 OR > 5'-6" TO 6'-6" FOR TYPE 3)	LF
	At the following locations:	
	N/S Stanley Ave., 25' W/W/C of Snediker Ave. (Sh. 4)	
	W/S 108 St., 12' N/N/C of Farragut Rd. (Sh. 5)	
	W/S 108 St., 288' S/S/C of Stanley Ave. (Sh. 05)	
	W/S 108 St., 19' S/S/C of Stanley Ave. (Sh. 05)	•
	W/S 108 St., 217' N/N/C of Flatlands Ave. (Sh. 8)	
	N/S Farragut Rd., 206' W/W/C of 108 St. (Sh. 9)	
	N/E/C of Farragut Rd. and 103 St. (Sh. 10) W/S 104 St., 17' S/S/C of Farragut Rd. (Sh. 10)	
	E/S 104 St., 15' S/S/C of Farragut Rd. (Sh. 10)	
	N/S Glenwood Rd., 254' E/E/C of 105 St. (Sh. 12)	
	N/S Glenwood Rd., 11' W/W/C of 104 St. (Sh. 13)	
	Total Quantity for CET 200.2 = 348	
CET 225.1A	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	.
	At the following locations:	EA
	N/S Stanley Ave., 14' E/E/C of Van Sinderen Ave. (Sh. 4)	
	W/S 108 St., 12' N/N/C of Farragut Rd. (Sh. 5)	
	N/S Farragut Rd., 14' W/W/C of 105 St. (Sh. 9)	
	W/S 104 St., 17' S/S/C of Farragut Rd. (Sh. 10)	
	N/S Glenwood Rd., 15' E/E/C of 104 St. (Sh. 13)	
	Total Quantity for CET 225.1A = 5	
CET 225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA
	At the following locations:	/1
	W/S 108 St., 217' N/N/C of Flatlands Ave. (Sh. 8)	
	N/S Farragut Rd., 18' E/E/C of 105 St. (Sh. 9)	
	W/S 105 St., 398' N/N/C of Glenwood Rd. (Sh. 16)	
	Total Quantity for CET 225.1B = 3	
CET 225.1C	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	E A
	At the following locations:	EA
	N/S Farragut Rd., 33' E/E/C of 105 St. (Sh. 9)	
	Total Quantity for CET 225.1C = 1	

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FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 300 SPECIAL CARE EXCAVATION AND BACKFILING

CY

At the following locations:

N/S Stanley Ave. 22' W/W/C of Hinsdale St. (Sh. 3)

N/S Stanley Ave., 25' W/W/C of Snediker Ave. (Sh. 4)

N/S Stanley Ave., 14' E/E/C of Van Sinderen Ave. (Sh. 4)

W/S 108 St., 288' S/S/C of Stanley Ave. (Sh. 05)

W/S 108 St., 19' S/S/C of Stanley Ave. (Sh. 05)

W/S 108 St., 439' N/N/C of Glenwood Rd. (Sh. 7)

W/S 108 St., 19' N/N/C of Glenwood Rd. (Sh. 7)

N/S Farragut Rd., 14' W/W/C of 105 St. (Sh. 9)

S/S Farragut Rd., 19' W/W/C of 105 St. (Sh. 9)

N/W/C of Farragut Rd. and 105 St. (Sh. 9)

S/S Farragut Rd., 16' E/E/C of 105 St. (Sh. 9)

N/S Farragut Rd., 206' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 115' E/E/C of 102 St. (Sh. 10)

N/E/C of Farragut Rd. and 103 St. (Sh. 10)

W/S 104 St., 17' S/S/C of Farragut Rd. (Sh. 10)

E/S 104 St., 15' S/S/C of Farragut Rd. (Sh. 10)

W/S 108 St., 17' S/S/C of Glenwood Rd. (Sh. 11)

N/S Glenwood Rd., 254' E/E/C of 105 St. (Sh. 12)

N/W/C of Glenwood Rd. and 103 St. (Sh. 13)

N/S Glenwood Rd., 11' W/W/C of 104 St. (Sh. 13)

E/S 103 St., 167' S/S/C of Farragut Rd. (Sh. 18)

E/S 103 St., 15' S/S/C of Farragut Rd. (Sh. 18)

Total Quantity for CET 300

CY

At the following locations:

N/S Farragut Rd., 14' W/W/C of 105 St. (Sh. 9)

FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE

N/S Int. of Farragut Rd. and 105 St. (Sh. 9)

N/S Farragut Rd., 115' E/E/C of 102 St. (Sh. 10)

N/E/C of Farragut Rd. and 103 St. (Sh. 10)

W/S 104 St., 17' S/S/C of Farragut Rd. (Sh. 10)

N/S Glenwood Rd., 308' E/E/C of 105 St. (Sh. 12)

N/E/C of Glenwood Rd. and 104 St. (Sh. 13)

W/S 105 St., 162' N/N/C of Farragut Rd. (Sh. 15)

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total Quantity for CET 304 A = 28

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CET 304 A

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	TIMOE ZB	
CET 305	FURNISH AND INSTALL ASPHALT PAVING MIXTURE	TON
•	At the following locations:	1011
	N/S Farragut Rd., 14' W/W/C of 105 St. (Sh. 9) N/S Int. of Farragut Rd. and 105 St. (Sh. 9) N/S Farragut Rd., 115' E/E/C of 102 St. (Sh. 10) N/E/C of Farragut Rd. and 103 St. (Sh. 10) W/S 104 St., 17' S/S/C of Farragut Rd. (Sh. 10)	
	N/S Glenwood Rd., 308' E/E/C of 105 St. (Sh. 12) N/E/C of Glenwood Rd. and 104 St. (Sh. 13)	
	W/S 105 St., 162' N/N/C of Farragut Rd. (Sh. 15)	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total Quantity for CET 305 = 19	
CET 330E-A.1	SUPPORT & PROTECT ELEC, GAS & STEAM FAC. DURING EXCAVATION OF CITY TRENCH WHEN FAC. LIE W/IN TRENCH LIMITS W/O SHEETING (TYPE.I)	LF
	At the following locations:	
	N/E/C of Farragut Rd. and 103 St. (Sh. 10)	
	Total Quantity for CET 330E-A.1 = 7	
CET 330E-A.2	SUPPORT & PROTECT ELEC, GAS & STEAM FAC. DURING EXCAVATION OF CITY TRENCH WHEN FAC. LIE W/IN TRENCH LIMITS W/O SHEETING(TYPE .2)	LF
	At the following locations:	
	N/S Stanley Ave., 100' E/E/C of Van Sinderen Ave. (Sh. 4) N/W/C of Farragut Rd. and 104 St. (Sh. 10)	
	Total Quantity for CET 330E-A.2 = 55	
CET 350	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES AND APPURTENANCES	
	At the following locations:	LS
	Various Locations	
	AS SHOWN ON CONTRACT DOCUMENTS	•
•	Total Quantity for CET 350 = 1	

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FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 351	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	EA
	At the following locations:	
	N/S Stanley Ave., 100' W/W/C of Williams Ave. (Sh. 3)	
	N/E/C of Farragut Rd. and 103 St. (Sh. 10)	
	N/S Glenwood Rd., 444' E/E/C of 105 St. (Sh. 12)	
	N/W/C of Glenwood Rd. and 102 St. (Sh. 13)	
	N/S Glenwood Rd., 37' W/W/C of 103 St. (Sh. 13) N/E/C of Glenwood Rd. and 104 St. (Sh. 13)	
	S/E/C of Glenwood Rd. and 104 St. (Sh. 13)	
	N/W/C of Glenwood Rd. and 98 St. (Sh. 14)	
	N/E/C of 102 St. and Glenwood Rd. (Sh. 19)	
,	Total Quantity for CET 351 = 9	
CET 353E	SPECIAL CARE OPERATION - TREE PRUNING	EA
•	At the following locations:	
	Various Locations	
	AS SHOWN ON CONTRACT DOCUMENTS	
	Total Quantity for CET 353E = 1	
CET 400	TEST PITS FOR UTILITY FACILITIES	CY
	At the following locations:	
	Various Locations	
	AS SHOWN ON CONTRACT DOCUMENTS	
	Total Quantity for CET 400 = 50	
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	CY
	At the following locations:	
	N/S Farragut Rd., 14' W/W/C of 105 St. (Sh. 9)	
	N/S Int. of Farragut Rd. and 105 St. (Sh. 9)	
	N/S Farragut Rd., 115' E/E/C of 102 St. (Sh. 10)	
	N/E/C of Farragut Rd. and 103 St. (Sh. 10)	
	W/S 104 St., 17' S/S/C of Farragut Rd. (Sh. 10) N/S Glenwood Rd., 308' E/E/C of 105 St. (Sh. 12)	
	N/E/C of Glenwood Rd. and 104 St. (Sh. 13)	
	W/S 105 St., 162' N/N/C of Farragut Rd. (Sh. 15)	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total Quantity for CET 401 = 133	

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FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

EXISTING OCCUPIED NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O **CET 402.2** LF CONCRETE ENCASEMENT At the following locations: N/S Farragut Rd., 14' W/W/C of 105 St. (Sh. 9) N/S Int. of Farragut Rd. and 105 St. (Sh. 9) N/S Farragut Rd., 115' E/E/C of 102 St. (Sh. 10) N/E/C of Farragut Rd. and 103 St. (Sh. 10) W/S 104 St., 17' S/S/C of Farragut Rd. (Sh. 10) N/S Glenwood Rd., 308' E/E/C of 105 St. (Sh. 12) N/E/C of Glenwood Rd. and 104 St. (Sh. 13) W/S 105 St., 162' N/N/C of Farragut Rd. (Sh. 15) AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE Total Quantity for CET 402.2 = 833

CET 403 PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES

SF

At the following locations:

N/S Int. of Farragut Rd. and 105 St. (Sh. 9) N/E/C of Glenwood Rd. and 104 St. (Sh. 13)

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total Quantity for CET 403

CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE SIZE SURVEY CREW PERFORMING TYPICAL SURVEY FUNCTIONS (TYPE .1)

CRHRS

At the following locations:

Various Locations

AS SHOWN ON CONTRACT DOCUMENTS

Total Quantity for CET 450.1 = 1

CET 450.2 CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE SMALL SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS (TYPE .2)

CRHRS

At the following locations:

Various Locations

AS SHOWN ON CONTRACT DOCUMENTS

Total Quantity for CET 450.2 = 1

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CET 450.1

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CET 450.3

CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE MEDIUM SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS (TYPE .3)

CRHRS

At the following locations:

Various Locations

AS SHOWN ON CONTRACT DOCUMENTS

Total Quantity for CET 450.3 =

CET 500

REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)

LF

At the following locations:

N/W/C of Stanley Ave. and Williams Ave. (Sh. 3)

W/S Int. of Stanley Ave. and Williams Ave. (\$h, 3)

N/S Stanley Ave. B/W Hinsdale St. and Williams Ave. (Sh. 3)

N/S Stanley Ave. B/W Snediker Ave. and Williams Ave. (Sh. 3)

W/S 108 St., 43' N/N/C of Flatlands Ave. (Sh. 8)

S/E/C of Farragut Rd. and 103 St. (Sh. 10)

N/S Glenwood Rd., 17' W/W/C of 108 St. (Sh. 11)

W/S 108 St., 17' S/S/C of Glenwood Rd. (Sh. 11)

N/S Glenwood Rd., 22' E/E/C of 108 St. (Sh. 11)

E/S Int. of 103 St. and Farragut Rd. (Sh. 18)

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total Quantity for CET 500

= 4.367

CET 501

REMOVAL OF ABANDONED MASONRY FOR ELEC. AND TEL. FACILITIES

CY

At the following locations:

N/W/C of Stanley Ave. and Williams Ave. (Sh. 3)

N/S Stanley Ave., 36' W/W/C of Williams Ave. (Sh. 3)

W/S 108 St., 43' N/N/C of Flatlands Ave. (Sh. 8)

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total Quantity for CET 501 = 35

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FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 601.1 INSTALL CONDUIT IN PAVED AREA (1 EA. 2", 4" OR 5" CONDUIT - ALL TYPES)

At the following locations:

LF

S/S Stanley Ave., 17' E/E/C of Williams Ave. (Sh.3)

S/E/C of Stanley Ave. and Hinsdale St. (Sh. 3)

S/S Stanley Ave., 120' W/W/C of Hinsdale St. (Sh. 3)

S/E/C of Stanley Ave. and Snediker Ave. (\$h. 4)

S/S Stanley Ave., 113' E/E/C of Van Sinderen Ave. (Sh. 4)

S/W/C of Farragut Rd. and 105 St. (Sh. 9)

S/E/C of Farragut Rd. and 103 St. (Sh. 10)

N/S Glenwood Rd., 430' E/E/C of 105 St. (Sh. 12)

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total Quantity for CET 601.1 = 65

CET 636 EA RD ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (UNDER 7" WIDTH)

EA

At the following locations:

N/S Stanley Ave., 55' E/E/C of Williams Ave. (Sh.3)

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total Quantity for CET 636 EA RD= 1

CET 636 ED RD ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (30" TO UNDER 34" WIDTH)

EA

At the following locations:

N/W/C of Stanley Ave. and Hinsdale St. (Sh. 3)

N/S Stanley Ave., 56' E/E/C of Snediker Ave. (Sh. 4)

N/S Stanley Ave., 16' W/W/C of Snediker Ave. (Sh. 4)

N/S Stanley Ave., 101' E/E/C of Van Sinderen Ave. (Sh. 4)

N/W/C of Stanley Ave. and Van Sinderen Ave. (Sh. 4)

W/S 108 St., 85' N/N/C of Farragut Rd. (Sh. 5)

W/S 108 St., 295' N/N/C of Farragut Rd. (Sh. 5)

W/S 108 St., 179' S/S/C of Stanley Ave. (Sh. 05)

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total Quantity for CET 636 ED RD= 8

SE-855

FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 636 MD

MOD. OF WORK METHODS TO ACCOMM. UTILITY STREET HARDWARE DURING PAVE MILL. & RESURF. OPS. (30" TO UNDER 34" WIDTH)

At the following locations:

W/S 108 St., 524' N/N/C of Glenwood Rd. (Sh. 7)

W/S 108 St., 424' N/N/C of Glenwood Rd. (Sh. 7)

W/S 108 St., 228' N/N/C of Glenwood Rd. (Sh. 7)

W/S 108 St., 565' N/N/C of Flatlands Ave. (Sh. 8)

W/S 108 St., 376' N/N/C of Flatlands Ave. (Sh. 8)

W/S 108 St., 245' N/N/C of Flatlands Ave. (Sh. 8)

S/W/C of 108 St. and Flatlands Ave. (Sh. 8)

S/S Farragut Rd., 38' W/W/C of 105 St. (Sh. 9)

NW/C of Farragut Rd. and 105 St. (Sh. 9)

N/S Farragut Rd., 107' E/E/C of 105 St. (Sh. 9)

N/S Farragut Rd., 207' E/E/C of 105 St. (Sh. 9)

N/S Farragut Rd., 252' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 124' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 88' W/W/C of 108 St. (Sh. 9)

N/S Farragut Rd., 20' W/W/C of 108 St. (Sh. 9)

N/E/C of Farragut Rd. and 102 St. (Sh. 10)

N/S Farragut Rd., 63' E/E/C of 102 St. (Sh. 10)

N/S Farragut Rd., 135' E/E/C of 102 St. (Sh. 10)

N/S Farragut Rd., 28' E/E/C of 103 St. (Sh. 10)

N/E/C of Farragut Rd. and 104 St. (Sh. 10)

N/S Farragut Rd., 124' E/E/C of 104 St. (Sh. 10)

N/S Glenwood Rd., 32' W/W/C of 108 St. (Sh. 11)

NW/C of Glenwood Rd. and 105 St. (Sh. 12)

N/S Glenwood Rd., 86' E/E/C of 105 St. (Sh. 12)

N/S Glenwood Rd., 308' E/E/C of 105 St. (Sh. 12)

N/W/C of Glenwood Rd. and 103 St. (Sh. 13)

N/S Glenwood Rd., 91' E/E/C of 103 St. (Sh. 13)

N/W/C of Glenwood Rd. and 104 St. (Sh. 13)

N/S Glenwood Rd., 111' E/E/C of 104 St. (Sh. 13)

W/S 105 St., 319' N/N/C of Farragut Rd. (Sh. 15)

E/S 104 St., 37' S/S/C of Farragut Rd. (Sh. 17)

E/S 103 St., 167' S/S/C of Farragut Rd. (Sh. 18)

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total Quantity for CET 636 MD

SE-855

FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 636 MG	MOD. OF WORK METHODS TO ACCOMM. UTILITY STREET HARDWARE DURING PAVE MILL. & RESURF. OPS. (41" TO UNDER 75" WIDTH)	EA
	At the following locations:	
	W/S 108 St., 103' N/N/C of Glenwood Rd. (Sh. 7)	
	N/S Farragut Rd., 89' E/E/C of 103 St. (Sh. 10)	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	•
	Total Quantity for CET 636 MG = 2	
CET 636 MI	MOD. OF WORK METHODS TO ACCOMM. UTILITY STREET HARDWARE DURING PAVE MILL. & RESURF. OPS. (125" TO UNDER 170" WIDTH)	EA
	At the following locations:	
	N/S Farragut Rd., 38' W/W/C of 105 St. (Sh. 9)	
	N/S Farragut Rd., 55' W/W/C of 108 St. (Sh. 9)	
	N/S Glenwood Rd., 67' W/W/C of 108 St. (Sh. 11)	
	N/S Glenwood Rd., 33' W/W/C of 105 St. (Sh. 12)	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total Quantity for CET 636 MI = 4	
CET 710.1	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/PLASTIC, UP TO AND INCL. 12" DIAMETER PIPES	LF
	At the following locations:	
	S/S Stanley Ave., 17' E/E/C of Williams Ave. (Sh.3)	
	S/E/C of Stanley Ave. and Hinsdale St. (Sh. 3)	
	S/S Stanley Ave., 120' W/W/C of Hinsdale St. (Sh. 3)	
	S/E/C of Stanley Ave. and Snediker Ave. (Sh. 4)	
	S/S Stanley Ave., 113' E/E/C of Van Sinderen Ave. (Sh. 4)	
	S/W/C of Farragut Rd. and 105 St. (Sh. 9)	
	N/S Glenwood Rd., 430' E/E/C of 105 St. (Sh. 12)	
	Total Quantity for CET 710.1 = 610	
CET 1006V	6" VERTICAL OR ROLLED WATER MAIN OFFSET	-FA
	At the following locations:	
	N/S Farragut Rd., 20 E/E/C of 102 St. (Ch. 10)	
	N/S Glenwood Rd., 430' E/E/O of 105 St. (Sh. 12)	
	- AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total Quantity for CET 1086V = 2	
	VA. C. CON TABLE T	

SE-855

FRESH CREEK HIGH LEVEL STORM AND SANITARY SEWERS AND WATERMAIN WORK PHASE 2B

CET 1013V 13" VERTICAL OR ROLLED WATER MAIN OFFSET

-At the following locations:

-NAW/C of Glonwood Rd. and 108 St. (Sh. 11)

-NAW/C of 105 St. and Glonwood Rd. (Ch. 16)

-AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

- Total Quantity for CET 1013V -- 2

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For Information Only

September 2016

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Borough of Brooklyn

Schedule U-2: Scope of Work for CET items

CET ITEM NUMBER	1 DESCRIPTION	Unit of Measure	Estimated Quantity
CET 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS AND/OR TEST PITS (TYPE .1)	EACH	1
CET 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS AND/OR TEST PITS (TYPE .2)	EACH	4
CET 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS AND/OR TEST PITS (TYPE .3)	EACH	3
CET 101.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	EACH	2
CET 101.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	EACH	2
CET 103.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1)	EACH	1
CET 104.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 60" DIAMETER (TYPE .1)	EACH	1
	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .3)	EACH	1
	UTILITIES CROSSING TRENCH FOR SEWERS OVER 84" DIAMETER (TYPE .1)	EACH	3
1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 84" DIAMETER (TYPE .3)	EACH	1
1	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	EACH	17
	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	EACH	1
*	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .3)	EACH	2
1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	EACH	3

JULY 2016

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Borough of Brooklyn

Schedule UI: Scope of Work for CET items

CET ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity
CET 109.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO	EACH	1
	24" DIAMETER (TYPE .2)		
CET 200	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	LF	72
CET 304 A	FURNISH, DELIVER AND INSTALL CONCRETE PAVEMENT FOR ROAD BASE	CY	44
CET 305	FURNISH, DELIVER AND INSTALL ASPHALT PAVING MIXTURES	TON	58
CET 330T	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE IN OR IN CLOSE PROXIMITY TO TRENCH LIMITS	LF	250
CET 330T2.1	COMMUNICATIONS FACILITY OPERATOR(S) REQUEST TRENCH TO BE WIDENED	LF	100
CET 330T2.2	COMMUNICATIONS FACILITY OPERATOR(S) REQUESTS THE TRENCH/SHEETING TO BE MODIFIED	LF	100
CET 350	OVERHEAD ACCOMMODATION PROTECTION OF OVERHEAD FACILITIES, POLES AND APPURTENANCES	LS	1
CET 400	TEST PITS FOR UTILITY FACILITIES	CY	20
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	CY	740
	EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	LF	800
CET 500	REMOVAL OF ABANDONED UTILITY STRUCTURES (NON-CONC. ENCASED)	LF	32025
CET 501	REMOVAL OF ABANDONED MASONRY FOR UTILITY STRUCTURES	CY	62

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	Schedule U-2: Scope of Work for CET items		
	Schedule 0-2. Scope of Work for CET nems		
CET 1	00.1		-
	OSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS	3	
AND/OR TEST	PITS (TYPE .1)		
	@ THE FOLLOWING LOCATIONS		QTY(EA
NEC INT OF GL	ENWOOD RD. & E. 103rd STREET		1
CET 100.1		TOTAL	1
CET 1	- · ·		
UTILITIES CRO AND/OR TEST	OSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS PITS (TYPE .2)	,	
	@ THE FOLLOWING LOCATIONS		QTY(EA)
	8th STREET BTWN FLATLANDS AVE. & GLENWOOD RD.		1
	ENWOOD RD. & E. 108th STREET		1
	Sth STREET BTWN FARRAGUT RD. & GLENWOOD RD.		1
SWC INT OF FAI	RRAGUT ROAD & E. 105th STREET		1
CET 100.2	***************************************	TOTAL	4
CET 10	00.3		
UTILITIES CRO AND/OR TEST I	OSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS PITS (TYPE .3)		
	@ THE FOLLOWING LOCATIONS		QTY(EA)
	REET BTWN FARRAGUT ROAD & STANLEY AVENUE		1
	REET BTWN GLENWOOD ROAD & FARRAGUT ROAD		1
SEC INT OF STA	NLEY AVENUE & E. 108th STREET		1
CET 100.3		TOTAL	3
CET 10		•	·
UTILITIES CRO TYPE .1)	SSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER		
	@ THE FOLLOWING LOCATIONS		QTY(EA)
	NLEY AVENUE & SNEDIKER AVENUE		1
SEC INT OF STA	NLEY AVENUE & HINSDALE STREET		1

