

**Greater New Haven Water Pollution Control Authority  
Protecting the Environment**



**PROJECT: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A  
and East Haven Areas 15, 18, and 23**

**PROJECT NUMBER: CWF 2019-02**

**BID OPENING: 1:00 PM  
Thursday  
February 29, 2024**

**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**



**GREATER NEW HAVEN  
WATER POLLUTION CONTROL AUTHORITY  
260 EAST STREET  
NEW HAVEN, CT 06511  
PHONE: 203.466.5280 FAX: 203.772.2027  
WEB: WWW.GNHWPCA.COM  
EMAIL: ENGINEERING@GNHWPCA.COM**

**EMERGENCY NUMBER: 203-466-5260**

**Greater New Haven Water Pollution Control Authority**  
**Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A**  
**And East Haven Areas 15, 18, and 23**  
**Project No. CWF 2019-02**

**Table of Contents**

	<u>Pages</u>
Invitation	3 - 5
Special Specifications and Notes	6 - 12
Item 524M Sanitary Sewer Manhole Rehabilitation Specification	13 – 22
Manhole Cover Raising Standard Construction Detail	23
CT DEEP Required Construction Contract Provisions	24 - 141
Statement of Qualifications Form	142
Itemized Proposal	147-153
Appendix A Performance Bond & Payment Bond	
Appendix B Prevailing Wage Rates	
Appendix C Schedule of Sewers to Be Rehabilitated	
Appendix D Schedule of Manholes to Be Rehabilitated	
Appendix E Contract Drawings	

**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**



**Greater New Haven**  
**Water Pollution Control Authority**

**INVITATION**

for Constructing

**PROJECT: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**

**GNHWPCA PROJECT NO. CWF 2019-02**

Sealed bids will be received at the Office of the Director of Finance and Administration of the Greater New Haven Water Pollution Control Authority located at 260 East Street, New Haven, Connecticut 06511 for the **Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Area 15, 18, and 23 PROJECT (CWF 2019-02)** until 1:00 PM on Thursday, February 29th, 2024, at which time and place said bids will be opened publicly or via video conference and read aloud.

The purpose of the proposed project is to rehabilitate over 25,000 feet of sanitary sewer pipes and over 300 manholes to reduce infiltration and inflow. The size of the sewers proposed for rehabilitation varies from 6" ACP and 8" tile pipes, to 18" RCP sewers. The areas chosen for this contract are result of the March 2018 Sanitary Sewer Evaluation Survey of Woodbridge Meter Area W-2 and Study Area W-2A and East Haven Meter Areas 15, 18 & 23. Portions of the East Haven meter area are located within New Haven. The Contractor shall obtain State, City and Town permits as required. The project duration is 365 days from the notice to proceed date.

The information for Bidders, Proposal, Form of Contract, Plans and Specifications may be examined at the web address <https://gnhwPCA.com/doing-business-with-gnhwPCA/vendor-portal/>. Anyone submitting a bid for this project must have in their possession a copy of **THE GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY STANDARD SPECIFICATIONS dated September 2017**. The document can be obtained upon payment of One Hundred Dollars (\$100.00). The plans and a "bid package" containing the Invitation; Proposal; Plans; Special Specifications and Notes can be obtained upon payment of a non-refundable fee of One Hundred Dollars (\$100.00). Documents may be mailed or

picked up by appointment only at 260 East Street, New Haven, CT. Schedule your appointment by emailing Engineering @gnhwpc.com or calling (203) 466-5280 Ext. 321

The March 2018 Sanitary Sewer Evaluation Survey of Woodbridge Meter Area W-2 and Study Area W-2A and East Haven Meter Areas 15, 18 & 23 and associated data and CCTV footage is not made part of the contract documents but can be provided at the bidder's request (bidder must provide suitable storage device for transfer of the files, 200 GB required). Due to the file size and resulting transfer time, bidders should expect to have to return to pick up their storage device in 1-2 business days.

There will be a non-mandatory **pre-bid video conference meeting** on **Thursday, February 8th, 2024 at 11:00 AM** to be hosted by the Greater New Haven Water Pollution Control Authority – Engineering Department. All registered Bidders will receive an email in advance with additional pre-bid meeting instructions.

All bidders are to note this project is subject to the following requirements:

1. Disadvantaged Business Enterprise (DBE) requirements, including Minority Business Enterprise (MBE) and Women Business Enterprise (WBE) participation in accordance with the most recent CT DEEP's CWF Memorandum which requires a compliance statement be submitted with the proposal, and submittal of the Clean Water Fund Subcontractor Verification Form with in (14) Calendar Days after bid opening to the municipality along with the corresponding DBE certification for each subcontractor
2. Contractor and Subcontractor affirmative action to ensure equal opportunity for employment, as noted in the Governor's Executive Orders Three and Seventeen.
3. Any contract awarded under this invitation for bids is expected to be funded in part by the State of Connecticut, Department of Energy and Environmental Protection. Neither the State of Connecticut nor any of its departments, agencies, or employees is or will be party to this invitation for bids or any resulting contract. This procurement will be subject to the requirements contained in Title 22a, Section 22a-842-4, subsections (h), (j), and (o).
4. Bidders must hold a current State of Connecticut Department of Administrative Services (DAS) Sewer and Water Lines Prequalification Certificate.
5. American Iron and Steel (AIS) requirements of Section 436 of Public Law (P.L.) 113-76, Consolidated Appropriations Act, 2014.
6. State of Connecticut Wage Rates and Federal Minimum Wage Rates, as determined by the United States Department of Labor under the Davis-Bacon Act.

Each Bid must be submitted on the prescribed Bid Form and a certified check or bid bond in the amount of ten percent (10%) of the total bid amount must accompany the bid. Said checks or bid bonds will be returned to the unsuccessful bidders upon Award of the Contract to the selected firm and execution of the Agreement. If any bid is not accompanied by a bid bond or check at the specified time for the bid opening, the incomplete bid will not be read and this action will constitute automatic rejection of the bid.

The successful bidder will be required to furnish a performance bond and a labor and materials payment bond in the form as attached to the Bid Documents for the amount of the total bid. A certified check cannot be substituted for either bond. The Greater New Haven Water Pollution Control Authority reserves the right to alter quantities and to accept or reject any or all bids or any portion of any bids, for any or no reason, including unavailability of appropriated funds as it may deem to be in its best interests.

All bidders are to note that the award of this Contract is subject to the following conditions and contingencies:

1. The approval of such governmental agencies as may be required by law.
2. The appropriation of adequate funds by the proper agencies.
3. The Proposal submitted with all applicable certifications and documentation in accordance with the bid documents.

-----  
**Gabriel Varca**

**Director of Finance and Administration**

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**1. Location of GNHWPCA Offices**

The GNHWPCA Administration Building is located at 260 East Street, New Haven, Connecticut 06511. All references in the Standard specifications to the Office of the Director of Finance and Administration shall refer to the address above.

**2. Liquidated Damages**

For each calendar day that any work remains uncompleted after the date specified for the completion of the work provided in the Contract, the amount of ONE THOUSAND DOLLARS (\$ 1,000.00) per calendar day will be deducted from any money due the Contractor, not as a penalty but as liquidated damages; provided, however, that due account shall be taken of any adjustment of the contract time of completion of the work as provided for elsewhere in the specifications.

**3. Scope of Work**

The Greater New Haven Water Pollution Control Authority manages, operates and maintains the wastewater treatment and collection system that serves the City of New Haven, and the Towns of East Haven, Hamden and Woodbridge, Connecticut.

Contractor shall become familiar with all sections of the **GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY STANDARD SPECIFICATIONS dated September 2017**, General Provisions, and Technical Specifications. The Standard Specifications are hereby made a part of the Contract Documents. Any other item of work not covered under the Technical Specifications, its design or installation shall conform to the State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 817, as amended.

The purpose of the proposed project is to rehabilitate over 25,000 feet of sanitary sewer pipes and over 300 manholes to reduce infiltration and inflow. The size of the sewers proposed for rehabilitation varies from 6" ACP and 8" tile pipes, to 18" RCP sewers. The areas chosen for this contract are result of the March 2018 Sanitary Sewer Evaluation Survey of Woodbridge Meter Area W-2 and Study Area W-2A and East Haven Meter Areas 15, 18 & 23. Portions of the East Haven meter area are located within New Haven. The Contractor shall obtain City and Town permits as required. The proposed rehabilitation technology to be used is Cured-in-place pipe (CIPP) lining. Sewer bypass work will be required as part of this effort.

The Contractor shall perform all work as necessary including preparatory cleaning, pre and post television inspections, sanitary sewer bypass, and CIPP lining in accordance with this document and the GNHWPCA Standard Specifications. All CCTV inspection video and files and reports shall be provided as individual files and named in the following manner: Pipe # - Starting MH # - Ending MH # - Street Name – Date in YYMMDD. For instance, CCTV file for pipe WAL01P0023 CCTV'd on October 17<sup>th</sup>, 2023 would be named as “WAL01P0023-WAL01M0036-WAL01M0045 -Litchfield Tpke-231017”

The Contractor shall be required to protect all adjoining property, all utilities and existing Roadway facilities within the Right-of-Way/Site and to repair or replace any such properties, utilities and facilities damaged or destroyed by them or their employees in performing the Work, both within and adjacent to the Right-of-Way/Site. Contractor is responsible for obtaining all necessary State DOT, City and Town permits.

**The March 2018 Sanitary Sewer Evaluation Survey of Woodbridge Meter Area W-2 and Study Area W-2A and East Haven Meter Areas 15, 18 & 23 and associated data and CCTV footage is not made part of the contract documents but can be provided at the bidder's request (bidder must provide suitable storage device for transfer of the files, 200 GB required)**

#### 4. Clean Water Fund

This project is funded through the Clean Water Fund. Therefore, the construction contract must be executed in accordance with CT DEEP requirements. These requirements have been provided herein. In the event of a conflict with GNHWPCA Standard Specifications, the more stringent of the requirements shall be abided by.

#### 5. Notice to Contractors

Section 107-01: The Contractor shall observe all federal, state and local laws, ordinances, policies, practices and regulations. In addition, the Contractor agrees to promptly procure all necessary approvals, licenses and permits, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the Work.

The Contractor will be required to cooperate with all other contractors and the owners of the various utilities in and around the Site and to coordinate and arrange the sequence of their work to conform with the progressive operations of such other work. Cooperation and adjustments with the Contractors already engaged and to be engaged upon the Site is essential to properly coordinate the construction efforts of all Contractors, Utility Owners, and Subcontractors engaged in the Work within and adjacent to the construction area of this Project.

The contractor shall be responsible for executing a City of New Haven Road Opening Permit and applicable CT DOT and Town permits before beginning construction. The contractor shall contact the City Traffic Department, to provide traffic control plans/detours/road closure information and obtaining the City of New Haven Road Opening Permit for execution of the work. Copies of the executed permit shall be forwarded to the GNHWPCA. The contractor shall provide all necessary traffic control and police protection.

Point Repairs (if any) will be performed by the Authority. Contractor shall provide the exact location and limits of the point repair to the Engineer.

**6. Notice to Contractors – Sequence of Work**

The Authority does not have a current CCTV inspection of the sewer pipes to be rehabilitated. The Contractor shall coordinate with the Authority the execution of the cleaning/pre-lining CCTV inspection work prior to the start of CIPP lining work.

The Contractor shall submit to the Engineer a copy of the cleaning/pre-lining CCTV inspection files of all pipe segments within two (2) days of completing the pre-lining CCTV inspection work for that particular segment.

**7. Access to Work**

Owner, Engineer, their consultants, and other representatives and personnel of Owner, independent testing laboratories, CT DEEP and authorities having jurisdiction will have access to the Site, Project Records and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

**8. Water Use**

A hydrant permit must be obtained from the Fire Department. Once this permit is obtained, a hydrant meter and backflow preventer can be obtained from RWA.

It shall be the responsibility of the Contractor to comply with all permits conditions and requirements established by the South Central Connecticut Regional Water Authority (RWA) for the use of such hydrants.

All costs associated with permitting, related hardware, and water used to complete the project shall be included in the contract unit price for Cured-In-Place Pipe Lining.

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



## 9. Archaeological Finds

General: Should finds of an archaeological or paleontological nature be made within Site limits, immediately notify Owner and Engineer and proceed in accordance with General Conditions. Continue the Work in other areas without interruption.

Archaeological Finds: Evidence of human occupation or use of an area within contract limits prior to the Year 1840. Evidence may consist of skeletons, stone, or other utensils, or evidence of habitations or structures.

Paleontological Finds: Evidence of prehistoric plant or animal life, such as skeletons, bones, fossils, or casts and other indications such as pictographs.

Owner may order the Work stopped in other areas if, in Owner's opinion, find is more extensive than may appear from uncovered material.

Protection of Finds:

- a. Cover, fence, or otherwise protect finds until notice to resume the Work is given.
- b. Cover finds with plastic film held in place by earth, rocks, or other weights placed outside the find. Should additional backfilling be necessary for safety or to prevent caving, place backfill material loosely over plastic film.
- c. Sheet or shore as necessary to protect excavations underway. Place temporary fence to prevent unauthorized access.
- d. Dewater finds made below water table as necessary to protect construction Work underway. Divert groundwater or surface runoff away from find by ditching or other acceptable means.

Removal of Finds:

- a. Finds are property of Owner. Do not remove or disturb finds without Owner's written authorization.
- b. Should Owner elect to have a find removed, provide equipment, labor, and material to permit safe removal of find without damage. Provide transportation for delivery to individuals, institutions, or other places as Owner may find desirable, expedient, or required by law.

## 10. Modification of General Provisions, Section §107-06 Insurance

The Contractor is required to take out and maintain at its sole cost and expense insurance of the types specified in Section §107-06.

- A. The Umbrella Excess Liability Insurance limits for this project have been modified as follows:

Each Occurrence	\$5,000,000
-----------------	-------------

- B. Paragraph 11 shall be deleted in its entirety and replaced with the following: "ADDITIONAL INSURED: All insurance policies, except for workers' compensation, shall be endorsed to include the Owner, Engineer, State of Connecticut and the officers, directors, elected and non-elected officials, members, partners, managers, agents, employees, consultants and subcontractors of each and any of them, as additional insureds (collectively "Indemnitees") covered for liability arising out of any ongoing and completed operations using additional insured endorsement being on a CG 20 10 and CG 20 37 or their equivalent. Copies of additional insured coverage endorsements shall be attached to the certificates of insurance."

**11. Modification of General Provisions, Section §109-15 Maintenance Bond**

The guarantee period for CIPP lining projects is three (3) years. First sentence on Section §109-15 Maintenance Bond shall be modified to read: "... and in a form acceptable to the Authority guaranteeing their work and the performance of the guarantee period CCTV inspection for a period of three (3) years from the date of final acceptance by the Authority."

**12. New Section §109-16 Allowance Procedure**

New Section §109-16 Allowance Procedure is added to the GNHWPCA Standard Specifications, General Provisions.

Bid allowances are included in base bids as estimates for work that will be completed under the base construction contract, but the exact costs or scope are indeterminate at the time of bid. These amounts are later adjusted to actual costs once the work is completed.

Allowances shall be specifically included and listed on the schedule of bid items.

Treatment of mark-ups for allowances is as follows:

- Allowances are a part of the base contract work; no additional mark-up is credited to the contractor for work performed within the allowance by the contractor or any subcontractor.
- Work performed in excess of an allowance is subject to normal general contractor mark-ups in accordance with the Contract General Provisions, Section §109-04 Extra and Force Account Work.

**13. Modification Item 523 Sanitary Sewer Manholes**

Modify the "PAYMENT" section of Item 523 in the following manner:

<u>Item Number</u>	<u>Pay Item</u>	<u>Pay Unit</u>
523.01	Sanitary Sewer Manhole – (DIAMETER)	Vertical Foot
523.02	Sanitary Doghouse Manhole – (DIAMETER)	Vertical Foot
523.03	Sanitary Drop Manhole – (DIAMETER)	Vertical Foot
523.04	Reconstruct Sanitary Sewer Manhole	Vertical Foot
523.05	Conversion – Sanitary Sewer Manhole	Each
<del>523.06</del>	<del>Reset – Sanitary Sewer Manhole</del>	<del>Each</del>
<b>523.06A</b>	<b>Reset- Sanitary Sewer Manhole (non-paved)</b>	<b>Each</b>
<b>523.06B</b>	<b>Reset-Sanitary Sewer Manhole (paved)</b>	<b>Each</b>
523.07	Proposed Connection at Existing Manhole	Each
523.08	Proposed Drop Connection at Existing Manhole	Each
<b>523.09A</b>	<b>Replace Manhole Frame and Cover (Standard)</b>	<b>Each</b>
<b>523.09B</b>	<b>Replace Manhole Frame and Cover (Watertight)</b>	<b>Each</b>

**14. Modification of Technical Specification, Item 524 Sanitary Sewer Manhole Rehabilitation**

Replace existing specification with the enclosed Item 524M Sanitary Sewer Manhole Rehabilitation specification, revised July 2023.

Manhole frames and covers shall be raised in accordance with GNHWPCA's "Manhole Cover Raising" detail from GNHWPCA Standard Construction Details Dated January 2020, enclosed following specification 524M. All of GNHWPCA's Standard Construction Details are available for download at <https://gnhwpc.com/standard-details/>

**15. Modification of Technical Specification, Item 971 Maintenance and Protection of Traffic**

Under DESCRIPTION, REMOVE the first paragraph and REPLACE with the following:

The Contractor shall maintain and protect traffic in the project area in accordance with the requirements and regulations of the applicable municipality or Connecticut Department of Transportation (CTDOT) and these Specifications. Unless otherwise specified, the Contractor must maintain pedestrian and vehicular traffic to permit access to commercial and industrial businesses, residences, and intersecting streets. It shall be the sole responsibility of the

Contractor to warn the Local Regulatory Agencies (including but not limited to the Police and Fire Departments) at least seven (7) days in advance of changes in traffic patterns due to reduction of pavement widths or closures of streets. The Contractor shall furnish, install, maintain, move, adjust, clean, relocate and store all signs, barricades, drums, delineators and traffic cones, as necessary to carry out the traffic routing plan and maintain vehicular and pedestrian traffic. All of this work shall meet with the approval of the applicable municipality.

Under DESCRIPTION, INSERT the following after the first paragraph:

Contractor shall be responsible for developing a Maintenance and Protection of Traffic (MPT) Plan prepared by a Connecticut Licensed Professional Engineer; obtaining applicable local permit(s); and obtaining applicable CTDOT permit(s) for all work within any State right-of-way. Contractor shall also be responsible for providing applicable insurances and bonds. The MPT Plan shall be prepared in accordance with the CTDOT's "Traffic Control Patterns for Highway Maintenance Operations" Manual and the Federal Highway Administration's "Manual on Uniform Traffic Control Devices", latest editions.

Contractor shall be responsible for securing uniformed police officers and coordinating traffic control patterns as required for the work.

**16. Call-Before-You-Dig**

Public Act 87-71 of the Connecticut State statute requires individuals who use power or mechanized equipment for the purpose of disturbing the sub-surface of the earth to provide advance notice of **at least 48 hours** to the "Call Before You Dig" central clearinghouse @ 1-800-922-4455 prior to commencing proposed excavations (see Section 1111 for definition of excavation/excavator).

Call Before You Dig, Inc., (CBYD) is a state regulated, nonprofit organization comprised of all public utilities and municipalities within the state of Connecticut.

The Contractor assumes all responsibilities for any damage to the various utility services, and all liabilities arising there from.

## **ITEM 524M SANITARY SEWER MANHOLE REHABILITATION**

### **DESCRIPTION:**

The Contactor shall be responsible for furnishing all labor, supervision, products, materials, equipment, and incidentals required to complete all manhole rehabilitation work and testing in accordance with this Specification.

Work under this Item consists of sanitary sewer manhole rehabilitation necessary to provide a system that stops infiltration, exfiltration, restores structural integrity, and provides protection for structures subject to hydrogen sulfide corrosion.

All structures scheduled for rehabilitation shall be cleaned, prepared, repaired, patched and/or sealed as required prior to the application of a hybrid epoxy system or polyurethane coating system or fiber reinforced geopolymer or epoxy lining system.

### **MATERIALS:**

#### **A. GENERAL**

1. Handling, formulation, and storage of the products and grouts shall be in strict conformance with the manufacturer's recommendations. The uncured compound and grouts shall be delivered to the site in unopened containers, with the date of manufacture clearly indicated.
2. Mixing and handling of the compounds and grouts and the constituents producing it, which may be toxic on contact or inhalation, shall be as recommended by the manufacturer and Contractor shall minimize hazard to personnel. The Contractor is responsible for providing appropriate protective measures to ensure that the components and the chemicals produced in mixing are under the control of the Contractor at all times and are not available to unauthorized personnel or others. Excess material resulting from rehabilitation operations shall be disposed of in a safe manner. All equipment and material shall be subject to the review of the Engineer.
3. All chemical materials used shall meet the following minimum application requirements:
  - a. All component materials shall be easily transportable by common carriers.
  - b. Packing of component materials shall be compatible with field storage requirements.
  - c. Components shall be packed in such a fashion as to provide for maximum worker safety when handling the materials and minimize spillage when preparing for use.

- d. Residual sealing materials shall be removed from the sewer after injection to ensure no flow reductions, restrictions or blockages of sewer flows.

## **B. EPOXY LINING SYSTEM**

To complete a sanitary sewer manhole rehabilitation using an epoxy lining system, the Contractor shall apply a combination of a cementitious liner first, followed by an epoxy coating.

### **1. Cementitious liner**

Approved products with required one-inch thick application:

- a. AP/M Permaform CR-9000;
- b. Strong-Seal MS-2C;
- c. Raven 755.

### **2. Epoxy coating**

Approved products with specified thickness application:

- a. Raven 405: Required thickness – 125 mils;
- b. AP/M Permaform COR+GARD: Required Thickness – 125 mils.

## **C. HYBRID EPOXY SYSTEM**

To complete a sanitary sewer manhole rehabilitation using a hybrid epoxy lining system, the Contractor shall apply CladLiner, a product of CladLiner, with a required thickness of 500 mils.

## **D. POLYURETHANE COATING SYSTEM**

To complete a sanitary sewer manhole rehabilitation using a polyurethane coating system, the Contractor shall apply SprayWall Structural Polyurethane, a product of Sprayroq, with a required thickness of 500 mils.

## **E. FIBER REINFORCED GEOPOLYMER**

To complete a sanitary sewer manhole rehabilitation using a fiber reinforced geopolymer system, the Contractor shall apply Geopolymer mortar with a required thickness of one-inch. Approved materials include Quadex Geokrete, Parson Environmental Geoliner, and Geotree Solutions Geospray.

## **F. ACTIVE LEAK CONTROL**

Active leak control materials are to be utilized to stop running water, infiltration, and other water stop needs. All active leak control materials must be compatible with the repair and lining materials proposed by the Contractor.

Approved materials include CladStop, Avanti AV-100, Strong-Plug, Strong-Seal Grout, or equal injection hydrophobic polyurethane products. Repair work shall follow manufacturer's recommended installation methods.

## **G. PATCHING, REPOINTING, FILLING AND REPAIRING NON-LEAKING HOLES, CRACKS AND SPALLS**

Approved patching materials include CladRestore, Strong-Seal QSR, or equal. Patching materials must be compatible with the active leak control and lining materials proposed by the Contractor. Repair work shall follow manufacturer's recommended installation methods.

## **H. INVERT REPAIR**

Invert repair shall be performed on all inverts with visible damage or where infiltration is present or when vacuum testing is specified. All invert repair materials must be compatible with the active leak control and lining materials proposed by the Contractor.

Acceptable products are CladRestore, Strong-Seal QSR, or approved equal.

## **I. MANHOLE FRAME CHIMNEY SEAL MATERIAL**

Manhole frame chimney seals shall be applied of a corrosion resistant aromatic flexible urethane resin coating fully compatible with the manhole rehabilitation liner. The coating shall include a primer and a final coat. Frame chimney seals shall be Flex-Seal Utility Sealant as manufactured by Sealing Systems, Inc., Loretto, MN or equal.

## **CONSTRUCTION DETAILS:**

### **A. REFERENCES:**

The latest codes and standards referenced herein and belonging to the following organizations shall be followed:

1. American Society for Testing and Materials (ASTM)
2. National Association of Corrosion Engineers, NACE International (NACE)
3. The Society for Protective Coatings (SSPC)

4. Occupational Safety and Health Administration (OSHA)
5. Resource Conservation and Recovery Act (RCRA)
6. International Concrete Repair Institute (ICRI)
7. National Association of Sewer Service Companies (NASSCO)

**B. SUBMITTALS:**

1. The Contractor shall submit manufacturer's technical data, details, and specifications showing complete information on surface preparation and application procedures, material composition, physical properties and installation equipment.

The Contractor shall submit the testing procedure to ensure the liner system is of required thickness, strength and water-tightness. Provide a site-specific testing plan. Test records shall include GNHWPCA manhole identification, test used, location of each defect tested, and a statement indicating test results.

2. The technical data, with quantitative and qualitative values based on ASTM testing results, and/or other 3rd party testing methods shall demonstrate performance conformity with these specifications. If submitting an alternative product, please follow procedures set forth below.
3. The Contractor shall submit manufacturer's certification of applicator's successful completion of training in use of the application equipment, rehabilitation products, and rehabilitation procedures.
4. The Contractor shall submit warranty information.
5. In order to be considered as an equal product, said product will have to meet the minimum physical and performance properties of the products described herein as measured by the applicable ASTM standards referenced or other 3rd party referenced testing methods. Testing results must be performed and presented in the form of technical data sheets. Equal products' technical specifications/data and material safety data must be submitted to the Engineer a minimum of ten (10) days prior to bid date. Written product pre-approval is required to determine if the prospective product may be bid and utilized on this project(s). A product will be rejected as unacceptable should submittal to the Engineer not be received by the deadline and should the bid package not have enclosed a written approval from the Authority.

**C. QUALITY ASSURANCE:**

1. Product Manufacturer Qualifications – The manufacturers shall have a minimum



of 5 years' experience manufacturing the liner products.

2. Contractor Qualifications – The Contractor shall have at least 3-years' experience applying manhole lining systems. The Contractor shall have installed the lining system proposed for this project in a minimum of 200 manholes.
3. Single Source Responsibility - All products used with the lining system, including but not limited to, materials for infiltration control, invert repair and patching shall be approved by and supplied through the lining system manufacturer.
4. Quality Control of Application Conditions - The Owner reserves the right to cancel manhole rehabilitation work due to concerns with weather conditions. Provide continuous ventilation and, if necessary, cooling and heating facilities to maintain surface and ambient temperatures before, during, and following application of finishes, within temperature range and for duration as directed by the Manufacturer.
5. All work must be supervised by a foreman responsible for rehabilitating a minimum of 50 manholes using the proposed manufacturer's manhole lining system.

**D. GUARANTEE:**

1. Materials and labor shall be warranted by the Contractor of applied material systems for a minimum period of ten (10) years from the date of final acceptance of the project, once correctly applied by an approved applicator and inspected.
2. Failure will be deemed to have occurred if the protective system fails to (a) prevent the internal damage or corrosion of the underlying structure due to bacteriological, chemical, gaseous attack in the form of hydrogen sulfide (H<sub>2</sub>S) found in sanitary sewer collection systems, (b) seal and protect the substrate and environment from contamination by effluent, (c) seal and protect from influent. It does not include excessive, atypical, non-wastewater induced chemical abuse, structural deficiencies, or atypical acts of God which cause hybrid damage.
3. Contractor shall, within a reasonable time after receipt of written notice thereof, repair defects in materials or workmanship which may develop during said warranty period, and any damage to other work caused by such defects or the repairing of same, at his own expense and without cost to the Authority.

**E. LEGAL, SAFETY AND HEALTH REQUIREMENTS**

The Contractor shall observe all federal, state and local laws, ordinances, policies, practices and regulations. In addition, the Contractor agrees to promptly procure all necessary approvals, licenses and permits, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

The Contractor shall conduct the work at all times in such a manner as to insure the least possible obstruction to traffic. The convenience of the general public and of the residents along and adjacent to the roadway shall be provided for in an adequate and satisfactory manner as the Engineer may direct.

All equipment and Materials shall be placed or stored in such locations so as not to be or to create the danger of becoming a hazard to the traveling public. No section of road shall be closed to the public except by permission of the municipality and Authority.

The safety provisions of applicable laws, building, construction and fire safety codes and the latest edition of the "Construction Safety Code, State of Connecticut, Labor Department", approved by the State Labor Commissioner, shall be complied with at all times.

The Contractor shall perform operations in strict accordance with OSHA and manufacturers' safety requirements. Particular attention is drawn to safety requirements involving entering confined spaces.

Damage incurred to the manhole or pipe segments due to methods and equipment employed by the Contractor is the responsibility of the Contractor. Damage to public and private property from sewer surcharging that results from material or equipment left in the manhole or sewer or from any flow blockage is the responsibility of the Contractor. The cost to repair the manhole or pipe segments and expenses incurred by the Authority as a result of the damage shall be the responsibility of the Contractor.

#### **F. MANHOLE CLEANING / PREPARATION**

1. Clean bench/invert floor and interior walls of manholes by removing deleterious material, including dirt, grease, and other debris. Use high-pressure water, at a minimum force of 3,000 psi. If required, use approved cleaners to remove grease, oil, and other matter, which would prevent a good bond between existing manhole wall and the approved repair materials.
2. Preparation of the interior surfaces shall conform to requirements of the wall liner material manufacturer. Loose and protruding brick, mortar and concrete shall be removed using a mason's hammer and chisel and/or scrapper. No debris shall be disposed of into the sewer system.
3. Active leaks shall be stopped and all interior surfaces shall be prepared as recommended by the lining manufacturer.
4. Insert plywood mats or sheeting over the existing flow channel and bench to prevent debris from falling into the sewer and to collect debris from manhole bench.
5. Existing manhole steps shall be removed, ground smooth, and patched. Step removal shall be incidental to the manhole rehabilitation costs.

6. Drop Connections – The Contractor shall confirm whether a drop connection exists. If one is found, the Contractor shall remove any interior drop connections anchored to manhole walls prior to installing the lining system. After installation and proper curing of the liner, the Contractor shall re-install interior drop connections to their original condition prior to removal. Installation of new inside drops, if requested by the Engineer, shall follow the Authority’s standard construction detail SD523-08 & SD523-09.

**G. GENERAL APPLICATION**

Sewer manhole rehabilitation lining shall be applied in accordance with the material manufacturer’s specifications. Plugging leaks and patching surfaces shall be performed where indicated or required. Coatings and sealants shall be applied to all surfaces from the manhole base to the manhole frame. Apply lining material to the manhole bench and produce a gradual slope from the walls to the invert with the thickness at the invert to be no less than 1 inch. Round the wall/bench intersection to a uniform radius the full circumference of the intersection.

**H. MANHOLE FRAME CHIMNEY SEAL**

Manhole frame chimney seal installation shall be in strict accordance with the manufacturer’s instructions. The Engineer shall inspect each manhole frame chimney seal after installation and before payment is made. There shall be no infiltration, inflow, or other leakage through the manhole frame chimney joint after the frame chimney seals have been installed. If leakage is evident, the manhole frame chimney seal shall be repaired as approved by the Engineer.

Contractor shall guarantee the manhole frame chimney seal for two full years from the date of acceptance by the Engineer to the extent that any defects including, but not limited to, root penetration signs of infiltration, cracks or excess grouting material, which may appear from faulty workmanship or material furnished by the Contractor shall be repaired. No additional payment will be made for repairing manhole frame chimney seals that fail testing.

The chimney seal shall be applied from a point 2-inches above the joint between the frame and chimney to a depth as required to rehabilitate the chimney. The minimal coverage shall be 12-inches, unless otherwise directed by the Engineer.

**I. INSPECTION AND TESTING**

1. Quality Assurance and Acceptance:

- a. Four (4) - two-inch test cubes of the liner shall be cast each day or from every pallet of product used, and shall be properly packaged, labeled and sent for compression strength testing per ASTM C-109, to an independent testing

laboratory acceptable to the Engineer and paid for by the Contractor.

- b. After completion of manhole rehabilitation, Contractor shall verify the minimum coating thickness of the manhole liner. The Contractor shall propose a method for measuring the liner thickness. The costs associated with measuring the liner thickness shall be included in the unit bid price. If the thickness of the lining is not uniform or is less than specified, it shall be repaired or replaced at no additional cost to the Authority.
2. After the manhole rehabilitation work has been completed, the manhole shall be visually inspected by the Engineer in the presence of the Contractor and the work shall be found satisfactory to the Engineer. Any work that has been found to be defective shall be redone by the Contractor at no additional expense to the Authority.
  3. Approximately 10% of manholes shall be vacuum tested to ensure a watertight installation. Manholes that will be vacuum tested will be selected by the Engineer.
    - a. Testing for water tightness shall be accomplished by vacuum testing in accordance with ASTM C 1244.
    - b. Manholes shall be vacuum tested and shall have a minimum of 8-inches of mercury applied to the manhole. Pressure drop shall not exceed 1 inch of mercury in a 1-minute test.
    - c. If the tested manhole meets the required test pressure and duration, full payment for the manhole will be made. If the time duration measured to drop 1 inch of mercury is less than the required time as noted above, the manhole will have failed the vacuum test, and payment will be reduced as described below.
      - i. If the tested manhole achieves the required initial vacuum pressure but holds the required pressure for less than the required time duration, half payment for the applicable manhole pay Item will be made for that manhole.
      - ii. If the tested manhole fails to achieve the initial specified pressure, no payment will be made for the applicable manhole pay Item for that manhole.
    - d. Contractor may repair and re-test manholes which fail the vacuum test. If the manhole passes the subsequent vacuum test, the Contractor shall be entitled to the commensurate payment for the manhole Work.
    - e. Written verification of every manhole test must be provided to the Engineer. The following minimum information shall be recorded and provided:
      - i. Manhole Number.
      - ii. Beginning test pressure, end test pressure, and test duration (minimum 60

- seconds).
- iii. Repeat test number.
- iv. Repairs made.

## **M. CLEAN UP**

The Site shall be cleaned on a continuous, daily basis during performance of the work and shall be cleaned upon completion so that the Project Site shall be left in a neat and orderly condition acceptable to the Engineer.

## **MEASUREMENT AND PAYMENT**

This work will be measured for payment by the actual number of vertical linear feet of manhole rehabilitated in accordance with these specifications. Measurement shall be made from the invert of the out flowing pipe to the bottom of the manhole cover and rounded to the nearest whole number of feet. Invert rehabilitation shall be included in this vertical foot unit cost.

This work shall be paid for at the unit price bid per vertical foot for Sanitary Sewer Manhole Rehabilitation completed and accepted, which price shall include all materials, labor, tools, and equipment necessary and incidental to complete the work in accordance with these specifications including plugging holes and under drains, stopping active hydrostatic infiltration, patching, filling and repairing non-infiltrating holes, cracks and breaks, surface preparation, installation and/or application of manhole lining system, installation and/or application of an injection grout system, testing, sealing pipe connections, lift holes, riser joining sections, bench/trough and corbel sections, and cleanup of the site.

No measurement will be made for partially completed manhole rehabilitation.

There will be a separate measurement for payment for the Installation and/or application of a manhole frame chimney seal if requested by the Engineer.

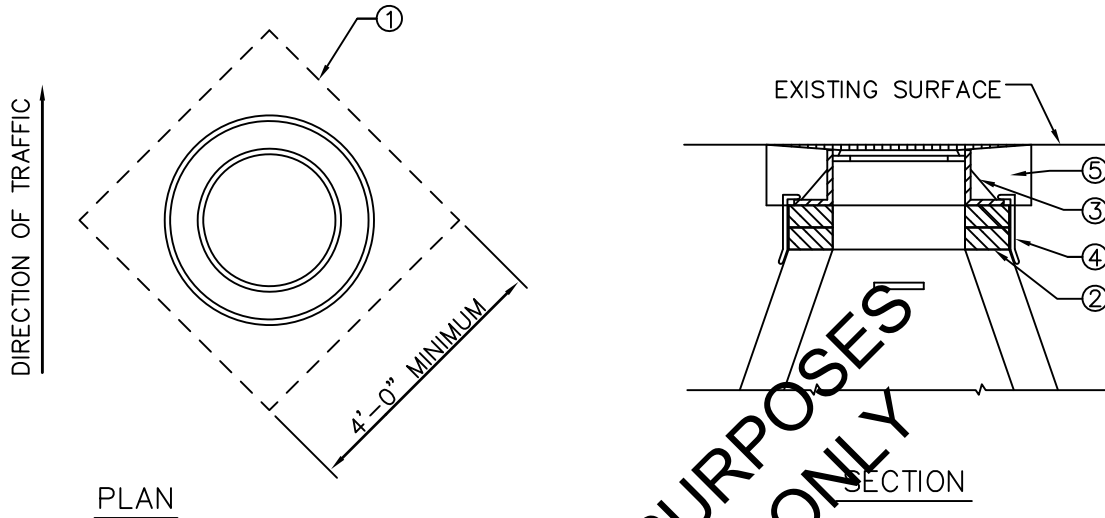
There will be no separate measurement for payment for the cost of temporary bypass pumping, but the cost thereof shall be included in the contract unit price for sanitary sewer manhole rehabilitation.

Maintenance and Protection of Traffic will be measured and paid for in accordance with the provisions of Item 971, "Maintenance and Protection of Traffic." When no price for Item 971, Maintenance and Protection of Traffic, is asked for on the Proposal Form, this work will not be measured for payment, but the cost shall be included in the unit price bid for sanitary sewer manhole rehabilitation.

<u>Item Number</u>	<u>Pay Item</u>	<u>Pay Unit</u>
524.01	Sanitary Sewer Manhole Rehabilitation	Vertical Foot
524.02	Flex Coat Chimney Seal	Each

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

# GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY CONSTRUCTION DETAILS



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**NOTES:**

1. CUT AND REMOVE EXISTING PAVEMENT TO NEAT LINES AS SHOWN OR AS DIRECTED. REMOVE BITUMINOUS CONCRETE FROM MANHOLE FRAME AND COVERS. CIRCULAR PAVEMENT CUT AROUND MANHOLE COVER ALSO ACCEPTABLE.
2. REMOVE AND REPLACE EXISTING MORTAR AND MASONRY WHICH IS LOOSE, DETERIORATED OR UNSOUND AS DIRECTED BY THE ENGINEER.
3. SET MANHOLE FRAME TO REQUIRED GRADE WITH MANHOLE GRADE RINGS OR AS DIRECTED BY THE GNHWPCA. MANHOLE FRAMES ARE TO BE SET IN FULL MORTAR BEDS.
4. INSTALL EXTERNAL RUBBER BUTYL MASTIC SEAL INFISHIELD UNI-BAND OR APPROVED EQUAL.
5. REPLACE PAVEMENT WITH 3" BITUMINOUS CONCRETE CLASS 1 LAID IN TWO COURSES ON 4" BITUMINOUS CONCRETE CLASS 4 LAID ON TAMPED SUBBASE. SEAL PAVEMENT JOINT WITH ASPHALT.
6. CONTRACTOR TO FURNISH NEW MANHOLE FRAME AND COVER AS REQUIRED.
7. EXISTING MANHOLE FRAME AND COVER TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER.

## MANHOLE COVER RAISING NTS

REVISIONS	
NO.	DATE
3	JANUARY, 2020

REQUIRED CONSTRUCTION CONTRACT  
PROVISIONS UNDER THE CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION'S CLEAN WATER FUND

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



**REQUIRED CONSTRUCTION CONTRACT PROVISIONS  
UNDER THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION'S  
CLEAN WATER FUND**

**22a-482-4 (g) REQUIRED PROVISIONS FOR  
CONSTRUCTION CONTRACTS**

Municipalities must include, when appropriate, the following clauses or their equivalent in each subagreement and may substitute other terms for "grantee" and "CONTRACTOR" in their subagreements.

**22a-482-4 (g)(1) Supersession**

The municipality and the CONTRACTOR agree that the following general provisions, or their equivalent, apply to eligible work to be performed under this contract and that these provisions supersede any conflicting provisions of this contract;

**22a-482-4 (g)(2) Privity of contract**

This contract is expected to be funded in part by the State of Connecticut. Neither the State, nor any of its departments, agencies, or employees or will be a party to this contract or any lower tier subcontract. This contract is to be subject to regulations adopted in accordance with Section 22a-482 of the Connecticut General Statutes.

**22a-482-4 (g)(3) Changes for contracts for construction**

(A) The municipality may, at any time, without notice to any surety, by written order designated or indicated to be a change order, make any change in the work within the general scope of the subagreement, including but not limited to changes:

- (i) In the specifications (including drawings and designs);
- (ii) In the time, method, or manner of performance of the work;
- (iii) In the municipality-furnished facilities, equipment, materials, services, or site;

or

- (iv) Directing acceleration in the performance of the work.

(B) A change order shall also be any other written or oral order (including direction, instruction, interpretation or determination) from the municipality which causes any change, provided the CONTRACTOR gives the municipality written notice stating the date, circumstances, and source of the order and that the CONTRACTOR regards the order as a change order.

(C) Except as provided in this clause, no order, statement, or conduct of the municipality shall be treated as a change under this clause or entitle the CONTRACTOR to an equitable adjustment.

(D) If any change under this clause causes an increase or decrease in the CONTRACTOR's cost or the time required to perform any part of the work under this contract, whether or not changed by any order, an equitable adjustment shall be made and the subagreement modified in writing. However, for claims based on defective specifications, no claim for any change under (B) above shall be allowed for any costs incurred more than 20 days before the CONTRACTOR gives written notice as required in paragraph (B). In the case of defective specifications for which the municipality is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the CONTRACTOR in attempting to comply with those defective specifications.

(E) If the CONTRACTOR intends to assert a claim for an equitable adjustment under this clause, he must, within thirty (30) days after receipt of a written change order under (A) of this change clause or the furnishing of a written notice under (B) of this clause, submit to the grantee a

written statement setting forth the general nature and monetary extent of such claim. The municipality may extend the 30-day period. The statement of claim may be included in the notice under (B) of this clause.

(F) No claim by the CONTRACTOR for an equitable adjustment shall be allowed if made after final payment under this contract.

**22a-482-4 (g)(4) Changes for contracts for supplies**

(A) The municipality may at any time, by a written order and without notice to the sureties, make changes within the general scope of this subagreement in any one or more of the following:

- (i) Drawings, designs, or specifications, where the supplies to be furnished are to be specially manufactured for the municipality;
- (ii) Method of shipment or packing; and
- (iii) Place of delivery.

