



**Department of
Design and
Construction**

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

DIVISION OF INFRASTRUCTURE

30-30 THOMSON AVENUE
LONG ISLAND CITY, NY, 11101
TEL: 718.391.1000
WEB: www.nyc.gov/ddc

TO BE FILLED IN BY THE BIDDER:

BIDDER'S NAME:

BID SECURITY (CIRCLE ONE):

BID BOND / CERTIFIED CHECK

NUMBER OF ADDENDUMS RECEIVED
AND ATTACHED TO BID:

_____ ADDENDUMS

DDC CLIENT AGENCY:

**THE DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

PREPARED BY:

IN-HOUSE DESIGN

DATE PREPARED:

07/20/2026



VOLUME 3 OF 3

FOR FURNISHING ALL LABOR AND MATERIALS
NECESSARY AND REQUIRED FOR:

PROJECT ID: EC-SEH27

**SCHEDULE A
SPECIFICATIONS AND
REVISIONS TO STANDARD
SPECIFICATIONS**

RECONSTRUCTION OF EXISTING SEWERS

TOGETHER WITH ALL WORK INCIDENTAL THERETO

**BOROUGH OF THE BRONX
CITY OF NEW YORK**

VOLUME 3 OF 3

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SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following specifications and standards are incorporated into the Contract Documents by reference as though fully set forth herein.

1. Standard Specifications and Drawings for New York City Department of Transportation (NYCDOT) are available:
Online at: <http://www1.nyc.gov/site/ddc/resources/publications.page>
 - a. NYC DOT Standard Highway Specifications
 - b. NYC DOT Standard Details of ConstructionOnline at: <https://www1.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec>
 - c. NYC DOT Division of Street Lighting Standard DrawingsOnline at: <https://www1.nyc.gov/html/dot/downloads/pdf/nycdot-street-lighting-standard-drawings.pdf>
 - d. NYC DOT Standard Specifications for Traffic Signals
 - e. NYC DOT Standard Drawings for Traffic SignalsFor purchase between 9:00 A.M. and 3:00 P.M. Bid Window, at 55 Water St., Ground Floor, NYC, N.Y. 10041. Tel. (212) 839-9435.
 - f. NYC DOT Division of Street Lighting Specifications
2. The 2010 Americans with Disabilities Act (ADA) Standards; available online at: <https://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards.htm>
3. The 2013 Public Rights-of-Way Accessibility Guidelines (PROWAG); available online at: <https://www.access-board.gov/files/prowag/PROW-SUP-SNPRM-2013.pdf>
4. Standard Specifications and Drawings for New York City Department of Environmental Protection (NYCDEP) are available online at: <http://www1.nyc.gov/site/ddc/resources/publications.page>
 - a. NYC DEP Standard Sewer and Water Main Specifications, August 8, 2022
 - b. NYC DEP Instructions to Architect/Engineers Specifications for Concrete, January 1992
 - c. NYC DEP General Specification 11-Concrete, November 1991
 - d. NYC DEP Sewer Design Standards, September 2025
 - e. NYC DEP Water Main Standard Drawings, September 19, 2024
 - f. Specifications for Trunk Main Work, June 1, 2026
 - g. Standard Green Infrastructure Specifications August 1, 2024
5. Standard Design and Guidelines for Green Infrastructure Practices, latest version, available only online at: <https://www1.nyc.gov/assets/dep/downloads/pdf/water/stormwater/green-infrastructure/green-infrastructure-standard-designs.pdf>
6. Standard Specifications and Drawings for New York City Fire Department Communications facilities of New York City are available online at <https://www1.nyc.gov/assets/fdny/downloads/pdf/about/fdny-plant-operations-standard-drawings-specifications.pdf> or for pick up from the FDNY Facilities Management Bureau, Plant Operations Engineering, 316 Sgt. Beers Avenue Cluster 1 Box 16, Fort Totten, N.Y. 11359. Contact: Mr. Ed Durkin, Tel. (718) 281-3933
7. Tree Planting Standards of the City of New York Parks & Recreation are available at the following Department of Parks & Recreation website: <http://www.nycgovparks.org/pagefiles/53/Tree-Planting-Standards.pdf>
8. Standards and Specifications for Utility Joint Bid work are available online at <http://www1.nyc.gov/site/ddc/resources/publications.page>
 - a. CET SPECIFICATIONS AND SKETCHES, dated November 2010
 - b. JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR MANHATTAN, Issued August 1, 2005

SCHEDULE A**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT
(INCLUDING GENERAL CONDITIONS RELATED TO ARTICLE 22 – INSURANCE)****PART I. REQUIRED INFORMATION**

<u>INFORMATION FOR BIDDERS SECTION 26 BID SECURITY</u> The Contractor shall obtain a bid security in the amount indicated to the right.	Required provided the TOTAL BID PRICE set forth on the Bid Form is \$1,000,000. or more. Certified Check: 2% of Bid Amount or Bond: 10% of Bid Amount
<u>INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS</u> The Contractor shall obtain performance and payment bonds in the amount indicated to the right.	Required for contracts in the amount of \$1,500,000 or more. Performance Security and Payment Security shall each be in an amount equal to 100% of the Contract Price
<u>INFORMATION FOR BIDDERS DEPARTMENT OF DESIGN AND CONSTRUCTION SAFETY REQUIREMENTS</u> The Contractor shall provide the safety personnel as indicated to the right.	☒ Project Safety Representative ☐ Dedicated, full-time Project Safety Manager
<u>CONTRACT ARTICLE 14 DATE FOR SUBSTANTIAL COMPLETION</u> The Contractor shall substantially complete the Work in the number of calendar days indicated to the right.	See Page SA-4 and as stated in the Work Orders
<u>CONTRACT ARTICLE 15 LIQUIDATED DAMAGES</u> 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.	See Section C.(1) in the SEWER AND WATER MAIN REVISIONS TO SPECIFICATIONS (SW-PAGES) page SW-10 in volume 3 of 3 of this contract.
<u>CONTRACT ARTICLE 17. SUB-CONTRACTOR</u> 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 <u>35%</u> of the Contract price

<u>CONTRACT ARTICLE 21.</u> <u>RETAINAGE</u> The Commissioner shall deduct and retain until the substantial completion of the Work the percent value of the Work indicated to the right.	<u>5 %</u> of the value of the Work
<u>CONTRACT ARTICLE 22.</u> <u>(Per Directions Below)</u>	See pages SA-5 through SA-12
<u>CONTRACT ARTICLE 24.</u> <u>DEPOSIT GUARANTEE</u> As security for the faithful performance of its obligations, the Contractor, upon filing its requisition for payment on Substantial Completion, shall deposit with the Commissioner a sum equal to the percentage of the Contract price indicated to the right.	1% of Contract price
<u>CONTRACT ARTICLE 24.</u> <u>PERIOD OF GUARANTEE</u> Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to the right.	Eighteen (18) Months, excluding Trees and Plants Twenty-four (24) Months for Trees and Plants
<u>CONTRACT ARTICLE 75.</u> <u>COMPENSATION TO BE PAID TO CONTRACTOR</u> The City shall pay and the Contractor shall accept in full consideration for the performance of the Contract, subject to additions and deductions as provided herein, the total sum shown in the column to the right, being the amount at which the Contract was awarded to the Contractor at a public letting thereof, based upon the Contractor's bid for the Contract.	Amount for which the Contract was Awarded: _____ _____ Dollars (\$ _____)
<u>CONTRACT ARTICLE 79.</u> <u>PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT</u>	See M/WBE Utilization Plan in the PASSPort Procurement M/WBE Considerations Section.

<u>STANDARD HIGHWAY SPECIFICATIONS</u> <u>SECTION 6.40</u> <u>LIQUIDATED DAMAGES FOR ENGINEER'S FIELD OFFICE</u> 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.	N/A
<u>STANDARD HIGHWAY SPECIFICATIONS</u> <u>SECTION 6.70</u> <u>LIQUIDATED DAMAGES FOR MAINTENANCE AND PROTECTION OF TRAFFIC</u>	<u>\$ 400.00</u> for each instance of failure to comply with the Maintenance and Protection of Traffic requirements within three (3) hours after written notice from the Engineer. <u>\$ 800.00</u> for each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation.
<u>STANDARD HIGHWAY SPECIFICATIONS</u> <u>SECTION 7.13</u> <u>LIQUIDATED DAMAGES FOR MAINTENANCE OF SITE</u> 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.	<u>\$ 800.00</u> 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 365 consecutive calendar days ("ccds").

The Final Contract Duration shall be the Base Contract Duration when a check mark is indicated before the word "NO", below, and shall be the Base Contract Duration adjusted by the table set forth below when a check mark is indicated before the word "YES", below.

 YES ✓ NO

When the Final Contract Duration is indicated above to be adjusted by the table below, the table may increase the Base Contract Duration depending on the date of scheduled substantial completion to avoid a scheduled substantial completion of the Work during the winter months. The date of scheduled substantial completion shall be determined by adding the Base Contract Duration to the date specified to commence work in the written Notice to Proceed. The Final Contract Duration shall then be determined as follows:

- (a) Find the row that corresponds to the month of substantial completion based on the Base Contract Duration added to the date specified to commence work in the written Notice to Proceed.
- (b) Find the number of days to be added to the Base Contract Duration in the table below. Add that number of days to the Base Contract Duration to obtain the Final Contract Duration in consecutive calendar days.

Month of Substantial Completion based on the Base Contract Duration	Number of Days of adjustment
January	150
February	120
March	90
April	60
May	30
June	0
July	0
August	0
September	0
October	0
November –December 15	0
December 16 – December 31	180

(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)**PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS**

Note: All certificate(s) of insurance submitted pursuant to Contract Article 22.3.3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;
- Policy limits consistent with the requirements listed below;
- Additional insureds or loss payees consistent with the requirements listed below; and
- The number assigned to the Contract by the City (in the “Description of Operations” field).

Insurance indicated by a blackened box (■) or by X in a □ to left will be required under this contract

Types of Insurance (per Article 22 in its entirety, including listed paragraph)	Minimum Limits and Special Conditions
■ Commercial General Liability Art. 22.1.1	The minimum limits shall be \$ <u>3,000,000</u> per occurrence and \$ <u>6,000,000</u> 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),

☒ Workers' Compensation Art. 22.1.2 ☒ Disability Benefits Insurance Art. 22.1.2 ☒ Employers' Liability Art. 22.1.2 ☐ Jones Act Art. 22.1.3 ☐ U.S. Longshoremen's and Harbor Workers Compensation Act Art. 22.1.3 Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction. Note: The following forms are acceptable: (1) New York State Workers' Compensation Board Form No. C-105.2, (2) State Insurance Fund Form No. U-26.3, (3) New York State Workers' Compensation Board Form No. DB-120.1 and (4) Request for WC/DB Exemption Form No. CE-200. The City will not accept an ACORD form as proof of Workers' Compensation or Disability Insurance. Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. Law. ☐ Additional Requirements:	
☐ Builders' Risk Art. 22.1.4 ☐ Required: 100% of total bid amount ☐ Required: 100 % of total bid amount for Item(s): Contractor the Named Insured; the City both an Additional Insured and one of the loss payees as its interests may appear. If the Work does not involve construction of a new building or gut renovation work, the Contractor may provide an installation floater in lieu of Builders Risk insurance. Note: Builders Risk Insurance may terminate upon Substantial Completion of the Work in its entirety.	

☒ Commercial Auto Liability Art. 22.1.5	\$ <u>2,000,000</u> per accident combined single limit If vehicles are used for transporting hazardous materials, the Contractor shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90 Additional Insureds:
☐ Contractors Pollution Liability Art. 22.1.6	\$ <u>5,000,000</u> per occurrence \$ <u>5,000,000</u> aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
☐ Marine Protection and Indemnity Art. 22.1.7(a)	\$ _____ each occurrence \$ _____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
☐ Hull and Machinery Insurance Art. 22.1.7(b)	\$ _____ per occurrence \$ _____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____

☐ Marine Pollution Liability Art. 22.1.7(c)	\$ <u>1,000,000</u> per occurrence \$ <u>1,000,000</u> aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
[OTHER] Art. 22.1.8 ☐ Railroad Protection Liability Policy (ISO-RIMA or equivalent form) approved by Permitto 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 <u>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>	\$ <u>2,000,000</u> per occurrence \$ <u>6,000,000</u> annual aggregate Named Insureds: 1. The New York City Transit Authority ("NYCT"), the Manhattan and Bronx Surface Transit Operating Authority ("MaBSTOA"), the Staten Island Rapid Transit Operating Authority ("SIRTOA"), the Metropolitan Transportation Authority ("MTA") including its subsidiaries and affiliates, MTA Construction & Development Company ("MTA C&D"), MTA Bus Company ("MTA Bus").

[OTHER] Art. 22.1.8 ■ Professional Liability A. The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of \$1,000,000 per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Contract arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor's Professional Engineer or anyone employed by the Contractor's Professional Engineer. B. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor's Professional Engineer shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.	
[OTHER] Art. 22.1.8 ☐ Engineer's Field Office Section 6.40, Standard Highway Specifications	Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of <u>\$40,000</u>
[OTHER] Art. 22.1.8 ☐ The Following Additional Insurance Must Be Provided: Umbrella/Excess Liability Insurance - The Contractor shall provide Umbrella/Excess Liability Insurance in the minimum amount of \$10,000,000 per Occurrence and \$10,000,000 in Aggregate. The policy terms and condition should be at least as broad as the underlying policies. The underlying policies should comply with the insurance provision as outlined by the contract. Defense cost should be in addition to the limit of liability. The City of New York, including its officials and employees, should be included as additional insured as respects to the noted project.	

Per **Article 22.2.5** of the **Standard Construction Contract**: The Contractor may satisfy its insurance obligations as defined in this Schedule A through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.

SCHEDULE A
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART III. CERTIFICATES OF INSURANCE

All certificates of insurance (except certificates of insurance solely evidencing Workers' Compensation Insurance, Employer's Liability Insurance, and/or Disability Benefits Insurance) must be accompanied by one of the following:

- (1) the Certification by Insurance Broker or Agent on the following page setting forth the required information and signatures;

-- OR --

- (2) copies of all policies as certified by an authorized representative of the issuing insurance carrier that are referenced in such certificate of insurance. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

CITY OF NEW YORK
CERTIFICATION BY INSURANCE BROKER OR AGENT

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

[Name of broker or agent (typewritten)]

[Address of broker or agent (typewritten)]

[Email address of broker or agent (typewritten)]

[Phone number/Fax number of broker or agent (typewritten)]

[Signature of authorized official, broker, or agent]

[Name and title of authorized official, broker, or agent (typewritten)]

State of)
) ss.:
 County of)

Sworn to before me this _____ day of _____, 20_____

NOTARY PUBLIC FOR THE STATE OF _____

SCHEDULE A

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)

PART IV. ADDRESS OF COMMISSIONER

Wherever reference is made in Article 7 or Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents must be sent through email to insurance@ddc.nyc.gov. Hard copy documents of the above requirement are no longer required.

(NO FURTHER TEXT ON THIS PAGE)

REVISIONS TO STANDARD SPECIFICATIONS

NOTICE

The Specification Bulletin(s) ("SB(s)") referenced in this Section (R-Pages) may consist of revisions to the following Standard Specifications:

- New York City Department of Transportation ("NYC DOT") Standard Highway Specifications, dated 5/16/2022;
- New York City Department of Environmental Protection ("NYC DEP") Standard Sewer and Water Main Specifications, dated 8/8/2022;
- NYC Department of Environmental Protection ("NYC DEP") Standard Green Infrastructure Specifications, dated 8/1/2024; and
- NYC DEP Specifications for Trunk Main Work, dated 6/1/2026.

The SB(s) modify and supersede portions of the applicable Standard Specifications. The provisions contained in this Contract's I-Pages, S-Pages and SW-Pages may further modify the applicable Standard Specifications.

The following active SB(s) are included as part of this contract:

- *SB 22-006 – INCREMENTAL COST NEAR TRANSIT FACILITIES*
- *SB 23-001 – SEWER DESIGN STANDARDS*
- *SB 23-002 – PIPE BOLLARD*
- *SB 23-003 – MOBILIZATION*
- *SB 23-004 – SUSTAINABLE CONSTRUCTION*
- *SB 24-001 – CEMENT, PORTLAND*
- *SB 24-002 – SHEETING AND BRACING*
- *SB 24-003 – CORNER CURB*
- *SB 24-004 – PIGMENTING*
- *SB 24-006 – REINFORCED CONCRETE SEWERS*
- *SB 24-007 – DRAINS TO BE KEPT CLEAN*
- *SB 24-008 – PAYMENT REQUISITIONS*
- *SB 24-010 – FLAGGERS, CROSSING GUARDS, AND PEDESTRIAN MANAGERS*

- *SB 24-011 – ALLOWANCE FOR RAILROAD FACILITY PERMITTING (ALL TYPES)*
- *SB 24-012 – ASPHALT, FUEL, AND STEEL PRICE ADJUSTMENT*
- *SB 24-013 – ENGINEER’S FIELD OFFICE*
- *SB 24-014 – MAINTENANCE OF SITE*
- *SB 24-015 – SUSTAINABLE CONSTRUCTION REQUIREMENTS*
- *SB 24-016 – HANDLING, TRANSPORTING, AND DISPOSAL OF POTENTIAL AND IDENTIFIED CONTAMINATED AND HAZARDOUS MATERIALS*
- *SB 24-017 – EXPANDED WORK ALLOWANCE*
- *SB 24-018 – STORMWATER POLLUTION PREVENTION*
- *SB 24-019 – MOBILIZATION*
- *SB 24-020 – PARTIAL PAYMENTS FOR MATERIALS IN ADVANCE OF THEIR INCORPORATION IN THE WORK*
- *SB 25-001 – HELICAL PILES (GROUT-FILLED CORE)*
- *SB 25-002 – WATER MAIN LOCK-OUT / TAG-OUT (LOTO)*
- *SB 25-003 – PROJECT SIGN*
- *SB 25-004 – TREE CONSULTANT*
- *SB 25-005 – MAINTENANCE OF SITE*
- *SB 25-006 –SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW CURB AND SIDEWALKS*
- *SB 25-007 – CURING MATERIALS*
- *SB 25-008 – TEMPORARY RESTORATION AND CLEANING UP*
- *SB 25-009 – SEWER DESIGN STANDARDS*
- *SB 25-010 – SAWCUTTING EXISTING PAVEMENT*
- *SB 25-011 – CURBS, HEADERS, AND SLABS*
- *SB 26-001 – CURBS, HEADERS, AND SLABS*
- *SB 26-002 – CONCRETE BASE FOR PAVEMENT*
- *SB 26-003 – SPLIT SLEEVE COUPLINGS*
- *SB 26-004 – CATCH BASINS*
- *SB 26-005 – MODIFICATION OF EXISTING STRUCTURES*
- *SB 26-006 – SUBWAY SIDEWALK FRAMES AND GRATINGS*

- *SB 26-007 – SEWERS TO BE KEPT CLEAN; BYPASS FLOW OF SEWERS AND DRAINS AND TEMPORARY SERVICES; REMOVING AND ABANDONING SEWERS, WATER MAINS, ETC.*
- *SB 26-008 – BYPASS PLAN*
- *SB 26-009 – NYCDEP Specifications For Trunk Main Work 6/1/2026*
- *SB 26-010 – COSTS OF TESTS BORNE AND INSPECTION*
- *SB 26-011 – TEMPORARY RESTORATION AND CLEANING UP*
- *SB 26-012 – ENGINEER’S FIELD OFFICE*
- *SB 26-013 – TREE CONSULTANT*

The SB(s) are available online at:

<http://www1.nyc.gov/site/ddc/resources/specification-bulletins.page>

(NO FURTHER TEXT ON THIS PAGE)

NOTICE

UNLESS OTHERWISE NOTED, ALL SECTIONS, SUBSECTIONS, ARTICLES, OR SUBARTICLES AS REFERRED TO HEREIN WITHIN THESE NEW SECTION SPECIFICATIONS MUST BE THOSE OF THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION'S (NYCDOT'S) CURRENT STANDARD HIGHWAY SPECIFICATIONS WITH CURRENT ADDITIONS, MODIFICATIONS AND REVISIONS TO THE STANDARD HIGHWAY SPECIFICATIONS (R-PAGES).

THE STANDARD HIGHWAY SPECIFICATIONS ARE NOT INCLUDED IN THESE I-PAGES. SEE THE NYCDOT STANDARD HIGHWAY SPECIFICATIONS BOOKS FOR STANDARD SPECIFICATIONS TEXTS.

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1.06.23.(S). – TRUCKING

All third-party trucking hired by the prime contractor or any tier subcontractor must be submitted as a Request for Subcontractor Approval (RFAS) as a subcontractor with the following exceptions:

- 1) For materials delivered by a supplier;
- 2) For pick-up and delivery of containers and/or dumpsters not used for soils.

S - PAGES

GENERAL AND SPECIAL PROVISIONS:

- (A) GENERAL PROVISIONS
 - (B) HIGHWAY PROJECT SPECIFIC PROVISIONS
 - (C) SEWER & WATER MAIN PROJECT SPECIFIC PROVISIONS
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NOTICE

THE PAGES CONTAINED HEREIN (S-PAGES) ARE GENERAL AND SPECIAL PROVISIONS THAT APPLY TO THE WORK AND ARE PART OF THE CONTRACT DOCUMENTS.

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(NO TEXT)

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(NO TEXT)

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(NO TEXT)

(D) GREEN INFRASTRUCTURE PROVISIONS

(NO TEXT)

(NO TEXT ON THIS PAGE)

(A) GENERAL PROVISIONS

A. LINES AND GRADES. The Contractor must furnish lines and grades in accordance with Section 1.06.27 of the NYCDOT Standard Highway Specifications, except that survey controls established for this project may no longer exist and the Contractor will be required to re-establish the survey control information using official Borough Survey Control Monuments and Bench Marks, where they exist. The Contractor must check with Topographic Section of the Borough President's Office as to the reliability and accuracy of the data to be used for lines and grades.

B. SPECIFIC TRAFFIC STIPULATIONS. Under this contract, the Contractor must perform the work in strict accordance with the requirements of Section 6.70 in the Standard Highway Specifications, specific traffic stipulations as called for on the plans, Office of Construction Mitigation and Coordination (OCMC) Traffic Stipulations attached to the end of these Special Provisions, and the directions of the Engineer. In case of a conflict, the Engineer's decision will be final.

The Contractor must plan and schedule the work in order to accommodate all special events listed in the NYCDOT Special Events Annual Calendars. The calendars are available at the following link:

https://nycdot.sharepoint.com/:f/s/publicshare/Ei2XN4G99_JFkdrtd_cj0QBtSPR2xhVrApcqAs1KSLpeA?e=j276PF

In addition, the cost of compliance with requirements of the OCMC Traffic Stipulations, unless otherwise provided for, will be deemed included in the prices bid for all scheduled items..

C. HOLIDAY CONSTRUCTION EMBARGO. A special Holiday Construction Embargo will be in effect on the Friday of the week preceding Thanksgiving Day week from 6:00 AM to 11:59 PM and again from the Monday of Thanksgiving Day week from 6:00 AM through January 2, at 11:59 PM. Roadway and sidewalk construction activities will be restricted during the embargo period on the streets listed below*.