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	SE855 Borough of Brooklyn Schedule U-2: Scope of Work for CET items		
CET 101.1		TOTAL	2
CET 10 UTILITIES CRO (TYPE .3)	01.3 OSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMET	ER	,
	@ THE FOLLOWING LOCATIONS 8th STREET & GLENWOOD ROAD NLEY AVENUE & E. 108th STREET		QTY(EA) 1 1
CET 101.3		TOTAL	2
CET 10 UTILITIES CRO (TYPE .1)	SSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMET	ER	QTY(EA)
S SIDE OF FARR	@ THE FOLLOWING LOCATIONS AGUT ROAD BTWN E. 104th STREET & E. 103rd STREET		1
CET 103.1	ng 3 a bead multip a hatte propins trop sin dato u Worde do noto une contrato dos multiples per col best despu	TOTAL	1
CET 10 UTILITIES CRO (TYPE .1)	04.1 OSSING TRENCH FOR SEWERS OVER 48" TO 60" DIAMET	ER	
S SIDE OF FARR	@ THE FOLLOWING LOCATIONS AGUT RD. BTWN E. 108th STREET & E. 105th STREET		QTY(EA) 1
CET 104.1		TOTAL	1
CET 10 UTILITIES CRO (TYPE .3)	95.3 OSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMET	ER	
E SIDE INT OF G	@ THE FOLLOWING LOCATIONS LENWOOD ROAD & E. 108th STREET		QTY(EA)
CET 105.3		TOTAL	1

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·	Borough of Brooklyn		
S	chedule U-2: Scope of Work for CET items		
	chedule 0-2. Scope of work for CE1 items		
CET 107.1	•		٠.
	NG TRENCH FOR SEWERS OVER 84" DIAMETER		er.
	@ THE FOLLOWING LOCATIONS		QTY(EA)
W SIDE OF E. 108th	STREET BTWN FLATLANDS AVE. & GLENWOOD RD.		2
N SIDE INT E. 108th	STREET & FARRAGUT ROAD		1
CET 107.1	, poppuppuppuppuppuppup	TOTAL	3
CET 107.3			
UTILITIES CROSSI	NG TRENCH FOR SEWERS OVER 84" DIAMETER		
(TYPE .3)			
•	@ THE FOLLOWING LOCATIONS		QTY(EA)
S SIDE INT OF E. 108	Sth STREET & FARRAGUT ROAD		1
CET 107.3		TOTAL	1
CET 108.1			
	NG TRENCH FOR WATER MAIN UP TO AND INCLUDI PE .1)	NG	
	@ THE FOLLOWING LOCATIONS		QTY(EA)
NWC INT OF GLENY	OOD ROAD & E. 103rd STREET		1
*	OOD ROAD & E. 103rd STREET		1
	OD ROAD BTWN E. 103rd STREET & E. 104th STREET		1
NWC INT OF GLENW	OOD ROAD & E. 105th STREET		1
NWC INT OF E. 108th	STREET & FARRAGUT ROAD	•	1
N SIDE OF FARRAGI	JT RD. BTWN E. 108th STREET & E. 105th STREET		2
	LEY AVENUE & E. 108th STREET		1
	AVE. BTWN E. 108th STREET & SNEDIKER AVE.		4
	EY AVENUE & SNEDIKER AVENUE		2
	EY AVENUE & HINSDALE STREET		2
N SIDE OF STANLEY	AVENUE BTWN HINSDALE ST. & WILLIAMS AVE.		1
CET 108.1		TOTAL	17

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Sche	SE855 Borough of Brooklyn dule U-2: Scope of Work for CET items		
JB 108.2			
UTILITIES CROSSING 12" DIAMETER (TYPE	G TRENCH FOR WATER MAIN UP TO AND INCLUDI E .2)	NG	
S SIDE INT OF GLENW	@ THE FOLLOWING LOCATIONS OOD RD. & E. 108th STREET		QTY(EA)
JB 108.2		TOTAL	1
CET 108.3 UTILITIES CROSSING 12" DIAMETER (TYPE	TRENCH FOR WATER MAIN UP TO AND INCLUDE .3)	NG	
	@ THE FOLLOWING LOCATIONS DD ROAD & E. 105th STREET DD ROAD & E. 108th STREET	÷	QTY(EA) 1
CET 108.3	***************************************	TOTAL	2
CET 109.1 UTILITIES CROSSING 24" DIAMETER (TYPE	TRENCH FOR WATER MAIN OVER 12" AND UP TO .1)		
· · · · · · · · · · · · · · · · · · ·	@ THE FOLLOWING LOCATIONS EET BTWN FLATLANDS AVE. & GLENWOOD RD. 8th STREET & FARRAGUT ROAD		QTY(EA) 2 1
CET 109.1		TOTAL	3
CET 109.2 UTILITIES CROSSING 24" DIAMETER (TYPE	TRENCH FOR WATER MAIN OVER 12" AND UP TO .2)		
S SIDE INT OF GLENWO	@ THE FOLLOWING LOCATIONS OOD RD. & E. 108th STREET		QTY(EA) 1
CET 109.2		TOTAL	1

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	Borough of Brooklyn		
	Schedule UI: Scope of Work for CET items		
	schedule CI. Scope of Work for CE1 items		
CET 200 EXTRA DEPTH EX	CAVATION OF CATCH BASIN CHUTE CONNECTION PIPE	es	
	@ THE FOLLOWING LOCATIONS		OTMA E
E SIDE OF E. 108th	STREET BTWN FLATLANDS AVE. & GLENWOOD RD.		QTY(LF 23
	STREET BTWN FARRAGUT RD. & GLENWOOD RD.		30
	STREET & STANLEY AVE.		30 19
CET 200		TOTAL	72
***************************************		IOIAL	
CET 304 A FURNISH, DELIVE	A R AND INSTALL CONCRETE PAVEMENT FOR ROADWAY	OR SID	EWALK
	@ THE FOLLOWING LOCATIONS		QTY(CY)
AS ENCOUNTERED	AND DIRECTED BY THE VERIZON FIELD REPRSENTATIVE		44
CET 304 A	**************************************	TOTAL	44
CET 305 FURNISH, DELIVE	R AND INSTALL ASPHALT PAVING MIXTURES		
AS ENCOUNTERED	@ THE FOLLOWING LOCATIONS AND DIRECTED BY THE VERIZON FIELD REPRSENTATIVE		QTY(TONS) 58
CET 305		TOTAL	58
CET 330T			
SUPPORT AND PRODURING EXCAVAT	OTECTION OF COMMUNICATION UTILITY FACILITIES TON OF CITY TRENCH WHEN FACILITIES LIE IN OR ITY TO TRENCH LIMITS		
	@ THE FOLLOWING LOCATIONS		QTY(LF)
E SIDE FARRAGUT	ROAD BTWN 104TH STREET & 105TH STREET		250
CET 330T	**************************************	TOTAL	250
CET 330T2	.1		
J	 S FACILITY OPERATOR(S) REQUEST TRENCH TO BE WII		

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	Schedule UI: Scope of Work for CET items	
	@ THE FOLLOWING LOCATIONS	QTY(LF
E SIDE FARRAG	UT ROAD BTWN 104TH STREET & 105TH STREET	100
CET 330T2.1	TOTAL	100
CET 33 COMMUNICATI TO BE MODIFIE	IONS FACILITY OPERATOR(S) REQUESTS THE TRENCH/SHEETING	;
E SIDE FARRAGI	@ THE FOLLOWING LOCATIONS UT ROAD BTWN 104TH STREET & 105TH STREET	QTY(LF 100
CET 330T2.2	TOTAL	100
FACILITIES, PO	O COMMODATION PROTECTION OF OVERHEAD LES AND APPURTENANCES @ THE FOLLOWING LOCATIONS ED AND DIRECTED BY THE VERIZON FIELD REPRESENTATIVE	LS 1
CET 350	TOTAL	1
CET 400 TEST PITS FOR U	UTILITY FACILITIES	
S ENCOUNTER	@ THE FOLLOWING LOCATIONS ED AND DIRECTED BY THE VERIZON FIELD REPRESENTATIVE	QTY(CY) 20
ET 400	TOTAL	20
CET 401 RENCH EXCAV	ATION FOR ADJUSTMENT OF UTILITY FACILITIES	
S ENCOUNTERE	@ THE FOLLOWING LOCATIONS D AND DIRECTED BY THE VERIZON FIELD REPRESENTATIVE	QTY(CY) 740
ET 401	TOTAL	740
CET 402 XISTING NON-C	T.2A CONCRETE ENCASED TELECOMMUNICATION CONDUITS	

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Borough of Brooklyn	•	
Schedule UI: Scope of Work for CET items		
PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT		· · · · · · · · · · · · · · · · · · ·
@ THE FOLLOWING LOCATIONS		QTY(LF
AS ENCOUNTERED AND DIRECTED BY THE VERIZON FIELD REPRESENTA	ATIVE	800
CET 402T.2A	TOTAL	800
CET 500		
REMOVAL OF ABANDONED UTILITY CONDUITS		-
(NON-CONCRETE ENCASED)		
@ THE FOLLOWING LOCATIONS		QTY(LF)
		Q11(LF
S SIDE STANLEY AVENUE BTWN 108TH STREET & SNEDIKER AVE		2000
S SIDE STANLEY AVENUE BTWN SNEDIKER AVE & HINDSDALE ST		1400
E SIDE 108TH STREET BTWN FARRAGUT ROAD & STANLEY AVENUE		9800
SIDE FARRAGUT ROAD BTWN 105TH STREET & 108TH STREET		2915
SIDE FARRAGUT ROAD BTWN 105TH STREET & 108TH STREET		6215
SIDE GLENWOOD ROAD BTWN 103RD STREET & 105TH STREET		4480
SIDE GLENWOOD ROAD BTWN 105TH STREET & 108TH STREET		5215
CET 500	TOTAL	32025
CET 501		***********
EMOVAL OF ABANDONED MASONRY FOR UTILITY STRUCTURES		
@ THE FOLLOWING LOCATIONS	·	QTY(LF)
SIDE INT OF STANLEY AVE & SNEDIKER AVE	·	9
EC INT OF STANLEY AVE & E 108TH ST		9
EC INT OF STANLEY AVE & HINSDALE ST		9
SIDE FARRAGUT ROAD BTWEEN 105TH STREET & 108TH STREET		9
EC INT OF FARRAGUT ROAD & 104TH STREET		13
EC INT GLENWOOD ROAD & 105TH STREET		7
EC INT GLENWOOD ROAD & 103RD STREET		7
ET 501	TOTAL	62

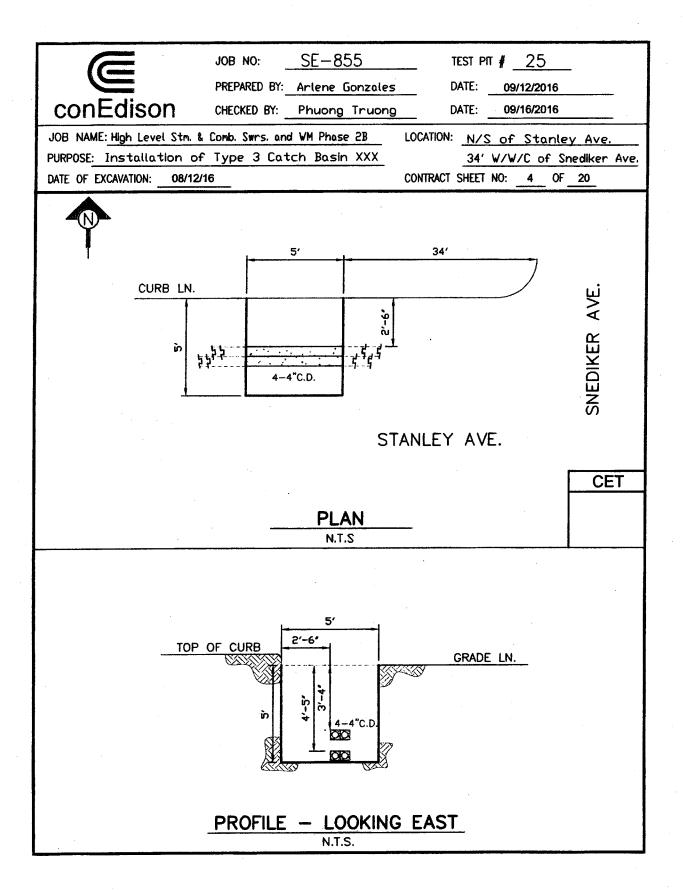
OCT 2016

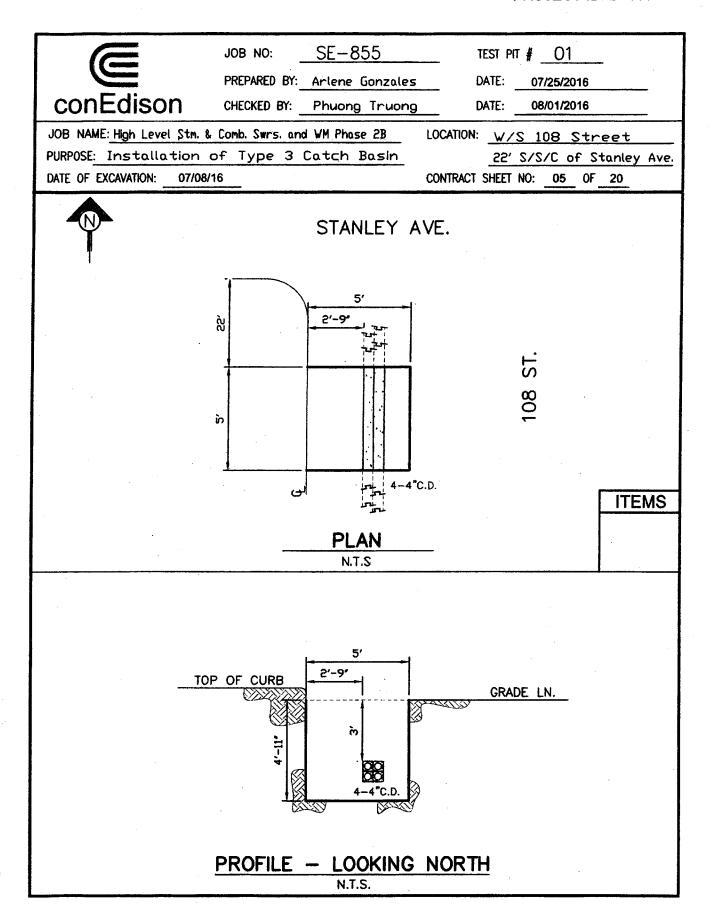
SCHEDULE U-3

(NO TEXT IN THIS SECTION)

TEST PITS

- 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.
 - (4) PROPOSED BASIN AND CHUTE LOCATIONS ARE APROXIMATE.







JOB NO:

SE-855

TEST PIT # 02

conEdison

PREPARED BY: Arlene Gonzales

DATE:

07/25/2016

CHECKED BY:

Phuong Truong

DATE:

08/01/2016

JOB NAME: High Level Stm. & Comb. Swrs. and VM Phase 2B

LOCATION: W/S 108 St.

PURPOSE: Installation of Type 3 Catch Basin

280' S/S/C of Stanley Ave. 20

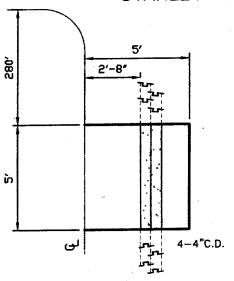
DATE OF EXCAVATION:

07/07/16

CONTRACT SHEET NO: 5 0F



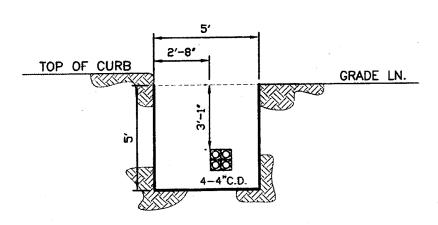
STANLEY AVE.



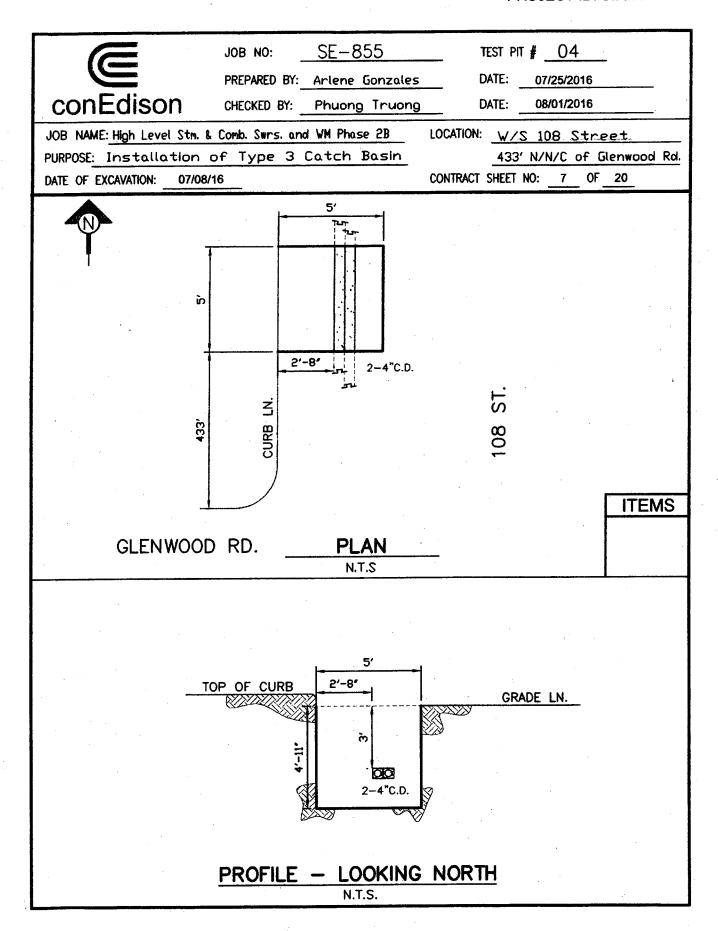
ITEMS

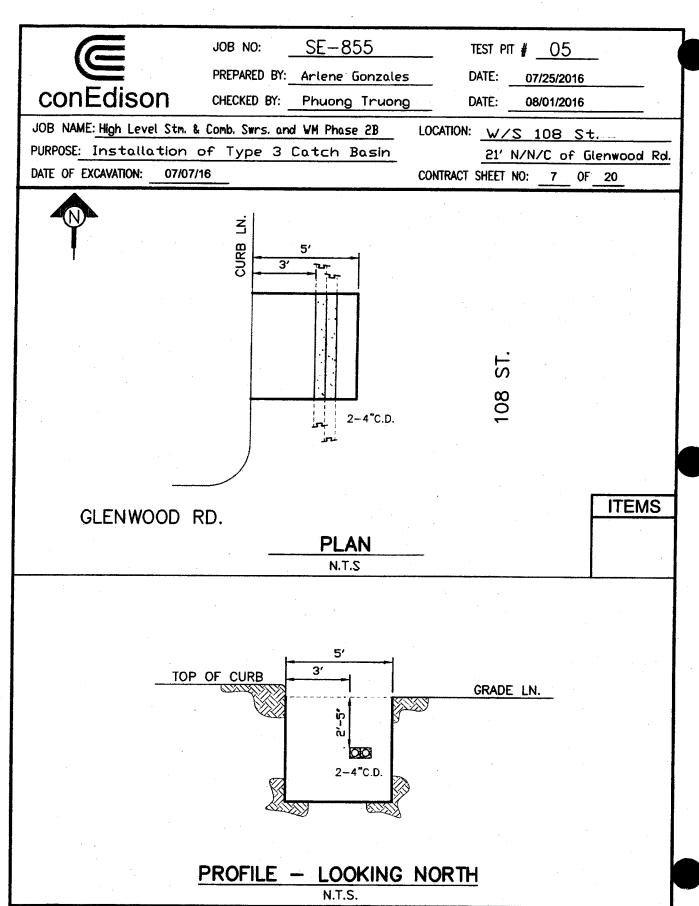
PLAN

N.T.S



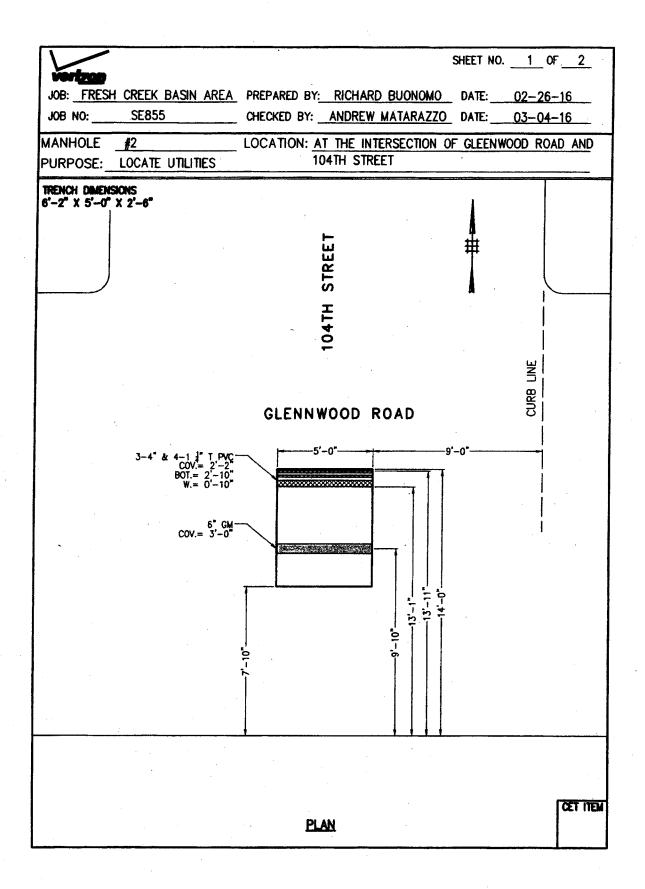
PROFILE - LOOKING NORTH N.T.S.