(B) If any change causes an increase or decrease in the cost or the time required to perform any part of the work under this subagreement, whether or not changed by any such order, an equitable adjustment shall be made in the subagreement price or delivery schedule, or both, and the subagreement shall be modified in writing. Any claim by the CONTRACTOR for adjustment under this clause must be asserted within 30 days from the date of receipt by the CONTRACTOR of the notification of change. If the municipality decides that the facts justify such action, the municipality may receive and act upon any such claim asserted at any time before final payment under this subagreement. Where the cost of property made obsolete or excess as a result of a change is included in the CONTRACTOR's claim for adjustment, the grantee shall have the right to prescribe the manner of disposition of such property. Nothing in this clause shall excuse the CONTRACTOR from proceeding with the subagreement as changed.

**22a-482-4 (g)(5) Differing site conditions**

(A) The CONTRACTOR shall promptly, and before such conditions are disturbed, notify the municipality in writing of:

- (i) Subsurface or latent physical conditions at the site differing materially from those indicated in this subagreement; or
- (ii) Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this subagreement. The municipality shall promptly investigate the conditions and, if it finds that conditions are materially different and will cause an increase or decrease in the CONTRACTOR's cost or the time required to perform any part of the work under this subagreement, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the subagreement modified in writing.

(B) No claim of the CONTRACTOR under this clause shall be allowed unless the CONTRACTOR has given notice required in (A) of this clause. However, the municipality may extend the prescribed time.

(C) No claim by the CONTRACTOR for an equitable adjustment shall be allowed if asserted after final payment under this subagreement.

**22a-482-4 (g)(6) Suspension of work**

(A) The municipality may order the CONTRACTOR, in writing, to suspend, delay, or interrupt all or any part of the work for such period of time as the municipality may determine to be appropriate for the convenience of the municipality.

(B) If the performance of all or any part of the work is suspended, delayed, or interrupted for an

unreasonable period of time by an act of the municipality in administration of the contract, (or if no time is specified, within a reasonable time), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by such unreasonable suspension, delay, or interruption and the contract modified in writing. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the CONTRACTOR, or for which an equitable adjustment is provided for or excluded under any other provision of the contract.

(C) No claim under this clause shall be allowed for any costs incurred more than 20 days before the CONTRACTOR notified the municipality in writing of the act or failure to act involved (this requirement does not apply to a claim resulting from a suspension order), and unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of such suspension, delay, or interruption, but not later than the date of final payment under the contract.

**22a-482-4 (g)(7) Termination**

(A) This contract may be terminated in whole or in part in writing by either party in the event of substantial failure by the party to fulfill its obligations under this subagreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(B) This contract may be terminated in whole or in part in writing by the municipality for its convenience, provided that the CONTRACTOR is given not less than ten (10) calendar days written

notice (delivered by certified mail, return receipt requested) of intent to terminate and an opportunity for consultation with the terminating party prior to termination.

(C) If termination for default is effected by the municipality, an equitable adjustment in the price provided for in this contract shall be made but no amount shall be allowed for anticipated profit on unperformed services or other work, and any payment due to the CONTRACTOR at the time of termination may be adjusted to cover any additional costs to the municipality because of the CONTRACTOR's default. If termination for default is effected by the CONTRACTOR, or if termination for convenience is effected by the municipality, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to the CONTRACTOR for services rendered and expenses incurred prior to the termination in addition to termination settlement costs reasonably incurred by the CONTRACTOR relating to commitments which had become firm prior to the termination.

(D) Upon receipt of a termination action pursuant to (A) or (B) above, the CONTRACTOR shall promptly discontinue all services affected (unless the notice directs otherwise), and deliver or otherwise make available to the recipient all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by the CONTRACTOR in performing this contract whether completed or in process.

(E) Upon termination under (A) or (B) of this clause the municipality may take over the work and may award another party a contract to complete the work under this contract.

(F) If, after termination for failure of the CONTRACTOR to fulfill contractual obligations, it is determined that the CONTRACTOR had not failed to fulfill contractual obligations, the

termination shall be deemed to have been for the convenience of the municipality. In such event, adjustment of the price provided for in this contract shall be made as provided in (C) of this clause.

**22a-482-4 (g)(8) Remedies**

Except as may be otherwise provided in this contract, all claims, counter-claims, disputes, and other matters in question between the municipality and the CONTRACTOR arising out of or relating to this contract or the breach thereof will be decided by arbitration if the parties mutually agree or in a court of competent jurisdiction within the district in which the municipality is located.

**22a-482-4 (g)(9) Price reduction for defective cost or pricing data**

NOTE - This clause is applicable to any contract negotiated between the municipality and its CONTRACTOR in excess of \$500,000; negotiated change orders in excess of \$500,000 or 10 percent of the contract, whichever is less, affecting the price of a formally advertised, competitively awarded, fixed price contract; or any lower tier subcontract or purchase order in excess of \$500,000 or 10 percent of the assistance agreement, whichever is less, under a contract other than a formally advertised, competitively awarded, fixed price subagreement. This clause is not applicable for contracts to the extent that they are awarded on the basis of effective price competition.

The CONTRACTOR and subcontractor, where appropriate, warrant that cost and pricing data submitted for evaluation with respect to negotiation of prices for negotiated contracts, lower tier subcontracts and change orders is based on current, accurate, and complete data supported by their books and records. If the municipality or the Commissioner determines that any price (including profit) negotiated in connection with

this contract, any lower tier subcontract, or any amendment thereunder was increased by any significant sums because the data provided was incomplete, inaccurate, or not current at the time of submission, then such price, cost or profit shall be reduced accordingly, and the contract shall be modified in writing to reflect such reduction. Failure to agree on a reduction shall be subject to the remedies clause of this agreement.

**NOTE - Since the contract is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with lower tier subcontracts, the CONTRACTOR may wish to include a clause in each lower tier subcontract requiring the lower tier subcontractor to appropriately indemnify the CONTRACTOR. It is also expected that any lower tier subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by lower tier CONTRACTORS.**

**22a-482-4 (g)(10) Audit; Access to records**

(A) The CONTRACTOR shall maintain books, records, documents, and other evidence directly pertinent to performance on grant work under this contract in accordance with generally accepted accounting principles and practices consistently applied. The CONTRACTOR shall also maintain the financial information and data used by the CONTRACTOR in the preparation or support of the cost submission required under Section 22a-482-4(i)(8) for any negotiated contract or change order and a copy of the cost summary submitted to the municipality. The municipality and the Commissioner or any of his authorized representatives shall have access to all such books, records, documents, and other evidence for the purpose of inspection, audit and copying during normal business hours. The CONTRACTOR will provide proper facilities for such access and inspection.

(B) If this is a formally advertised, competitively awarded, fixed price contract, the CONTRACTOR agrees to make (A) through (F) of this clause applicable to all negotiated change orders and contract amendments affecting the contract price. In the case of all other types of prime contracts, the CONTRACTOR agrees to include (A) through (F) of this clause in all his subcontracts in excess of \$10,000 and to make paragraphs (A) through (F) of this clause applicable to all change orders directly related to project performance.

(C) Audits conducted under this provision shall be in accordance with generally accepted auditing standards and established procedures and guidelines of the reviewing or audit departments and meeting the requirements of Section 20-282 of the Connecticut General Statutes.

(D) The CONTRACTOR agrees to disclose all information and reports resulting from access to records under (A) and (B) of this clause.

(E) Records under (A) and (B) above shall be maintained and made available during performance on assisted work under this contract and until three years from the date of final State payment for the project. In addition, those records which relate to any dispute appeal arising under a grant assistance agreement, to litigation, to the settlement of claims arising out of such performance, or to costs of items to which an audit exception has been taken, shall be maintained and made available until three years after the date of resolution of such appeal, litigation, claim, or exception.

(F) This right of access clause (with respect to financial records) applies to:

- (i) Negotiated prime subagreements;
- (ii) Negotiated change orders or contract amendments in excess of \$10,000 affecting the price of any formally advertised, competitively awarded, fixed

- price contract; and
- (iii) **Subcontracts or purchase orders under any contract other than a formally advertised, competitively awarded, fixed price contract. However, this right of access does not apply to a prime contract, lower tier subcontract, or purchase order awarded after effective price competition, except with respect to records pertaining directly to contract performance, (excluding any financial records of the CONTRACTOR); if there is any indication that fraud, gross abuse, or corrupt practices may be involved or if the contract is terminated for default or for convenience.**

**22a-482-4 (g)(11) Covenant against contingent fees**

The CONTRACTOR warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the CONTRACTOR for the purpose of securing business. For breach or violation of this warranty the grantee shall have the right to annul this agreement without liability or, at its discretion, to deduct from the contract price or consideration, or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

**22a-482-4 (g)(12) Gratuities**

(A) If the municipality finds, after a notice and hearing, that the CONTRACTOR, or any of the CONTRACTOR's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise), to any official, employee, or agent of the municipality or the State, in an attempt to secure a contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this agreement, the municipality

may, by written notice to the CONTRACTOR, terminate this agreement. The municipality may also pursue other rights and remedies that the law or this agreement provides. However, the existence of the facts on which the municipality bases such findings shall be in issue and may be reviewed in proceedings under the Remedies clause of this agreement.

(B) In the event this contract is terminated, as provided in (A) in this clause, the recipient may pursue the same remedies against the CONTRACTOR as it could pursue in the event of a breach of the contract by the CONTRACTOR and, as a penalty, in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the grantee) which shall be not less than three nor more than ten times the costs the CONTRACTOR incurs in providing any such gratuities to any such officer or employee.

**22a-482-4 (g)(13) Responsibility of the CONTRACTOR**

(A) The CONTRACTOR agrees to perform all work under this agreement in accordance with this agreement's designs, drawings, and specifications.

(B) The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of substantial completion of the system that the completed system is free from all defects due to faulty materials, equipment or workmanship; and the CONTRACTOR shall promptly make whatever adjustments or corrections necessary to cure such defects, including repairs of any damage to other parts of the system resulting from such defects. The municipality shall give notice to the CONTRACTOR of observed defects with reasonable promptness. In the event that the CONTRACTOR fails to make adjustments, repairs, corrections or other work that may be made necessary by such defect, the municipality

may do so and charge the CONTRACTOR the cost incurred. The performance bond shall remain in full force and effect through the guarantee period.

(C) The CONTRACTOR's obligations under this clause are in addition to the CONTRACTOR's other express or applied warranties under this agreement or State law and in no way diminish any other rights that the municipality may have against the CONTRACTOR for faulty material, equipment, or work.

**22a-482-4 (g)(14) Final payment**

Upon satisfactory completion of the work performed under this agreement, as a condition before final payment under this agreement, or as a termination or settlement under this agreement, the CONTRACTOR shall execute and deliver to the municipality a release of all claims against the municipality arising under or by virtue of this agreement, except claims which are specifically exempted by the CONTRACTOR to be set forth therein. Unless otherwise provided in this agreement or by State law or otherwise expressly agreed to by the parties to this agreement, final payment under this agreement or settlement upon termination of this agreement shall not constitute a waiver of the municipality's claims against the CONTRACTOR or his sureties under this agreement or applicable performance and payment bonds.

**22a-482-4(h) PROCUREMENT REQUIREMENTS - GENERAL**

**22a-482-4(h)(1) Applicability**

This defines the responsibilities of the State and the municipality and the minimum procurement standards for each municipality's procurement system.

**22a-482-4(h)(2) Municipality responsibility**

(A) The municipality is responsible for the

settlement and satisfactory completion in accordance with sound business judgment and good administrative practice of all contractual and administrative issues arising out of subagreements entered into under the assistance agreement. This includes issuance of invitations for bids or requests for proposals, selection of CONTRACTORS, award of subagreements, settlement of protests, claims, disputes and other related procurement matters.

(B) The municipality shall maintain a subagreement administration system to assure that CONTRACTORS perform in accordance with the terms, conditions and specifications of their subagreements.

(C) The municipality shall review its proposed procurement actions to avoid purchasing unnecessary or duplicative items.

(D) The municipality shall consider consolidating its procurement or dividing it into parts to obtain a more economical purchase.

(E) Where appropriate, the municipality shall make an analysis of lease versus purchase alternatives in its procurement actions.

(F) A municipality may request technical assistance from the Commissioner for the administration and enforcement of any subagreement awarded under this section. However, such assistance does not relieve the municipality of its responsibilities under this section.

(G) A municipality may use innovative procurement methods or procedures only if it receives the Commissioner's prior written approval.

**22a-482-4(h)(3) Municipality reporting requirements**

The municipality shall request, in writing, the Commissioner's authorization to award each

construction subagreement which has an aggregate value over \$10,000. The request shall include:

(A) Name, address, telephone number and employee identification number of the construction CONTRACTOR;

(B) Amount of the award;

(C) Estimated starting and completion dates;

(D) Project number, name and site location of the project; and

(E) Copy of the tabulations of bids or offers and the name of each bidder or offeror.

**22a-482-4(h)(4) Copies of contract documents.**

The municipality must promptly submit to the Commissioner copies of any prime contract or modification thereof, and revisions to plans and specifications.

**22a-482-4(h)(5) Limitations on subagreement award**

(A) The municipality shall award subagreements only to responsible CONTRACTORS that possess the potential ability to perform successfully under the terms and conditions of a proposed procurement. A responsible CONTRACTOR is one that has:

- (i) Financial resources, technical qualifications, experience, an organization and facilities adequate to carry out the project, or a demonstrated ability to obtain these;
- (ii) Resources to meet the completion schedule contained in the subagreement;
- (iii) A satisfactory performance record for completion of subagreements;
- (iv) Accounting and auditing procedures adequate to control property, funds and

assets; and

- (v) Demonstrated compliance or willingness to comply with the civil rights, equal employment opportunity, labor laws and other statutory requirements.

(B) The municipality shall not make awards to CONTRACTORS who have been suspended or debarred by Connecticut State Agencies.

**22a-482-4(h)(6) Violations.**

The municipality shall refer violations of law to the local or State officials having the proper jurisdiction.

**22a-482-4(h)(7) Competition**

(A) The municipality shall conduct all procurement transactions in a manner that provides maximum open and free competition.

(B) Procurement practices shall not unduly restrict or eliminate competition. Examples of practices considered to be unduly restrictive include:

- (i) Noncompetitive practices between firms;
- (ii) Organizational conflicts of interest;
- (iii) Unnecessary, experience and bonding requirements;
- (iv) Local laws, ordinances, regulations or procedures which give local bidders or proposers preference over other bidders or proposers in evaluating bids or proposals; and
- (v) Placing unreasonable requirements on firms in order for them to qualify to do business.

(C) The municipality may use a prequalification list(s) of persons, firms or products if it:

- (i) Updates its prequalified list(s) at least every six months;

- (ii) Reviews and acts on each request for prequalification made more than thirty (30) days before the closing date for receipt of proposals or bid opening; and
- (iii) Gives adequate public notice of its prequalification procedures in accordance with the public notice procedures.

(D) A municipality may not use a prequalified list(s) of persons or firms if the procedure unnecessarily restricts competition.

**22a-482-4(h)(8) Profit**

(A) Municipalities must assure that only fair and reasonable profits are paid to CONTRACTORS awarded subagreements under State assistance agreements.

(B) The municipality shall negotiate profit as a separate element of price for each subagreement in which there is no price competition, or where prices based on cost analysis.

(C) Where the municipality receives two or more bids, profit included in a formally advertised, competitively bid, fixed price subagreement shall be considered reasonable.

(D) Off-the-shelf or catalog supplies are exempt from this section.

**22a-482-4(h)(9) Use of small, minority, and women's businesses**

The municipality must take affirmative steps to assure that small, minority, and women's businesses are used to the maximum extent practicable. The Commissioner may impose goals as conditions of financial assistances.

**22a-482-4(h)(10) Privity of subagreement.**

The State shall not be a party to any subagreement nor to any solicitation or request for proposals.



**22a-482-4(h)(11) Documentation**

(A) Procurement records and files for procurements in excess of \$10,000 shall include the following:

- (i) Basis for CONTRACTOR selection;
- (ii) Written justification for selection of the procurement method;
- (iii) Written justification for use of any specification which does not provide for maximum free and open competition;
- (iv) Written justification for the type of subagreement;
- (v) Basis for award cost or price, including a copy of the cost or price analysis made and documentation of negotiations; and
- (vi) A municipality must state the reasons in writing for rejecting any or all bids and the justification for procurements on a noncompetitively negotiated basis and make them available for public inspection.

**22a-482-4(h)(12) Specifications**

(A) Nonrestrictive specifications.

- (i) No specification for bids or statement of work in connection with such works shall be written in such a manner as to contain proprietary, exclusionary or discriminatory requirements other than those based upon performance, unless such requirements are necessary to test or demonstrate a specific thing or to provide for necessary interchangeability of parts and equipment, **or at least two brand names** or trade names of comparable quality or utility are listed and are followed by the words "or equal". If brand or trade names are specified, the municipality must be prepared to identify to the Commissioner, or in any protest action, the exact requirements (relating to the minimum needs of the project) which must be met by any offeror. The single base bid method of solicitation for equipment and parts for determination of a low, responsive bidder may not be utilized. With regard to materials, if a single material is specified, the municipality must be prepared to substantiate the basis for the selection of the material.
- (ii) Project specifications shall, to the extent practicable, provide for maximum use of structures, machines, products, materials, construction methods, and equipment which are readily available through competitive procurement, or through standard or proven production techniques, methods, and processes.

(B) Sole source restriction. A specification shall not require the use of structures, materials, equipment, or processes which are known to be available only from a sole source, unless the Commissioner determines in advance that the municipality's engineer has adequately justified in writing that the proposed use meets the particular project's minimum needs or the Commissioner determines that use of a single source is necessary to promote innovation.

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

(C) Experience clause restriction. The general use of experience clauses requiring equipment manufacturers to have a record of satisfactory operation for a specified period of time or of bonds or deposits to guarantee replacement in the event of failure is restricted to special cases where the municipality's engineer adequately justifies any such requirement in writing. Where such justification has been made, submission of a bond or deposit shall be permitted instead of a specified experience period. The period of time for which the bond or deposit is required should not exceed the experience period specified.

**22a-482-4(h)(13) Force account work**

(A) The municipality must receive the Commissioner's prior written approval for use of the force account method for any planning, design work or construction work.

(B) The Commissioner may approve the force account method upon the municipality's demonstration that it possesses the necessary competence required to accomplish such work and that the work can be accomplished more economically by use of the force account method, or emergency circumstances dictate its use.

(C) Use of the force account method for construction work shall generally be limited to minor portions of a project.

**22a-482-4(h)(14) Code of conduct**

(A) The municipality shall maintain a written code or standards of conduct which shall govern the performance of its officers, employees, or agents engaged in the award and administration of subagreements supported by State funds. No employee, officer or agent of the municipality shall participate in the selection, award or administration of a subagreement supported by State funds if a conflict of interest, real or apparent, would be involved.

(B) Such a conflict would arise when:

- (i) Any employee, officer or agent of the municipality, any member of the immediate families, or their partners, have a financial or other interest in the firm selected for award; or
- (ii) An organization which may receive or has been awarded a subagreement employs, or is about to employ, any person under (B)(i) of this Section.

(C) The municipality's officers, employees or agents shall neither solicit nor accept gratuities, favors or anything of monetary value from CONTRACTORS, potential CONTRACTORS or other parties to subagreements.

(D) Municipalities may set minimum rules where the financial interest is not substantial or the gift is an unsolicited item of nominal value.

(E) To the extent permitted by State or local law or regulations, the municipality's code of conduct shall provide for penalties, sanctions or other disciplinary actions for violations of the code by the municipality's officers, employees or agents or by CONTRACTORS or their agents.

**22a-482-4(h)(15) Payment to consultants**

(A) For all State assistance agreements, the State will limit its participation in the salary rate (excluding overhead) paid to individual consultants retained by a municipality or by a municipality's CONTRACTORS or subcontractors to the maximum daily rate for a GS-18 federal employee. (Municipality's may, however, pay CONTRACTORS and subcontractors more than this amount.) This limitation applies to consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate. The rate does not include transportation and subsistence costs for travel performed; municipalities will pay these in accordance with their normal travel reimbursement practices.

(B) Subagreements with firms for services which are awarded using these procurement requirements are not affected by this limitation.

**22a-482-4(h)(16) Cost and price considerations**

(A) The municipality shall conduct a cost analysis of all negotiated change orders and all negotiated subagreements estimated to exceed \$10,000.

(B) The municipality shall conduct a price analysis of all formally advertised procurements estimated to exceed \$10,000 if there are fewer than three bidders.

(C) For negotiated procurement, CONTRACTORS and subcontractors shall submit cost or pricing data in support of their proposals to the municipality.

**22a-482-4(h)(17) Small purchases**

(A) Small Purchase Procurement. If the aggregate amount involved in any one procurement transaction does not exceed \$10,000 including estimated handling and freight charges, overhead and profit, the municipality may use small purchase procedures.

(B) Small Purchase Procedures. Small purchase procedures are relatively simple procurement methods that are sound and appropriate for procurement of services, supplies or other property costing in the aggregate not more than \$10,000.

(C) Requirements for Competition.

- (i) Municipalities shall not divide a procurement into smaller parts to avoid the dollar limitation for competitive procurement.
- (ii) Municipalities shall obtain price or rate quotations from an adequate number of qualified sources.

**22a-482-4(h)( 18) Negotiation and award of subagreements**

(A) Unless the request for proposals states that award may be based on initial offers alone, the municipality must conduct meaningful negotiations with the best qualified offerors with acceptable proposals within the competitive range, and permit revisions to obtain best and final offers. The best qualified offerors must have equal opportunities to negotiate or revise their proposals. During negotiations, the municipality must not disclose the identity of competing offerors or any information from competing proposals.

(B) The municipality must award the subagreement to the responsible offeror whose proposal is determined in writing to be the most advantageous to the municipality, taking into consideration price and other evaluation criteria set forth in the request for proposals.

(C) The municipality must promptly notify unsuccessful offerors that their proposals were rejected.

(D) The municipality must document its procurement file to indicate how proposals were evaluated, what factors were used to determine the best qualified offerors within the competitive range, and what factors were used to determine the subagreement award.

**22a-482-4(h)(19) Optional selection procedure for negotiation and award of subagreement for architectural and engineering services**

(A) The municipality may evaluate and select an architect or engineer using the procedures in this subdivision in place of the procedures in "Negotiation and award of subagreements" in subdivision (18).

(B) The municipality may use responses from requests for statement of qualifications to determine the most technically qualified architects

or engineers.

(C) After selecting and ranking the most qualified architects or engineers, the municipality will request technical proposals from those architects or engineers and inform them of the evaluation criteria the municipality will use to rank the proposals.

(D) The municipality shall then select and determine, in writing, the best technical proposal.

(E) After selecting the best proposal, the municipality shall attempt to negotiate fair and reasonable compensation with that offeror.

(F) If the municipality and the offeror of the best proposal cannot agree on the amount of compensation, the municipality shall formally terminate negotiations with that offeror. The municipality shall then negotiate with the offeror with the next best proposal. This process will continue until the municipality reaches agreement on compensation with an offeror with an acceptable proposal. Once the municipality terminates negotiations with an offeror, the municipality cannot go back and renegotiate with that offeror.

**22a-482-4(h)(20) Noncompetitive negotiation procurement method**

Noncompetitive negotiation may be used only when the award of a subagreement is not feasible under small purchase, formal advertising, or competitive negotiation procedures. The municipality may award a noncompetitively negotiated subagreement only under the following circumstances:

(A) The item is available only from a single source;

(B) A public exigency or emergency exists and the urgency for the requirement will not permit a delay incident to competitive procurement; or

(C) After solicitation from a number of sources, competition is determined to be inadequate.

**22a-482-4(h)(21) Use of the same architect or engineer during construction**

(A) If the municipality is satisfied with the qualifications and performance of the architect or engineer who provided any or all of the planning or design services for the project, it may wish to retain that firm or individual during construction of the project. The municipality may do so without further public notice and evaluation of qualifications provided that it received financial assistance for the planning and/or design services and selected the architect or engineer in accordance with these procurement regulations.

(B) However, if the municipality uses the procedures in (A) to retain an architect or engineer, any construction subagreements between the architect or engineer and the municipality must meet the procurement provisions of section 22a-482-4(h)(5) of this section.

**22a-482-4(h)(22) Negotiation of subagreements**

(A) Formal advertising, with adequate purchase descriptions, sealed bids, and public openings shall be the required method of procurement unless negotiation under (B) of this section is necessary to accomplish sound procurement.

(B) All negotiated procurement shall be conducted in a manner to provide to the maximum practicable extent open and free competition appropriate to the type of project work to be performed. The municipality is authorized to negotiate subagreements if any of the following conditions exist:

(i) Public exigency will not permit the delay incident to formally advertised procurement (e.g. an emergency procurement);

- (ii) The aggregate amount involved does not exceed \$10,000;
- (iii) The material or service to be procured is available from only one person or entity. If the procurement is expected to aggregate more than \$10,000, the municipality must document its file with a justification of the need for noncompetitive procurement, and provide such documentation to the Commissioner on request;
- (iv) The procurement is for personal or professional services (including architectural or engineering services) or for any service that a university or other educational institution may render;
- (v) No responsive, responsible bids at acceptable price levels have been received after formal advertising, and the Commissioner's prior written approval has been obtained;
- (vi) The procurement is for materials or services where the price is established by law;
- (vii) The procurement is for technical items or equipment requiring standardization and interchangeability of parts with existing equipment; or
- (viii) The procurement is for experimental, developmental or research services.

**22a-482-4(h)(23) Enforcement**

If the Commissioner determines that the municipality has failed to comply with any of these procurement provisions, he or she may impose any of the following sanctions:

- (A) The grant may be terminated or annulled under Section 22a-482-4(t).
- (B) Project costs directly related to the noncompliance may be disallowed.
- (C) Payment otherwise due to the municipality of up to 10 percent may be withheld.

(D) Project work may be suspended under Sec. 22a-482-4(g) (5).

(E) A non-complying municipality may be found non-responsible or ineligible for future state funding assistance or a non-complying CONTRACTOR may be found non-responsible or ineligible for approval for future contract award under state grants.

(F) An injunction may be entered or other equitable relief afforded by a court of appropriate jurisdiction.

(G) Such other administrative or judicial action may be instituted if it is legally available and appropriate.

**22a-482-4(h)(24) Contract Enforcement**

Commissioner authority. At the request of a municipality, the Commissioner is authorized to provide technical and legal assistance in the administration and enforcement of any contract related to pollution abatement facilities for which a State grant was made and to intervene in any civil action involving the enforcement of such contracts, including contract disputes which are the subject of either arbitration or court action in accordance with the requirements of Section 22a-482-4(f)(1).

**22a-482-4 (j) CONSTRUCTION CONTRACT PROCUREMENT REQUIREMENTS**

(This section applies to construction contracts in excess of \$10,000 awarded by municipalities for any construction projects.)

**22a-482-4 (j)(1) Type of Contract**

Each contract shall be a fixed price (lump sum or unit price or a combination of the two) contract, unless the Commissioner gives advance written approval for the municipality to use some other acceptable type of contract. The

cost-plus-percentage-of-cost contract shall not be used in any event.

**22a-482-4 (j)(2) Formal Advertising**

Each contract shall be awarded after formal advertising, unless negotiations are permitted in accordance with Sec. 22a-482-4(h)(18). Formal advertising shall be in accordance with the following:

(A) Adequate public notice. The municipality will cause adequate notice to be given of the solicitation by publication in newspapers or journals of general circulation beyond the municipality's locality (statewide, generally), inviting bids on the project work and stating the method by which bidding documents may be obtained or examined. Where the estimated cost of construction is \$10 million or more, the municipality should publish the notice in trade journals of nationwide distribution. The municipality may solicit bids directly from bidders if it maintains a bidders list;

(B) Adequate time for preparing bids. Adequate time, generally not less than 30 days, must be allowed between the date when public notice is first published and the date by which bids must be submitted. Bidding documents (including specifications and drawings) shall be available to prospective bidders from the date when such notice is first published.

(C) Adequate bidding documents. The municipality shall prepare a reasonable number of bidding documents (invitations for bids) and shall furnish them upon request on a first-come, first-served basis. The municipality shall maintain a complete set of bidding documents and shall make them available for inspection and copying by any party. The bidding documents shall include:

- (i) A complete statement of the work to be performed, including necessary drawings and specifications, and the required

- completion schedule;
- (ii) The terms and conditions of the contract to be awarded;
- (iii) A clear explanation of the method of bidding and the method of evaluation of bid prices, and the basis and method for award of the contract;
- (iv) Responsibility requirements or criteria which will be employed in evaluating bidders;
- (v) The following statement:

Any contract or contracts awarded under this invitation for bids are expected to be funded in part by the State of Connecticut (Department of Environmental Protection). Neither the State of Connecticut nor any of its departments, agencies or employees is or will be a party to this invitation for bids or any resulting contract. This procurement will be subject to the requirements contained in Section 22a-482-4, (h), (j) and (o) of the regulations of Connecticut State Agencies;

- (vi) A copy of Sec. 22a-482-4, (h), (j) and (o); and
- (vii) The prevailing State Wage Determination as applicable.

(D) Sealed bids. The municipality shall provide for bidding by sealed bid and for the safeguarding of bids received until public opening.

(E) Addenda to bidding documents. If a municipality desires to amend any part of the bidding documents (including drawings and specifications) during the period when bids are being prepared, the addenda shall be communicated in writing to all firms which have obtained bidding documents at least five (5) working days prior to the bid opening.

(F) Bid modifications. A firm which has submitted a bid shall be allowed to modify or

withdraw its bid before the time of bid opening.

(G) Public opening of bids. The municipality shall provide for a public opening of bids at the place, date and time announced in the bidding documents.

(H) Award to the low, responsive, responsible bidder.

- (i) After bids are opened, the municipality shall evaluate them in accordance with the methods and criteria set forth in the bidding documents.
- (ii) The municipality may reserve the right to reject all bids. Unless all bids are rejected for good cause, award shall be made to the low, responsive, responsible bidder.
- (iii) If the municipality intends to make the award to a firm which did not submit the lowest bid, it shall prepare a written statement before any award, explaining why each lower bidder was deemed non-responsive or non-responsive. The Municipality shall retain such statement in its files and forward a copy to the Commissioner for review.
- (iv) Local laws, ordinances, regulations or procedures which are designed or which operate to give local bidders preference over other bidders shall not be employed in evaluating bids.
- (v) If an unresolved procurement review issue or a protest relates only to award of a subcontract or procurement of an item under the prime contract, and resolution of that issue or protest is unduly delaying performance of the prime contract, the Commissioner may authorize award and performance of the prime contract before resolution of the issue or protest, if the Commissioner determines that resolution of the protest will not affect the placement of the prime contract bidders and will not materially affect initial performance of the prime contract; and

that award of the prime contract is in the State's best interest, will not materially affect resolution of the protest, and is not barred by State or local law.

- (vi) The municipality shall not reject a bid as non-responsive for failure to list or otherwise indicate the selection of a subcontractor(s) or equipment, unless the municipality has unambiguously stated in the solicitation documents that such failure to list shall render a bid non-responsive and shall cause rejection of a bid.

**22a-482-4 (k) NEGOTIATION OF CONTRACT AMENDMENTS (CHANGE ORDERS)**

**22a-482-4 (k)(1)**

The Municipality is responsible for the negotiation of construction contract change orders. This function may be performed by the municipality directly or, if authorized, by its engineer. During negotiations with the CONTRACTOR the municipality shall:

- (A) Make certain that the CONTRACTOR has a clear understanding of the scope and extent of work and other essential requirements;
- (B) Assure that the CONTRACTOR demonstrates that he will make available or will obtain the necessary personnel, equipment and materials to accomplish the work within the required time; and
- (C) Assure a fair and reasonable price for the required work.

**22a-482-4 (k)(2)**

The contract price or time may be changed only by a change order. When negotiations are required, they shall be conducted in accordance with section 22a-482(k)(3) and (4) as appropriate.

The value of any work covered by a change order or of any claim for increase or decrease in the contract price shall be determined by the method set forth in paragraphs (2)(A) through (2)(C) of this section, whichever is most advantageous to the municipality.

(A) Unit prices.

(i) Original bid items. Unit prices previously approved are acceptable for pricing changes of original bid items. However, when changes in quantities exceed 15 percent of the original bid quantity and the total dollar change of that bid item is significant, the municipality shall review the unit price to determine if a new unit price should be negotiated.

(ii) New items. Unit prices of new items shall be negotiated.

(B) A lump sum to be negotiated.

(C) Cost reimbursement. The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work plus an amount to be agreed upon to cover the cost of general overhead and profit to be negotiated.

**22a-482-4 (k)(3)**

For each change order not in excess of \$100,000 the CONTRACTOR shall submit sufficient cost and pricing data to the municipality to enable the municipality to determine the necessity and reasonableness of costs and amounts proposed, and the allowability and eligibility of costs proposed.

**22a-482-4 (k)(4)**

For each change order in excess of \$100,000, the CONTRACTOR shall submit to the municipality for review sufficient cost and pricing data as described in paragraphs (4)(A) through (4)(E) of

this section to enable the municipality to ascertain the necessity and reasonableness of costs and amounts proposed, and the allowability and eligibility of costs proposed.

(A) The CONTRACTOR shall certify that proposed costs reflect complete, current, and accurate cost and pricing data applicable to the date of the change order.

(B) In addition to the specific elements of cost, the estimated amount of profit shall be set forth separately in the cost summary for fixed price change orders and a specific total dollar amount of profit will be set forth separately in the cost summary for cost reimbursement change orders.

(C) The municipality may require more detailed cost data in order to substantiate the reasonableness of proposed change order costs. The Commissioner may, on a selected basis, perform a detailed cost analysis on any change order.

(D) For costs under cost reimbursement change orders, the CONTRACTOR shall have an accounting system which accounts for such costs in accordance with generally accepted accounting principles. This system shall provide for the identification, accumulation and segregation of allowable and unallowable change orders. Allowable change order costs shall be determined in accordance with Sections 22a-482-4(a), (b), (c), (d), and (e). The CONTRACTOR must propose and account for such costs in a manner consistent with his normal accounting procedures.

(E) Change orders awarded on the basis of review of a cost element summary and a certification of complete, current, and accurate cost and pricing data shall be subject to downward renegotiation and recoupment of funds where a subsequent audit substantiates that such certification was not based on complete, current and accurate cost and pricing data.



**22a-482-4 (k)(5) Review by Commissioner.**

The municipality shall submit, before the execution of any change order in excess of \$100,000, to the Commissioner for review and approval:

- (A) The cost and pricing data the CONTRACTOR submitted;
- (B) A certification of review and acceptance of the CONTRACTOR's cost or price; and
- (C) A copy of the proposed change order.

**22a-482-4 (k)(6) Profit.**

The objective of negotiations shall be the exercise of sound business judgment and good administrative practice including the determination of a fair and reasonable profit based on the CONTRACTOR's assumption of risk and input to total performance and not merely the application of a predetermined percentage factor. For the purpose of negotiated change orders to construction contracts profit is defined as the net proceeds obtained by deducting all allowable costs (direct and indirect) from the price. The municipality should review the estimate of profit as it reviews all other elements of price.

**22a-482-4 (k)(7) Related work.**

Related work shall not be split into two amendments or change orders merely to keep it under \$100,000 and thereby avoid the requirements of (4) of this section. For change orders which include both additive and deductive items:

- (A) If any single item (additive or deductive) exceeds \$100,000 the requirements of (4) of this section shall be applicable;
- (B) If no single additive or deductive item has a value of \$100,000 but the total price of the change order is over \$100,000, the requirements

of (4) of this section shall be applicable; and

(C) If the total of additive items of work in the change order exceeds \$100,000 or the total of deductive items of work in the change order exceeds \$100,000 and the net price of the change order is less than \$100,000, the requirements of (4) of this section shall be applicable.

**22a-482-4 (1) SUBCONTRACTS UNDER CONSTRUCTION CONTRACTS.**

**22a-482-4 (1)(1)**

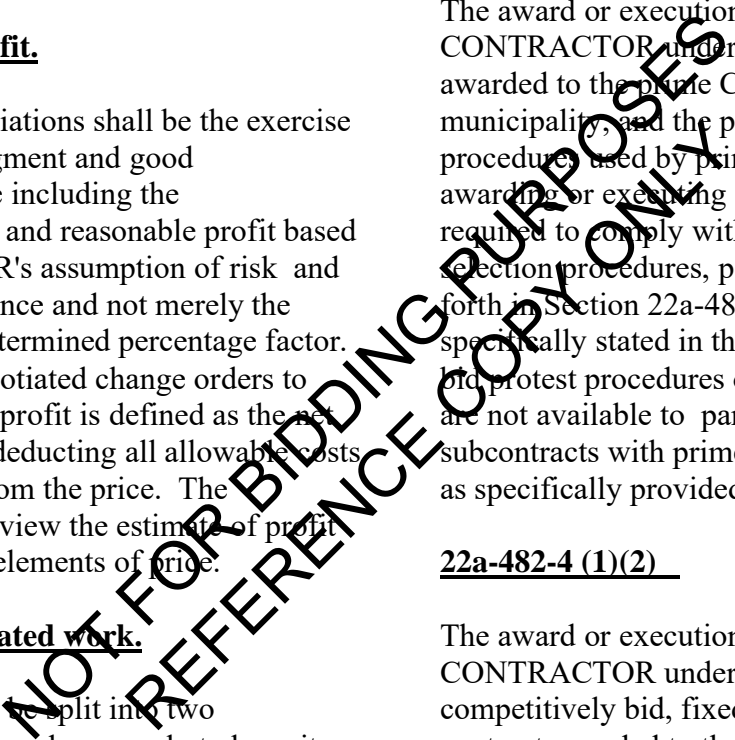
The award or execution of subcontracts by a prime CONTRACTOR under a construction contract awarded to the prime CONTRACTOR by the municipality, and the procurement and negotiation procedures used by prime CONTRACTORS in awarding or executing subcontracts are not required to comply with any of the provisions, selection procedures, policies or principles set forth in Section 22a-482-4(h) or (j) except those specifically stated in this section. In addition, the bid protest procedures of Section 22a-482-4(o) are not available to parties executing subcontracts with prime CONTRACTORS except as specifically provided in that section.

**22a-482-4 (1)(2)**

The award or execution of subcontracts by a prime CONTRACTOR under a formally advertised, competitively bid, fixed price construction contract awarded to the prime CONTRACTOR by the municipality, and the procurement and negotiation procedures used by such prime CONTRACTORS in awarding or executing such subcontracts must comply with any municipality procurement system, State small, minority and women's business policy, (Section 22a-482-4(h)(9)), negotiation of contract amendments (Section 22a-482-4(k)), and clauses (8) and (9) of Section 22a-482-4(g).

**22a-482-4 (m) PROGRESS PAYMENTS TO CONTRACTORS**

DEEP REQUIRED CONSTRUCTION  
CONTRACT PROVISIONS



**22a-482-4 (m)(1)**

Except as State law otherwise provides, municipalities must make prompt progress payments to prime CONTRACTORS and prime CONTRACTORS should make prompt progress payments to subcontractors and suppliers for eligible construction, material, and equipment costs, including those of undelivered, specifically manufactured equipment, incurred under a contract under this program. The Clean Water Fund shall only be obligated to pay the municipality amounts that the municipality is actually going to pay CONTRACTORS..

**22a-482-4 (m)(2) Conditions of progress payments.**

For purposes of this section, progress payments are defined as follows:

- (A) Payments for work in place;
- (B) Payments for materials or equipment

which have been delivered to the construction site, or which are stockpiled in the vicinity of the construction site, in accordance with the terms of the contract, when conditional or final acceptance is made by or for the municipality. The municipality shall assure that items for which progress payments have been made are adequately insured and are protected through appropriate security measures. Costs of such insurance and security are allowable costs; or

(C) Payments for undelivered specifically manufactured items or equipment (excluding off-the-shelf or catalog items) as work on them progresses. Such payments must be made if provisions therefore are included in the bid and contract documents. Such provisions may be included at the option of the municipality only when all of the following conditions exist:

- (i) The equipment is so designated in the project specifications;

- (ii) The equipment to be specifically manufactured for the project could not be readily utilized on nor diverted to another job; and
- (iii) A fabrication period of more than 6 months is anticipated.

**22a-482-4 (m)(3) Protection of progress payments made for specifically manufactured equipment.**

The municipality will assure protection of the State's interest in progress payments made for items or equipment referred to in (2)(C) of this section. The protection must be acceptable to the municipality and must take the form of:

(A) Securities negotiable without recourse, condition or restrictions, a progress payment bond, or an irrevocable letter of credit provided to the municipality through the prime CONTRACTOR by the subcontractor or supplier; and

(B) For items or equipment in excess of \$200,000 in value which are manufactured in a jurisdiction in which the Uniform Commercial Code is applicable, the creation and perfection of a security interest under the Uniform Commercial Code which is reasonably adequate to protect the interests of the municipality.

**22a-482-4 (m)(4) Limitations on progress payments for specifically manufactured equipment.**

(A) Progress payments made for specifically manufactured equipment or items shall be limited to the following:

- (i) A first payment upon submission by the prime CONTRACTOR of shop drawings for the equipment or items in an amount not exceeding 15 percent of the contract or item price plus appropriate and allowable higher tier costs; and

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

- (ii) Subsequent to the municipality's release or approval for manufacture, additional payments not more frequently than monthly thereafter up to 75 percent of the contract or item price plus appropriate and allowable higher tier costs. However, payment may also be made in accordance with the contract and grant terms and conditions for ancillary onsite work before delivery of the specifically manufactured equipment or items.

(B) In no case may progress payments for undelivered equipment or items under (4)(A)(i) or (4)(A)(ii) of this section be made in an amount greater than 75 percent of the cumulative incurred costs allocable to contract performance with respect to the equipment or items. Submission of a request for any such progress payments must be accompanied by a certification furnished by the fabricator of the equipment or item that the amount of progress payment claimed constitutes not more than 75 percent of cumulative incurred costs allocable to contract performance and, in addition, in the case of the first progress payment request a certification that the amount claimed does not exceed 15 percent of the contract or item price quoted by the fabricator.

(C) As used in this section, the term "costs allocable to contract performance" with respect to undelivered equipment or items includes all expenses of contract performance which are reasonable, allocable to the contract, consistent with sound and generally accepted accounting principles and practices consistently applied and which are not excluded by the contract.