Any permits issued prior to the date of this notice, for work during this embargo period on the streets listed below* which do not already have the permit stipulation "410" are hereby suspended for the period noted above. All permittees must comply with this embargo unless a special waiver is granted by OCMC. Waiver requests must be filed at least thirteen days before Thanksgiving Day, in the Permit Office by filing a "Request for Roadway/Sidewalk Permits During "Embargo Periods" and submitting supporting documentation. Waiver requests should only be submitted for critical reasons for a specific project. If a waiver is granted, the applicant will be notified so they can apply for the approved permits. Waivers **are not** required for ongoing Building Construction Activity Permits which already include the "410" permit stipulation. Waiver request forms may be obtained at any Permit Office or on the Department of Transportation's website at:

<http://www.nyc.gov/html/dot/downloads/pdf/holidayembapp.pdf>

Prior to this embargo period all necessary measures must be taken so that all roadways and sidewalks are in proper condition to allow for the expeditious and safe movement of vehicular, bicycle and pedestrian traffic. Tool carts, cable reels, containers, and material stored on roadways must be removed during the embargo period.

The opening of utility access covers is prohibited on any of the streets noted below** between the hours of 6:00 AM and midnight unless the utility or Contractor files for an Emergency Authorization Number as required by Section 2-07 of the Department of Transportation's Highway Rules. The planned opening of utility access covers may occur during the hours of 12:01 AM and 5:59 AM where no authorization number is required.

Temporary restoration of the streets and sidewalks and removal thereof, if required for the Holiday Embargo period, will be paid for under the appropriate scheduled items.

No extension of time due to the shutdown period will be granted to the Contractor for completion of the work.

* Please note that this embargo only applies to NYCDOT construction permits.

** List of street and maps of the affected locations are available by borough on the Department of Transportation's website at: <http://www.nyc.gov/html/dot/html/motorist/trafalrt.shtml>

D. CONTRACT ITEMS THAT INCLUDE BACKFILL AS A PART OF THEIR WORK. The following will pertain to all contract items that have backfill as a part of their work: Backfilling will comply with Subsection 4.11.3 of the Standard Specifications and no additional payment will be made for any Highway or Street Lighting work item requiring Contractor to furnish additional fill material to meet these requirements when backfilling.

E. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES. Contractor will plan and/or stage his/her work schedule using all hours/days available. Contractor is advised that all applicable unit prices will include, for the purpose of this contract, all overtime costs, premium time costs, shift differentials required to complete construction within the specified "Time(s) of Completion" stipulated in this contract.

Contractor will be permitted to accelerate this project, to combine stages and/or work sequences. Any such changes will be shown in the construction schedule, to be furnished in accordance with the General Provisions of the Standard Specifications.

F. DISPOSAL OF EXCESS EXCAVATED MATERIAL. All excess excavated material, with the exception of contaminated material, will become the property of the Contractor and will be properly disposed of away from the site, at the Contractor's expense. Contaminated material will be disposed of separately in accordance with contract requirements.

G. NO EXTENSION OF TIME FOR WINTER SHUT-DOWN. Where the Contractor's approved work schedule for installing sidewalk, curb, roadway base and/or pavement falls within the winter period of December 1st through April 1st, the Contractor will NOT be granted an extension of time for completion of this contract due to the winter shut-down period, unless otherwise provided in Schedule A.

H. PRIVATE UTILITY HARDWARE ADJUSTMENTS. will be performed by the owning utility company or its agent, at its expense. The Contractor must notify the utility company 72 hours prior to start of work at each location where its hardware requires adjustment.

I. SURVEY MONUMENTS. When working in the vicinity of survey monument the Contractor will hand excavate per Item 8.02 AB-S, 8.02 A and 8.02 B (as applicable), at City Survey Monuments, for a distance of five (5) feet around each monument, as directed by the Engineer.

J. RESTORATION OF ADJACENT AREAS. The Contractor will be required to remove all form work. In planting strip areas, the Contractor will be required to restore areas damaged as a result of the Contractor's operations, to the satisfaction of the Engineer, with sod. The Contractor will also, as directed by the Engineer, make safe adjacent areas to the Contractor's work, such as: restoring missing or damaged pavement markings that were removed or damaged as a result of the Contractor's operations (as per requirements of Section 6.44 in the Standard Specifications); resetting granite blocks in tree pits; and, applying binder mixture (Item 4.02 CA or as applicable) where badly broken sidewalk or curb may create a dangerous condition just outside his area of operation, where and when directed by the Engineer.

All restoration work must be performed to the satisfaction of the Engineer.

K. FLAGGERS. The Contractor is notified that wherever the Item No. "6.52" and words "flagger", "flagperson" and "flagman" are used in the contract documents and drawings it will mean the Item No. "6.52 CG" and the words "Crossing Guard", respectively.

L. FUEL COST. The Contractor is notified that the fuel cost per gallon used in the formula under Sub-Article 26.2.8 of the Standard Construction Contract for Extra Work will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy

Information Administration (“USEIA”), and available on its website at <http://www.eia.gov/petroleum/gasdiesel/>. The USEIA-published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1st, April 1st, July 1st and September 1st) will be used in the reimbursement formula for all **Extra Work** invoiced that was performed during that calendar quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.

M. NYCDPR CONSTRUCTION PERMITS AND OTHER REQUIREMENTS.

1. At least thirty (30) days prior to the upcoming start of construction at or near the New York City Department of Parks and Recreation (NYCDPR) land, the Contractor is required to issue a notice to NYCDPR about the start of construction activity. At least 30 days in advance of the Order to Work Date, the Contractor must notify the New York City Department of Parks and Recreation (NYCDPR) of the upcoming start of construction by emailing interagency@parks.nyc.gov.

2. Parks Construction Permits are required for all work on Parkland. Construction Permits may also be required for work on sidewalks adjacent to Parks properties or other areas maintained by NYCDPR such as Greenstreets depending on the scope of work. It is the Contractor’s responsibility to coordinate with Parks via email at interagency@parks.nyc.gov to establish whether Construction Permits are required for the contract scope of work.

3. The Contractor will not be permitted to store, stage, stockpile, barricade, lay down construction materials or equipment, or otherwise impede access to Parkland, Greenstreets, or sidewalks in the right-of-way fronting Park properties unless such permission is granted by NYCDPR via issuance of a Parks Construction Permit.

4. The Contractor must obtain the necessary Parks Construction Permit from NYCDPR prior to the start of work on Parkland or areas under Parks’ jurisdiction. The Construction Permit application is found online at <https://www.nycgovparks.org/permits/construction>.

5. When no Construction Permit is required, the contractor must notify Parks at interagency@parks.nyc.gov at least one week in advance of any construction adjacent to Greenstreets or in the right-of-way fronting Parks properties to allow for coordination as needed.

6. The Contractor is responsible for the protection of any Greenstreets, sidewalks, and other landscape features under NYCDPR jurisdiction that are adjacent to or enclosed by the construction area, including hardscape, landscape, shrubs, and trees. Any areas and features disturbed or damaged during construction activity are the responsibility of the Contractor to restore and repair.

7. Many NYCDPR properties are indicated on the publicly accessible online mapping resource of the New York City Department of Information Technology and Telecommunications (DOITT) at <http://maps.nyc.gov/doitt/nycitymap/>. However, the map is not exhaustive, and Contractors should confirm Parks properties in the vicinity of their work with NYCDPR.

8. The Contractor must take necessary precautions to prevent interference with or damage to utilities or other facilities during construction. The cost of all work connected with maintaining and protecting utilities affected by the work be borne by the Contractor and the cost will be deemed included in the price bid for the various items in the contract.

9. In the event the Contractor damages an existing utility or interrupts utility service, the Contractor will immediately notify its owner and the Engineer and must commence repair/replacement work as instructed by the Engineer.

10. In the event the Contractor causes an interruption in utility service, the Contractor will immediately arrange for service to be restored and may not cease the repair work until service is restored. The Contractor will not continue work until the service is restored, unless otherwise directed by the Engineer. All corrective utility work will be acceptable to the engineer and the subject utility owner.

11. If any utility service or connection of unknown ownership is encountered during construction which appears to enter or serve Parkland, Contractor must contact Parks at interagency@parks.nyc.gov to inquire if Parks is the owner of such utility.

N. START OF CONTRACT WORK. The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within 21 to 30 Days of Contract Registration.

O. STANDARD WORKING HOURS: In absence of OCMC Traffic Stipulations, Section 1.06.23 (P) of NYC DOT STANDARD HIGHWAY SPECIFICATIONS regarding standard working hours is to be followed is to be followed. Work performed outside the standard working hours must be pre-approved by NYC DDC.

P. TREE BARRIERS. The Contractor will furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers will be Type B, unless otherwise directed by the Engineer, and will be constructed and installed as shown on the Protective Tree Barrier sketch in Department Of Transportation, Standard Highway Details Of Construction, Drawing No. H-1046A, as directed by the Engineer, and in accordance with Department of Parks and Recreation requirements.

Price of the tree barriers must be included in the in the unit prices bid for all scheduled items.

Q. UTILITIES. All utility locations and invert elevations are not guaranteed, nor is there any guarantee that all existing utilities, whether functional or abandoned within the project area are shown.

R. HOUSE CONNECTIONS. All existing house connections will be maintained and supported during construction. The Contractor will replace any existing house connection damaged as a result of the Contractor's construction operations as ordered by the Engineer at no cost to the City.

S. STREET LIGHT AND TRAFFIC SIGNAL. The Contractor is responsible for any damage to the existing street lighting and traffic signal equipment, including underground conduits and the safety of both pedestrian and vehicular traffic for the duration of the contract. All street lighting and traffic signal foundations require grounding rod to be installed per Street Lighting Drawing SL-MIS-014. The costs of the grounding rod must be included in the prices bid for the associated street lighting or traffic signal work.

Should any conduits, cables or foundations need repair due to the Contractor's negligent operations during construction, all work will be performed according to NYCDOT Bureau of Traffic's Standard Drawings and Specifications and City of New York DOT System Engineering Specifications (dated November 2013) at the sole expense of the Contractor.

It is the Contractor's responsibility to secure an approved electrical Contractor to perform all traffic signal work (if any). For list of approved electrical Contractors, contact Bjorn Seedan or James Celentano, New York City Department of Transportation at (212) 839-3790.

T. SAW CUT. The Contractor is advised that where the existing roadway pavement is designated to be replaced from curb to curb, then no full depth saw cutting of pavement for sewer and

water main trenches will be required, except at the limits of full width pavement restoration. No separate or additional payment will be made for any saw cutting.

U. PRE-CONSTRUCTION STAGE. The Contractor is advised that the Base Contract Duration (consecutive calendar days "ccds") must also include pre-construction stage from the Notice To Proceed date. During this stage the Contractor is required to submit the necessary shop drawings, obtain all permits and submit the health and safety plan for review and approval. The Engineer's field office will also need to be established during this pre-construction stage period. Failure to comply with the pre-construction stage requirements may result in assessing liquidated damages to the Contractor for everyday beyond the pre-construction stage duration. The liquidated damage will be of equivalent value as identified in the Schedule A for work beyond the construction completion date.

V. EXISTING SEWERS, WATER AND APPURTENANCE. The Contractor is notified that at some locations there may exist sewers, manholes, water mains, etc., which are to remain undisturbed and are in close proximity to the line of the proposed work. The Contractor exercise extreme care, minimize the trench width of the proposed sewers and take all necessary precautions in placing sheeting and during excavation of the trenches to prevent any damage to the existing structures, pavement, curbs, and sidewalks that are to remain while working adjacent to them. The Contractor maybe restricted to use wood sheeting at certain critical locations as directed by the Engineer. Should any damage occur to any portion of the existing structures that are to remain due to the Contractor's operations, the Contractor will make all repairs to the existing structures to the satisfaction of and as directed by the Engineer. The cost of such repair will be borne by the Contractor, at no cost to the City. Additional cost to use wood sheeting specifically to ensure integrity of existing sewer structures will be deemed included in all bid items for work.

W. RECONNECTING EXISTING SEWERS TO NEW MANHOLES. If there are locations on the contract plans, where the Contractor is required to reconnect all existing sewers to the proposed manholes in this contract. The said manholes will be fabricated to provide openings for the existing sewers at the specified invert elevations as shown on the contract drawings. The cost of reconnecting existing sewer pipes to new manholes, including concrete collar with steel reinforcements and/or grouting around the existing sewer pipes at the openings and all work necessary to complete the pipe reconnection, to the satisfaction of the Resident Engineer will be deemed included in the prices bid for all items of work. No additional payment will be made.

***[ARTICLE "X" IS ONLY APPLICABLE IF ITEMS FOR VIBRATION MONITORING
ITEM NO. 76.31 IS IN THE BID SCHEDULE]***

X. VIBRATION MONITORING. In case of structures requiring vibration monitoring, the Contractor, in addition to Continuous Real Time Monitoring for Vibrations as determined in the Construction Report must provide Continuous Real Time Monitoring for Vibrations of existing buildings/structures adjacent to or in the proximity of different types of construction activities being conducted including, but not limited to, installation of sheeting for construction of proposed water and sewer mains, installation of sheeting for excavation of jacking/receiving pits, direct jacking of sewers, piling work or as directed by the Engineer.

Y. CITY ASSETS. The Contractor is advised that any City owned light poles, traffic signals, street name signs, traffic signs and encumbrances including, but not limited to, underground conduit displaced as the result of the installation of the new sewers, water mains, catch basins, catch basin connections and appurtenances will be replaced in kind and as directed by the Engineer. The cost of such work will be deemed included in the prices bid for all items of work under this contract.

[ARTICLE "Z" IS ONLY APPLICABLE FOR WATERMAIN 24-INCHES AND HIGHER]

Z. “AS-BUILT” DRAWINGS FOR WATER MAINS AND APPURTENANCES 24-INCHES (600-MM.) AND LARGER: Upon the completion of the work for each Capital Project and as a condition precedent to obtaining the certificate for Substantial Completion for each Capital Project under Article 44 of the Contract, the Contractor will furnish “As-Built” drawings for water mains and appurtenances 24-inches and larger to the City. The Contractor will prepare and submit the “As-Built” record drawings to the Engineer for approval. Approved “As-Built” drawings will be delivered to the Department of Design and Construction, 30-30 Thomson Avenue, Long Island City, New York, 11101-3045. The following guideline is provided for the preparation of “As-Built” record drawings:

1. The Contractor will prepare the “As-Built” drawings on AutoCAD and will provide to the City two (2) sets of Mylar and AutoCAD files on a CD. The drawings on CD’s and the plotted Mylar’s will conform to the standard size of 22” x 36” (559-mm. x 914-mm.) using a 1”=30’ (1:360) horizontal and 1”=10’ (1:120) vertical scale. The Mylar will be 3-mil in thickness.

2. The “As-Built” drawings will include but not be limited to the following guidelines summarized below:

(a) Drawings will consist of the same legend and layout of title boxes shown on the contract drawings.

(b) Each plotted Mylar drawing will contain the signature and stamp of the Contractor’s NYS Professional Engineer/Registered Architect.

(c) The drawings will include:

- street name and crossing street(s) or distance from;
- north arrow;
- property lines and widths;
- legal and existing street widths, street alignment and grades;
- “new” curb lines and widths;
- water main center line measured off the “new” curb line;
- horizontal stationing for all valves, hydrants, outlets, blow-offs, house service connections, etc., measured on a horizontal line as established by the Borough Office Bureau of Topographic;
- alignment and appurtenance location stationing, and deflection angles;
- cover and elevations (Datum used will be that of the Borough where work is located);
- location of pipe joints;
- profile of all piping;
- complete details of all outlet piping roundabouts;
- complete details of all blow-off connections to the sewer;
- complete details of all air cocks;
- location of taps and access manholes;
- location of all cathodic protection stations;
- Venturi sensing lines plans and profiles;

- all appropriate notes.

3. The cost of preparing and submitting "As-Built" approved drawings will be deemed included in the prices bid for all scheduled bid items in the contract. No separate or additional payment will be made for this work.

AA. NO ADDITIONAL PAYMENT. The Contractor is advised that any fences, guardrails, boulders, asphalt walkway of the park, fixtures, other encumbrances removed within project limits during construction will be replaced in kind to the satisfaction of the Engineer. The cost of such work will be deemed included in the prices bid for all contract items of work and no additional or separate payment will be made.

AB. SHEETING AND EXCAVATION AT TRANSIT FACILITIES. In case of transit facilities like MTA, LIRR, METRO NORTH etc., the Contractor will exercise extreme caution and take all necessary precautions in placing sheeting and excavation to prevent any damage to the existing underground or overhead structures and its appurtenances during construction work throughout the project area. The Contractor must take full responsibility to protect the said structures and its appurtenances and any damage caused by the Contractor's operations must be made good by the Contractor to the satisfaction of the Engineer at no additional cost to the City.

The Contractor must submit shop drawings to the Transit facilities showing all the details and methods of construction, such as, sheeting and bracing, including the Contractor's procedure and sequence of construction, supporting and/or protection of the existing structures and its appurtenances, with necessary design calculations for approval prior to starting of the construction. The design will be made by a New York State Licensed Professional Engineer skilled in this type of construction and as further evidenced by the imprint of Professional Engineer's seal and signature on all drawings. The cost of this work will be deemed included in the price bid for all items of work under this contract.

AC. ARCHAEOLOGICAL DISCOVERIES. The Contractor is notified that if requested by the Resident Engineer and the City, the Contractor will be required retain the services of an Archaeologist (the "City's Archaeologist") for this project.

The City's Archaeologist will be notified in advance and will be present on site during sub-surface excavations as deemed necessary. The City's Archaeologist will be authorized to halt construction at any time in order to record and/or recover any archaeological resources encountered during excavations, and to stabilize in place any human remains encountered.

For the purpose of evaluating and recording archaeological resources, the City's Archaeologist will be allowed to enter trenches provided all standard safety requirements are met. It is understood that some construction down time may be necessary.

In the event that human remains, and/or other significant archaeological deposits are encountered during construction or archaeological investigations, Landmarks Preservation Commission (LPC) will be notified as directed by the City's Archaeologist and the State Historic Preservation Office (SHPO) requires that the following protocol is implemented:

1. At all times human remains must be treated with the utmost dignity and respect. Should human remains be encountered work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance.

2. Human remains or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.

3. The County coroner and local law enforcement as well as the SHPO and the involved agency will be notified immediately. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archeological. If the remains are archeological in nature, a bio-archaeologist will confirm the identification as human.

4. If human remains are determined to be Native American, the remains will be left in place and protected from further disturbance until a plan for their protection or removal can be generated. The involved agency will consult SHPO and appropriate Native American groups to determine a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance.

5. If human remains are determined to be Euro-American, African- American, etc., the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action.

Should extra work be ordered by the Resident Engineer as a result of any archaeological discoveries, it will be paid for from the Fixed Sum included in, and in accordance with Item HW-908 Allowance for Extra Work Due To Archaeological Discoveries.

AD. USE OF CITY WATER. Please refer to NYCDOT STANDARD HIGHWAY SPECIFICATIONS (May 16, 2022), Sub Section 1.06.23 (A), Rules, Laws, and Requirements, for use of City water.

AE. PUBLIC DISSEMINATION OF INFORMATION. The Contractor agrees to hold confidential, both during and after the completion or termination of this Contract, all of the reports, information, or data, furnished to, or prepared, assembled or used by, the Contractor under this Contract. The Contractor agrees to maintain the confidentiality of such reports, information, or data by using a reasonable degree of care, and using at least the same degree of care that the Contractor uses to preserve the confidentiality of its own confidential information. The Contractor agrees that such reports, information, or data will not be made available to any person or entity without the prior written approval of the Commissioner. The obligation under this Section to hold reports, information or data confidential will not apply where the Contractor is legally required to disclose such reports, information or data by virtue of a subpoena, court order or otherwise ("disclosure demand"), provided that the Contractor complies with the following: (1) the Contractor will provide advance notice to the Commissioner, in writing or by e-mail, that it received a disclosure demand for such reports, information or data and (2) if requested by the Commissioner, the Contractor will not disclose such reports, information or data until the City has exhausted its legal rights, if any, to prevent disclosure of all or a portion of such reports, information, or data. The previous sentence will not apply if the Contractor is prohibited by law from disclosing to the City the disclosure demand for such reports, information or data.

The Contractor will restrict access to confidential information to persons who have a legitimate work-related purpose to access such information. The Contractor agrees that it will

instruct its officers, employees, and agents to maintain the confidentiality of any and all information required to be kept confidential by this Contract.

The Contractor, and its officers, employees, and agents will notify the Commissioner, at any time either during or after completion or termination of this Contract, of any intended statement to the press or any intended issuing of any material for publication in any media of communication (print, news, television, radio, Internet, etc.) regarding the services provided or the data collected pursuant to this Contract at least twenty-four (24) hours prior to any statement to the press or at least five (5) business days prior to the submission of the material for publication, or such shorter periods as are reasonable under the circumstances. The Contractor may not issue any statement or submit any material for publication that includes confidential information as prohibited by this Section.

At the request of the Commissioner, the Contractor will return to the Commissioner any and all confidential information in the possession of the Contractor or its sub Contractors. If the Contractor or its sub Contractors are legally required to retain any confidential information, the Contractor will notify the Commissioner in writing and set forth the confidential information that it intends to retain and the reasons why it is legally required to retain such information. The Contractor will confer with the Commissioner, in good faith, regarding any issues that arise from the Contractor retaining such confidential information. If the Commissioner does not request such information, or the Law does not require otherwise, such information will be maintained in accordance with the requirements set forth in the Contract Documents.

AF. PRICES TO INCLUDE. No direct payment will be made for costs incurred in complying with the foregoing Special Provisions, unless otherwise provided. Said costs will be deemed to have been included in the prices bid for all the scheduled contract items.

(B)HIGHWAY PROJECT SPECIFIC PROVISIONS

(NO TEXT)

(C) SEWER & WATER MAIN PROJECT SPECIFIC PROVISIONS

(NO TEXT)

(D) GREEN INFRASTRUCTURE PROVISIONS

(NO TEXT)

NOTICE

The Standard Sewer And Water Main Specifications of the Department of Environmental Protection, Sewer Design Standards of the Department of Environmental Protection, Water Main Standard Drawings of the Department of Environmental Protection, Specifications For Trunk Main Work of the Department of Environmental Protection and the Standard Highway Specifications of the Department of Transportation of The City of New York, must be included as part of the contract documents. These said specifications and standard drawings are hereby revised under the following section headings:

- A. NOTICE TO BIDDERS
- B. REVISIONS TO THE STANDARD HIGHWAY SPECIFICATIONS
- C. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
- D. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

(NO TEXT ON THIS PAGE)

A. NOTICE TO BIDDERS

- (1) The Contractor is advised that this contract may include locations in other boroughs. At the discretion of the Commissioner via express written consent, locations beyond the limits of The Bronx, may be included only if there is no active contract for the identical work in the other borough or if the active contract fails to respond to the task order in question. The cost of the work for these locations must be deemed included in the prices bid for all contract items.
- (2) The Contractor must furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers must be Type B, unless otherwise directed by the Engineer, and must 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) (A) There is no provision for "ENGINEER'S FIELD OFFICE" in this contract, as per **New York City Department of Transportation (NYCDOT) Standard Highway Specifications Section 6.40 - Engineer's Field Office**.

(B) There is no item for "MOBILIZATION" in this contract, except for Mobilization for dewatering under Item No. DSS008A. The cost for mobilization must be deemed included in the prices bid for all contract items of work.