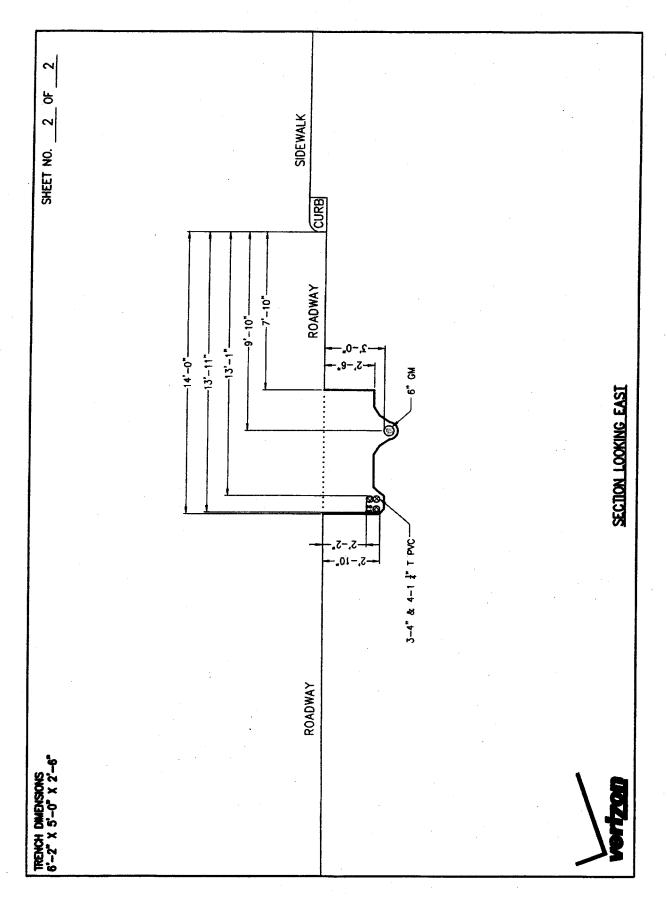


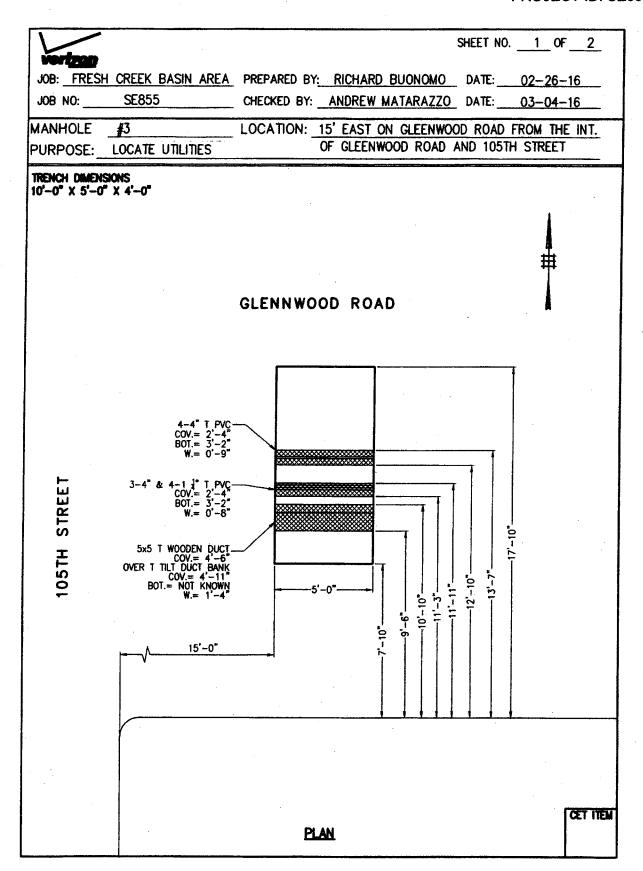


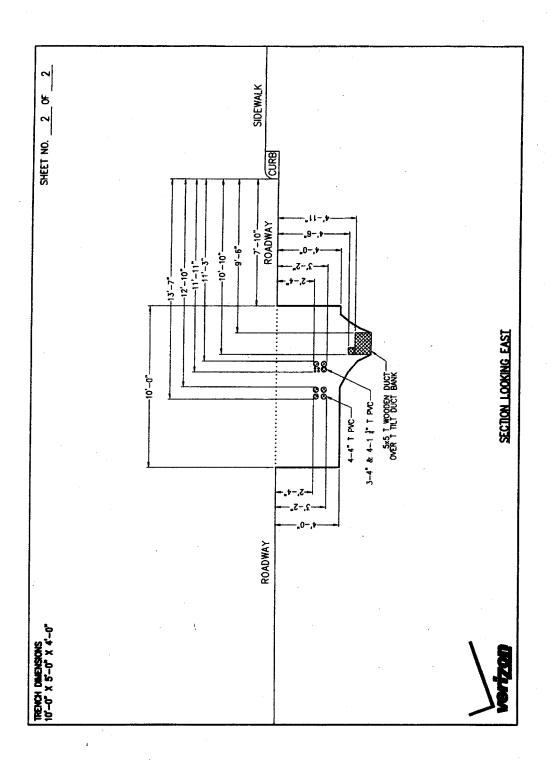
SE-855 TEST PIT # 11 JOB NO: PREPARED BY: DATE: 07/29/2016 Arlene Gonzales conEdison CHECKED BY: Phuong Truong DATE: 08/01/2016 JOB NAME: High Level Stm. & Comb. Swrs. and VM Phase 2B LOCATION: N/S Farragut Rd. PURPOSE: Installation of Type 3 Catch Basin 200' W/W/C of 108 St. DATE OF EXCAVATION: 07/08/16 CONTRACT SHEET NO: OF 20 5′ 2001 CURB LN. 'n -4"C.D. FARRAGUT RD. **ITEMS PLAN** N.T.S 3' 1'-8" TOP OF CURB GRADE LN. PROFILE - LOOKING EAST N.T.S.

SE-855 JOB NO: TEST PIT # 14 PREPARED BY: Arlene Gonzales DATE: 08/03/2016 conEdison CHECKED BY: 08/05/2016 Phuong Truong DATE: LOCATION: S/S Farragut Road JOB NAME: High Level Stm. & Comb. Swrs. and VM Phase 2B PURPOSE: Installation of Type 3 Catch Basin 7' E/E/C of 105 St. DATE OF EXCAVATION: 07/08/16 CONTRACT SHEET NO: OF 20 FARRAGUT RD. 2-4"C.D. ST. CURB LN. 5′ **ITEMS PLAN** N.T.S TOP OF CURB GRADE LN. 2-4"C.D. PROFILE - LOOKING EAST N.T.S.

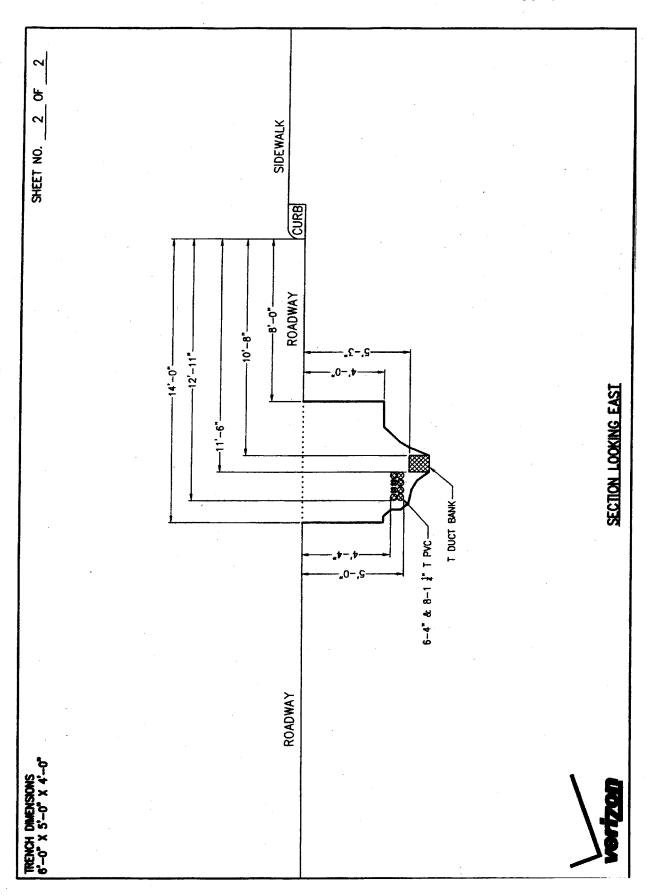


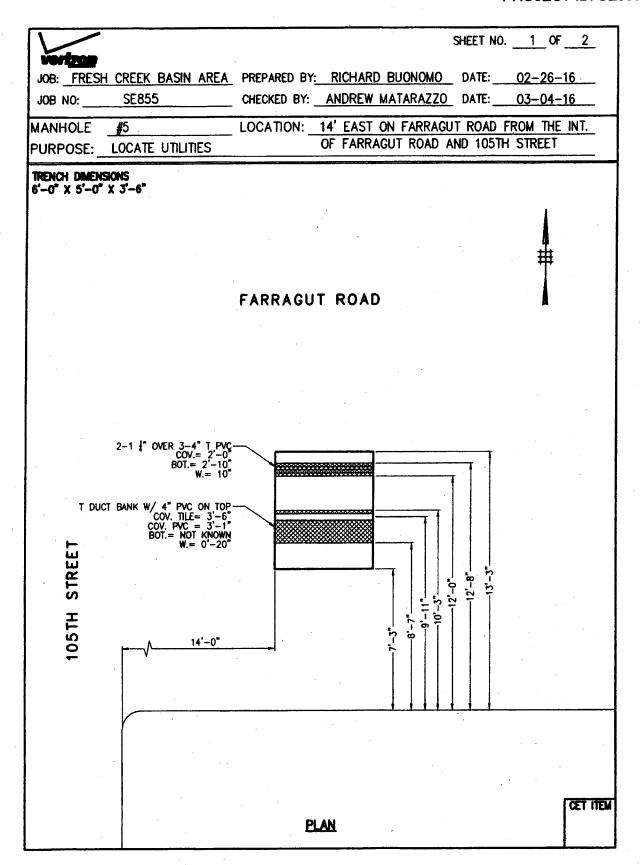


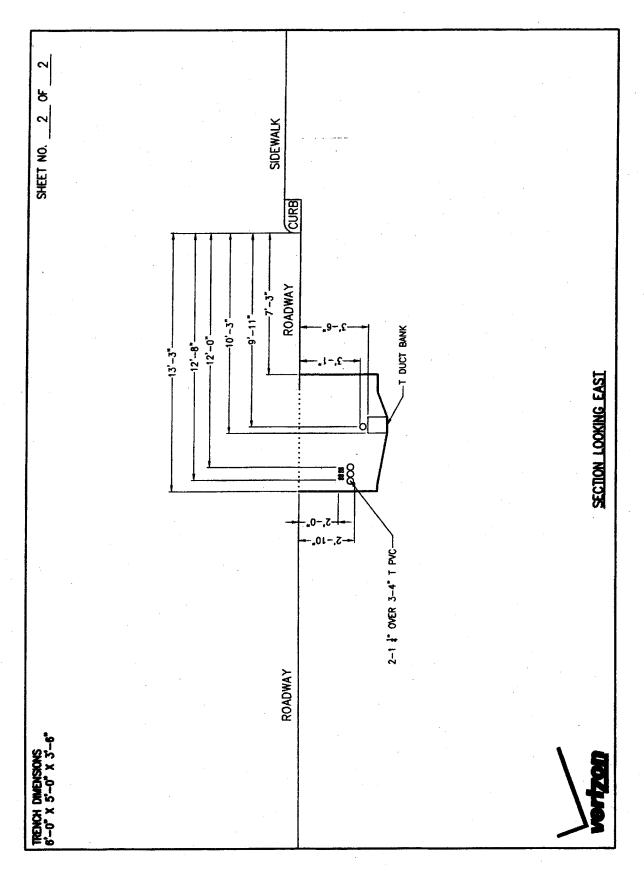




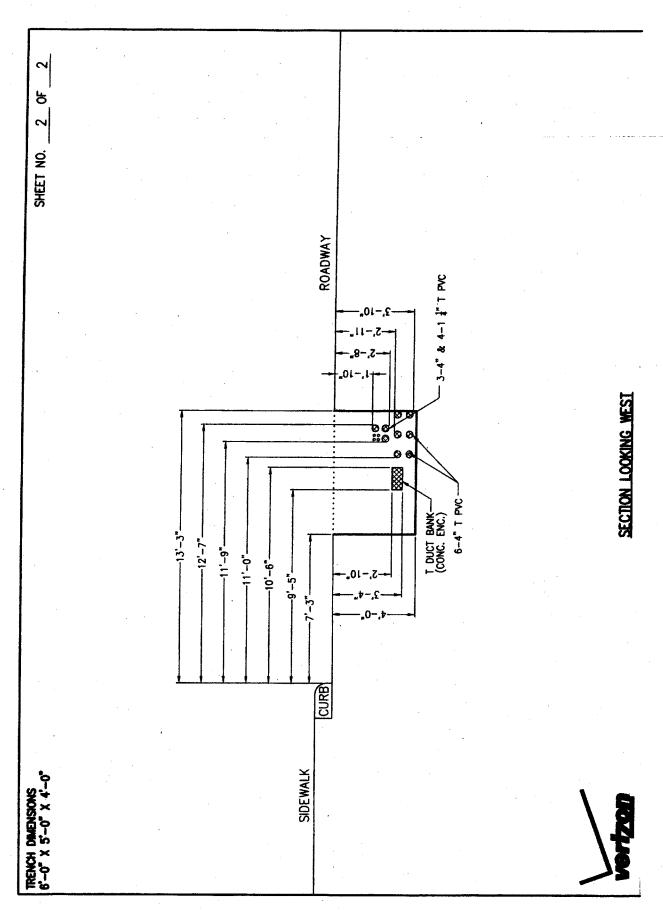
		
vertzen		SHEET NO. 1 OF
	CREEK BASIN AREA	PREPARED BY: RICHARD BUONOMO DATE: 02-26-16
JOB NO:	SE855	CHECKED BY: ANDREW MATARAZZO DATE: 03-04-16
ANHOLE	#4	LOCATION: 15' EAST ON FARRAGUT ROAD FROM THE IN
URPOSE:_	LOCATE UTILITIES	OF FARRAGUT ROAD AND 104TH STREET
RENCH DIMENS		
-U X 3-U	x 4 =0	
		# ##
		#
		FARRAGUT ROAD
		 5'-0"
	6-4" & 8-1 T PVC- COV.= 4'-4" BOT.= 5'-0" W.= 1'-5"	
	BOT.= 5'-0" W.= 1'-5"	
	T DUCT BANK-	
•	T DUCT BANK— COV.= 5'-3" BOT.= NOT KNOWN W.= 0'-10"	
104TH STREET		
T.		-6" - 6" - 12' - 11" - 14' - 0"
· T		10'-8' 11'-6" 12'-
I	^15'-0"	-0-8
5	- \	
		PLAN

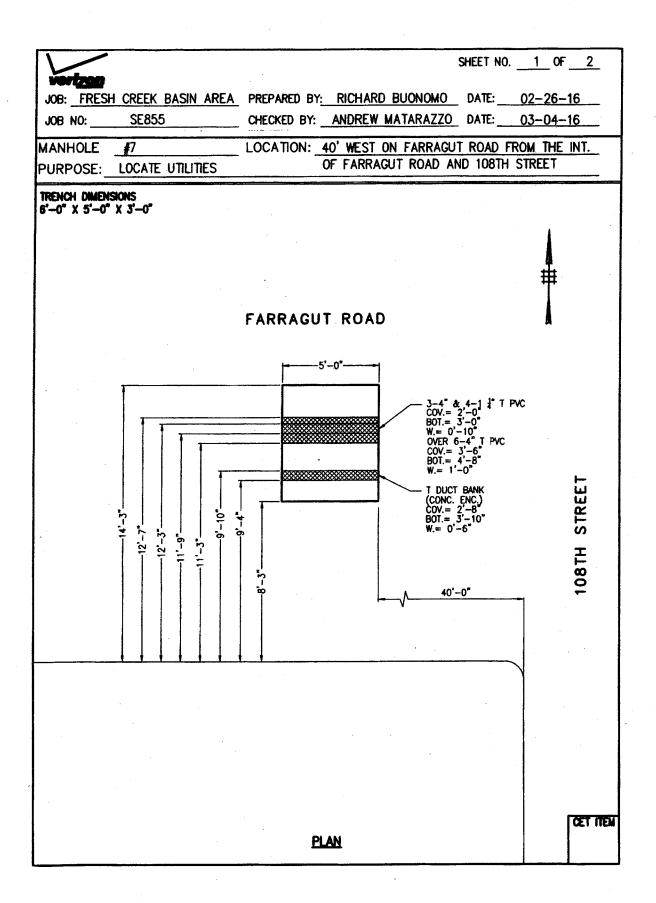


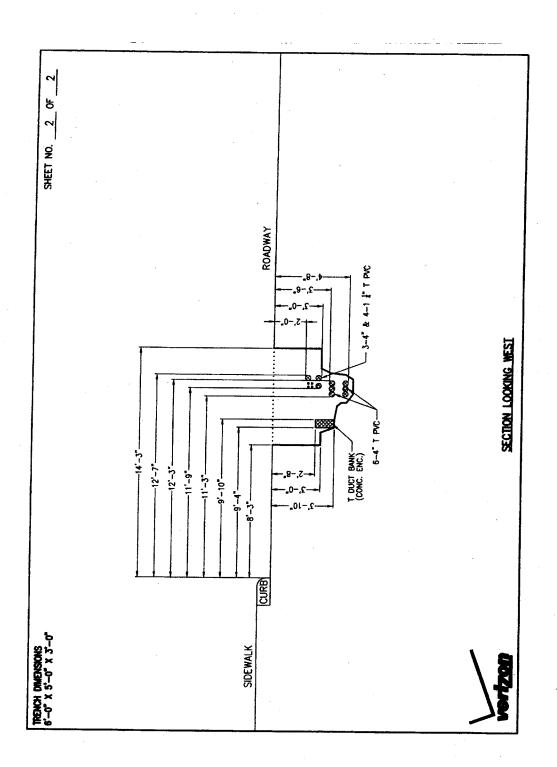


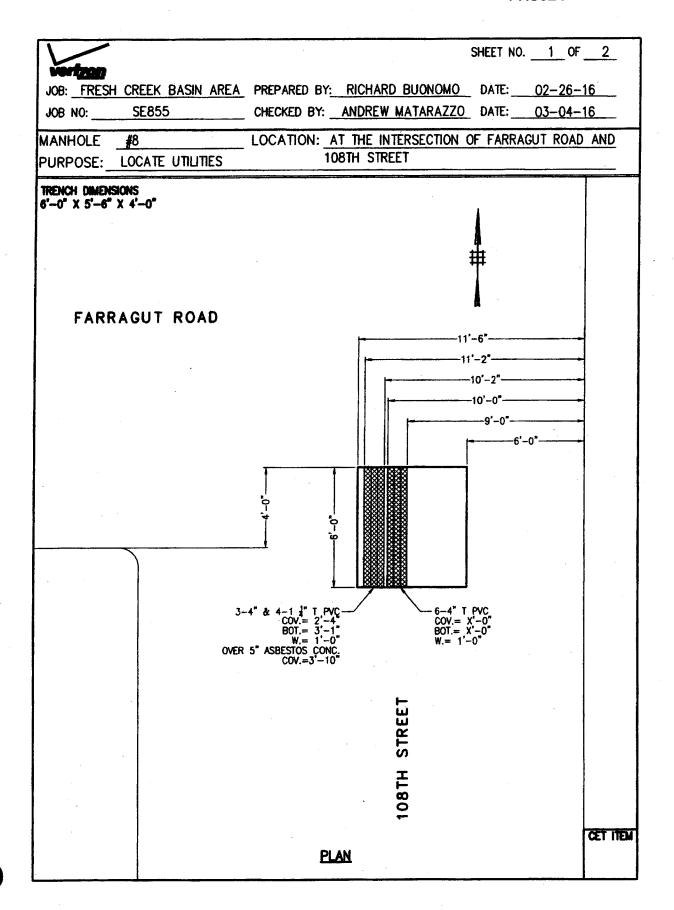


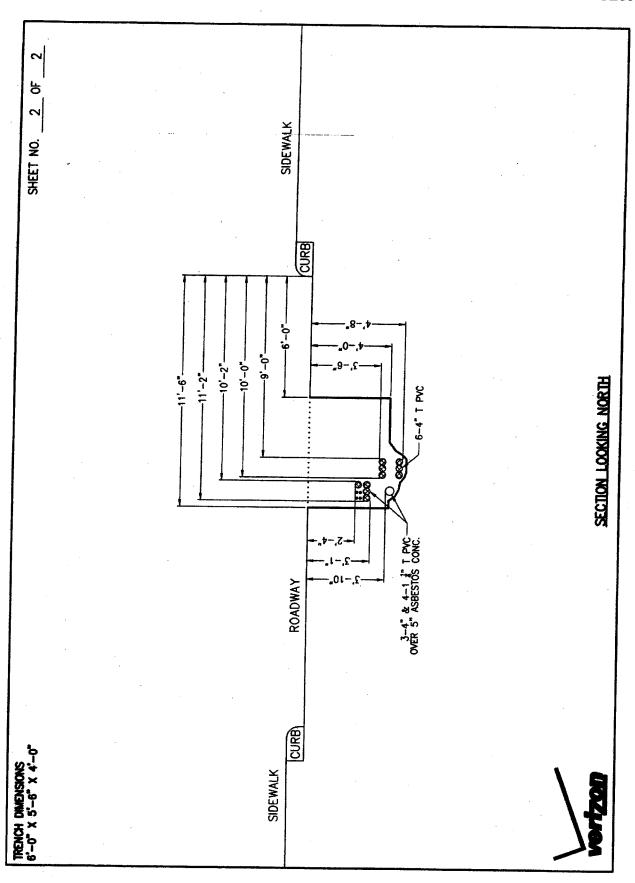
T		· · · · · · · · · · · · · · · · · · ·		SHEET NO. 1	OF 2
vertzen		:		**	
	CREEK BASIN AREA				
JOB NO:	SE855		NDREW MATARAZZO		04-16 .
MANHOLE			WEST ON FARRAGE FARRAGUT ROAD AM		
PURPOSE:_	LOCATE UTILITIES	UT .	FARRAGUT RUAD AF	AD IOOID SIKEE	. 1
TRENCH DIMENS					
		•			i ·
			,	#	H
	• •			• .	
		FARRAGUT	ROAD		l .
		 5'-0'	•		
		3-0	İ	t 4-1 ∦" T PVC 1,-10"	
			COV.= BOT.= W.= 0'	1'-10" 2'-8" -10"	
			T *12 10000000000	DI//C	
			COV.= BOT.= W.= 2'	3′-10° -3°	6
*.			T DUCT (CONC.	BANK ENC.)	STREET
		<u> </u>	(CONC. COV.= BOT.=, W.= 1	2 - 10 3'-4" -1"	TR.
	12'-7" 12'-7" 0"				
		 			108TH
		ا ا آب		-0"	5
4			V		
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·					(APT INT)
	•	PLAN		1.	CET ITEM
	•	للائحة	•	.	