**22a-482-4 (m)(5) Enforcement.**

A subcontractor or supplier which is determined by the Commissioner to have frustrated the intent of the provisions regarding progress payments for major equipment or specifically manufactured equipment through intentional forfeiture of its bond or failure to deliver the equipment may be

determined nonresponsible and ineligible for further work under State funded projects.

**22a-482-4 (m)(6) Contract provisions.**

Where applicable, appropriate provisions regarding progress payments must be included in each contract and subcontract.

**22a-482-4 (m)(7) Implementation.**

The foregoing progress payments policy should be implemented in invitations for bids for project funded by the Clean Water Fund. If provision for progress payments is made after contract award, it must be for consideration that the municipality deems adequate.

**22a-482-4 (n) RETENTION FROM PROGRESS PAYMENTS**

**22a-482-4 (n)(1)**

The municipality may retain a portion of the amount otherwise due the CONTRACTOR. The amount the municipality retains shall be limited to the following:

(A) Withholding of not more than 5 percent of the payment claimed until work is 50 percent complete;

(B) When work is 50 percent complete, reduction of the withholding to 2 percent of the dollar value of all work satisfactorily completed to date, provided that the CONTRACTOR is making satisfactory progress and there is no specific cause for greater withholding;

(C) When the work is substantially complete (operational or beneficial occupancy), the withheld amount shall be further reduced below 2 percent to only that amount necessary to assure completion;

(D) The municipality may reinstate up to 5 percent withholding if the municipality determines, at its discretion, that the

CONTRACTOR is not making satisfactory progress or there is other specific cause for such withholding; and

(E) The municipality may accept securities negotiable without recourse, condition or restrictions, a release of retainage bond, or an irrevocable letter of credit provided by the CONTRACTOR instead of all or part of the cash retainage.

**22a-482-4 (n)(2)**

The foregoing retention policy shall be implemented with respect to all construction projects. Appropriate provision to assure compliance with this policy must be included in the bid documents for such projects initially or by addendum before the bid submission date and as a special condition in the funding agreement or in an amendment which is issued by the Commissioner.

**22a-482-4 (n)(3)**

A municipality which delays disbursement to CONTRACTORS of funds will be required to credit to the Clean Water Fund all interest earned on those funds and will be responsible for any and all tax law violations which occur as a result of their actions.

**22a-482-4 (o) PROTESTS**

**22a-482-4 (o)(1) General**

A protest based upon an alleged violation of the procurement requirements may be filed against a municipality's procurement action by a party with an adversely affected direct financial interest. Any such protest must be received by the municipality within the time period in (2)(A) of this section. The municipality is responsible for resolution of the protest before taking the protested action, in accordance with (4) of this section, except as otherwise provided by (9) of this section or 22a-482-4(j)(2)(H)(v).

**22a-482-4 (o)(2) Time limitations**

(A) A protest under (4) of this section should be made as early as possible during the procurement process to avoid disruption of or unnecessary delay to the procurement process. A protest authorized by (4) of this section must be received by the municipality within one week after the basis for the protest is known or should have been known, whichever is earlier.

(i) In the case of an alleged violation of the specification requirements of Section 22a-482-4(h)(12), relating to specifications (e.g., that a product fails to qualify as an "or equal") a protest need not be filed prior to the opening of bids. The municipality may resolve the issue before receipt of bids or proposals through a written or other formal determination, after notice and opportunity to comment is afforded to any party with a direct financial interest.

(ii) When an alleged violation of the specification requirements of Section 22a-482-4(h)(12) first arises subsequent to the receipt of bids or proposals, the municipality must decide the protest if the protest was received by the municipality within one week of the time that the municipality's written or other formal notice is first received.

(B) A protest appeal authorized by this section must be filed in a court of competent jurisdiction within the locality of the municipality within one week after the complainant has received the municipality's determination.

(C) If a protest is mailed, the complaining party bears the risk of nondelivery within the required time period. All documents transmitted in accordance with this section shall be mailed by certified mail (return receipt requested) or otherwise delivered in a manner which will objectively establish the date of receipt. Initiation of protest actions under (4) or (5) of this section may be made by brief telegraphic notice

accompanied by prompt mailing or other delivery of a more detailed statement of the basis for the protest. Telephone protests will not be considered.

**22a-482-4 (o)(3) Other initial requirements**

(A) The initial protest document must briefly state the basis for the protest and should:

- (i) Refer to the specific portions of these regulations which allegedly prohibit the procurement action;
- (ii) Specifically request a determination pursuant to this section;
- (iii) Identify the specific procurement document(s) or portion(s) of them in issue; and
- (iv) Include the name, telephone number, and address of the person representing the protesting party.

(B) The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest which may be adversely affected by the determination of the protest (all bidders or proposers who appear to have a substantial and reasonable prospect of receiving an award if the protest is denied or sustained) and to the Commissioner.

**22a-482-4 (o)(4) Municipality determination**

(A) The municipality is responsible for the initial resolution of protests based upon alleged violations of the procurement requirements.

(B) When the municipality receives a timely written protest, it must defer the protested procurement action in accordance with (7) of this section and:

- (i) Afford the complaining party and interested parties an opportunity to present arguments in support of their views in writing or at a conference or

other suitable meeting (such as a city council meeting);

- (ii) Inform the complainant and other interested parties of the procedures which the municipality will observe for resolution of the protest;
- (iii) Obtain an appropriate extension of the period for acceptance of the bid and bid bond(s) of each interested party, where applicable (failure to agree to a suitable extension of such bid and bid bond(s) by the party which initiated the protest shall be cause for summary dismissal of the protest by the municipality or the Commissioner); and
- (iv) Promptly deliver (by certified mail, return receipt requested, or by personal delivery) its written determination of the protest to the complaining party and to each other participating party.

(C) The municipality's determination must be accompanied by a legal opinion addressing issues arising under State, or local law, if any and, when construction is involved, by an engineering report, if appropriate.

(D) The municipality should decide the protest as promptly as possible - generally within 3 weeks after receipt of a protest, unless extenuating circumstances require a longer period of time for proper resolution of the protest.

**22a-482-4 (o)(5) Procedures**

(A) Where resolution of an issue properly raised with respect to a procurement requirement necessitates prior or collateral resolution of a legal issue arising under State or local law, and such law is not clearly established in published legal decisions of the State or other relevant jurisdiction, the municipality may rely upon:

- (i) An opinion of the municipality's legal counsel adequately addressing the issue;
- (ii) The established or consistent practice of the municipality, to the extent

- appropriate;
- (iii) The law of other local jurisdictions as established in published legal decisions; r
- (iv) If none of the foregoing adequately resolve the issue, published decisions of the Comptroller General of the United States (U.S. General Accounting Office) or of the Federal or State courts addressing Federal or State requirements comparable to procurement requirements of this section.

(B) A party who submits a document subsequent to initiation of a protest proceeding must simultaneously furnish each of the other parties with a copy of such document.

(C) The procedures established herein are not intended to preclude informal resolution or voluntary withdrawal of protests. A complainant may withdraw its appeal at any time, and the protest proceedings shall thereupon be terminated.

(D) A protest may be dismissed for failure to comply with procedural requirements set forth in this section.

**22a-482-4 (o)(6) Burden of proof**

(A) In protest proceedings, if the municipality proposes to award a formally advertised, competitively bid, fixed price contract to a party who has submitted the apparent lowest price, the party initiating the protest will bear the burden of proof.

(B) In protest proceedings:

- (i) If the municipality proposes to award a formally advertised, competitively bid, fixed price contract to a bidder other than the bidder which submitted the apparent lowest price, the municipality will bear the burden of proving that its determination concerning responsiveness is in accordance with these regulations; and
- (ii) If the basis for the municipality's

determination is a finding of nonresponsibility, the municipality must establish and substantiate the basis for its determination and must adequately establish that such determination has been made in good faith.

**22a-482-4 (o)(7) Deferral of procurement action**

Upon receipt of a protest, the municipality must defer the protested procurement action (for example, defer the issuance of solicitations, contract award, or issuance of notice to proceed under a contract) until ten days after delivery of its determination to the participating parties. The municipality may receive or open bids at its own risk, if it considers this to be in its best interest. When the Commissioner has received a written protest, he or she must notify the municipality promptly to defer its protested procurement action until notified of the formal or informal resolution of the protest.

**22a-482-4 (o)(8) Enforcement**

Noncompliance with the procurement provisions by the municipality shall be cause for enforcement action in accordance with one or more of the provisions of Section 22a-482-4(h)(23).

**22a-482-4 (o)(9) Limitation**

A protest may not be filed with respect to the following:

(A) Issues not arising under the procurement provisions;

(B) Issues relating to the selection of a consulting engineer, provided that a protest may be filed only with respect to the mandatory procedural requirements of Section 22a-482-4(i);

(C) Issues primarily determined by local law or ordinance and as to which the Commissioner, upon review, determines that there is no

contravening state requirement and that the municipality's action has a rational basis;

(D) Provisions of State regulations applicable to direct State contracts unless such provisions are explicitly referred to or incorporated in these regulations;

(E) Basic project design determinations; or

(F) Award of subcontracts or issuance of purchase orders under formally advertised, competitively bid, lump sum construction contracts. However, protest may be made to alleged violations of the following:

- (i) Specification requirements of Section 22a-482-4(h)(12); or
- (ii) Provisions applicable to the procurement procedures, negotiation or award of subcontracts or issuance of purchase orders under Section 22a-482-4(1).
- (ii) Provisions applicable to the procurement procedures, negotiation or award of subcontracts or issuance of purchase orders under Section 22a-482-4(1).

**ADDITIONAL REQUIRED CONTRACT PROVISIONS**

Construction Safety and Health Standards

It is a condition of this Contract, and shall be made a condition of each Subcontract entered into pursuant to this Contract, that the CONTRACTOR and any subcontractor shall not require any laborer or mechanic employed in performance of the Contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety, as determined under construction safety and health standards (Title 29, Code of Federal Regulations, Part 1518 - published in the Federal Register on April 17, 1971) promulgated by the United States Secretary of Labor, in accordance with section 107 of the Contract Work Hours and Safety Standards Act (83 Stat. 96).

Service of Process

The CONTRACTOR, if not a resident or a domestic entity of the State of Connecticut, or, in the case of a partnership, the partners, if not residents, hereby appoints the Secretary of State of the State of Connecticut, and his successors in office as agent for service of process for any action arising out of or as a result of this Contract; such appointment to be evidenced by the appropriate filing with the office of the Secretary of the State of Connecticut and to be in effect throughout the life of this Contract, and six (6) years thereafter.

Substitution of Securities for Retainage

The CONTRACTOR is advised of the provisions of section 3-112a of the General Statutes of the State of Connecticut, Revision of 1966, which is quoted as follows:

SECTION 3-112a. Substitution of securities for retainages on state contracts. (a) Under any contract made or awarded by the state, or by any public department or official thereof, the CONTRACTOR may, from time to time withdraw the whole or any portion of the amount retained for payments to the CONTRACTOR pursuant to the terms of the contract, upon depositing with the comptroller (1) United States treasury bonds, United States treasury notes, United States treasury certificates of indebtedness or United States treasury bills, or (2) bonds or notes of the state of Connecticut or (3) bonds of any political subdivision in the state of Connecticut. No amount shall be withdrawn in excess of the market value of the securities at the time of deposit or of the par value of such securities, whichever is lower. (b) The comptroller shall, on a regular basis, collect all interest or income on the obligations so deposited and shall pay the same, when and as collected, to the CONTRACTOR who deposited the obligations. If the deposit is in the form of coupon bonds, the comptroller shall deliver each coupon as it matures to the

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

CONTRACTOR. (c) Any amount deducted by the state, or by any public department or official thereof, pursuant to the terms of the contract, from the retainages due the CONTRACTOR, shall be deducted, first from that portion of the retainage for which no security has been substituted, then from the proceeds of any deposited security. In the latter case, the CONTRACTOR shall be entitled to receive interest, coupons or income only from those securities which remain after such amount has been deducted.

Requirements for Timely Payments

The CONTRACTOR is advised of the provisions of section 49-41a of the General Statutes of the State of Connecticut, Revision of 1958, which is quoted as follows:

SECTION 49-41a Enforcement of payment by general CONTRACTOR to subcontractor and by subcontractor to his subcontractors. (a) When any public work is awarded by a contract for which a payment bond is required by section 49-41, the contract for the public work shall contain the following provisions: (1) A requirement that the general CONTRACTOR, within forty-five days after payment to the CONTRACTOR by the state or a municipality, pay any amounts due any subcontractor, whether for labor performed or for materials furnished, when the labor or materials have been included in a requisition submitted by a CONTRACTOR and paid by the state or a municipality; (2) a requirement that the general CONTRACTOR shall include in each of its subcontracts a provision requiring each subcontractor to pay any amounts due any of its subcontractors, whether for labor performed or materials furnished, within twenty days after such subcontractor receives a payment from the general CONTRACTOR which encompasses labor or materials furnished by such subcontractor.

(b) If payment is not made by the general CONTRACTOR or any of its subcontractors in accordance with such requirements, the subcontractor shall set forth his claim against the

general CONTRACTOR and the subcontractor of a subcontractor shall set forth its claim against the subcontractor through notice by registered or certified mail. Ten days after receipt of that notice, the general CONTRACTOR shall be liable to the subcontractor, and the subcontractor shall be liable to the subcontractor, for interest on the amount due and owing at the rate of one per cent per month. In addition, the general CONTRACTOR, upon written demand of its subcontractor, or the subcontractor, upon written demand of its subcontractor, shall be required to place funds in the amount of the claim, plus interest of one per cent, in an interest-bearing escrow account in a bank in this state, provided the general CONTRACTOR or subcontractor may refuse to place the funds in escrow on the grounds that the subcontractor has not substantially performed the work according to the terms of his or its employment. In the event that such general CONTRACTOR or subcontractor refuses to place such funds in escrow, and the party making a claim against it under this section is found to have substantially performed its work in accordance with the terms of its employment in any arbitration or litigation to determine the validity of such claim, then such general CONTRACTOR or subcontractor shall pay the attorney's fees of such party.

(c) No payment may be withheld from a subcontractor for work performed because of a dispute between the general CONTRACTOR and another CONTRACTOR or subcontractor.

(d) This section shall not be construed to prohibit progress payments prior to final payment of the contract and is applicable to all subcontractors for material or labor whether they have contracted directly with the general CONTRACTOR or with some other subcontractor on the work.

Language not current  
Maximum Retainage Allowed

SECTION 49-41b. Release of payments



on public works construction projects. When any public work is awarded by a contract for which a payment bond is required by section 49-41 and such contract contains a provision requiring the general or prime CONTRACTOR under such a contract to furnish a performance bond in the full amount of the contract price, the awarding authority shall be prohibited from withholding more than five per cent from any periodic or final payment which is otherwise properly due to the general or prime CONTRACTOR under the terms of such contract, and any such general or prime CONTRACTOR shall be prohibited from withholding more than five per cent from any periodic or final payment which is otherwise due any subcontractor.

#### Nondiscrimination

The CONTRACTOR agrees and warrants that in the performance of this Contract CONTRACTOR will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age marital status, national origin, sex, mental retardation, or physical disability, including, but not limited to, blindness, unless it is shown by such CONTRACTOR that such disability prevents performance of the Work involved in any manner prohibited by the laws of the United States or of the State of Connecticut, and further agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission concerning the employment practices and procedures of the CONTRACTOR as relates to the provisions of Public Act 78-148 and as required by law.

This Contract is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill promulgated June 16, 1971 and, as such, this contract may be cancelled, terminated or suspended by the State Labor Commissioner for violation of or non-compliance with said Executive Order No. Three or any state or federal law concerning nondiscrimination ,

notwithstanding that the Labor Commissioner is not a party to this Contract. The parties to this Contract as part of the consideration hereof, agree that Executive Order No. Three is incorporated herein by reference and made a part hereof. The parties agree to abide by said Executive Order and agree that the State Labor Commissioner shall have continuing jurisdiction in respect to contract performance in regard to nondiscrimination, until the Contract is completed or terminated prior to completion.

The CONTRACTOR or subcontractor agrees, as part consideration hereof, that this Contract is subject to the Guidelines and Rules issued by the State Labor Commissioner to implement Executive Order No. Three, and that CONTRACTOR will not discriminate in CONTRACTOR's employment practices or policies will file all reports as required, and will fully cooperate with the State of Connecticut and the State Labor Commissioner.

The Governor's Executive Order No. Three and the Guidelines and Rules implementing the Governor's Executive Order No. Three are included elsewhere in the Contract Documents.

Language Not Current  
Construction, Alteration or Repair of Public Works Projects by the State or Political Subdivision

The CONTRACTOR shall comply with the provisions of Section 31-53 of the General Statutes of the State of Connecticut, Revision of 1967, a part of which is quoted as follows:

SECTION 31-53(a). Each contract for the construction, alteration or repair of any public works projects by the State or any of its agents, or by any political subdivision of the State or any of its agents, shall contain the following provision: "The wages paid on an hourly basis to any mechanic, laborer or workman employed upon the work herein contracted to be done and the amount of

payment or contribution paid or payable on behalf of each such employee welfare fund, as defined in subsection (h) of this section, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works contract work is being constructed. Any CONTRACTOR who is not obligated by agreement to make payment or contribution on behalf of such employees to any such employee welfare fund shall pay to each employee as part of his wages the amount of payment or contribution for his classification on each pay day."

Listing All Employment Openings With the Office of the Connecticut State Employment Service

This contract is executed subject to the Governor's Executive Order No. 17, a copy of which is attached hereto and is hereby made a part of this Agreement. Governor's Executive Order No. 17 requires, inter alia, that all CONTRACTORS and subcontractors shall list all employment openings with the office of the Connecticut State Employment Service in the area where the work is to be performed or where the services are to be rendered. Failure of the CONTRACTOR to conform with the requirements of the Governor's Executive Order No. 17 and any orders, rules or regulations issued pursuant thereto, shall be a basis for termination of this agreement by the State.

Residents Preference in Work on Other Public Facilities

The CONTRACTOR shall comply with the provisions of Section 31-52a of the General Statutes of the State of Connecticut, Revision of 1967, a part of which is quoted as follows:

SECTION 31-52a(b). Each contract for any such project covered by this section under the supervision of the state or any of its agents shall contain the following provision: "In the employment of mechanics, laborers or

workmen to perform the work specified herein, preference shall be given to residents of the state who are, and continuously for at least six months prior to the date hereof have been, residents of this state, and if no such person is available then to residents of other states."

Education, Welfare, and Public Health Tax (Sales and Use Tax)

The CONTRACTOR's attention is called to Regulation 12-426-18 as amended, promulgated by the Sales and Use Tax Division of the State Department of Revenue Services, which provided for the exemption of the sales and use tax on the purchase of such materials and supplies as are to be physically incorporated in and become a permanent part of the project being performed under this contract. The CONTRACTOR may avail himself of the savings of this tax and shall take this exemption into account in calculating his bid for this work. The CONTRACTOR or Subcontractor shall furnish his suppliers with a completed certificate, in the following prescribed form:

Project Sign (When DEP/EPA funds are applicable)

The CONTRACTOR shall erect a sign at the Site identifying the Project and indicating that the Connecticut Department of Environmental Protection is providing funding for the construction of the Project. The sign shall be erected within 14 days after the Notice to Proceed has been issued, and shall be in accordance with these specifications and the enclosed project sign detail. The sign shall be furnished, erected, and maintained by the CONTRACTOR at a location designated by the Engineer. The names of the Commissioner of Environmental Protection and the Governor of the State of Connecticut as shown on the sign shall be kept current, and shall be revised within 30 days of such notice to the CONTRACTOR that a change has occurred, at no cost to the OWNER. No additional information shall be placed on the project sign beyond that

shown in the project sign detail. If the OWNER desires to erect a supplemental sign with additional detail regarding the Project or its sponsors, that sign shall be placed in such a manner that the project sign is not obscured from public view.

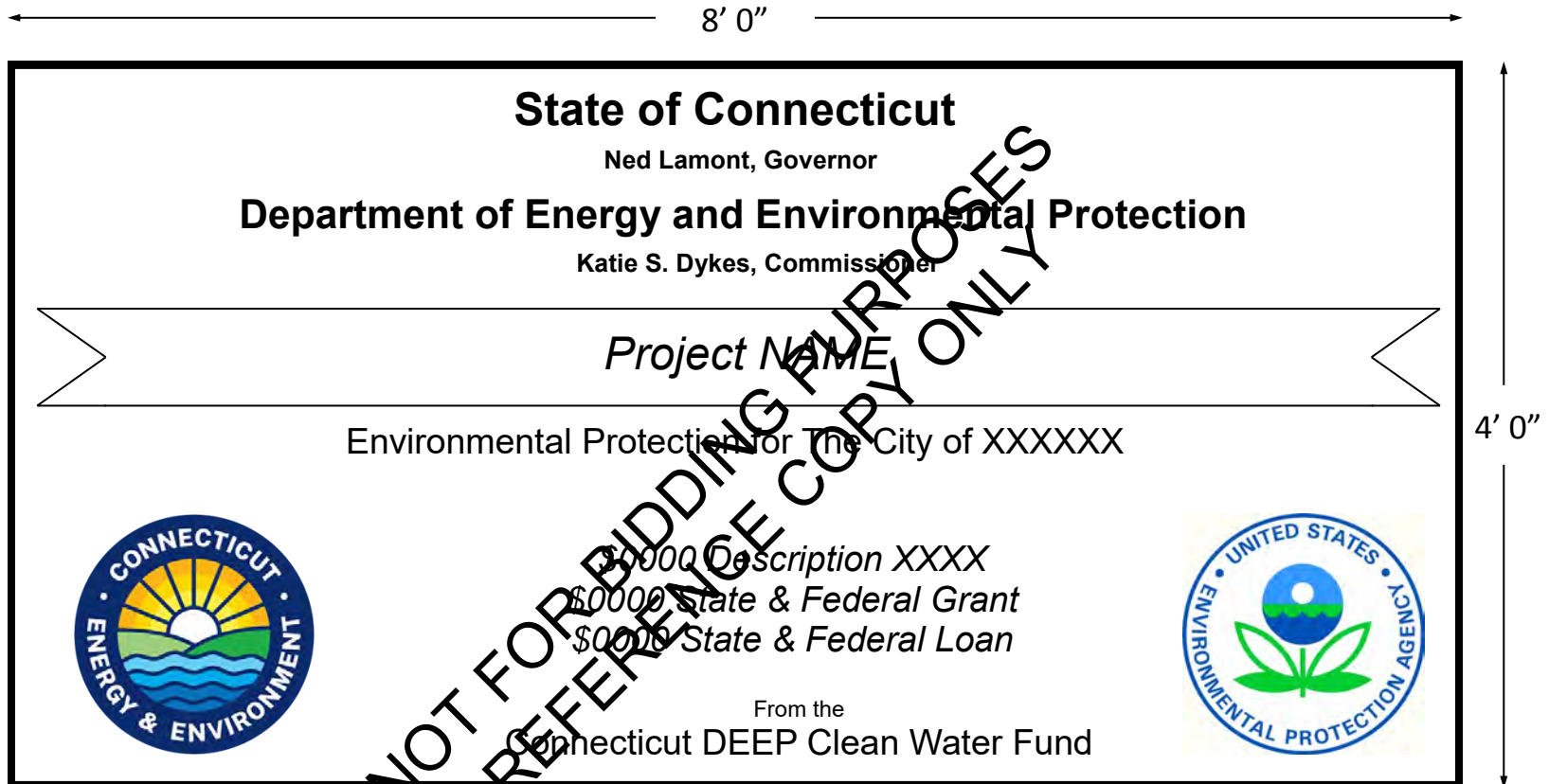
The sign shall be constructed of 3/4" minimum thickness exterior plywood (A-B) or APA high density overlay plywood (HDO). All fasteners shall be of a rustproof nature. The sign face background shall consist of at least three (3) coats of white outdoor enamel paint. The sign shall be fastened securely in an upright position and maintained in a location on the Site clearly visible to the public and to visitors to the Site.

**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**

THIS PAGE INTENTIONALLY BLANK

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

# CONNECTICUT CLEAN WATER FUND PROJECT SIGN



Color Scheme:  
 Lettering in black  
 Background in white  
 Banner in yellow  
 Logo as pictured

Provide adequate supports for sign as site conditions may require. Keep sign a proper distance above prevailing grade to permit public viewing.

**April 2023 DRAFT 5**

Revised January 2019

THIS PAGE INTENTIONALLY BLANK

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

Contractor's Exempt Purchase Certificate

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



\*\*\*\*\*

CONTRACTOR'S EXEMPT PURCHASE CERTIFICATE

Town \_\_\_\_\_ Grant or Loan Identifier \_\_\_\_\_

Contract Name \_\_\_\_\_ Contract Number \_\_\_\_\_

I hereby certify under penalties of (FALSE STATEMENT) that I am engaged in the performance of a construction contract funded by the following named exempt agency or organization:

Department of Environmental Protection  
79 Elm Street, Hartford, Connecticut

That such agency is, to the best of my knowledge and belief, exempt from the Education, Welfare and Public Health Tax (Sales and Use Tax) because it is a branch of the State Government, in accordance with Regulation 12-426-18 of the Sales and Use Tax Division of the State Department of Revenue Services.

That this certificate is issued to cover all purchases of material and supplies to be physically incorporated in and become a permanent part of the project referred to above.

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

\_\_\_\_\_  
Signature of CONTRACTOR \_\_\_\_\_ Date

Name of Firm: \_\_\_\_\_

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

\*\*\*\*\*

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

Connecticut General Statutes

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

The following subsections are set forth here as required by section 4a-60 of the Connecticut General Statutes and shall be set forth in all Subcontracts:

(a) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut. The contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved; (1) the contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the commission; (2) the contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the commission advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, 46a-68e and 46a-68f; (4) the contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor as relate to the provisions of this section and section 46a-56.

(b) If the contract is a public works contract, the contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works project.

The following subsections are set forth herein as required by section 4a-60a of the Connecticut General statutes and shall be set forth in all Subcontracts:

(1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or of the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor

union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said commission pursuant to section 46a-56; and (4) the contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor which relate to the provisions of this section and section 46a-56.

Executive Orders of the Governor

This Contract and all Subcontracts are subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of this Contract as if they had been fully set forth in it. This provision shall be set forth and incorporated in all Subcontracts.

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

Executive Order No. Three

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



STATE OF CONNECTICUT  
BY HIS EXCELLENCY  
THOMAS J. MESKILL  
GOVERNOR  
EXECUTIVE ORDER NO. THREE

WHEREAS, sections 4-61d (b) and 4-11a of the 1969 supplement to the general statutes require nondiscrimination clauses in state contracts and subcontracts for construction on public buildings, other public works and goods and services and

WHEREAS, section 4-61e (c) of the 1969 supplement to the general statutes requires the labor department to encourage and enforce compliance with this policy by both employers and labor unions, and to promote equal employment opportunities, and

WHEREAS, the government of this state recognizes the duty and desirability of its leadership in providing equal employment opportunity, by implementing these laws.

NOW, THEREFORE, I, THOMAS J. MESKILL, Governor of the State of Connecticut, acting by virtue of the authority vested in me under section twelve of article fourth of the constitution of the state, as supplemented by section 3-1 of the general statutes, do hereby ORDER and DIRECT, as follows, by this Executive Order:

I

The labor commissioner shall be responsible for the administration of this Order and shall adopt such regulations as he deems necessary and appropriate to achieve the purposes of this Order. Upon the promulgation of this Order, the commissioner of finance and control shall issue a directive forthwith to all state agencies, that henceforth all state contracts and subcontracts for construction on public buildings, other public works and goods and services shall contain a provision rendering such contract or subcontract subject to this Order, and that such contract or subcontract may be canceled, terminated or suspended by the labor commissioner for violation of or noncompliance with this Order or state and federal laws concerning nondiscrimination, notwithstanding that the labor commissioner is not a party to such contract or subcontract.

II

Each contractor having a contracting containing the provisions prescribed in section 4-11a of the 1969 supplement to the general statutes, shall file and shall cause each of his subcontractors to file, compliance reports with the contracting agency or the labor commissioner, as may be directed. Such reports shall be filed within such time and shall contain such information as to employment policies and statistics of the contractor and each subcontractor, and shall be in such form as the labor commissioner may prescribe. Bidders or prospective contractors or subcontractors may be required to state whether they have participated in any previous contract subject to the provisions of this Order of any preceding similar Order, and in that event to submit on behalf of themselves and their proposed subcontractors compliance reports prior to or as an initial part of their bid or negotiation of a contract.

III

Whenever the contractor or subcontractor has a collective bargaining agreement or contract or understanding with a labor organization or employment agency as defined in section 31-122 of the general statutes, the compliance report shall identify the said organization or agency and the contracting agency or the labor commissioner may require a compliance report to be filed with the contracting agency or the labor commissioner, as may be directed, by such organization or agency, signed by an authorized officer or agent of such organization or agency, with supporting information, to the effect that the signer's practices and policies including but not limited to matters concerning personnel, training, apprenticeship, member-ship, grievance and representation, and upgrading, do not discriminate on grounds of race, color, religious creed, age, sex or national origin, or ancestry of any individual, and that the signer will either affirmatively cooperate in the implementation of the policy and provisions of this Order, or that it consents and agrees that recruitment, employment and the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and provisions of the Order.

IV

The labor commissioner may by regulation exempt certain classes of contracts, subcontracts or purchase order from the implementation of this Order, for standard commercial supplies or raw materials, for less than specified amounts of money or numbers of workers or for subcontractors below a specified tier. The labor commissioner may also provide by regulation for the exemption of facilities of a contractor which are in all respects separate and distinct from activities of the contractor related to the performance of the state contract, provided that such exemption will not interfere with or impede the implementation of this Order, and provided further, that in the absence of such an exemption, all facilities shall be covered by the provisions of this Order.

V

Each contracting agency shall be primarily responsible for obtaining compliance with the regulations of the labor commissioner with respect to contracts entered into by such agency or its contractors. All contracting agencies shall comply with the regulations of the labor commissioner in discharging their primary responsibility for securing compliance with the provisions of contracts and otherwise with the terms of this Order and of the regulations of the labor commissioner issued pursuant to this Order. They are directed to cooperate with the labor commissioner and to furnish the labor commissioner such information and assistance as he may require in the performance of his functions under this Order. They are further directed to appoint or designate from among the personnel of each agency, compliance officers, whose duty shall be to seek compliance with the objectives of this Order by conference, conciliation, mediation, or persuasion.

VI

The labor commissioner may investigate the employment practices and procedures of any state contractor or sub-contractor and the practices and policies of any labor organization or employment agency hereinabove described, relating to employment under the state contract, as concerns nondiscrimination by such organization or agency as hereinabove described, or the labor commissioner may initiate such investigation by the appropriate contract agency, to determine whether or not the contractual provisions, hereinabove specified or statutes of the state respecting they have been violated. Such investigation shall be conducted in accordance with the procedures established by the labor commissioner and the investigating agency shall report to the labor commissioner any action taken or recommended.

VII

The labor commissioner shall receive and investigate or cause to be investigated complaints by employees or prospective employees of a state contractor or subcontractor or member or applicants for membership or apprenticeship or training in a labor organization or employment agency hereinabove described, which allege discrimination contrary to the contractual provisions specified hereinabove or state

statutes requiring nondiscrimination in employment opportunity. If this investigation is conducted for the labor commissioner by a contracting agency, that agency shall report to the labor commissioner what action has been taken or is recommended with regard to such complaints.

#### VIII

The labor commissioner shall use his best efforts directly and through contracting agencies, or other interested federal, state and local agencies, contractors and all other available instrumentalities, including the commission on human rights and opportunities, the executive committee on human rights and opportunities, and the apprenticeship council under its mandate to provide advice and counsel to the labor commissioner in providing equal employment opportunities to all apprentices and provide training, employment and upgrading opportunities for disadvantaged workers, in accordance with section 31-51 (d) of the 1969 supplement to the general statutes, to cause any labor organization or any employment agency whose members are engaged in work under government contracts or referring workers or providing or supervising apprentice-ship or training for or in the course of work under a state contract or subcontract to cooperate in the implementation of the purposes of this Order. The labor commissioner shall in appropriate cases notify the commission on human rights and opportunities or other appropriate state or federal agencies whenever it has reason to believe that the practices of any such organization or agency violate equal employment opportunity requirements or state or federal law.

#### IX

The labor commissioner or any agency officer or employee in the executive branch designated by regulation of the labor commissioner may hold such hearings, public or private, as the labor commissioner may deem advisable for compliance, enforcement or educational purposes under this Order.

#### X

(a) The labor commissioner may hold or cause to be held hearings, prior to imposing ordering or recommending the imposition or penalties and sanctions under this Order. No order for disbarment or any contractor from further state contracts shall be made without affording the contractor an opportunity for a hearing. In accordance with such regulations as the labor commissioner may adopt, the commissioner or the appropriate contracting agency may

- (1) Publish or cause to be published the names of contractors or labor organizations or employment agencies as hereinabove described which it has concluded have complied or failed to comply with the provisions of this Order or the regulations of the labor commissioner in implementing this Order.
- (2) Recommend to the commission on human rights and opportunities that in cases in which there is substantial or material violation or threat thereof of the contractual provision or related state statutes concerned herein, appropriate proceedings be brought to enforce them, including proceedings by the commission on its own motion under chapter 563 of the general statutes and the enforcing, within the limitations or applicable law, of organizations, individuals or groups who prevent directly or indirectly or seek to prevent directly or indirectly compliance with the provisions of this Order.
- (3) Recommend that criminal proceedings be brought under chapter 939 of the general statutes.
- (4) Cancel, terminate, suspend or cause to be canceled, terminated, or suspended in accordance with law any contract or any portion or portions thereof for failure of the contractor or subcontractor to comply with the nondiscrimination provisions of the contract. Contracts may be canceled, terminated, suspended absolutely or their continuance conditioned upon a pro-gram for future compliance approved by the contracting agency.
- (5) Provide that any contracting agency shall refrain from entering into any further contract or extensions or modifications of existing contracts with any contractor until he has satisfied the labor commissioner that he has established and will carry out personnel and employment policies compliant with this Order.
- (6) Under regulations prescribed by the labor commissioner each contracting agency shall make reasonable efforts within a reasonable period of time to secure compliance with the contract provisions of this Order by methods of conciliation, mediation or persuasion, before other proceedings shall be instituted under this Order or before a state contract shall be cancelled or terminated in whole or in part for failure of the contractor or subcontractor to comply with the contract provisions of state statute and this Order.

(b) Any contracting agency taking any action authorized by this Order, whether on its own motion or as directed by the labor commissioner or pursuant to his regulations shall promptly notify him of such action. Whenever the labor commissioner makes a determination under this order, he shall promptly notify the appropriate contracting agency and other interested federal, state and local agencies of the action recommended. The state and local agency or agencies shall take such action and shall report the results thereof to the labor commissioner within such time as he shall specify.

#### XI

If the labor commissioner shall so direct, contracting agencies shall not enter into contracts with any bidder or prospective contractor unless he has satisfactorily complied with the provisions of this Order, or submits a program for compliance acceptable to the labor commissioner, or if the labor commissioner so authorizes, to the contracting agency.

#### XII

Whenever a contracting agency cancels or terminates a contract, or a contractor has been disbarred from further government contracts because of noncompliance with the contract provisions with regard to nondiscrimination, the labor commissioner or the contracting agency shall rescind such disbarment, upon the satisfaction of the labor commissioner that the contractor has purged himself of such noncompliance and will thenceforth carry out personnel and employment policies of non-discrimination in compliance with the provision of this Order.

#### XIII

The labor commissioner may delegate to any officer, agency or employee in the executive branch any function or duty of the labor commissioner under this Order except authority to promulgate regulations of a general nature.

This Executive Order supplements the Executive Order issued on September 28, 1967. All regulations, orders, instructions, designations and other directives issued heretofore in these premises, including these issued by the heads of various departments or agencies under or pursuant to prior order or statute, shall remain in full force and effect, unless and until revoked or superseded by appropriate authority, to the extent that they are not inconsistent with this Order.

This Order shall become effective thirty days after the date of this Order.

Dated at Hartford, Connecticut, this 16th day of June, 1971.

\_\_\_\_\_  
GOVERNOR

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

GUIDELINES AND RULES  
OF STATE LABOR COMMISSIONER  
IMPLEMENTING GOVERNOR'S EXECUTIVE  
ORDER NO. THREE

SEC. 1 PERSONS AND FIRMS SUBJECT TO EXECUTIVE ORDER NO. THREE AND GUIDELINES AND RULES.

- a. Every contractor, or subcontractor as defined in Sec. 2 hereof, supplier of goods or services, vendor, bidder and prospective contractor or subcontractor, having ten or more employees as defined in Sec. 3 of these guidelines, having or entering into or bidding to enter into any type of contractual relationship with the State of Connecticut or any of its agencies, boards, commissions, departments or officers, and if the consideration, cost, subject matter or value of the goods or services exceeds \$5,000.00, shall be subject to the Governor's Executive Order No. Three and these Guidelines and Rules.
- b. A copy of the Governor's Executive Order No. Three and of these Guidelines and Rules shall be available to each said contractor, subcontractor, supplier, vendor, bidder and prospective contractor and subcontractor, and the said Executive Order No. Three and these Guidelines and Rules shall be incorporate by reference and made a part of the contract, purchase order, agreement or document concerned. A copy of the Executive Order and of these Guidelines and Rules shall be furnished to a contracting party or bidder on request.
- c. All persons, partnerships, associations, firms, corporations and other entities having less than ten employees as defined in Sec. 3 at the time of the bid and execution of the contract and continuing through the performance of the contract are exempt from the provisions of the said Executive Order and these Guidelines and Rules. All contracts, subcontracts, purchase orders and agreements wherein the consideration ins \$5,000.00 or less shall be exempt from Executive Order No. Three and from these Guidelines and Rules.

SEC. 2 SUBCONTRACTORS

As used herein, subcontractors are persons, partnerships, associations, firms or corporations or other entities having contractual relationship with a contractor who in turn has a contract with the State of Connecticut or any of its agencies, board, commissions or departments. Subcontractors below this tier are exempt from the Executive Order and from these Guidelines and Rules.

SEC. 3 EMPLOYEES

As used herein, employees are persons working full or part-time irrespective of personal classification whose wages, salaries, or earnings are subject to the Federal Insurance Contribution Act and/or to Federal Withholding Tax as a matter of law (whether in fact or not any actual withholding occurs in a given case), in an employee-employer relationship at the time of bid, contract execution, or offer or acceptance, and/or during any time thereafter during the existence of the performance period of the contract to the conclusion thereof.

SEC. 4 REPORTS

- a. Prior to the execution of the contract or prior to acceptance of a bid, as the case may be, the contractor, subcontractor, bidder or vendor shall file a report with the State Labor Commissioner, which report shall be complete and contain all of the information therein prescribed. The report shall be on Form E.O.3-1, a facsimile of which is attached hereto and made a part hereof, or in lieu thereof the contractor, subcontractor, bidder or vendor shall submit a detailed report containing all of the information required in Form E.O. 3-1.
- b. The Labor Commissioner may require the filing of additional reports prior to final payment or prior to any renewal or extension of the contract and during the duration of the contract at such times as the Commissioner may, in his discretion, from time to time deem necessary. The Labor Commissioner may require the filing of additional information or reports, and the contractor, subcontractor, bidder or vendor shall furnish said information or report within the times prescribed by the Labor Commissioner.
- c. The Labor Commissioner may, at his discretion, also require timely statistical reports on the number of minority employees employed or to be employed in the performance of the contract, and the Labor Commissioner may de-fine such minority groups or persons.
- d. Reports filed pursuant to these Guidelines and Rules in Implementation of Executive Order No. Three are not public records subject to public inspection, but may be inspected only by federal and state officials having jurisdiction and authority to investigate matters of this type. All federal and state agencies empowered by law to investigate matters relating to Executive order No. Three shall have access to these reports for inspection or copying during regular business hours.
- e. Any person who willfully, wantonly or through negligence destroys or permits to be destroyed, alters or allows to be altered after filing any reports submitted in compliance herewith shall be subject to penalties as pre-scribed by law.

SEC. 5. MANDATORY CLAUSES IN DOCUMENTS

- a. All contracts shall contain the following provisions verbatim:

This contract is subject in the provisions of Executive Order No. Three of Governor Thomas J. Meskill promulgated June 16, 1971 and, as such, this contract may be canceled, terminated or suspended by the state labor commissioner for violation of or noncompliance with said Executive Order No. Three, or any state or federal law concerning nondiscrimination, notwithstanding that the labor commissioner is not a party to this contract. The parties to this contract, as part of the consideration hereof, agree that said Executive Order No. Three is incorporated herein by reference and made a part hereof. The parties agree to abide by said Executive Order and agree that the state labor commissioner shall have continuing jurisdiction in respect to contract performance in regard to nondiscrimination, until the contract is completed or terminated prior to completion.

The (contractor), (subcontractor), (bidder), (vendor) agrees, as part consideration hereof, that his (order) (contract) is subject to the Guidelines and Rules issued by the state labor commissioner to implement Executive Order No. Three, and that he will not discriminate in his employment practices or policies, will file all reports as required, and will fully cooperate with the State of Connecticut and the state labor commissioner.

These provisions are in addition to and not in lieu of other clauses required by law.\*

\*N.B. The above paragraphs contain requirements additional to those set forth in July 16, 1971 directive to state agencies.

b. Every purchase order or like form submitted by a vendor or bidder, as applicable, shall contain the following clause verbatim:

Vendor agrees, as part of the consideration hereof, that this order is subject to the provisions of Executive Order No. Three and the Guidelines and Rules issued by the Labor Commissioner implementing said Order as to nondiscrimination, and vendor agrees to comply therewith.

c. Where preprinted contract forms have been prescribed by federal authority and the rules of the federal agency prohibit the alteration thereof, the compliance officer of the State agency concerned shall submit to the Labor Commissioner a suggested short form or addendum acceptable to the federal agency, and such cases, after approval by the Labor Commissioner, said clause may be substituted.

#### SEC. 6. COOPERATION OF STATE AGENCIES, BOARDS AND COMMISSIONS

Every agency, board, commission and departments of the State of Connecticut shall cooperate with the Labor Commissioner in the implantation of Executive Order No. Three and shall furnish such information and assistance as the Labor Commissioner may from time to time request.

#### SEC. 7. INVESTIGATIONS, COMPLAINTS

The Labor Commissioner may initiate an investigation upon receipt of a complaint alleging discrimination. The Labor Commissioner may request that an investigation be conducted by the State agency which is the party to the contract in question. Investigations shall be conducted in accordance with acceptable legal standards, safeguarding the rights of all parties involved, and obtaining all of the relevant facts necessary for a complete determination of the issues. If the Labor Commissioner is not satisfied with the investigation or any part thereof he may order it to continue or to proceed further.