- (4) The Project Sign as per **New York City Department of Transportation (NYCDOT) Standard Highway Specifications Subsection 1.06.46 - Project Sign** will not be required on this contract. However, the Contractor will be required to provide Temporary Notification Signs in accordance with **New York City Department of Transportation (NYCDOT) Standard Highway Specifications Subsection 1.06.46A - Temporary Notification Signs**.
- (5) 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 must be performed according to NYCDOT Bureau of Traffic's Standard Drawings and Specifications at the sole expense of the Contractor.

It is the Contractor's responsibility to secure an approved electrical contractor to perform all traffic signal work (if any). For list of approved electrical contractors, contact **Hasib Amini or James Celentano** of New York City Department of Transportation at (212) 839-3386/ (212) 839-3129.

- (6) The Contractor will be required to prepare and submit "**As Built**" sewer record drawings to the Engineer for approval, at the completion of each installation. Drawings submitted at the completion of the entire contract after all installations must not be accepted. Approved "**As Built**" drawings must be delivered to the Department of Environmental Protection, Chief of Emergency Construction, 59-17 Junction Boulevard, 6th Floor - High Rise, Corona, New York, 11368, Tel. No. (718) 595 4200. The following guideline is provided for the preparation of "**As Built**" sewer record drawings:

(A) Drawings must be prepared for each individual unrelated location. The drawings must be submitted in CADD format on CD's along with a plotted Mylar for each location drawing. The drawings on CD's and the plotted Mylar's must be legal size (8-1/2" x 14"). The Mylar must be 3-mil in thickness.

(B) The "**As Built**" drawings must conform to Department of Environmental Protection (DEP) Emergency Construction Drawings (ECD). A sample copy of the ECD may be obtained at the above office together with DEP guidelines. These DEP guidelines are summarized below:

- (1) Drawings must consist of the same legend and layout of title boxes shown on the sample ECD drawing.
- (2) Drawings must consist of a location plan view on one sheet. The location plan view must be

drawn Not-To-Scale.

- (3) Drawings must contain a note making reference to the datum used. (Datum used must be that of the Borough where the sewer is located.)
- (4) Each plotted Mylar drawing must contain the signature and stamp of the Contractor's NYS Professional Engineer/Registered Architect.
- (5) The location plan view must include:
 - (a) street name and two (2) crossing streets or distance from;
 - (b) north arrow;
 - (c) property lines and widths;
 - (d) curb lines and widths;
 - (e) sewers, manholes, catch basins, connections (No horizontal bends allowed on sewer lines);
 - (f) sewer sizes, materials (ESVP, RCP, DIP, etc.), and types (New, Existing, Sanitary, Storm, Combined, etc.);
 - (g) sewer length (between centerlines of manholes);
 - (h) sewer flow direction;
 - (i) offsets of sewer lines or extensions from property lines (not curb lines);
 - (j) foundations (concrete cradle, stone ballast, piles, etc.);
 - (k) manholes types (Precast, Concrete, Brick, A-1, A-2, etc.);
 - (l) manhole elevations (both rim and invert);
 - (m) manhole stationing along installed sewers;
 - (n) catch basins types (Type 1, Type 2, etc.);
 - (o) catch basin connections;
 - (p) show actual number of manholes and catch basins;
 - (q) house connection spurs (stations and locations);
 - (r) address of house connections (new connections and reconnections);
 - (s) house connection information at curb (station, length, depth and offset from the curb);
 - (t) details of non-standard structures or appurtenances constructed;
 - (u) location of all existing and installed offset distances from property lines;
 - (v) for shotcreted sewers (thickness and reinforcement of shotcreting); and
 - (w) all appropriate notes.
- (6) Examples of notes that can be used are as follows:
 - (a) Unless otherwise noted, all house connections are 6" ESVP;
 - (b) Unless otherwise noted, all catch basins are Standard Type 1;
 - (c) Unless otherwise noted, all new curb connections are at a depth of approximately 8-feet at the curb and are 2-feet inside the curb line;
 - (d) Unless otherwise noted, all built manholes are brick;
 - (e) Unless otherwise noted, all catch basin connections are 12" DIP on crushed stone;
 - (f) unless otherwise noted, all ESVP sewers are installed on 6" concrete cradle;
 - (g) Pipe lengths are measured from inside face of manhole to inside face of manhole.

(C) The cost of preparing and submitting "**As Built**" approved drawings must be deemed included in the prices bid for all scheduled bid items in the contract. No separate or additional payment will be made for this work.

(7) The Contractor will be required to prepare and submit Field Cards and Tap Cards for any water main work that may be required during the sewer repair work. The following guideline is provided for the preparation of "Field Cards" and "Tap Cards". A sample copy of Tap Card and Field Card may be provided to the contractor by the Engineer upon request.

I. FIELD CARDS:

(A) Basic Information Required on each Field Card Drawn:

1. The information provided in the header section of the field card should include the following:

Borough

- Date (Month / Year)
- General Description

- General Location
 - Contract No.
 - Contractor's Name
 - Resident Engineer's Last Name (REI Consultant Name - If Applicable)
 - Inspector's Last Name (REI Consultant Name - If Applicable)
2. The pipe information drawn on the field card should be oriented so that the North Arrow is pointing to the top or the right side of the field card.
 3. The name of street or avenue in which the water main was installed and any crossing street passed should be provided. Each field card is an independent drawing and identification of streets and cross streets should not be dependent on adjacent cards.
 4. Curb lines should be clearly indicated and labeled.
 5. Each fitting drawn should be identified by size and type.
 6. Each full length piece of pipe need not be drawn and stationed, but should be indicated by representative or nominal lengths (i.e. 5 F.L.@18'-11" +/- or 5 F.L.@18.92' +/-).
 7.
 - a) All pipe and fitting joints should be noted as to type:
 - MJ - Mechanical Joint
 - PO - Push-on Joint
 - LJ - Lead Joint
 - FL - Flange
 - etc
 - b) Restraint for all pipe and fitting joints should be noted in detail:

Mechanical Joint Restraint

- WRG - Wedge-type Retainer Gland (Ebaa MegaLug or equivalent)
- RG - Retainer Gland w/ set screws Plain Gland

Push-On Joint Restraint

- FLG - Field Lok Gasket
- TR-Flex
- Snap-Lok
- etc.

Rods & Bands

The location of all tie rods and bands should be indicated. The number of, diameter and length of rods used and number of bands installed must be recorded on the card. Indicate all wedge restraint glands used in conjunction with "Rodding".

8. Cover (distance from pavement surface to top of pipe or fitting) should be provided every 50 feet or so, at start and end of sudden deviations caused by vertical or combination (horizontal & vertical) offsets and where the new pipe is connected to the existing water main (i.e. C=4'-7" or C=4.58').
9. Centerline of pipe to curb line distance (a.k.a. lane dimension) should be provided for each block, deviations and where the new pipe is connected to the existing water main.
10. Every mainline & hydrant valve locations must be referenced to from the center of the valve to the parallel and the nearest projected perpendicular curb line. The building line to curb line distances at each corner should be noted as well. This will allow DEP to locate any buried or paved over valves boxes in an emergency even if the curb line had been altered during a street reconstruction after the water main's installation.
11. Temporary pipe and fittings should be noted. Although not drawn, the information can be written out alongside the dimension lines providing the "date of work" information. With temporary pipe and fittings information provided on the field cards, they can be used to verify final payment quantities for all pipe related work.
12. Curb line stationing typically runs parallel to the curb line and water main. This may be referred to as a baseline that runs parallel to the curb line but is offset from it. A station on each joint should be recorded where necessary. A Station must be provided at all alignment changes (vertical and/or horizontal) and at all fittings (i.e. 3-way branches, 4W centerlines, offsets, caps, plugs, double hubs, sleeves, etc.) and appurtenances (i.e. valves, hydrants, etc.). Pipeline stationing (along the centerline of the pipe - P.L.) is optional for payment purposes. You MUST distinguish between the two types of stationing by labeling pipeline stationing with the abbreviation - P.L.

13. A dimension line should be drawn approximately two boxes from the edge of the field card and parallel to the centerline of the pipe. On this line, the beginning and end of the day's work should be indicated and the date (date of work) inscribed. (This is not necessary on a job requiring only one card where the date at the top of the card is adequate).
14. Abandoned Mains - Indicate on the field card:
 - The size of any replaced mains.
 - Whether it was removed, or abandoned in place.
 - If abandoned in place, indicate its location where possible.
15. Interference - Indicate all utility interferences and major utilities that may have affected pipe work and may be of future concern. The owner, size of facility, cover and station should be noted for utilities crossing the water main. All pipe and fitting installed for a utility interference should be identified (i.e. CE, ECS, TW, CV, etc.).
16. "Tie-Ins" - Existing to new pipe connections should always be referenced by measured distances from existing appurtenances or valves except where this is impossible.
17. Section Lines - These notations reference the next field card on which the water main installation work continues by referring to a label generated for a specific contract location (typically number/lettered sequence). DEP Mapping stamps each card with a unique number on a borough basis for cataloging purposes.

(B) Submission of Field Cards:

The Resident Engineer will submit copies of the field cards to the Borough's Reviewer through the Engineer-in-charge. The Borough's Reviewer will return the copies with comments and corrections in red. Once incorporated, the field cards are resubmitted together with the "marked" copy to the Borough's Reviewer for a final check. If all is in order, the field cards are returned to Resident Engineer for transmittal to DEP and copying (three sets).

The Field Cards are to be transmitted to DEP by letter listing each field card. A receipt must be obtained from DEP's Mapping Unit to prove submission.

The three copies of the Field Cards are to be distributed as follows:

- One copy will remain with the contract files along with a copy of the transmittal letter and the original receipt.
- The second copy will be forwarded to DDC's Construction Support Unit (CSU) with a copy of the transmittal letter and a copy of the receipt.
- The third copy along with a copy of the transmittal letter and receipt is to be sent to be the Borough's Reviewer concluding the submission process.

This process will eliminate practically all the errors in preparing Field Cards and improve consistency.

(C) Additional Considerations in Preparing Field Cards:

1. The Resident Engineer must review Inspector Reports in a timely manner to correct any reporting deficiencies that might impair preparation of Field Cards. This is especially a concern on REI consultant contracts where inspection personnel are very transient internally and between other companies. Old errors are hard to rectify without test pitting. It is a better practice to question early while the work is part of recent memory.
2. Although it is not a rule, it is good practice to use the grid on the card to establish a pipe diameter convention:
 - Single box width / services 4-inches or smaller
 - 2 box width / 6-inch pipe
 - 3 box width / 8-inch pipe
 - 4 box width / 12-inch pipe
 - 5 box width / 20-inch pipe.
3. There is nothing wrong with using Visio or a PC-based CAD program to prepare field cards. However the time invested to become proficient in the software's use may not be an economical investment to produce a small quantity of cards and the quantity may be insufficient to maintain a high skill level. There may be only one computer in the field office. There also may be one person possessing the skill that can bog down the process or halt it completely if the skilled individual is on vacation, reassigned or moves on. Everybody knows how to use a pencil and a straight edge. Everybody can pitch

in on a rainy day. The time invested when hand drawing a Field Card rapidly goes from practice to increasing accuracy in lieu of being caught up in the software nuances.

4. Laying out a line drawing prior to drawing a Field Card is good practice.
5. Using templates to prepare Field Cards is good practice. A pipe fitting template, a large circle template, a large ellipse template and a lettering template (if needed) are the most useful in drawing Field Cards.
6. Good examples can be emulated to expedite the process

II. TAP CARDS:

1) The Tap Card at a minimum but not limited to include the following information:

- Block No and Lot No
- Borough Name
- Permit / Contract Number
- Location / Address of the Premises
- Work Type
- Size, depth, and length of Tap connection
- Location of the connection relative to the building being served (Distance from the projected building line crossing the water main to the connection point).
- Station at the connection point
- Size of the water main Tapped to
- Piping material and service type
- Plumber Name, License Number, and signature
- Any additional comments or Remarks
- Sworn Statement certifying that the information on the Tap card is correct.
- Penalty/Warning stating Falsifying any statement made herein is an offence punishable by fine, imprisonment, or both (N.Y.C. Adm Code Sec 1151-0.0).

(8) At all locations where the Engineer determines that the existing subgrade material has an unsatisfactory soil bearing capacities, the Contractor must excavate below subgrade to the depth required to remove the unsatisfactory soil (maximum twenty-five (25) foot depth below subgrade), and must backfilled to subgrade with stone ballast as described in Section 70.71. Payment for this work must be made under:

Item No. 73.31AE1 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (0' TO 12' DEPTH),

Item No. 73.31AE2 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 12' TO 16' DEPTH),

Item No. 73.31AE3 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 16' TO 20' DEPTH),

Item No. 73.31AE4 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 20' TO 24' DEPTH),

Item No. 73.31AE5 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 24' DEPTH);

and Item No. 70.71SB - STONE BALLAST.

The cost for any additional sheeting and bracing required for excavating below subgrade must be deemed included in the price bid for Items:

Item No. 73.31AE1 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (0' TO 12' DEPTH),

Item No. 73.31AE2 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 12' TO 16'

DEPTH),

Item No. 73.31AE3 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 16' TO 20' DEPTH),

Item No. 73.31AE4 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 20' TO 24' DEPTH),

Item No. 73.31AE5 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 24' DEPTH).

(9) The Sheet piling design must be submitted to Department of Environmental Protection. For Specified Length (Spot Repair) Of Existing Catch Basin Connection Reconstruction Work Ordered Performed: The contract prices for Item No. 52.11D12C - 12" DUCTILE IRON PIPE BASIN CONNECTION (FOR CHUTE CONNECTION WORK ONLY),

Item No. 52.11V12- 12" EXTRA STRENGTH VITRIFIED PIPE BASIN CONNECTION,

Item No. 52.11V12C – 12" EXTRA STRENGTH VITRIFIED PIPE BASIN CONNECTION (CHUTE CONNECTION WORK ONLY) must be the unit price bid per linear foot for each size and class of catch basin connection pipe constructed to all specified lengths (spot repair) and must cover the cost of all labor, materials, equipment, samples, tests and insurance required and necessary to construct the catch basin connections of the sizes and to the lines and grades shown, specified, or ordered, including the earth excavation of all materials of whatever nature encountered (See Section 40.03 - Earth Excavation); concrete cradles; crushed stone bedding and encasements; all sheet piling and bracing; pumping; fluming; bridging; breaking down and filling in of abandoned catch basins and catch basin connections together with their foundations, including bulkheading at both ends; cored openings for connections to structures; connections; backfilling; cleaning up; support and maintenance of existing City structures that are encountered during excavation (including fences, copings, vaults, light poles, etc.), all in accordance with the plans, specifications (See Section 52.11) and standards and as directed by the Engineer.

(10) The Contractor must exercise extreme caution and take all necessary precautions in placing sheet piling 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 must take full responsibility to protect the said NYC TRANSIT'S subway structures and its appurtenances and any damage caused by the Contractor's operations must be made good by the Contractor to the satisfaction of the Engineer at no additional cost to the City.

(11) The Contractor must submit shop drawings to NYC Transit Authority showing all the details and methods of construction, such as, sheet piling 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 must 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 must be deemed included in the price bid for all items of work under this contract.

(12) The Contractor is hereby notified that a new scope of lead water service line replacement is added to the contract and all LSLR work must be in compliance with the new section **SECTION 64.14 LEAD SERVICE LINE REPLACEMENT which is included herein SW Pages under Section C in subsection (9).**

Prior to the start of any water main work, the Contractor must perform lead service line investigation/survey and LSLR identification report of all water service connections encountered within the project limits and report to the Engineer. Information is also available in the DEP website: nyc.gov/leadpipe.

The Contractor is advised that the cost of Lead Service Line Replacement (LSLR) work, as per the specifications and as ordered by the Engineer, including investigation/survey, identification report, all materials, equipment and labor necessary to complete the work will be deemed included and paid under the bid items 64.14A, 64.14AL, 64.14AM, 64.14B, 64.14BL, 64.14BM, 64.14V, 4.02 AG, 4.13 AAS, 4.13BAS, 4.2, and 6.27 A.

No separate payment will be made.

B. REVISIONS TO THE STANDARD HIGHWAY SPECIFICATIONS

- (1) **Refer** to Standard Highway Specifications (May 16, 2022), Page 26:
Delete the Subsection 1.06.28(B) DRAINS TO BE KEPT CLEAN in its entirety:
Substitute the following new Subsection 1.06.28(B):

1.06.28 - PROTECTION OF THE WORK, PERSONS AND PROPERTY

(B) DRAINS TO BE KEPT CLEAN

During the progress of the work and until the completion and acceptance thereof, all catch basins and inlets, and connections, whether built under this contract or existing to remain, must be kept thoroughly serviceable throughout, and shall be left serviceable upon the completion of the project. The Contractor is required to actively provide temporary protection shielding to prevent construction debris from entering catch basins and inlets.

- 1) The temporary protection shielding must be a manufactured product made from permeable geotextile and designed to be supported beneath the catch basin grate.
- 2) Where the inlet has a curb piece, the shielding must have an integral barrier to prevent free flowing water through the curb piece bypassing the shielding.
- 3) The shielding must have overflow ports for high volume storm events.
- 4) The shielding must have integral lifting straps or apparatus to allow the shielding to be removed, emptied, and reused when the shielding is full of sediment.

The Contractor is required to maintain the temporary protection shielding per the manufacturer's instructions and as directed by the Engineer. Installation, maintenance, and removal of the temporary protection shielding is deemed included in the unit prices bid for all scheduled items.

All existing basins and connections within the limits of this contract and contiguous thereto are to be cleaned and flushed to the satisfaction of the Engineer. Unless a scheduled item is provided for this work, the cost of cleaning these existing basins and connections is deemed included in the unit prices bid for all scheduled items.

C. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS

- (1) **Refer** to Contract Book, Volume 2 of 3, Standard Construction Contract, **Article 15 - Liquidated Damages**:
Delete this article in its entirety:
Substitute the following new **Article 15**:

ARTICLE 15 - LIQUIDATED DAMAGES

- 15.1 In the event the Contractor fails to complete the Initial Services, as set forth in **Division VIII, Section DSS-4 - Issuance of Work Orders**, within the Initial Response Time, as set forth in Paragraph 15.2 below, the Contractor must pay to the City the sum(s) set forth below, for each and every specified period of delay in completing the Initial Services. Due to the difficulty in accurately ascertaining the loss the City will suffer by reason of delay in completion of the Initial Services hereunder, the sum(s) set forth below are hereby fixed and agreed to as the liquidated damages that the City will suffer by reason of such delay, and not as a penalty. Liquidated damages will be assessed on a cumulative basis. This article must also apply to the Contractor if it is defaulted pursuant to CHAPTER X, Page-74 of STANDARD CONSTRUCTION CONTRACT, VOLUME 2 OF 3. Neither the failure to assess liquidated damages nor the granting of any time extension must operate as a waiver or release of any claim the City may have against the Contractor for either actual or liquidated damages.

Delay Beyond Initial Response Time		Amount of Liquidated Damages
(a)	First one (1) hour period after Initial Response Time	\$1,000
(b)	First six (6) hour period after the end of the time frame set forth in (a)	\$2,000
(c)	Second and all subsequent six (6) hour periods after the end of the time frame set forth in (b)	\$3,000

- 15.2 The Initial Response Time will mean the period of time within which the Contractor must complete the Initial Services set forth in **Division VIII, Section DSS-4 - Issuance of Work Orders**. The Initial Response Time must be specified in the Notice provided to the Contractor in accordance with such section. The Initial Response Time must commence at the time the Notice is transmitted to the Contractor by fax.
- 15.3 Liquidated damages received hereunder are not intended to be nor must 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.
- 15.4 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 must be less than the amount of liquidated damages suffered by the City, the Contractor must be liable to pay the difference.

- (2) **Refer** to **Subsection 10.15 - Notice To Utility Companies, Etc., To Remove Structures Occupying Place Of Sewers, Water Mains Or Appurtenances**, Page 19:
Add the following to **Subsection 10.15**:

The concerned utility companies are listed in the utility packages herein Volume 3 of 3 (page U-15).

- (3) **Refer** to **Subsection 10.21 - Contractor To Notify City Departments**, Page 21:
Add the following to **Subsection 10.21**:

(I) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor must notify Mr. Peter Gordon, P.E., Linear Capital Program Management Division at the Department of Environmental Protection, at (718)-595-4347, 59-17 Junction Blvd., 3rd floor low rise, Corona N.Y. 11368, at least (30) days prior to the start of construction.

(II) NEW YORK CITY FIRE DEPARTMENT

The Contractor must notify the Bureau of Plant Operations - Engineering Unit at least thirty (30) days prior to the start of construction by contacting Mr. Ed Durkin at (718) 281-3933.

(III) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor must notify Hasib Amini /Akmal Mikhail -Traffic Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (212) 839-3386 / (212)-839-3368, at least seventy-two (72) hours prior to the start of construction.

(IV) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor must notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. Daniel Grulich at (718) 760-6927.

(V) N.Y.C. TRANSIT AUTHORITY

- (a) The Contractor will notify the Transit Authority at least seven (7) days prior to the start of construction.

The Contractor will contact:
Mr. Mohamed Adam, P.E.
Project Engineer-Outside Projects
New York City Transit
2 Broadway, 8th Floor
New York, NY 10004
EPP-PublicAgency@mtacd.org
External Partner Program Website
Telephone No. (646) 252-3641

- (b) The Contractor is advised that the bus routes as well as bus stops, within the scope of the project may be affected during construction operations. The contractor will notify the Transit Authority at least two (2) weeks prior to the start of construction, in order to make necessary arrangements.

Michael Wallin
Acting Director, MTA-NYCT & MTA Bus, Bus Service Planning
New York City Transit
2 Broadway, ROOM B17.143
New York, N.Y. 10004
Telephone No. (646) 252-2844

- (4) **Refer to Subsection 10.24, DAMAGED WATER SERVICE PIPES TO BE REPAIRED BY A LICENSED PLUMBER** Page 22:
Add the following to Subsection 10.24:

If the damaged or cut water service pipe is lead, galvanized steel, or galvanized iron, the service pipe must not be partially replaced, but fully replaced from the main to the house control valve. If the service pipe was damaged, cut, or otherwise interrupted due to the Contractor's actions or means & methods (including selection of shoring systems), the water service pipe will be replaced at the Contractor's own cost.