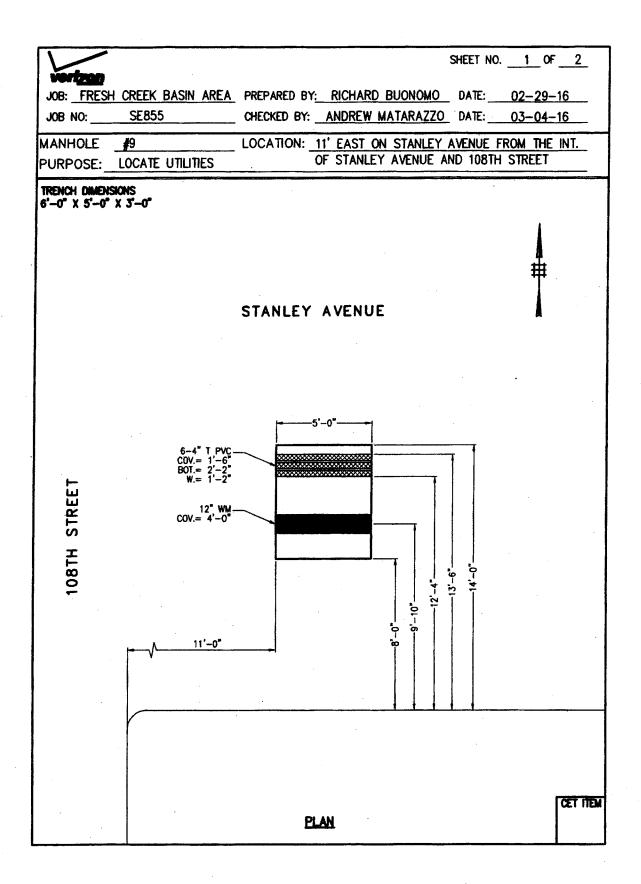


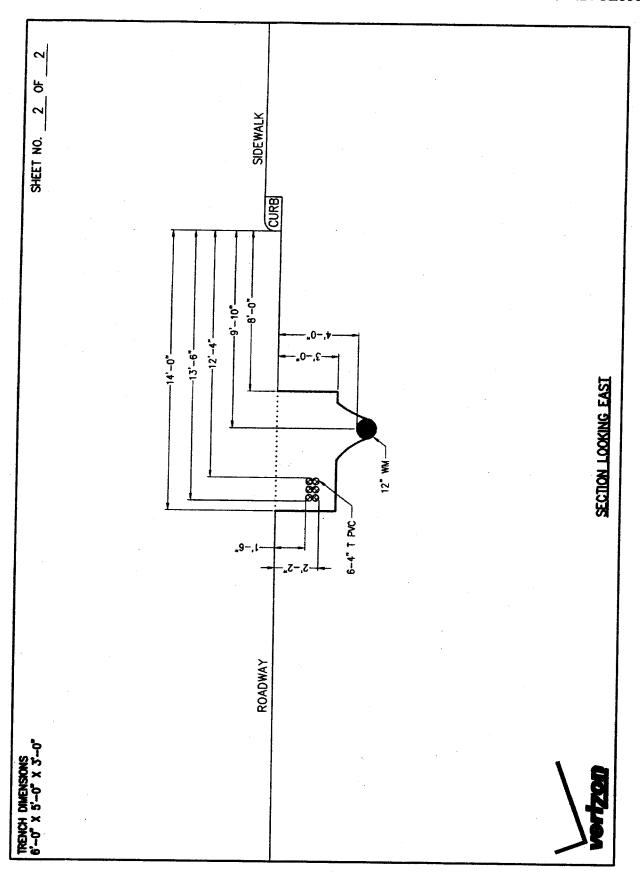


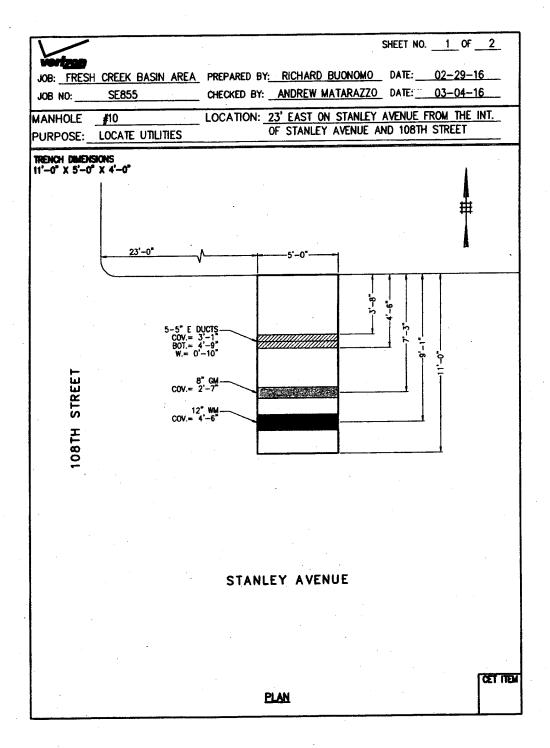


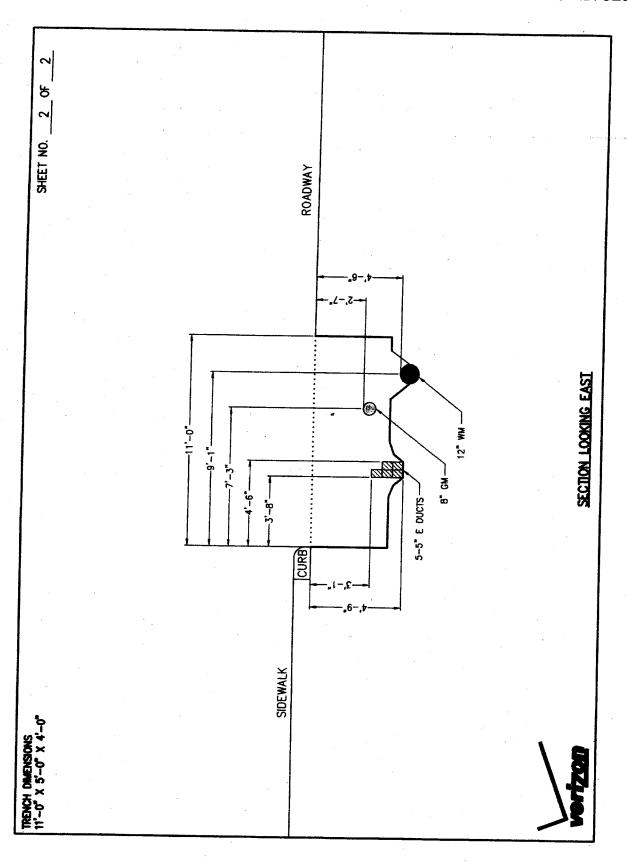




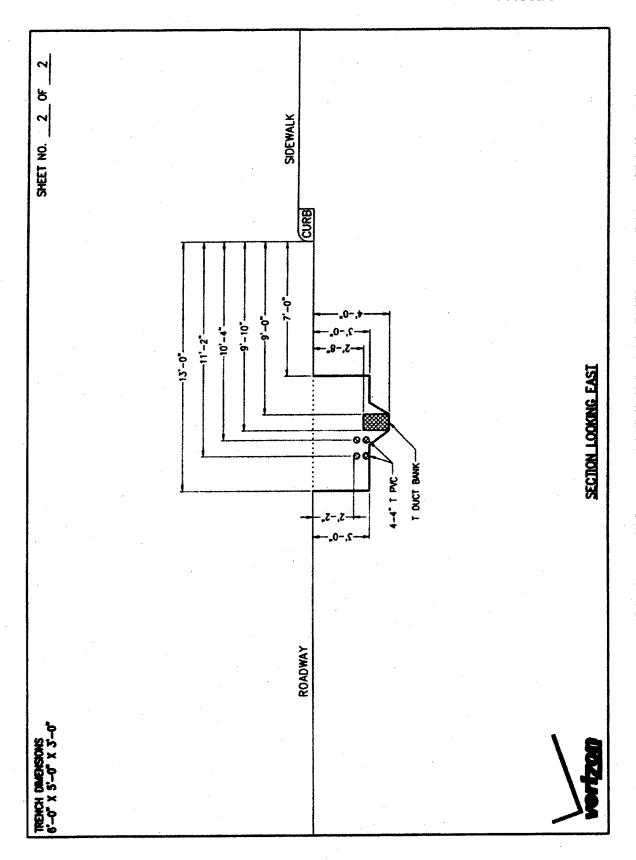








vertzen	SHEET NO. 1 OF 2
	A PREPARED BY: RICHARD BUONOMO DATE: 02-29-16
JOB NO:SE855	CHECKED BY: ANDREW MATARAZZO DATE: 03-04-16
MANHOLE #11	LOCATION: 10' WEST ON STANLEY AVENUE FROM THE INT.
PURPOSE: LOCATE UTILITIES	OF STANLEY AVENUE AND HINSDALE STREET
TRENCH DIMENSIONS 6'-0" X 5'-0" X 3'-0"	
x 50 x 50	
	, #
	į A
	STANLEY AVENUE
	STANLET AVENUE
	5'-0"
	<u> </u>
4-4" T PVC COV.= 2'-2" BOT.= 3'-0"	DA
BOT.= 3'-0"	HINSDALE
T DUCT BANK	1
T DUCT BANK COV.= 2'-8" BOT.= 4'-0" W.= 0'-10"	
	130
	910"-
	- 6
	+ + + + + +
	CET ITEM
	PLAN



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

ADDENDA CONTROL SHEET

BID OPENING DATE: MARCH 8, 2017		
PROJECT NO.: SE855		ulinggy a months
TITLE: CONSTRUCTION OF SANITARY AND WATER MAINS AND APPURTENAND ROAD, ETC, TOGETHER WITH ALL VERENETO, BOROUGH OF BROOKLY	CES IN, GLENWOO WORK INCIDENTA (N.	<u>)D</u>
ADDENDA ISSUED	No. OF DRAWINGS	DATE
#1: Additional Amendments	2	2/24/2017
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	and the second s	<u></u>
		anning the state of the state o

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 1

DATED: February 24, 2017

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.

- (1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, BID SCHEDULE, pages B-3 to B-39;

 Delete all pages in their entirety;

 Substitute attached revised pages B-3 (REVISION #1) to B-39 (REVISION #1).

 (Changes made: SEQ. NO. 151, ITEM NO. 70.41K081580001A, description has been revised and SEQ. NO. 152, ITEM NO. 70.41K081580001B, description has been revised)
- (2) Refer to the Contract Drawings Sheet 4 of 34 and 5 of 34;

 Delete Sheet 4 of 34 and 5 of 34 in their entirety;

 Substitute with attached revised Sheet 4R of 34 and 5R of 34.

 (NOTE: Please see the bubbles for the changes as shown on the contract drawings)
- (3) See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum plus thirty eight (38) pages of attachments and two (2) drawings.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

		Moksen Furgandah
		GURDIP SAINI, P.E. Associate Commissioner/Design I
		Associate Commissioner/Design I
·	Name of Bidder	
Ву:		
-		

ADDENDUM NO.1 PROJECT ID: SE855

QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC

QUESTION NO. 1: Item #151, 152,& 153 (70.41K081580001A,B,C) - indicate that underpinning is required for (3) buildings. However, there is no detail indicating the scope of the underpinning....specifically the limits as to where the underpinning will be for each structure.

ANSWER NO. 1: Refer to Article.1 & Article. 2 of this Addendum.

PROJECT ID:SE855



BID SCHEDULE

- proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated 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 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 item numbers appliances of every description necessary to complete the entire work, as specified, and the removal of all in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and 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 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.
- Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the them. The pages of this Bid Schedule are numbered consecutively, as follows: B-3 [REVISION #1] Through B-39 [REVISION #1] **©**

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.



CONTRACT PIN: 8502016SE0002C

2/24/2017 10:12 AM

COL. 5 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS CTS DOLLARS CTS					
COL. 4 UNIT	TONS	۲,	C.Y.	u. L	F.
COL 3 ENGINEER'S ESTIMATE OF QUANTITIY 44,335.00	4,270.00	3,950.00	110.00	800.00	510.00
COL. 2 ITEM NUMBER and DESCRIPTION 4.02 AF-R ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	4.02 CA BINDER MIXTURE	4.04 H CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	4.05 AX HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	4.08 AA CONCRETE CURB (18" DEEP)	4.08 BA CONCRETE CURB (21" DEEP)
SEG. NO	005	003	004	002	900





2/24/2017 10:12 AM

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855

COL 1 SEQ. NO	COL.2 TEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	COL.4	COL.5 UNIT PRICE EXTER (IN FIGURES) DOLLARS :CTS	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
002	4.09 AD STRAIGHT STEEL FACED CONCRETE CURB (18" DEEP)	320.00	Ä.		
800	4.09 AE STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)	740.00	L.F.		
600	4.09 BD DEPRESSED STEEL FACED CONCRETE CURB (18" DEEP)	550.00	L.F.		
010	4.09 CD CORNER STEEL FACED CONCRETE CURB (18" DEEP)	400.00	LF.		
011	4.09 CE CORNER STEEL FACED CONCRETE CURB (21" DEEP)	515.00	L.F.		
012	4.13 AAS 4* CONCRETE SIDEWALK (UNPIGMENTED)	5,400.00	я. П		



CONTRACT PIN: 8502016SE0002C

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COL. 5 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS : CTS DOLLARS : CTS						
COL 4	S.F.	S. T.	ЕАСН	EACH	EACH	EACH
COL.3 ENGINEERS ESTIMATE OF QUANTITY	1,050.00	1,300.00	5.00	2.00	14.00	5.00
COL. 2 TEM NUMBER and DESCRIPTION	4.13 BAS 7" CONCRETE SIDEWALK (UNPIGMENTED)	4.13 DE EMBEDDED PREFORMED DETECTABLE WARNING UNITS	4.16 AC TREES REMOVED (18" TO UNDER 24" CALIPER)	4.16 AD TREES REMOVED (24" CALIPER AND OVER)	4.16 CAA TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES	4.18 A MAINTENANCE TREE PRUNING (UNDER 12" CAL.)
COL 1 SEQ. NO	013	014	015	016	017	018





CONTRACT PIN: 8502016SE0002C

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2/24/2017 10:12 AM

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

8 7		COL 3 ENGINEER'S	SOL.4	COL.5 UNIT PRICE	COL. 6 EXTENDED AMOUNT
SEQ. NO	ITEM NUMBER and DESCRIPTION	ESTIMATE OF QUANTITY	HNO	(IN FIGURES) DOLLARS CTS	(IN FIGURES) DOLLARS
025	50.11MS116040 11'-6"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	2,190.00	H.	***	
026	50.11MS130040 13'-0'W X 4'-0'H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	650.00	1.5		
027	50.21C3C024D 24" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	760.00	Ä		
028	50.21C3C030D 30" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE.	815.00	류		
020	50.21C3C036D 36" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	260.00	Ä.		
030	50.21C3C038W 38"W X 24"H R.C.P. CLASS HE-III COMBINED SEWER, ON CONCRETE CRADLE	215.00	Ŗ.		





CONTRACT PIN: 8502016SE0002C

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COL. 2 COL. 3 COL. 4 COL. 5 COL. 6 COL. 6 COL. 6 COL. 6 COL. 9 CO	COMBINED SEWER, ON CONCRETE CRADLE	STORM SEWER, ENCASED IN CONCRETE	V L.F. CLASS HE-III STORM SEWER, ENCASED IN	V CLASS HE-III STORM SEWER, ENCASED IN	V L.F. CLASS HE-III STORM SEWER, ENCASED IN	NED SEWER, ON CONCRETE CRADLE
COL. 2 THE THE THEM NUMBER and DESCRIPTION IN	111 1	50.21M3E024D 24" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE	50.21M3E030W 30"W x 19"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	50.21M3E038W 38"W X 24"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	50.21M3E045W 45"W X 29"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	50.31CC15 15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE
COL. 1. SEQ. NO	031	032	033	034	035	036



CONTRACT PIN: 8502016SE0002C

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COL. 1 SEQ. NO	COL. 2 TIEM NUMBER and DESCRIPTION	COL.3 ENGINEERS ESTIMATE OF QUANTITY	SOL 4	COL.5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
037	50.31CC18 18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	1,595.00	<u>ட</u> ் ப்	* · · · · · · · · · · · · · · · · · · ·	
038	50.31MC15 15" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	45.00	<u>"</u>		
039	50.31ME12 12" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	95.00	r.		
040	50.31ME15 15" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	210.00	Ŗ		
142	50.31ME18 18" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	215.00	H.		
042	51.11C001 CHAMBER NO. 1	1.00	ЕАСН		





CONTRACT PIN: 8502016SE0002C

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047 51.11C006 EACH 1.00 EACH CHAMBER NO. 6 1.00 EACH 1.00 EACH	046 51.11C005	244 51.11C003 1.00 EACH CHAMBER NO. 3	COL.2 COL.5 COL.6 ENGINEER'S COL.4 COL.5 COL.6 UNIT PRICE EXTENDED AMOUNT ESTIMATE (IN FIGURES) (IN FIGURES) ITEM NUMBER and DESCRIPTION OF QUANTITIY UNIT DOLLARS CTS DOLLARS	UNIT PRICE (IN FIGURES) DOLLARS		
51.11C005 CHAMBER NO. 5			51.11C002 1.00 CHAMBER NO. 2 1.00 51.11C003 1.00 CHAMBER NO. 3 1.00	· · · · · · · · · · · · · · · · · · ·	51,11C004 CHAMBER NO. 4	
51.11C003 1.00 CHAMBER NO. 3 1.00 51.11C004 1.00 CHAMBER NO. 4 1.00 51.11C005 1.00 CHAMBER NO. 5 1.00	51.11C003 1.00 CHAMBER NO. 3 1.00 51.11C004 1.00 CHAMBER NO. 4 1.00			天	51.11C002 CHAMBER NO. 2	



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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

COL 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	80L4	COL.5 UNIT PRICE (IN FIGURES) DOI LARS	COL. 6 EXTENDED AMOUNT (IN FIGURES)
049	51.11C008 CHAMBER NO. 8	1.00	EACH		
050	51.11P004 STANDARD 4:0" DIAMETER PRECAST MANHOLE	5.00	ЕАСН		
051	51.11P005 STANDARD 5-0" DIAMETER PRECAST MANHOLE	7.00	EACH		
052	51.11P006 STANDARD 6'-0" DIAMETER PRECAST MANHOLE	3.00	EACH		
053	51.11P007 STANDARD 7'-0" DIAMETER PRECAST MANHOLE	2.00	ЕАСН		
054	51.21A00000C ACCESS MANHOLE	21.00	ЕАСН		





CONTRACT PIN: 8502016SE0002C

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COL 5 COL 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS CTS DOLLARS CTS COL 6 COL 6 COL 5 COL 6 COL 5 COL 5 COL 6 COL 7 COL 6 COL 7 COL 6 COL 7 COL 6 COL 7 COL 6 COL 7 COL 6 COL 7 COL 6 COL 7 COL 6 C						
COL. 4 UNIT	EACH	ЕАСН	EACH	EACH	EACH	EACH
COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	3.00	6.00	9.00	11.00	1.00	1.00
COL 2 E TEM NUMBER and DESCRIPTION	51.21A000000E ACCESS MANHOLE ON EXISTING SEWER	51.21S0A1000V STANDARD MANHOLE TYPE A-1	51.21S0A3000V STANDARD SHALLOW MANHOLE TYPE A-3	51.21S0B1000V STANDARD MANHOLE TYPE B-1	51.21S0E1038H STANDARD MANHOLE TYPE E-1 ON 38"W X 24"H H.E.R.C.P. SEWER	51.21S0E1045H STANDARD MANHOLE TYPE E-1 ON 45"W X 29"H H.E.R.C.P. SEWER
COL.1 SEQ. NO	055	056	057	058	029	090



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502016SE0002C

COL.1 SEQ. NO	COL.2 TEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4.	COL. 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
061	51.41S001 STANDARD CATCH BASIN, TYPE 1	55.00	ЕАСН	************	
062	51.41S003 STANDARD CATCH BASIN, TYPE 3	2.00	ЕАСН		
690	51.41W000 SHALLOW CATCH BASIN	33.00	ЕАСН		
064	51.42S1SO INCREMENTAL COST OF STANDARD CATCH BASIN TYPE 3 WITH CURB PIECE IN LIEU OF STANDARD CATCH BASIN TYPE 1	11.00	ЕАСН		
065	52.11D12 12" DUCTILE IRON PIPE BASIN CONNECTION	1,980.00	F.		
990	52.31V06C15 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	5.00	EACH		





CONTRACT PIN: 8502016SE0002C

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:0F.1		COL 3 ENGINEER'S	20L4	COL. 5. UNIT PRICE	COL 6 EXTENDED.AMOUNT
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITY	UNIT	DOLLARS CTS	DOLLARS
790	52.31V06C18 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	00.00	ЕАСН		
890	52,31V08C15 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	2.00	ЕАСН		
690	52,31V08C18 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	5.00	ЕАСН		
070	52.41V06R 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	1,240.00	Ä.		
071	52.41V08R 8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	220.00	Ľ,		
072	53.11DR TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	13,185.00	ι. L		



CONTRACT PIN: 8502016SE0002C

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COL. 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) (IN FIGURES) (IN FIGURES) (IN FIGURES)		I				T
COL.4		EACH	C.Y.	Ç.	C.Y.	ЕАСН
COL.3 ENGINEER'S ESTIMATE OF QUANTITY	20.00	11.00	5,480.00	18.00	18.00	3.00
COL. 2 TEM NUMBER and DESCRIPTION	54.12CS CLEANING OF DRAINAGE STRUCTURES	55.11AB ABANDONING BASINS AND INLETS	6.02 AAN UNCLASSIFIED EXCAVATION	6.02 XHEC INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) TRANSIT FACILITIES AND BUILDING VAULTS	6.02 XSCW INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) TRANSIT FACILITIES	6.23 AB REMOVE EXISTING FIRE ALARM POST
COL.1 SEQ. NO	073	074	075	920	7.20	078





CONTRACT PIN: 8502016SE0002C

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COL. 1 SEQ. NO	COL.2 THEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4	COL. 5 UNIT PRICE (IN FIGURES) DOLLARS:CTS	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
079	6.23 BA FURNISH AND INSTALL FIRE ALARM POST AND SUBBASE IN ACCORDANCE WITH F.D. STD. DWG. #141	3.00	ЕАСН		
080	6.23 BD FURNISH AND INSTALL 4-PAIR FIRE ALARM CABLE	3,075.00	Ŗ.		
180	6.23 BE FURNISH AND INSTALL FIRE DEPARTMENT MANHOLE TYPE "A" WITH FRAME AND COVER IN ACCORDANCE WITH F.D. STD. DWG. #140, #144 & #144E	3.00	ЕАСН		
082	6.23 BFB FURNISH AND INSTALL FIRE DEPARTMENT 24 WIRE TERMINAL BOX AND TERMINATE FIRE ALARM CABLES	3.00	ЕАСН		
083	6.23 BFC FURNISH AND INSTALL FIRE DEPARTMENT 12 WIRE TERMINAL BOX AND TERMINATE FIRE ALARM CABLES	1.00	ЕАСН		
084	6.23 BGSE FURNISH AND INSTALL 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION)	120.00	r.		