#### SEC. 8. HEARINGS

The Labor Commissioner or officers designed by the heads of the State agencies, board and commissions may conduct hearings on complaints filed. Hearings shall be held only after a report of the complaint has been filed with the Labor Commissioner and after a hearing on the complaint has been authorized or directed by the Labor Commissioner. Hearings shall be in accordance with the accepted principles of administrative law. All parties shall be afforded the opportunity to a full, fair, impartial and complete hearing, the opportunity to examine and cross examine witnesses and to be present at all sessions of the hearing. If any party is vulnerable to a charge of a violation of the law, he shall be afforded the opportunity to procure counsel who say be present at the hearing.

#### SEC. 9. EQUAL EMPLOYMENT OPPORTUNITIES

All State contracting agencies, employers, and labor unions shall use their best efforts to provide equal employment opportunities to all apprentices and to provide training, employment and upgrading opportunities for disadvantaged workers in accordance with section 31-51 (d) of the General Statutes.

#### SEC. 10. DUTIES OF CONTRACTING AGENCIES.

All State contracting agencies shall be responsible for compliance with said Executive Order and with all state and federal laws relating to equal employment opportunities. All contracting agencies conducting investigations for the Labor Commissioner pursuant to Executive Order No. Three and these Guidelines and Rules shall report to the Labor Commissioner the action taken or recommended with regard to each complaint filed. Each officer of the executive department, every commissioner, and each executive head of each State agency, board and commission in the executive branch of the State government is expected to assume the responsibility of seeing to complete compliance with the Governor's Executive Order No. Three and shall forthwith take steps to assure and guarantee that there shall be no discrimination within their departments, agencies, boards or commissions in the performance of any state contract or subcontract on the basis of race, creed, color, sex, age, national origin or national ancestry, or in any way in violation of any state or federal law relating thereto.

BY VIRTUE OF THE AUTHORITY VESTED IN ME PURSUANT TO EXECUTIVE ORDER NO. THREE EFFECTIVE JULY 16, 1971, AND THE GENERAL STATUTES OF CONNECTICUT.

Date in Wethersfield, Connecticut this 19th day of Nov., 1971,

Jack Fusari  
Labor Commissioner

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

Executive Order No. Sixteen

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



STATE OF CONNECTICUT  
BY HIS EXCELLENCY  
JOHN G. ROWLAND  
GOVERNOR  
EXECUTIVE ORDER NO. SIXTEEN

WHEREAS, the State of Connecticut recognizes that workplace violence is a growing problem that must be addressed; and

WHEREAS, the State is committed to providing its employees a reasonably safe and healthy working environment, free from intimidation, harassment, threats, and/or violent acts; and

WHEREAS, violence or the threat of violence by or against any employee of the State of Connecticut or member of the public in the workplace is unacceptable and will subject the perpetrator to serious disciplinary action up to and including discharge and criminal penalties.

NOW, THEREFORE, I, John G. Rowland, Governor of the State of Connecticut, acting by virtue of the authority vested in me by the Constitution and by the statutes of this state, do hereby ORDER and DIRECT:

That all state agency personnel, contractors, subcontractors, and vendors comply with the following Violence in the Workplace Prevention Policy:

The State of Connecticut adopts a statewide zero tolerance policy for workplace violence.

Therefore, except as may be required as a condition of employment <sup>3</sup>/<sub>4</sub>

No employee shall bring into any state worksite any weapon or dangerous instrument as defined herein.

No employee shall use, attempt to use, or threaten to use any such weapon or dangerous instrument in a state worksite.

No employee shall cause or threaten to cause death or physical injury to any individual in a state worksite.

Weapon means any firearm, including a BB gun, whether loaded or unloaded, any knife (excluding a small pen or pocket knife), including a switchblade or other knife having an automatic spring release device, a stiletto, and police baton or nightstick or any martial arts weapon or electronic defense weapon.

Dangerous instrument means any instrument, article, or substance that, under the circumstances, is capable of causing death or serious physical injury.

Violation of the above reasonable work rules shall subject the employee to disciplinary action up to and including discharge.

That each agency must prominently post this policy and that all managers and supervisors must clearly communicate this policy to all state employees.

That all manager and supervisors are expected to enforce this policy fairly and uniformly.

That any employee who feels subjected to or witnesses violent, threatening, harassing, or intimidating behavior in the workplace immediately report the incident or statement to their supervisor, manager, or human resources office.

That any employee who believes that there is a serious threat to their safety or the safety of others that requires immediate attention notifies proper law enforcement authorities and his or her manager or supervisor.

That any manager or supervisor receiving such a report shall immediately contact their human resources office to evaluate, investigate and take appropriate action.

That all parties must cooperate fully when questioned regarding violations of this policy.

That all parties be advised that any weapon or dangerous instrument at the worksite will be confiscated and that there is no reasonable expectation of privacy with respect to such items in the workplace.

That this order applies to all state employees in the executive branch.

That each agency will monitor the effective implementation of this policy.

That this order shall take effect immediately.

Dated in Hartford, Connecticut, this fourth day of August, 1999.

/s/John G. Rowland, Governor

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

Executive Order ~~MOSES~~ Seventeen

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

STATE OF CONNECTICUT  
THOMAS J. MESKILL  
GOVERNOR  
EXECUTIVE ORDER NO. SEVENTEEN

WHEREAS, Section 31-247 of the General statutes of Connecticut as amended requires the maintaining of the established free services of the Connecticut State Employment Service to both employers and prospective employees and

WHEREAS, Section 31-5 of the General Statutes of Connecticut requires that no compensation or fee shall be charged or received directly or indirectly for the services of the Connecticut State Employment Service and

WHEREAS, large numbers of our citizens who have served in the Armed Forces of our nation are returned to civilian life in our state and seeking employment in civilian occupations and

WHEREAS, we owe a duty as well as gratitude to these returning veterans including the duty to find suitable employment for them and

WHEREAS, many of our handicapped citizens are fully capable of employment and are entitled to be placed in suitable employment and

WHEREAS, many of the citizens of our state who are unemployed are unaware of the job openings and employment opportunities which do in fact exist in our state and

WHEREAS, notwithstanding the free services of the Connecticut State Employment Service, many of our Connecticut employers do not use its free services or do not avail themselves fully of all the services offered.

NOW, THEREFORE, I, Thomas J. Meskill, Governor of the State of Connecticut, acting by virtue of the authority vested in me under the fourth article of the Constitution of the State and in accordance with Section 3-1 of the General Statutes, do hereby ORDER and DIRECT, as follows, by this Executive Order:

I

The Labor Commissioner shall be responsible for the administration of this Order and shall do all acts necessary and appropriate to achieve its purpose. Upon the promulgation of this Order, the Commissioner of Finance and Control shall issue a directive forthwith to all state agencies that henceforth all state contracts and subcontracts for construction on public buildings, other public works and goods and services shall contain a provision rendering such contract or subcontract subject to this Order, and that such contract or subcontract may be canceled, terminated or suspended by the Labor Commissioner for violation of or noncompliance with this Order, notwithstanding that the Labor Commissioner is not a party to such contract or subcontract.

II

Every contractor and subcontractor having a contract with the state or any its agencies, boards, commissions, or departments, every individual partnership, corporation, or business entity having business with the state or who or which seeks to do business in the state, and every bidder or prospective bidder who submits a bid or replies to an invitation to bid on any state contract shall list all employees openings with the office of the Connecticut State Employment Service in the area where the work is in be performed or where the services are to be rendered.

III

All state contracts shall contain a clause which shall be a condition of the contract that the contractor and any subcontractor holding a contract directly under the contractor shall list all employment openings with the Connecticut State Employment Service. The Labor Commissioner may allow exceptions to listings of employment openings which the contractor proposes to fill from within its organization from employees on the rolls of contractor on the date of publication of the invitation to bid or the date on which the public announcement was published or promulgated advising of the program concerned.

IV

Each contracting agency of the state shall be primarily responsible for obtaining compliance with this Executive Order. Each contracting agency shall appoint or designate from among its personnel one or more persons who shall be responsible for compliance with the objectives of this Order

V

The Labor Commissioner shall be an is hereby empowered to inspect the books, records, payroll and personnel data of each individual or business entity subject to this Executive Order and may hold hearings or conference, formal or informal, in pursuance of the duties and responsibilities hereunto delegated to the Labor Commissioner.

VI

The Labor Commissioner or any agency officer or employee in the executive branch designated by regulation of the Labor Commissioner may hold such hearings, public or private, as the Labor Commissioner may deem advisable for compliance, enforcement or educational purposes under this Order.

VII

(a) The Labor Commissioner may hold or cause to be held hearings, prior to imposing, ordering, or recommending the imposition of penalties and sanctions under this Order. In accordance herewith, the Commissioner or the appropriate contracting agency may suspend, cancel, terminate, or cause to be suspended, canceled, or terminated in accordance with law any contract or any portion or portions thereof for failure of the contractor or subcontractor to comply with the listing provisions of the contract. Contracts may be canceled, terminated, suspended absolutely or their continuance conditioned upon a program for future compliance approved by the contracting agency.

(b) Any contracting agency taking any action authorized by this Order, whether on its own motion or as directed by the Labor Commissioner, shall promptly notify him of such action. Whenever the Labor Commissioner makes a determination under this Order, he shall promptly notify the appropriate contracting agency of the action recommended. The agency shall report the results to the Labor Commissioner promptly.

VIII

If the Labor Commissioner shall so direct, contracting agencies shall not enter into contracts with any bidder or prospective contractor unless he has satisfactorily complied with the provisions of this Order.

This Order shall become effective sixty days after the date of this Order.

Dated at Hartford, Connecticut, this 15th day of February, 1973.

\_\_\_\_\_  
Governor

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

Clean Water Fund Memo  
2019-003 for Construction

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



### Clean Water Fund Memorandum (2019-003)

## Disadvantaged Business Enterprise (DBE) Subcontractor Participation on Clean Water Fund (CWF) Projects for Construction Projects

### I. PURPOSE

The municipality, through its prime contractor must make specified good faith efforts to attain the DBE goals as specified in this document in Section III. This is an administrative condition of the U.S. Environmental Protection Agency (EPA) Grant which funds CWF projects.

This memorandum supersedes the **Clean Water Fund Memorandum (2016-063)**

### II. GOVERNING STATUTE OR REGULATION

**General Compliance (Federal), 40 CFR, Part 33:** The municipality, through its prime contractor must comply with the requirements of EPA's Program for Utilization of DBEs.

### III. EPA REQUIREMENTS

The following clause shall be included in all Construction Contract documents and amendments for goods and services to be funded under the CWF:

The requirement for DBE subcontractor participation, expressed as a percentage of the total eligible contract amount, shall be a minimum of 8.0 percent with the following makeup:

**Minority Business Enterprise (MBE): 3.0 percent**  
**Woman Business Enterprise (WBE): 5.0 percent**

Failure to meet or exceed the required percentage or submit acceptable documentation of the six good faith efforts may render a bid non-responsive and may cause the bid to be rejected.

### IV. THE SIX GOOD FAITH EFFORTS AS SPECIFICALLY DEFINED BY EPA

The Six Good Faith Efforts are required methods employed by all Connecticut Department of Energy and Environmental Protection (DEEP) CWF recipients to ensure that all DBEs have the opportunity to compete for procurements funded by DEEP financial assistance dollars. The prime contractor is expected to employ the six good faith efforts throughout the entire project to insure that the DBE percentages are maintained or exceeded in the event that one DBE subcontractor needs to be substituted for another.

1. Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local and Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.

2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
5. Use the services and assistance of the Small Business Administration (SBA) (Federal) and the Minority Business Development Agency of the Department of Commerce.
6. If the prime contractor awards subcontracts, require the prime contractor to take the above steps.

The prime contractor's certification as a DBE has no effect on this requirement. Therefore, if the prime contractor is a DBE, the Six Good Faith Efforts defined above must be employed in the procurement of subcontracts to be secured to achieve the MBE 3.0% and WBE 5.0% participation.

## V. CERTIFICATION

A DBE must be certified at the time that the subcontract for their services is executed. A business that is pending new certification, recertification, or whose certification has expired cannot be counted toward the goals.

In the case where a subcontractor DBE is certified as both a MBE and a WBE (a woman who is also a member of a minority class):

1. The prime contractor may count the entire value of the subcontract as either a MBE or a WBE.
2. The prime contractor may choose to split the subcontract between the MBE and the WBE categories to fulfill both goals. If the prime contractor chooses this route:
  - a. They must indicate the dollars to be apportioned to the categories either on the face of the copy of the fully executed subcontract submitted to the Connecticut Department of Energy and Environmental Protection (DEEP) or by some other written method.
  - b. The certification submitted to DEEP must indicate that the principal of the subcontractor is both a woman and a minority.
  - c. For a certification that only identifies the subcontractor as a DBE, additional documentation is required as proof of dual status. In the case of Connecticut Department of Transportation (CTDOT), the detailed information page within their online database suffices as proof.

## VI. ACCEPTABLE CERTIFICATION OPTIONS

1. **Connecticut Department of Administrative Services (DAS)** - DEEP will continue to accept DAS certification until such time as other State entities are identified whose certification processes meet the EPA criteria. DAS will only certify Connecticut based firms that meet the criteria under Connecticut General Statute 4a-60g.
2. **CTDOT** - Companies that desire to do business with CTDOT as well as the DEEP should seek CTDOT certification which will be accepted by the DEEP. DBE firms are advised that the certification process can take 90 days to complete. CTDOT will certify both in state as well as out of state firms.

3. **EPA** - In the event an entity cannot be certified by CTDOT as a DBE, that entity should seek certification with EPA. Such entities must provide EPA with evidence from CTDOT denying certification.
4. **SBA** - Certification is available to companies under the Woman Owned Small Business (WOSB) program and the SBA 8(a) Business Development Program ([www.sba.gov/8abd/](http://www.sba.gov/8abd/)) which has a net worth ceiling of \$250,000 for initial applicants.
5. **Other states certification** - Prime contractors may utilize certification from other states. Such certification must specify the DBE designation. Where there is no DBE certification option within a state, the instance must be presented to the DEEP Financial Administrator assigned to the project for consideration on a per case basis.

## VII. DBE COMPLIANCE PROCESS

1. Within fourteen (14) calendar days after bid opening the prime contractor (apparent low bidder) shall complete and submit two copies of the DEEP Subcontractor Verification Form along with the DBE certification for each subcontractor to the municipality. The municipality must then submit one copy of these documents to DEEP as part of the authorization to award request.
2. Once DEEP authorizes the municipality to award the contract, the prime contractor is required to submit two copies of the executed DBE subcontracts to the municipality who submits one copy to the DEEP Financial Administrator.
3. No payment requests will be processed by DEEP until the executed copies of the subcontracts and the DBE certifications are on file in the DEEP office.
4. Should the prime contractor not meet the goals, documentation of good faith efforts will be required to be submitted to the DEEP Municipal Facilities Wastewater Engineer for consideration that the good faith effort was extensive enough to warrant the acceptance of a lower goal for the specific contract in question.
5. In the event that a DBE subcontractor is substituted for another during the project, two copies of the executed subcontract along with the corresponding DBE certification for the substitute are submitted to the municipality who forwards one copy of each to the DEEP Financial Administrator.
6. If additional construction costs are approved by DEEP, the prime contractor employs the good faith efforts defined above to meet the goals for the new total eligible contract amount.

## VIII. DAS PREQUALIFICATION CERTIFICATION FOR DBE SUBCONTRACTORS

At time that the prime contractor submits copies of the executed DBE subcontracts to the municipality, two copies of the current DAS Prequalification Certificate for each DBE subcontractor whose subcontract value is equal to or greater than \$500,000 must also be submitted. In turn, the municipality is required to submit one copy of each DBE Prequalification Certification to the DEEP Financial Administrator. Suppliers of material or products who do not do installation or construction work are not subject to the DAS Construction Contractor prequalification requirement.

## IX. SUBMISSION OF THIS FORM

This form is to be signed by the contractor or the contractor's authorized representative. The form is then submitted to the municipality's representative for signature. The municipality includes the form as part of the authorization to award request to DEEP.

I hereby verify that I have read and understand the DBE requirements in this memorandum and will procure subcontracts whose percentages will meet or exceed the minimums listed above.

Contract Name \_\_\_\_\_

Name of Prime Contractor \_\_\_\_\_

Name and Title of Authorized Officer \_\_\_\_\_

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Town Official and Title \_\_\_\_\_

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

## X. DEFINITIONS

CGS: Connecticut General Statutes

CTDOT: Connecticut Department of Transportation

CWF: Clean Water Fund

DAS: Connecticut Department of Administrative Services

DBE: Disadvantaged Business Enterprise

DEEP: Connecticut Department of Energy and Environmental Protection

EPA: Environmental Protection Agency (Federal)

MBE: Minority Business Enterprise

SBA: Small Business Administration (Federal)

WBE: Woman Business Enterprise

WOSB: Woman Owned Small Business (Federal program - SBA)

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

June 19, 2019  
Date

Denise Ruzicka  
Denise Ruzicka, Director  
Water Planning and Management Division  
Bureau of Water Protection & Land Reuse



The completion and submission of this form does not constitute a contractual agreement between the prime contractor and the named subcontractor, but is solely for documenting proposed compliance with DBE participation under the DEEP's Clean Water Fund (CWF).

Prime Contractor Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**

---

Contract Language Required  
Pursuant to Public Acts  
88-251 and 89-253

NOT FOR BIDDING PURPOSES  
REFERENCE COPY

---

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



Contract Language Required

Pursuant to Public Acts 88-351 and 89-253

(a) For the purposes of this section, "minority business enterprise" means any small contractor or supplier of materials fifty-one percent or more of the capital stock, if any, of assets of which is owned by a person or persons: (1) Who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise and (3) who are members of a minority, as such term is defined in subsection (a) of Conn. Gen. Stat. § 32-9n; and "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations. "Good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements.

For the purpose of this Section, "Commission" means the Commission on Human Rights and Opportunities.

(b) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved in a manner prohibited by the laws of the United States or of the state of Connecticut. The contractor further agrees to take affirmative action to insure that applicants with job related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation, or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved; (2) the contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the commission; (3) the contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the commission advising the labor union or worker's representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the contractor agrees to comply with each provision of this section and Conn. Gen. Stat. §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to Conn. Gen. Stat. §§ 46a-56, as amended by Section 5 of Public Act 89-253, 46a-68e and 46a-68f; (5) the contractor agrees to provide the commission on human rights and opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor as

related to the provisions of this section and section 46a-56. If the contract is a public works contract, the contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works projects.

(c) Determination of the contractor's good faith efforts shall include but shall not be limited to the following factors: the contractor's employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.

(d) The contractor shall develop and maintain adequate documentation, in a manner prescribed by the commission, of its good faith efforts.

(e) The contractor shall include the provisions of subsection (b) of this section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the state and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the commission. The contractor shall take such action with respect to any such subcontract or purchase order as the commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Conn. Gen. Stat. § 46a-56, as amended by Section 5 of Public Act 89-253; provided if such contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the commission, the contractor may request the state of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the state and the state may so enter.

(f) The contractor agrees to comply with the regulations referred to in this section as they exist on the date of this contract and as they may be adopted or amended from time to time during the term of this contract and any amendments thereto.

Eff. 7/1/89

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

# Wage Rate Requirements

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

## WAGE RATE REQUIREMENTS

00820.02 WAGE RATE REQUIREMENTS. Wage rates on this Project shall conform to the following:

A. CONNECTICUT REQUIREMENTS. The State of Connecticut requires minimum wage rates to be paid if the value of work done on this Contract exceeds \$400,000 for new construction or exceeds \$100,000 for remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project. These wage rates, if required for this Project, are included in Document 00830.

It is the responsibility of the contractor before bid opening to request, if necessary, any additional information on State Wage Rates for those tradespeople who are not covered by the applicable State Wage Determination but who may be employed for the proposed work under this contract.

B. CERTIFIED PAYROLL/COMPLIANCE STATEMENT. The CONTRACTOR may be required, for work under this Contract, to submit weekly to the Engineer a certified payroll and compliance statement consistent with the requirements of public act 93-392. (Section 31-53 of Connecticut General Statutes, as amended.) A copy of this form, if submittal is required, is included following this page.

C. FEDERAL REQUIREMENTS. It is the responsibility of the CONTRACTOR to obtain the most recent Federal Wage Determination. For further information on Federal Wage Determinations, the CONTRACTOR shall contact the U.S. Department of Labor in Washington D.C. Information may also be obtained from the Connecticut State Library, U.S. Regional Depository.

It is also the responsibility of the CONTRACTOR to request, before bid opening if necessary, any additional information on Federal Wage Determination for those tradespeople who are not covered by the applicable Federal Wage Determination but who may be employed for the proposed Work under this Contract.

D. RATES TO BE PAID. The minimum wage rates to be paid on this Project shall be as shown on either the State of Connecticut Labor Department Wage Rate Schedule or the Federal Wage Determination, whichever is higher. The State of Connecticut Department of Environmental Protection has determined that all construction on this Project shall be covered by the heavy construction rates and classifications.

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

---

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

Davis Bacon Act

---

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



**THE CONTRACTOR SHALL COMPLY WITH THE WAGE AND REPORTING REQUIREMENTS SPECIFIED IN THE DAVIS-BACON ACT.**

**Davis Bacon Act:**

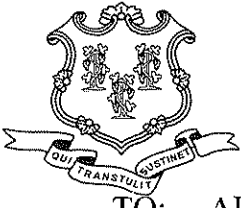
All monthly pay requests for funding shall contain a certification from the principal or prime Contractor which states at a minimum the following:

1. The project name, location, contract number and pay period.
2. That all of the U.S. Department of Labor Davis-Bacon requirements have been complied with by the undersigned as principal contractor, and by each subcontractor employing mechanics or laborers at the site of the work;
3. That I, the undersigned, pay or supervise the payment of the persons employed by (insert name of construction company), principal contractor;
4. That the payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
5. That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract or a subcontract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part;
6. That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
7. The undersigned acknowledges that the falsification of any of the above certifications may subject the undersigned to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code. It shall be the responsibility of the Bidder, before the Bid Opening, to request any additional information on Federal Wage Rate requirements relating to the Davis-Bacon Act.

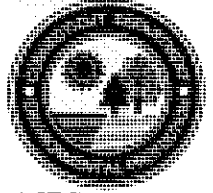
**Wage Rates:**

It shall be the responsibility of the Bidder, before the Bid Opening, to request any additional information on Federal Wage Rate requirements relating to the Davis-Bacon Act.

1. Since this project falls under the Davis-Bacon Act, the higher of Connecticut State and Federal Wage Rates apply.
2. It shall be the responsibility of the Bidder, before Bid Opening, to request any additional information on Wage Rates for trades people not covered by the applicable Wage Decisions Package, but who may be employed for the proposed work under this Contract. All construction associated with this Contract will be governed by Heavy and Highway Rates.



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Clean Water Fund Memorandum (2010-0816)



August 16, 2010

TO: ALL CONNECTICUT MUNICIPALITIES AND ENGINEERING CONSULTANTS

RE: DAVIS BACON REQUIREMENTS FOR CONSTRUCTION CONTRACTS

As of 10/30/2009, all financing agreements that utilize the Clean Water Fund must comply with Davis-Bacon Act (DB) wage requirements. DB wage requirements are federally established rates to be paid to laborers and mechanics on public works projects. Application of the DB requirements extends to all assistance agreements executed on or after October 30, 2009. If a project began construction prior to 10/30/2009, but is financed through an assistance agreement executed on or after 10/30/2009, DB requirements will apply to all construction that occurs on or after 10/30/2009 and through the completion of construction. This requirement is in addition to compliance with Connecticut's Prevailing Wage rates.

All monthly pay requests for funding shall contain a certification from the principal or prime contractor which states at a minimum the following:

1. The project name, location, contract number and pay period.
2. That all of the U.S. Department of Labor Davis-Bacon requirements have been complied with by the undersigned as principal contractor, and by each subcontractor employing mechanics or laborers at the site of the work;
3. That I, the undersigned, pay or supervise the payment of the persons employed by (insert name of construction company), principal contractor;
4. That the payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
5. That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract or a subcontract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part;
6. That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
7. The undersigned acknowledges that the falsification of any of the above certifications may subject the undersigned to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

It is not necessary to submit the state and federal certified payroll forms with each pay request to DEP provided the above certification has been submitted.

If utility relocation work by private utility companies is required for the project (generally for projects involving separation of storm drainage from sanitary sewers), all utility companies must comply with DB regardless of the funding source. The only exception to this requirement is when 1) there is no state or federal funding for the utility relocation work, and 2) the utility company relocates their utilities before the municipality commences construction of the CWF project.

If you have any questions, please contact George Hicks at 860-424-3752.

*Paul E. Stacey*  
Paul E. Stacey, Director  
Planning & Standards Division  
Bureau of Water Protection & Land Reuse

Attachment: Outline of Davis Bacon Requirements

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

## Outline of the Davis-Bacon Act Requirements

Determine the type of construction (serves as the basis for prevailing wage classification)

- **Residential** -single family houses, townhouses, and apartment buildings up to four stories
- **Building** - sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies. Also apartment buildings greater than 4 stories, parking garages, service stations, office buildings, fire stations, etc.
- **Highway** - roads, streets, highways, sidewalks, runways, parking areas, and other paving work not incidental to other construction
- **Heavy** - those projects, generally public works, which cannot be classified as Residential, Building, or Highway Construction

### General Requirements

- Obtain Wage Determinations: <http://www.wdol.gov> Wage Determinations online
- Davis-Bacon Wage Determinations
  - Established by geographic area (usually a county or a group of counties)
  - Published for the 4 types of construction: Residential, Building, Highway, Heavy (classifications may be combined in many areas)
  - May be modified periodically
  - Must be included in bid documents and contract for construction with appropriate Federal labor standards provisions
- Verify prime contractor and all subcontractor eligibility against GSA Debarment List
- On-line access at: <http://epls.mnet.gov>
- Make record of verification to contract file
- Bid/contract documents must contain:
  - Applicable Davis-Bacon Wage Determination (WD)
  - Federal labor standards clauses

### Wage Determination "Lock-in" Rules

- Competitive bidding: Modifications published less than 10 days before bid opening may be disregarded if found there is not sufficient time to notify bidders, and a report is made to contract file
- Lock-in at bid opening provided contract is awarded within 90 days
- Must update wage determination if contract award is more than 90 days after bid opening
- Once a Davis-Bacon wage rate has been "locked," it stays in effect for the duration of the project.

### Municipal Responsibilities

- Ensure bid/contract documents contain applicable wage determination and labor clauses (prime and subcontractors)
- Ensure no contracts are awarded to ineligible contractors

- Ensure submission of certified payrolls
- Ensure sole source contracts contain labor standards
  
- Conduct onsite interviews with laborers and mechanics
  - Minimum once within 2 weeks of initial payroll and once within 2 week of final payroll per contractor
- Spot-check payrolls/related records
  - Minimum once within 2 weeks of initial payroll and once within 2 week of final payroll per contractor
- Periodically review use of apprentices and trainees
- Report potential violations to EPA DB contact and DOL Wages and Hours.District Office
- Maintain full documentation
- Maintain records 3 years after completion

#### Prime Contractor's Responsibilities

- Prepares and submits certified payrolls for its own employees.
- Submits certified payrolls for all subcontractor employees.
- Reviews wage determination and requests additional classifications when needed.
- Provides subcontractors with forms and guidance concerning DB requirements.
- Provides DB Poster and interviewer confidential access to employees on site.
- Instructs lower-tier subcontractors of their responsibilities

#### Subcontractor's Responsibilities

- Prepares & submits certified payrolls each week for its own employees.
- Instructs any lower-tier subcontractors of responsibilities.
- Reviews wage determination and requests additional classifications if needed.
- Provides DB Poster and interviewer confidential access to employees on-site.

#### Federal and State Wage Rates Apply

- Contract must contain both Federal and State wage decisions/contract standards
- Employers must pay higher of two rates
- Payrolls must carry Federal statement of compliance (backside of payroll form WH-347) and the State's statement of compliance

#### Job Site Postings

- Notice to All Employees (WH1321)
- Davis-Bacon wage decision OR Project Wage Rate Sheet
- Protected from elements
- Accessible to all laborers and mechanics
- Easy for contractors and subs to know what rates they must pay
- Easy for laborers and mechanics to see whether they are paid properly
- Easy for the contract administrators reviewing payroll reports

- Should be prepared only after the wage decision has been locked in
- Davis-Bacon wage decision OR Project Wage Rate Sheet
- Should be prepared only after the wage decision has been locked in

#### Certified Payroll

- Form WH 347
- Compliance statement (w/original signature of corporate official or designee)
- Payrolls required weekly
- Identify first and final payroll
- Prime contractor reviews prior to submission
- Payroll retention is 3 years

#### Violations of DB

- Misclassification of laborers and mechanics.
- Failure to pay full prevailing wage, including fringe benefits, for all hours worked (including overtime hours).
- Inadequate recordkeeping, such as not counting all hours worked by an individual in two or more classifications during a day.
- Failure to maintain a copy of bona fide apprenticeship program and individual registration documents for apprentices.
- Failure to submit certified weekly payrolls.
- Failure to post the Davis-Bacon poster and applicable wage determination

All alleged violations should be reported to the EPA DB Coordinator and to Department of Labor

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**Connecticut Department of Energy and Environmental Protection  
Payroll Certification-Davis Bacon Compliance**

Project name: \_\_\_\_\_

Project location: \_\_\_\_\_

Contract number: \_\_\_\_\_

Pay period: \_\_\_\_\_ to \_\_\_\_\_

I, \_\_\_\_\_, the undersigned, pay or supervise the payment of the persons employed by \_\_\_\_\_, prime contractor.

1. All of the U.S. Department of Labor Davis-Bacon requirements have been complied with by the undersigned as principal contractor, and by each subcontractor employing mechanics or laborers at the site of the work.
2. The payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
3. Each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract or a subcontract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 5;
4. Each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

The undersigned acknowledges that the falsification of any of the above certifications may subject the undersigned to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code

Name: \_\_\_\_\_ (please type or print).

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

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

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



Prohibition on Certain  
Telecommunication and Video  
Surveillance Services or  
Equipment in SRF Programs

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF WATER

**MEMORANDUM**

**SUBJECT:** Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment in the SRF Programs

**FROM:** Kiri Anderer, P.E., Acting Associate Branch Chief  
Infrastructure Branch, OGWDW

KIRSTEN  
ANDERER

Digitally signed by KIRSTEN  
ANDERER  
Date: 2020.12.11 07:55:52  
-05'00'

Michael Deane, Branch Chief  
State Revolving Fund Branch, OWM

MICHAEL DEANE

Digitally signed by MICHAEL  
DEANE  
Date: 2020.12.11 17:56:38 -05'00'

**TO:** SRF Branch Chiefs  
Regions 1-10

Effective August 13, 2020, recipients and subrecipients of EPA funded assistance agreements, including borrowers under EPA funded revolving loan funds, must comply with regulations at [2 CFR 200.216](#), *Prohibition on certain telecommunication and video surveillance services or equipment*, implementing section 889 of [Public Law 115-232](#). The regulation prohibits the use of Federal funds to procure (enter into, extend, or renew contracts) or obtain equipment, systems, or services that use “covered telecommunications equipment or services” identified in the regulation as a substantial or essential component of any system, or as critical technology as part of any system. Prohibitions extend to the use of Federal funds by recipients and subrecipients to enter into a contract with an entity that “uses any equipment, system, or service that uses covered telecommunications equipment or services” as a substantial or essential component of any system, or as critical technology as part of any system. Certain equipment, systems, or services, including equipment, systems, or services produced or provided by entities subject to the prohibition are recorded in the [System for Award Management](#) exclusion list.

As described in section 889 of Public Law 115-232, covered telecommunications equipment or services includes:

- Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- Telecommunications or video surveillance services provided by such entities or using such equipment.

- Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

### **Applicability in the State Revolving Fund (SRF) Programs**

Clean Water and Drinking Water SRF (CWSRF and DWSRF) programs may not expend equivalency funds for these products on or after August 13, 2020. States must ensure that equivalency assistance agreements include the telecommunications prohibition condition [provided by EPA's Office of Grants and Debarment](#) (OGD) in OGD's most recent EPA General Terms and Conditions. The condition must also be in construction contracts associated with equivalency assistance agreements.

There is no exhaustive list of components and services that fall under the prohibition. State SRF managers and local assistance recipients should exercise due diligence and be particularly mindful of project components with internet or cellular connections. For example, recipients should be mindful of automatic meter reading (AMR) technology and advanced metering infrastructure (AMI), instrumentation control systems (e.g. process control systems, distributed control systems and programmable logic controls), and security cameras and other electronic security measures to ensure that those items are procured from a non-excluded entity. Items included in the prohibition are not eligible SRF costs, and the SRF programs cannot reimburse borrowers for these costs.

The prohibition also applies to the CWSRF administrative funds (if states are billing those costs to the federal CWSRF capitalization grant) and the four DWSRF set asides. States should be mindful of items such as cell phones, computers, and mobile WiFi routers or hotspots funded by those accounts.

If you have questions on the implementation of this grant condition, please contact Michael Deane at [Deane.Michael@epa.gov](mailto:Deane.Michael@epa.gov) or Kiri Anderson at [Anderson.Kirsten@epa.gov](mailto:Anderson.Kirsten@epa.gov).

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**Eff: 8/13/2020**

**Per EPA Guidance, the following language must be inserted in all bid/Specification documents to ensure proper compliance to the Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment:**

**Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment**

This term and condition implements 2 CFR 200.216 and is effective for obligations and expenditures of EPA financial assistance funding on or after 8/13/2020. As required by 2 CFR 200.216, EPA recipients and subrecipients, including borrowers under EPA funded revolving loan fund programs, are prohibited from obligating or expending loan or grant funds to procure or obtain; extend or renew a contract to procure or obtain; or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities). Recipients, subrecipients, and borrowers also may not use EPA funds to purchase: a. For the purpose of public safety, security of government facilities, physical security surveillance of critical Page 4 of 29 infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities). b. Telecommunications or video surveillance services provided by such entities or using such equipment. c. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country. Consistent with 2 CFR 200.471, costs incurred for telecommunications and video surveillance services or equipment such as phones, internet, video surveillance, and cloud servers are allowable except for the following circumstances: a. Obligating or expending EPA funds for covered telecommunications and video surveillance services or equipment or services as described in 2 CFR 200.216 to: (1) Procure or obtain, extend or renew a contract to procure or obtain; (2) Enter into a contract (or extend or renew a contract) to procure; or (3) Obtain the equipment, services, or systems. Certain prohibited equipment, systems, or services, including equipment, systems, or services produced or provided by entities identified in section 889, are recorded in the System for Award Management exclusion list.

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

American Iron and Steel Act  
DEP Revised

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY





## Memorandum

**To:** All Connecticut Municipalities, Water Pollution Control Facilities, and Consultants

**Date:** May 28, 2015

**Re:** Revised American Iron and Steel Memorandum

---

The Department of Energy and Environmental Protection's (DEEP) Municipal Water Pollution Control Section has updated the American Iron and Steel (AIS) memorandum that was distributed on May 19, 2014.

On June 10, 2014, the Water Resources Reform and Development Act of 2014 (WRRDA) was signed into law by President Obama, which amended the Federal Water Pollution Control Act (FWPCA). The FWPCA section 608 extended the AIS provision that was originally scheduled to expire on September 30, 2014.

This means that AIS is now a **permanent** project requirement for all Connecticut Clean Water Fund (CWF) projects.

The effective date for the newly codified AIS provision is the date of enactment of the WRRDA, or June 10, 2014.

A recent Environmental Protection Agency (EPA) memorandum dated September 18, 2014 indicates that EPA intends to interpret the WRRDA language for the AIS requirement in the same manner as described in an earlier EPA guidance memo dated March 20, 2014. Therefore, the March 20, 2014 EPA memorandum shall serve as the final EPA AIS guidance on how to apply the AIS requirement, and it is attached to the revised CWF memo.

The final memorandum is now available on our website at <http://www.ct.gov/dep/cwp>.

Sincerely,

George V. Hicks, P.E.  
Supervising Sanitary Engineer  
Bureau of Water Protection & Land Reuse

### Revised Clean Water Fund Memorandum (2014-001a)

**TO: All Connecticut Municipalities and Consultants**

**RE: Implementation of American Iron and Steel provisions on Connecticut Clean Water Fund Projects**

#### **I. PURPOSE**

To provide clarification on the applicability of American Iron and Steel (AIS) provisions to construction projects funded by the Connecticut Clean Water Fund (CWF).

#### **II. GOVERNING FEDERAL PUBLIC LAW**

Section 436 of Public Law (P.L.) 113-76, Consolidated Appropriations Act, 2014.

#### **III. APPLICABILITY**

All Connecticut CWF projects must use “iron and steel products” (Section III.A) that are “produced in the United States” for construction projects. The final Environmental Protection Agency (EPA) AIS guidance memorandum dated March 20, 2014 (“final EPA AIS guidance”) on how to apply the AIS requirement is attached.

This memorandum summarizes the final EPA AIS guidance, and describes how it relates specifically to Connecticut CWF projects. Section III.C details what is required for a CWF project that is subject to the AIS provisions. Any definitions provided by the final EPA AIS guidance are included in Section IV.

Section 436 of P.L. 113-76 excludes products (Section III.B) to the AIS requirement, as well as a waiver request process to exclude products or the entire project from AIS requirements (Section III.D).

##### **A. Applicable Iron and Steel Products**

1. The AIS requirement applies to all of the following products:
  - a. Lined or unlined pipes and fittings;
  - b. Manholes covers and other “municipal castings”;
  - c. Hydrants;
  - d. Tanks;
  - e. Flanges;
  - f. Pipe clamps and restraints;
  - g. Valves;
  - h. “Structural steel”;
  - i. Reinforced precast concrete; or
  - j. “Construction materials”.

Refer to Section IV for further clarification of items b, h, and j.

2. Each project item listed in Section III.A.1 and is considered to be “primarily iron or steel”, or comprised of greater than 50% iron or “steel” as measured by cost, becomes subject to the AIS requirement.
  - a. The cost used to determine AIS applicability shall be based on the material costs, and shall include the cost to pour and cast iron and/or steel components.
  - b. The cost used to determine AIS applicability shall not include assembly cost.
3. Unlike the products listed in Section III.A.1.a – h and j, all reinforced precast concrete used in applicable products is subject to the AIS requirement, no matter how much iron or steel comprises the reinforced precast concrete. The reinforcing bar and wire must be produced in the US and meet the same standards as for any other iron or steel product. The casting of the concrete product must take place in the US. The cement and other raw materials used in concrete production are not required to be of domestic origin.
4. “Construction materials” are any products that become permanently incorporated into the project, even if those products may be considered temporary in most instances. For example, any iron or steel sheeting or piles that are not removed after construction is completed are considered to be “construction materials” subject to the AIS requirement.

#### **B. Excluded Products**

1. The AIS requirement does not apply to any mechanical and/or electrical components, equipment and systems. Mechanical and electrical components, equipment and systems are not considered construction materials.
2. The following examples (including their maintenances necessary for their intended use and operation) are NOT considered construction materials, and are therefore NOT subject to the AIS requirement:
  - a. Pumps;
  - b. Motors;
  - c. Gear reducers;
  - d. Drives (including variable frequency drives (VFDs));
  - e. Electric, pneumatic, manual accessories used to operate valves (such as electric valve actuators);
  - f. Mixers;
  - g. Gates;
  - h. Motorized screens (such as traveling screens);
  - i. Blowers/aeration equipment;
  - j. Compressors;
  - k. Meters, sensors, controls and switches;
  - l. Supervisory control and data acquisition (SCADA);
  - m. Membrane bioreactor systems;
  - n. Membrane filtration systems;
  - o. Filters, clarifiers and clarifier mechanisms;
  - p. Rakes, grinders;
  - q. Disinfection systems;
  - r. Presses (including belt presses);
  - s. Conveyors, cranes;
  - t. HVAC (excluding ductwork), water heaters, heat exchangers;
  - u. Generators;

- v. Cabinetry and housings (such as electrical boxes/enclosures);
  - w. Lighting fixtures;
  - x. Electrical conduit;
  - y. Emergency life systems;
  - z. Metal office furniture, shelving;
  - aa. Laboratory equipment, analytical instrumentation; and
  - bb. Dewatering equipment.
3. Raw materials such as iron ore, limestone, and iron/steel scrap are not covered by the AIS requirement. If any raw materials are being applied as a coating, the raw materials are similarly not covered.

### C. AIS Requirements

1. For each item that meets the criteria indicated in Sections III.A, the iron and steel products contained in that item must be "produced in the United States (US)".
- a. All manufacturing processes must take place in the US, with the exception of metallurgical processes involving the refinement of steel additives.
  - b. Manufacturing processes covered by the AIS requirement include: melting, refining, forming, rolling, drawing, refining, finishing, fabricating, coating.
  - c. In the case of reinforced precast concrete, the casting of the concrete must also occur in the US. The cement and other raw materials used in the concrete production may come from non-US sources.
  - d. Each domestic iron and steel product must remain in the US for the entire manufacturing process; otherwise, it will be considered foreign source material.
  - e. Non-iron or steel components of an iron and steel product may come from non-US sources.
2. The construction contract language contained in **Appendix 4 of the attached final EPA AIS guidance** must be included in the CWF contract documents in order to obtain CWF approval of the engineering plans and specifications.
3. Certification for AIS compliance
- a. Certification must be provided for all items in Section III.A.
  - b. Types of Certification
    - i. Step certification process: Each handler (supplier, fabricator, manufacturer, processor, etc) of the iron and steel products certifies that their step in the process was domestically performed.
    - ii. Final manufacturer certification: Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the US.
  - c. AIS compliance certification must be provided on company letterhead, in the format provided by **Appendix 5 of the attached final EPA AIS guidance**.
  - d. These certifications shall be collected and maintained by the municipality, and must be available upon request by either the EPA or the DEEP.