- (5) **Refer to Subsection 10.25 - Contractor To Carry Out Agreement Between City And Railroad Company Or Property Owner(s)**, Page 22:
Add the following to Subsection 10.25:

(A) NYC TRANSIT GENERAL NOTES

- (1) The NYC Transit (NYCT) reserves the right to place inspectors, flagmen or other personnel in the subway structures during construction of the project linked by a telephone system, if deemed necessary, to observe the effects of the construction on the transit facilities. It is expected that such personnel will be necessary when the construction comes within twenty-five (25) feet of the subway structure. However, NYCT further reserves the right to place such personnel whenever, in its opinion, the project conditions warrant such placement, regardless of distance. The cost of such personnel, telephone installation and any re-routes, diversions of service, work trains, etc., made necessary by the project, will be paid for directly to the Transit Authority by the City, at no cost to the Contractor.
- (2) All rock excavation adjacent to the transit structure is to be channel drilled two (2) feet below subgrade.
- (3) If top of rock is found below subway structure, the subway structure must be underpinned in accordance with drawings to be submitted to NYCT for approval.
- (4) If rock is soft or seamy, lateral supports must be provided below the subway structure in accordance with drawings to be submitted to NYCT for approval.
- (5) Blasting will be permitted only with light charges subject to the approval of NYCT's Engineer and in accordance with the regulations of the Fire Department. The Contractor must provide a detailed monitoring plan, providing for measurements of both particle velocity and displacements at critical locations of the NYCT structure. The monitoring plan must include threshold and upset levels of both particle velocity and settlement together with an action plan for their implementation. The Contractor must secure an approved seismologist to install and operate suitable velocity gauges to continuously monitor particle velocity and an independent licensed surveyor to monitor displacements. The threshold maximum particle velocity above ambient caused by the blasting will be 0.5 inch per second. Values exceeding this level will be reviewed and evaluated by NYCT's Engineer. In no case will particle velocities exceed the upset level of 2.0 inches per second.
- (6) Before placing concrete, the subgrade of the foundations in the vicinity of the subway structure is to be inspected and approved by NYCT's Engineer.
- (7) If any portion of the subway structure or finish is damaged as a result of the Contractor's operations, it must be repaired or replaced with the same materials in place, subject to the approval of NYCT's Engineer and at the Contractor's own expense.
- (8) Excavation embankments are to be shored and braced. Drawings indicating a suggested method of construction are to be submitted to NYCT for approval in conjunction with the project's contract drawings. In case of excavation undermining the subway structure, underpinning may be required. Drawings for underpinning are to be submitted to NYCT for approval.

- (9) Temporary shoring may be placed in direct contact with NYCT structures only if the NYCT structure is shown to be able to support all anticipated loads that can be transferred through the temporary structures without damaging the existing structure. At the completion of the project, these temporary shoring and bracing systems are to be removed or cut-off as approved by NYCT.
- (10) When piles are to be driven adjacent to the subway structure, boring data, pile layouts, specifications and installation procedures are to be submitted to NYCT for approval. Velocity meters are to be installed in the subway tunnel at critical locations to monitor induced vibrations. Induced displacements along the tunnel structure and track invert are to be monitored during driving. The threshold maximum particle velocity above ambient caused by the driving will be 0.5 inch per second. Values exceeding this level will be reviewed and evaluated by NYCT's Engineer. In no case will particle velocities exceed the upset level of 2.0 inches per second.
- (11) No piles are permitted to be installed by any method within three (3) feet of subway structure measured from the edge of the pile or casing to the wall. Closed-end piles will not be permitted to be driven within ten (10) feet of the subway structure.
- (12) All piles are to be placed within a preaugered cased hole to the influence line. The casing must be cleaned without disturbing the soil outside the casing and the pile placed within the casing for installation. The piles may then be driven beyond the influence line within the casing.
- (13) The influence line must start at the bottom of the subway structure and sidewall and extend at a 1:1 slope. For piles installed within ten (10) feet of the subway structure the casing must be extended up to the bottom of the subway structure.
- (14) At the completion of pile installation, the space between the pile and the casing is to be filled with either clean sand or grout. If the casing is to be removed, the filling must be completed prior to removal of the casing.
- (15) All piles are to be driven a minimum of ten (10) feet below the intersection of the pile centerline and the influence line of the subway structure.
- (16) The use of "down-the-hole-hammers" for installation of piles through overburden and fill will be permitted only to remove boulders. It will not be permitted as a matter of course to advance the hole. Their use to construct rock sockets will not be allowed within five (5) feet of the NYCT structure.
- (17) Vibratory hammers will not be permitted within seventy-five (75) feet of subway structures. Hoerams will not be permitted within twenty-five (25) feet of subway structures.
- (18) Dynamic compaction methods using dropped heavy weights cannot be conducted within one thousand (1,000) feet of any NYCT structure unless it is shown that induced settlements and vibrations will not damage these structures. A suitable monitoring plan including settlement and vibration measurements must be approved by NYCT's Engineer for all such operations within these distances.
- (19) There must be no machine excavation within three (3) feet of NYCT structures, power duct lines, or any other facilities until they have been carefully exposed by hand excavation.
- (20) All dewatering operations conducted within five hundred (500) feet of the NYCT structure must be performed in accordance with drawings and procedures submitted to NYCT for approval. The distance from the structure to the dewatering operation can be reduced provided that soil conditions at the site indicate that the radius of influence of the dewatering is less than five hundred (500) feet. For dewatering within the radius of influence, the dewatering program must be shown to have negligible influence on settlements of the NYCT structure.
- (21) Subway entrances (ventilators, etc.) are to be underpinned or shored and braced if directed by NYCT's Engineer.

- (22) NYCT, at its discretion, reserves the right to require the project to close or maintain and protect existing subway entrances, ventilators, etc. adjacent to the project during construction. Such construction may include underpinning, shoring, bracing and erection of suitable barricades and/or canopies and shields. Such protection must be in accordance with drawings submitted to NYCT for approval.
- (23) If shields are to be installed to protect NYCT facilities and/or the public, plans showing the location, type and method of attachment to the transit structure must be submitted to NYCT for approval.
- (24) All lumber and plywood used for protection of subway facilities must be fire retardant.
- (25) Subway emergency exits must be kept clear at all times.
- (26) In excavation over or near the subway roof, special care must be exercised so that the thin concrete protection of the subway waterproofing is not damaged.
- (27) Burning of, welding to or drilling through existing steel structures will not be permitted except as shown on drawings approved by NYCT.
- (28) Horizontal and vertical control survey data of the existing NYCT structure is to be taken by a Licensed Land Surveyor to monitor any movements that occur during construction and to show that the induced movements are within allowables provided and approved by NYCT's Engineer. If any movements exceed allowables, remediation as approved by NYCT must be performed.
- (29) Bus routes affected by the project will or may require bus diversions.

When impacting any bus stop, Special Operations must be notified two (2) weeks in advance.

- (30) Duct lines must be maintained and protected during construction. Any interference with duct lines should be reported to NYCT inspector. When a duct line containing cables is to be removed, or when masonry adjacent thereto is to be removed, penetrated, or drilled, the work must be done with hand labor entirely, using hammer and chisel. Jackhammers, bull points or other power equipment must not be used.
- (31) Where manholes are encountered:
 - (a) They must be protected and raised or lowered as required, to match the new street grade.
 - (b) If manhole covers are raised or lowered, protect cables in manhole by wood sheeting of two (2) inches nominal thickness.
 - (c) Prior to the start of construction operations affecting manholes and duct lines, seven (7) days notice must be given to Mr. John Malvasio, P.E., Director, Department of Maintenance-Of-Way, at (718) 694-1358.
- (32) Construction work done near vent gratings and hatches must be as follows:
 - (a) Unless approved by the NYCT's Engineer, all vent gratings and hatches should remain outside the construction site, separated by a construction fence. Protective shields must be provided over vent gratings as required by NYCT's Engineer.
 - (b) No building material, vehicles or construction equipment is to be stored or run over vent, gratings, hatches or emergency exits.
 - (c) Details of sidewalk reconstruction around vent gratings, hatches and emergency exits are to be submitted to NYCT for approval.
- (33) Tractors, cranes, excavators, etc. used in the vicinity of the elevated structures must be isolated from the ground. Since the elevated structure is used as a negative return path, with a consequent potential between it and the ground, any contact between the structure and grounded equipment could result in burning of the steel.
- (34) Temporary construction sheds, barricades or plywood partitions must be a minimum of five (5) feet from edge of finished platform.

- (35) Station Areas or Stairway/Entrance closings: The general requirements for Station Areas or Stairway/Entrance closings are as follows:
- (a) Only one (1) stairway at each station will be permitted to be closed at the same time. Approvals for closing any stairway must be obtained from the Division of Station Operations at least three (3) weeks in advance.
 - (b) Mr. Ashok Patel, Director, Office of Station Programs; Telephone (718) 694-1695 of the Division of Stations must be notified one (1) week prior to the actual closing and reopening of the entrance.
 - (c) Ample signage must be supplied and posted at least one (1) week in advance, advising the public of the proposed subway stair closing.
 - (d) The street entrance stairway should not be closed unless manpower and materials are available to commence work on dates permitted.
 - (e) Once the closing is effected construction signs must be placed at appropriate locations on the barricades at the street and mezzanine levels, stating the Contractor's name, 24-hour emergency telephone number, contract number, the duration of the closing, direction to an alternate entrance/exit, and an apology for the inconvenience to our customers.
 - (f) Existing station signage must be adjusted to reflect any changes in access/egress.
 - (g) Barricades are to be painted and kept graffiti free at all times. The Contractor must maintain the barricaded area clean of all debris.
 - (h) All materials are to be properly stored and secured away from passenger traffic.
 - (i) The Contractor must remove all waste material and barricades from all station areas when construction is completed.
 - (j) Inspection of the area under construction by authorized Station Department employees must not be inhibited.
 - (k) If street lights on the sidewalks are affected, temporary lights must be provided.
- (36) If new concrete construction is joined to existing concrete, dowels and keyways are to be used in accordance with NYCT Standards.
- (37) If the project involves construction or alteration of a subway facility on private property, the property owners will be required to enter into an agreement with NYCT pertaining to all work affecting the transit facilities and clearly defining limits and responsibility for maintenance and liability.
- (38) Wherever a new sidewalk is being placed adjacent to NYCT structures the following will be required:
- (a) The top of the new sidewalk must be flush with the subway vent gratings, hatches and emergency exits.
 - (b) The slope of the new sidewalk must be such that the drainage be away from these structures.
 - (c) A one-half (1/2) inch premolded filler must be installed between the new sidewalk and NYCT structure.
 - (d) Where sidewalk elevations are being changed details of proposed work around NYCT structures are to be submitted for approval.
- (39) Before the start of any work, the Contractor must make an examination, in the presence of NYCT's Engineer, of the interior and exterior of NYCT subway or other structure adjacent to the proposed work. The person or persons authorized by the Contractor to make these examinations must be approved by the Engineer. The Contractor must take all photographs as may be necessary or ordered to indicate the existing condition of NYCT structure. One (1) copy of each photograph, eight (8) inches by ten (10) inches in size, and the negative is to be submitted to Mr. John Malvasio, P.E., Director, Department of Maintenance-Of-Way, 130 Livingston Street, Room 8044D, Brooklyn, New York 11201, Telephone (718) 694-1358 before the start of construction.
- (40) All architectural details (token booths, railings, doors, etc.) are to conform to the latest NYCT Standards. These standards are available at NYCT.
- (41) Standard NYCT insurance clauses are to be made part of the Project's contract drawings. Proof that the necessary insurance is in effect will be required before work can commence.

(42) At the close of any project involving construction or alterations to transit facilities, one (1) set of vellums or mylars, five (5) sets of 35mm microfilm, and electronic copies complying to microstation.dgn format of "approved as-builts" must be provided to NYCT for its records. For details of specific requirements contact NYCT Outside Projects.

(43) At least seven (7) working days prior to the start of construction operations, notification must be given to Mr. John Malvasio, P.E., Director, Department of Maintenance-Of-Way, at (718) 694- 1358. The Contractor must provide temporary quarters near the job site for NYCT inspectors containing a desk and telephone.

- (6) **Refer** to **Subsection 10.30 - Contractor To Provide For Traffic**, Page 24:
Add the following to **Subsection 10.30**:

(1) Traffic Stipulations:

The Contractor must obtain all permits and traffic requirements from the Office of Construction Mitigation and Coordination (OCMC) prior to the start of work at any ordered location. The Contractors must contact Nicolas Dagher at 212-839-9637 or Duane Barra at (212)839-9630, NYC Department of Transportation, Division of Engineering Control, 55 Water Street, 7th Floor, New York, NY 10041.

- (7) **Refer** to **Section 40.06 - Backfilling**, Page 194:
Delete from this section, **Subsection 40.06.2(D) - CLEAN FILL** in its entirety:
Substitute the following new **Subsection 40.06.2(D)**:

(D) CLEAN FILL

- (1) Clean fill material for this contract must be select granular fill ordered in writing by the Engineer where there is a deficiency of acceptable backfill. Select granular fill material will be required in order to fill voids in the trenches and excavations, (For Sewers Trenches - from a point not less than two (2) feet above the top of sewers to the underside of the pavement as it existed at the start of the work; and, For Water Main Trenches - from a point not less than twelve (12) inches above the top of the barrel of the water main pipe to the underside of the pavement as it existed at the start of the work), caused by the removal of boulders, unsuitable backfill materials, existing sewers and associated sewer structures, and any other underground facilities or structures, and must be approved clean earth or sand of low silt and clay content (less than eight (8) percent passing No. 200 sieve), free from bricks, blocks, excavated pavement materials and debris, stumps, roots and other organic matter, as well as ashes, oil and other perishable or foreign matter and must not contain particles larger than one quarter (1/4) inch in diameter.
- (2) This backfill must be exclusive of the normal backfill required in the trenches and excavations for proposed sewers and associated sewer structures for which payment is included therein. Payment must be made in accordance with **Subsection 40.06.6**.

(8) **Refer** to **Section 40.06 - Backfilling**, Page 194:

Delete from this section, paragraphs (B) of **Subsection 40.06.6 - Deficiency Of Backfill Material** in their entirety:

Substitute the following new paragraphs:

- (B) For providing acceptable select granular fill material (whether natural or processed) to satisfy the requirements of **Subsection 40.06.2(D)**:
- (1) To fill voids left by the removal of ledge rock payment must be included in price bid under the contract item(s) labeled "ROCK EXCAVATION". The Contractor attention is directed to **Section 70.61 – Rock Excavation** of the specifications and that all references to clean fill therein, will mean select granular fill.
 - (2) To fill voids left by removal of non-contaminated and non-hazardous excavated material deemed not suitable for backfill and which requires replacement with clean backfill, payment will made under Item No. 73.41AG - ADDITIONAL SELECT GRANULAR BACKFILL. The Contractor's attention is directed to **Section 73.41 - Additional Select Granular Backfill** of the specifications, with the addition that the conditions for use as specified in **Subsection 73.41.1** must be expanded to include those specified in **Subsection 40.06.2(D)** as amended above.
 - (3) To fill voids left by removal of non-contaminated and non-hazardous material that does not have a satisfactory Beneficial Use Determination (BUD) per NYSDEC Part 360.12, payment will made under Item No. 73.41AG - ADDITIONAL SELECT GRANULAR BACKFILL. The Contractor's attention is directed to **Section 73.41 - Additional Select Granular Backfill** of the specifications, with the addition that the conditions for use as specified in **Subsection 73.41.1** must be expanded to include those specified in **Subsection 40.06.2(D)** as amended above.
 - (4) To fill voids left by removal of contaminated and/or hazardous material, payment will be made under Item No. 73.41AG - ADDITIONAL SELECT GRANULAR BACKFILL. The Contractor's attention is directed to **Section 73.41 - Additional Select Granular Backfill** of the specifications, with the addition that the conditions for use as specified in **Subsection 73.41.1** must be expanded to include those specified in **Subsection 40.06.2(D)** as amended above.

(9) Add the following new SECTION 64.14

Section 64.14 LEAD SERVICE LINE REPLACEMENT

64.14.1. INTENT

(A) Description

This section describes the work to be performed when a lead house service line must be replaced.

Replacing a lead service line includes replacing the entire service line between the corporation stop at the water main and the meter inside the building. Partial replacements or repairs of lead service lines are not allowed, per the Rules of the City of New York ("RCNY") Title 15, Chapter 20, Section 20-03(s). See Section 64.14.1 (D), below.

A partial lead service line (i.e., a lead service line that was previously extended or repaired) will be treated as a lead service line for the purposes of this Section.

All Work must conform to the requirements of RCNY Title 15, Chapter 20. If a conflict exists between these specifications and Title 15, Chapter 20 of the RCNY, Title 15 Chapter 20 of the RCNY will take precedence.

(B) Responsibility

Replacing a lead house service line will be:

1. The responsibility of the Contractor, and performed at the Contractor's sole expense, when:
 - a. The Contractor has damaged the lead service line.
 - b. The lead service line is cut or damaged due to the Contractor's means and methods.
2. The responsibility of the property owner, and performed by a contractor retained by the property owner at the property owner's sole expense when:
 - a. Upon careful excavation, the service line is found to be already damaged or leaking.
3. The responsibility of the City, and performed by the Contractor at the City's expense, as paid for under bid items **64.14A, 64.14AL, 64.14AM, 64.14B, 64.14BL, 64.14BM, and / or 64.14V** when:
 - a. The service line is in good condition and must be relocated or modified in order to construct a City owned utility, structure, or Green Infrastructure asset.

The final determination of responsibility for each service line to be replaced will be made by the Commissioner, in consultation with NYCDEP.

If a service line is required to be replaced at the Contractor's sole expense, the requirements of this Section must be followed.

(C) Outreach and property owner coordination

If a service line is required to be replaced at the Contractor's sole expense, the Contractor is responsible for all outreach and property owner coordination.

If a service line is required to be replaced at the property owner's sole expense, the Engineer, in consultation with NYCDEP, will provide the DEP 3-day water notice to the property owner.

If a service line is required to be replaced at the City's sole expense, the outreach will be as follows:

1. The Engineer will perform the initial outreach to the property owner and distribute the water filters provided in accordance with **Section 64.14.3.(O)**.
2. The Engineer, in consultation with NYCDEP, will obtain a written consent agreement from the property owner to:
 - a. Have their service line replaced at the City's expense;
 - b. Allow the Contractor access to perform the service line replacement; and
 - c. Accept the restoration provided by the City under **Section 64.14.3.(N)**.

The Contractor must not commence any service line restoration until and unless a written consent is obtained from the property owner by the Engineer.

(D) Partial replacement of lead service lines

Lead service lines will be partially replaced in the following conditions:

1. The service line is required to be replaced at the City's sole expense, but the property owner does not provide the required agreement per **Section 64.14.1.(C).2** above;
2. Removal of encumbrances would prevent access to the building (i.e., require the removal of stoops) or cause a building code violation; or
3. The Engineer deems the extent of encumbrances to be excessive.

Where a lead service line is to be partially replaced, the Contractor will install a new curb valve and appurtenances per **Section 64.14.3.(D)** below and replace the service line between the main and the curb valve. The replaced service line will be paid for under the appropriate items from **Sections 64.11** and **64.12**. The cost of installing the new curb valve and appurtenances must be included in the prices bid for the appropriate items from **Sections 64.11** and **64.12**.

For the purpose of providing water filter cartridges per **Section 64.14.2.(G)** below, a partial replacement, will be considered "fully replaced" upon completion of the partial replacement inclusive of the installation of the curb valve.

64.14.2. MATERIALS

(A) All service pipe, insulation, and jacketing must be in accordance with **Section 25.01**, modified as follows: Only new materials must be used for installation of service pipes. New service pipes of two (2) inches in diameter or less must be Type K copper tubing. Lead service pipes larger than two (2) inches in diameter are not anticipated in this Contract. Materials for service pipes and fittings must be in accordance with Section PC605, Chapter 6 of the New York City Plumbing Code, latest version.

(B) Backfill must be in accordance with **Section 40.06**.

(C) Sawcutting must be in accordance with of **Section 71.11**.

(D) Temporary restoration of streets, sidewalks, and curbs must be in accordance with **Section 71.31**.

(E) Permanent restoration of streets, sidewalks, and curbs must be in accordance with **Section 71.41**.

(F) Permanent restoration of pavements on private property must be in accordance with **Section 71.41**.

(G) Water filters: The water filter must include a water pitcher and an adequate supply of matching filter cartridges. The water pitcher must be a 7 cup standard PUR pitcher filter system as manufactured by KAZ, Inc. Filter cartridges must be supplied at no separate cost to cover the duration from distribution of the pitcher to the property owner for six months after the service line is fully replaced. Filters must be certified by the Water Quality Association (WQA) to remove 99% of lead in the water.

64.14.3. METHODS

(A) Service Line Details

1. Service lines less than one (1") inch will be replaced with one (1") inch service lines. Service lines one (1") inch and greater will be replaced with the same size service line.
2. Each new water service pipe must be laid in a straight line at right angle to the street main and extending from the tap to the main building control valve. Where surface or subsurface conditions make it impracticable to install a service pipe in accordance with the above conditions, it may be otherwise laid in an alternate location, provided the Contractor submits

a plan showing the proposed alternative location of the water service pipe, and obtains the prior written approval of the Engineer as well as any and all applicable permits.

3. Unless otherwise authorized by the Engineer in writing, each copper tubing service must have at least three (3) feet of copper tubing formed in a gooseneck connection to the tap and laid to the right hand, facing the tap. Each copper pipe with threaded joints must have, at the tap or wet connection, an offset swing joint consisting of four (4) elbows and three (3) pieces of pipe, each piece of pipe not less than two (2) feet in length, laid to the right side facing the connection. Connections to the City main by ductile iron or cast iron must be made directly; no offset swing joint is permitted.
4. Where buildings are constructed on pile foundations or other unyielding supports, the copper tubing service must have two (2) goosenecks, and the copper pipe with threaded joints must have two (2) offset swing joints, one at the tap or the wet connection, laid to the right side facing the main, and one immediately outside the building, laid to the right side facing the building, with a sleeve to carry the service through the foundation wall.
5. All water service pipes must be installed and maintained at a depth of at least three and one-half (3½) feet and no more than six (6) feet below ground unless written permission to vary this requirement is obtained from the Engineer. Where a water service pipe has less than three and one-half (3½) feet of cover, due to subsurface conditions, it must be insulated and protected and possibly plated, as required, in a manner approved by the Engineer. No water service pipes will be allowed at a depth of 30" or less.
6. A water service pipe must not be laid within six (6) inches of any other subsurface structure, conduit or pipe, nor directly below and parallel with any subsurface structure, conduit or pipe.
7. All surfaces to be insulated must be cleaned of all scale, rust, oil, and foreign matter and must be dry and free of frost prior to and during application of insulation. All testing of piping to be insulated must be completed prior to the application of any insulation materials. All insulation and accessory materials must be stored in an area that is dry and protected from weather before and during insulation application. Insulation must be applied based on the approved manufacturer's requirements and as approved by the Engineer.
8. If a house ground connection is attached to the existing service line, it must be reconnected to the new service line at no additional cost.

(B) Installation

1. Water service pipe laid in a sewer or construction trench must be protected from settlement by supports or by securely benching the service in the side earth wall where applicable, while maintaining minimum distance requirements from sewer pipe.
2. After a tap has been inserted or service pipe installed, the backfill around and one (1) foot over the main and service must be Select Granular Fill and carefully tamped under and around the main and service line. The remainder of the backfill must be Approved Excavated Suitable Fill and must be satisfactorily compacted either by tamping or flushing, or both. Where trenchless technology (tunneling) has been permitted the backfill of the tunnel portion must be well compacted with Select Granular Fill. Tunneling is the preferred method and should be used where practical to avoid disturbing encumbrances.
3. If removal of encumbrances is necessary, the removal will be paid for under item 6.27A, DEMOLITION OF STRUCTURES. Prior written approval of the Engineer is required.

(C) Disconnect and Reconnecting Service Connections

The Contractor must disconnect existing lead service lines and reconnect new copper pipe at the City water main for all water service lines which are required to be replaced.

1. In all instances, where lead water service lines are to be replaced, the Contractor must excavate at the water main, disconnect the supply at the existing tap, and continue with replacement of the lead service line.
2. New taps may be required to be installed prior to the installation of the water service line. The Engineer must determine if an existing tap must be replaced. The Contractor must expose the existing tap and provide the Engineer the opportunity to inspect the tap and make such determination. Any and all costs associated with the installation of new taps, including but not limited to coordination and accommodation efforts, is deemed included in the unit items herein and no additional payment will be made to the Contractor.