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COL. 1	COL 2	COL.3 ENGINEER'S ESTIMATE	COL 4	ă	
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITY	TINO	(IN PIGURES) DOLLARS :CTS DOLLARS	· CTS
085	6.23 BGT FURNISH AND INSTALL 2 - 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 IN ONE TRENCH (WITHOUT PAVEMENT EXCAVATION, ONE ON TOP OF THE OTHER)	1,870.00	<u> </u>		
086	6.23 BHE FURNISH AND INSTALL 4" 90-DEGREE P.V.C. WIDE BEND, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141 OR #145AA	4.00	ЕАСН		
087	6.23 BP FURNISH AND INSTALL FIRE ALARM PEDESTAL BUMPERS (2 REQUIRED PER SET) IN ACCORDANCE WITH F.D. STD. DWG. #168	4.00	SETS		
880	6.25 RS TEMPORARY SIGNS	4,700.00	R.		
680	6.26 TIMBER CURB	29,800.00	H.		





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COL. 5 COL. 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS CTS DOLLARS CTS						
COL 3 COL 4 C ENGINEER'S COL 4 UNI ESTIMATE (IN F OF QUANTITITY UNIT DOLLY	13,150.00 L.F.	42.00 MONTH	3,550.00 L.F.	23,600.00 L.F.	580.00 P/HR	8,905.00 L.F.
	• · · · · · · · · · · · · · · · · · · ·		ENT MARKINGS (4" WIDE))E)
COL. 2 TTEM NUMBER and DESCRIPTION	6.28 AA LIGHTED TIMBER BARRICADES	6.40 D ENGINEER'S FIELD OFFICE (TYPE D)	6.44 THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	6.49 TEMPORARY PAVEMENT MARKINGS (4" WIDE)	6.52 CG CROSSING GUARD	6.53 REMOVE EXISTING LANE MARKINGS (4" WIDE)
COL 1		160	092	093	094	095



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COL 1 SEQ. NO	COL.2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL.4	COL5 UNIT PRICE (IN FIGURES) DOLLARS : CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
960	6.87 PLASTIC BARRELS	16,950.00	ЕАСН		
260	60.11R520 FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	2,470.00	n,		
860	60.11R606 FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	330.00	<u>.</u> 7		
660	60.11R608 FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	2,025.00	L.F.		
100	60.11R612 FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	6,410.00	L.F.		
101	60.12D06 LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	365.00	L.F.		





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COL.5 COL.6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS : CTS					
COL.4	L.F.	L.F.	L.F.	TONS	ЕАСН
COL.3 ENGINEER'S ESTIMATE OF QUANTITY	2,100.00	6,585.00	2,540.00	19.00	33.00
COL.2 TTEM NUMBER and DESCRIPTION	60.12D08 LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS	60.12D12 LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	60.12D20 LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	60.13M0A24 FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24 INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	61.11DMM06 FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
COL. 1 SEQ. NO	102	103	104	105	106



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COL 1	20.2 mg/s	COL.3 ENGINEER'S ESTIMATE	COL 4	5 ICE RES)	COL. 6 EXTENDED AMOUNT (IN FIGURES)
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITIY	UNIT	DOLLARS CTS	DOLLARS
107	61.11DMM08 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	6.00	ЕАСН		
108	61.11DMM12 FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	18.00	ЕАСН		
109	61.11DMM20 FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	0.00	ЕАСН		
110	61.11TWC03 FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	3.00	ЕАСН		
	61,11TWC04 FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	5.00	ЕАСН		





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COL. 6 EXTENDED AMOUNT (IN FIGURES) CTS DOLLARS CTS						
COL. 5 UNIT PRICE (IN FIGURES) DOLLARS		Ť	T	T	.	Ť
COL. 4	ЕАСН	ЕАСН	EACH	ЕАСН	ЕАСН	БАСН
COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	4.00	1.00	33.00	6.00	18.00	6.00
COL 2 TEM NUMBER and DESCRIPTION	61,11TWC06 FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.11TWC08 FURNISHING AND DELIVERING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM06 SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM08 SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM12 SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM20 SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
COL.1 SEQ. NO	112	113	114	115	116	117



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COL. 1 SEQ. NO	COL. 2 TEM NUMBER and DESCRIPTION.	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	COL.4	COL. 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	CTS
118	61.12TWC03 SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	3.00	ЕАСН			, , , , , , , , , , , , , , , , , , , ,
119	61.12TWC04 SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	2.00	ЕАСН			
120	61.12TWC06 SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	4.00	ЕАСН			
121	61.12TWC08 SETTING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	ЕАСН			
122	62.11SD FURNISHING AND DELIVERING HYDRANTS	33.00	ЕАСН			
123	62.12SG SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	33.00	ЕАСН			





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WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS 44.12COEG 64.12COEG 64.12COEG 64.12COEG	WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	63.11VC FURNISHING AND DELIVERING VARIOUS CASTINGS	52.14FS -URNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	62.13RH REMOVING HYDRANTS	COL.2 COL.6
151.00			33.00 G AND DELIVERING VARIOUS CASTINGS		HYDRANTS G, DELIVERING AND INSTALLING HYDRANT FENDERS IG AND DELIVERING VARIOUS CASTINGS 33.00



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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COL.5 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS : CTS DOLLARS : CTS						
COL. 4	L.F.	L.F.		ЕАСН	EACH	ЕАСН
COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	1,020.00	170.00	1,020.00	1.00	7.00	5.00
COL 2 ITEM NUMBER and DESCRIPTION	64.12COLT CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	64.12ESEG EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	64.12ESLT EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	64.13WC08 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 8-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64.13WC12 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64,13WC20 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS
COL. 1 SEQ. NO	130	131	132	133	134	135





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COL 1 SEQ. NO	COL. 2 TEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS:CTS	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS C	<u>SLIS</u>
136	65.11BR FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	21,000.00	LBS.			
137	65.21PS FURNISHING AND PLACING POLYETHYLENE SLEEVE Unit price bid shall not be less than: \$ 0.50	10,900.00	Н			
138	65.31FF FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$0.10	293,800.00	S.F.			
139	65.71SG FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	850.00	C.Y.			
140	7.13 B MAINTENANCE OF SITE Unit price bid shall not be less than: \$8,000.00	36.00	MONTH			***************************************
141	7.19 LOAD TRANSFER JOINT	830.00	4			



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COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL. 6 EXTENDED AMOUNT (IN FIGURES) S DOLLARS
142	7.36 PEDESTRIAN STEEL BARRICADES	24,150.00	Ä.		
143	7.88 AA RODENT INFESTATION SURVEY AND MONITORING Unit price bid shell not be less then: \$10,400.00	1.00	L.S.		
144	7.88 AB RODENT BAIT STATIONS Unit price bid shall not be less than: \$60.00	458.00	ЕАСН		
145	7.88 AC BAITING OF RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 9.50	458.00	ЕАСН		
146	7.88 AD WATERBUG BAIT APPLICATIONS Unit price bid shall not be less than: \$65.00	954.00	BLOCK		
147	70.12AN CONTINUOUS FLIGHT AUGER (CFA) PILES	19,630.00	V.F.		





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00F.1	COUL2	COL.3 ENGINEER'S ESTIMATE	COL. 4) ES)	COL. 8 EXTENDED AMOUNT (IN FIGURES)
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITIN	UNIT	DOLLARS CTS	DOLLARS CTS
153	70.41K081580001C SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING AND MAINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1 - THREE (3) STORY BRICK, RESIDENTIAL (330 STANLEY AVENUE)	1.00	L.S.		
154	70.51EO EXCAVATION OF BOULDERS IN OPEN CUT Unit price bid shall not be less than: \$75.00	20.00	C.Y.		
155	70.61RE ROCK EXCAVATION	90.00	C.Y.		
156	70.71SB STONE BALLAST Unit price bid shall not be less than: \$ 15.00	217.00	C.Y.		
157	70.81CB CLEAN BACKFILL Unit price bid shall not be less than: \$ 15.00	10,135.00	C.Y.		





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BID SCHEDULE FORM

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CTS EXTENDED AMOUNT (IN FIGURES) DOLLARS STO: (IN FIGURES) UNIT PRICE COL. 5 DOLLARS SOL. 4 S. Ç. ≺. C.≺ LBS. C.≺ E S. 150.00 255.00 1,030.00 21,950.00 30.00 65.00 OF QUANTITY ENGINEER'S ESTIMATE COL. 3 HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS) Unit price bid shall not be less than: \$ 20.00 ITEM NUMBER and DESCRIPTION Unit price bid shall not be less than: \$62.50 Unit price bid shall not be less than: \$ 15.00 Unit price bid shall not be less than: \$62.50 Unit price bid shall not be less than: \$ 1.00 ADDITIONAL SELECT GRANULAR BACKFILL ADDITIONAL STEEL REINFORCING BARS SOL. 2 ADDITIONAL BRICK MASONRY ADDITIONAL CONCRETE 73.31AE0 73.51AS 73.41AG 73.21AC 73.11AB 72.11HF SEQ. NO . 1905 163 162 159 160 161 158



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COL 1 SEC NO	COL.2	COL.3 ENGINEERS ESTIMATE	COL. 4	COL. 5 UNIT PRICE (IN FIGURES)	COL. 6 EXTENDED AMOUNT (IN FIGURES)
164	73.61AT ADDITIONAL STONE BALLAST Unit price bid shall not be less than: \$15.00	20.00	C.Y.		
165	76.11CR CONSTRUCTION REPORT	1.00	L.S.		
166	76.21MR MONITORING AND POST-CONSTRUCTION REPORT	1.00	r.S.		
167	8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	20,000.00	TONS		
168	8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	16.00	SETS		
169	8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	1,000.00	TONS		





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COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE OF QUANTITITY	COL.4	COL. 5 UNIT PRICE (IN FIGURES) DOLLARS : CTS	COL. 6 EXTENDED AMOUNT (IN FIGURES) - DOLLARS : CTS
170	8.01 S HEALTH AND SAFETY	1.00	L.S.		
171	8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	720.00	DAY		
172	8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER	24.00	SETS		
173	8.02 A SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	400.00	R.		
174	8.02 B SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	40.00	ui L		



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SEQ. NO	ITEM NUMBER and DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	4 UNIT	COL. 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL. 6 EXTENDED AMOUNT (IN FIGURES) S DOLLARS	NT . CTS
175	9.04 HW ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 50,000.00	1.00	ர் ல்	50,000 00		\$50,000 00
176	9.30 STORM WATER POLLUTION PREVENTION	1.00	L.S.			
771	SL-20.02.02 FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	6.00	ЕАСН			
178	SL-20.08.01 REMOVE STANDARD TYPE ANCHOR BOLT CONCRETE FOUNDATION	6.00	ЕАСН			
179	SL-21.03.02 FURNISH AND INSTALL TYPE 2S, 4S, 6S, 8S OR 12S LAMPPOST WITH TRANSFORMER BASE	6.00	ЕАСН			





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COL.5 COL.6 UNIT.PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS CTS DOLLARS CTS						
COL 4 E	ЕАСН	ЕАСН	ЕАСН	ЕАСН	ЕАСН	ЕАСН
COL.3 ENGINEER'S ESTIMATE OF QUANTITY	9.00	6.00	6.00	13.00	1.00	2.00
COL. 2 THEM NUMBER and DESCRIPTION	SL-21.09.05 REMOVE STANDARD FABRICATED STEEL, SPUN ALUMINUM NO. 10, ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY.	SL-22.16.05 FURNISH AND INSTALL ROADWAY TYPE LED FIXTURE AS PER SPECIFICATION 466 WITH PEC RECEPTACLE AND PEC	SL-26.01.04 FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT	UTL-6.01.1 GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$1,040.00	UTL-6.01.2 GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	UTL-6.01.2A GAS MAIN CROSSING 38"W X 24"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$1,870.00
COL. 1 SEQ. NO	180	181	182	183	184	185



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COL. 5 COL. 6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS CTS DOLLARS CTS						
COL. 3 COL. 4 ENGINEER'S ESTIMATE OF QUANTITITY UNIT DO	1.00 EACH	1.00 EACH	2.00 ЕАСН	5.00 EACH	1.00 EACH	1.00 EACH
COL 2 TEM NUMBER and DESCRIPTION	UTL-6.01,2B GAS MAIN CROSSING 30"W X 19"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	UTL-6.01.4A. GAS MAIN CROSSING 4:0"W X 2:0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,960.00	UTL-6.01.4C GAS MAIN CROSSING 45"W X 29"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,960.00	UTL-6.01.4D GAS MAIN CROSSING 4:0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	UTL-6.01.4N GAS MAIN CROSSING 4'-6"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	UTL-6.01.5C GAS MAIN CROSSING 5'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$2,340.00
COL 1 SEQ. NO	186	187	188	189	190	191





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COL.5 COL.6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS CTS						
COL 4.	EACH	EACH	ЕАСН	ЕАСН	ЕАСН	ЕАСН
COL.3 ENGINEER'S ESTIMATE OF QUANTITY	1.00	3.00	2.00	90.00	32.00	4.00
COL.2 ITEM NUMBER and DESCRIPTION	UTL-6.01.5F GAS MAIN CRO CONCRETE STO Unit price bid s	UTL-6.01.700 GAS MAIN CROSSING 13:-0"W X 4:-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,940.00	UTL-6.01.7VV GAS MAIN CROSSING 11'-6"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$2,840.00	UTL-6.01.8 GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01) Unit price bid shell not be less than: \$ 465.00	UTL-6.01.9 GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$485.00	UTL-6.02 EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (\$6.02) Unit price bid shall not be less than: \$715.00
COL. 1 SEQ. NO	192	193	194	195	196	197



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	COL.6 UNIT PRICE EXTENDED AMOUNT (IN FIGURES) (IN FIGURES) DOLLARS : CTS DOLLARS : CTS		c				
TIEM NUMBER and DESCRIPTION UTL-6.03 REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (56.03) Unit price bid shall not be less than: \$ 15.00 UTL-6.03.1 REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (FOR NATIONAL GRID WORK ONLY) (56.03) Unit price bid shall not be less than: \$ 25.00 UTL-6.04 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAINING.) (56.04) Unit price bid shall not be less than: \$ 35.00 UTL-6.05 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAINING.) (56.04) Unit price bid shall not be less than: \$ 65.00 UTL-6.05 UNIT price bid shall not be less than: \$ 180.00 UTL-6.06A SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MANN TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSION TRANSMISSI	COL. 4 UNIT	Ŗ.	F.	ЕАСН	ЕАСН	C.Y.	C.Y.
	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	500.00	7,500.00	175.00	175.00	3,500.00	100.00
202 203 203		UTL-6.03 REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (S6.03) Unit price bid shall not be less then: \$ 15.00	UTL-6.03.1 REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (FOR NATIONAL GRID WORK ONLY) (S6.03) Unit price bid shall not be less than: \$25.00	UTL-6.04 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (\$6.04) Unit price bid shall not be less than: \$35.00	UTL-6.05 ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05) Unit price bid shall not be less than: \$65.00	UTL-6.06 SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06) Unit price bid shall not be less than: \$ 180.00	UTL-6.06A SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG) (S6.06A) Unit price bid shall not be less than: \$230.00





PROJECT ID: SE855 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

BID SCHEDULE FORM

CONTRACT PIN: 8502016SE0002C

2/24/2017 10:12 AM

COL. 1 SEQ. NO	COL.2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITIY	COL 4	COL.5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL.6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	CTS
204	UTL-6.07	100.00	C.Y.	WPA . 200 . 200		
	TEST PITS FOR GAS FACILITIES (S6.07)			**************************************	was defin	1,,,,,,,,,
	Unit price bid shall not be less than: \$ 100.00					- to the state of
205	UTL-GCS-2WS	1.00	F.S.	150.000:00	\$150.000:00	
	GAS INTERFERENCES AND ACCOMMODATIONS					
	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 150,000.00			7 M.D. Se es	e ente av a	
	Unit price bid shall not be less than: \$ 0.00			***	· · · · · · · · · · · · · · · · · · ·	

SUB-TOTAL: \$

206	206 6.39 A	1.00	L.S.				
	MOBILIZATION				· 49 49 18 18 18 18 18 18 18 18 18 18 18 18 18	e server ver a	
	BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.			- :			

TOTAL BID PRICE: \$

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.

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

ADDENDA CONTROL SHEET

BID OPENING DATE: MARCH 8, 2017		
PROJECT NO.: SE855		
TITLE: CONSTRUCTION OF SANITARY AND WATER MAINS AND APPURTENANCE ROAD, ETC, TOGETHER WITH ALL VITHERETO, BOROUGH OF BROOKLY	CES IN, GLENWOO WORK INCIDENTA	<u>DD</u>
ADDENDA ISSUED	No. OF DRAWINGS	DATE
#1: Additional Amendments	2	2/24/2017
#2: Additional Amendments		3/3/2017
	·	

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD. ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 2

DATED: March 3, 2017

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.

(1)See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum plus one (1) page of Attachment.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

Furning &huw
fr.GURDIP SAINI, P.E.
Associate Commissioner/Design I

Name of Bidder

By:______

ADDENDUM NO.2 PROJECT ID: SE855

QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC

QUESTION NO. 1: For all streets on the project the traffic stipulations require "Full width of roadway shall be opened when the site is unattended." Please confirm that the intent of this is to deck the trench at the end of each work shift.

ANSWER NO. 1: Allowable lane closures and lanes to remain open as stated in the Traffic Stipulations from NYCDOT are to be followed. Therefore, trenches would require decking within lanes to remain open after working hours.

QUESTION NO. 2: The Contract indicates that underpinning of 3 buildings is required. Please provide any as-built information and survey of bottom floor elevations so the scope of underpinning can be estimated and priced.

ANSWER NO. 2: Survey or as-built of existing buildings are not available at this time. Contractor is required to obtain building records and conduct required surveys prior to construction.

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

ADDENDA CONTROL SHEET

BID OPENING DATE: MARCH 16, 2017
PROJECT NO.: SE855
TITLE: CONSTRUCTION OF SANITARY AND STORM SEWERS AND WATER MAINS AND APPURTENANCES IN, GLENWOOD ROAD, ETC, TOGETHER WITH ALL WORK INCIDENTAL THERETO - BOROUGH OF BROOKLYN.

ADDENDA ISSUED	No. OF DRAWINGS	DATE
#1: Additional Amendments	2	2/24/2017
#2: Additional Amendments		3/3/2017
#3: Additional Amendments		3/6/2017
		·

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 3

DATED: March 6, 2017

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.

- (1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page A-1, Attachment 1 Bid Information;
 Change the dates shown for Submission of Bids To: and for Bid Opening: from "March 8, 2017" to read "March 16, 2017."
- (2) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page 13, Schedule B MWBE;
 Change the dates shown for Bid/Proposal Response Date: from "March 8, 2017" to read "March 16, 2017."

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

		G. Sarun
		GURDIP SAINI, P.E.
		Associate Commissioner/Design I
	Name of Bidder	
Ву:		equines

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

ADDENDA CONTROL SHEET

BID OPENING DATE: MARCH 29,2017

PROJECT NO.: <u>SE855</u>

DESCRIPTION: CONSTRUCTION OF SANITARY AND STORM SEWERS AND WATER MAINS AND APPURTENANCES IN, GLENWOOD ROAD, ETC, TOGETHER WITH ALL WORK INCIDENTAL THERETO-

BOROUGH OF BROOKLYN.

Addendum		Addendum Contains:					
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)	
1	2/24/2017		×	×		⊠ (2)	
2	3/3/2017			Ø	П	□ (o)	
3	3/6/2017	×		П		□ (O)	
4	3/13/2017	×	Ø			⊠ (27)	
					П	□ (O)	
			· 🗖	П		□ (o)	
						□ (O)	
						□ (O)	
				П		□ (0)	
						☐ (0)	
						□ (0)	
						□ (o)	

The Table above is a guide. Refer to the referenced Addendum for specific information.

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 4

DATED: March 13, 2017

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.

- (1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page A-1, Attachment 1 Bid Information:
 - Change the dates shown for Submission of Bids To: and for Bid Opening: from "March 16, 2017" to read "March 29, 2017."
- (2) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page 13, Schedule B MWBE;
 Change the dates shown for Bid/Proposal Response Date: from "March 16, 2017" to read "March 29, 2017."
- (3) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, BID SCHEDULE, pages B-3 (REVISION #1) to B-39 (REVISION #1);
 - Delete all pages in their entirety;
 - Substitute with attached revised pages B-3 (REVISION #2) to B-40 (REVISION #2).
- (4) <u>Refer</u> to the Contract Drawings Sheet 4 of 34, 5 of 34, 6 of 34, 7 of 34, 8 of 34, 9 of 34, 10 of 34, 11 of 34, 13 of 34, 14 of 34, 15 of 34, 17 of 34, 18 of 34, 19 of 34 and 32 of 34;

<u>Delete</u> Sheet 4 of 34, 5 of 34, 6 of 34, 7 of 34, 8 of 34, 9 of 34, 10 of 34, 11 of 34, 13 of 34, 14 of 34, 15 of 34, 17 of 34, 18 of 34, 19 of 34 and 32 of 34 in their entirety;

<u>Substitute</u> with attached revised Sheet 4R of 34, 5R of 34, 6R of 34, 7R of 34, 8R of 34, 9R of 34, 10R of 34, 11R of 34, 13R of 34, 14R of 34, 15R of 34, 17R of 34, 18R of 34, 19R of 34 and 32R of 34

(NOTE: Please see the bubbles for the changes as shown on the contract drawings)

(5) Refer to the Contract Drawings Add Fire Department Drawings: two (2) sheets of key map, sheet 1 of 4 to sheet 4 of 4, Standard Drawing 140, Standard Drawing 141, Standard Drawing 144, Standard Drawing 144E, Standard Drawing 144S and Standard Drawing 168.

By signing in the space provided below, the bidder acknowledges receipt of two (2) page of this Addendum plus thirty eight (38) pages of attachments and twenty seven (27) drawings.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

GURDIP SAINI, P.E.

Associate Commissioner/Design I

Name of Bidder

.

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION CONTRACT PIN:8502016SE0002C **DIVISION OF INFRASTRUCTURE - BUREAU OF** PROJECT ID:SE855

BID SCHEDULE

- NOTE: (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be for the performance of the items in question. 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
- (2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the item numbers appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances. in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and
- (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM Alterations must be initialed in lnk by the bidder.
- (4) The Extended Amount entered in Column 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.
- (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the them. The pages of this Bid Schedule are numbered consecutively, as follows: Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished B-3 [REVISION # 2] Through B-40 [REVISION # 2]

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.