### D. Waiver Request Process

1. A waiver from the AIS requirement may be requested for a CWF project if at least one of the following conditions is sufficiently demonstrated:
- a. The AIS requirement will increase the cost of the overall project by more than 25 percent, as demonstrated by the inclusion of a bid alternate and backup calculations;

- b. The iron and steel products are not produced in the United States in sufficient and “reasonably available quantities” and of “satisfactory quality”, as demonstrated by soliciting proposals from at least three manufacturers; or
  - c. The AIS requirement is inconsistent with the public interest.
2. Waiver Request Format
    - a. The waiver request must include a table with responses to the “Information Checklist for Waiver Request” in **Appendix 1 of the attached final EPA AIS guidance**.
    - b. Evaluation of the waiver request shall include the criteria in the “HQ Review Checklist for Waiver Request” in **Appendix 2 of the attached final EPA AIS guidance**.
    - c. Waiver requests shall be submitted to the Connecticut Department of Energy and Environmental Protection (DEEP) for initial screening.
    - d. If the DEEP determines that a waiver to the AIS requirement has been sufficiently demonstrated, the DEEP will forward the waiver request to the EPA.
  3. Final Waiver Determination
    - a. The waiver request shall be made available on the EPA website and the DEEP CWF webpage.
    - b. The EPA shall allow for informal public input for at least 15 days prior to making a determination.

#### IV. DEFINITIONS

AIS: American Iron and Steel

Assistant recipients: A borrower or grantee that receives funding from a State CWSRF program. In the case of Connecticut CWF projects, “assistant recipients” are the municipalities, as defined below.

CGS: Connecticut General Statutes

Construction materials: Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the applicable project, not including mechanical and/or electrical components, equipment and systems.

Some construction materials may overlap with what is also considered “structural steel”. This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens.

CWF: Connecticut Clean Water Fund

CWSRF: Clean Water State Revolving Fund

DEEP: Connecticut Department of Energy and Environmental Protection

Electrical equipment: Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

EPA: Federal Environmental Protection Agency

FWPCA: Federal Water Pollution Control Act

Final EPA AIS Guidance: This refers to the attached EPA Memorandum entitled “Implementation of American Iron and Steel provisions of P.L. 113-76, Consolidated Appropriations Act, 2014” dated March 20, 2014.

HVAC: Heating, ventilation, and air conditioning

Municipality: Any “municipality” eligible for the CWF, as defined in Section 22a-475 of the CGS. The municipalities are the “assistance recipients” for the purposes of the AIS requirement.

Iron and Steel Products: The term “iron and steel products” means the following products are made of “primarily iron or steel”: lined or unlined pipes and fittings, manholes covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

Mechanical equipment: Mechanical equipment is typically that which has motorized parts and/or is powered by a motor.

Municipal castings: Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings are:

- Access Hatches;
- Ballast Screen;
- Benches (Iron or Steel);
- Bollards;
- Cast Bases;
- Cast Iron Hinged Hatches, Square and Rectangular;
- Cast Iron Riser Rings;
- Catch Basin Inlets;
- Cleanout/Monument Boxes;
- Construction Covers and Frames;
- Curb and Corner Guards;
- Curb Openings;
- Detectable Warning Plates;
- Downspout Shoes (Boot, Inlet);
- Drainage Grates, Frames and Curb Inlets;
- Inlets;
- Junction Boxes;
- Lampposts;
- Manhole Covers, Rings and Frames, Risers;
- Meter Boxes;
- Service Boxes;
- Steel Hinged Hatches, Square and Rectangular;
- Steel Riser Rings;

- Trash receptacles;
- Tree Grates;
- Tree Guards;
- Trench Grates; and
- Valve Boxes, Covers and Risers.

Primarily Iron or Steel: To be considered “primarily iron or steel”, the product must be made of greater than 50% iron or steel, measured by cost. The cost should be based on the material costs.

P.L.: Public Law

Production in the US: For the purposes of the AIS requirement, “production in the US” of the iron or steel used in an applicable product requires that all manufacturing processes must take place in the US, except metallurgical processes involving refinement of steel additives.

Reasonably Available Quantity: The quantity of iron or steel products is available or will be available at the time needed and place needed, and in the proper form or specification as specified in the project plans and design.

Satisfactory Quality: The quality of iron or steel products, as specified in the project plans and designs.

SCADA: Supervisory control and data acquisition

Steel: An alloy that includes at least 50 percent iron, between 0.02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of steel includes carbon steel, alloy steel, stainless steel, tool steel, and other specialty steels.

Step Certification: A step certification is a process under which each handler (supplier, fabricator, manufacturer, processor, etc.) of the iron and steel products certifies that their step in the process was domestically performed.

Structural steel: Structural steel is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes. Some structural steel may overlap with what is also considered “construction materials” (see definition above).

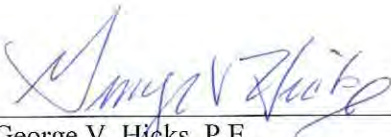
RCSA: Regulations of the Connecticut State Agencies

US: United States

VFDs: Variable frequency drives

WRRDA: Water Resources Reform and Development Act of 2014

5/28/2015  
Date

  
George V. Hicks, P.E.  
Supervising Sanitary Engineer  
Bureau of Water Protection & Land Reuse

Attachment: EPA Memorandum: "Implementation of American Iron and Steel provisions of P.L. 113-76, Consolidated Appropriations Act, 2014" dated March 20, 2014.

**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**





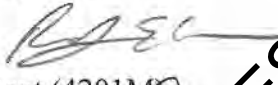
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460


MAR 20 2014

OFFICE OF WATER

**MEMORANDUM**

SUBJECT: Implementation of American Iron and Steel provisions of P.L. 113-76,  
Consolidated Appropriations Act, 2014

FROM: *For* Andrew D. Sawyers, Director   
Office of Wastewater Management (4201M)

Peter C. Grevatt, Director   
Office of Ground Water and Drinking Water (4601M)

TO: Water Management Division Directors  
Regions I - X

P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), includes an “American Iron and Steel (AIS)” requirement in section 436 that requires Clean Water State Revolving Loan Fund (CWSRF) and Drinking Water State Revolving Loan Fund (DWSRF) assistance recipients to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works if the project is funded through an assistance agreement executed beginning January 17, 2014 (enactment of the Act), through the end of Federal Fiscal Year 2014.

Section 436 also sets forth certain circumstances under which EPA may waive the AIS requirement. Furthermore, the Act specifically exempts projects where engineering plans and specifications were approved by a State agency prior to January 17, 2014.

The approach described below explains how EPA will implement the AIS requirement. The first section is in the form of questions and answers that address the types of projects that must comply with the AIS requirement, the types of products covered by the AIS requirement, and compliance. The second section is a step-by-step process for requesting waivers and the circumstances under which waivers may be granted.

## Implementation

The Act states:

Sec. 436. (a)(1) None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.

(2) In this section, the term “iron and steel products” means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the “Administrator”) finds that—

- (1) applying subsection (a) would be inconsistent with the public interest;
- (2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
- (3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

(d) This section shall be applied in a manner consistent with United States obligations under international agreements.

(e) The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean and Drinking Water State Revolving Funds for carrying out

the provisions described in subsection (a)(1) for management and oversight of the requirements of this section.

(f) This section does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency's capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of the enactment of this Act.

The following questions and answers provide guidance for implementing and complying with the AIS requirements:

**Project Coverage**

**1) What classes of projects are covered by the AIS requirement?**

All treatment works projects funded by a CWSRF assistance agreement, and all public water system projects funded by a DWSRF assistance agreement, from the date of enactment through the end of Federal Fiscal Year 2014, are covered. The AIS requirements apply to the entirety of the project, no matter when construction begins or ends. Additionally, the AIS requirements apply to all parts of the project, no matter the source of funding.

**2) Does the AIS requirement apply to nonpoint source projects or national estuary projects?**

No. Congress did not include an AIS requirement for nonpoint source and national estuary projects unless the project can also be classified as a 'treatment works' as defined by section 212 of the Clean Water Act.

**3) Are any projects for the construction, alteration, maintenance, or repair of a public water system or treatment works excluded from the AIS requirement?**

Any project, whether a treatment works project or a public water system project, for which engineering plans and specifications were approved by the responsible state agency prior to January 17, 2014, is excluded from the AIS requirements.

**4) What if the project does not have approved engineering plans and specifications but has signed an assistance agreement with a CWSRF or DWSRF program prior to January 17, 2014?**

The AIS requirements do not apply to any project for which an assistance agreement was signed prior to January 17, 2014.

**5) What if the project does not have approved engineering plans and specifications, but bids were advertised prior to January 17, 2014 and an assistance agreement was signed after January 17, 2014?**

If the project does not require approved engineering plans and specifications, the bid advertisement date will count in lieu of the approval date for purposes of the exemption in section 436(f).

**6) What if the assistance agreement that was signed prior to January 17, 2014, only funded a part of the overall project, where the remainder of the project will be funded later with another SRF loan?**

If the original assistance agreement funded any construction of the project, the date of the original assistance agreement counts for purposes of the exemption. If the original assistance agreement was only for planning and design, the date of that assistance agreement will count for purposes of the exemption only if there is a written commitment or expectation on the part of the assistance recipient to fund the remainder of the project with SRF funds.

**7) What if the assistance agreement that was signed prior to January 17, 2014, funded the first phase of a multi-phase project, where the remaining phases will be funded by SRF assistance in the future?**

In such a case, the phases of the project will be considered a single project if all construction necessary to complete the building or work, regardless of the number of contracts or assistance agreements involved, are closely related in purpose, time and place. However, there are many situations in which major construction activities are clearly undertaken in phases that are distinct in purpose, time, or place. In the case of distinct phases, projects with engineering plans and specifications approval or assistance agreements signed prior to January 17, 2014 would be excluded from AIS requirements while those approved/signed on January 17, 2014, or later would be covered by the AIS requirements.

**8) What if a project has split funding from a non-SRF source?**

Many States intend to fund projects with “split” funding, from the SRF program and from State or other programs. Based on the Act language in section 436, which requires that American iron and steel products be used in any project for the construction, alteration, maintenance, or repair of a public water system or treatment works receiving SRF funding between and including January 17, 2014 and September 30, 2014, any project that is funded in whole or in part with such funds must comply with the AIS requirement. A “project” consists of all construction necessary to complete the building or work regardless of the number of contracts or assistance agreements involved so long as all contracts and assistance agreements awarded are closely related in purpose, time and place. This precludes the intentional splitting of SRF projects into separate and smaller contracts or assistance agreements to avoid AIS coverage on some portion of a larger

project, particularly where the activities are integrally and proximately related to the whole. However, there are many situations in which major construction activities are clearly undertaken in separate phases that are distinct in purpose, time, or place, in which case, separate contracts or assistance agreement for SRF and State or other funding would carry separate requirements.

**9) What about refinancing?**

If a project began construction, financed from a non-SRF source, prior to January 17, 2014, but is refinanced through an SRF assistance agreement executed on or after January 17, 2014 and prior to October 1, 2014, AIS requirements will apply to all construction that occurs on or after January 17, 2014, through completion of construction, unless, as is likely, engineering plans and specifications were approved by a responsible state agency prior to January 17, 2014. There is no retroactive application of the AIS requirements where a refinancing occurs for a project that has completed construction prior to January 17, 2014.

**10) Do the AIS requirements apply to any other EPA programs, besides the SRF program, such as the Tribal Set-aside grants or grants to the Territories and DC?**

No, the AIS requirement only applies to funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12)

**Covered Iron and Steel Products**

**11) What is an iron or steel product?**

For purposes of the CWSRF and DWSRF projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the public water system or treatment works:

- Lined or unlined pipes or fittings;
- Manhole Covers;
- Municipal Castings (defined in more detail below);
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel (defined in more detail below);
- Reinforced precast concrete; and
- Construction materials (defined in more detail below).

**12) What does the term ‘primarily iron or steel’ mean?**

‘Primarily iron or steel’ places constraints on the list of products above. For one of the listed products to be considered subject to the AIS requirements, it must be made of greater than 50% iron or steel, measured by cost. The cost should be based on the material costs.

**13) Can you provide an example of how to perform a cost determination?**

For example, the iron portion of a fire hydrant would likely be the bonnet, body and shoe, and the cost then would include the pouring and casting to create those components. The other material costs would include non-iron and steel internal workings of the fire hydrant (i.e., stem, coupling, valve, seals, etc). However, the assembly of the internal workings into the hydrant body would not be included in this cost calculation. If one of the listed products is not made primarily of iron or steel, United States (US) provenance is not required. An exception to this definition is reinforced precast concrete, which is addressed in a later question.

**14) If a product is composed of more than 50% iron or steel, but is not listed in the above list of items, must the item be produced in the US? Alternatively, must the iron or steel in such a product be produced in the US?**

The answer to both question is no. Only items on the above list must be produced in the US. Additionally, the iron or steel in a non-listed item can be sourced from outside the US.

**15) What is the definition of steel?**

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of steel covers carbon steel, alloy steel, stainless steel, tool steel and other specialty steels.

**16) What does ‘produced in the United States’ mean?**

Production in the United States of the iron or steel products used in the project requires that all manufacturing processes, including application of coatings, must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives. All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating and coating. Further, if a domestic iron and steel product is taken out of the US for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the

material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin.

**17) Are the raw materials used in the production of iron or steel required to come from US sources?**

No. Raw materials, such as iron ore, limestone, scrap iron, and scrap steel, can come from non-US sources.

**18) If an above listed item is primarily made of iron or steel, but is only at the construction site temporarily, must such an item be produced in the US?**

No. Only the above listed products made primarily of iron or steel, permanently incorporated into the project must be produced in the US. For example trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not required to be made of U.S. Iron or Steel.

**19) What is the definition of ‘municipal castings’:**

Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings are:

- Access Hatches;
- Ballast Screen;
- Benches (Iron or Steel);
- Boards;
- Cast Bases;
- Cast Iron Hinged Hatches, Square and Rectangular;
- Cast Iron Riser Rings;
- Catch Basin Inlet;
- Cleanout/Monument Boxes;
- Construction Covers and Frames;
- Curb and Corner Guards;
- Curb Openings;
- Detectable Warning Plates;
- Downspout Shoes (Boot, Inlet);
- Drainage Grates, Frames and Curb Inlets;
- Inlets;
- Junction Boxes;
- Lampposts;
- Manhole Covers, Rings and Frames, Risers;

Meter Boxes;  
Service Boxes;  
Steel Hinged Hatches, Square and Rectangular;  
Steel Riser Rings;  
Trash receptacles;  
Tree Grates;  
Tree Guards;  
Trench Grates; and  
Valve Boxes, Covers and Risers.

**20) What is ‘structural steel’?**

Structural steel is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other construction purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

**21) What is a ‘construction material’ for purposes of the AIS requirement?**

Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered “structural steel”. This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens.

**22) What is not considered a ‘construction material’ for purposes of the AIS requirement?**

Mechanical and electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

The following examples (including their appurtenances necessary for their intended use and operation) are NOT considered construction materials: pumps, motors, gear reducers, drives (including variable frequency drives (VFDs)), electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators), mixers, gates, motorized screens (such as traveling screens), blowers/aeration equipment, compressors, meters, sensors, controls and switches, supervisory control and



data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, presses (including belt presses), conveyors, cranes, HVAC (excluding ductwork), water heaters, heat exchangers, generators, cabinetry and housings (such as electrical boxes/enclosures), lighting fixtures, electrical conduit, emergency life systems, metal office furniture, shelving, laboratory equipment, analytical instrumentation, and dewatering equipment.

**23) If the iron or steel is produced in the US, may other steps in the manufacturing process take place outside of the US, such as assembly?**

No. Production in the US of the iron or steel used in a listed product requires that all manufacturing processes must take place in the United States, except metallurgical processes involving refinement of steel additives.

**24) What processes must occur in the US to be compliant with the AIS requirement for reinforced precast concrete?**

While reinforced precast concrete may not be at least 50% iron or steel, in this particular case, the reinforcing bar and wire must be produced in the US and meet the same standards as for any other iron or steel product. Additionally, the casting of the concrete product must take place in the US. The cement and other raw materials used in concrete production are not required to be of domestic origin.

If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered to be a construction material and must be produced in the US.

**Compliance**

**25) How should an assistance recipient document compliance with the AIS requirement?**

In order to ensure compliance with the AIS requirement, specific AIS contract language must be included in each contract, starting with the assistance agreement, all the way down to the purchase agreements. Sample language for assistance agreements and contracts can be found in Appendix 3 and 4.

EPA recommends the use of a step certification process, similar to one used by the Federal Highway Administration. The step certification process is a method to ensure that producers adhere to the AIS requirement and assistance recipients can verify that products comply with the AIS requirement. The process also establishes accountability and better enables States to take enforcement actions against violators.

Step certification creates a paper trail which documents the location of the manufacturing process involved with the production of steel and iron materials. A step certification is a process under which each handler (supplier, fabricator, manufacturer,

processor, etc) of the iron and steel products certifies that their step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin. A certification can be quite simple. Typically, it includes the name of the manufacturer, the location of the manufacturing facility where the product or process took place (not its headquarters), a description of the product or item being delivered, and a signature by a manufacturer's responsible party. Attached, as Appendix 5, are sample certifications. These certifications should be collected and maintained by assistance recipients.

Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the US. While this type of certification may be acceptable, it may not provide the same degree of assurance. Additional documentation may be needed if the certification is lacking important information. Step certification is the best practice.

**26) How should a State ensure assistance recipients are complying with the AIS requirement?**

In order to ensure compliance with the AIS requirement, States SRF programs must include specific AIS contract language in the assistance agreement. Sample language for assistance agreements can be found in Appendix 3.

States should also, as a best practice, conduct site visits of projects during construction and review documentation demonstrating proof of compliance which the assistance recipient has gathered.

**27) What happens if a State or EPA finds a non-compliant iron and/or steel product permanently incorporated in the project?**

If a potentially non-compliant product is identified, the State should notify the assistance recipient of the apparent unauthorized use of the non-domestic component, including a proposed corrective action, and should be given the opportunity to reply. If unauthorized use is confirmed, the State can take one or more of the following actions: request a waiver where appropriate; require the removal of the non-domestic item; or withhold payment for all or part of the project. Only EPA can issue waivers to authorize the use of a non-domestic item. EPA may use remedies available to it under the Clean Water Act, the Safe Drinking Water Act, and 40 CFR part 31 grant regulations, in the event of a violation of a grant term and condition.

It is recommended that the State work collaboratively with EPA to determine the appropriate corrective action, especially in cases where the State is the one who identifies the item in noncompliance or there is a disagreement with the assistance recipient.

If fraud, waste, abuse, or any violation of the law is suspected, the Office of Inspector General (OIG) should be contacted immediately. The OIG can be reached at 1-

888-546-8740 or [OIG\\_Hotline@epa.gov](mailto:OIG_Hotline@epa.gov). More information can be found at this website: <http://www.epa.gov/oig/hotline.htm>.

## **28) How do international trade agreements affect the implementation of the AIS requirements?**

The AIS provision applies in a manner consistent with United States obligations under international agreements. Typically, these obligations only apply to direct procurement by the entities that are signatories to such agreements. In general, SRF assistance recipients are not signatories to such agreements, so these agreements have no impact on this AIS provision. In the few instances where such an agreement applies to a municipality, that municipality is under the obligation to determine its applicability and requirements and document the actions taken to comply for the State.

### **Waiver Process**

The statute permits EPA to issue waivers for a case or category of cases where EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the US in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the US will increase the cost of the overall project by more than 25 percent.

In order to implement the AIS requirements, EPA has developed an approach to allow for effective and efficient implementation of the waiver process to allow projects to proceed in a timely manner. The framework described below will allow States, on behalf of the assistance recipients, to apply for waivers of the AIS requirement directly to EPA Headquarters. Only waiver requests received from states will be considered. Pursuant to the Act, EPA has the responsibility to make findings as to the issuance of waivers to the AIS requirements.

### **Definitions**

The following terms are critical to the interpretation and implementation of the AIS requirements and apply to the process described in this memorandum:

**Reasonably Available Quantity:** The quantity of iron or steel products is available or will be available at the time needed and place needed, and in the proper form or specification as specified in the project plans and design.

**Satisfactory Quality:** The quality of iron or steel products, as specified in the project plans and designs.

**Assistance Recipient:** A borrower or grantee that receives funding from a State CWSRF or DWSRF program.

## Step-By-Step Waiver Process

### Application by Assistance Recipient

Each local entity that receives SRF water infrastructure financial assistance is required by section 436 of the Act to use American made iron and steel products in the construction of its project. However, the recipient may request a waiver. Until a waiver is granted by EPA, the AIS requirement stands, except as noted above with respect to municipalities covered by international agreements.

The waiver process begins with the SRF assistance recipient. In order to fulfill the AIS requirement, the assistance recipient must in good faith design the project (where applicable) and solicit bids for construction with American made iron and steel products. It is essential that the assistance recipient include the AIS terms in any request for proposals or solicitations for bids, and in all contracts (see Appendix 3 for sample construction contract language). The assistance recipient may receive a waiver at any point before, during, or after the bid process, if one or more of three conditions is met:

1. Applying the American Iron and Steel requirements of the Act would be inconsistent with the public interest;
2. Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
3. Inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Proper and sufficient documentation must be provided by the assistance recipient. A checklist detailing the types of information required for a waiver to be processed is attached as Appendix 1.

Additionally, it is strongly encouraged that assistance recipients hold pre-bid conferences with potential bidders. A pre-bid conference can help to identify iron and steel products needed to complete the project as described in the plans and specifications that may not be available from domestic sources. It may also identify the need to seek a waiver prior to bid, and can help inform the recipient on compliance options.

In order to apply for a project waiver, the assistance recipient should email the request in the form of a Word document (.doc) to the State SRF program. It is strongly recommended that the State designate a single person for all AIS communications. The State SRF designee will review the application for the waiver and determine whether the necessary information has been included. Once the waiver application is complete, the State designee will forward the application to either of two email addresses. For CWSRF waiver requests, please send the application to: [cwsrfwaiver@epa.gov](mailto:cwsrfwaiver@epa.gov). For DWSRF waiver requests, please send the application to: [dwsrfwaiver@epa.gov](mailto:dwsrfwaiver@epa.gov).

## Evaluation by EPA

After receiving an application for waiver of the AIS requirements, EPA Headquarters will publish the request on its website for 15 days and receive informal comment. EPA Headquarters will then use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.

In the event that EPA finds that adequate documentation and justification has been submitted, the Administrator may grant a waiver to the assistance recipient. EPA will notify the State designee that a waiver request has been approved or denied as soon as such a decision has been made. Granting such a waiver is a three-step process:

1. Posting – After receiving an application for a waiver, EPA is required to publish the application and all material submitted with the application on EPA's website for 15 days. During that period, the public will have the opportunity to review the request and provide informal comment to EPA. The website can be found at: [http://water.epa.gov/grants\\_funding/aisrequirement.cfm](http://water.epa.gov/grants_funding/aisrequirement.cfm)
2. Evaluation – After receiving an application for waiver of the AIS requirements, EPA Headquarters will use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.
3. Signature of waiver approval by the Administrator or another agency official with delegated authority – As soon as the waiver is signed and dated, EPA will notify the State SBI program, and post the signed waiver on our website. The assistance recipient should keep a copy of the signed waiver in its project files.

## Public Interest Waivers

EPA has the authority to issue public interest waivers. Evaluation of a public interest waiver request may be more complicated than that of other waiver requests so they may take more time than other waiver requests for a decision to be made. An example of a public interest waiver that might be issued could be for a community that has standardized on a particular type or manufacturer of a valve because of its performance to meet their specifications. Switching to an alternative valve may require staff to be trained on the new equipment and additional spare parts would need to be purchased and stocked, existing valves may need to be unnecessarily replaced, and portions of the system may need to be redesigned. Therefore, requiring the community to install an alternative valve would be inconsistent with public interest.

EPA also has the authority to issue a public interest waiver that covers categories of products that might apply to all projects.

EPA reserves the right to issue national waivers that may apply to particular classes of assistance recipients, particular classes of projects, or particular categories of iron or steel products. EPA may develop national or (US geographic) regional categorical waivers through the identification of similar circumstances in the detailed justifications presented to EPA in a waiver request or requests. EPA may issue a national waiver based on policy decisions regarding the public's interest or a determination that a particular item is not produced domestically in reasonably available quantities or of a sufficient quality. In such cases, EPA may determine it is necessary to issue a national waiver.

If you have any questions concerning the contents of this memorandum, you may contact us, or have your staff contact Jordan Dorfman, Attorney-Advisor, State Revolving Fund Branch, Municipal Support Division, at [dorfman.jordan@epa.gov](mailto:dorfman.jordan@epa.gov) or (202) 564-0614 or Kiri Anderer, Environmental Engineer, Infrastructure Branch, Drinking Water Protection Division, at [anderer.kirsten@epa.gov](mailto:anderer.kirsten@epa.gov) or (202) 564-3134.

Attachments

**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**

## Appendix 1: Information Checklist for Waiver Request

The purpose of this checklist is to help ensure that all appropriate and necessary information is submitted to EPA. EPA recommends that States review this checklist carefully and provide all appropriate information to EPA. This checklist is for informational purposes only and does not need to be included as part of a waiver application.

Items	✓	Notes
<p>General</p> <ul style="list-style-type: none"> <li>• Waiver request includes the following information:               <ul style="list-style-type: none"> <li>— Description of the foreign and domestic construction materials</li> <li>— Unit of measure</li> <li>— Quantity</li> <li>— Price</li> <li>— Time of delivery or availability</li> <li>— Location of the construction project</li> <li>— Name and address of the proposed supplier</li> <li>— A detailed justification for the use of foreign construction materials</li> </ul> </li> <li>• Waiver request was submitted according to the instructions in the memorandum</li> <li>• Assistance recipient made a good faith effort to solicit bids for domestic iron and steel products, as demonstrated by language in requests for proposals, contracts, and communications with the prime contractor</li> </ul>		
<p>Cost Waiver Requests</p> <ul style="list-style-type: none"> <li>• Waiver request includes the following information:               <ul style="list-style-type: none"> <li>— Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products</li> <li>— Relevant excerpts from the bid documents used by the contractors to complete the comparison</li> <li>— Supporting documentation indicating that the contractor made a reasonable survey of the market, such as a description of the process for identifying suppliers and a list of contacted suppliers</li> </ul> </li> </ul>		
<p>Availability Waiver Requests</p> <ul style="list-style-type: none"> <li>• Waiver request includes the following supporting documentation necessary to demonstrate the availability, quantity, and/or quality of the materials for which the waiver is requested:               <ul style="list-style-type: none"> <li>— Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials</li> <li>— Documentation of the assistance recipient's efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers.</li> <li>— Project schedule</li> <li>— Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials</li> </ul> </li> <li>• Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought</li> <li>• Has the State received other waiver requests for the materials described in this waiver request, for comparable projects?</li> </ul>		

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

## Appendix 2: HQ Review Checklist for Waiver Request

Instructions: To be completed by EPA. Review all waiver requests using the questions in the checklist, and mark the appropriate box as Yes, No or N/A. Marks that fall inside the shaded boxes may be grounds for denying the waiver. If none of your review markings fall into a shaded box, the waiver is eligible for approval if it indicates that one or more of the following conditions applies to the domestic product for which the waiver is sought:

1. The iron and/or steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
2. The inclusion of iron and/or steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Review Items	Yes	No	N/A	Comments
<b>Cost Waiver Requests</b> <ul style="list-style-type: none"> <li>• Does the waiver request include the following information?                             <ul style="list-style-type: none"> <li>— Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products</li> <li>— Relevant excerpts from the bid documents used by the contractors to complete the comparison</li> <li>— A sufficient number of bid documents or pricing information from domestic sources to constitute a reasonable survey of the market</li> </ul> </li> <li>• Does the Total Domestic Project exceed the Total Foreign Project Cost by more than 25%?</li> </ul>				
<b>Availability Waiver Requests</b> <ul style="list-style-type: none"> <li>• Does the waiver request include supporting documentation sufficient to show the availability, quantity, and/or quality of the iron and/or steel product for which the waiver is requested?                             <ul style="list-style-type: none"> <li>— Supplier information or other documentation indicating availability/delivery date for materials</li> <li>— Project schedule</li> <li>— Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of materials</li> </ul> </li> <li>• Does supporting documentation provide sufficient evidence that the contractors made a reasonable effort to locate domestic suppliers of materials, such as a description of the process for identifying suppliers and a list of contacted suppliers?</li> <li>• Based on the materials delivery/availability date indicated in the supporting documentation, will the materials be unavailable when they are needed according to the project schedule? (By item, list schedule date and domestic delivery quote date or other relevant information)</li> <li>• Is EPA aware of any other evidence indicating the non-availability of the materials for which the waiver is requested? Examples include:                             <ul style="list-style-type: none"> <li>— Multiple waiver requests for the materials described in this waiver request, for comparable projects in the same State</li> <li>— Multiple waiver requests for the materials described in this waiver request, for comparable projects in other States</li> <li>— Correspondence with construction trade associations indicating the non-availability of the materials</li> </ul> </li> <li>• Are the available domestic materials indicated in the bid documents of inadequate quality compared those required by the project plans, specifications, and/or permits?</li> </ul>				

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



### Appendix 3: Example Loan Agreement Language

ALL ASSISTANCE AGREEMENT MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN SRF ASSISTANCE AGREEMENTS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE LAW:

Comply with all federal requirements applicable to the Loan (including those imposed by the 2014 Appropriations Act and related SRF Policy Guidelines) which the Participant understands includes, among other, requirements that all of the iron and steel products used in the Project are to be produced in the United States (“American Iron and Steel Requirement”) unless (i) the Participant has requested and obtained a waiver from the Agency pertaining to the Project or (ii) the Finance Authority has otherwise advised the Participant in writing that the American Iron and Steel Requirement is not applicable to the Project.

Comply with all record keeping and reporting requirements under the Clean Water Act/Safe Drinking Water Act, including any reports required by a Federal agency or the Finance Authority such as performance indicators of program deliverables, information on costs and project progress. The Participant understands that (i) each contract and subcontract related to the Project is subject to audit by appropriate federal and state entities and (ii) failure to comply with the Clean Water Act/Safe Drinking Water Act and this Agreement may be a default hereunder that results in a repayment of the Loan in advance of the maturity of the Bonds and/or other remedial actions.

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

#### Appendix 4: Sample Construction Contract Language

ALL CONTRACTS MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN ALL CONTRACTS IN PROJECTS THAT USE SRF FUNDS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE OR LOCAL LAW:

The Contractor acknowledges to and for the benefit of the City of \_\_\_\_\_ (“Purchaser”) and the \_\_\_\_\_ (the “State”) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as “American Iron and Steel;” that requires all of the iron and steel products used in the project to be produced in the United States (“American Iron and Steel Requirement”) including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

## Appendix 5: Sample Certifications

The following information is provided as a sample letter of **step** certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

\_\_\_\_\_

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXXXXXXXXX)

I, (company representative), certify that the following products and/or materials shipped/provided to the subject project are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

\_\_\_\_\_

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

## American Iron and Steel Provisions - Bidder Certification

The Bidder ("Contractor") acknowledges to and for the benefit of the Greater New Haven Water Pollution Control Authority ("Purchaser") and the State of Connecticut ("State") that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel;" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure, including without limitation any impairment or loss of funding, whether in whole or in part from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

Please Print

Bidder (Contractor):

By:

\_\_\_\_\_  
Name of Contractor (Company)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
City/State/Zip Code

\_\_\_\_\_  
Date

STATEMENT OF QUALIFICATIONS

\_\_\_\_\_  
Bidder

\_\_\_\_\_  
Address

Similar Projects Completed by Bidder:

1. NAME OF PROJECT: \_\_\_\_\_  
OWNER: \_\_\_\_\_ ADDRESS: \_\_\_\_\_  
DATE STARTED: \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_  
APPROX. QUANTITIES OF MAJOR ITEMS: \_\_\_\_\_  
\_\_\_\_\_  
VALUE OF CONTRACT: \_\_\_\_\_
2. NAME OF PROJECT: \_\_\_\_\_  
OWNER: \_\_\_\_\_ ADDRESS: \_\_\_\_\_  
DATE STARTED: \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_  
APPROX. QUANTITIES OF MAJOR ITEMS: \_\_\_\_\_  
\_\_\_\_\_  
VALUE OF CONTRACT: \_\_\_\_\_
3. NAME OF PROJECT: \_\_\_\_\_  
OWNER: \_\_\_\_\_ ADDRESS: \_\_\_\_\_  
DATE STARTED: \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_  
APPROX. QUANTITIES OF MAJOR ITEMS: \_\_\_\_\_  
\_\_\_\_\_  
VALUE OF CONTRACT: \_\_\_\_\_
4. OTHER PROJECT REFERENCES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

## LIST OF SUBCONTRACTORS

**SUBCONTRACTORS:**

Include the names of subcontractors you intend to use in the execution of the work of this contract. Include only one sub-contractor name for each type of work identified below. Failure to list the requested subcontractors may cause the bid to be rejected. Replacement of the listed subcontractors is subject to owner concurrence.

NAME	ADDRESS	TYPE OF WORK	ESTIMATED VALUE OF WORK (\$)	MBE/WBE CERTIFIED

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

State of Connecticut  
 Department of Administrative Services (DAS) Contractor Prequalification  
**Update (Bid) Statement**  
 (Statement to be included with the bid)

Connecticut General Statute §4a-100 and Connecticut General Statute §4b-91

Each bid submitted for a contract shall include a copy of a prequalification certificate issued by the Commissioner of Administrative Services. The bid shall also be accompanied by an **update bid statement** in such form as the Commissioner of Administrative Services prescribes. The form for such **update bid statement** shall provide space for information regarding all projects completed by the bidder since the date the bidder's prequalification certificate was issued or renewed, all projects the bidder currently has under contract, including the percentage of work on such projects not completed, the names and qualifications of the personnel who will have supervisory responsibility for the performance of the contract, any significant changes in the bidder's financial position or corporate structure since the date the certificate was issued or renewed, any change in the contractor's qualification status, and such other relevant information as the Commissioner of Administrative Services prescribes. Any bid submitted without a copy of the prequalification certificate and an **update bid statement** shall be invalid. Any public agency that accepts a bid submitted without a copy of such prequalification certificate and an **update bid statement**, as required by this section, may become ineligible for the receipt of funds related to such bid.

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

Name of Project that company is bidding on:	
Project Number:	
Name of Company:	
FEIN:	
Company Address:	
Prequalification Contact:	
Date of Prequalification with the DAS:	Telephone Number:
Single Limit:	Aggregate Work Capacity (AWC):
Remaining Aggregate Work Capacity:	

\* This amount equals your company's AWC minus the Total \$ Amount of Work Remaining.

Please list all of your company's BONDED PROJECTS (BOTH PUBLIC AND PRIVATE) WHICH WERE 90% COMPLETED SINCE THE DATE YOUR PREQUALIFICATION WAS ISSUED OR RENEWED: (Please add additional page(s) if required)

Name of Project	Owner of Project	Date Project Completed	Total Contract Amount



Please list all of your company's BONDED PROJECTS (BOTH PUBLIC AND PRIVATE) CURRENTLY UNDER CONTRACT:  
 (Please add additional page(s) if required. Please total the Work Remaining column)

Name of Project	Owner of Project	Total Contract Amount	% Complete	Work Remaining (\$)
Total \$ Amount of Work Remaining				→

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY

Please list the names and titles of the personnel who will have supervisory responsibility for the performance of the contract being bid on:  
 (Please add additional page(s) if required)

Individual Name	Title of Individual

Have there been any changes in your company's financial condition or business organization, which might affect your company's ability to successfully complete this contract?

Yes  No

If yes, please explain:

I certify under penalty of law that all of the information contained in this Update (Bid) Statement is true and accurate to the best of my knowledge as of the date below.

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date

It is the responsibility of the Awarding Authority to determine if any of the information provided above will impact the contractor's performance on this project.  
 The DAS' Contractor Prequalification Program can be reached at (860) 713-5280

---

State of Connecticut DAS Contractor  
Prequalification Certificate

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

Contractor to provide.

§ 102-20

## ITEMIZED PROPOSAL

For Constructing

**PROJECT: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and  
And East Haven Areas 15, 18, and 23**

**GNHWPCA PROJECT NO. CWF 2019-02**

**The work proposed herein must be completed within 365 days from the NTP.**

Greater New Haven  
Water Pollution Control Authority  
260 East Street  
New Haven, Connecticut 06511

To Whom It May Concern,

In submitting this bid the duly authorized undersigned declares that the entity on behalf of which this bid is made is, or they are, the only person or persons interested in the said bid; that the bid is made without any connection with any person making another bid for the same contract; that the bid is in all respects fair and without collusion, fraud or mental reservation; and that no official of the Greater New Haven Water Pollution Control Authority, or any person in the employ of the Authority is directly or indirectly interested in said bid or in the supplies or work to which it relates, or in any portion of the profits thereof.

The undersigned also hereby declares that they have, either for themselves or on behalf of the entity they represent, carefully examined the Plans, specifications, and form of Contract for this Project, have personally inspected the actual location of the Work and have considered potential local sources of supply, and are satisfied as to all the quantities and conditions, and understands that in signing this Proposal they or the entity that they represent waives all rights to plead any misunderstanding regarding the same.

The undersigned further understands and agrees that they are to furnish and provide for the respective item price bid all the necessary material, machinery, implements, tools, labor, services, and other items of whatever nature, and to do and perform all the Work necessary under the aforesaid conditions, to complete the improvements of the Project, which Plans and specifications it is agreed are a part of this Proposal, and to accept in full compensation therefore the amount of the summation of the products of the approximate quantities multiplied by the unit prices bid. This summation will hereinafter be referred to as the gross sum bid.

The undersigned further agrees to accept the aforesaid unit bid prices in compensation

for any additions or deductions caused by any variation in quantities due to more accurate measurement, or by any changes or alterations in the Plans or specifications of the Work and for use in the computation of the value of the Work performed for monthly estimates.

Every Proposal must be accompanied by a certified check or bank cashier's check or bid bond payable to the Greater New Haven Water Pollution Control Authority in the amount of ten percent (10%) of the bid.

Accompanying this Proposal is a certified check or bank cashier's check or bid bond payable to the Greater New Haven Water Pollution Control Authority in the amount of \$\_\_\_\_\_. In case this Proposal shall be accepted by the Authority, and the undersigned shall fail to execute the Contract, the monies represented by such certified check or bank cashier's check or bid bond shall be regarded as liquidated damages and shall be forfeited and become the property of the Authority. The undersigned understands and accepts:

- A. When Work is required in which no specific payment item is listed on the Proposal Form, the cost of such Work shall be included in the unit prices bid.
- B. All unit prices, lump sums, etc. listed in the bid Proposal are firm and not subject to change for ninety (90) days from the day bids are opened.
- C. Within ten (10) days from the date of a notice of acceptance of this Proposal, the undersigned agrees to execute the Contract and to furnish to the Authority a satisfactory "Faithful Performance Bond" and "Labor and Material Payment Bond" in the amount of one hundred percent (100%) of the Contract price.
- D. Time is of the Essence. All Work to be performed under the Contract shall be completed within the time stated in the Agreement for the Project or within such extended time for completion as may be granted by the Authority.
- E. As a condition of the Contract Award, the successful Bidder shall provide proof, from the Connecticut Secretary of State's office, of its current authorization to do business in Connecticut. All Connecticut corporations must provide a Certificate of Good Standing from the Secretary of State's Office. All foreign (out of State) corporations shall provide a valid license to do business in Connecticut, in the form of a current Certificate of Authority from the Secretary of State's office and evidence of compliance with the bond requirements of the Connecticut Department of Revenue Services. These documents must be presented within thirty (30) days from the date of the bid opening.

Bidder acknowledges receipt of the Addenda listed below and further acknowledges that the provisions of each Addendum have been included in the preparation of this bid.

Addendum No.	Date Received	Addendum No.	Date Received
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**COMPANY NAME (BIDDER):** \_\_\_\_\_

**Address of Bidder:** \_\_\_\_\_  
\_\_\_\_\_

**Phone Number:** Area Code (\_\_\_\_\_) \_\_\_\_\_

**Email Address:** \_\_\_\_\_

I hereby sign this document acting within my authority as a duly authorized representative of the named Bidder. By signing below, I certify, acknowledge, and affirm that the information set forth in this document is true, accurate and complete to the best of my knowledge and belief.