(D) Curb Valves

1. All new water service lines must have new curb valves installed with iron extension boxes, unless directed by the Engineer.
2. Curb valves must be full port ball valves or non-rising stem gate valves designed for a minimum of 150 psi of working pressure.
3. All curb valves must be set in the sidewalk area and located 18" (eighteen) inches inside the face of the curb. Any variance from this requirement must be submitted in writing to, and approved in writing by, the Engineer.
4. Curb valves must be provided with a tar coated iron extension box with a cover which must be installed flush with the sidewalk within ¼ inches. Curb valves 2 inches and smaller may be full port ball valves equipped with a quarter turn shutoff.

(E) Building Control Valves

1. Where possible, existing building control valves must remain. If directed by the Engineer or if a building control valve is not present, a new building control valve must be installed. Removal and disposal of deteriorated valves or valves that contain lead will be incidental to installation of new building control valves. Building control valves must be made of material similar to the water service pipes and must be gate type except that valves between ¾" and 2" may be full port ball valves. Lead content of valves must not exceed 0.25%.
2. Building control valves must be placed on the water service pipe within 2' of the building wall and located where they will be accessible at all times. Valves must be designed for a 150 psi minimum working pressure. For combined service pipes 2 inches or smaller, the building control valve may be an OS&Y valve or UL/FM-approved full-port ball valve approved by the New York City Department of Buildings.

(F) Building Penetration

1. Where required, existing sleeves must be removed and new sleeves must be installed and grouted to properly seal the building penetration. Additional building penetrations should be avoided when possible. The sleeves to be used must be ductile iron. The cost for sleeves will be deemed included in the costs of all scheduled items.
2. If the existing service is cast into the wall without a removable sleeve, the Contractor must drill accordingly to allow for the installation of a sleeve. If the sleeve is non-removable, in good condition, and can be properly sealed, the Contractor must reuse the existing penetration, subject to the Engineer's approval. Core holes must be centered over the existing service pipe. The Contractor must take all necessary precautions to prevent coring water from collecting inside the building and to prevent damage to property in the building.

(G) Test of Service Pipe

Each new water service line must be subjected to a water test under the street main pressure by the Licensed Master Plumber in the presence of the Engineer. All pipes and appurtenances must remain uncovered for the duration of the test and must show no sign of leakage.

(H) Flushing of Service Lines

The Contractor must perform flushing in accordance with AWWA C810, Section 4.4.1. The cost for all flushing will be deemed included in the costs of all scheduled items.

(I) Water Main Shutdowns

The work under this item must be performed in strict accordance with RCNY, Title 15, Chapter 20, and as directed by the Engineer. If it is necessary to shut off the water main while repairing, replacing, or installing a service pipe, the Licensed Master Plumber must immediately notify the Engineer. No separate payment will be made for water main shutdowns that are needed by the Contractor; payment will be deemed included in the individual bid items.

(J) Dewatering

The work under this item requires installation, maintenance, operation, deconstruction, and removal of dewatering equipment to adequately lower the groundwater table to a point below the trench subgrade. Dewatering will be required at all ordered locations where groundwater is present in the trench, or as directed by the Engineer. The work must be performed in strict accordance with the Standard Water Main Specifications, NYCDOT Standard Highway Specifications, and as directed by the Engineer. There will be no separate payment for the installation, maintenance, operation, deconstruction, or removal of any dewatering equipment; payment will be deemed included in the individual bid items.

(K) Extended Work Hours

The Contractor must schedule corporation stop (tap) and wet connection inspections only during regular business hours, unless approved by the Engineer. All work performed during extended work hours and any work done on holidays or on weekends, must be performed in strict accordance with the NYCDOT permits, and as directed by the Engineer. Work performed during extended hours will not be paid for separately; payment will be deemed included in bid items.

(L) Time is of the Essence

Construction of building service lines must be completed promptly and without delay in order to minimize the impact on property owners. All service lines should be disconnected and reconnected (brought back on-line) on the same day of installation and no later than 6 pm. However, in no event will building service lines be disconnected for a duration greater than 24 hours. This may require the service line replacement to be done in a two-step process (main to curb valve, curb valve to meter) in order to minimize the impact on property owners, at no separate cost. If service line replacement is done as a two-step process, the overall time must not exceed six months.

(M) Final Cleanup

All pipes and valves removed during the Work will become the property of the Contractor. Lead pipes must be disposed of by the Contractor in full compliance with federal, state, and local environmental rules, policies, and regulations, and as approved by the Engineer. Project site must be left in a neat and clean condition. All tools, equipment, materials, debris, scrap, trash, etc. must be removed at the end of the work day and upon completion of the Work.

(N) Restoration

1. Restoration in roadways, curbs, and sidewalks

Restoration of roadways, curbs, and sidewalks will be in kind to match existing, and will be paid for under the appropriate bid item, as described in **Section 71.41**.

2. Restoration on private property

All excavations within the building line, except asphalt and concrete pavements, must be backfilled with the excavated material and levelled smoothly to the adjacent ground, and these costs must be included in the prices bid for replacement of service lines. The Contractor will not be responsible for removal or replacement of encumbrances on service line replacements paid for by the City.

Encumbrances are the property owner's property that interfere with the lead water service line replacement and may include:

- a. Stoops, retaining walls, railings, decks, porches, fountains, statuary, or other structures other than sidewalks, driveways, or pavements;
- b. Shrubs, trees, or landscaping other than turf; and
- c. Walls, panels or finishes inside the building.

Restoration on private property will be limited to installing new asphalt and concrete pavements, subject to approval by the property owner. If the property owner does not agree to the restoration below, no additional restoration will be provided. The following are the only items available for restoration on private property:

- a. Item 4.02 AG, ASPHALTIC CONCRETE WEARING COURSE, 3" THICK, S.Y.
- b. Item 4.13 AAS, 4" CONCRETE SIDEWALK, S.F.
- c. Item 4.13 BAS, 7" CONCRETE SIDEWALK, S.F.
- d. Item 4.20 SEEDING, S.Y.

(O) Water Filters and Test Kits

For every lead service line encountered, the Contractor must:

1. Submit a Lead Test request through NYC 311. NYCDEP will directly supply lead test kits to the property owner.
2. Provide a water filter meeting the requirements of **64.14.2.(G)** to the Engineer, who will distribute to the property owner immediately following lead service line replacement. The Contractor will not be paid separately for water filters; the costs of these items must be included with the prices bid for all items.

64.14.4. MEASUREMENT

- (A) The quantities of REPLACEMENT OF SERVICE LINE UP TO 1 IN, UP TO 40 FT and REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, UP TO 40 FT to be measured for payment will be the actual number of service lines replaced.
- (B) The quantities of ADDITIONAL LENGTH OF SERVICE LINE UP TO 1 IN BEYOND 40 FT and ADDITIONAL LENGTH OF SERVICE LINE 1 -1/4 TO 2 IN BEYOND 40 FT to be measured for payment will be the additional length, measured in linear feet, of service line beyond 40 feet measuring as the distance of a straight line from the centerlines of the water main to the meter or building main control valve, whichever is encountered first. Any quantity beyond the straight-line distance will require prior written approval by Engineer.
- (C) The quantities of REPLACEMENT OF SERVICE LINE UP TO 1 IN BETWEEN BUILDING CONTROL VALVE AND METER and REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, BETWEEN BUILDING CONTROL VALVE AND METER to be measured for payment will be the actual length of service lines replaced between the building control valve and meter.
- (D) The quantities of INSTALL NEW BUILDING CONTROL VALVE 2 IN AND UNDER to be measured for payment will be the actual number of building control valves replaced.

64.14.5. PRICE TO COVER

- (A) The price bid for REPLACEMENT OF SERVICE LINE UP TO 1 IN, UP TO 40 FT, ADDITIONAL LENGTH OF SERVICE LINE UP TO 1 IN BEYOND 40 FT,

REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, UP TO 40 FT, and ADDITIONAL LENGTH OF SERVICE LINE 1 -1/4 TO 2 IN BEYOND 40 FT must be a unit price bid per each service line replaced, and must include the cost of all labor, materials, plant, equipment, and insurance required to complete the Work as specified, including but not limited to: obtaining permits, scheduling appointments, performing site visits, performing building interior inspection, taking pre and post construction photographs, providing notification, mobilization, sawcutting, excavation work disconnection and reconnection of service at main, sheeting, removal and disposal of existing service lines (inclusive of any salvage value), curb valves and curb valve boxes, removal or destruction of existing tap, installation of new taps, installation of gooseneck and offset swing joint, installation of new curb valve, coring and installing seal for building penetration, excavation of all materials of whatever nature encountered, restoration of private property, permanent restoration of street, curb and sidewalks including pigmented concrete as required, cleaning up, hauling away of all materials, removal of all debris and water incidental to connecting the water service line to the building control valve, inspection and testing, flushing, and buried insulation of water service lines due to insufficient depth, and demobilization together with all other items necessary to complete the Work.

- (B) The price bid for REPLACEMENT OF SERVICE LINE UP TO 1 IN BETWEEN BUILDING CONTROL VALVE AND METER and REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, BETWEEN BUILDING CONTROL VALVE AND METER must be a unit price bid per linear foot, and must include the cost of all labor, materials, plant, equipment, and insurance required to complete the Work as specified, including but not limited to the meter setter, couplings, and other fittings; cleaning up; hauling away of all materials; together with all other items necessary to complete the Work.
- (C) The price bid for INSTALL NEW BUILDING CONTROL VALVE 2 IN AND UNDER must be a unit price bid per each valve replaced, and must include the cost of all labor, materials, plant, equipment, and insurance required to complete the Work as specified, including valve supports; connections to service and building lines; earth excavation of all materials of whatever nature encountered; backfilling; cleaning up; hauling away of all materials; together with all other items necessary to complete the Work.
- (D) When payment is made under this **Section 64.14** for replacement of a service line, no separate payment will be made under **Sections 64.11** and **64.12**.
- (E) No direct payment will be made to the Contractor for insulating service lines where required. All costs associated with furnishing, delivering, and installing insulation and appurtenances will be deemed included in the prices bid for the items below.

Payment will be made under:

Item No.	Description	Pay Unit
64.14A	REPLACEMENT OF SERVICE LINE UP TO 1 IN, UP TO 40 FT	EACH
64.14AL	ADDITIONAL LENGTH OF SERVICE LINE UP TO 1 IN BEYOND 40 FT	LF
64.14AM	REPLACEMENT OF SERVICE LINE UP TO 1 IN BETWEEN BUILDING CONTROL VALVE AND METER	LF
64.14B	REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, UP TO 40 FT	EACH
64.14BL	ADDITIONAL LENGTH OF SERVICE LINE 1 -1/4 TO 2 IN BEYOND 40 FT	LF
64.14BM	REPLACEMENT OF SERVICE LINE 1-1/4 TO 2 IN, BETWEEN BUILDING CONTROL VALVE AND METER	LF
64.14V	INSTALL NEW BUILDING CONTROL VALVE 2 IN AND UNDER	EACH

- (10) **Refer** to **Section 70.51 - Excavation Of Boulders In Open Cut, Subsection 70.51.4**, Page 498:
Add the following new **Subsection 70.51.6**:

70.51.6 EXISTING SEWER ENCASED IN CONCRETE

The Contractor is advised that at certain locations, the existing sewer to be removed may be encased in concrete. Where this condition is encountered, the Contractor must remove the concrete encasement from the site. The quantity, in cubic yards, to be measured for payment must be determined by taking the total volume of the encased sewer including the cradle portion less the volume of the sewer pipe. Payment must be made at the unit price bid for Item No. 70.51EO - EXCAVATION OF BOULDERS IN OPEN CUT and must cover the cost of all labor, materials, plant, equipment and insurance necessary to remove the concrete encasement, together with all work incidental thereto, as directed by the Engineer. The cost of any additional backfilling required to be done in connection with this work must be deemed included in the unit price bid for Item No. 70.51EO
 - EXCAVATION OF BOULDERS IN OPEN CUT.

- (11) **Refer** to **Subsection 71.41.4 - Specific Pavement Restoration Provisions**, Page 530:
Add the following to **Subsection 71.41.4**:

(E) Specific Pavement Restoration Provisions:

Upon completion, at each and every ordered location, of the reconstructed collapsed or otherwise defective storm, sanitary or combined vitrified clay pipe sewers and the backfill and compaction of all sewer and water main trenches, the Contractor must permanently restore all roadways, sidewalks and curbs within the ordered limits of the trench width and cutbacks as follows:

(1) Roadway Restoration:

(a) The permanent roadway restoration over the **trench widths and cutbacks only** must consist of a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a minimum of one and one-half (1-1/2) inches of binder mixture on a base course of a minimum of six (6) inches of high-early strength concrete, to match the existing pavement as directed by the Engineer.

(b) Before the top course is installed, an additional width of asphalt beyond the edge of new base course must be saw-cut and removed from all edges of trenches to a depth to accommodate the specified top course and the entire area restored. This additional removal must be in accordance with paragraph (c).

(c) Pavement excavation along with saw cutting of pavements for sewer and water main trenches must be in accordance with **Section 71.21 - Pavement Excavation** of the Standard Sewer And Water Main Specifications.

(d) At locations requiring the installation of a high-early strength concrete base course, a reflective cracking membrane must be installed over joints prior to restoration. Additionally, appropriate pavement keys as described below must be used as required by the Engineer.

(e) Pavement keys **Type B-1** must be used to insure a desired four (4) inch curb reveal (two and one-half (2-1/2) inch absolute minimum). Pavement key **Type A** must be used in all intersections. Both keys are to be per Bureau of Highways Operations Specifications and Standard Details of Construction.

(f) The cost of all labor, materials, equipment, samples and tests required and necessary to permanently restore the roadway over the trench width and cutbacks only must be deemed included

in the prices bid for all E.S.V.P. items, all R.C.P. items and all laying ductile iron pipe and fittings items. No separate or additional payment will be made for any one and one-half (1- 1/2) inches of asphaltic concrete wearing course, binder mixture, high-early strength concrete, reflective cracking member, tack coating, full and partial depth saw cutting, excavation of pavements, stripping or milling of existing pavements, etc. required to permanently restore the roadway over the trench width and cutbacks, cost must be deemed included in the prices of the bid items.

(2) Sidewalk And Curb Restoration:

- (a) The permanent sidewalk restoration over the trench width and cutbacks only must consist of 4" concrete sidewalk (unpigmented) outside driveway and 7" concrete sidewalk (unpigmented) inside driveway and pedestrian ramps, as directed by the Engineer. All sidewalks must be restored in full flag units.

(b) Since all sidewalks must be restored in full flag units, the cutbacks for sidewalk restoration must be defined as the distances beyond the edges of the trenches that require removal in order to get to an adjacent undisturbed full flag unit. For the purpose of this contract sidewalk must be saw-cut, removed and restored in full flag units up to a maximum overall width of ten (10) feet (two (2) full flag units).

(c) The permanent restoration of curbs over the **trench width only** must consist of concrete curb, straight steel faced concrete curb, depressed steel faced concrete curb and corner steel faced concrete curb, as directed by the Engineer.

(d) The cost of all labor, materials, equipment, samples and tests required and necessary to permanently restore the sidewalk and curb over the trench width and cutbacks only must be deemed included in the prices bid for all E.S.V.P. items, all R.C.P. items and all laying ductile iron pipe and fittings items. No separate or additional payment will be made for any concrete sidewalk including 6" foundation material, straight and depressed concrete and steel faced concrete curb, corner steel faced concrete curb, full and partial depth saw cutting, excavation of sidewalks and curbs, etc. required to permanently restore the sidewalk and curb over the trench width and cutbacks, cost must be deemed included in the prices of the bid items.

- (3) The cost for all saw cutting of sewer and water trenches and cutbacks, excavation of pavements within limits of sewer and water trenches and cutbacks, tack coating, removal of pavement markings and replacement with thermoplastic reflectorized pavement markings (crosswalks and lane dividers), placement and eradication of temporary roadway markings, stripping or milling of pavement keys and adjustment of city owned castings must be deemed included in the prices bid for the items specified in paragraph (1)(f) above and paragraph (2)(d) above of this section. No separate or additional payment will be made for this work.
- (4) All Sidewalks; Driveways; Curbs; Corner Curbs; Pedestrian Ramps; and Roadway base courses, top courses and wearing courses must be installed in conformance with the latest Department of Transportation Specifications and Standard Details, except as amended herein.
- (5) The Contractor must exercise caution during the construction operation, so as to prevent damage and/or disturbance to sidewalks, curbs and roadways outside the ordered reconstruction limits of trench width and cutbacks.
- (6) All disturbed grass sidewalk areas over the trench width and cutbacks only must be restored in conformance with the **New York City Department of Transportation (NYCDOT) Standard Highway Specifications Section 4.19 - Sodding**. The cost of all labor, materials, equipment, samples and tests required and necessary to install sod in grass sidewalk areas over the trench width and cutbacks must be deemed included in the prices bid for the items specified in paragraph (1)(f) above and paragraph (2)(d) above of this section. No separate or additional payment will be made for this work.

- (7) Should granite block, asphalt block or brick pavement be encountered over the trench width and cutbacks only, five (5) inches of binder mixture must be substituted for the blocks and bricks removed. The binder mixture must be installed on a base course of a minimum of six (6) inch of high-early strength concrete and topped with 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 to match the existing pavement as directed by the Engineer. All granite or brick removed must be delivered to the designated City Yard. The cost of all labor, materials, equipment, samples and tests required and necessary to install new pavement as described herein to replace granite block, asphalt block or brick pavement over the trench width and cutbacks must be deemed included in the prices bid for the items specified in paragraph (1)(f) above and paragraph (2)(d) above of this section. No separate or additional payment will be made for this work.
- (8) If additional roadway restoration is required and ordered in writing by the Engineer outside the ordered limits of trench widths and cutbacks the cost of all labor, materials, equipment, samples and tests required and necessary to perform this additional roadway restoration work must be deemed included in the prices bid for Item No. 4.02 CA - BINDER MIXTURE, Item No. 4.02 CB - ASPHALTIC CONCRETE MIXTURE, and Item No. 4.04 H - CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH). Included in the prices bid for these items must be the cost for all saw cutting, excavation of pavements, tack coating, removal of pavement markings and replacement with thermoplastic reflectorized pavement markings (crosswalks and lane dividers), placement and eradication of temporary roadway markings, stripping or milling of pavement keys and adjustment of city owned castings. No separate or additional payment will be made for this work.
- (9) If additional sidewalk restoration is required and ordered in writing by the Engineer outside the ordered limits of trench widths and cutbacks the cost of all labor, materials, equipment, samples and tests required and necessary to perform this additional sidewalk restoration must be deemed included in the prices bid for Item No. 4.13 AAS - 4" CONCRETE SIDEWALK (UNPIGMENTED), and Item No. 4.13 BAS - 7" CONCRETE SIDEWALK (UNPIGMENTED). Included in the prices bid for these items must be the cost for all saw cutting, excavation of sidewalks, 6" foundation material, etc. No separate or additional payment will be made for this work.
- (12) **Add** the following new **SECTION 75.21**

SECTION 75.21 – MAKE SAFE FOR SINKHOLES

75.21.1 DESCRIPTION

Under this section, the Contractor must backfill and make safe sinkholes as necessary in order to perform sewer or water main work.

75.21.2 MATERIALS

Backfill material must meet the requirements of **Section 26.01**.

75.21.3 METHODS

Work within three feet of the payment trench width per **Subsection 40.02.4**, is deemed included in the prices bid for the associated work. Sinkhole areas beyond three feet of the payment trench width will be filled and made safe under this item, where directed by the Engineer.

Pavement restoration will be made under the associated bid item.

75.21.4 MEASUREMENT AND PAYMENT

The fixed sum shown in the bid schedule for **MAKE SAFE FOR SINKHOLES** will be considered the price bid for this item. The fixed sum is not to be altered in any manner by the bidder. Should the amount shown be altered, the new figures will be disregarded and the original price will be used to determine the total amount bid for the contract.

Such Make Safe for Sinkholes work will be paid for under this item in accordance with the requirements of Articles 25 and 26 of the Standard Construction Contract. Payment made under this Fixed Sum item will cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to make safe sinkholes as ordered by the Engineer.

No guarantee is given that this allowance item will in fact be required in this contract. The estimated "fixed sum" amount shown in the Bid Schedule is included in the total bid solely to insure a method of payment for any Make Safe for Sinkholes work by the Contractor, as directed by the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
75.21	MAKE SAFE FOR SINKHOLES	FIXED SUM

- (13) **Refer** to Page 574:
Add the following new **DIVISION VIII**:

DIVISION VIII
DETAILED SPECIFICATION FOR RECONSTRUCTION OF COLLAPSED OR OTHERWISE
DEFECTIVE STORM, SANITARY OR COMBINED VITRIFIED CLAY PIPE SEWERS

DSS-1 INTENT

It is intent of this emergency repairs contract, at all locations and areas ordered under this contract as determined by the New York City Department of Environmental Protection and as directed by the Engineer to reconstruct sections of existing collapsed or otherwise defective Storm, Sanitary or Combined Sewers in roadways, sidewalks, malls, medians, pedestrian ways, easements or other non-roadway areas including the reconnection of all existing house sewers, basin connections, and the construction of new manholes as required.

The sections of existing collapsed or otherwise defective Storm, Sanitary or Combined Sewers must be removed and reconstructed with Extra Strength Vitrified Clay Pipe on Concrete Cradle and/or Precast Reinforced Concrete Pipe on Concrete Cradle, complete, as shown, specified or required.

The Contractor, when so ordered by the Engineer, will be required to substitute the use of Ductile Iron Pipe on Stone Bedding in lieu of Extra-Strength Vitrified Clay Pipe on Concrete Cradle for the various sized pipes indicated in the Bid Schedule. The Ductile Iron Pipe must meet all of the requirements, standards and specifications of the Department of Environmental Protection. The payment for Ductile Iron Pipe on Stone Bedding will be made under the applicable unit prices bid for the various sizes of Extra-Strength Vitrified Clay Pipe on Concrete Cradle. The substitution of 15-inch Extra-Strength Vitrified Clay Pipe will be made with 16-inch Ductile Iron Pipe.

At each ordered location the length of existing collapsed or otherwise defective Storm, Sanitary or Combined Pipe Sewer to be reconstructed will vary; however, the length will generally not be less than fifteen (15) feet per trench opening. The actual length at each ordered location and the area of reconstruction will be determined by the New York City Department of Environmental Protection and as directed by the Engineer. For each reconstruction less than a manhole length, the trench opening must be at least one and one-half (1-1/2) feet longer at the ends of the reconstruction to permit proper jointing.

DSS-2 STANDARD SEWER AND WATER MAIN SPECIFICATION

Unless otherwise specified, all work and materials must conform to the applicable sections of the Standard Sewer And Water Main Specifications of the Department of Environmental Protection, Sewer Design Standards of the Department of Environmental Protection, Water Main Standard Drawings of the Department of Environmental Protection, and Standard Highway Specifications of The City of New York.