CONTRACT PIN: 8502016SE0002C

			T T			- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
006	005	004	003	002	001	COL 1 SEQ. NO
4.08 BA CONCRETE CURB (21" DEEP)	4.08 AA CONCRETE CURB (18" DEEP)	4.05 AX HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	4.04 H CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	4.02 CA BINDER MIXTURE	4.02 AF-R ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	COL. 2 TIEM NUMBER and DESCRIPTION:
510.00	800.00	110.00	4,020.00	4,380.00	48,435.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
Ë	'n	C.Y.	c.Y.	TONS	S.Y.	COL 4 UNIT
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

CONTRACT PIN: 8502016SE0002C

3/13/2017 10:06 AM

012	011	010	009	008	007	COL 1 SEQ. NO
4.13 AAS 4" CONCRETE SIDEWALK (UNPIGMENTED)	4.09 CE CORNER STEEL FACED CONCRETE CURB (21" DEEP)	4.09 CD CORNER STEEL FACED CONCRETE CURB (18" DEEP)	4.09 BD DEPRESSED STEEL FACED CONCRETE CURB (18" DEEP)	4.09 AE STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)	4.09 AD STRAIGHT STEEL FACED CONCRETE CURB (18" DEEP)	COL. 2 ITEM NUMBER and DESCRIPTION
5,400.00	515.00	400.00	550.00	740.00	320.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
S.F.	LF.	LF.	LF.	LF.	LF	COL 4
						COL. 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						EXTENDED AMOUNT (IN FIGURES) S DOLLARS
						CTS



B-6 [REVISION #2]

						Ø -
018	017	016	015	014	013	COL 1 SEQ. NO
4.18 A MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	4.16 CAA TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES	4.16 AD TREES REMOVED (24" CALIPER AND OVER)	4.16 AC TREES REMOVED (18" TO UNDER 24" CALIPER)	4.13 DE EMBEDDED PREFORMED DETECTABLE WARNING UNITS	4.13 BAS 7" CONCRETE SIDEWALK (UNPIGMENTED)	COL. 2
5.00	14.00	2.00	5.00	1,300.00	1,050.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
EACH	EACH	EACH	EACH	Ģ.Ţī	Э.	COL. 4 UNIT
. 2'						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
φ						COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
. A . A . A . A . A . A . A . A . A . A						CIS

BID SCHEDULE FORM

3/13/2017 10:06 AM





CONTRACT PIN: 8502016SE0002C

3/13/2017 10:06 AM

						SE C
024	023	022	021	020	019	COL 1
50.11MS050026 5-0"W X 2-6"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS046026 4'-6"W X 2'-6"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS040026 4'-0"W X 2'-6"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS040020 4'-0"W X 2'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	4.21 TREE CONSULTANT	4.18 B MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	COL. 2 ITEM NUMBER and DESCRIPTION
255.00	235.00	1,075.00	265.00	500.00	11.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
LF	Ę	Ę.	Ë	P/HR	EACH	COL 4
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL.6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS





CONTRACT PIN: 8502016SE0002C

3/13/2017 10:06 AM

030	029	028	027	026	025	SEQ. NO
50.21C3C036D 36" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C030D 30" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C024D 24" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.11MS130040 13'.0"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS116040 11'-6"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS050030 5'-0"W X 3'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	COL. 2 ITEM NUMBER and DESCRIPTION
260.00	815.00	760.00	650.00	2,190.00	1,015.00	ENGINEER'S ESTIMATE OF QUANTITY
LF.	L.F.	L.F.	LF,	LF.	L.F.	COL;4 UNIT
						UNIT PRICE (IN FIGURES) DOLLARS CTS
					***********	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN **CONTRACT PIN: 8502016SE0002C**

3/13/2017 10:06 AM

036	035	034	033	032	031	COL 1 SEQ. NO
50.21M3E045W 45"W X 29"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	50.21M3E038W 38"W X 24"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	50.21M3E030W 30"W X 19"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	50.21M3E024D 24" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE	50.21C3C042D 42" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C038W 38"W X 24"H R.C.P. CLASS HE-III COMBINED SEWER, ON CONCRETE CRADLE	COL_2 ITEM NUMBER and DESCRIPTION
500.00	770.00	255.00	760.00	255.00	215.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
Ë	Ŀī L	ĹŦ	7.	Ä	L.F.	COL.4 UNIT
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
-						CIS





CONTRACT PIN: 8502016SE0002C

3/13/2017 10:06 AM

042 51	041 50	040 51	039 50	18 850	037 5 (COL 1 SEQ. NO
50.31ME18 18" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	50.31ME15 15" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	50.31ME12 12" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	50.31MC15 15" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	50.31CC18 18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	50.31CC15 15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	COL. 2 ITEM NUMBER and DESCRIPTION
215.00	210.00	95.00	45.00	1,595.00	1,400.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
LF.	L.F.	L.F.	LF.	LF.	Ę	COL 4 UNIT
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				COL.5 UNIT PRICE (IN FIGURES) DOLLARS: CTS
						COL.6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

CONTRACT PIN: 8502016SE0002C

3/13/2017 10:06 AM

COL 1 SEQ. NO	COL.2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL.4	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
043	51.11C001 CHAMBER NO. 1	1.00	EACH		
044	51.11C002 CHAMBER NO. 2	1.00	EACH		
045	51,11C003 CHAMBER NO. 3	1.00	EACH		
046	51.11C004 CHAMBER NO. 4	1.00	EACH		
047	51.11C005 CHAMBER NO. 5	1.00	EACH		
048	51.11C006 CHAMBER NO. 6	1.00	EACH		





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 **CONTRACT PIN: 8502016SE0002C**

DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

ENGINEER'S ESTIMATE OF QUANTITITY UNIT DOLLARS OTS 1.00 EACH 1.00 EACH MANHOLE MANHOLE 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH 1.00 EACH	054	053	052	051	050	049	COL 1 SEQ. NO
UNIT PRICE (IN FIGURES.) UNIT DOLLARS CTS O EACH O EACH O EACH O EACH O EACH	51.11P006 STANDARD 6'-0" DIAMETER PRECAST MANHOLE	51.11P006 STANDARD 6'-0" DIAMETER PRECAST MANHOLE	51.11P005 STANDARD 5'-0" DIAMETER PRECAST MANHOLE	51.11P004 STANDARD 4'-0" DIAMETER PRECAST MANHOLE	51.11C008 CHAMBER NO. 8	51.11C007 CHAMBER NO. 7	COL. 2 TEM NUMBER and DESCRIPTION
DOLLARS CTS	10.00	3.00	5.00	2.00	1.00	1.00	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY
RES CTS	EACH	EACH	EACH	EACH	EACH	EACH	COL. 4
							RES)
FIGURES CTS							COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS

CONTRACT PIN: 8502016SE0002C

3/13/2017 10:06 AM

						G
060	059	058	057	056	055	SEQ NO
51.21S0E1038H STANDARD MANHOLE TYPE E-1 ON 38"W X 24"H H.E.R.C.P. SEWER	51.21S0B1000V STANDARD MANHOLE TYPE B-1	51.21S0A3000V STANDARD SHALLOW MANHOLE TYPE A-3	51.21S0A1000V STANDARD MANHOLE TYPE A-1	51.21A000000E ACCESS MANHOLE ON EXISTING SEWER	51.21A000000C ACCESS MANHOLE	ITEM NUMBER and DESCRIPTION
2.00	8.00	9.00	10.00	3.00	21.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITIY
EACH	EACH	EACH	EACH	EACH	EACH	COL. 4 UNIT
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL, 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS





CONTRACT PIN: 8502016SE0002C

3/13/2017 10:06 AM

		Ę	1,980.00	52.11D12 12" DUCTILE IRON PIPE BASIN CONNECTION	066
		EACH	11.00	51.42S1SO INCREMENTAL COST OF STANDARD CATCH BASIN TYPE 3 WITH CURB PIECE IN LIEU OF STANDARD CATCH BASIN TYPE 1	065
		EACH	33.00	51.41W000 SHALLOW CATCH BASIN	064
		EACH	2.00	51.41S003 STANDARD CATCH BASIN, TYPE 3	063
		EACH	55.00	51.41S001 STANDARD CATCH BASIN, TYPE 1	062
		EACH	1.00	51.21S0E1045H STANDARD MANHOLE TYPE E-1 ON 45"W X 29"H H.E.R.C.P. SEWER	061
EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL.4	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 2 ITEM NUMBER and DESCRIPTION	COL-1
201.0	14 Mar				

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072	071	070	069	068	067	COL 1 SEQ. NO
52.41D08R 8" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.41C08R 8" C.I.S.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.31V08C18 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	52.31V08C15 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	52.31V06C18 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	52.31V06C15 6"E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15"E.S.V.P. COMBINED.SEWER	COL, 2 ITEM NUMBER and DESCRIPTION
90.00	90.00	5.00	3.00	55.00	48.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
ŗ	Ĺ	EACH	EACH	EACH	EACH	COL 4: UNIT
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS
						COL. 6 EXTENDED AMOUNT (IN FIGURES) CTS DOLLARS
						CIS





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	078	077	076	075	074	073	COL 1 SEQ. NO
UNCLASSIFIED EXCAVATION	6.02 AAN	55.11AB ABANDONING BASINS AND INLETS	54.12CS CLEANING OF DRAINAGE STRUCTURES	53.11DR TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	52.41V08R 8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.41V06R 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	COL. 2 ITEM NUMBER and DESCRIPTION
	5,560.00	11.00	20.00	13,875.00	130.00	1,490.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
	C.Y.	EACH	C.Y.	Ę	L.F.	LF.	COL 4 UNIT
	* * * *	•					COL. 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
							COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS

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COL 1	COL 2	COL. 3 ENGINEER'S ESTIMATE	COL 4	COL. 5 UNIT PRICE (IN FIGURES)	COL.6 EXTENDED AMOUNT (IN FIGURES)
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITY	UNIT	DOLLARS CTS	П
079	6.02 XHEC INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR	18.00	C.Y.		
				1 M M N M	
080	6.02 XSCW	18.00	c.Y.	:	
	INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) TRANSIT FACILITIES			• • • • • • • •	
081	6.23 AB REMOVE EXISTING FIRE ALARM POST	7.00	EACH	er er din Srap ner e	'ar na na ank ar na ank 'a

082	6.23 BA	7.00	EACH	*****	
	FURNISH AND INSTALL FIRE ALARM POST AND SUBBASE IN ACCORDANCE WITH F.D. STD. DWG. #141				
083	6.23 BD	5,765.00	L.F.	· · · · · · · · · · · · · · · · · · ·	
	FURNISH AND INSTALL 4-PAIR FIRE ALARM CABLE				
084	6.23 BE	6.00	EACH	u ar an 'ani.s	
	FURNISH AND INSTALL FIRE DEPARTMENT MANHOLE TYPE "A" WITH FRAME AND COVER IN ACCORDANCE WITH F.D. STD. DWG. #140, #144 & #144E			# ma # # # # # #	* pr * *
				e de les	* * * * * * * * * * * * * * * * * * *





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COL.1 SEQ. NO	COL 2 TTEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4	COL.5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
085	6.23 BES FURNISH AND INSTALL FIRE DEPARTMENT SLOTTED MANHOLE	1.00	EACH		
	TYPE "A" WITH FRAME AND COVER IN ACCORDANCE WITH F.D. STD. DWG. #140, #144S & #144E		*		
086	6.23 BFB FURNISH AND INSTALL FIRE DEPARTMENT 24 WIRE TERMINAL BOX	6.00	EACH		
	AND TERMINATE FIRE ALARM CABLES			* * * * * * * * * * * * * * * * * * *	
087	6.23 BFC	1.00	EACH		*** *** ***
	FURNISH AND INSTALL FIRE DEPARTMENT 12 WIRE TERMINAL BOX AND TERMINATE FIRE ALARM CABLES				
088	6.23 BGSE	210.00	ĽF.	***	
	FURNISH AND INSTALL 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION)				
089	6.23 BGTE	5,060.00	'n	* * * P.	
	FURNISH AND INSTALL 2 - 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 IN ONE TRENCH (WITH PAVEMENT EXCAVATION, ONE ON TOP OF THE OTHER)				



COL 1	COL 2	COL 3 ENGINEER'S ESTIMATE	COL.4	COL.5 UNIT PRICE EXTEND (IN FIGURES) (IN F	COL. 6 EXTENDED AMOUNT (IN FIGURES)
090	6.23 BHE FURNISH AND INSTALL 4" 90-DEGREE P.V.C. WIDE REND. SCHEDULE	7.00	EACH		
	FURNISH AND INSTALL 4" 90-DEGREE P.V.C. WIDE BEND, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141 OR #145AA		ч		· · · · · · · · · · · · · · · · · · ·
091	6.23 BP FURNISH AND INSTALL FIRE ALARM PEDESTAL BUMPERS (2 REQUIRED PER SET) IN ACCORDANCE WITH F.D. STD. DWG. #168	7.00	SETS		
092	6.25 RS	4,700.00	S.F.		
	TEMPORARY SIGNS				
093	6.26 TIMBER CURB	31,860.00	'n		
094	6.28 AA LIGHTED TIMBER BARRICADES	13,150.00	Ä		• • • • • • • • • • • • • • • • • • • •
095	6.40 D	42.00	MONTU		
	ENGINEER'S FIELD OFFICE (TYPE D)			* * * * *	
		-			

BID SCHEDULE FORM

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T	T.					S
101	100	099	098	097	096	COL 1
60.11R520 FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	6.87 PLASTIC BARRELS	6.53 REMOVE EXISTING LANE MARKINGS (4" WIDE)	6.52 CG CROSSING GUARD	6.49 TEMPORARY PAVEMENT MARKINGS (4" WIDE)	6.44 THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	COL. 2
2,470.00	18,310.00	8,905.00	620.00	24,960.00	3,620.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
Ĺ	EACH	LF.	P/HR	LF.	Ę	COL.4
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
					:	CIS

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COL.1 SEQ. NO 102	COL. 2 ITEM NUMBER and DESCRIPTION 60.11R606 FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56) 60.11R608	COL.3 ENGINEER'S ESTIMATE OF QUANTITY 330.00 2,025.00	COL.4	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	CIS
103	60.11R608 FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	2,025.00	7	L.F.	Ę
104	60.11R612 FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	6,410.00		ָד.	Ę
105	60.12D06 LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	365.00		LF.	Ľ.
106	60.12D08 LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS	2,100.00		Ļ.	F
107	60.12D12 LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	6,585.00		LF,	LF.





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SEQ. NO 원.1 108 110 112 109 60.12D20 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24 INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS 60.13M0A24 FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 61.11DMM12 61.11DMM08 GLANDS FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER. 61.11DMM06 LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS TEM NUMBER and DESCRIPTION SOL. 2 OF QUANTITY ENGINEERS ESTIMATE COL 3 2,540.00 33.00 18.00 19.00 6.00 EACH EACH EACH TONS 5 00L.4 S DOLLARS (IN FIGURES) **UNIT PRICE** COL 5 CTS EXTENDED AMOUNT (IN FIGURES) DOLLARS 818 8 CIS

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EACH
EACH
4.00 EACH
5.00 EACH
3.00 EACH
6.00 EACH
COL 3 ENGINEER'S ESTIMATE OF QUANTITY UNIT





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COL_1	COL 2	COL. 3 ENGINEER'S ESTIMATE	COL 4	COL. 5 UNIT PRICE (IN FIGURES)	COL. 6 EXTENDED AMOUNT (IN FIGURES)
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITY	UNIT	DOLLARS ; CTS	DOLLARS ; CTS
119	61.12DMM08 SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	6.00	EACH		
120	61.12DMM12 SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	18.00	EACH		
121	61.12DMM20 SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	6.00	EACH		
122	61.12TWC03 SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	3.00	EACH		
123	61.12TWC04 SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	5.00	EACH		
124	61.12TWC06 SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	4.00	EACH		



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130 63.1	129 62.1 FURI	128 62.1 REM	127 62.1 SETT GLAI	126 62.	125 61. SETT	COL 1
63.11VC FURNISHING AND DELIVERING VARIOUS CASTINGS	62.14FS FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	62.13RH REMOVING HYDRANTS	62.12SG SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	62.11SD FURNISHING AND DELIVERING HYDRANTS	61.12TWC08 SETTING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	COL.2 ITEM NUMBER and DESCRIPTION
33.00	66.00	32.00	33.00	33.00	1.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
TONS	EACH	EACH	EACH	EACH	EACH	COL.4
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS: CTS
						COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
				X * * * * * * * * * * * * * * * * *		CIS





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136	135	134	133	132	131	COL 1
64.12ESLT EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	64.12ESEG EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	64.12COLT CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	64.12COEG CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	64.11ST WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	64.11EL WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	COL 2 ITEM NUMBER and DESCRIPTION
1,020.00	170.00	1,020.00	170.00	151.00	15.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITIY
LF.	L.F.	Ë	Ę.	EACH	EACH	COL.4 UNIT
	i u jako uko ko ko u nome					COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS



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142	141	140	139	138	137	COL 1 SEQ. NO
65.31FF FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$ 0.10	65.21PS FURNISHING AND PLACING POLYETHYLENE SLEEVE Unit price bid shall not be less than: \$ 0.50	65.11BR FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	64.13WC20 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64.13WC12 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64.13WC08 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 8-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	COL. 2 ITEM NUMBER and DESCRIPTION
293,800.00	10,900.00	21,000.00	5.00	7.00	1.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
S IT.	두	LBS.	HOVE	EACH	EACH	COL 4
						COL. 5 UNIT PRICE (IN FIGURES) DOLLARS : CTS
						COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS





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col 1	COL.2	COL 3 ENGINEER'S ESTIMATE	COL.4	UNIT PRICE (IN FIGURES)	EXTENDED AMOUNT (IN FIGURES)
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITIY	UNIT	DOLLARS CTS	DOLLARS CTS
143	65.71SG FURNISHING, DELIVERING AND PLACING SCREENED BROKEN STONE BEDDING SCREENED BROKEN STONE BEDDING	850.00	c.x.	## # # nn n n n n	
14	7.13 B	36.00	HTNOM	in de San de	** * *
	MAINTENANCE OF SITE	-		्का का व	****
	Unit price bid shall not be less than: \$8,000.00				
145	7.19	830.00	Ë		
	LOAD TRANSFER JOINT			. with 48 ft	
				7 10 10	
146	7.36	25,530.00	Ä		pojeci en la persona
	PEDESTRIAN STEEL BARRICADES	:		•••	
147	7.88 AA	1.00	L.S.	, , , , , , , , , , , , , , , , , , ,	
	Unit price bid shall not be less than: \$ 10,400.00				
148	7.88 AB	486.00	EACH	: :	*** * *
	RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 60.00			# # ## #; #	# # # # W: W

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COL 1	· COL.2	COL 3	COL.4	COL 5	COL. 6
		ESTIMATE		8 8	(IN FIGURES)
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITIY	CNI	DOLLARS CIS	
149	7.88 AC	486.00	EACH	ஆம் இம் ^{இத} ்	>= * *;
	BAITING OF RODENT BAIT STATIONS				***
	Unit price bid shall not be less than: \$ 9.50			e word jes 8	
150	7.88 AD	954.00	BLOCK		
	WATERBUG BAIT APPLICATIONS			. # #-#	· · · • · · · · · · · · · · · · · · · ·
	Unit price bid shall not be less than: \$65.00			· · · · · · · · · · · · · · · · · · ·	* * *.
151	70.12AN	19,630.00	V.F.	· K · K · W	
	CONTINUOUS FLIGHT AUGER (CFA) PILES				≠ •• • • • • • • • • • • • • • • • • • •

152	70.12AT	3.00	EACH	**. e. *.**	
	CONTINUOUS FLIGHT AUGER (CFA) PILES, LOAD TEST			***	
153	70.21DK	18,385.00	s.Y.	***	**************************************
	DECKING			** * * *	e e e e e e e e e e e e e e e e e e e
154	70.31FN	53,460.00	Ę	10 to 10 to	
	FENCING				
	Unit price bid shall not be less than: \$2.00				





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159	158	157	156	155	COL 1 SEQ. NO
70.61RE ROCK EXCAVATION	70.51EO EXCAVATION OF BOULDERS IN OPEN CUT Unit price bid shall not be less than: \$75.00	70.41K081580001C SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING AND MAINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1-THREE (3) STORY BRICK, RESIDENTIAL (330 STANLEY AVENUE)	70.41K081580001B SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING AND MAINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1 - THREE (3) STORY BRICK, RESIDENTIAL (272-276 STANILEY AVENUE)	70.41K081580001A SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING AND MAINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1 - SEVEN (7) STORY BRICK, RESIDENTIAL (254 STANILEY AVENUE)	COL.2 TEM NUMBER and DESCRIPTION
70.00	55.00	1.00	1.00	1.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
C.Y.	C.Y.	L.S.	L.S.	L.S.	WIL 4
					COL.5 UNIT PRICE (IN FIGURES) DOLLARS: CTS
					EXTENDED AMOUNT, (IN FIGURES) DOLLARS
					ंटाड

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COL1	COL 2	COL. 3 ENGINEER'S	COL.4	COL 5 UNIT PRICE	COL 6 EXTENDED AMOUNT
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITIY	UNT.	DOLLARS CTS	DOLLARS CTS
160	70.71SB STONE BALLAST	227.00	C.Y.	·	
	Unit price bid shall not be less than: \$ 15.00			1 in 44 -	
5	70.81CB CLEAN BACKFILL	00.000,01	C.Y.		
	Unit price bid shall not be less than: \$ 15.00				
162	72.11HF	30.00	C.Y.	•••	
	HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS				7
163	73.11AB ADDITIONAL BRICK MASONRY	65.00	C.Y.		
	Unit price bid shall not be less than: \$ 62.50				
164	73.21AC ADDITIONAL CONCRETE	255.00	C.Y.		
	Unit price bid shall not be less than: \$62.50				
165	73.31AE0 ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS) Unit price bid shall not be less than: \$ 20.00	150.00	C.Y.		





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Unit price bid shall not be less than: \$ 15.00 73.51AS ADDITIONAL STEEL REINFORCING BARS Unit price bid shall not be less than: \$ 1.00 73.61AT ADDITIONAL STONE BALLAST Unit price bid shall not be less than: \$ 15.00 76.11CR CONSTRUCTION REPORT CONSTRUCTION REPORT 76.21MR MONITORING AND POST-CONSTRUCTION REPORT HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS 20,000.00 LS. HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS
LBS. LS. LS. LS.