**Signature of Bidder:** \_\_\_\_\_ **Dated:** \_\_\_\_\_

**Name and Addresses of Members of the Firm:**

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

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



Schedule Of Bid Items

ITEM NUMBER	ESTIMATED QUANTITY	UNIT	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT BID	
				DOLLARS	CTS	DOLLARS	CTS
109.15	1	LS	Lump Sum 3-year Maintenance Bond  For - _____ _____				
205	1	Allow.	Allowance Trench Excavation and Backfill  For - Thirty Thousand Dollars and No Cents _____	\$	30,000 00	\$	30,000 00
407	1	Allow.	Allowance Bituminous Concrete Trench Repair Class 2, Thickness 4 inches For - Thirty Thousand Dollars and No Cents _____	\$	30,000 00	\$	30,000 00
516	1	LS	Lump Sum Sanitary Sewer Flow Control and Bypass Pumping For - _____ _____				
516.01	1	Allow.	Allowance Individual Building Bypass Excavation For - Fifty thousand Dollars and No Cents _____	\$	50,000 00	\$	50,000 00
518.01A	24,699	LF	Linear Foot Sanitary Sewer Hydraulic Cleaning (Light) 12" Diameter and Less For - _____ _____				
518.01B	3091	LF	Linear Foot Sanitary Sewer Hydraulic Cleaning (Light) 15" Diameter and 18" Diameter For - _____ _____				
518.02A	2500	LF	Linear Foot Sanitary Sewer Hydraulic Cleaning (Heavy) 12" Diameter and Less For - _____ _____				

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



Schedule Of Bid Items

ITEM NUMBER	ESTIMATED QUANTITY	UNIT	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT BID	
				DOLLARS	CTS	DOLLARS	CTS
518.02B	300	LF	Linear Foot Sanitary Sewer Hydraulic Cleaning (Heavy) 15" Diameter and 18" Diameter For -	_____	_____	_____	_____
520.01A	24,699	LF	Linear Foot Sanitary Sewer CIPP Lining 12" Diameter and Less For -	_____	_____	_____	_____
520.01B	3,091	LF	Linear Foot Sanitary Sewer CIPP Lining 15" Diameter and 18" Diameter For -	_____	_____	_____	_____
520.10	550	EA	Each Re-establish House Service Connections For -	_____	_____	_____	_____
520.11	120	EA	Each Cut Pre-laid Taps For -	_____	_____	_____	_____
520.12	15	EA	Each Sewer Lateral/Sewer Main Connection Lining For -	_____	_____	_____	_____
520.13	15	EA	Each Sewer Lateral/Sewer Main Connection Epoxy Coated Repair Mortar Rehabilitation For -	_____	_____	_____	_____
522.01	24,699	LF	Linear Foot Sanitary Sewer CCTV Inspection 12" Diameter and Less For -	_____	_____	_____	_____

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



Schedule Of Bid Items

ITEM NUMBER	ESTIMATED QUANTITY	UNIT	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT BID	
				DOLLARS	CTS	DOLLARS	CTS
522.02	3,091	LF	Linear Foot Sanitary Sewer CCTV Inspection 15" Diameter and 18" Diameter For - _____ _____	_____	_____	_____	_____
523.06A	21	EA	Each Reset Frame and Cover (Earth) For - _____ _____	_____	_____	_____	_____
523.06B	67	EA	Each Reset Frame and Cover (Pavement) For - _____ _____	_____	_____	_____	_____
524.09A	37	EA	Each Replace Frame and Cover - Standard For - _____ _____	_____	_____	_____	_____
524.09B	5	EA	Each Replace Frame and Cover - Watertight For - _____ _____	_____	_____	_____	_____
524	3,367	LF	Linear Foot Sanitary Sewer Manhole Rehabilitation For - _____ _____	_____	_____	_____	_____
970	1	Est.	Estimate Trafficperson For - Six Hundred Thousand Dollars and No Cents	\$ 600,000 . 00		\$ 600,000 . 00	
971	1	LS	Lump Sum Maintenance and Protection of Traffic For - _____ _____	_____	_____	_____	_____
975	1	LS	Lump Sum Mobilization (Max. 3% of Total Cost) For - _____ _____	_____	_____	_____	_____

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY





**Schedule Of Bid Items**

ITEM NUMBER	ESTIMATED QUANTITY	UNIT	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT BID	
				DOLLARS	CTS	DOLLARS	CTS
985	1	LS	Lump Sum Red-Line Plans	\$30,000	. 00	\$	30,000 . 00
For - _____							

BASE BID  
TOTAL OR GROSS SUM IN WORDS: \_\_\_\_\_ \$ \_\_\_\_\_  
IN FIGURES

Signature of Bidder: \_\_\_\_\_ Date: \_\_\_\_\_

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

Name of Firm: \_\_\_\_\_

**BIDDER'S CHECKLIST**

At a minimum, the following separate documents shall be completed and submitted with each bid:

- 1. Itemized Proposal
- 2. Bid Bond
- 3. Statement of Qualifications
- 4. List of proposed subcontractors. All Subcontractors contributing over 10% of the Contract amount shall be listed.
- 5. State of Connecticut DAS Contractor Prequalification Certificate
- 6. State of Connecticut DAS Update Bid Statement
- 7. MBE/WBE subcontractor participation Form.
- 8. Clean Water Fund Memorandum CWF 2019-003 and Subcontractor Verification Form
- 9. American Iron and Steel Act Bidder Certification Form

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

APPENDIX A

PERFORMANCE BOND

AND

LABOR AND MATERIALS PAYMENT BOND

GNHWPCA PROJECT NO. SSR 2021-04

BOND NO. \_\_\_\_\_

**PAYMENT BOND (incorporating C.G.S. § 49-41)**

KNOW ALL MEN BY THESE PRESENTS: That by this Bond, we, \_\_\_\_\_ (hereinafter called the "Principal") and \_\_\_\_\_ (hereinafter called the "Surety"), located at \_\_\_\_\_, a surety insurer chartered and existing under the laws of the State of \_\_\_\_\_ and authorized to do business in the State of Connecticut, are held and firmly bound unto the Greater New Haven Water Pollution Control Authority (hereinafter called "Owner") in the sum of \_\_\_\_\_ (\$ \_\_\_\_\_) for the payment whereof we bind ourselves, our heirs, personal representatives, executors, successors and assigns, jointly and severally.

WHEREAS, Principal and the Owner have reached a mutual agreement (hereinafter referred to as the "Contract") for the purpose of \_\_\_\_\_, said Contract being made a part of this Bond by this reference.

NOW, THEREFORE, THE CONDITION OF THIS BOND is that if the Principal:

1. Promptly makes payments to all claimants supplying the Principal with labor, materials or supplies, as used directly or indirectly by the Principal in the prosecution of the work provided for in the Contract; and
2. Pays the Owner for all losses, damages, expenses, costs, and attorneys' fees, including the costs of any mediation, arbitration, litigation or appellate proceedings, that the Owner sustains because of a default by the Principal under paragraph 1 of this Bond, then this Bond is void; otherwise this Bond remains in full force and effect.

BE IT FURTHER KNOWN:

Any changes in or under the Contract and compliance or noncompliance with formalities connected with the Contract or alterations which may be made in the terms of the said Contract, or in the work to be done under it, or the giving by the Owner of any extension of time for the performance of the said Contract, or any other forbearance on the part of the Owner or Principal to the other, shall not affect the obligation of the Principal and the Surety, or either of them, their heirs, personal representatives, successors or assigns under this Bond, notice to the Surety of any such changes, alterations, extensions or forbearance being hereby waived.

This Bond is issued in accordance with and expressly incorporates herein the requirements of Conn. Gen. Stat. § 49-41.

IN WITNESS WHEREOF, the above parties have executed this instrument this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, the name of each party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Signed, sealed and delivered in the presence of:

Witnesses as to Principal:

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

PRINCIPAL:

By: \_\_\_\_\_

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

Its: \_\_\_\_\_

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ corporation/limited liability company /partnership], on behalf of the \_\_\_\_\_ corporation/limited liability company/partnership]. [He/She/It is personally known to me or who has produced \_\_\_\_\_ as identification and who [did] [did not] take an oath.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public (Signature)

(AFFIX NOTARY SEAL)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Title or Rank)

\_\_\_\_\_  
(Serial Number, if any)

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

ATTEST:

SURETY:

Witnesses as to Surety:

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(Authorized Signature)

\_\_\_\_\_  
(Printed Name)

OR

Witnesses as to Attorney-in-Fact:

\_\_\_\_\_  
As Attorney-in-Fact  
(Attach Power of Attorney)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Telephone Number)

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_  
by \_\_\_\_\_, as \_\_\_\_\_ of \_\_\_\_\_, a Surety, on behalf of the  
Surety. [He/She] is personally known to me or who has produced \_\_\_\_\_ as  
identification and who [did] [did not] take an oath.

My Commission Expires:

(AFFIX NOTARY SEAL)

\_\_\_\_\_  
Notary Public (Signature)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Title or Rank)

\_\_\_\_\_  
(Serial Number, if any)

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_ as Principal, and \_\_\_\_\_, as Surety, located at \_\_\_\_\_ (Business Address), a surety insurer chartered and existing under the laws of the State of \_\_\_\_\_ and authorized to do business in the State of Connecticut, are held and firmly bound unto the Greater New Haven Water Pollution Control Authority, as Obligee, in the sum of \_\_\_\_\_ (\$\_\_\_\_\_) for the payment whereof we bind ourselves, our heirs, executors, personal representatives, successors and assigns, jointly and severally.

WHEREAS, Principal has entered into a contract dated as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ with Obligee for

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

in accordance with drawings and specifications, which contract is incorporated by reference and made a part hereof, and is referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS BOND is that of Principal:

1. Performs the Contract at the times and in the manner prescribed in the Contract; and
2. Pays Obligee any and all losses, damages, expenses, costs, direct or indirect, and attorney's fees, including costs of any mediation, arbitration, litigation or appellate proceedings, that Obligee sustains because of any default by Principal under the Contract, including, but not limited to, all delay damages, whether liquidated or actual, incurred by Obligee;

then this Bond is void; otherwise it remains in full force and effect and Surety shall be fully liable for performance of the Principal's obligations provided thereunder.

In the event of a declaration of default of Principal by Obligee under the Contract, the Surety shall, within twenty (20) days of receipt of notice of such default, either: (1) tender the Obligee the full amount of the penal sum of this Bond; or (2) undertake to perform or complete the remaining Contract obligations itself through its agents or through independent contractors.

If Surety denies liability, in whole or in part, it shall notify the Obligee, in writing, citing the detailed reasons therefor, within fifteen (15) days of receipt of the aforesaid declaration of default of Principal.

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

The Surety, for value received, hereby stipulates and agrees that no changes, extensions of time, or additions to the terms of the Contract, or other work to be performed hereunder, or the specifications referred to therein shall in anyway affect its obligations under this Bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions to the terms of the Contract, to the work thereunder or to the specifications.

In no event will the Surety be liable in the aggregate to Obligee for more than the penal sum of this Performance Bond, regardless of the number of suits that may be filed by Obligee.

Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the State of Connecticut and shall be instituted within the applicable statute of limitations for contract actions after Principal defaults.

IN WITNESS WHEREOF, the above parties have executed this instrument this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, the name of each party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Signed, sealed and delivered  
in the presence of:

PRINCIPAL

Witnesses as to Principal:

By \_\_\_\_\_

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

Its: \_\_\_\_\_

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_, as \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ [corporation/limited liability company/partnership], on behalf of the [corporation/limited liability company/partnership]. [He/She/ is personally known to me or what has produced \_\_\_\_\_ as identification and who [did] [did not] take an oath.

My Commission Expires:

\_\_\_\_\_  
Notary Public (Signature)

(AFFIX NOTARY SEAL)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Title or Rank)

\_\_\_\_\_  
(Serial Number, if any)

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

ATTEST:

SURETY:

Witnesses as to Surety:

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(Authorized Signature)

\_\_\_\_\_  
(Printed Name)

Witnesses as to Attorney-in-Fact:

\_\_\_\_\_  
As Attorney-in-Fact  
(Attach Power of Attorney)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Telephone Number)

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_, as \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ [corporation/limited liability company/partnership], on behalf of the [corporation/limited liability company/partnership]. [He/She/ is personally known to me or what has produced \_\_\_\_\_ as identification and who [did] [did not] take an oath.

My Commission Expires:

\_\_\_\_\_  
Notary Public (Signature)

(AFFIX NOTARY SEAL)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Title or Rank)

\_\_\_\_\_  
(Serial Number, if any)

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

APPENDIX B

Prevailing Wage Rates

GNHWPCA PROJECT NO. CWF 2019-02

APPENDIX C

Schedule of Sewers to Be Rehabilitated

GNHWPCA PROJECT NO. CWF 2019-02

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**CFW 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**



**Schedule of Sewers to be Cleaned, CCTV Inspected and Rehabilitated  
Woodbridge Meter Area W-2**

Sheet	Street Name	SewerMain_ID	Pipe Size (in)			UpStrmMH	DwnStrmMH	Length (ft)	Laterals
			Nominal	Horiz	Vert				
W2-1	LITCHFIELD TRKE	WAL01P0011	12	12	12	WAL01M0021	WAL01M0020	191	2
W2-1	LITCHFIELD TRKE	WAL01P0012	12	12	12	WAL01M0020	WAL01M0038	389	4
W2-1	LITCHFIELD TRKE	WAL01P0021	12	12	12	WAL01M0038	WAL01M0037	369	3
W2-1	LITCHFIELD TRKE	WAL01P0022	12	12	12	WAL01M0037	WAL01M0036	163	1
W2-2	LITCHFIELD TRKE	WAL01P0023	12	12	12	WAL01M0036	WAL01M0045	315	4
W2-2	LITCHFIELD TRKE	WAL01P0125	15	15	15	WAL01M0016	WAL01M0125	61	2
W2-2	LITCHFIELD TRKE	WAL01P0024	15	15	15	WAL01M0045	WAL01M0016	377	6
W2-3	LITCHFIELD TRKE	WAL01P0017	15	15	15	WAL01M0125	WAL01M0015	342	6
W2-3	LITCHFIELD TRKE	WAL01P0018	15	15	15	WAL01M0015	WAL01M0014	408	6
W2-4	BRADLEY RD	WAL01P0036	8	8	8	WAL01M0030	WAL01M0025	75	0
W2-4	BRADLEY RD	WAL01P0037	8	8	8	WAL01M0025	WAL01M0026	74	0
W2-4	BRADLEY RD	WAL01P0038	8	8	8	WAL01M0026	WAL01M0012	52	0
W2-4	BRADLEY RD	WAL01P0035	10	10	10	WAL01M0027	WAL01M0030	296	3
W2-4	LITCHFIELD TRKE	WAL01P0006	15	15	15	WAL01M0012	WAL01M0007	19	0
W2-4	LITCHFIELD TRKE	WAL01P0007	15	15	15	WAL01M0007	WAL01M0017	8	0
W2-4	LITCHFIELD TRKE	WAL01P0019	15	15	15	WAL01M0014	WAL01M0013	322	4
W2-4	LITCHFIELD TRKE	WAL01P0020	15	15	15	WAL01M0013	WAL01M0012	83	1
W2-5	LANDIN ST	WAL02P0029	8	8	8	WAL02M0024	WAL02M0111	189	5
W2-5	LANDIN ST	WAL02P0030	8	8	8	WAL02M0023	WAL02M0022	310	8
W2-5	LANDIN ST	WAL02P0031	8	8	8	WAL02M0022	WAL02M0001	314	8
W2-5	LANDIN ST	WAL02P0032	8	8	8	WAL02M0001	WAL02M0010	223	1
W2-5	LANDIN ST	WAL02P0110	8	8	8	WAL02M0111	WAL02M0023	74	5
W2-5	METTLER ST	WAL02P0001	8	8	8	WAL02M0006	WAL02M0005	265	6
W2-5	METTLER ST	WAL02P0002	8	8	8	WAL02M0005	WAL02M0004	188	4
W2-5	METTLER ST	WAL02P0003	8	8	8	WAL02M0004	WAL02M0003	113	4
W2-5	METTLER ST	WAL02P0004	8	8	8	WAL02M0003	WAL02M0002	300	9
W2-5	METTLER ST	WAL02P0005	8	8	8	WAL02M0002	WAL02M0001	250	2
W2-6	MANILA AVE	WAL02P0099	6	6	6	WAL02M0107	WAL02M0106	275	5
W2-6	MANILA AVE	WAL02P0100	8	8	8	WAL02M0106	WAL02M0104	107	3

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**



**Schedule of Sewers to be Cleaned, CCTV Inspected and Rehabilitated  
Woodbridge Meter Area W-2**

Sheet	Street Name	SewerMain_ID	Pipe Size (in)			UpStrmMH	DwnStrmMH	Length (ft)	Laterals
			Nominal	Horiz	Vert				
W2-6	MANILA AVE	WAL02P0101	8	8	8	WAL02M0104	WAL02M0103	140	6
W2-6	MANILA AVE	WAL02P0102	8	8	8	WAL02M0103	WAL02M0101	140	5
W2-6	MANILA AVE	WAL02P0103	8	8	8	WAL02M0101	WAL02M0100	140	4
W2-6	MANILA AVE	WAL02P0104	8	8	8	WAL02M0100	WAL02M0109	139	4
W2-6	MANILA AVE	WAL02P0105	8	8	8	WAL02M0099	WAL02M0099	141	6
W2-6	MANILA AVE	WAL02P0106	8	8	8	WAL02M0099	WAL02M0098	135	3
W2-6	MERRIT AVE	WAL02P0089	8	8	8	WAL02M0105	WAL02M0102	121	3
W2-6	MERRIT AVE	WAL02P0088	8	8	8	WAL02M0102	WAL02M0097	151	4
W2-6	MERRIT AVE	WAL02P0087	8	8	8	WAL02M0097	WAL02M0096	152	8
W2-6	MERRIT AVE	WAL02P0127	8	8	8	WAL02M0096	WAL02M0121	151	6
W2-6	MERRIT AVE	WAL02P0109	8	8	8	WAL02M0121	WAL02M0095	147	5
W2-6	MILES AVE	WAL02P0107	12	12	12	WAL02M0098	WAL02M0110	119	3
W2-6	MILES AVE	WAL02P0108	12	12	12	WAL02M0110	WAL02M0095	123	2

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**CFW 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**



**Schedule of Sewers to be Cleaned, CCTV Inspected and Rehabilitated  
Woodbridge Meter Area W-2A**

Sheet	Name	Pipe ID	Pipe Size (in)			UpStrmMH	DwnStrmMH	Length (ft)	Laterals
			Nominal	Horiz	Vert				
W2-7	AMITY RD	WAL02P0076	12	12	12	WAL02M0088	WAL02M0087	323	2
W2-7	AMITY RD	WAL02P0077	12	12	12	WAL02M0087	WAL02M0086	120	1
W2-7	AMITY RD	WAL02P0078	12	12	12	WAL02M0086	WAL02M0085	49	0
W2-7	AMITY RD	WAL02P0079	12	12	12	WAL02M0085	WAL02M0084	276	1
W2-7	AMITY RD	WAL02P0080	12	12	12	WAL02M0084	WAL02M0083	344	2
W2-7	AMITY RD	WAL02P0124	12	12	12	WAL02M0083	WAL02M00120	41	0
W2-7	AMITY RD	WAL02P0114	12	12	12	WAL02M0118	WAL02M0088	257	1
W2-7	AMITY RD	WAL02P0123	18	18	18	WAL02M00126	NWR01M0333	152	0
W2-7	HAZEL TER	WAL02P0083	8	8	8	WAL02M0078	WAL02M0079	275	3
W2-7	JUNE ST	WAL02P0081	10	10	10	WAL02M0073	WAL02M00120	225	2
W2-7	JUNE ST	WAL02P0084	10	10	10	WAL02M0079	WAL02M0073	235	1

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**



**Schedule of Sewers to be Cleaned, CCTV Inspected and Rehabilitated  
East Haven Meter Area EH-15**

Sheet	Street Name	SewerMain_ID	Pipe Size (in)			UpStrmMH	DwnStrmMH	Length (ft)	Laterals
			Nominal	Horiz	Vert				
EH15-1	PEAT MEADOW RD	NUL04P0073	15	15	15	NUL04M0019	NUL04M0042	132	0
EH15-1	PEAT MEADOW RD	NUL04P0074	15	15	15	NUL04M0042	NUL04M0043	119	0
EH15-1	PEAT MEADOW RD	NUL04P0075	15	15	15	NUL04M0043	NUL04M0044	180	2
EH15-1	PEAT MEADOW RD	NUL04P0076	15	15	15	NUL04M0044	NUL04M0045	169	3
EH15-1	PEAT MEADOW RD	NUL04P0077	15	15	15	NUL04M0045	NUL04M0046	58	0
EH15-2	HUNTINGTON AVE	NUL04P0001	12	12	12	NUL04M0065	NUL04M0066	130	4
EH15-2	HUNTINGTON AVE	NUL04P0015	12	12	12	NUL04M0061	NUL04M0062	192	5
EH15-2	HUNTINGTON AVE	NUL04P0016	12	12	12	NUL04M0062	NUL04M0063	198	9
EH15-2	HUNTINGTON AVE	NUL04P0017	12	12	12	NUL04M0063	NUL04M0064	110	3
EH15-2	HUNTINGTON AVE	NUL04P0018	12	12	12	NUL04M0064	NUL04M0065	125	5
EH15-2	HUNTINGTON AVE	NUL04P0120	12	12	12	NUL04M0118	NUL04M0061	198	7
EH15-3	BOSTON AVE	EUL02P0187	12	12	12	EUL02M0221	EUL02M0191	326	8
EH15-3	BOSTON AVE	NUL04P0123	12	12	12	NUL04M0121	NUL04M0122	194	3
EH15-3	BOSTON AVE	NUL04P0124	12	12	12	NUL04M0122	NUL04M0123	173	6
EH15-3	BOSTON AVE	NUL04P0125	12	12	12	NUL04M0123	NUL04M0124	177	6
EH15-3	BOSTON AVE	NUL04P0126	12	12	12	NUL04M0124	NUL04M0125	170	3
EH15-3	BOSTON AVE	NUL04P0179	12	12	12	NUL04M0125	EUL02M0221	304	9
EH15-3	HARRINGTON AVE	NUL04P0132	12	12	12	NUL04M0130	NUL04M0131	169	4
EH15-3	HARRINGTON AVE	NUL04P0133	12	12	12	NUL04M0131	NUL04M0132	199	5
EH15-3	HARRINGTON AVE	NUL04P0134	12	12	12	NUL04M0132	NUL04M0133	226	5
EH15-3	HARRINGTON AVE	NUL04P0135	12	12	12	NUL04M0134	NUL04M0135	117	3
EH15-3	HARRINGTON AVE	NUL04P0136	12	12	12	NUL04M0135	NUL04M0136	199	6
EH15-3	HARRINGTON AVE	NUL04P0137	12	12	12	NUL04M0136	NUL04M0130	108	1
EH15-3	HARRINGTON AVE	NUL04P0178	12	12	12	NUL04M0133	EUL02M0190	238	4
EH15-3	TERRACE ST	NUL04P0081	12	12	12	NUL04M0049	NUL04M0050	147	3
EH15-3	TERRACE ST	NUL04P0121	12	12	12	NUL04M0119	NUL04M0049	146	7
EH15-3	TERRACE ST	NUL04P0127	12	12	12	NUL04M0126	NUL04M0127	227	6
EH15-3	TERRACE ST	NUL04P0128	12	12	12	NUL04M0127	NUL04M0128	145	4
EH15-3	TERRACE ST	NUL04P0129	12	12	12	NUL04M0128	NUL04M0119	203	8

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**



**Schedule of Sewers to be Cleaned, CCTV Inspected and Rehabilitated  
East Haven Meter Area EH-15**

Sheet	Street Name	SewerMain_ID	Pipe Size (in)			UpStrmMH	DwnStrmMH	Length (ft)	Laterals
			Nominal	Horiz	Vert				
EH15-3	TERRACE ST	NUL04P0130	12	12	12	NUL04M0126	NUL04M0129	224	4
EH15-3	TERRACE ST	NUL04P0131	12	12	12	NUL04M0129	NUL04M0130	40	0
EH15-4	MASSACHUSETTS AVE	NUL04P0148	12	12	12	NUL04M0147	EUL02M0224	384	11
EH15-5	ELIZABETH ANN DR	NUL04P0156	12	12	12	NUL04M0156	NUL04M0157	241	8
EH15-5	ELIZABETH ANN DR	NUL04P0157	12	12	12	NUL04M0157	NUL04M0158	252	7
EH15-5	ELIZABETH ANN DR	NUL04P0158	12	12	12	NUL04M0158	NUL04M0159	69	3
EH15-5	ELIZABETH ANN DR	NUL04P0159	12	12	12	NUL04M0159	NUL04M0160	165	6
EH15-5	ELIZABETH ANN DR	NUL04P0160	12	12	12	NUL04M0160	NUL04M0161	81	2
EH15-5	ELIZABETH ANN DR	NUL04P0166	12	12	12	NUL04M0161	NUL04M0162	272	6
EH15-5	ELIZABETH ANN DR	NUL04P0167	12	12	12	NUL04M0162	NUL04M0163	176	4
EH15-5	ELIZABETH ANN DR	NUL04P0168	12	12	12	NUL04M0163	NUL04M0164	173	2
EH15-5	ELIZABETH ANN DR	NUL04P0169	12	12	12	NUL04M0164	NUL04M0121	77	0

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**

**Schedule of Sewers to be Cleaned, CCTV Inspected and Rehabilitated  
East Haven Meter Area EH-18**



Sheet	Street Name	SewerMain_ID	Pipe Size (in)			UpStrmMH	DwnStrmMH	Length (ft)	Laterals
			Nominal	Horiz	Vert				
EH18-1	HELLSTROM RD	EFM01P0187	8	8	8	EFM01M0053	EFM01M0054	120	1
EH18-2	WILLOW RD EASEMENT	EFM03P0034	8	8	8	EFM03M0094	EFM03M0057	216	2
EH18-3	BORRMAN RD	EFM01P0020	8	8	8	EFM01M0065	EFM01M0064	215	5

**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**



**Schedule of Sewers to be Cleaned, CCTV Inspected and Rehabilitated  
East Haven Meter Area EH-23**

Sheet	Street Name	SewerMain_ID	Pipe Size (in)			UpStrmMH	DwnStrmMH	Length (ft)	Laterals
			Nominal	Horiz	Vert				
EH23-1	DANIEL DR	NQU03P0320	12	12	12	NQU03M0326	NQU03M0327	221	4
EH23-1	DANIEL DR	NQU03P0321	12	12	12	NQU03M0327	NQU03M0328	56	1
EH23-1	DANIEL DR	NQU03P0322	12	12	12	NQU03M0328	NQU03M0329	163	3
EH23-1	DANIEL DR	NQU03P0323	12	12	12	NQU03M0329	NQU03M0330	98	2
EH23-1	DANIEL DR	NQU03P0375	12	12	12	NQU03M0330	NQU03M0353	77	0
EH23-1	DANIEL DR	NQU03P0324	12	12	12	NQU03M0353	NQU03M0331	42	0
EH23-1	DANIEL DR	NQU03P0325	12	12	12	NQU03M0331	NQU03M0332	60	2
EH23-1	DANIEL DR	NQU03P0326	12	12	12	NQU03M0332	NQU03M0333	80	2
EH23-1	DANIEL DR	NQU03P0327	12	12	12	NQU03M0333	NQU03M0334	118	3
EH23-1	DANIEL DR	NQU03P0328	12	12	12	NQU03M0334	NQU03M0324	152	1
EH23-1	DELL DR	NQU03P0228	12	12	12	NQU03M0325	EFX03M0215	156	3
EH23-1	DELL DR	NQU03P0232	12	12	12	EFX03M0215	EFX03M0216	136	2
EH23-1	DELL DR	NQU03P0319	12	12	12	NQU03M0324	NQU03M0325	101	1
EH23-1	FOXON BLVD	NQU03P0229	12	12	12	EFX03M0216	NQU03M0289	127	2
EH23-1	FOXON BLVD	NQU03P0230	12	12	12	NQU03M0289	NQU03M0352	234	5
EH23-2	FOXON BLVD	NQU03P0222	12	12	12	NQU03M0346	NQU03M0345	87	0
EH23-2	FOXON BLVD	NQU03P0231	12	12	12	NQU03M0352	NQU03M0346	51	0
EH23-2	OLD FOXON RD	EFX03P0202	8	8	8	EFX03M0038	EFX03M0053	143	0
EH23-2	OLD FOXON RD	EFX03P0203	8	8	8	EFX03M0053	EFX03M0017	231	4
EH23-2	OLD FOXON RD	NQU03P0376	15	15	15	NQU03M0344	NQU03M0290	132	1
EH23-2	OLD FOXON RD	NQU03P0221	15	15	15	NQU03M0290	NQU03M0345	35	0
EH23-2	OLD FOXON RD	NQU03P0338	15	15	15	EFX03M0017	NQU03M0343	114	0
EH23-2	OLD FOXON RD	NQU03P0339	15	15	15	NQU03M0343	NQU03M0344	99	1
EH23-3	FOXON BLVD	EFX03P0061	8	8	8	EFX03M0070	EFX03M0043	284	4
EH23-3	OLD FOXON RD	EFX03P0035	8	8	8	EFX03M0040	EFX03M0039	115	2
EH23-3	OLD FOXON RD	EFX03P0036	8	8	8	EFX03M0041	EFX03M0040	171	3
EH23-3	OLD FOXON RD	EFX03P0037	8	8	8	EFX03M0042	EFX03M0041	257	6
EH23-3	OLD FOXON RD	EFX03P0038	8	8	8	EFX03M0036	EFX03M0042	170	5

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**



**Schedule of Sewers to be Cleaned, CCTV Inspected and Rehabilitated  
East Haven Meter Area EH-23**

Sheet	Street Name	SewerMain_ID	Pipe Size (in)			UpStrmMH	DwnStrmMH	Length (ft)	Laterals
			Nominal	Horiz	Vert				
EH23-3	OLD FOXON RD	EFX03P0039	8	8	8	EFX03M0043	EFX03M0036	109	1
EH23-3	OLD FOXON RD	EFX03P0040	8	8	8	EFX03M0044	EFX03M0043	133	2
EH23-3	OLD FOXON RD	EFX03P0204	8	8	8	EFX03M0039	EFX03M0208	55	1
EH23-3	OLD FOXON RD	EFX03P0205	8	8	8	EFX03M0208	EFX03M0038	101	2
EH23-4	JOHN ST	EFX03P0031	8	8	8	EFX03M0037	EFX03M0036	364	8
EH23-4	JOHN ST	EFX03P0164	8	8	8	EFX03M0035	EFX03M0037	386	9
EH23-5	RUSSO AVE	EFX03P0034	8	8	8	EFX03M0035	EFX03M0025	388	6
EH23-5	RUSSO AVE	EFX03P0033	8	8	8	EFX03M0025	EFX03M0020	297	4
EH23-5	RUSSO AVE	EFX03P0032	8	8	8	EFX03M0020	EFX03M0038	284	3
EH23-6	ANN ST	EFX03P0018	8	8	8	EFX03M0024	EFX03M0023	245	7
EH23-6	ANN ST	EFX03P0019	8	8	8	EFX03M0023	EFX03M0022	197	5
EH23-6	ANN ST	EFX03P0020	8	8	8	EFX03M0022	EFX03M0021	155	4
EH23-6	ANN ST	EFX03P0021	8	8	8	EFX03M0021	EFX03M0020	151	2
EH23-6	BRENNAN ST	EFX03P0022	8	8	8	EFX03M0029	EFX03M0028	214	6
EH23-6	BRENNAN ST	EFX03P0023	8	8	8	EFX03M0028	EFX03M0027	97	3
EH23-6	BRENNAN ST	EFX03P0024	8	8	8	EFX03M0027	EFX03M0026	145	3
EH23-6	BRENNAN ST	EFX03P0025	8	8	8	EFX03M0026	EFX03M0025	200	3

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

APPENDIX D

Schedule of Manholes to be Rehabilitated

GNHWPCA PROJECT NO. CWF 2019-02

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**  
**Schedule of Manhole Rehabilitation**  
**Woodbridge Meter Area W-2**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-1	WAL01M0017	WOODBIDGE	BRADLEY RD	Unknown /Paved		P	X	
MH-1	WAL01M0027	WOODBIDGE	BRADLEY RD	6.4		P	X	
MH-1	WAL01M0030	WOODBIDGE	BRADLEY RD	8.7			X	
MH-1	WAL01M0035	WOODBIDGE	BRADLEY RD	9.5			X	
MH-1	WAL01M0025	WOODBIDGE	BRADLEY RD	10.6			X	
MH-1	WAL01M0026	WOODBIDGE	BRADLEY RD	10.2			X	
MH-1	WAL01M0059	WOODBIDGE	BRADLEY RD	Unknown/Paved		P	X	
MH-1	WAL01M0062	WOODBIDGE	BRADLEY RD	Unknown/Buried		D	X	
MH-1	WAL01M0063	WOODBIDGE	BRADLEY RD	Unknown/Buried		D	X	
MH-1	WAL01M0089	WOODBIDGE	LAWRENCE RD	9.6	S		X	
MH-1	WAL02M0053	WOODBIDGE	LITCHFIELD AVE	9.1			X	
MH-1	WAL01M0007	WOODBIDGE	LITCHFIELD TPKE	10.1			X	
MH-1	WAL01M0011	WOODBIDGE	LITCHFIELD TPKE	11.3			X	
MH-1	WAL01M0013	WOODBIDGE	LITCHFIELD TPKE	10.6	WT		X	
MH-1	WAL01M0014	WOODBIDGE	LITCHFIELD TPKE	12.0	WT		X	
MH-1	WAL01M0015	WOODBIDGE	LITCHFIELD TPKE	12.5	WT		X	
MH-1	WAL01M0016	WOODBIDGE	LITCHFIELD TPKE	12.1			X	
MH-1	WAL01M0125	WOODBIDGE	LITCHFIELD TPKE	Unknown/Buried		D	X	
MH-1	WAL01M0020	WOODBIDGE	LITCHFIELD TPKE	5.6			X	
MH-1	WAL01M0021	WOODBIDGE	LITCHFIELD TPKE	Unknown/Buried		D	X	
MH-1	WAL02M0008	WOODBIDGE	LITCHFIELD TPKE	8.2	S		X	
MH-1	WAL02M0009	WOODBIDGE	LITCHFIELD TPKE	7.6			X	
MH-1	WAL02M0010	WOODBIDGE	LITCHFIELD TPKE	Unknown/Paved		P	X	
MH-1	WAL02M0054	WOODBIDGE	LITCHFIELD TPKE	8.9	WT		X	
MH-1	WAL01M0012	WOODBIDGE	LITCHFIELD TPKE	10.4			X	
MH-1	WAL01M0036	WOODBIDGE	LITCHFIELD TPKE	8.9			X	X
MH-1	WAL01M0037	WOODBIDGE	LITCHFIELD TPKE	8.4			X	
MH-1	WAL01M0038	WOODBIDGE	LITCHFIELD TPKE	8.9	S		X	
MH-1	WAL01M0045	WOODBIDGE	LITCHFIELD TPKE	11.6			X	
MH-1	WAL01M0040	WOODBIDGE	LUCIANI RD	10.6			X	
MH-1	WAL01M0041	WOODBIDGE	LUCIANI RD	6.3			X	
MH-1	WAL01M0043	WOODBIDGE	LUCIANI RD	3.3			X	X
MH-1	WAL01M0044	WOODBIDGE	LUCIANI RD	5.2			X	

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23  
 Schedule of Manhole Rehabilitation  
 Woodbridge Meter Area W-2**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-1	WAL01M0072	WOODBIDGE	RAYMOND RD	1.6			X	
MH-1	WAL01M0046	WOODBIDGE	RAYMOND RD EASEMENT	Unknown/Buried		D	X	
MH-1	WAL01M0051	WOODBIDGE	RESEARCH DR	6.2	S		X	
MH-2	WAL02M0001	WOODBIDGE	LANDIN ST	12.5			X	
MH-2	WAL02M0022	WOODBIDGE	LANDIN ST	9.3	S		X	X
MH-2	WAL02M0023	WOODBIDGE	LANDIN ST	9.0			X	
MH-2	WAL02M0024	WOODBIDGE	LANDIN ST	7.2			X	
MH-2	WAL02M0111	WOODBIDGE	LANDIN ST	8.1			X	
MH-2	WAL02M0098	WOODBIDGE	MANILA AVE	8.2			X	
MH-2	WAL02M0099	WOODBIDGE	MANILA AVE	8.0			X	
MH-2	WAL02M0100	WOODBIDGE	MANILA AVE	Unknown			X	
MH-2	WAL02M0101	WOODBIDGE	MANILA AVE	Unknown/Paved		P	X	
MH-2	WAL02M0103	WOODBIDGE	MANILA AVE	Unknown/Paved		P	X	
MH-2	WAL02M0104	WOODBIDGE	MANILA AVE	7.5			X	
MH-2	WAL02M0106	WOODBIDGE	MANILA AVE	9.8	S		X	
MH-2	WAL02M0107	WOODBIDGE	MANILA AVE	14.1	S		X	
MH-2	WAL02M0108	WOODBIDGE	MANILA AVE	3.3			X	
MH-2	WAL02M0109	WOODBIDGE	MANILA AVE	7.6			X	
MH-2	WAL02M0102	WOODBIDGE	MERRITT AVE	9.2		P	X	
MH-2	WAL02M0105	WOODBIDGE	MERRITT AVE	10.8			X	
MH-2	WAL02M0095	WOODBIDGE	MERRITT AVE	8.2			X	
MH-2	WAL02M0122	WOODBIDGE	MERRITT AVE	7.8		P	X	
MH-2	WAL02M0096	WOODBIDGE	MERRITT AVE	8.2		P	X	
MH-2	WAL02M0121	WOODBIDGE	MERRITT AVE	8.8	S		X	
MH-2	WAL02M0097	WOODBIDGE	MERRITT AVE	7.7	S		X	
MH-2	WAL02M0002	WOODBIDGE	METTLER ST	10.9			X	
MH-2	WAL02M0003	WOODBIDGE	METTLER ST	8.3		P	X	
MH-2	WAL02M0006	WOODBIDGE	METTLER ST	5.9			X	
MH-2	WAL02M0110	WOODBIDGE	MILES AVE	8.2			X	

1. "S" Indicates the installation of a standard manhole frame and cover. "WT" indicates the installation of a watertight manhole frame and cover.

2. "P" indicates that the frame & cover to be reset is located within a paved area. "D" indicates that the frame & cover to be reset is not located within a paved area but within an area comprised of dirt/gravel/ non-paved.



**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**  
**Schedule of Manhole Rehabilitation**  
**Woodbridge Meter Area W-2A**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-2	NWR01M0333	NEW HAVEN	AMITY RD	9.3			X	
MH-2	WAL02M0083	WOODBIDGE	AMITY RD	4.2			X	
MH-2	WAL02M0120	WOODBIDGE	AMITY RD	Unknown/Paved		P	X	
MH-2	WAL02M0084	WOODBIDGE	AMITY RD	Unknown			X	
MH-2	WAL02M0085	WOODBIDGE	AMITY RD	Unknown			X	
MH-2	WAL02M0086	WOODBIDGE	AMITY RD	Unknown/Buried		D	X	
MH-2	WAL02M0087	WOODBIDGE	AMITY RD	Unknown/Paved		P	X	
MH-2	WAL02M0088	WOODBIDGE	AMITY RD	Unknown/Paved		P	X	
MH-2	WAL02M0117	WOODBIDGE	AMITY RD	8.0			X	
MH-2	WAL02M0118	WOODBIDGE	AMITY RD	Unknown/Buried		D	X	
MH-2	WAL02M0078	WOODBIDGE	HAZEL TER	5.5			X	
MH-2	WAL02M0073	WOODBIDGE	JUNE ST	5.4		P	X	
MH-2	WAL02M0079	WOODBIDGE	JUNE ST	6.0		P	X	
MH-2	WAL02M0074	WOODBIDGE	SELDEN ST	7.8			X	
MH-2	WAL02M0075	WOODBIDGE	SELDEN ST	8.0			X	

1. "S" Indicates the installation of a standard manhole frame and cover. "WT" indicates the installation of a water tight manhole frame and cover.  
 2. "P" indicates that the frame & cover to be reset is located within a paved area. "D" indicates that the frame & cover to be reset is not located within a paved area but within an area comprised of dirt/gravel/ non-paved.

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY

CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23  
 Schedule of Manhole Rehabilitation  
 East Haven Meter Area EH-15



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-3	EUL02M0221	EAST HAVEN	BOSTON AVE	11.9	S		X	
MH-3	NUL04M0132	NEW HAVEN	HARRINGTON AVE	9.4			X	
MH-3	NUL04M0133	NEW HAVEN	HARRINGTON AVE	9.4			X	X
MH-3	NUL04M0067	NEW HAVEN	HILLSIDE AVE	10.6			X	
MH-3	NUL04M0068	NEW HAVEN	HILLSIDE AVE	10.7			X	
MH-3	NUL04M0069	NEW HAVEN	HILLSIDE AVE	10.7			X	
MH-3	NUL04M0071	NEW HAVEN	HILLSIDE AVE	9.1			X	
MH-3	NUL04M0072	NEW HAVEN	HILLSIDE AVE	9.4			X	
MH-3	NUL04M0073	NEW HAVEN	HILLSIDE AVE	10.2			X	
MH-3	NUL04M0117	NEW HAVEN	HILLSIDE AVE	Unable to Open		P	X	
MH-3	NUL04M0061	NEW HAVEN	HUNNTINGTON RD	9.8		P	X	
MH-3	NUL04M0062	NEW HAVEN	HUNNTINGTON RD	Unknown/Paved		P	X	
MH-3	NUL04M0063	NEW HAVEN	HUNNTINGTON RD	9.6			X	X
MH-3	NUL04M0064	NEW HAVEN	HUNNTINGTON RD	Unknown/Paved		P	X	
MH-3	NUL04M0065	NEW HAVEN	HUNNTINGTON RD	10.9			X	
MH-3	NUL04M0066	NEW HAVEN	HUNNTINGTON RD	9.9	S		X	X
MH-3	NUL04M0118	NEW HAVEN	HUNNTINGTON RD	9.9	S		X	
MH-3	NUL04M0140	NEW HAVEN	HUNNTINGTON RD	Unknown			X	
MH-3	NUL04M0141	NEW HAVEN	HUNNTINGTON RD	10.1			X	
MH-3	NUL04M0142	NEW HAVEN	HUNNTINGTON RD	10.2			X	
MH-3	NUL04M0143	NEW HAVEN	HUNNTINGTON RD	Unknown			X	
MH-3	NUL04M0144	NEW HAVEN	HUNNTINGTON RD	Unknown			X	
MH-3	NUL04M0145	NEW HAVEN	HUNNTINGTON RD	Unknown			X	
MH-3	NUL04M0168	NEW HAVEN	HUNNTINGTON RD	Unable to open		P	X	
MH-3	NUL04M0169	NEW HAVEN	HUNNTINGTON RD	Unable to open		P	X	
MH-3	NUL04M0172	NEW HAVEN	HUNNTINGTON RD	Unknown			X	
MH-3	NUL04M0174	NEW HAVEN	HUNNTINGTON RD	Unknown			X	
MH-3	EUL02M0190	EAST HAVEN	MAIN ST	12.7			X	
MH-3	EUL02M0337	EAST HAVEN	MAIN ST	12.9			X	
MH-3	EUL02M0191	EAST HAVEN	MAIN ST	13.4			X	
MH-3	EUL02M0192	EAST HAVEN	MAIN ST	12.4			X	
MH-3	NUL04M0046	NEW HAVEN	MAIN ST ANNEX	18.9			X	
MH-3	NUL04M0047	NEW HAVEN	MAIN ST ANNEX	15.5			X	
MH-3	NUL04M0048	NEW HAVEN	MAIN ST ANNEX	14.2	S		X	
MH-3	NUL04M0053	NEW HAVEN	MAIN ST ANNEX	6.6			X	
MH-3	NUL04M0054	NEW HAVEN	MAIN ST ANNEX	9.6			X	
MH-3	NUL04M0055	NEW HAVEN	MAIN ST ANNEX	Unable to open		P	X	

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY

CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23  
 Schedule of Manhole Rehabilitation  
 East Haven Meter Area EH-15



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-3	NUL04M0058	NEW HAVEN	MAIN ST ANNEX	Unknown/Paved		P	X	
MH-3	NUL04M0059	NEW HAVEN	MAIN ST ANNEX	Unknown			X	
MH-3	NUL04M0052	NEW HAVEN	OAKLEY ST	8.8			X	
MH-3	NUL04M0060	NEW HAVEN	OAKLEY ST	9.5			X	
MH-3	NUL04M0060	NEW HAVEN	OAKLEY ST	9.5			X	
MH-3	NUL04M0019	NEW HAVEN	PEAT MEADOW RD	Unable to open			X	
MH-3	NUL04M0042	NEW HAVEN	PEAT MEADOW RD	Unknown/Buried		D	X	
MH-3	NUL04M0043	NEW HAVEN	PEAT MEADOW RD	1.0			X	
MH-3	NUL04M0044	NEW HAVEN	PEAT MEADOW RD	Unknown/Paved		P	X	
MH-3	NUL04M0045	NEW HAVEN	PEAT MEADOW RD	19.4			X	
MH-3	NUL04M0049	NEW HAVEN	TERRACE ST	9.2			X	
MH-3	NUL04M0050	NEW HAVEN	TERRACE ST	9.4			X	
MH-3	NUL04M0119	NEW HAVEN	TERRACE ST	9.7			X	
MH-3	NUL04M0127	NEW HAVEN	TERRACE ST	9.9			X	
MH-3	NUL04M0128	NEW HAVEN	TERRACE ST	9.6			X	X
MH-4	NUL04M0122	NEW HAVEN	BOSTON AVE	8.5			X	
MH-4	NUL04M0123	NEW HAVEN	BOSTON AVE	7			X	
MH-4	NUL04M0124	NEW HAVEN	BOSTON AVE	8.3			X	
MH-4	NUL04M0125	NEW HAVEN	BOSTON AVE	10.1			X	
MH-4	NUL04M0121	NEW HAVEN	CLARENDON ST	8.2			X	
MH-4	NUL04M0137	NEW HAVEN	CLARENDON ST	7.1			X	
MH-4	NUL04M0138	NEW HAVEN	CLARENDON ST	8.6		P	X	
MH-4	NUL04M0139	NEW HAVEN	CLARENDON ST	8.1			X	
MH-4	NUL04M0164	NEW HAVEN	CLARENDON ST	13.3			X	
MH-4	NUL04M0156	NEW HAVEN	ELIZABETH ANN DR	11.1			X	
MH-4	NUL04M0157	NEW HAVEN	ELIZABETH ANN DR	6.0			X	
MH-4	NUL04M0158	NEW HAVEN	ELIZABETH ANN DR	5.3		P	X	
MH-4	NUL04M0159	NEW HAVEN	ELIZABETH ANN DR	5.8	S		X	
MH-4	NUL04M0160	NEW HAVEN	ELIZABETH ANN DR	7.8			X	
MH-4	NUL04M0161	NEW HAVEN	ELIZABETH ANN DR	11.0	S		X	
MH-4	NUL04M0162	NEW HAVEN	ELIZABETH ANN DR	14.8			X	X
MH-4	NUL04M0163	NEW HAVEN	ELIZABETH ANN DR	14.3			X	
MH-4	NUL04M0130	NEW HAVEN	HARRINGTON AVE	9.8	S		X	
MH-4	NUL04M0131	NEW HAVEN	HARRINGTON AVE	10.0			X	
MH-4	NUL04M0134	NEW HAVEN	HARRINGTON AVE	9.1			X	
MH-4	NUL04M0135	NEW HAVEN	HARRINGTON AVE	9.3	S		X	
MH-4	NUL04M0136	NEW HAVEN	HARRINGTON AVE	9.3			X	

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**  
**Schedule of Manhole Rehabilitation**  
**East Haven Meter Area EH-15**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-4	NUL04M0149	NEW HAVEN	HILLSIDE AVE	Unknown/Paved		P	X	
MH-4	NUL04M0147	NEW HAVEN	MASSACHUSETTS AVE	8.2			X	
MH-4	EUL02M0224	NEW HAVEN	MASSACHUSETTS AVE	6.2		P	X	
MH-4	NUL04M0154	NEW HAVEN	MASSACHUSETTS AVE	8.2	S		X	
MH-4	NUL04M0126	NEW HAVEN	TERRACE ST	10.0			X	X
MH-4	NUL04M0129	NEW HAVEN	TERRACE ST	9.6			X	
MH-4	NUL04M0173	NEW HAVEN	UPSON TER	Unable to open		P	X	

1. "S" Indicates the installation of a standard manhole frame and cover. "WT" indicates the installation of a watertight manhole frame and cover.