DSS-3 DEFINITIONS

This contract will be managed by the New York City Department of Environmental Protection's (DEP) Bureau of Water and Sewer Operations. "Engineer" means the Director of DEP's Bureau of Water and Sewer Operations, or a designated representative to act as such in relation to this contract; "Commissioner" means the Commissioner of DEP, or a designated representative to act as such in relation to this contract; "DDC Quality Assurance and Construction Safety Bureau (QACS)," or the "Director of QACS," means the Director of DEP's Bureaus of Water and Sewer Operations, who must oversee the performance of all testing and approvals that are otherwise specified to be performed by QACS.

DSS-4 ISSUANCE OF WORK ORDERS

(A) General: The Contractor must, for the duration of this contract, provide services as directed by the Engineer for the reconstruction of existing sewers or portions thereof, in accordance with the terms and conditions set forth herein. The services to be provided by the Contractor must include both Initial Services and Reconstruction Services, as described below.

(B) Transmission of Notices and Work Orders:

- (1) The Engineer must advise the Contractor of the need for services hereunder through Notices, as set forth in **Paragraph (C)** below, and Work Orders, as set forth in **Paragraph (D)** below. The Engineer must send Notices and Work Orders to the Contractor by e-mail or by telephone promptly confirmed by e-mail.
- (2) The Contractor must, for the duration of this contract, provide and maintain at its place of business a dedicated telephone line, a dedicated e-mail address and a dedicated fax line for the receipt of Notices and Work Orders hereunder. The e-mail and fax machine must be in operation twenty-four (24) hours per day, seven (7) days per week, for the duration of this contract. The Contractor must not be entitled to any compensation for the provision of such equipment. All expenses for the required telephone, e-mail and fax lines must be deemed included in the Contractor's overhead.

(C) Initial Services to be Provided by Contractor:

- (1) Notice: When the need for services arises, the Engineer must issue a Notice to the Contractor. The Notice must specify the following: (a) the location where the Contractor must provide Initial Services, and (b) the Initial Response Time.
- (2) Initial Services: The Contractors must complete the Initial Services set forth below within the Initial Response Time specified by the Engineer in the Notice.
 - (a) Make the area safe for residents in the area of the ordered work and for pedestrian and vehicular traffic. Such work must include, but not be limited to, the placement of adequate lighted barricades, plates, signs, as well as any other work required by the Engineer in order to make the area safe.
 - (b) As directed by the Engineer the Contractor must:
 - (i) Commence excavation, and/or
 - (ii) Provide and operate such pumping equipment to maintain sewage flow

- (3) Initial Response Time: Initial Response Time will mean the period of time within which the Contractor must complete the Initial Services, set forth in **Paragraph (2)** above. The Initial Response Time must be specified in the Notice set forth in **Paragraph (1)** above. The Initial Response Time must commence at the time the Notice is transmitted to the Contractor by fax or Email. The Contractor is advised that the Initial Response Time must be determined by the Department of Environmental Protection, in its sole discretion and in accordance with the degree of emergency presented. The Contractor is advised that the Initial Response Time will range from a minimum of within six (6) hours of notification to a maximum of within twenty-four (24) hours of notification.
- (D) Work Order: When the need for services arises, the Engineer must issue a Work Order to the Contractor. The Work Order must specify the items set forth below:
- (1) Description and Location of the Project
 - (2) Length of Reconstruction Work
 - (3) Reconstruction Services to be performed
 - (4) Reconstruction Time - Time for commencement and completion of work
- (E) Reconstruction Services: The Engineer must specify the services necessary and required for reconstruction. The Contractor must perform such reconstruction services within the reconstruction time, as set forth below.
- (F) Reconstruction Time: The Reconstruction Time will mean the period of time within which the Contractor must complete the required Reconstruction Services. The Reconstruction Time must be specified in the Work Order. The Contractor is advised that the Reconstruction Time must be determined by the Department of Environmental Protection, in its sole discretion and in accordance with the degree of emergency presented. The Contractor is advised that the Reconstruction Time will range from a minimum of twelve (12) hours to a maximum of forty-eight (48) hours.
- Time is of the essence as the public health and safety are involved. Accordingly, the Contractor must perform the work at each and every ordered location promptly and diligently, using such means and methods of construction as will assure its expeditious and satisfactory completion without delay.
- (G) Personnel: The Contractor must provide adequate personnel and equipment at each ordered location. Prior to the start of work the Engineer must approve such personnel and equipment. The Engineer reserves the right to determine the personnel and equipment required to adequately and properly carry out the intent of this contract and to order personnel and equipment in excess of that normally required for the work to be done, off the job site. No payment will be made for such excess personnel and equipment. The Contractor must be prepared to provide adequate personnel and equipment to perform the services specified in **Paragraphs (C) and (E)** above at up to six (6) concurrent reconstruction sites continuously and uninterrupted to completion.
- (H) No Right To Refuse: The Contractor must have no right to reject or decline to perform any Work Order issued under this contract. However, if the Contractor is unable to begin the work of reconstruction for any reason, the Contractor must so notify the Engineer by telephone as soon as possible, such notifications to be followed by an explanation in writing as to the reasons why the Contractor is unable to begin the required work.
- (I) Supplementary Work Orders: The Contractor must perform only the work specifically ordered by the Engineer in the written Work Order. The Department of Environmental Protection reserves the right to order additional work through Supplementary Work Orders issued by the Engineer, as the work on the original Work Order progresses.
- (J) Time for Performance of Individual Work Orders. Work Orders may extend beyond the expiration date of the Contract itself. No new Work Orders may be issued after the termination date of the Contract.
- (1) All terms and conditions of the Contract applicable to a Work Order must remain

in effect until the Work Order ends.

- (2) Work Orders must continue until:
 - a. the Work covered by the Work Order is completed.
 - b. the Work Order expires by its own terms; or
 - c. DEP terminates the Work Order.

DSS-5 WORK INCLUDED

The Contractor must at each and every ordered location, furnish all labor, equipment, materials and supervision, and must perform all the work called for within each item ordered including any incidental work required for a complete and satisfactory job.

All labor, equipment and materials necessary for the proper execution and completion of each item of work called for are to be furnished and delivered by and at the cost and expense of the Contractor, and the work executed and completed in every detail whether specifically mentioned or not.

The Contractor must be prepared to do this work without prepared plans.

At each ordered location the Contractor must remove and clean the sewer of any debris up to and including manholes on both sides of the section of sewer being reconstructed during and after the completion of the work.

DSS-6 EXISTING CONDITIONS

The Contractor is advised that the Engineer will furnish to the Contractor, where available, plans of the existing collapsed or otherwise defective Storm, Sanitary or Combined Sewers.

The Contractor is further advised that since the reconstructed sewer is to be within the same trench where the existing collapsed or otherwise defective pipe sewer was constructed, it is assumed that the original trench was backfilled with acceptable materials and that no exceptionally large boulders, or other obstructions would hinder or delay the excavation work. If boulders, rip-rap and other large objects as herein before specified in excess of one-half (1/2) cubic yard in volume are encountered during the excavation down to the top of the existing collapsed or otherwise defective pipe sewer, payment for the removal of same will be paid for at the unit price bid for Item No. 70.51EO - EXCAVATION OF BOULDERS IN OPEN CUT. The entire boulder must be measured where practicable. The resultant void must be backfilled and paid for under Item No. 73.41AG - ADDITIONAL SELECT GRANULAR BACKFILL.

The average depth to be excavated to subgrade for the reconstructed sewer is eight (8) to nine (9) feet, varying from a minimum depth of four (4) feet to a maximum depth of thirty (30) feet. Deeper sewer excavations to a maximum depth of thirty (30) feet, must be paid for under Item No. 73.31AE2 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 12' TO 16' DEPTH), Item No. 73.31AE3 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 16' TO 20' DEPTH), Item No. 73.31AE4 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 20' TO 24' DEPTH), Item No. 73.31AE5 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 24' DEPTH).

DSS-7 PAYMENT FOR WORK PERFORMED

The Contractor must include in the unit price bid for each item of work, the cost of all labor, equipment, materials, supervision, overhead, profit, insurance, and all other services required to execute and complete each item of work.

Payment will be made at the unit price bid for the various items of work ordered in writing by the Engineer and actually performed and incorporated into the work. The Contractor is advised that the payment for each increment of length of sewer to be replaced will be made at the unit prices bid for each increment of length of sewer to be replaced according to the following schedule:

- (a) Minimum fifteen (15) linear feet. For example: item no. 1.A08S, 1.A10S, 1.A12S, 1.A15S, 1.A18S, 1.A24S, 1.A30S, 1.A36S, 1.A42S, 1.A48S, 1.A54S, 1.A60S.
- (b) Additional length beyond the minimum fifteen (15) linear feet to a maximum of one hundred (100) linear feet. Fixed unit price as listed in the contract document - bid schedule of prices. For example: item no. 1.A08S1, 1.A10S1, 1.A12S1, 1.A15S1, 1.A18S1, 1.B24S1, 1.B30S1, 1.B36S1, 1.B42S1, 1.C48S1, 1.C54S1, 1.C60S1.
- (c) Additional length beyond one hundred (100) linear feet. Fixed unit price as listed in the contract document - bid schedule of prices. For example: item no. 1.A10S2, 1.A12S2, 1.A15S2, 1.A18S2, 1.B24S2, 1.B30S2, 1.B36S2, 1.B42S2, 1.C48S2, 1.C54S2, 1.C60S2.

Where Class IV RCP Sewer is required to be installed, the Contractor will be paid 120% of the unit price for the associated Class III RCP Sewer. Where Class V RCP Sewer is required to be installed, the Contractor will be paid 135% of the unit price for the associated Class III RCP Sewer. No additional payment will be made for the installation of Class IV or Class V RCP Sewers.

DSS-8 PROCEDURAL ORDERS TO CONTRACTOR

The Contractor must either give personal attention to the work or employ and retain a competent superintendent or foreman at each and every ordered location while the work is in progress. Instructions given to the superintendent or foreman must be considered as having been given to the Contractor.

DSS-9 CITY TO NOTIFY CITY DEPARTMENT

At the time the Engineer orders the Contractor to proceed with the work, the Department of Environmental Protection must notify and transmit a copy of the order to start work to all public and private agencies concerned. These notifications must be in addition to the Contractors required notifications of public and private agencies as specified herein.

At the start of the work, the Contractor will be furnished with a temporary street opening permit by the Department of Environmental Protection. However, the Contractor must obtain the prescribed permits from the Department of Transportation within forty-eight (48) hours of beginning the work.

DSS-10 MEASUREMENTS

All measurements must be made under the supervision of the Engineer. The Contractor's representative must notify the Engineer when measurements are to be made so the Engineer may be present at that time, the Contractor must record all measurements and give the Engineer duplicate copies of these measurements.

DSS-11 WORK ORDERED BY THE ENGINEER AND NOT OTHERWISE COVERED IN THE DETAILED SPECIFICATION.

During the course of the work being performed at any ordered location, it may be necessary for the Engineer to order, in writing, extra work not otherwise covered in the work order and in the Detailed Specifications. Payment for extra work for which there are classified bid item(s) must be made under the unit price bid for the respective bid item(s). Payment for extra work for which there are no specific classified bid item(s) must be made in accordance with **Articles 25 and 26** of the Contract

DSS-12 INSPECTION OF MATERIALS FURNISHED

In lieu of the procedure for the inspection of materials to be furnished, as called for in **DIVISION III** of the Standard Sewer And Water Main Specifications, the City will accept certificates from the Contractor's materials suppliers stating that the materials furnished and incorporated in the work at each ordered location, meets the requirement of the appropriate sections of the specifications. Such material certificates must be provided to the Engineer by the completion date specified in the work order for each ordered location.

DSS-13 DISPOSAL OF WATER FROM TRENCHES (DEWATERING)

- (1) **DESCRIPTION** - The Contractor will be required, at all ordered locations where groundwater is present in the trench and as ordered by the Engineer, to install, maintain and operate a dewatering system to adequately lower the groundwater table to a point below the trench subgrade.
- (2) **METHODS** - Upon obtaining a work order to commence work at any location where dewatering is known to be required, or immediately upon discovery at any location that dewatering is required, the Contractor must prepare working drawings and designs showing all facets of the proposed dewatering system including but not limited to; soil type, permeability, anticipated discharge amount, wellpoint spacing, depth of well points, size of header pipe, location of discharge point, etc. All of this information must be submitted to the Engineer for review and approval. Wherever there is insufficient data available to provide accurate information on the soil properties required above, the Contractor must be permitted to make assumptions and/or educated estimates provided that it is so stated in the submissions.
- (3) **CRITERIA** - The parameters or need for the installation of a dewatering system must be determined by the Engineer. The location of the water table must be a minimum of one (1) foot above subgrade and the maximum location must be twenty-nine (29) feet above subgrade prior to the use of any wellpoints. These minimum and maximum heights of water table are based upon a trench depth not exceeding thirty (30) feet. Lowering of the water level more than thirty (30) feet is beyond the scope of this item. The use of sump pumps or open trench pumping must not be considered for payment.
- (4) **PERMITS** - Whenever the Contractor is required to install a temporary dewatering system to lower the groundwater level within the Boroughs of Brooklyn or Queens it will be necessary to obtain a New York State Department of Environmental Conservation (NYSDEC) Long Island Well Permit. Since all work performed under the scope of this project is of an emergency nature the Dewatering Contractor will be required to notify NYSDEC as expeditiously as possible to inform them of the impending work. The Contractor will be required to submit all data and water quality test results to NYSDEC upon their request.
- (5) **MEASUREMENT AND PRICE TO COVER** - There must be six (6) items under which payment will be made for dewatering. These are as follows:
 - (a) **Mobilization (Dewatering)** - The quantity of mobilization to be measured for payment must be a per EACH measurement for each ordered location mobilization for dewatering performed, complete, as specified or required. The contract price for Item No. DSS008A - MOBILIZATION (DEWATERING) must be the unit price bid per EACH for any ordered location mobilization when dewatering is required as specified herein, and must cover the cost of all labor, materials, equipment, setting up of plant, samples, necessary design computations and drawings, tests and permits required and necessary to mobilize for dewatering at each ordered location, including the furnishing and installing of all other items necessary to complete this work and do all work incidental thereto; all in accordance with the specifications, and as directed by the Engineer.
 - (b) **Header and Discharge Pipe Installation** - The quantity of header and discharge pipe to be measured for payment must be the number of linear feet of header and discharge pipe incorporated in the work, complete, as shown, specified or required. The contract price for Item No. DSS008B - HEADER AND DISCHARGE PIPE INSTALLATION must be the unit price bid per linear foot for header and discharge pipe installed and utilized at any ordered location and must cover the cost of all labor, materials, equipment and tests required and necessary to install the header and discharge pipe at each ordered location, including the furnishing and installing of all other items necessary to complete this work and do all work incidental thereto; all in accordance with the specifications, and as directed by the Engineer.

- (c) Header and Discharge Pipe Rental - The quantity of header and discharge pipe rental to be measured for payment must be the number of sections per day of header and discharge pipe incorporated into the work, complete, as shown, specified or required. A section of header and discharge pipe must be measured as a ten (10) foot length or portion thereof. The contract price for Item No. DSS008C - HEADER AND DISCHARGE PIPE RENTAL must be the unit price bid per section per day for header and discharge pipe installed and utilized at any ordered location and must cover all costs required and necessary for rental of header and discharge pipe. Payment under this item will commence upon completion of installation and start of operation of the dewatering system. Payment will cease upon completion of the need for dewatering as approved or ordered by the Engineer.
- (d) Wellpoint Installation - The quantity of wellpoint installation to be measured for payment must be the number of wellpoints incorporated into the work, complete, as shown, specified or required. The contract price for Item No. DSS008D - WELLPOINT INSTALLATION must be the unit price bid per each for wellpoints installed and utilized at any ordered location and must cover the cost of all labor, materials, equipment and tests required and necessary to install the wellpoints at each ordered location, including the furnishing and installing of all other items necessary to complete this work and do all work incidental thereto; all in accordance with the specifications, and as directed by the Engineer.
- (e) Wellpoint Rental - The quantity of wellpoint rental to be measured for payment must be the number of wellpoints per day incorporated into the work, complete, as shown, specified or required. The contract price for Item No. DSS008E - WELLPOINT RENTAL must be the unit price bid per each per day for wellpoints installed and utilized at any ordered location and must cover all costs required and necessary for rental of wellpoints. Payment under this item will commence upon completion of installation and start of operation of the dewatering system. Payment will cease upon completion of the need for dewatering as approved or ordered by the Engineer.
- (f) System Operation - The quantity of system operation to be measured for payment must be the number of hours of system operation required, during normal working hours and/or as approved or ordered by the Engineer, to operate the dewatering system, complete, as specified or required. The contract price for Item No. DSS008F - SYSTEM OPERATION must be the unit price bid per hour for system operation at any ordered location and must cover the cost of all labor, materials, plant and equipment required and necessary to properly operate the dewatering system at each ordered location, including the furnishing and installing of all other items necessary to complete this work and do all work incidental thereto; all in accordance with the specifications, and as directed by the Engineer. Payment under this item will be made based upon the hours the system is in operation and staffed during normal working hours and/or as approved or ordered by the Engineer. No additional or separate payment will be made for any additional costs arising out of labor overtime costs (premium costs) or for any work that is performed beyond normal work hours or on weekends. The costs thereof must be deemed included in the unit price bid per hour of System Operation.
- (6) ADDITIONAL PAYMENT - If Header or Discharge Pipe is required to be buried to provide vehicular and/or pedestrian access as determined in writing by the Engineer, additional payments must be made as follows; for any excavation, removal of pavements, plating or temporary pavement, backfilling and compaction required, payment must be made under Item No. 73.31AE2 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 12' TO 16' DEPTH); for any additional fill ordered in writing by the Engineer, payment must be made under Item No. 73.41AG - ADDITIONAL SELECT GRANULAR BACKFILL; and for any permanent pavement restoration required outside the limits of the trench widths and cutbacks, payment must be made under the appropriate pavement restoration items.
- (7) NO ADDITIONAL PAYMENT - No additional payment will be made for any costs associated with demobilization as a result of dewatering. The costs thereof must be deemed included in the unit prices bid for all associated dewatering items.

DSS-14 TREE CONSULTANT**(1) INTENT**

The Contractor must engage the services of a professional forester or arborist as a Tree Consultant who must, in anticipation of the potential for work in sidewalk and roadway street areas that will affect trees, prepare a preconstruction report and serve as an advisor to the Engineer and the Contractor. The Tree Consultant must be responsible, at all ordered locations affecting trees, for checking, inspecting and directing; all construction work around existing trees; all maintenance pruning of trees; all fertilization; and all protection of trees. The Tree Consultant must also be responsible for ensuring and enforcing compliance of all work with these specifications, and the Department of Parks and Recreation permits, requirements, specifications and standards.

(2) DESCRIPTION

The Tree Consultant must be a professional forester or arborist approved by the Engineer, who must, in anticipation of the potential for work in sidewalk and roadway street areas that will affect trees, prepare a preconstruction report advising the Engineer and the Contractor as to the following:

- (a) Possible means and methods (including alternate methods) of excavation, backfill and compaction at potential sidewalk and roadway street areas that will affect trees so as to ensure the least impact upon existing trees and compliance with these specifications, and the Department of Parks and Recreation permits, specifications, and standards.
- (b) Probable means and methods (including alternate methods) of maintenance pruning operations where necessary.
- (c) Assess potential damage or injury to trees and root systems that may be caused by Contractor's operation and establish construction operation procedures for preventing such damage or injury.
- (d) And any other procedures required to satisfy these specifications, and the Borough Forester's requirements.

The Tree Consultant will be required, at all ordered locations affecting trees, to be present at all times during the Contractor's construction operation to ensure, direct and enforce compliance by the Contractor with these specifications, and all Department of Parks and Recreation permits, requirements, specifications and standards.

The Tree Consultant must be a person independent of and not associated with those persons performing tree pruning, protection and fertilization operations under this contract.

The Tree Consultant must, at all ordered sidewalk street locations affecting trees, personally witness all; sidewalk, driveway, curb and roadway removal; excavation, backfill and compaction work; and tree pruning, protection and fertilization. The Tree Consultant must, at all ordered roadway street locations affecting trees, personally witness all; excavation, backfill and compaction work; and tree pruning, protection and fertilization. The Tree Consultant must at each ordered location affecting trees, locate and identify all trees affected and the means and methods to be utilized for their protection. The Tree Consultant must also approve all Contractor's construction equipment and manner of work. The Tree Consultant must also assess any damage and recommend corrective action. The Tree Consultant must identify trees, recommend construction alternatives to save existing trees and must do all other work required and necessary to ensure compliance with these specifications, and the Department of Parks and Recreation permits, requirements, specifications and standards.

(3) SELECTION PROCESS

Prior to the start of work the Contractor must submit the name and qualifications of a person whom the Contractor feels would be acceptable as a Tree Consultant.

The Tree Consultant must submit at this time a proposal describing its relevant experience and general approach towards fulfilling the requirements and objectives of this section.

(4) QUALIFICATIONS

The minimum qualifications required for consideration as the Tree Consultant must be as follows:

- (a) Associate degree in forestry, arboriculture, horticulture, or related plant science field, and five (5) years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or
- (b) B.S. in forestry, arboriculture, horticulture, or related plant science field, and three (3) years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or
- (c) M.S. in forestry, arboriculture, horticulture, or related plant science field, and one (1) year of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or
- (d) Arborist certification from the New York State Arborists/International Society of Arboriculture Chapter, Inc., and three (3) years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage of existing trees from the negative impacts of construction; or
- (e) Other state arborist certification recognized by the International Society of Arboriculture or the National Arborist Association, and three (3) years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction.

(5) SUBMISSION OF REPORTS

Upon approval, the Tree Consultant will be required to submit five (5) copies of the preconstruction report together with all materials and plans required. Reports must be bound and bear the name of the contract and signature of the preparer.

(6) MEASUREMENT

The quantity to be measured for payment of Item No. DSS006A - TREE CONSULTANT must be the time, measured in person hours, that the Tree Consultant actually performed work on this contract as specified and to the satisfaction of the Engineer.

(7) PRICE TO COVER

The contract price bid for Item No. DSS006A - TREE CONSULTANT must be a unit price per person hour and must cover the cost of all labor, material, plant, equipment, inspection, reports and incidentals required to complete the work, all in accordance with the plans, specifications, standard and as directed by the Engineer and Borough Forester.

DSS-15 TREES TO BE REMOVED AND REPLACED

During the work of reconstructing sewers in sidewalk or mall areas, the Contractor, when ordered in writing by the Engineer and approved by the Parks Department, must remove trees along the line of the work. The cost of all the labor and materials required to remove trees, as directed, must be deemed included in the unit prices bid for the respective tree removal items.

Where trees along the line of the work are removed, as directed, the Contractor must replace such trees with new trees in accordance with the requirements of the Department of Parks and Recreation. The cost of all the labor and materials required to furnish and place new trees, as directed, together with the cutting of tree pits and all work incidental thereto, must be deemed included in the unit price bid for Item No. 4.16 CA405 - TREES PLANTED, 3" TO 3-1/2" CALIPER, ALL TYPES, IN 4' X 5' TREE PITS.

DSS-16 ADDITIONAL SIDEWALK RESTORATION

The Contractor is notified that during the work of reconstructing sewers at any ordered location, the Engineer may order additional sidewalk reconstruction outside the ordered trench and cutback restoration limits.

The cost of all the labor and materials required to perform this ordered additional existing concrete sidewalk removal and reconstruction outside the ordered sewer and water main trench and cutback restoration limits, together with all work incidental thereto, must be deemed included in the unit prices bid for Item No. 4.13 AAS - 4" CONCRETE SIDEWALK (UNPIGMENTED), and Item No. 4.13 BAS - 7" CONCRETE SIDEWALK (UNPIGMENTED).