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	177	176	175	174	173	172	SEQ. NO
	8.02 A SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER	8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	8.01 S HEALTH AND SAFETY	8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	COL. 2 TIEM:NUMBER and DESCRIPTION
	400.00	24.00	720.00	1.00	1,000.00	16.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
	S.F.	SETS	DAY	Ls.	TONS	SETS	COL.4
***	- 24						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
							COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
							CIS





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					REMOVE STANDARD TYPE ANCHOR BOLT CONCRETE FOUNDATION	
			EACH	6.00	SL-20.08.01	182
6 M 48 M 78 W					FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	
wair er ser een			EACH	6.00	SL-20.02.02	181
			ŗ,	1.00	9.30 STORM WATER POLLUTION PREVENTION	180
			÷			
					PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 50,000.00	
					ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE	
\$50,000:00	8	50,000:00	F.S.	1.00	9.04 HW	179
				·		
					SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	
**************************************	4-14-130-00		<u></u>	40.00	8.02 B	
DOLLARS	CIS		UNIT	OF QUANTITIY	ITEM NUMBER and DESCRIPTION	SEQ. NO
(IN FIGURES)		(IN FIGURES)		ESTIMATE		
EXTENDED AMOUNT	<u> </u>	UNIT PRICE	COL. 4	COL. 3	COL 2	COL. 1
<u> </u>	_	2				

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EACH
EACH
EACH
EACH
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EACH
COL 4 UNIT





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						Ø
194	193	192	191	190	189	COL.1
UTL-6.01.4N GAS MAIN CROSSING 4'-6"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	UTL-6.01.4D GAS MAIN CROSSING 4:0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	UTL-6.01.4C GAS MAIN CROSSING 45"W X 29"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,960.00	UTL-6.01.4A GAS MAIN CROSSING 4'-0"W X 2'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,960.00	UTL-6.01.2B GAS MAIN CROSSING 30"W X 19"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	UTL-6.01.2A GAS MAIN CROSSING 38"W X 24"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,870.00	COL. 2 ITEM NUMBER and DESCRIPTION
1.00	5.00	2.00	1.00	1.00	2.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
EACH	EACH	EACH	EACH	EACH	EACH	COL.4
				t and the second		COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS C
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

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SEQ. NO
UTL-6.01.5C GAS MAIN CROSSING 5-0"W X 2-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$ 2,340.00 UTL-6.01.5H GAS MAIN CROSSING 5-0"W X 3-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$ 2,340.00 UTL-6.01.7OO GAS MAIN CROSSING 13-0"W X 4-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$ 2,940.00 UTL-6.01.7VV GAS MAIN CROSSING 11-5"W X 4-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) UTL-6.01.8 GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (\$6.01) Unit price bid shall not be less than: \$ 2,840.00 UTL-6.01.8 GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (\$6.01) Unit price bid shall not be less than: \$ 465.00
UTL-6.01.5C GAS MAIN CROSSING 5-0"W X 2-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,340.00 UTL-6.01.5H GAS MAIN CROSSING 5-0"W X 3'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,340.00 UTL-6.01.7OO GAS MAIN CROSSING 13'-0"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,940.00 UTL-6.01.7VV GAS MAIN CROSSING 11'-6"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,940.00 UTL-6.01.8
UTL-6.01.5C GAS MAIN CROSSING 5'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,340.00 UTL-6.01.5H GAS MAIN CROSSING 5'-0"W X 3'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,340.00 UTL-6.01.7OO GAS MAIN CROSSING 13'-0"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,340.00 UTL-6.01.7VV GAS MAIN CROSSING 11'-6"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) UTL-6.01.7VV GAS MAIN CROSSING 11'-6"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,940.00
UTL-6.01.5C GAS MAIN CROSSING 5'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00 UTL-6.01.5H GAS MAIN CROSSING 5'-0"W X 3'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00 UTL-6.01.7OO GAS MAIN CROSSING 13'-0"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00 Unit price bid shall not be less than: \$ 2,340.00
UTL-6.01.5C GAS MAIN CROSSING 5'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00 UTL-6.01.5H GAS MAIN CROSSING 5'-0"W X 3'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00
UTL-6.01.5C GAS MAIN CROSSING 5'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00
ITEM NUMBER and DESCRIPTION
COL 2 COL 3 ENGINEER'S





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			Unit price bid shall not be less than: \$ 180.00	
	C.Y.	3,500.00	UTL-6.06 SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06)	206
	EACH	175.00	UTL-6.05 ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05) Unit price bid shall not be less than: \$ 65.00	205
	EACH	175.00	UTL-6.04 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04) Unit price bid shall not be less than: \$ 35.00	204
	LF.	7,500.00	UTL-6.03.1 REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (FOR NATIONAL GRID WORK ONLY) (S6.03) Unit price bid shall not be less than: \$ 25.00	203
	LF.	500.00	UTL-6.03 REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (S6.03) Unit price bid shall not be less than: \$ 15.00	202
	EACH	4.00	UTL-6.02 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	201
COL. 5 UNIT PRICE (IN FIGURES) CTS COL. 6 EXTENDED AMOUNT (IN FIGURES) CTS DOLLARS CTS	UNIT COL.4	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL: 2: ITEM NUMBER and DESCRIPTION	COL.1 SEQ. NO



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

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BID SCHEDULE FORM

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		210	
BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.	MOBILIZATION	6.39 A	
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SUB-TOTAL: \$





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TOTAL BID PRICE: \$

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.

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

ADDENDA CONTROL SHEET

BID OPENING DATE: MARCH 29,2017

PROJECT NO.: SE855

DESCRIPTION: CONSTRUCTION OF SANITARY AND STORM SEWERS AND WATER MAINS AND APPURTENANCES IN, GLENWOOD ROAD,

ETC, TOGETHER WITH ALL WORK INCIDENTAL THERETO-

BOROUGH OF BROOKLYN

	Addendum	OGH OF B		Addendum Cont	tains:	
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)
1	2/24/2017		\boxtimes	×		⊠ (2)
2	3/3/2017			\boxtimes		□ (0)
3	3/6/2017	×				□ (o)
4	3/13/2017	×	Ø			⊠ (27)
5	3/16/2017		×	×		□ (o)
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The Table above is a guide. Refer to the referenced Addendum for specific information.

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 5

DATED: March 16, 2017

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.

(1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, BID SCHEDULE, pages B-3(REVISION #2) to B-40 (REVISION #2);

Delete all pages in their entirety;

Substitute with attached revised pages B-3 (REVISION #3) to B-40 (REVISION #3).

NOTE: Delete SEQ.NO. 053 Item No. 51.11P006 & SEQ.NO. 054 Item No 51.11P006 from BID SCHEDULE (REVISION#2) and replace with SEQ NO. 053 ITEM NO. 51.11P006 of the attached BID SCHEDULE (REVISION#3).

By signing in the space provided below, the bidder acknowledges receipt of two (1) page of this Addendum plus thirty-eight (38) pages of attachments.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

GURDIP SAINI, P.E.
Associate Commissioner/Design I

Name of Bidder

. •

Questions Submitted by Bidders and DDC's Responses

QUESTION #1: Please note that in the latest set of bid sheets for the referenced project, specifically regarding page B-12 (Revision #2), there are two bid items for 51.11P006 – Standard 6'-0" Diameter Precast Manhole. Please clarify.

DDC'S RESPONSE: See Article 1, herein this addendum.

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION CONTRACT PIN:8502016SE0002C DIVISION OF INFRASTRUCTURE - BUREAU OF PROJECT ID:SE855

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 item numbers debris, temporary work and appliances appliances of every description necessary to complete the entire work, as specified, and the removal of all in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and
- (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 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.
- 9 Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the them. The pages of this Bid Schedule are numbered consecutively, as follows: Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished B-3 [REVISION #3] Through B-40 [REVISION #3]

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.



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C PROJECT ID: SE855

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900	005	004	003	002	001	SEQ. NO	COL. 1
4.08 BA CONCRETE CURB (21" DEEP)	4.08 AA CONCRETE CURB (18" DEEP)	4.05 AX HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	4.04 H CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	4.02 CA BINDER MIXTURE	4.02 AF-R ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	ITEM NUMBER and DESCRIPTION	COL. 2
510.00	00.008	110.00	4,020.00	4,380.00	48,435.00	OF QUANTITY	COL 3 ENGINEER'S ESTIMATE
LF.	LF.	C.Y.	C.Y.	TONS	S.Y.	UNIT	COL. 4
						DOLLARS CTS	COL. 5 UNIT PRICE (IN FIGURES)
						DOLLARS	COL. 6 EXTENDED AMOUNT (IN FIGURES)
						CTS	



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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF CHANTITY	COL.4	S)
007	4.09 AD STRAIGHT STEEL FACED CONCRETE CURB (18" DEEP)	320.00	LF.	Class
008	4.09 AE STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)	740.00	L.F.	
009	4.09 BD DEPRESSED STEEL FACED CONCRETE CURB (18" DEEP)	550.00	<u>, i</u>	
010	4.09 CD CORNER STEEL FACED CONCRETE CURB (18" DEEP)	400.00	Ë	
011	4.09 CE CORNER STEEL FACED CONCRETE CURB (21" DEEP)	515.00	Ę.	
012	4" CONCRETE SIDEWALK (UNPIGMENTED)	5,400.00	II.	





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

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COL 1	COL-2	COL 3	COL. 4	COL.5 UNIT PRICE	EXTENDED AMOUNT
		ESTIMATE OF QUANTITY	UNIT	(IN FIGURES) DOLLARS CTS	(IN FIGURES)
013	4.13 BAS	1,050.00	S.F.		
	7" CONCRETE SIDEWALK (UNPIGMENTED)				
014	4.13 DE	1,300.00	S.F.	** • •	
	EMBEDDED PREFORMED DETECTABLE WARNING UNITS				
015	4.16 AC	5.00	EACH		
	TREES REMOVED (18" TO UNDER 24" CALIPER)				
016	4.16 AD	2.00	EACH		
	TREES REMOVED (24" CALIPER AND OVER)				
017	4.16 CAA	14.00	EACH	** * * **	
	TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES				
018	4.18 A MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	5.00	EACH		
				energe de la company de la co	

CONTRACT PIN: 8502016SE0002C

			_		t de la constantina della constantina della cons		
	024	023	022	021	020	019	COL 1
	50.11MS050026 51.07W X 21.67H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS046026 4'-6"W X 2'-6"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS040026 4'-0"W X 2'-6"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS040020 4:0"W X 2:0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	4.21 TREE CONSULTANT	4.18 B MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	COL. 2 TTEM NUMBER and DESCRIPTION
	255.00	235.00	1,075.00	265.00	500.00	11.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
	LF.	LF.	LF.	LF.	P/HR	EACH	COL.4
2 • • ×							COL 5 UNIT PRICE (IN FIGURES) DOLLARS :CTS
्र स्टब्स्ट स्टब्स्ट						***	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS





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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855

BID SCHEDULE FORM

DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C

						e e
030	029	028	027	026		COL 1 SEQ. NO
50.21C3C036D 36" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C030D 30" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.21C3C024D 24" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	50.11MS130040 13'-0"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS116040 11'-6"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	50.11MS050030 5'-0"W X 3'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	COL-2 ITEM NUMBER and DESCRIPTION
260.00	815.00	760.00	650.00	2,190.00	1,015.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
ä	LF.	Ļ	Ľ.F.	LF.	Ë	UNIT
		-				UNIT PRICE (IN FIGURES) DOLLARS: CTS
						EXTENDED AMOUNT (IN FIGURES) DOLLARS
						CIS



CONTRACT PIN: 8502016SE0002C

SEQ. NO	COL-2 ITEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE	COL.4	S)
031	50.21C3C038W	215.00	<u>.</u>	POLITANO GIO
	38"W X 24"H R.C.P. CLASS HE-III COMBINED SEWER, ON CONCRETE CRADLE			 • • • • • • • • •
032	50.21C3C042D 42" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	255.00	Ę	
033	50.21M3E024D 24" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE	760.00	<u>'</u> n	
034	50.21M3E030W 30"W X 19"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	255.00	Ę.	
035	50.21M3E038W 38"W X 24"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	770.00	LF.	
036	50.21M3E045W 45"W X 29"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	500.00	<u>.</u>	





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-		٥	0	o	o.	9	COL 1
	042	041	040	039	038		COL 1
	50.31ME18 18" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	50.31ME15 15" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	50.31ME12 12" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	50.31MC15 15" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	50.31CC18 18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	50.31CC15 15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	COL. 2 ITEM NUMBER and DESCRIPTION
	215.00	210.00	95.00	45.00	1,595.00	1,400.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
	Ā	<u>.</u>	<u>.</u>	<u>"</u>	<u>.</u>	<u>.</u>	COL 4 UNIT
							COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
							COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C

048	047	046	045	044	043	COL 1
51.11C006 CHAMBER NO. 6	51.11C005 CHAMBER NO. 5	51.11C004 CHAMBER NO. 4	51.11C003 CHAMBER NO. 3	51.11C002 CHAMBER NO. 2	51.11C001 CHAMBER NO. 1	COL. 2 TIEM NUMBER and DESCRIPTION
1.00	1.00	1.00	1.00	1.00	1.00	COL.3 ENGINEER'S ESTIMATE OF QUANTITY
EACH	EACH	EACH	EACH	EACH	EACH	COL 4
						COL.5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS





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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C PROJECT ID: SE855

SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION 51.11C007	COL 3 ENGINEER'S ESTIMATE OF QUANTITY 1.00	COL 4 UNIT
049	51.11C007 CHAMBER NO. 7	1.00	
050	51.11C008 CHAMBER NO. 8	1.00	8
051	51.11P004 STANDARD 4'-0" DIAMETER PRECAST MANHOLE	2.	2.00
052	51.11P005 STANDARD 5'-0" DIAMETER PRECAST MANHOLE	5	5.00
053	51.11P006 STANDARD 6'-0" DIAMETER PRECAST MANHOLE	-	13.00
054	51.21A000000C ACCESS MANHOLE	N	21.00

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	T		T	_	·	
060	059	058	057	056	055	COL 1 SEQ. NO
51.21S0E1045H STANDARD MANHOLE TYPE E-1 ON 45"W X 29"H H.E.R.C.P. SEWER	51.21S0E1038H STANDARD MANHOLE TYPE E-1 ON 38"W X 24"H H.E.R.C.P. SEWER	51.21S0B1000V STANDARD MANHOLE TYPE B-1	51.21S0A3000V STANDARD SHALLOW MANHOLE TYPE A-3	51.21S0A1000V STANDARD MANHOLE TYPE A-1	51.21A000000E ACCESS MANHOLE ON EXISTING SEWER	COL. 2 TIEM NUMBER and DESCRIPTION
1.00	2.00	8.00	9.00	10.00	3.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
EACH	EACH	EACH	EACH	EACH	EACH	OL.4
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS
					CIG	COL 6 EXTENDED AMOUNT (IN FIGURES)





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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C

		I				SE C
066	065	064	063	062	061	SEC NO
52.31V06C15 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	52.11D12 12" DUCTILE IRON PIPE BASIN CONNECTION	51.42S1SO INCREMENTAL COST OF STANDARD CATCH BASIN TYPE 3 WITH CURB PIECE IN LIEU OF STANDARD CATCH BASIN TYPE 1	51.41W000 SHALLOW CATCH BASIN	51.41S003 STANDARD CATCH BASIN, TYPE 3	51.41S001 STANDARD CATCH BASIN, TYPE 1	COL 2 ITEM NUMBER and DESCRIPTION
48.00	1,980.00	11.00	33.00	2.00	55.00	COL.3 ENGINEER'S ESTIMATE OF QUANTITY
EACH	Ę	EACH	EACH	EACH	EACH	UNIT
				_		UNIT PRICE (IN FIGURES) DOLLARS CTS
						EXTENDED AMOUNT (IN FIGURES) DOLLARS

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	072	071	070	069	068	067	COL 1 SEQ. NO
	52.41V06R 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.41D08R 8" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.41C08R 8" C.I.S.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.31V08C18 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	52.31V08C15 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	52.31V06C18 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	COL. 2 ITEM NUMBER and DESCRIPTION
	1,490.00	90.00	90.00	5.00	3.00	55.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
	ĽF	Ĺ	Ļ.	EACH	EACH		COL.4
				7. T. T. T. T. T. T. T. T. T. T. T. T. T.			COL 5 UNIT PRICE (IN FIGURES) DOLLARS
							COL. 6 EXTENDED AMOUNT (IN FIGURES)
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078	077	076	075	074	073	COL 1
6.02 XHEC INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) TRANSIT FACILITIES AND BUILDING VAULTS	6.02 AAN UNCLASSIFIED EXCAVATION	55.11AB ABANDONING BASINS AND INLETS	54.12CS CLEANING OF DRAINAGE STRUCTURES	53.11DR TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	52.41V08R 8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	COL. 2 ITEM NUMBER and DESCRIPTION
18.00	5,560.00	11.00	20.00	13,875.00	130.00	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY
C.Y.	C.Y.	EACH	c.x.	<u>.</u>	Ę.	COL.4.
						OOL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
						CIS

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SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	ONIT OOL 4
079	6.02 XSCW INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) TRANSIT FACILITIES	18.00	C.Y.
080	6.23 AB REMOVE EXISTING FIRE ALARM POST	7.00	EACH
081	6.23 BA FURNISH AND INSTALL FIRE ALARM POST AND SUBBASE IN ACCORDANCE WITH F.D. STD. DWG. #141	7.00	EACH
082	6.23 BD FURNISH AND INSTALL 4-PAIR FIRE ALARM CABLE	5,765.00	<u>.</u>
083	6.23 BE FURNISH AND INSTALL FIRE DEPARTMENT MANHOLE TYPE "A" WITH FRAME AND COVER IN ACCORDANCE WITH F.D. STD. DWG. #140, #144 & #144E	6.00	EACH





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094	093	092	091	090	089	SEQ. NO
ENGINEER'S FIELD OFFICE (TYPE D)	6.28 AA LIGHTED TIMBER BARRICADES	6.26 TIMBER CURB	6.25 RS TEMPORARY SIGNS	6.23 BP FURNISH AND INSTALL FIRE ALARM PEDESTAL BUMPERS (2 REQUIRED PER SET) IN ACCORDANCE WITH F.D. STD. DWG. #168	6.23 BHE FURNISH AND INSTALL 4"90-DEGREE P.V.C. WIDE BEND, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141 OR #145AA	COL: 2 TTEM NUMBER and DESCRIPTION
42.00	13,150.00	31,860.00	4,700.00	7.00		COL 3 ENGINEER'S ESTIMATE OF QUANTITY
MONTH	Ţ	Ļ	S.F.	SETS		WIIT 80L.4
						OOL 5 UNIT PRICE (IN FIGURES)
						COL 6 EXTENDED AMOUNT (IN FIGURES)



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				T	į.	(0
100	099	098	097	096	095	COL 1
60.11R520 FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	6.87 PLASTIC BARRELS	6.53 REMOVE EXISTING LANE MARKINGS (4" WIDE)	6.52 CG CROSSING GUARD	6.49 TEMPORARY PAVEMENT MARKINGS (4" WIDE)	6.44 THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	COL. 2 ITEM NUMBER and DESCRIPTION
2,470.00	18,310.00	8,905.00	620.00	24,960.00	3,620.00	COL. 3 ENGINEER'S ESTIMATE OF QUANTITIY
Ë	EACH	L.F.	P/HR	Ę	Ë	COL. 4
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
						CIS

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COL 1 SEQ NO	COL. 2 TIEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL.4	COL 5 UNIT PRICE (IN FIGURES) DOLLARS : CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS
101	60.11R606 FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	330.00	Ë	ė.	. ब्रोड के अभूति व्याक्त के क्रांत
102	60.11R608 FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	2,025.00	두		
103	60.11R612 FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	6,410.00	L.F.		
104	60.12D06 LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	365.00	LF.		
105	60.12D08 LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS	2,100.00	ĹF.		
106	60.12D12 LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	6,585.00	Ë		



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‡	110	109	108	107	COL 1 SEQ. NO
FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 61.11DMM08	61.11DMM06	60.13M0A24 FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24 -INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE BETANIED GLANDS	60.12D20 LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	COL.2 [TEM NUMBER and DESCRIPTION
18 00	6.00	33.00	19.00	2,540.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
EACH	EACH	EACH	TONS	L.F.	COL. 4
				· · · · · · · · · · · · · · · · · · ·	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
				en monte en en en en en en en en en en en en en	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
	FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 61 11 17 18 10	6.00 61.11DMM08 61.11DMM08 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 6.00 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 6.00 6.11DMM19	61.11DMM06 FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 61.11DMM08 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 18.00	60.13M0A24 FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24 -INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS 61.11DMM06 FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 61.11DMM08 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 6.00 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	60.12D20 LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS 60.13M0A24 FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24 -INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS 61.11DMM06 FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 61.11DMM08 61.11DMM08 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS 6.00 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS

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SEQ. NO 112	113	COL 2 TEM NUMBER and DESCRIPTION DELIVERING 20-INCH MECHANICAL JOINT DUCTILE PE COMPLETE WITH WEDGE TYPE RETAINER	COL 3 ENGINEER'S ESTIMATE OF QUANTITY 6.00	COL 4 UNIT EACH	COL. 5 UNIT PRICE (IN FIGURES) DOLLARS
= =	ಪ	61.11TWC03 FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	3.00		EACH
114	14	61.11TWC04 FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	5.00		EACH
115	5	61.11TWC06 FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	4.00		EACH
116	16	61.11TWC08 FURNISHING AND DELIVERING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00		EACH
117	17	61.12DMM06 SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	33.00		EACH



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_	=	121		<u>.</u>	118	COL 1
123	122		120	119		₹ -
61.12TWC06 SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12TWC04 SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12TWC03 SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM20 SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM12 SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	61.12DMM08 SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	COL 2 ITEM NUMBER and DESCRIPTION
4.00	5.00	3.00	6.00	18.00	6.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
EACH	EACH	EACH	EACH	EACH	EACH	COL 4
						COL-5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL.6 EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS

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129	128	127	126	125	124	COL 1 SEQ. NO
						8 1
63.11VC FURNISHING AND DELIVERING VARIOUS CASTINGS	62.14FS FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	62.13RH REMOVING HYDRANTS	62.12SG SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	62.11SD FURNISHING AND DELIVERING HYDRANTS	61.12TWC08 SETTING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	COL 2 ITEM NUMBER and DESCRIPTION
33.00	66.00	32.00	33.00	33.00	1.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
TONS	EACH	EACH	EACH	EACH	EACH	COL 4
- 40 - 2 44 - 4 - 4						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL 6 EXTENDED AMOUNT (IN FIGURES)
						CIS



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				T		
135	134	133	132	131	130	COL.1
64,12ESLT EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	64.12ESEG EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	64.12COLT CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	64.12COEG CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	64.11ST WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	64.11EL WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	COL. 2 ITEM NUMBER and DESCRIPTION
1,020.00	170.00	1,020.00	170.00	151.00	15.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
Ĺ	LF.	L .	į.	EACH	EACH	COL. 4 UNIT
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
						CIS

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141	140	139	138	137	136	SEQ. NO
65.31FF FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$ 0.10	65.21PS FURNISHING AND PLACING POLYETHYLENE SLEEVE Unit price bid shall not be less than: \$ 0.50	65.11BR FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	64.13WC20 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64.13WC12 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	64.13WC08 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 8-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	COL. 2 ITEM NUMBER and DESCRIPTION
293,800.00	10,900.00	21,000.00	5.00	7.00	1.00	COL.3 ENGINEER'S ESTIMATE OF QUANTITY
S.F.	[-	LBS.	EACH	EACH	EACH	COL 4
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
	,				******	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS



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147	146	145	14 44	143	142	COL 1 SEQ. NO
7 7.88 AB RODENT BAIT STATIONS Unit price bid shall not be less than: \$60.00	7.88 AA RODENT INFESTATION SURVEY AND MONITORING Unit price bid shall not be less than: \$ 10,400.00	7.36 PEDESTRIAN STEEL BARRICADES	1 7.19 LOAD TRANSFER JOINT	7.13 B MAINTENANCE OF SITE Unit price bid shall not be less than: \$8,000.00	65.71SG FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	1 COL. 2 NO ITEM NUMBER and DESCRIPTION
486.00	1.00	25,530.00	830.00	36.00	850.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
EACH	Ŀs	Ę.	ĽF.	MONTH	C.Y.	COL.4
						COL. 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL.6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS

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DOLLARS CTS DO EACH DO V.F. DO V.F. DO V.F. DO L.F.	} }		COL 3 ENGINEER'S ESTIMATE	COL 4	COL 5 UNIT PRICE (IN FIGURES)	COL 6 EXTENDED AMOUNT
Unit price bid shall not be less than: \$9.50 7.88 AD WATERBUG BAIT APPLICATIONS Unit price bid shall not be less than: \$65.00 70.12AN CONTINUOUS FLIGHT AUGER (CFA) PILES 70.21DK DECKING 70.31FN FENCING Unit price bid shall not be less than: \$2.00 954.00 954.00 954.00 19,630.00 19,630.00 19,630.00 53,460.00	148	7.88 AC	486.00	EACH		DOLLARS CTS
7.88 AD WATERBUG BAIT APPLICATIONS Unit price bid shall not be less than: \$ 65.00 70.12AN CONTINUOUS FLIGHT AUGER (CFA) PILES 70.12AT CONTINUOUS FLIGHT AUGER (CFA) PILES, LOAD TEST 70.21DK DECKING 70.31FN FENCING Unit price bid shall not be less than: \$ 2.00		BAITING OF RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 9.50				• • • • • • • •
70.12AN CONTINUOUS FLIGHT AUGER (CFA) PILES 70.12AT CONTINUOUS FLIGHT AUGER (CFA) PILES, LOAD TEST 70.21DK DECKING 70.31FN FENCING Unit price bid shall not be less than: \$2.00	149	7.88 AD WATERBUG BAIT APPLICATIONS	954.00	BLOCK		
70.12AT CONTINUOUS FLIGHT AUGER (CFA) PILES, LOAD TEST 70.21DK DECKING 70.31FN FENCING Unit price bid shall not be less than: \$ 2.00	150	70 12AN				
70.12AT 3.00 CONTINUOUS FLIGHT AUGER (CFA) PILES, LOAD TEST 70.21DK DECKING 70.31FN FENCING 70.31FN FENCING 53,460.00 FENCING		CONTINUOUS FLIGHT AUGER (CFA) PILES	19,630.00	<u>.</u> т.		h - hada a uu u ubud
70.21DK 18,385.00 DECKING DECKING TO.31FN FENCING FENCING Unit price bid shall not be less than: \$2.00	151	70.12AT CONTINUOUS FLIGHT AUGER (CFA) PILES, LOAD TEST	3.00	EACH		
70.31FN FENCING Unit price bid shall not be less than: \$2.00	152	70.21DK DECKING	18,385.00	s.×		
	153	70.31FN FENCING Unit price bid shall not be less than: \$ 2.00	53,460.00	Ţ.		





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157		156	155	154	COL. 1
Unit price bid shall not be less than: \$ 75.00	70.51EO EXCAVATION OF BOULDERS IN OPEN CUT	70.41K081580001C SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING AND MAINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1 - THREE (3) STORY BRICK, RESIDENTIAL (330 STANLEY AVENUE)	70.41K081580001B SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING AND MAINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1 - THREE (3) STORY BRICK, RESIDENTIAL (272-276 STANILEY AVENUE)	70.41K081580001A SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING SHORING, BRACING, UNDERPINNING, SUPPORTING, PROTECTING SHORINTAINING OF BUILDING AT BROOKLYN BLOCK NO. 8158, LOT NO. 1 - SEVEN (7) STORY BRICK, RESIDENTIAL (254 STANILEY AVENUE)	COL. 2 ITEM NUMBER: and DESCRIPTION
70.00	55.00	1.00	1.00	1.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITIY
	C.Y.	L.S.	L.S.	r.s.	COL 4
					COL. 5 UNIT PRICE (IN FIGURES) DOLLARS CIS
***					COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS

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		COL 3 ENGINEER'S ESTIMATE	t 700	S NCE RES)	COL.6 EXTENDED AMOUNT (IN FIGURES)
0 mg. 140	-	OF QUANTITY	UNIT	DOLLARS CTS	DOLLARS : CTS
159	70.71SB STONE BALLAST	227.00	C.Y.		
	Unit price bid shall not be less than: \$ 15.00			*****	e de la compansión de l
160	70.81CB CLEAN BACKFILL	10,300.00	C.Y.		
	Unit price bid shall not be less than: \$ 15.00				
5	72.11HF HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS	30.00	C.Y.		

162	73.11AB ADDITIONAL BRICK MASONRY	65.00	C.Y.		
-	Unit price bid shall not be less than: \$62.50				* * * * * * * * * * * * * * * * * * *
163	73.21AC ADDITIONAL CONCRETE	255.00	c.Y.		
	Unit price bid shall not be less than: \$ 62.50				
164	73.31AE0 ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS) Unit price bid shall not be less than: \$ 20.00	150.00	C.Y.	• • • • • • • • • • • • • • • • • • • •	
					-



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170	169	168	167	166	165	COL.1
8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	76.21MR MONITORING AND POST-CONSTRUCTION REPORT	76.11CR CONSTRUCTION REPORT	73.61AT ADDITIONAL STONE BALLAST Unit price bid shall not be less than: \$ 15.00	73.51AS ADDITIONAL STEEL REINFORCING BARS Unit price bid shall not be less than: \$ 1.00	73.41AG ADDITIONAL SELECT GRANULAR BACKFILL Unit price bid shall not be less than: \$ 15.00	COL-2 TIEM NUMBER and DESCRIPTION
20,000.00	1.00	1.00	50.00	21,950.00	1,060.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITY
TONS	L.S.	L.S.	c.y.	LBS.	C.Y.	COL 4
						COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS
						COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
						CIS

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	176		175	174		173	172		171	SEQ. NO	<u> </u>
SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	8.02 A	SAMPLING AND TESTING OF CONTAMINATED WATER	8.01 W2	8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER		8.01 S HEALTH AND SAFETY	8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	HAZARDOUS SOIL FOR DISPOSAL PURPOSES	8.01 C2	ITEM NUMBER and DESCRIPTION	COL 2
	400.00		24.00	720.00	-	1.00	1,000.00		16.00	OF QUANTITY	COL 3 ENGINEER'S ESTIMATE
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				Ja Ja			 			DOLLARS : CTS	COL 6 EXTENDED AMOUNT





NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN PROJECT ID: SE855

CONTRACT PIN: 8502016SE0002C

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豆	180	179	178	177	SEQ. NO
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SL-20.08.01 REMOVE STANDARD TYPE ANCHOR BOLT CONCRETE FOUNDATION	SL-20.02.02 FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	9.30 STORM WATER POLLUTION PREVENTION	9.04 HW ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 50,000.00	8.02 B SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	
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CONTRACT PIN: 8502016SE0002C

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COL. 1	COL 2	COL 3 ENGINEER'S	ΩΡ.4	COL 5 UNIT PRICE EX	COL. 6 EXTENDED AMOUNT
SEQ. NO	ITEM NUMBER and DESCRIPTION	OF QUANTITY	UNIT	DOLLARS CTS	(IN FIGURES) DOLLARS CTS
, 182	SL-21.03.02 FURNISH AND INSTALL TYPE 2S, 4S, 6S, 8S OR 12S LAMPPOST WITH TRANSFORMER BASE	6.00	EACH		
183	SL-21.09.05 REMOVE STANDARD FABRICATED STEEL, SPUN ALUMINUM NO. 10,	6.00	EACH		
	ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY.		·		· · · · · · · · · · · · · · · · · · ·
184	SL-22.16.05	6.00	EACH		
	FURNISH AND INSTALL ROADWAY TYPE LED FIXTURE AS PER SPECIFICATION 466 WITH PEC RECEPTACLE AND PEC				••••••
185	SL-26.01.04	6.00	EACH		
	FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT				
186	UTL-6.01.1 GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01)	13.00	EACH		
	Unit price bid shall not be less than: \$ 1,040.00				⊘= 1=, = ==.
187	UTL-6.01.2 GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01)	1.00	EACH		a anta di anta
	Unit price bid shall not be less than: \$ 1,770.00				



B-36 [REVISION #3]

			CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	
	EACH	1.00	UTL-6.01.4N	193
	EACH	5.00	UTL-6.01.4D GAS MAIN CROSSING 4'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	192
	EACH	2.00	UTL-6.01.4C GAS MAIN CROSSING 45"W X 29"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,960.00	191
	EACH	1.00	UTL-6.01.4A GAS MAIN CROSSING 4'-0"W X 2'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shell not be less than: \$ 1,960.00	190
	EACH	1.00	UTL-6.01.2B GAS MAIN CROSSING 30"W X 19"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	189
	EACH	2.00	UTL-6.01.2A GAS MAIN CROSSING 38"W X 24"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 1,870.00	188
DOLLARS CTS	UNIT	OF QUANTITIY	ITEM NUMBER and DESCRIPTION	SEQ. NO
COL.5 UNIT PRICE (IN FIGURES)	COL 4	COL.3 ENGINEERS ESTIMATE	COL. 2	COL 1

BID SCHEDULE FORM

3/16/2017 12:25 PM

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN **CONTRACT PIN: 8502016SE0002C**



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502016SE0002C

3/16/2017 12:25 PM

			Unit price bid shall not be less than: \$ 485.00	
	EACH	32.00	UTL-6.01.9 GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (S6.01)	199
	EACH	90.00	UTL-6.01.8 GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01) Unit price bid shall not be less than: \$ 465.00	198
	EACH	2.00	UTL-6.01.7VV GAS MAIN CROSSING 11'-6"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$2,840.00	197
	EACH	3.00	UTL-6.01.700 GAS MAIN CROSSING 13'-0"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,940.00	196
	EACH	1.00	UTL-6.01.5H GAS MAIN CROSSING 5'-0"W X 3'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00	195
	EACH	1.00	UTL-6.01.5C GAS MAIN CROSSING 5'-0"W X 2'-6"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00	194
COL.5 UNIT PRICE (IN FIGURES) DOLLARS CTS COL.6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 4 UNIT	COL.3 ENGINEER'S ESTIMATE OF QUANTITY	COL 2 TIEM NUMBER and DESCRIPTION	SEQ. NO



[REVISION #3]

	1	<u> </u>				
205	204	203	202	201	200	COL.,1 SEQ. NO
UTL-6.06 SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06) Unit price bid shall not be less than: \$ 180.00	UTL-6.05 ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05) Unit price bid shall not be less than: \$ 65.00	UTL-6.04 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04) Unit price bid shall not be less than: \$ 35.00	UTL-6.03.1 REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP, ALL SIZES, (FOR NATIONAL GRID WORK ONLY) (S6.03) Unit price bid shall not be less than: \$ 25.00	UTL-6.03 REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (S6.03) Unit price bid shall not be less than: \$ 15.00	UTL-6.02 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	COL. 2 FIEM NUMBER and DESCRIPTION
3,500.00	175.00	175.00	7,500.00	500.00	4.00	COL 3 ENGINEER'S ESTIMATE OF QUANTITIY
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						EXTENDED AMOUNT (IN FIGURES) DOLLARS

3/16/2017 12:25 PM Department of Design and Construction

DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

BID SCHEDULE FORM

CONTRACT PIN: 8502016SE0002C

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SE855



CONTRACT PIN: 8502016SE0002C

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TITEM NUMBER and DESCRIPTION UTIL-6.06A UTIL-6.06A UTIL-6.06A UTIL-6.06A UTIL-6.07 TEST PITS FOR GAS FACILITIES (\$6.07) Unit price bid shall not be less than: \$ 100.00 UTIL-GCS-2WS GAS INTERFERENCES AND ACCOMMODATIONS Unit price bid shall not be less than: \$ 150,000.00 UTIL-GCS AND ACCOMMODATIONS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 150,000.00 UTIL by Coll 3 COL. 4 UNIT PRICE ENGINEERS OF QUANTITITY UNIT 100.00 C.Y. 100.00 C.Y. 100.00 C.Y. 100.00 F.S. 150,000 00 \$150,000 00							
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COL. 2 COL. 3 COL. 4 COL. 5 ENGINEER'S ENGINEER'S ENGINEER'S ENGINEER'S ENGINEER'S (IN FIGURES) OF QUANTITITY UNIT DOLLARS CTS (IN FIGURES) OF QUANTITITY UNIT DOLLARS CTS OF QUANTITITY UNIT DOLLARS CTS OF QUANTITITY UNIT DOLLARS CTS 100.00 C.Y. TEST PITS FOR GAS FACILITIES (S6.07) COL. 4 UNIT PRICE (IN FIGURES) COL. 4 UNIT PRICE (IN FIGURES) CTS 100.00 C.Y. DOLLARS CTS 100.00 C.Y. TEST PITS FOR GAS FACILITIES (S6.07)		* * * * *			Unit price bid shall not be less than: \$ 100.00		
COL. 2 COL. 3 COL. 3 COL. 4 UNIT PRICE ESTIMATE ITEM NUMBER and DESCRIPTION UTL-6.06A UTL-6.06A SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG) (S6.06A) Unit price bid shall not be less than: \$230.00 COL. 4 UNIT PRICE ESTIMATE OF QUANTITIY UNIT DOLLARS CTS. 100.00 C.Y.			C.Y.	100.00	UTL-6.07 TEST PITS FOR GAS FACILITIES (S6.07)	207	
COL.2 COL.3 COL.4 COL.5 ENGINEER'S ENGINEER'S UNIT PRICE ESTIMATE (IN FIGURES) OF QUANTITY UNIT DOLLARS CTS			c.Y.	100.00	SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG) (S6.06A) Unit price bid shall not be less than: \$ 230.00		
COL. 2 COL. 3 COL. 4 COL. 5 ENGINEER'S UNIT PRICE ESTIMATE (IN FIGURES)	DOL	DOLLARS CTS	CNI	OF WOMENTA		206	
COL-2	EXTENDED	UNIT PRICE (IN FIGURES)		ENGINEER'S ESTIMATE	TEM NUMBER and DESCRIPTION	SEQ. NO	
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PROJECT ID: SE855
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BID SCHEDULE FORM

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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.

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

ADDENDA CONTROL SHEET

BID OPENING DATE: APRIL 12,2017

PROJECT NO.: <u>SE855</u>

DESCRIPTION: CONSTRUCTION OF SANITARY AND STORM SEWERS AND WATER MAINS AND APPURTENANCES IN, GLENWOOD ROAD, ETC, TOGETHER WITH ALL WORK INCIDENTAL THERETO-

BOROUGH OF BROOKLYN.

A	Addendum Contains:					
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)
1	2/24/2017		×	×		☑ (2)
2	3/3/2017			×		□ (0)
3	3/6/2017	Ø		. 🗖		□ (O)
4	3/13/2017	×	⊠		×	⊠ (27)
5	3/16/2017		Ø			□ (0)
6	3/23/2017					□ (O)
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The Table above is a guide. Refer to the referenced Addendum for specific information.

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN ADDENDUM NO. 6

DATED: March 23, 2017

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.

- (1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page A-1, Attachment 1 Bid Information;
 Change the dates shown for Submission of Bids To: and for Bid Opening: from "March 29, 2017" to read "April 12, 2017."
- (2) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Page 13, Schedule B MWBE;
 Change the dates shown for Bid/Proposal Response Date: from "March 29, 2017" to read "April 12, 2017."

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

GURDIP SAINI, P.E.
Associate Commissioner/Design I

Name of Bidder

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

ADDENDA CONTROL SHEET

BID OPENING DATE: APRIL 12,2017

PROJECT NO.: SE855

DESCRIPTION: CONSTRUCTION OF SANITARY AND STORM SEWERS AND

WATER MAINS AND APPURTENANCES IN, GLENWOOD ROAD,

ETC, TOGETHER WITH ALL WORK INCIDENTAL THERETO-

BOROUGH OF BROOKLYN.

A	ddendum	Addendum Contains:				
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)
1	2/24/2017		×	\boxtimes		⊠ (2)
2	3/3/2017					□ (o)
3	3/6/2017	×				□ (o)
4	3/13/2017	⊠	×		×	⊠ (27)
5	3/16/2017		×	×		□ (O)
6	3/23/2017	×		·□		□ (0)
7	4/04/2017			×	×	□ (o)
	·					□ (o)
						□ (o)
						□ (o)
						□ (o)
						□ (o)

The Table above is a guide. Refer to the referenced Addendum for specific information.

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN GLENWOOD ROAD, ETC.

Together With All Work Incidental Thereto
BOROUGH OF BROOKLYN
ADDENDUM NO. 7

DATED: April 4, 2017

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.

- (1) Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Notices to Bidders; Delete all pages in their entirety. Substitute attached revised Notices to Bidders.
- (2) Refer to the Bid and Contract Documents, VOLUME 2 OF 3; Delete VOLUME 2 OF 3 in its entirety.

 Substitute attached new revised VOLUME 2 OF 3.
- (3) <u>Refer</u> to the Bid and Contract Documents, VOLUME 3 OF 3; Schedule A. <u>Delete</u> all pages in their entirety. <u>Substitute</u> attached revised Schedule A.
- (4) See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

By signing in the space provided below, the bidder acknowledges receipt of one (1) page of this Addendum plus three hundreds and one (301) pages of attachments.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BIDS.

GURDIP SAINI, P.E. Associate Commissioner/Design I

Name of Bidder
Bv:

Notices to Bidders

Pre-Bid Questions (PBQs)

Please be advised that PBQs should be submitted to the Agency Contact Person (CSB_projectinquiries@ddc.nyc.gov) at least five (5) business days (by 5:00 PM EST) prior to the bid opening date as indicated in ATTACHMENT 1 - BID INFORMATION, page A-1 and SCHEDULE B, page 13, VOLUME 1 OF 3 of this BID BOOKLET.

All PBQs must reference the Project ID. If a Bidder has multiple PBQs for the same Project ID, the PBQs must be numbered sequentially, even if they are submitted separately.

Apprenticeship Program

If Apprenticeship Program is required as noted on Page 19 of this BID BOOKLET, the following notice applies:

Please be advised that, pursuant to the authority granted to the City under Labor Law §816-b, the New York City Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this solicitation, and any of its subcontractors with subcontracts worth two 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 program/s have successfully passed the two year Probation period following the initial registration date of such program/s with the New York State Department of Labor.

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 subcontractor not being approved.

Please be further advised that, pursuant to Labor Law §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.

Notices to Bidders

NYC Construction Loan Pilot Program

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 to learn more about the loan or contact 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.

QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC

QUESTION NO. 1: Please clarify the meaning of "unattended" when used in the OCMC traffic stipulations. Does the is mean any period when no contractor personnel are on site? Or does "unattended" mean during periods when work is shut down on the entire site and the contract has demobilized.

ANSWER NO. 1: This refers to during construction when working on site is not permitted as per OCMC Traffic Stipulations and the streets required to be open to traffic. Therefore, decking item is included in the scope and would be required during times after scheduled work hours.

QUESTION NO. 2: Please clarify if item 8.01 S will be paid in full or as a percentage if no contamination is found or if substantial portions of the scope are not required and therefore not completed. If it will be paid as percentage, what is he percentage for each item listed?

ANSWER NO. 2: If the soil samples collected by the Contractor are not found to be contaminated or hazardous, provisions in 8.01 S are not needed and therefore will not be paid.

QUESTION NO. 3: Please clarify when continuous air monitoring is required as described in Specification for Handling Transportation and Disposal of Nori-Hazardous and Potentially Hazardous Contaminated Soils. Please be aware that we have read the specification and believe it is not clear when this work is required, so please direct us back to the specifications.

ANSWER NO. 3: Community air monitoring shall be conducted in accordance with the specifications during excavation of contaminated or hazardous soil.

QUESTION NO. 4: Please clarify if the gas facility operation is required to cut and loop gas services at the contractor's request. IF not how can all contractors be assured that they will be given equal and fair treatment by the gas facility operator.

ANSWER NO. 4: Gas company has proposed relocation of work within the project limits and that work will be done prior to contractors starting construction. Therefore, contractor required to support and protect gas facilities within project limit. If there are location that would require cut and loop, then the Contractor is required to contact utility company prior to the start of construction to coordinate accordingly.

QUESTION NO. 5: The traffic stipulations are not feasible. Please revise traffic stipulations. It is not fair to change the traffic stipulations after the bid without clarifying how bid prices will be adjusted if the traffic stipulations are changed.

ANSWER NO. 5: The traffic stipulations will not be revised at this time. IF the provided stipulations are not deemed feasible, then it will be addressed with NYCDOT OCMC prior to construction. Please provide your best estimate based on information provided.

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QUESTION NO. 6: The drawings show a "proposed grade" above the existing grade on Glenwood Road. Please clarify how the work to raise the grade will be paid.

ANSWER NO. 6: The full street does not require regrading and this proposed work is covered under the items for roadway pavement restoration items.

QUESTION NO. 7: Please identify locations of timber piles.

ANSWER NO. 7: There are CFA piles on this project which are indicated on the profiles where required.



Department of Design and Construction

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

30-30 THOMSON AVENUE LONG ISLAND CITY, NEW YORK 11101-3045 TELEPHONE (718) 391-1000 WEBSITE www1.nyc.gov/site/ddc/index.page

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: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

Together with the Construction of BMPS and All Work Incidental Thereto
BOROUGH OF BROOKLYN
CITY OF NEW YORK

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN

DECEMBER 15, 2016





Department of Design and Construction

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

30-30 THOMSON AVENUE LONG ISLAND CITY, NEW YORK 11101-3045 TELEPHONE (718) 391-1000 WEBSITE www1.nyc.gov/site/ddc/index.page

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 ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN



March 15, 2017



INFRASTRUCTURE DIVISION BUREAU OF DESIGN

VOLUME 3 OF 3

PROJECT ID: SE855

FOR THE CONSTRUCTION OF HIGH LEVEL STORM SEWERS AND APPURTENANCES

FOR THE CONSTRUCTION OF COMBINED SEWERS AND APPURTENANCES

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES

Together with the Construction of BMPS and All Work Incidental Thereto BOROUGH OF BROOKLYN CITY OF NEW YORK

· · · · · · · · · · · · · · · · · · ·		Contractor
Dated	:	·, 20