2. "P" indicates that the frame & cover to be reset is located within a paved area. "D" indicates that the frame & cover to be reset is not located within a paved area, but within an area comprised of dirt/gravel/ non-paved.

**NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY**

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**  
**Schedule of Manhole Rehabilitation**  
**East Haven Meter Area EH-18**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-5	EFM02M0210	EAST HAVEN	ERICO DR EASEMENT	Unknown/Buried		D	X	
MH-5	EFM02M0211	EAST HAVEN	ERICO DR EASEMENT	Unknown/Buried		D	X	
MH-5	EFM01M0054	EAST HAVEN	HELLSTROM RD	16.6			X	
MH-5	EFM01M0062	EAST HAVEN	HELLSTROM RD	9.2			X	
MH-5	EFM01M0104	EAST HAVEN	HELLSTROM RD	7.2			X	
MH-5	EFM01M0105	EAST HAVEN	HELLSTROM RD	9.2			X	
MH-5	EFM01M0106	EAST HAVEN	HELLSTROM RD	9.2			X	
MH-5	EFM01M0108	EAST HAVEN	HELLSTROM RD	8.2			X	
MH-5	EFM01M0109	EAST HAVEN	HELLSTROM RD	9.0			X	
MH-5	EFM01M0111	EAST HAVEN	HELLSTROM RD	10.0			X	
MH-5	EFM01M0112	EAST HAVEN	HELLSTROM RD	9.0			X	
MH-5	EFM01M0130	EAST HAVEN	HELLSTROM RD	9.1			X	
MH-5	EFM01M0122	EAST HAVEN	HELLSTROM RD	7.9			X	
MH-5	EFM01M0157	EAST HAVEN	HELLSTROM RD EASEMENT	14.5			X	
MH-5	EFM01M0056	EAST HAVEN	HELLSTROM RD EASEMENT	7.2			X	
MH-5	EFM01M0264	EAST HAVEN	HELLSTROM RD EASEMENT	10.3			X	
MH-5	EFM02M0214	EAST HAVEN	MARGARET DR EASEMENT	Unknown/Buried		D	X	
MH-5	EFM02M0213	EAST HAVEN	MARGARET DR EASEMENT	Unknown/Buried		D	X	
MH-5	EFM02M0038	EAST HAVEN	N HIGH ST	Unknown/Paved		P	X	
MH-5	EFM02M0040	EAST HAVEN	N HIGH ST	Unknown/Paved		P	X	
MH-5	EFM03M0041	EAST HAVEN	N HIGH ST	Unknown/Paved		P	X	
MH-5	EFM01M0118	EAST HAVEN	RAYMOND CT	5.7			X	
MH-5	EFM01M0119	EAST HAVEN	RAYMOND CT	5.7			X	
MH-5	EFM01M0120	EAST HAVEN	RAYMOND CT	7.2	S		X	
MH-5	EFM01M0116	EAST HAVEN	VAN HORN DR	6.0			X	
MH-5	EFM01M0124	EAST HAVEN	VAN HORN DR	6.6	S		X	
MH-5	EFM01M0125	EAST HAVEN	VAN HORN DR	6.2	S		X	
MH-5	EFM01M0126	EAST HAVEN	VAN HORN DR	7.2			X	
MH-5	EFM01M0127	EAST HAVEN	VAN HORN DR	10.8			X	
MH-5	EFM01M0128	EAST HAVEN	VAN HORN DR	11.0			X	
MH-5	EFM01M0129	EAST HAVEN	VAN HORN DR	10.4			X	
MH-6	EFM01M0063	EAST HAVEN	BORRMAN RD	8.2			X	
MH-6	EFM01M0064	EAST HAVEN	BORRMAN RD	7.7			X	
MH-6	EFM01M0065	EAST HAVEN	BORRMAN RD	8.7			X	

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23**  
**Schedule of Manhole Rehabilitation**  
**East Haven Meter Area EH-18**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-6	EFM01M0066	EAST HAVEN	BORRMAN RD	8.2			X	
MH-6	EFM01M0079	EAST HAVEN	BORRMAN RD	7.8			X	
MH-6	EFM03M0088	EAST HAVEN	CLANCY ST	6.0		P	X	
MH-6	EFM03M0089	EAST HAVEN	CLANCY ST	6.0			X	
MH-6	EFM03M0090	EAST HAVEN	CLANCY ST	8.4			X	
MH-6	EFM02M0225	EAST HAVEN	GRANNIS ST	9.0			X	
MH-6	EFM02M0228	EAST HAVEN	GRANNIS ST	6.9			X	
MH-6	EFM03M0050	EAST HAVEN	HOWE CT EASEMENT	9.0			X	
MH-6	EFM03M0264	EAST HAVEN	HOWE CT EASEMENT	Unknown/Buried		D	X	
MH-6	EFM02M0201	EAST HAVEN	MARGARET CT EASEMENT	Unknown/Buried		D	X	
MH-6	EFM02M0033	EAST HAVEN	N HIGH ST	5.0			X	
MH-6	EFM02M0034	EAST HAVEN	N HIGH ST	Unknown/Paved		P	X	
MH-6	EFM02M0222	EAST HAVEN	N HIGH ST	Inable to open		P	X	
MH-6	EFM02M0196	EAST HAVEN	STRONG ST	5.6		D	X	
MH-6	EFM03M0070	EAST HAVEN	SUNSET RD	8.2			X	
MH-6	EFM03M0069	EAST HAVEN	WILLOW RD	12.9	S		X	
MH-6	EFM03M0094	EAST HAVEN	WILLOW RD	9.6	S		X	
MH-6	EFM03M0159	EAST HAVEN	WILLOW RD	6.0			X	
MH-6	EFM03M0057	EAST HAVEN	WILLOW RD EASEMENT	9.0			X	

1. "S" Indicates the installation of a standard manhole frame and cover. "WT" indicates the installation of a watertight manhole frame and cover.

2. "P" indicates that the frame & cover to be reset is located within a paved area. "D" indicates that the frame & cover to be reset is not located within a paved area but within an area comprised of dirt/gravel/non-paved.

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23  
 Schedule of Manhole Rehabilitation  
 East Haven Meter Area EH-23**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-7	EFX02M0074	EAST HAVEN	CENTER ST	21.5			X	
MH-7	EFX02M0142	EAST HAVEN	CENTER ST	8.7			X	
MH-7	EFX02M0211	EAST HAVEN	CREST AVE	Unknown/Paved		P	X	
MH-7	EFX01M0048	EAST HAVEN	DALE ST	10.5	S		X	
MH-7	NQU03M0326	NEW HAVEN	DANIEL DR	7.6			X	
MH-7	NQU03M0327	NEW HAVEN	DANIEL DR	8.8			X	
MH-7	NQU03M0328	NEW HAVEN	DANIEL DR	8.5			X	
MH-7	NQU03M0329	NEW HAVEN	DANIEL DR	8.9		P	X	
MH-7	NQU03M0330	NEW HAVEN	DANIEL DR	8.3			X	
MH-7	NQU03M0353	NEW HAVEN	DANIEL DR	8.0			X	
MH-7	NQU03M0331	NEW HAVEN	DANIEL DR	8.2		P	X	
MH-7	NQU03M0332	NEW HAVEN	DANIEL DR	8.3		P	X	
MH-7	NQU03M0333	NEW HAVEN	DANIEL DR	10.2			X	
MH-7	NQU03M0334	NEW HAVEN	DANIEL DR	10.0		P	X	
MH-7	EFX03M0215	NEW HAVEN	DELL DR	15.8		P	X	
MH-7	NQU03M0320	NEW HAVEN	DELL DR	6.5	S		X	
MH-7	NQU03M0321	NEW HAVEN	DELL DR	7.4			X	
MH-7	NQU03M0322	NEW HAVEN	DELL DR	8.0		P	X	
MH-7	NQU03M0323	NEW HAVEN	DELL DR	10.5	S		X	
MH-7	NQU03M0324	NEW HAVEN	DELL DR	16.5	S		X	
MH-7	NQU03M0325	NEW HAVEN	DELL DR	16.6		P	X	
MH-7	EFX02M0009	EAST HAVEN	FOXON BLVD	12.6			X	
MH-7	EFX02M0071	EAST HAVEN	FOXON BLVD	9.9			X	
MH-7	EFX02M0072	EAST HAVEN	FOXON BLVD	10.4			X	
MH-7	EFX02M0073	EAST HAVEN	FOXON BLVD	9.3			X	
MH-7	EFX02M0132	EAST HAVEN	FOXON BLVD	10.9			X	
MH-7	EFX02M0135	EAST HAVEN	FOXON BLVD	10.0			X	
MH-7	EFX02M0136	EAST HAVEN	FOXON BLVD	10.1			X	
MH-7	EFX03M0070	EAST HAVEN	FOXON BLVD	8.4			X	
MH-7	EFX02M0004	EAST HAVEN	FOXON RD	Unknown/Paved		P	X	

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23  
 Schedule of Manhole Rehabilitation  
 East Haven Meter Area EH-23**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-7	EFX02M0005	EAST HAVEN	FOXON RD	10.7		D	X	
MH-7	EFX02M0075	EAST HAVEN	HIGHLAND AVE	5.8		P	X	
MH-7	EFX02M0174	EAST HAVEN	HIGHLAND AVE	Unknown/Paved		P	X	
MH-7	EFX02M0068	EAST HAVEN	MICHAEL ST	11.6			X	
MH-7	EFX02M0207	EAST HAVEN	MICHAEL ST	Unknown/Paved		P	X	
MH-7	EFX01M0051	EAST HAVEN	NORTH ST	8.7			X	
MH-7	EFX01M0060	EAST HAVEN	NORTH ST	8.7			X	
MH-7	EFX01M0146	EAST HAVEN	NORTH ST	9.0			X	
MH-7	EFX02M0118	EAST HAVEN	PAUL ST	9.6			X	
MH-7	EFX02M0122	EAST HAVEN	PAUL ST	7.9			X	
MH-7	EFX02M0063	EAST HAVEN	ROSE ST	8.4			X	
MH-7	EFX02M0064	EAST HAVEN	ROSE ST	8.3		P	X	
MH-7	EFX02M0065	EAST HAVEN	ROSE ST	7.7		P	X	
MH-7	EFX02M0128	EAST HAVEN	ROSE ST EXD	8.9			X	
MH-7	EFX02M0203	EAST HAVEN	ROSE ST EXD EASEMENT	11.2			X	
MH-7	EFX02M0204	EAST HAVEN	ROSE ST EXD EASEMENT	6.0			X	
MH-7	EFX02M0205	EAST HAVEN	ROSE ST EXD EASEMENT	8.0		D	X	
MH-7	EFX02M0162	EAST HAVEN	S DALE ST	7.0		P	X	
MH-7	EFX02M0163	EAST HAVEN	S DALE ST	9.1			X	
MH-7	EFX02M0164	EAST HAVEN	S DALE ST	7.2			X	
MH-7	EFX02M0045	EAST HAVEN	WEST ST	6.6			X	
MH-7	EFX02M0046	EAST HAVEN	WEST ST	6.3			X	
MH-7	EFX02M0124	EAST HAVEN	WEST ST	6.7			X	
MH-7	EFX02M0125	EAST HAVEN	WEST ST	13.4			X	
MH-7	EFX02M0115	EAST HAVEN	WEST ST EASEMENT	10.2			X	
MH-7	EFX02M0116	EAST HAVEN	WEST ST EASEMENT	10.2		D	X	
MH-8	EFX03M0021	EAST HAVEN	ANN ST	6.0			X	
MH-8	EFX03M0022	EAST HAVEN	ANN ST	4.8			X	
MH-8	EFX03M0023	EAST HAVEN	ANN ST	4.9			X	
MH-8	EFX03M0024	EAST HAVEN	ANN ST	6.3			X	

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY



**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23  
 Schedule of Manhole Rehabilitation  
 East Haven Meter Area EH-23**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-8	EFX03M0026	EAST HAVEN	BRENNAN ST	8.4			X	
MH-8	EFX03M0027	EAST HAVEN	BRENNAN ST	6.7			X	
MH-8	EFX03M0028	EAST HAVEN	BRENNAN ST	6.8			X	
MH-8	EFX03M0029	EAST HAVEN	BRENNAN ST	5.1			X	
MH-8	EFX03M0030	EAST HAVEN	BRENNAN ST	7.0			X	
MH-8	EFX03M0031	EAST HAVEN	BRENNAN ST	6.8			X	
MH-8	NQU03M0346	NEW HAVEN	FOXON BLVD	10.1		P	X	
MH-8	NQU03M0289	NEW HAVEN	FOXON BLVD	Unknown/Paved		P	X	
MH-8	NQU03M0352	NEW HAVEN	FOXON BLVD	10.1			X	
MH-8	NQU03M0340	NEW HAVEN	FOXON BLVD EASEMENT	9.9			X	
MH-8	NQU03M0350	NEW HAVEN	FOXON BLVD EASEMENT	8.5		P	X	
MH-8	EFX02M0003	EAST HAVEN	FOXON RD	12.5			X	
MH-8	EFX02M0007	EAST HAVEN	FOXON RD	Unknown/Paved		P	X	
MH-8	EFX02M0016	EAST HAVEN	FOXON RD	12.4			X	
MH-8	EFX03M0216	NEW HAVEN	FOXON RD	20.8			X	
MH-8	EFX03M0037	EAST HAVEN	JOHN ST	6.9			X	
MH-8	EFX03M0175	EAST HAVEN	JOHN ST	5.0		P	X	
MH-8	EFX03M0017	EAST HAVEN	OLD FOXON RD	10.8	S		X	
MH-8	EFX03M0036	EAST HAVEN	OLD FOXON RD	11.8			X	
MH-8	EFX03M0038	EAST HAVEN	OLD FOXON RD	11.1			X	
MH-8	EFX03M0039	EAST HAVEN	OLD FOXON RD	7.5			X	
MH-8	EFX03M0040	EAST HAVEN	OLD FOXON RD	9.0			X	
MH-8	EFX03M0041	EAST HAVEN	OLD FOXON RD	9.5		P	X	
MH-8	EFX03M0042	EAST HAVEN	OLD FOXON RD	10.2	S		X	
MH-8	EFX03M0043	EAST HAVEN	OLD FOXON RD	12.2			X	
MH-8	EFX03M0044	EAST HAVEN	OLD FOXON RD	9.0			X	
MH-8	EFX03M0053	EAST HAVEN	OLD FOXON RD	9.3			X	
MH-8	EFX03M0208	EAST HAVEN	OLD FOXON RD	7.6			X	
MH-8	NQU03M0289	NEW HAVEN	OLD FOXON RD	15.4			X	
MH-8	NQU03M0290	NEW HAVEN	OLD FOXON RD	9.4			X	

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY

**CWF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23  
 Schedule of Manhole Rehabilitation  
 East Haven Meter Area EH-23**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-8	NQU03M0343	NEW HAVEN	OLD FOXON RD	8.4			X	
MH-8	NQU03M0344	NEW HAVEN	OLD FOXON RD	7.6		P	X	
MH-8	NQU03M0345	NEW HAVEN	OLD FOXON RD	9.3		D	X	
MH-8	EFX03M0001	EAST HAVEN	OLD FOXON RD EASEMENT	21.8			X	
MH-8	EFX03M0055	EAST HAVEN	OLD FOXON RD EASEMENT	7.6		P	X	
MH-8	EFX03M0020	EAST HAVEN	RUSSO AVE	9.2		P	X	
MH-8	EFX03M0025	EAST HAVEN	RUSSO AVE	13.4		P	X	
MH-8	EFX03M0035	EAST HAVEN	RUSSO AVE	9.5			X	

1. "S" Indicates the installation of a standard manhole frame and cover. "WT" indicates the installation of a watertight manhole frame and cover.

2. "P" indicates that the frame & cover to be reset is located within a paved area. "D" indicates that the frame & cover to be reset is not located within a paved area but within an area comprised of dirt/gravel/ non-paved.

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY

**CVF 2019-02: Infiltration and Inflow Improvements Woodbridge Areas 2 and 2A and East Haven Areas 15, 18, and 23  
 Schedule of Manhole Rehabilitation  
 East Haven - Morris Causeway**



Sheet	Manhole ID	Town	Street	Manhole Depth (ft)	Replace Frame and Cover <sup>1</sup>	Reset Manhole (Frame and Cover) <sup>2</sup>	Rehabilitate Manhole with Spray-On Geopolymer Liner	Repair Bench and Invert
MH-9	NES07M0581	EAST HAVEN	CONCORD ST	11.0			X	
MH-9	NES07M0602	EAST HAVEN	CONCORD ST	11.0			X	
MH-9	NES07M0569	EAST HAVEN	MORRIS CSWY	11.0			X	
MH-9	NES07M0570	EAST HAVEN	MORRIS CSWY	13.0			X	
MH-9	NES07M0571	EAST HAVEN	MORRIS CSWY	12.0			X	
MH-9	NES07M0600	EAST HAVEN	MORRIS CSWY	12.0			X	
MH-9	NES07M0601	EAST HAVEN	MORRIS CSWY	12.0			X	
MH-9	NES07M0603	EAST HAVEN	TOWNSEND AVE	12.0			X	
MH-9	NES07M0604	EAST HAVEN	TOWNSEND AVE	11.0			X	

1. "S" Indicates the installation of a standard manhole frame and cover. "WT" indicates the installation of a watertight manhole frame and cover.

2. "P" indicates that the frame & cover to be reset is located within a paved area. "D" indicates that the frame & cover to be reset is not located within a paved area but within an area comprised of dirt/gravel/ non-paved.

NOT FOR BIDDING PURPOSES  
 REFERENCE COPY ONLY

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

APPENDIX E

Contract Drawings

GNHWPCA PROJECT NO. CWF 2019-02

# GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY

## INFILTRATION AND INFLOW IMPROVEMENTS

### WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN AREAS 15, 18 AND 23

PROJECT CWF 2019-02

**GNHWPCA BOARD OF DIRECTORS**

<b>STEPHEN A. MONGILLO</b>	<b>CHAIRMAN</b>
<b>CLAYTON M. WILLIAMS</b>	<b>VICE CHAIRMAN</b>
<b>RUSSEL N. CYR</b>	<b>DIRECTOR</b>
<b>JOYCE ALTON</b>	<b>DIRECTOR</b>
<b>KENNETH DAGLIERE</b>	<b>DIRECTOR</b>
<b>JEFFERY D. GINZBERG, ESQ.</b>	<b>DIRECTOR</b>
<b>ELAINE BRAFFMAN</b>	<b>DIRECTOR</b>
<b>RAYMOND POMPARO, SR.</b>	<b>DIRECTOR</b>
<b>ALDERMAN SALVATORE E. DECOLA</b>	<b>DIRECTOR</b>

**EXECUTIVE DIRECTOR**

**SIDNEY J. HOLBROOK**

**DIRECTOR OF FINANCE AND ADMINISTRATION**

**GABRIEL VARCA**

**DIRECTOR OF ENGINEERING**

**THOMAS V. SGROI, P.E.**

**DIRECTOR OF OPERATIONS**

**GARY ZRELAK**

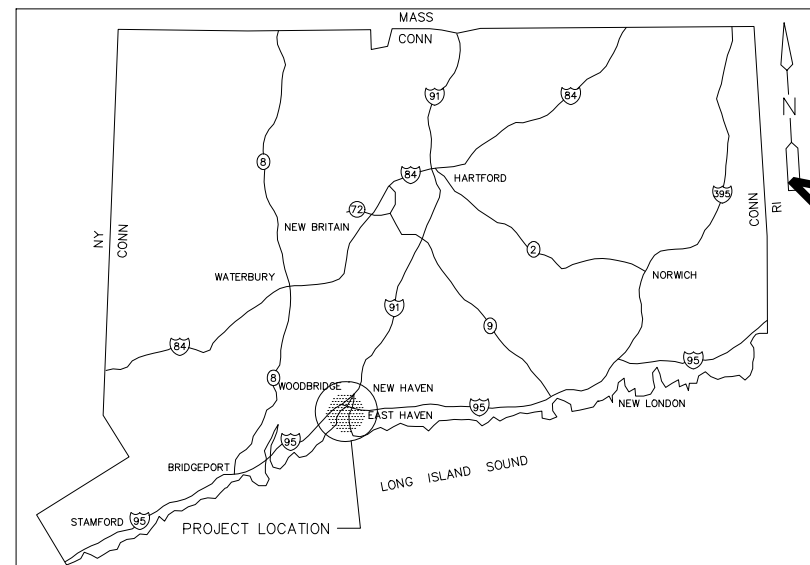


**JANUARY 2024**

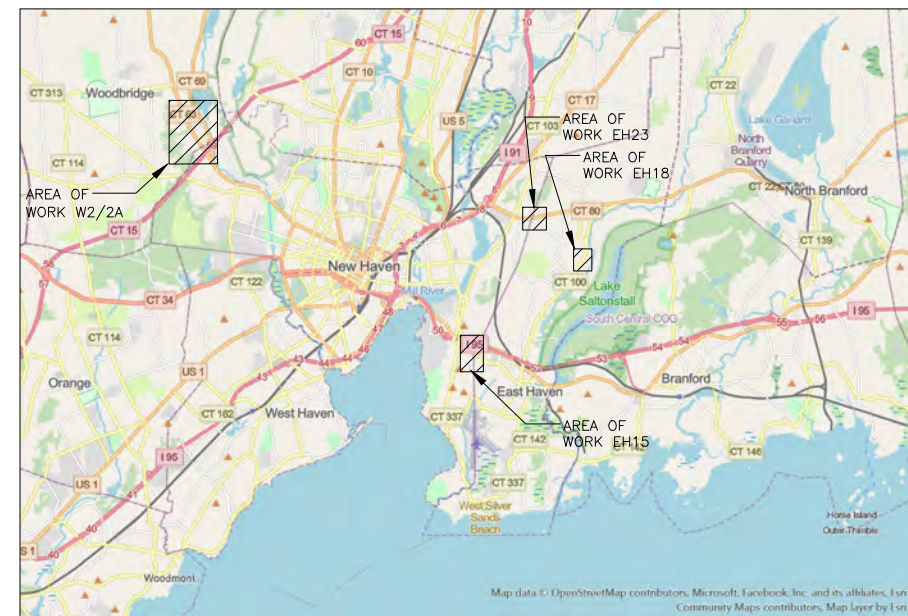
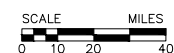
NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

**LIST OF DRAWINGS**

SHEET NO.	TITLE	SHEET NO.	TITLE
0	TITLE SHEET	W2-5	SANITARY SEWER REHAB AREA W2/2A V
MK1	MAP KEY - WOODBRIDGE AREA 2/2A	W2-6	SANITARY SEWER REHAB AREA W2/2A VI
MK2	MAP KEY - EAST HAVEN AREA 15	W2-6	SANITARY SEWER REHAB AREA W2/2A VII
MK3	MAP KEY - EAST HAVEN AREA 18	EH15-1	SANITARY SEWER REHAB AREA EH15 I
MK4	MAP KEY - EAST HAVEN AREA 23	EH15-2	SANITARY SEWER REHAB AREA EH15 II
MK5	MAP KEY - EAST HAVEN MORRIS CAUSEWAY	EH15-3	SANITARY SEWER REHAB AREA EH15 III
MH1	MANHOLE REHAB WOODBRIDGE AREA 2/2A - NORTH	EH15-4	SANITARY SEWER REHAB AREA EH15 IV
MH2	MANHOLE REHAB WOODBRIDGE AREA 2/2A - SOUTH	EH15-5	SANITARY SEWER REHAB AREA EH15 V
MH3	MANHOLE REHAB EAST HAVEN AREA 15 - NORTH	EH18-1	SANITARY SEWER REHAB AREA EH18 I
MH4	MANHOLE REHAB EAST HAVEN AREA 15 - SOUTH	EH18-2	SANITARY SEWER REHAB AREA EH18 II
MH5	MANHOLE REHAB EAST HAVEN AREA 18 - NORTH	EH18-3	SANITARY SEWER REHAB AREA EH18 III
MH6	MANHOLE REHAB EAST HAVEN AREA 18 - SOUTH	EH23-1	SANITARY SEWER REHAB AREA EH23 I
MH7	MANHOLE REHAB EAST HAVEN AREA 23 - NORTH	EH23-2	SANITARY SEWER REHAB AREA EH23 II
MH8	MANHOLE REHAB EAST HAVEN AREA 23 - SOUTH	EH23-3	SANITARY SEWER REHAB AREA EH23 III
MH9	MANHOLE REHAB EAST HAVEN MORRIS CAUSEWAY	EH23-4	SANITARY SEWER REHAB AREA EH23 IV
W2-1	SANITARY SEWER REHAB AREA W2/2A I	EH23-5	SANITARY SEWER REHAB AREA EH23 V
W2-2	SANITARY SEWER REHAB AREA W2/2A II	EH23-6	SANITARY SEWER REHAB AREA EH23 VI
W2-3	SANITARY SEWER REHAB AREA W2/2A III		
W2-4	SANITARY SEWER REHAB AREA W2/2A IV		



**VICINITY PLAN**



**LOCATION PLAN**

NTS



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

MAP KEY - AREA W2/W2A

**PLAN**  
NTS

**LEGEND**

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

**INFILTRATION AND INFLOW IMPROVEMENTS**  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: MK1 - MAP KEY W2



MAP KEY - AREA EAST HAVEN 15

PLAN  
NTS

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



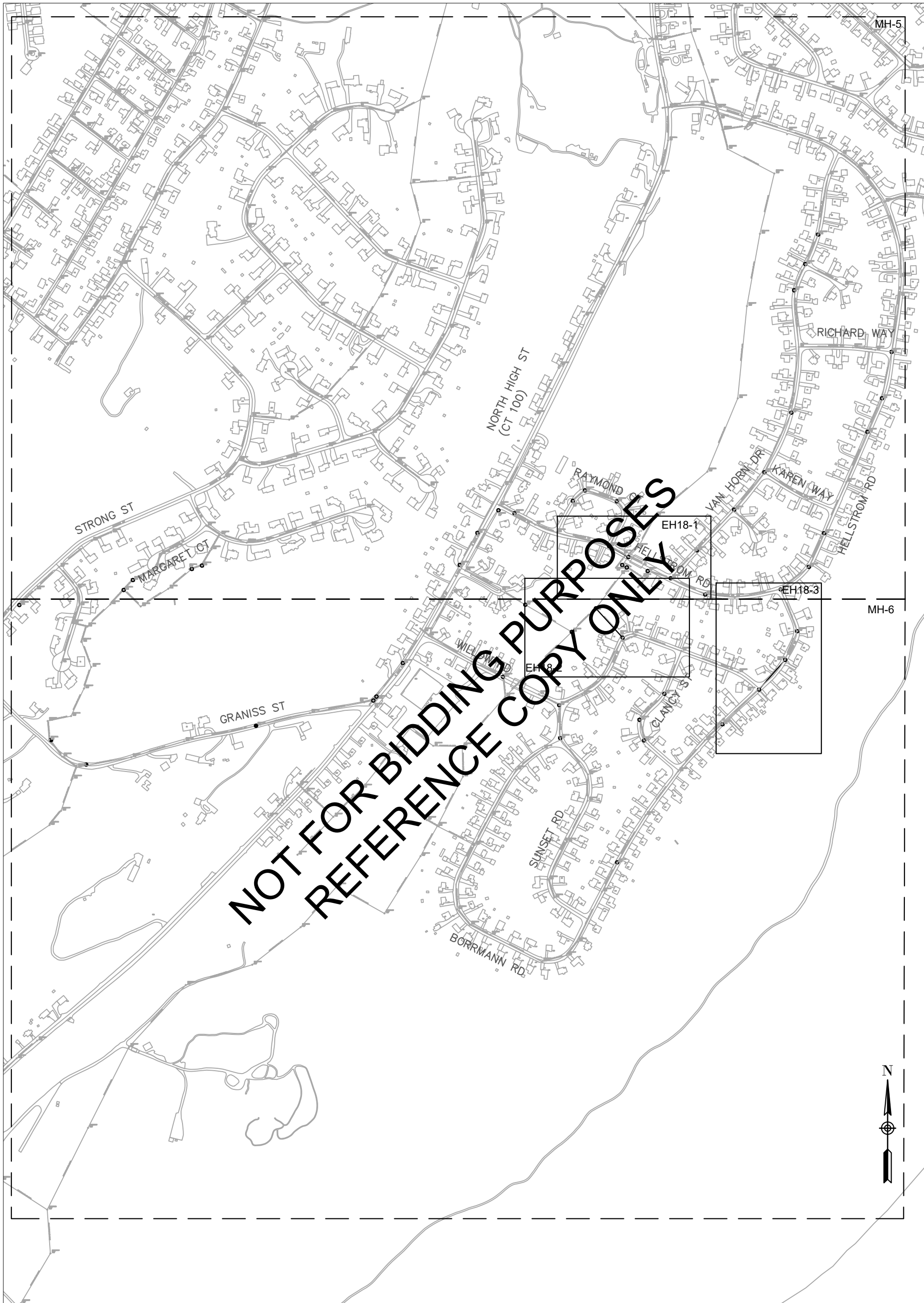
**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: MK2 - MAP KEY EH15



MAP KEY - AREA EAST HAVEN 18

PLAN  
NTS

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: MK3 - MAP KEY EH18





MAP KEY - AREA EAST HAVEN 23

PLAN  
NTS

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: MK4 - MAP KEY EH23



MAP KEY - AREA EAST HAVEN 15

**PLAN**  
NTS

**LEGEND**

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



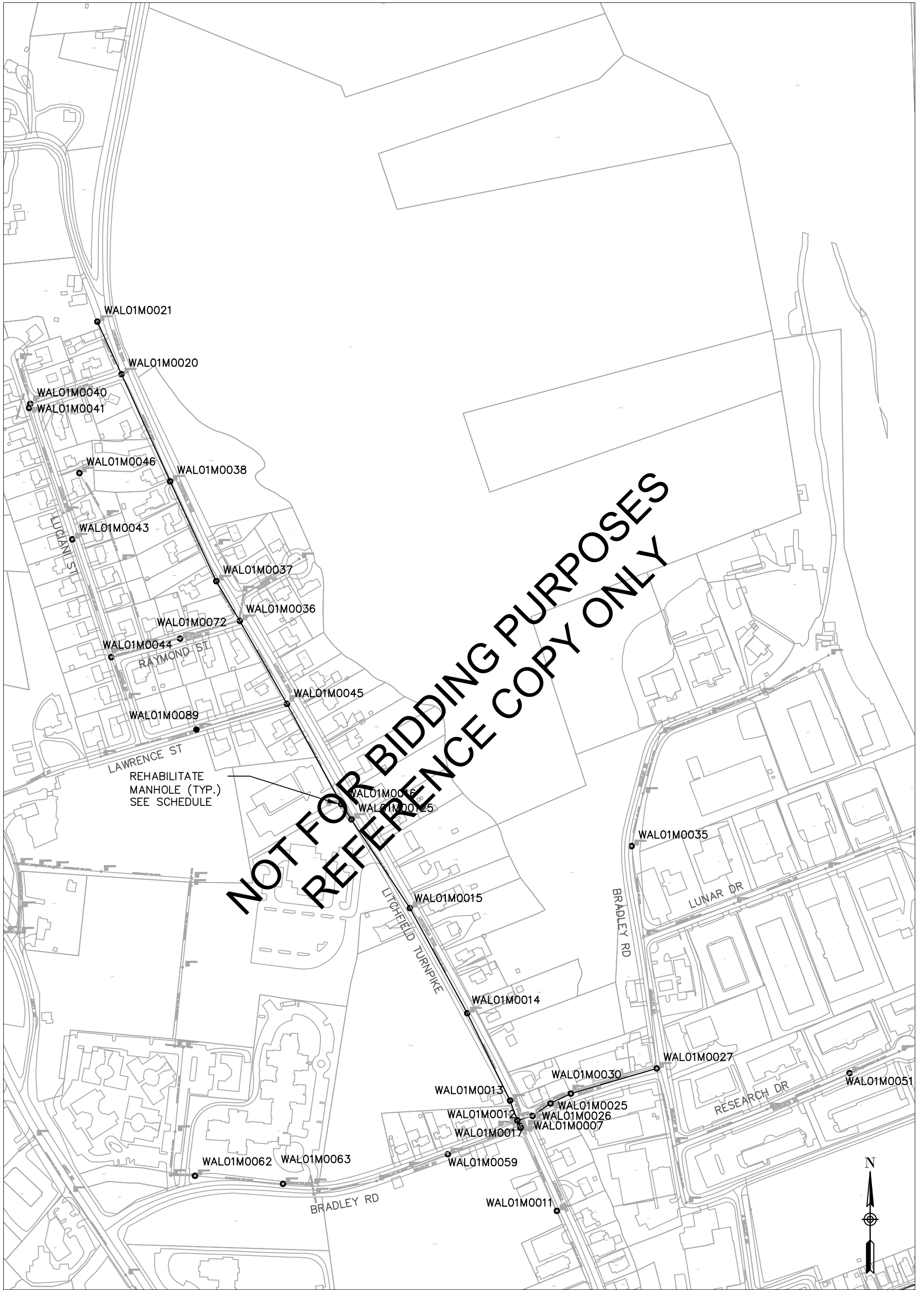
**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS | Approved By: RC | Date: 10/25/2023

**INFILTRATION AND INFLOW IMPROVEMENTS**  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02 | Sheet: MK5 - MAP KEY EHMC



MANHOLE REHABILITATION  
WOODBRIDGE AREA 2/2A - NORTH

PLAN

1" = 300'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



Greater New Haven Water Pollution Control Authority  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS | Approved By: RC | Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02 | Sheet: MH-1 W2 NORTH



MANHOLE REHABILITATION  
WOODBRIDGE AREA W2/2A - SOUTH

PLAN  
1" = 300'

- LEGEND**
- L= LINEAR FEET OF PIPE
  - S= No. OF SERVICE LATERALS PRESENT
  - = MANHOLE REHABILITATION
  - = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS	Approved By: RC	Date: 10/25/2023
INFILTRATION AND INFLOW IMPROVEMENTS WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN AREAS 15, 18 AND 23		
Project No.: CWF 2019-02	Sheet: MH-2 W2 SOUTH	



MANHOLE REHABILITATION  
EAST HAVEN AREA 15 - NORTH

PLAN

1" = 200'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING

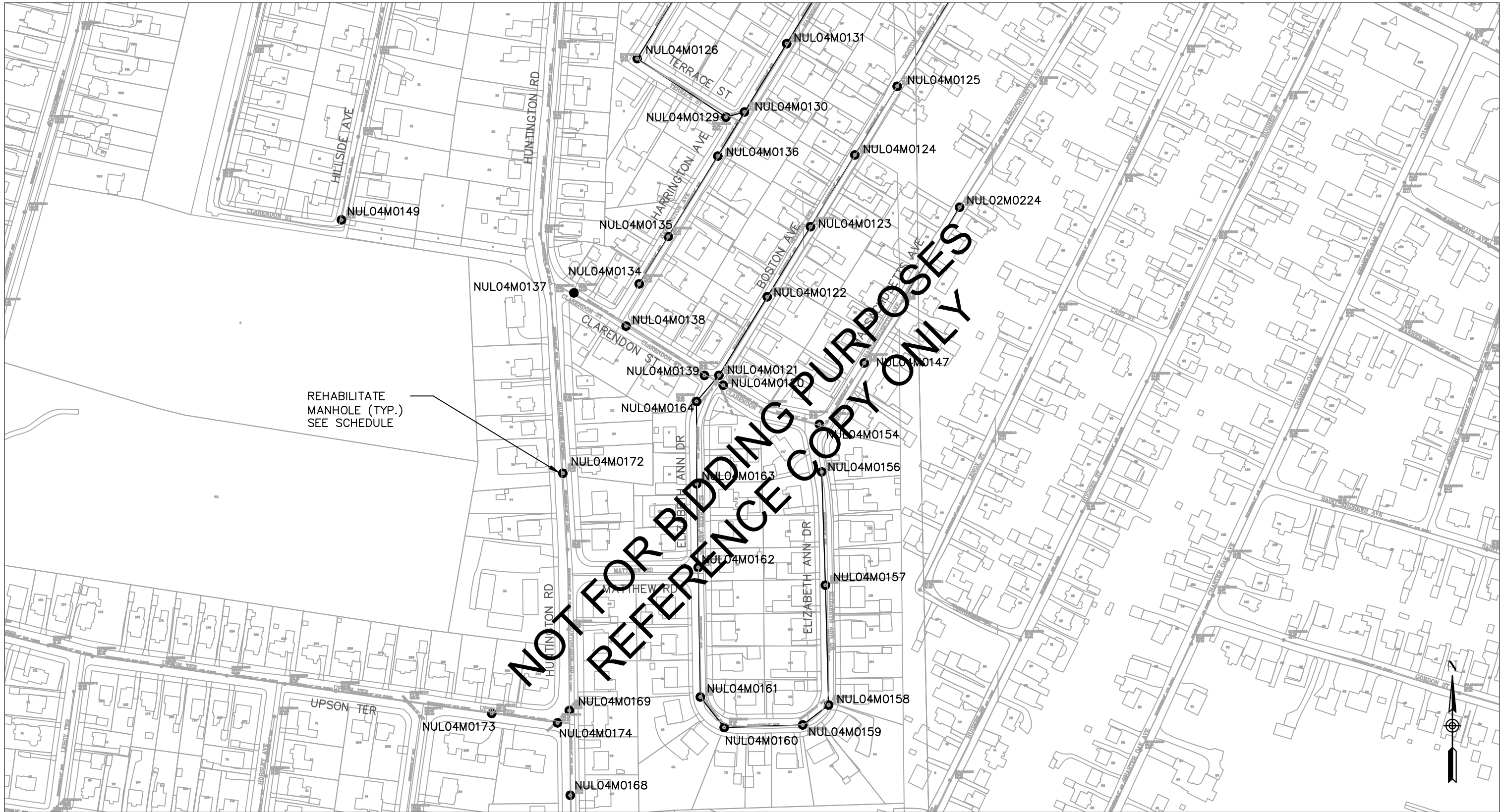


**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: MH-3 EH-15 NORTH



MANHOLE REHABILITATION  
EAST HAVEN AREA 15 - SOUTH

PLAN  
1" = 200'

- LEGEND**
- L= LINEAR FEET OF PIPE
  - S= No. OF SERVICE LATERALS PRESENT
  - = MANHOLE REHABILITATION
  - = CIPP LINING