It must be understood that such sidewalk reconstruction is in addition to and does not include sidewalk restoration included in the unit price bid for the reconstruction of sewers and water mains.

DSS-17 ADDITIONAL ROADWAY RESTORATION

The Contractor is notified that during the work of reconstructing sewers at any ordered location, the Engineer may order additional roadway reconstruction outside the ordered trench and cutback restoration limits.

The cost of all the labor and materials required to perform this ordered additional existing roadway removal and reconstruction outside the ordered sewer and water main trench and cutback restoration limits, together with all work incidental thereto, must be deemed included in the unit prices bid for Item

No. 4.02 CA - BINDER MIXTURE, Item No. 4.02 CB - ASPHALTIC CONCRETE MIXTURE, and Item No. 4.04 H - CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH).

It must be understood that such roadway reconstruction is in addition to and does not include roadway restoration included in the unit price bid for the reconstruction of sewers and water mains.

DSS-18 METHOD OF PAYMENT

The following items of work herein specified are provided in order to afford the City of New York opportunity to have such work done if found necessary. It must be understood by the Contractor that the work as specified under any one of these items may be ordered by the City of New York and in the unit quantities found necessary by the Department of Environmental Protection. The City of New York, however, is not bound to order any of the work specified under these items. Payment will be made only for the actual number of unit quantities ordered under each item.

In the execution of any work under any of these items, the Contractor must see that the work is progressed as quickly as possible and without delay. All labor, equipment and materials necessary for the proper execution and completion of each item of work called for are to be furnished and delivered by and at the cost and expense of the Contractor and the work executed and completed in every detail whether specifically mentioned or not.

The contract prices for Extra Strength Vitrified Pipe Sewers and/or Precast Reinforced Concrete Pipe Sewers must be the unit price bid per linear foot for each size, kind, class and type of sewer and must cover the cost of all labor, materials, equipment, samples and tests required and necessary to construct the extra strength vitrified pipe sewers and/or the precast reinforced concrete pipe sewers of the sizes and to the lines and grades as shown, specified, or ordered, including the earth excavation of all materials of whatever nature encountered (See **Section 40.03 - Earth Excavation** and except

excavation of concrete encased sewers and other large objects as specified herein); all pumping and work required to eliminate blockages and restore and maintain sewage flow, all sheeting and bracing; pumping; fluming; bridging; decking; breaking down and filling in of abandoned sewer appurtenances; connections; concrete cradle and encasements; maintaining flow in sewers; backfilling; cleaning up; mobilization (except mobilization for dewatering purpose); temporary restoration of street surfaces; support and maintenance of existing City structures that are encountered during excavation (including curbs, stoops, fences, copings, vaults, light poles, etc.); removal of existing collapsed or otherwise defective sewers and their foundation supports of broken stone or concrete cradle; removal, reconstruction and reconnection of existing house sewer connections together with spurs and risers for existing house connections; removal, reconstruction and reconnection of existing basin connections; removing and cleaning the sewer of any debris up to and including manholes on both sides of the section of sewer being reconstructed during and after the completion of the work at any ordered location; permanent restoration of all roadway top courses and base courses within the limits of trenches and cutbacks; permanent restoration of all sidewalks within the limits of trenches and cutbacks (sidewalks must be restored in full flag units up to a maximum overall width of ten (10) feet) together with foundation material; permanent restoration of all curbs, malls, medians, pedestrianways and other non-roadway areas within the limits of trenches and cutbacks together with foundation materials; and furnishing and installing all other items necessary to complete this work and do all work incidental thereto, all in accordance with the plans, specifications and standards and as directed by the Engineer. In addition, included in the price hereunder must be the cost of all labor and materials necessary to construct the concrete cradle so that it must extend under the existing sewer one and one-half (1-1/2) feet beyond the pipe joints at each end of the reconstructed sewer; and to construct at both ends where the reconstructed sewer joins the existing sewer, joints that must be encased with a four (4) inch thick concrete encasement, twelve (12) inches long on either side of the joint.

When additional spurs are required and ordered in writing by the Engineer for future house connections, payment must be made for these in place additional spurs under the prices bid for Item

No. 52.31V06P00 - 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON E.S.V.P. SEWER, and Item No. 52.31V08P00 - 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON E.S.V.P. SEWER.

When additional risers are required and ordered in writing by the Engineer for future house connections, payment must be made for these in place additional risers under the prices bid for Item No. 52.21V08 - 8" E.S.V.P. RISER FOR HOUSE CONNECTION, and Item No. 52.21V10 - 10" E.S.V.P. RISER FOR HOUSE CONNECTION.

When basin connections are required and ordered in writing by the Engineer to be relayed in a new location, payment must be made for these in place basin connections under the price bid for Item No. 52.11D12 - 12" DUCTILE IRON PIPE BASIN CONNECTION or 52.11D12C - 12" DUCTILE IRON PIPE BASIN CONNECTION (CHUTE CONNECTION WORK ONLY), 52.11D12D - 12" DUCTILE IRON PIPE BASIN CONNECTION FOR MODIFICATION AND/OR REPLACEMENT OF CATCH BASINS, 52.11V12 - 12" EXTRA STRENGTH VIRTIFIED PIPE BASIN CONNECTION, 52.11V12C - 12" EXTRA STRENGTH VIRTIFIED PIPE BASIN CONNECTION (CHUTE CONNECTION WORK ONLY), 52.11V12D - 12" EXTRA STRENGTH VIRTIFIED PIPE BASIN CONNECTION FOR MODIFICATION AND/OR REPLACEMENT OF CATCH BASIN.

Payment for in place additional steel reinforcing bars required and ordered in writing by the Engineer must be made under the price bid for Item No. 73.51AS - ADDITIONAL STEEL REINFORCING BARS.

Payment for in place additional select granular backfill required and ordered in writing by the Engineer must be made under the price bid for Item No. 73.41AG - ADDITIONAL SELECT GRANULAR BACKFILL.

Payment for in place additional brick masonry required and ordered in writing by the Engineer must be made under the price bid for Item No. 73.11AB - ADDITIONAL BRICK MASONRY.

Payment for in place standard manholes required and ordered in writing by the Engineer, must be made under the prices bid for Item No. 51.21S0A1000V - STANDARD MANHOLE TYPE A-1, Item No. 51.21S0A2000V - STANDARD MANHOLE TYPE A-2, Item No. 51.21S0B1000V - STANDARD

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MANHOLE TYPE B-1, Item No. 51.21S0B2000V - STANDARD MANHOLE TYPE B-2, Item No. 51.21S0C1000E – STANDARD MANHOLE TYPE C-1 ON EXISTING SEWER, Item No. 51.21S0C2000E – STANDARD MANHOLE TYPE C-2 ON EXISTING SEWER Item No. 51.31S00100E – STANDARD DROP-PIPE MANHOLE TYPE I ON EXISTING SEWER, Included in the respective prices bid must be the cost for the removal of existing manholes.

Payment for in place standard catch basins required and ordered in writing by the Engineer must be made under the price bid for Item No. 51.41S001 - STANDARD CATCH BASIN, TYPE 1. Included in the respective prices bid must be the cost for the removal of existing catch basins. Payment for excavation of boulders in open cut required and ordered in writing by the Engineer must be made under the price bid for Item No. 70.51EO - EXCAVATION OF BOULDERS IN OPEN CUT.

Payment for in place planted trees required and ordered in writing by the Engineer, must be made under the price bid for Item No. 4.16 CA405 - TREES PLANTED, 3" TO 3-1/2" CALIPER, ALL TYPES, IN 4' X 5' TREE PITS. Included in the price bid must be the cost for tree pits, fertilizer, stakes and wire, topsoil, etc.

Payment for additional earth excavation required and ordered in writing by the Engineer, must be made under the prices bid for Item No. 73.31AE2 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 12' TO 16' DEPTH), Item No. 73.31AE3 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 16' TO 20' DEPTH), Item No. 73.31AE4 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 20' TO 24' DEPTH) and Item No. 73.31AE5 - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (OVER 24' DEPTH) Included in the prices bid must be the cost for additional sheeting, bracing and pumping required beyond the limits hereinbefore mentioned.

Payment for in place stone ballast required and ordered in writing by the Engineer, must be made under the price bid for Item No. 70.71SB - STONE BALLAST. Included in the price bid must be the cost for additional excavation for placement of stone ballast.

Payment for in place additional concrete required and ordered in writing by the Engineer, must be made under the price bid for Item No. 73.21AC - ADDITIONAL CONCRETE.

Payment for maintenance and protection of traffic required and ordered in writing by the Engineer must be made under the price bid for Item No. 6.70 - MAINTENANCE AND PROTECTION OF TRAFFIC. Included in this item will be payment for making the area safe for residents and for pedestrian and vehicular traffic within the initial response time.

Payment for maintenance of site required and ordered in writing by the Engineer must be made under the price bid for Item No. 7.13 A - MAINTENANCE OF SITE.

Payment for in place fencing required and ordered in writing by the Engineer, must be made under the price bid for Item No. 70.31FN - FENCING.

Payment for television inspection and digital audio-visual recording of sewers required and ordered in writing by the Engineer must be made under the price bid for Item No. 53.11DR - TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS.

Payment for removal of trees required and ordered in writing by the Engineer, must be made under the prices bid for Item No. 4.16 AA - TREES REMOVED (4" TO UNDER 12" CALIPER), Item No. 4.16 AB - TREES REMOVED (12" TO UNDER 18" CALIPER), Item No. 4.16 AC - TREES REMOVED (18" TO UNDER 24" CALIPER), and Item No. 4.16 AD - TREES REMOVED (24" CALIPER AND OVER).

Payment for maintenance tree pruning required and ordered in writing by the Engineer, must be made under the prices bid for Item No. 4.18 A - MAINTENANCE TREE PRUNING (UNDER 12" CALIPER), Item No. 4.18 B - MAINTENANCE TREE PRUNING (12" TO UNDER 18" CALIPER), Item No. 4.18 C - MAINTENANCE TREE PRUNING (18" TO UNDER 24" CALIPER), and Item No. 4.18 D

- MAINTENANCE TREE PRUNING (24" CALIPER AND OVER).

Payment for 8-inch, 12-inch and 20-inch water main offsets and replacements required and ordered in writing by the Engineer due to water mains crossing sewer trenches and water mains interfering with sewer trenches must be made under the prices bid for the various water main items provided in the contract for water main work actually performed.

Payment for photographs required and ordered in writing by the Engineer, must be made under the price bid for Item No. 6.43 D - DIGITAL PHOTOGRAPHS.

DSS-19 GUARANTEED MINIMUM

In the event the Contractor is not issued any Work Orders hereunder, the City agrees to pay, and the Contractor agrees to accept, a minimum fee of two thousand dollars (\$2,000.00). The Contractor further agrees that under such circumstances, the Contractor has no action for damages or for loss of profits against the City.

DSS-20 WORK OUTSIDE THE ORDERED SEWER AND WATER MAIN TRENCHES AND CUTBACK RESTORATION LIMITS

The Contractor is notified that it will be required to work in, make safe and restore areas outside the limits of a standard sewer trench in roadways, sidewalks, malls, medians, pedestrian ways, easements or other non-roadway areas. Such work includes, but is not limited to, providing Initial Services; providing MPT; sawcutting of pavement; pavement excavation; excavation of material of any sorts; locating, supporting and protecting private and City facilities; support of excavation; backfilling and temporary and permanent pavement restoration within such areas. Work must be performed according to applicable Specifications. Unless otherwise stated, all work must be paid for under the applicable contract bid items.

Sawcutting must be performed in accordance with Standard Sewer And Water Main Specifications Section 71.11 – Saw Cutting Pavement or as directed by the Engineer. No separate payment will be made for sawcutting. Payment will be deemed included in the unit prices bid for Item No. 4.02 CA - BINDER MIXTURE, Item No. 4.02 CB – ASPHALTIC CONCRETE MIXTURE, Item No. 4.04 H - CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH), Item No. 4.13 AAS - 4" CONCRETE SIDEWALK (UNPIGMENTED), and Item No. 4.13 BAS - 7" CONCRETE SIDEWALK (UNPIGMENTED).

Pavement Excavation must be performed in accordance with Standard Sewer And Water Main Specifications Section 71.21 – Excavation. No separate payment will be made for Pavement Excavation. Payment must be deemed included in the unit prices bid for Item Nos. 73.31AE(1) through 73.31AE(5) - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS.

Excavation must be performed in accordance with Standard Sewer And Water Main Specifications Section 40.03 – Excavation and must be paid for under Item Nos. 73.31AE(1) through 73.31AE(5) - ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS

If in the opinion of the Engineer support of excavation is required it must be performed as directed by the Engineer and in accordance with Standard Sewer And Water Main Specifications Section 40.05 – Sheeting. No separate payment will be made for sheeting. Payment will be deemed included in with the unit prices bid for unit items under this contract.

Backfilling must be performed in accordance with Standard Sewer And Water Main Specifications Section 40.06 – Backfilling and must be paid for under Item 73.41AG – ADDITIONAL SELECT GRANULAR FILL.

Pavement Restoration must be performed in accordance with Standard Sewer And Water Main Specifications Section 40.09 - Pavement Restoration and must be paid for under Item No. 4.02 CA - BINDER MIXTURE, Item No. 4.02 CB – ASPHALTIC CONCRETE MIXTURE, Item No. 4.04 H - CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH), Item No. 4.13 AAS - 4" CONCRETE SIDEWALK (UNPIGMENTED), and Item No.

4.13 BAS - 7" CONCRETE SIDEWALK (UNPIGMENTED).

The contractor must be prepared to encounter facilities owned by private utility companies within the work area. As needed to complete the Work under this contract, such facilities must be located, uncovered, protected, supported, maintained and/or relocated in accordance with the direction of the private utility companies. Any and all work performed on, or in connection with, facilities owned by private utility companies must be done in accordance with Section U.

DSS-21 PRIVATE VEHICLES

The Contractor must note that parked vehicles may be found within the area of work to be performed under this contract. If removal and relocation of parked vehicles from the work zone is required, such removal and relocation must be coordinated and executed by the Contractor. Contractor must be responsible for hiring a towing company to remove and relocate the vehicles from the work area to a nearby safe location. Coordination of the removal and relocation of the vehicles in a timely manner is deemed part of the Initial Services and the Contractor must be prepared to execute such coordination to ensure the vehicles are removed within the Initial Response Time. The contractor must make sure not to incur any damage to the vehicles being removed and relocated. The Contractor is responsible for any damage that any vehicle may sustain during the removal and relocation process. Payment for such coordination, removal, and relocation of vehicles is included with the unit prices bid for all items under this contract.

D. 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 must be spiral welded pipes, and all steel water main fittings must be fabricated from qualified spiral welded pipe. Can type pipe is not acceptable except for fabrication of tees and reducers.

- 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 must have a length of seven (7) feet for every twelve (12) inches reduction in diameter.

END OF SECTION

This Section consists of Forty Two (42) Pages

U - PAGES**SECTION U (VERSION 2.0)**

NOTICE

THE PAGES CONTAINED IN THIS SECTION U VERSION 2.0 (U-PAGES) REPRESENT ADDITIONAL CONTRACT REQUIREMENTS APPLYING TO WORK PERFORMED IN THE PRESENCE OF PRIVATELY OWNED UTILITY FACILITIES.

(NO TEXT ON THIS PAGE)

SECTION U (VERSION 2.0)

DATED: JULY 17, 2026

1. The Contractor shall be responsible for compliance with all the provisions of the following Sections and Schedules, which are hereby made a part of the original contract documents:
 - A. "SECTION U: Additional Contract Requirements Applying to Work Performed in the Presence of Privately Owned Utility Facilities" (Pages U-3 through U-13)
 - B. Schedule U-1 (Page U-15)
 - C. Schedule U-2 listing scope of utility interferences is no longer included in City contract. Such information will be part of Interference Agreement between Utility Operator and the Contractor.
 - D. Schedule U-3 Page U-16 (as per the Private Utilities reference document for SECTION U called "CET SPECIFICATIONS AND SKETCHES", dated November 2010). Consolidated Edison Spec from Page U-17 and U-31
2. Each facility operator shall provide inspectors at the work site to inspect methods of interference work, verify quantities and items of Utility Work, and coordinate all phases of the facility operator operations.
3. In addition, the following statements are made to provide clarification of various paragraphs under Section U:
 - A. Section U, Paragraph 3, 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. The City has no contract with any of the Companies for work on or adjacent to the site of work under this Contract, and the Companies are not “Other Contractors” as defined for the purposes of this Contract. The Contractor is reminded, however, that pursuant to Section U, Paragraph 3, 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.
- C. Section U, Paragraph 13, provides that the provisions of Section U are material provisions of the Contract and that the Contractor’s failure to comply with the procedures set forth in Section U are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract.

Pursuant to this 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.

Section U: Additional Contract Requirements Applicable to Work Performed in the Presence of Privately Owned Utility Facilities

The Contractor is hereby notified that pursuant to the law and franchise agreements issued by the City, certain private utility and public service companies named in Schedule U-1 ("the Companies") own and/or operate surface and/or subsurface facilities within the limits of this contract. The existence of these facilities impacts the productivity of the City work called for in the contract. In order to improve coordination of the City construction with the private utility facilities owned and/or operated by the Companies named in Schedule U-1, Article 1.06.30 of the Standard Highway Specifications of the New York City Department of Transportation, Dated 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. Means and methods for City work:

- a) The Contractor is hereby notified that the utility interferences 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 will be required to perform the public work in the presence of energized electrical overhead lines and appurtenances located in areas adjacent and/or within the project area. As a consequence he/she will select means and method of construction appropriate to maintain the safety clearances required or as permitted by electric operators in order to avoid damaging the insulation or shielding of these lines and also to prevent knocking them down.

2. *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 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.

3. *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. 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, and at known locations of City contract work, that the Company(ies) choose(s) not to perform with its(their) own forces or by specialty contractors hired by it (them) (as per "Interference Agreement"). Specialty contractors' work is limited to (i) insulation installation and removal, (ii) live gas and steam work, (iii) cleanup and disposal of hazardous materials, (iv) splicing live electrical and telecommunications facilities, and (v) work not traditionally performed by general construction contractors.

4. *Interference Agreement:*

- a) Although the parties may negotiate an Interference Agreement in any format or manner they deem fit, the Contractor is hereby advised that the Companies have indicated to the City that they will agree to compensate the Contractor on a unit price basis for Types of Interferences encountered on this Contract in accordance to the Private Utilities reference document for SECTION U called “CET SPECIFICATIONS AND SKETCHES”, dated November 2010, copy of which is available on demand.
- b) The Contractor shall notify the City upon concluding an Interference Agreement with each of the Companies.

5. *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 shall issue a written “48 Hours’ notice to Public Corporation” as prescribed by the City of New York Administrative Code, commonly referred to as “Order-Outs” and City construction will 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. 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 9.
- 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 9.
- d) The Contractor will notify the Resident Engineer when 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 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).

6. *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 4, provides for the scope of work encountered.
- 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 5, 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.

7. Means and Methods for utility work:

Upon receipt of the Company's determination pursuant to Paragraphs 6.b, or 6.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.

8. *Disputed utility work covered by an interference agreement:*

The City Work will continue as described in Paragraph 5 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 9. 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.

9. *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 8.
- (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 hours 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.
- (l) 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.

10. 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.

11. 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.

12. Cost of utility interference work:

The Companies, by virtue of a prior agreement with the City, have agreed to perform their obligations described in this section. It is expressly understood that the cost of Utility Work or any delays cost 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 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.

13. 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.

14. 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 Section U of the contract performed by utility company (ies) with their own forces or vendors hired by such company (ies) is not public work.

15. Facility operators:

The insurance requirements in Paragraph 11 of this Section U 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]

“STANDARD UTILITY LETTER OF AGREEMENT”

(Name)
Deputy Commissioner, Infrastructure Division
Department of Design and Construction
30-30 Thomson Avenue
Long Island City, NY 11101

RE: City Work Performed in the Presence of Private Utility Facilities
Project No: _____

Dear (Name):

This letter is to certify that _____, has requested the inclusion of the attached “Section U: Additional contract requirements applying to work performed in the presence of privately owned utility.” The company agrees to abide by the terms of this Section U at the company’s own expenses due to their facilities interferences with the Public work.

Sincerely,

By: Authorized Company Representative

Title

NOTARY PUBLIC

CERTIFIED AS TO FORM
AND LEGAL AUTHORITY:

By: _____

SCHEDULE U-1**LISTING OF COMPANIES NAMED FOR THIS CONTRACT**

COMPANY NAME	CONTACT NAME	CONTACT TELEPHONE	E-MAIL
Consolidated Edison Company of New York, Inc. ("Coned")	DENNIS BRADY	917-608-3435	BradyD@coned.com
Verizon New York Inc. ("Verizon")	Sandra M. Smith	212-519-4914	sandra.smith@verizon.com
Altice USA, Inc. ("Altice")	Al Clark	516-315-1754	Al.clark@alticeusa.com

SCHEDULE U-3

(NO TEXT IN THIS SECTION)



Guideline Document for Public Improvement

CONST- 029 Revision Number 4

Purpose: To update the Public Improvement Contractor Guideline document for safe entry into Sub-Surface Structures and moving energized underground cables.

Revision Date: 7-30-2020 Next Revision Due 7-30-2022
Date:

Supersedes Date: 6-30-2018 Revision Cycle
Period: Once every 2 years

TYPE	NAME	DATE
EH&S	Glenn D. Newell	7/30/2020
Technical	Joseph Bedell, Joseph Bedell Jr. John Stefandl & Marlon Kalloo	7/30/2020
Legal	Inna Rozenberg	7/30/2020

Summary of Changes:

1. Updated Reference Section to Include OSHA 1926 Subpart V
2. Removed Section on Moving Energized U.G. Cables Located Inside Sub-Surface Structures. (Previously Section 4.0 in Revision 3)
3. Updated/Revised Sections 1.4, 2.1, 2.2.2, 3.4, 3.6, 3.8, 3.9, 4.5.5, 4.7 & 4.7.1
4. Added New Section 4.5.4 – HDPE Conduit
5. Added New Chapter 5.0 – Breaking Out a Point of Entry (POE)

Training Requirements - N/A

DOJT/Course #, etc. Associated with this Operating Document:

None

Subject Matter Expert: Marlon Kalloo

Approved Date: 7/30/2020

Approver Name: Theresa Kong

Approved Date: 7/30/2020

U-17

Consolidated Edison Company of New York, Inc.

Guideline

For

**Safe Entry into Sub-Surface Structures
(Electrical Enclosed Space),**

Moving Energized Underground Cables

Removal of Conduit from Cables, and

Breaking Point of Entry (POE's) Into Sub-Surface Structures

Performed by

Municipal Contractors

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5.0 - Breaking Out a Point of Entry (POE's) in an Electrical Enclose Space

- 5.1 – Activities Prior to creating POE's
- 5.2 – Creation of POE Operations

1.0 Definitions

- 1.1 Competent Person-** As a general rule, a Competent Person is an individual who, by way of training and/or experience, is knowledgeable of OSHA and other applicable standards, is capable of identifying workplace hazards relating to the specific operation, and is designated by the employer with the authority to take all appropriate actions necessary to comply with all applicable standards and properly address hazards. Some OSHA standards add additional specific requirements that must be met by the Competent Person.
- 1.2 Attendant -** An authorized individual who is stationed outside a sub-surface structure or an Electrical Enclosed Space to monitor the authorized entrants and to perform duties assigned including providing assistance to individual inside the sub-surface structure or Electrical Enclosed Space.
- 1.3 Electrical Enclosed Space –** OSHA defines an Electrical Enclosed Space as a working space, such as a manhole, vault, tunnel, service box, or shaft, used for the operation and maintenance of electric power generation, transmission, and distribution lines and equipment. An Electrical Enclosed Space has a limited means of egress or entry, and is designed for periodic entry under normal operating conditions. Under normal conditions, an Electrical Enclosed Space does not contain a hazardous atmosphere, but may contain a hazardous atmosphere under abnormal conditions.
- 1.4 CET Specification –** CET Specification defining private utility work within Municipal Construction Contracts.
- 1.5 JB Specification –** Joint Bid specification defining private utility work within a NYC DDC Capital contract.
- 1.6 Public Improvement Representative -** Con Edison employee, (Inspector, Construction Representative, Chief Construction Inspector, Project Specialist, or Manager) assigned to the Public Improvement section.
- 1.7 Municipal Contractor –** Construction municipal contractor performing work for Municipal, State or other Public Agencies or Authorities.
- 1.8 Electrically Competent Qualified Municipal Contractor -** is a Municipal Contractor employee designated and documented by the Municipal Contractor employer, in writing, as the electrically competent and qualified person who, by way of training and/or experience has the skills and techniques necessary to distinguish exposed live parts from other parts of electrical equipment, can identify non-insulated conductors from insulated conductors and/or cables and has the knowledge of the precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools that are required for working on or near exposed energized electrical equipment. The Electrically Competent Qualified Municipal Contractor employee is capable of identifying varying workplace electrical hazards relating to the specific operation and has the authority to take appropriate actions, as required. In order to meet the task specific qualifications of this guideline, the Electrically Competent Qualified Municipal Contractor employee must be familiar with this document and be able to demonstrate adherence.

2.0 References

2.1 OSHA Section 1910.269 – Electric Power Generation, Transmission & Distribution & 1926 Subpart V –Electric Power Transmission and Distribution

2.2 Training- The OSHA Office of Training and Education (OTE) develops, directs, oversees, manages and ensures implementation of OSHA's national training and education policies and programs in support of OSHA's strategic goals with the objective of reducing occupational hazards through direct intervention, promoting a safety and health culture through compliance assistance, cooperative programs and strong leadership and maximizing OSHA effectiveness and efficiency by strengthening capabilities and infrastructure.

All Municipal Contractor employees shall be trained in and familiar with the safety-related work practices, safety procedures, and other safety requirements in section 1910.269(a)(2) and 1926 Subpart V that pertains to the Municipal Contractor employees' respective job assignments. Municipal Contractor employees' shall also be trained in and familiar with any other safety practices, including emergency procedures, such as manhole rescue, that are not specifically addressed by this referenced section but that is related to their work and is necessary for their safety.

Con Edison manhole inspection and underground awareness training can be scheduled through the Con Edison TLC upon request of the municipal contractor. OSHA 10 certification cards and CPR / First Aid training are prerequisites.

2.2.1 Electrically Competent Qualified municipal contractors shall also be trained and competent in:

- a- The skills and techniques necessary to distinguish exposed live parts from other parts of electrical equipment
- b- The skills and techniques necessary to determine exposed live parts from other parts, (determination of non-insulated conductors from insulated conductors / cables).
- c- The knowledge of the precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools that are required for working on or near exposed energized parts of electrical equipment. Generally, the Municipal Contractor will not be required to work on or near exposed/non-insulated energized parts of electrical equipment or cables. In the event special conditions exist requiring working near exposed/non insulated energized parts of electrical equipment or cables, the Municipal Contractor shall cease working and immediately contact the authorized Con Edison Inspector so that a further assessment of the condition can be evaluated, and appropriate guidance provided.
- d- The Electrically Competent Qualified Municipal Contractor employee shall determine, through regular supervision and through inspections conducted on at least an annual basis that each Municipal Contractor employee is complying with the safety-related work practices outlined in this guidance document.

2.2.2 A Municipal Contractor employee shall receive additional training (or retraining) by the Electrically Competent Municipal Contractor under any of the following conditions:

- a- If the Electrically Competent Qualified Municipal Contractor employee indicates that the Municipal Contractor employee is not complying with safety-related work practices
- b- If new technology, new types of equipment, or changes in procedures necessitate the use of safety-related work practices that are different from those which the Municipal Contractor employee would normally use
- c- If the Municipal Contractor employee must employ other safety-related work practices that are not normally used or that require modification from those stated in this guidance document

Note: OSHA requires retraining before commencing with a task that has not been performed within one year.

The required training shall be of the classroom and/or on-the-job type. The training shall establish Municipal Contractor proficiency in the work practices required and shall introduce the procedures necessary for compliance. The Electrically Competent Qualified Municipal Contractor shall certify that each Municipal Contractor employee has received the training required and retains records of this training to be supplied upon request by Con Edison.

3.0 Safe Entry into Sub-Surface Structures, (Electrical Enclosed Space)

3.1 Purpose: To establish a guideline that shall be employed for safe entry into Con Edison sub-surface structures by Municipal Contractors.

3.2 Application: Municipal Contractor personnel

3.3 Guideline: This guideline provides the requirements for practices that shall be employed for safe entry into Con Edison sub-surface structures. Municipal Contractor personnel requiring entry into Con Edison sub-surface structures shall adhere to this guideline.

3.4 Inspection/Testing

Prior to entry into a Con Edison sub-surface structure, properly trained and qualified Con Edison electrical personnel must conduct an inspection. The assessment will determine if the condition of the electrical facilities contained therein is sufficient to allow need based unrestricted access. Con Edison electrical personnel shall validate that the Con Edison sub-surface structure inspected is approved for need based unrestricted access. The Con Edison Inspector shall communicate and document to an Electrically Competent Municipal Contractor personnel any safety precautions to be taken and that the subsurface structure is safe for entry. Any condition deemed to be un-safe through this formal inspection process would preclude granting access.

An inspection must take place daily prior to Municipal Contractor entry. Once the cover is placed on the electric subsurface structure another inspection must occur prior to Municipal Contractor entry. Inspections include but are not limited to:

- 1) Testing for stray voltage by a qualified Con Edison employee or qualified Municipal Contractor employee.
- 2) Completion of atmospheric testing.
- 3) Determination that it is safe to enter the space.
- 4) A visual inspection for any abnormalities previously defined.
- 5) Communication of inspection results and hazards to the Con Edison inspectors and the municipal contractor supervisor.

3.5 Job Briefing

The Electrically Competent Qualified Municipal Contractor in charge shall conduct a job briefing with the municipal contractor's employees involved before they start the job. The briefing shall cover: the hazards associated with the job; work procedures involved; special precautions; and personal protective equipment requirements. The Electrically Competent Qualified Municipal Contractor shall instruct that all cables are to be treated as energized. Additional briefings shall be held if significant changes, which might affect the safety of the municipal contractor's employees, occur during the course of the work. The Electrically Competent Qualified Municipal Contractor shall document completion of the job briefing. A copy of the documented job briefing should be available upon request by Con Edison.

3.6 Attendants

While work is performed in a Con Edison sub-surface structure, a Municipal Contractor Attendant shall be available in the immediate vicinity to render emergency assistance. Sub-surface structure Attendants shall comply with applicable OSHA requirements.

3.7 Hazardous Atmosphere

Municipal Contractor personnel shall perform a hazardous atmosphere test before entry into any Con Edison sub-surface structure and perform continuous air monitoring in compliance with applicable OSHA requirements. Any atmospheric reading deemed to be un-safe would prohibit access to the structure. The Municipal Contractor shall immediately notify the authorized Con Edison Inspector.

3.8 Personal Protective Equipment

Municipal Contractor personnel requiring entry into Con Edison sub-surface structures shall refer to and comply with applicable OSHA requirements regarding the use of Personal Protective Equipment when performing this work. In addition, Con Edison is requiring that Municipal Contractor personnel assigned to work inside Con Edison sub-surface structures shall at all times wear Flame Resistant (FR) Clothing with a rating of 8 cal/cm² or HR2, a retrieval harness and that a retrieval device be on location. In addition, an atmospheric tester

must be in use continuously anytime a structure is occupied. See section 3.9 for Matrix on Con Edison's Personal Protective Equipment Guideline.

3.9 Con Edison Personal Protective Equipment Guideline

	Task	Class 0 Gloves	FR Clothing	FR Hood	Blast Goggles	Face Shield	Safety Glasses
1	Pavement breaking	N	N				Y
2	Breaking out concrete encased duct	Y	Y				Y
3	Moving energized primary cables that are located outside a structure while in proximity to joints	Y	Y	Y	Y		
4	Moving primary cables outside a structure (no joints involved)	Y	Y				Y
5	Moving energized secondary cables	Y	Y				Y
6	Hand excavate to locate precast ducts	N	N				Y
7	Hand excavate to locate direct buried cables	Y	Y				Y
8	Removing cable from conduit	Y	Y				Y
9	Breaking structure for POE from outside/inside	Y	Y			Y	Y
10	Breaking sub-structure walls	Y	Y				Y
11	Pulling rope within structure with energized cable	Y	Y				Y
12	Pulling rope in enclosed spaces	Y	Y				Y
13	Building a bench or platform within a subsurface structure to support or protect cables.	Y	Y				Y
14	Breaking out unknown precast electric duct	Y	Y				Y
15	Using digging bar over electric facility	Y	N				Y
16	Using digging bar over direct buried cables	Y	Y				Y
17	Using Pneumatic clay digger in vicinity of electric facility	Y	Y				Y
18	Installing forms for field-constructed sub-surface structures from inside the designed footprint when connected cables are present	Y	Y				Y
19	Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present	N	N				Y
20	Installing forms for field-constructed subsurface structure prior to first energization of new cables	N	N				Y
21	Saw cutting operation	Y	N				Y
22	Hand excavate to locate cable fault	Y	Y				Y
23	Hand excavating to find service dead leg	Y	Y				Y
24	Removing underground silo	Y	Y				Y
25	Regrade	Y	N				Y
26	Build/remove shunt box w/ energized cable inside	Y	Y				Y

3.10 Access

Municipal Contractor personnel shall not climb into or out of Con Edison sub-surface structures by stepping on cables or hangers.

4.0 Removal of Conduit from Cables and Moving Energized Underground Cables Located Outside of Subsurface Structures

4.1 Purpose: Establish a guideline that shall be employed by Electrically Competent Qualified Municipal Contractor personnel, meeting OSHA training requirements, when removing conduit from cables and moving Con Edison energized underground cables located outside structures.

4.2 Application: Municipal Contractor personnel

4.3 Guideline: This guideline details the requirements for practices that shall be employed when moving Con Edison energized underground cables located outside of Con Edison structures. Movement of energized cables on the Con Edison system shall be performed in accordance with the following directions. Only Electrically Competent Qualified Municipal Contractor personnel who have been trained and meet necessary OSHA requirements for moving energized underground cables and in accordance with the following directions shall perform movement of energized cables on the Con Edison system.

4.4 Job Briefing

The Electrically Competent Qualified Municipal Contractor in charge shall conduct a job briefing with the Municipal Contractor's employees involved before they start the job. The briefing shall cover: the hazards associated with the job; work procedures involved; special precautions; and personal protective equipment requirements. The Electrically Competent Qualified Municipal Contractor shall instruct that all cables are to be treated as energized. Additional briefings shall be held if significant changes, which might affect the safety of the Municipal Contractor's employees, occur during the course of the work. The Electrically Competent Qualified Municipal Contractor shall document completion of the job briefing.

4.5 Removal of Conduit from Cables

All subsurface electric cable systems and related components shall be considered energized. Caution shall always be employed whenever conduits are opened to expose the interior cable.

4.5.1- Pre-cast Concrete Conduit

- a- The conduit shall be fractured by striking the top end corner of the conduit with a 3 lb. hammer equipped with a non-conductive handle. When fracturing the conduit, all impact/chipping action shall be performed in such a manner so as to be directed across the top of the conduit away from any cable that may be inside of the conduit.
- b- A small piece of the concrete conduit shall be chipped away so that a visual examination of the interior of the conduit can be made to verify the presence of cable. All impact/chipping actions shall be performed in such a manner so as to be directed across the top of the duct, away from the cable.

- c- If cable is present, concrete-chipping operations shall continue until enough material has been removed to permit insertion of a non-conductive protective shield barrier between the conduit and cable or as directed by the authorized Con Edison Inspector based on existing field conditions. Material such as exterior grade plywood or lumber (min. thickness $\frac{3}{4}$ ") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g. Norplex Micarta RT504 NEMA Grade G-3) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operations. The remainder of the conduit shall be fractured using the 3 lb. hammer equipped with a non-conductive handle. Care shall be taken so as to avoid any impact upon the cable, either by direct or indirect hammer blows.
- d- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 5.7, below.

4.5.2 - Concrete Encased Conduit

- a- The concrete encased conduit (including but not limited to pre-cast, fiber, tile, clay), shall be fractured by striking the top end corner of the conduit with a 3 lb. hammer equipped with a non-conductive handle. When fracturing the conduit, all impact/chipping action shall be performed in such a manner so as to be directed across the top of the conduit away from any cable that may be inside of the conduit.
- b- For concrete encased conduit, it may be necessary to employ a handheld cold chisel (in conjunction with the 3 lb. hammer) to remove concrete encasement. If a chisel is utilized, all impact/chipping actions shall be performed in such a manner so as to be directed across the top of the duct, away from the cable.
- c- If the concrete encasement is so dense as to render the use of a hammer and handheld chisel non-effective, an 8-pound sledgehammer may be employed. If neither of these devices proves effective, the use of a pneumatic chipping hammer will be permitted. The weight/size of the pneumatic chipping hammer shall not exceed 20 lbs. When utilizing a pneumatic chipping hammer, the device shall be securely positioned and be under close operator control at all times. The tool bit used for these operations shall be chisel shaped with a minimum width of two (2") inches. All impact/chipping actions shall be performed in such a manner so as to be directed across the top of the duct, away from the cable.
- d- A small piece of the concrete conduit shall be chipped away so as to permit verification of the presence of cable inside the conduit.
- e- If cable is present, concrete-chipping operations shall continue until enough material has been removed to permit insertion of a non-conductive protective shield barrier between the conduit and cable or as directed by the authorized Con Edison Inspector

based on existing field conditions. Material such as exterior grade plywood or lumber (min. thickness $\frac{3}{4}$ ") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g. Norplex Micarta RT504 NEMA Grade G-3) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operation.

- f- After installation of the shield material has been completed, continue removal of remaining conduit and encasement, using handheld and power tools.
- g- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 5.7, below.

4.5.3 – Wood Conduit

- a- Wooden conduit shall be split using a handheld cold chisel and a 3 lb. hammer equipped with a non-conductive handle. All impact/chipping action shall be performed in such a manner so as to be directed across the top of the conduit away from the cable.
- b- The chisel shall use to create a small window in the conduit that will permit a visual inspection of the conduit interior for the presence of cable.
- c- If cable is present, wood conduit material shall continue to be removed until enough material has been removed to permit insertion of a non-conductive protective shield barrier between the conduit and cable or as directed by the authorized Con Edison Inspector based on existing field conditions. Material such as exterior grade plywood or lumber (min. thickness $\frac{3}{4}$ ") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g. Norplex Micarta RT504 NEMA Grade G-3) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operation.
- d- After installation of the shield material has been completed, continue removal of remaining conduit
- e- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 5.7, below.

4.5.4 – HDPE Conduit

- a- HDPE conduit shall be split using hand tools or a handheld pneumatic rotary cutting tool. All splitting/cutting actions shall be performed in such a manner so as to be directed across the top of the duct, away from the cable.
- b- Pneumatic Rotary Cutting Tool – A pneumatic rotary cutting tool shall be used to score an access area in the surface of the conduit., Prior to application of the cutting tool to the surface of the

conduit, the depth collar on the pneumatic rotary cutting tool shall be set so that the cutting bit will penetrate approximately $\frac{3}{4}$ of the wall thickness of the conduit. After the conduit has been cut to the maximum depth allowable (such that the bit does not fully penetrate the thickness of the conduit), a 3 lb hammer shall be used to knock out the access area (window) outlined by the cutting tool. This will permit visual inspection of the conduit interior for the presence of cable.

- c- If inspection of the interior of the conduit reveals that cable is present, a non-conductive protective shield barrier shall be inserted into the conduit between the conduit and cable. This shield material shall provide protection for the cable during the remaining conduit removal operations. Material such as exterior grade plywood or lumber (min. thickness $\frac{3}{4}$ ") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g. Norplex Micarta RT504 NEMA Grade G-3) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operations.
- d- If inspection of the conduit interior does not reveal the presence of cable, the remaining conduit may be removed using the tool choices mentioned in 4.5.4.a.

4.5.5 - Metal Conduit

- a. When removing metal conduit, the Municipal Contractor should first excavate and expose a collar connecting two sections of conduit. Once the collar is accessible, split and/or cut the collar off to inspect the conduit interior for the presence of cable. If a metal conduit collar is NOT easily accessible, or found within 20 to 40 feet of open excavation, proceed to section 4.5.5.b. Note: If the work to be performed is in response to a suspected natural gas leak or in the presence of natural gas, only the use of non-powered hand tools is allowed. Further guidance will be provided by Gas Engineering.
- b. If a collar connecting two sections of conduit cannot be found, metal conduit will be split using hand tools and/or a handheld rotary cutting tool. All splitting actions will be directed across the top of the conduit, away from the cable. Note: If the work to be performed is in response to a suspected natural gas leak or in the presence of natural gas, only the use of non-powered hand tools is allowed. Further guidance will be provided by Gas Engineering.
- c. Score the outline of an access area onto the surface of the conduit. Do not fully penetrate the conduit with the tool while making this outline.
- d. Use this outline as a guide for further splitting and cutting operations that will eventually create a viewing window into the conduit.

- e. If inspection of the conduit interior reveals the presence of cable, insert a non-conductive protective barrier between the cable and conduit wall. The barrier will provide physical protection for the cable during remaining conduit removal operations. Materials including, but not limited to, exterior grade plywood, lumber, and Norplex Micarta are acceptable. After the installation of the non-conductive protective barrier, the removal of the remaining conduit may proceed using the tool choices mentioned in section 5.5.4b.
- f. If inspection of the conduit interior does not reveal the presence of cable, the remaining conduit may be removed using the tool choices mentioned in section 4.5.5b.

4.6 Visual Inspection

- a- A visual inspection of cables located outside Con Edison structures that will be moved, shall be performed by Electrically Competent Qualified Municipal Contractor personnel or the authorized Con Edison Inspector.
- b- After the conduits have been broken out (removed from the cables), the exposed cable(s) shall be inspected by the Electrically Competent Qualified Municipal Contractor personnel.
- c- The cables shall be visually inspected by the Electrically Competent Qualified Municipal Contractor personnel, and determined to be free from any of the defects that would prevent relocation. Cable(s) shall be free of cracks, tears, and evidence of oil stains, swelling, or melting of the insulation. Cables shall not have any exposed conductor.

4.7 Cable Moving Operations – Outside Structures

- a- Prior to moving any cables outside of a subsurface structure, the cables located within the associated connecting subsurface structures shall be inspected in accordance with the guideline requirements for moving cables within Con Edison sub-structures.
- b- Municipal Contractor personnel experienced in moving Con Edison cables only shall move cables.
- c- Cables shall not be moved until plastic “fair-leaders” are positioned at the duct edges to prevent chaffing damage.
- d- Synthetic web slings having a minimum width of two (2) inches shall support cables that have been removed from conduit. Slings shall be used in a basket hitch configuration.
- e- Conduits housing cables shall be supported using slings, cable, or rope. Conduits shall be supported in such manner as to maintain alignment with one another.
- f- Maximum distance between support points shall be four (4) feet.

- g- To prevent inadvertent over bending of the cables, the maximum vertical or horizontal offset between supports shall be one foot (1') for cable that is supported outside of conduit. For cable that is being moved while still installed in conduit, the conduit shall not be offset more than one foot per four-foot section of conduit.
- h- Each set of cables (cables from one duct/conduit) shall be moved individually. Cables from multiple ducts/conduits shall not be moved as a bundle.
- i- Relocation of cables shall be performed in a careful manner with the movement of cable under complete control at all times. There shall be no sudden movements of the cable or the conduit that contains cable.
- j- An observer shall be positioned so as to determine proper slack in structures and to ensure that joints remain properly supported on rack arms and specified offsets are maintained. This observation shall be performed from outside of the structure while the cable is being moved.
- k- Allowable horizontal and vertical offsets shall be determined based on applicable CET or JB item sketches and/or as directed by the authorized Con Edison Inspector.
- l- Cables shall not be permitted to fall freely from temporary supports.
- m- All cables supported by slings shall be visually inspected at the beginning and end of each work shift to ensure that no cracks, leaks, or other defects have developed.
- n- Cables shall be repositioned with care when being moved into their final position for the installation of split conduit.

4.7.1 Personal Protective Equipment

Municipal Contractor personnel moving Con Edison energized cables shall refer to and comply with applicable OSHA requirements regarding the use of Personal Protective Equipment when performing this work. See Section 3.9 for Matrix on Con Edison's Personal Protective Equipment Guideline.

5.0 Breaking Out a Point of Entry (POE's) in an Electrical Enclosed Space

5.1 Activities Prior to creating POE's

- 5.1.1** Prior to creating POE's, the location of all conduit and cable passing through the section of the wall shall be visually identified and protected inside structure.
- 5.1.2** If any cables are required to be moved prior to creation of a POE, they shall be moved by properly trained and qualified Con Edison electrical personnel.

5.2 Creation of POE Operations

5.2.1 Using caution, expose the exterior section of the wall that you intend to create the POE (typically done in 2' – deep vertical sections) by carefully excavating on the outside of the structure.

5.2.2 When there is a potential for contact between the existing cables that have been visually identified and the tool being used to break out the POE, protect the cables using fire rated wood, phenolic board, cable shields or other acceptable non-conductive materials. Along with protecting the cable from coming in contact with the implement being used for breaking, cables on the walls in the POE area shall also be protected from falling debris using FR wood even if there is no potential for contact with said cables.

5.2.3 Once the following conditions have been satisfied:

5.2.3.1 Location of cables inside the structure and the associated conduit outside have been verified.

5.2.3.2 Protection of cable on both the inside and the outside of the structure walls

5.2.3.3 Structural integrity of the proposed POE area has been confirmed using hand tools

Then use the appropriate tool (up to and including a 90 lb. jackhammer) to create the POE on the section of structure wall that was previously prepared.

5.2.4 If a jackhammer is being used for the POE breakout operation, where feasible, support the tool from underneath to prevent slippage.

5.2.5 Where possible, the use of a 90 lb. jackhammer shall be avoided within 8" of a live conduit. If the competent person determines that the breakout can only be made using a jackhammer within 8" of live conduit, a physical barrier must be placed between the jackhammer and all facilities that could possibly come in contact with the jackhammer. The Municipal Contractor may then begin utilizing the 90 lb. jackhammer using a 3" bit or wider.

END OF THE SECTION U (2.0)

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RECONSTRUCTION OF EXISTING SEWERS

**Together With All Work Incidental Thereto
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