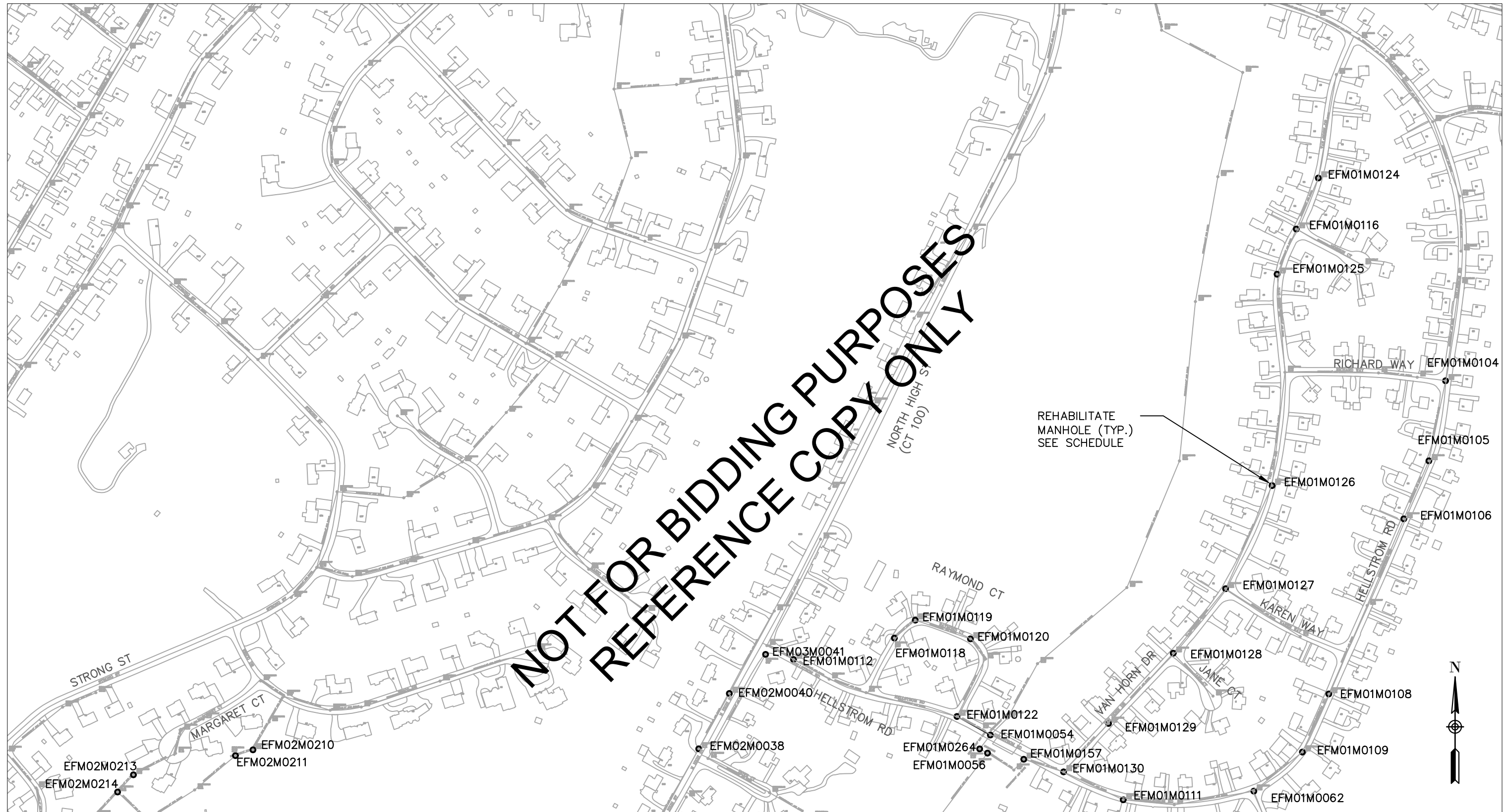
**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: MH-4 EH15 SOUTH

**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**



MANHOLE REHABILITATION  
EAST HAVEN AREA 18 - NORTH

PLAN  
1" = 300'

LEGEND	
L=	LINEAR FEET OF PIPE
S=	No. OF SERVICE LATERALS PRESENT
●	MANHOLE REHABILITATION
- -	CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: MH-5 EH18 NORTH




MANHOLE REHABILITATION  
EAST HAVEN AREA 18 - SOUTH

**PLAN**  
1" = 300'

**LEGEND**

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING

	<b>Greater New Haven Water Pollution Control Authority</b> ENGINEERING DEPARTMENT 260 East Street New Haven, CT 06511 (203) 466 5280 p (203) 722-1564 f		
	Drawn By: NS	Approved By: RC	Date: 10/25/2023
	<b>INFILTRATION AND INFLOW IMPROVEMENTS</b> WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN AREAS 15, 18 AND 23		
Project No.: CWF 2019-02		Sheet: MH-6 EH18 SOUTH	





MANHOLE REHABILITATION  
EAST HAVEN AREA 23 - NORTH

PLAN  
1" = 300'

- LEGEND**
- L= LINEAR FEET OF PIPE
  - S= No. OF SERVICE LATERALS PRESENT
  - = MANHOLE REHABILITATION
  - = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: MH-7 EH23 NORTH




MANHOLE REHABILITATION  
EAST HAVEN AREA 23 - SOUTH

PLAN  
1" = 300'

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

- LEGEND**
- L= LINEAR FEET OF PIPE
  - S= No. OF SERVICE LATERALS PRESENT
  - = MANHOLE REHABILITATION
  - = CIPP LINING

	<b>Greater New Haven Water Pollution Control Authority</b> ENGINEERING DEPARTMENT 260 East Street New Haven, CT 06511 (203) 466 5280 p (203) 722-1564 f		
	Drawn By: NS	Approved By: RC	Date: 10/25/2023
	<b>INFILTRATION AND INFLOW IMPROVEMENTS</b> WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN AREAS 15, 18 AND 23		
Project No.: CWF 2019-02	Sheet: MH-8 EH23 SOUTH		



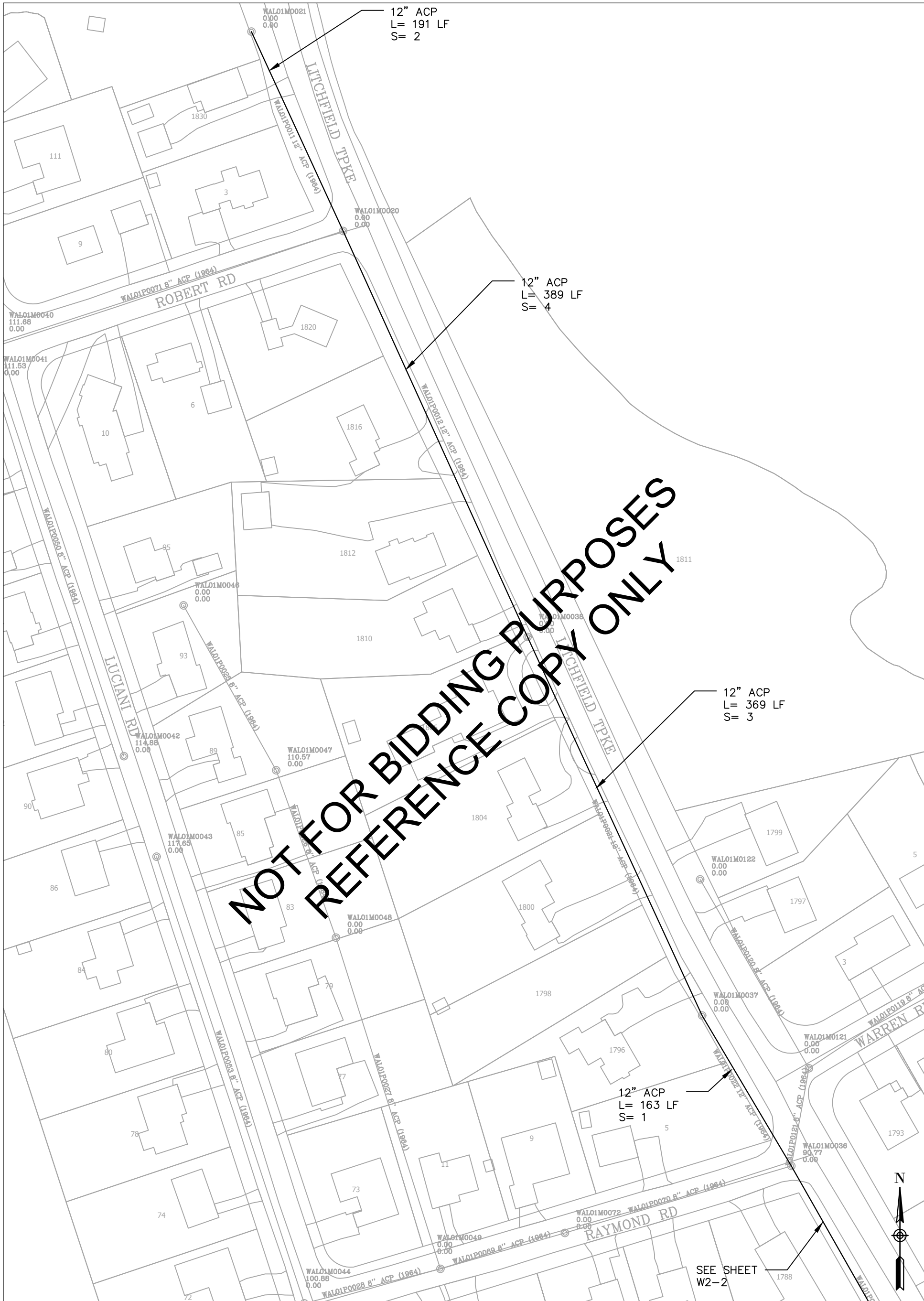
MANHOLE REHABILITATION  
MORRIS CAUSEWAY

PLAN  
1" = 100'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING

	<b>Greater New Haven Water Pollution Control Authority</b> ENGINEERING DEPARTMENT 260 East Street New Haven, CT 06511 (203) 466 5280 p (203) 722-1564 f		
	Drawn By: NS	Approved By: RC	Date: 10/25/2023
	INFILTRATION AND INFLOW IMPROVEMENTS WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN AREAS 15, 18 AND 23		
	Project No.: CWF 2019-02	Sheet: MH-9 EHMC	



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA W2/W2A I

PLAN

1" = 80'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- ⊙= MANHOLE REHABILITATION
- = CIPP LINING



**Greater New Haven Water Pollution Control Authority**

ENGINEERING DEPARTMENT

260 East Street

New Haven, CT 06511

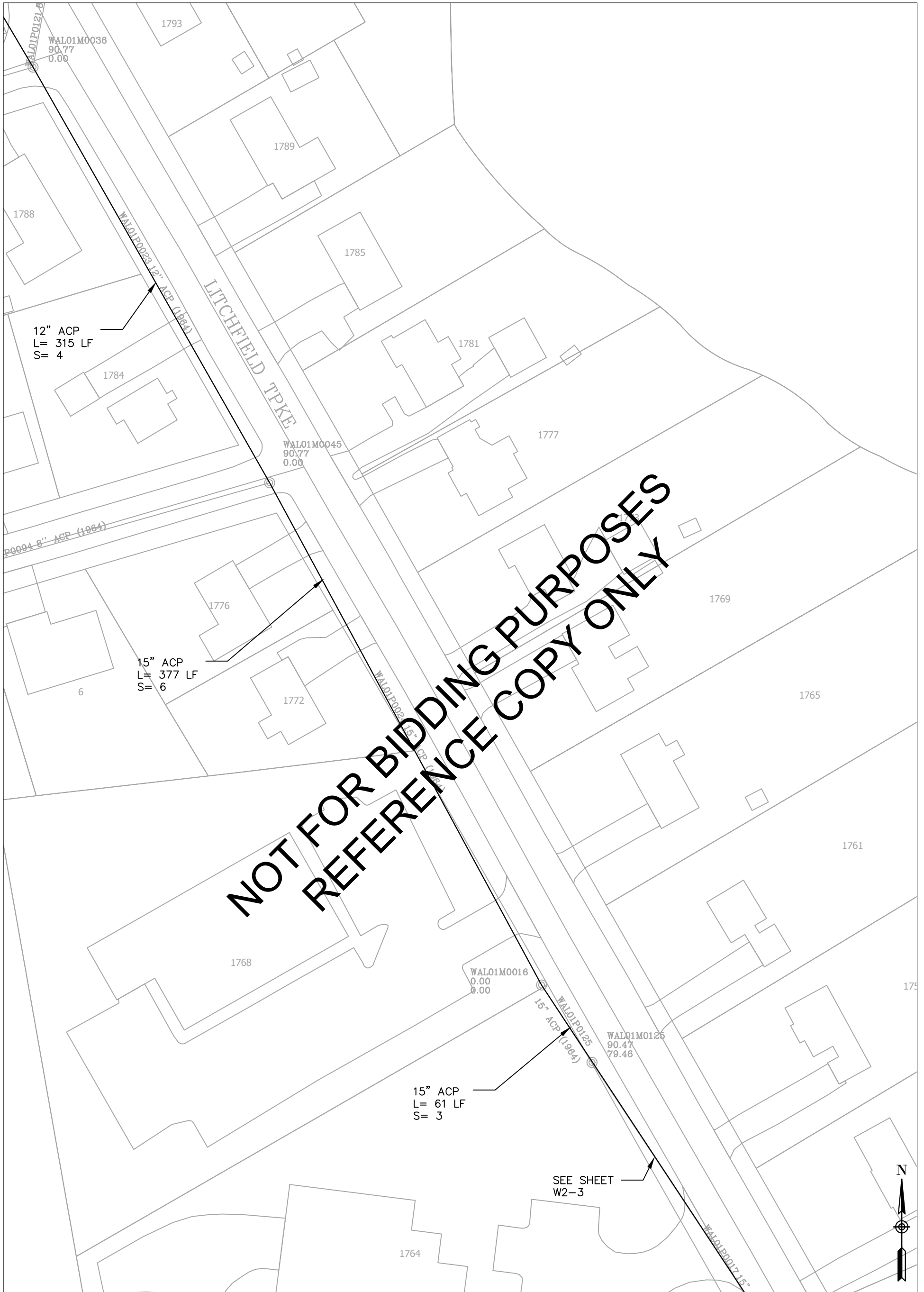
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS | Approved By: RC | Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02 | Sheet: W2-1





NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA W2/W2A II

**PLAN**

1" = 60'

**LEGEND**

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- ⊙= MANHOLE REHABILITATION
- = CIPP LINING



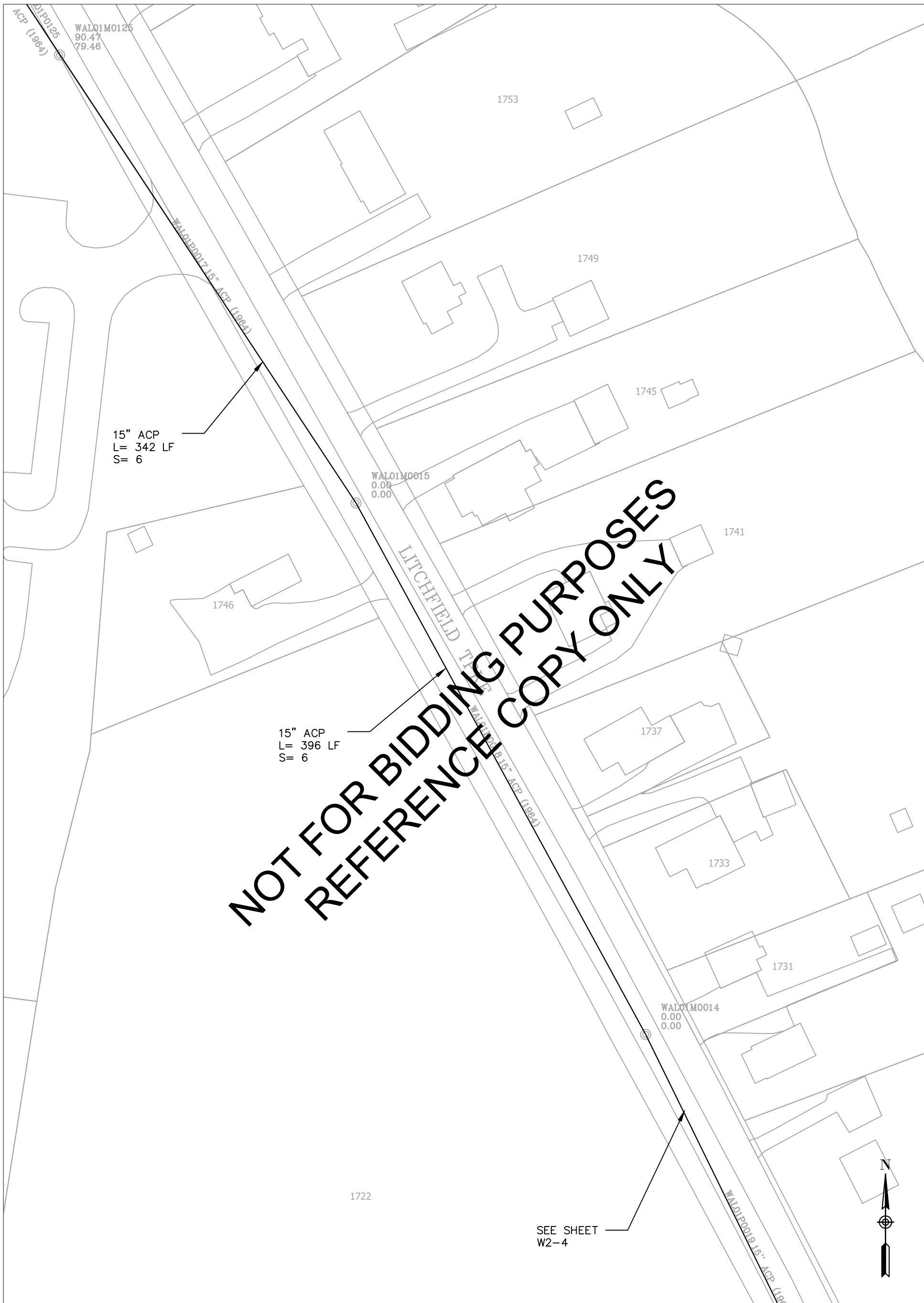
**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS | Approved By: RC | Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02 | Sheet: W2-2



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA W2/W2A III

**PLAN**  
1" = 60'

LEGEND	
L= LINEAR FEET OF PIPE	
S= No. OF SERVICE LATERALS PRESENT	
●= MANHOLE REHABILITATION	
--= CIPP LINING	



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS | Approved By: RC | Date: 10/25/2023

**INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23**

Project No.: CWF 2019-02 | Sheet: W2-3



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY


SANITARY SEWER REHABILITATION AREA W2/W2A IV

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

**PLAN**  
1" = 50'

**LEGEND**

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING

	<b>Greater New Haven Water Pollution Control Authority</b> ENGINEERING DEPARTMENT 260 East Street New Haven, CT 06511 (203) 466 5280 p (203) 722-1564 f		
	Drawn By: NS	Approved By: RC	Date: 10/25/2023
	<b>INFILTRATION AND INFLOW IMPROVEMENTS</b> <b>WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN</b> <b>AREAS 15, 18 AND 23</b>		
Project No.: CWF 2019-02		Sheet: W2-4	

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



SANITARY SEWER REHABILITATION AREA W2/W2A V

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

PLAN  
1" = 80'

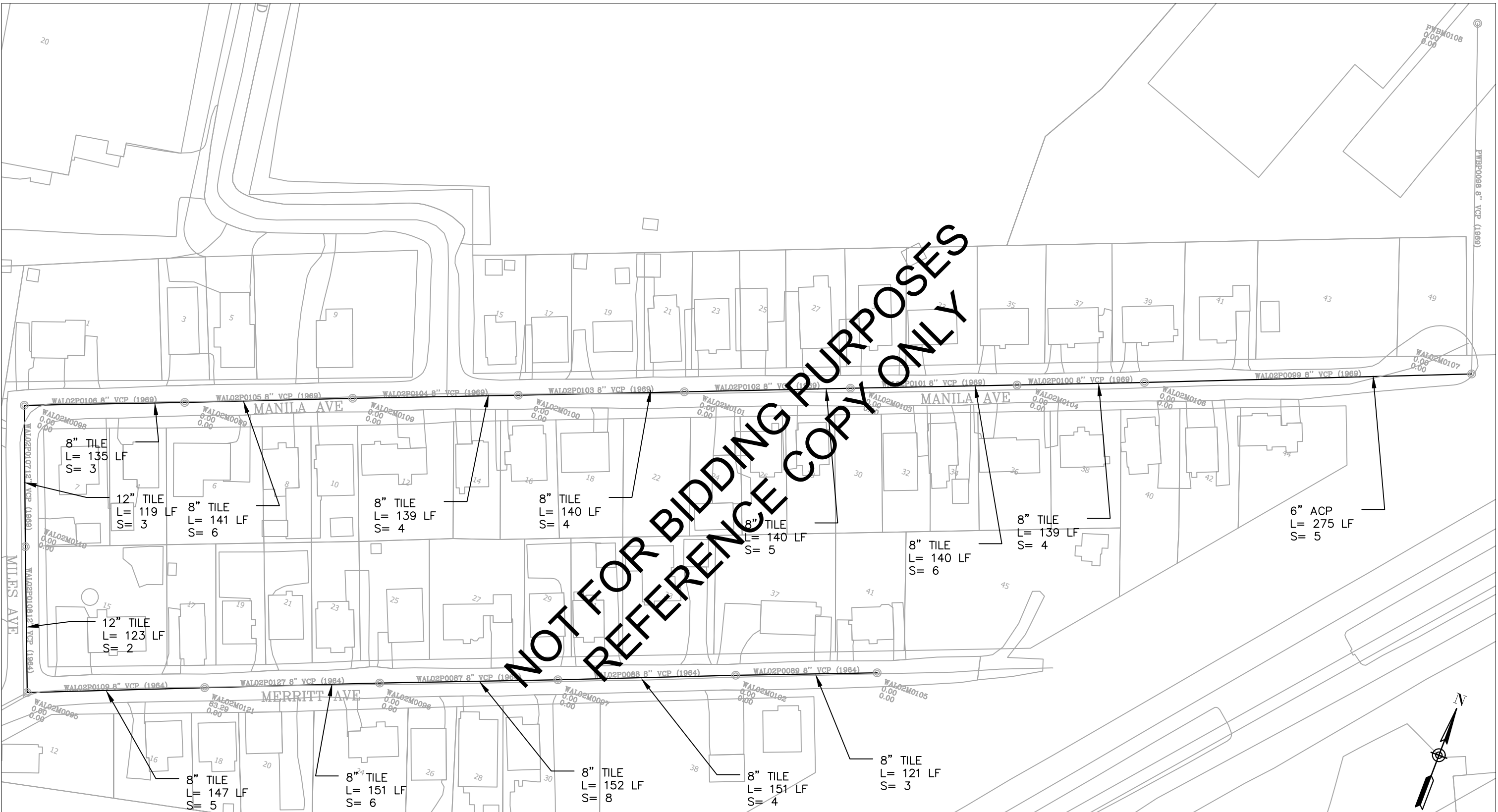
LEGEND	
L=	LINEAR FEET OF PIPE
S=	No. OF SERVICE LATERALS PRESENT
●	MANHOLE REHABILITATION
-	CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS	Approved By: RC	Date: 10/25/2023
INFILTRATION AND INFLOW IMPROVEMENTS WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN AREAS 15, 18 AND 23		
Project No.: CWF 2019-02	Sheet: W2-5	





NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

SANITARY SEWER REHABILITATION AREA W2/W2A VI

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

**PLAN**  
1" = 80'

LEGEND	
L=	LINEAR FEET OF PIPE
S=	No. OF SERVICE LATERALS PRESENT
●	MANHOLE REHABILITATION
- -	CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

**INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23**

Project No.: CWF 2019-02    Sheet: W2-6



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY


SANITARY SEWER REHABILITATION AREA W2/W2A VII

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

PLAN  
1" = 100'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING

	<b>Greater New Haven Water Pollution Control Authority</b> ENGINEERING DEPARTMENT 260 East Street New Haven, CT 06511 (203) 466 5280 p (203) 722-1564 f		
	Drawn By: NS	Approved By: RC	Date: 10/25/2023
	<b>INFILTRATION AND INFLOW IMPROVEMENTS</b> WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN AREAS 15, 18 AND 23		
	Project No.: CWF 2019-02	Sheet: W2-7	



**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**



NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA EH15 I

PLAN

1" = 80'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



Greater New Haven Water Pollution Control Authority  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS | Approved By: RC | Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02 | Sheet: EH15-1



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA EH15 II

PLAN

1" = 80'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

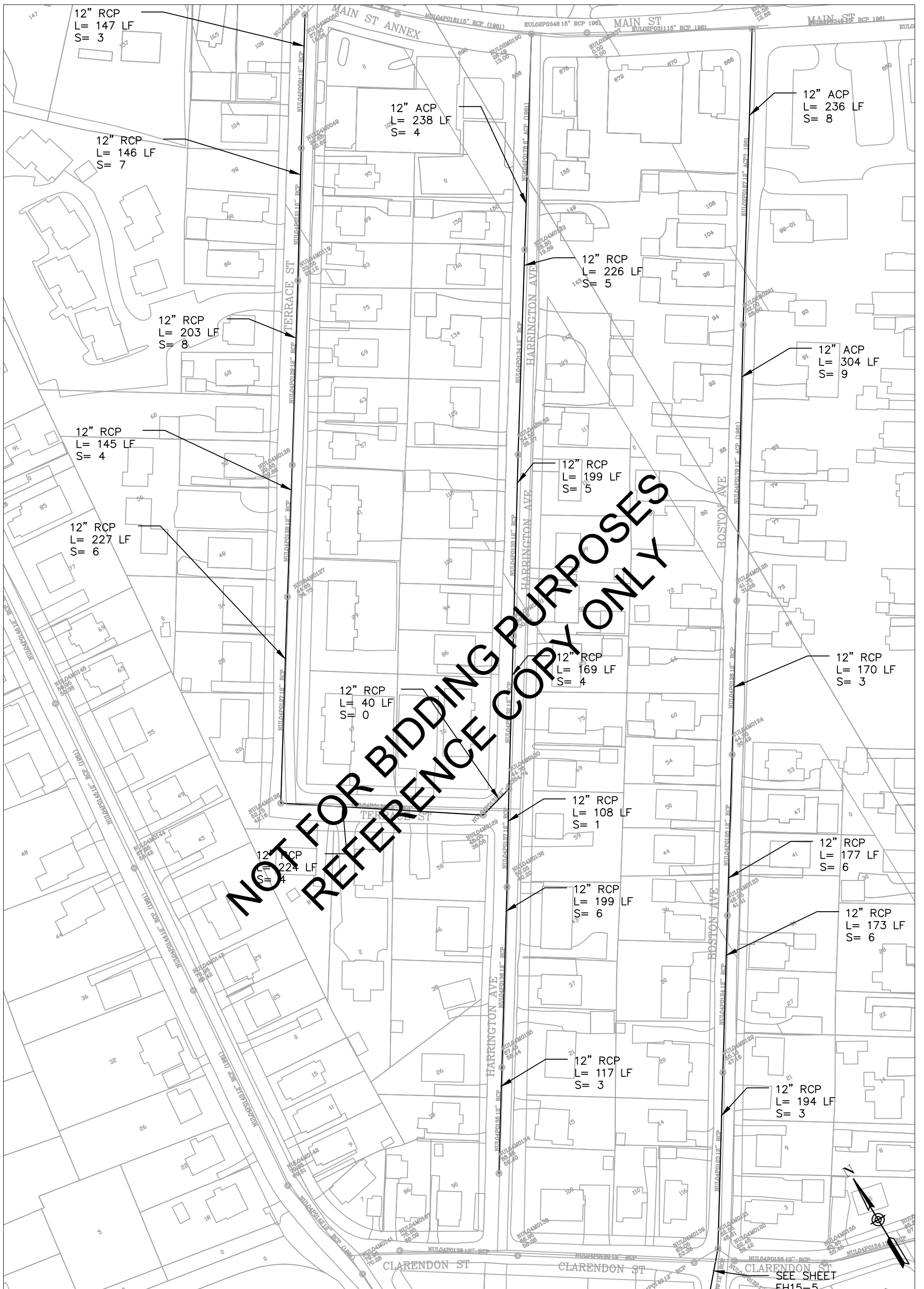
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: EH15-2





NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET.  
PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA EH15 III

**PLAN**  
1" = 100'

LEGEND	
L= LINEAR FEET OF PIPE	
S= No. OF SERVICE LATERALS PRESENT	
●= MANHOLE REHABILITATION	
--= CIPP LINING	



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: EH15-3



**NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY**

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA EH15 IV

**PLAN**

1" = 50'

**LEGEND**

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- ⊙= MANHOLE REHABILITATION
- = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS | Approved By: RC | Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02 | Sheet: EH15-4



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA EH15 V

PLAN

1" = 60'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: EH15-5



SANITARY SEWER REHABILITATION  
AREA EH18 I

PLAN  
1" = 60'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

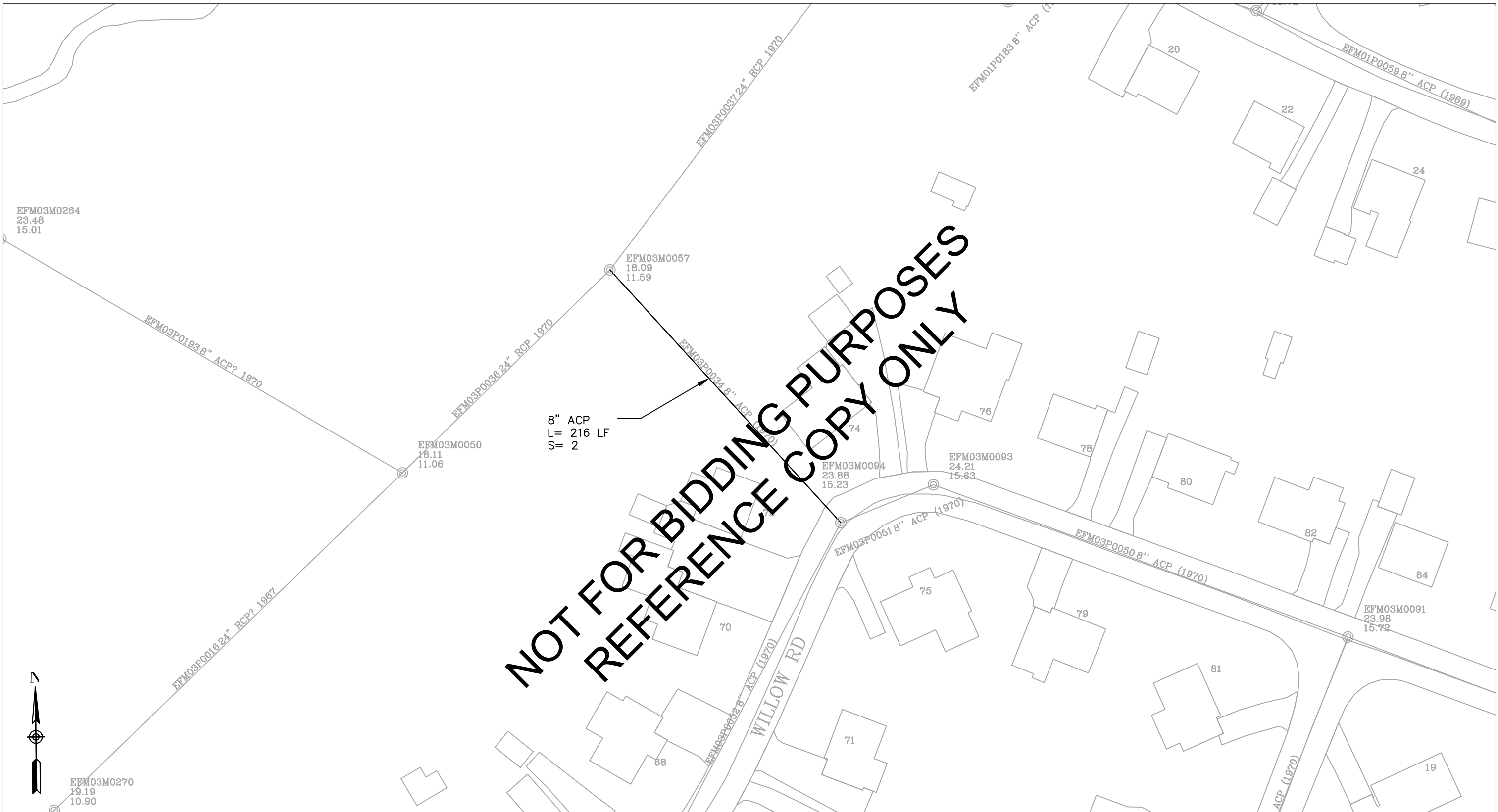
Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: EH18-1

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.






NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

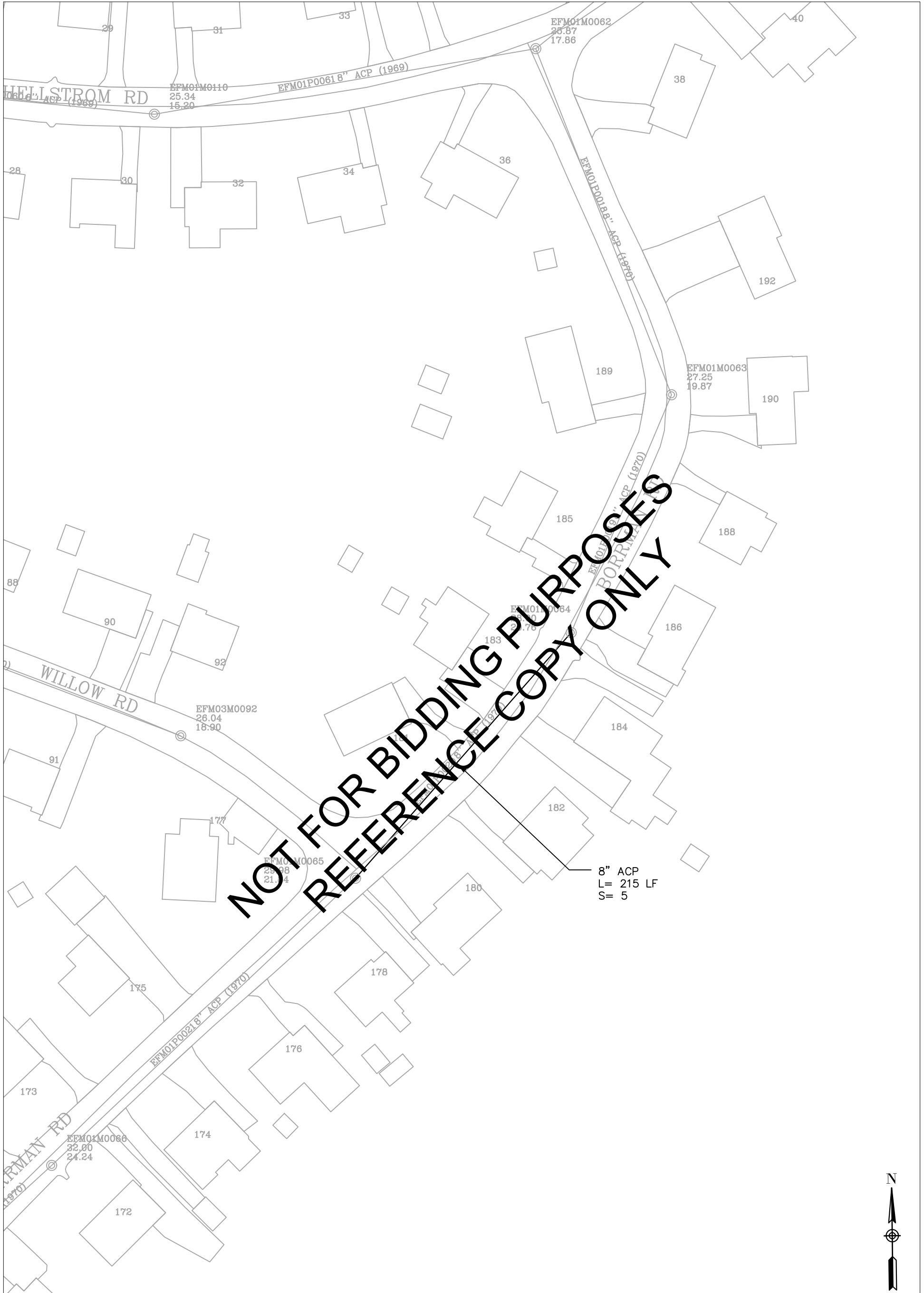
SANITARY SEWER REHABILITATION AREA EH18 II

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

**PLAN**  
1" = 60'

LEGEND	
L=	LINEAR FEET OF PIPE
S=	No. OF SERVICE LATERALS PRESENT
⊙	MANHOLE REHABILITATION
-	CIPP LINING

	<b>Greater New Haven Water Pollution Control Authority</b> ENGINEERING DEPARTMENT 260 East Street New Haven, CT 06511 (203) 466 5280 p (203) 722-1564 f		
	Drawn By: NS	Approved By: RC	Date: 10/25/2023
	<b>INFILTRATION AND INFLOW IMPROVEMENTS</b> WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN AREAS 15, 18 AND 23		
Project No.: CWF 2019-02	Sheet: EH18-2		



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY



NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA EH18 III

PLAN

1" = 60'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS | Approved By: RC | Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02 | Sheet: EH18-3



NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA EH23 I

PLAN

1" = 80'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



Greater New Haven Water Pollution Control Authority  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: EH23-1



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

SANITARY SEWER REHABILITATION  
AREA EH23 II

**PLAN**

1" = 50'

**LEGEND**

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- = CIPP LINING



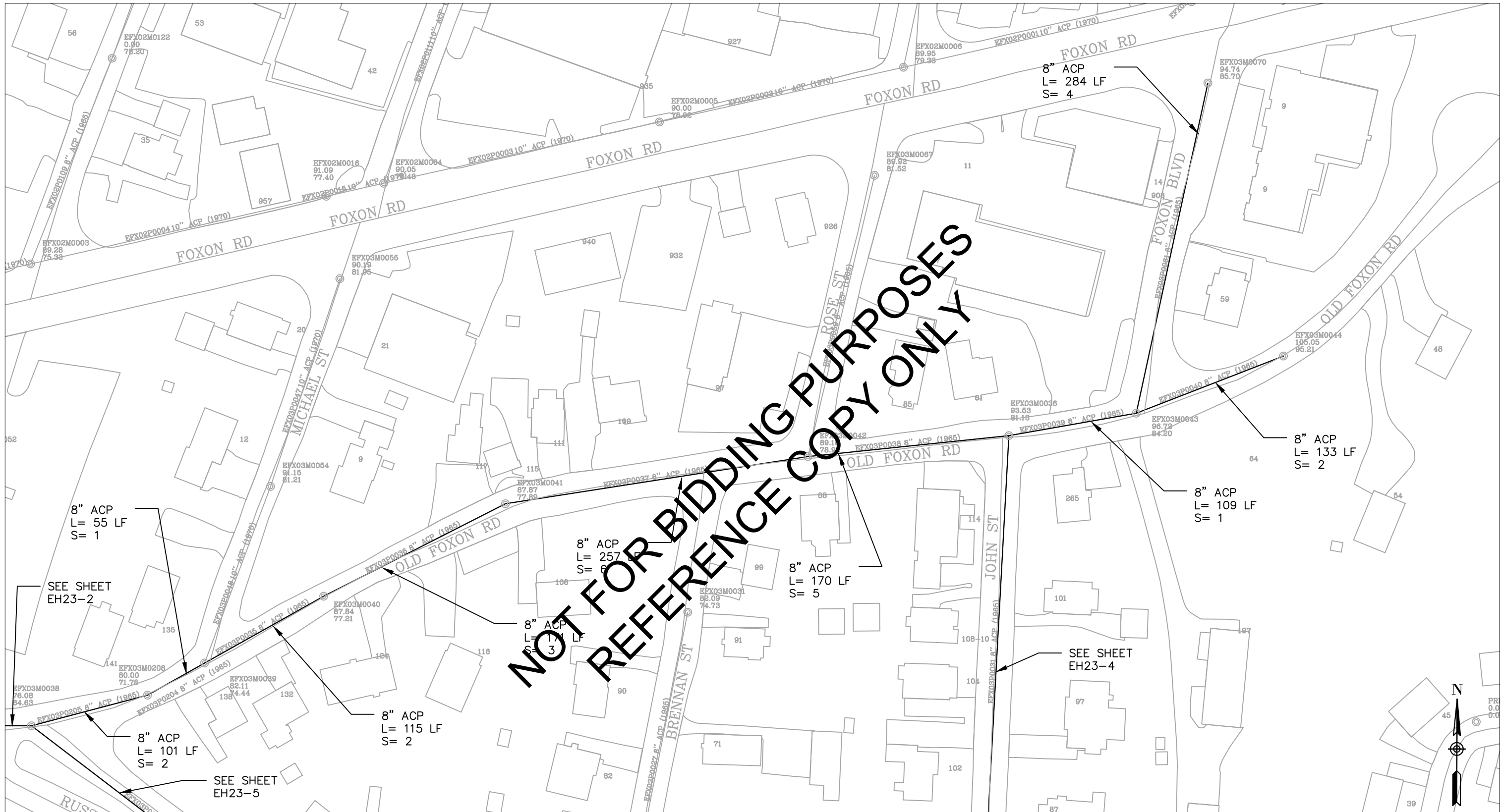
**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS | Approved By: RC | Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02 | Sheet: EH23-2

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.




NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

SANITARY SEWER REHABILITATION AREA EH23 III

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

PLAN  
1" = 80'

LEGEND	
L=	LINEAR FEET OF PIPE
S=	No. OF SERVICE LATERALS PRESENT
●	MANHOLE REHABILITATION
- -	CIPP LINING



**GNHWPCA**  
Protecting the Environment

**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS	Approved By: RC	Date: 10/25/2023
<b>INFILTRATION AND INFLOW IMPROVEMENTS WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN AREAS 15, 18 AND 23</b>		
Project No.: CWF 2019-02	Sheet: EH23-3	



NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA EH23 IV

**PLAN**  
1" = 60'

LEGEND	
L=	LINEAR FEET OF PIPE
S=	No. OF SERVICE LATERALS PRESENT
⊙	MANHOLE REHABILITATION
--	CIPP LINING



**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT

260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: EH23-4



SANITARY SEWER REHABILITATION AREA EH23 V

NTC:  
A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

PLAN  
1" = 80'

LEGEND	
L=	LINEAR FEET OF PIPE
S=	No. OF SERVICE LATERALS PRESENT
●	MANHOLE REHABILITATION
-	CIPP LINING

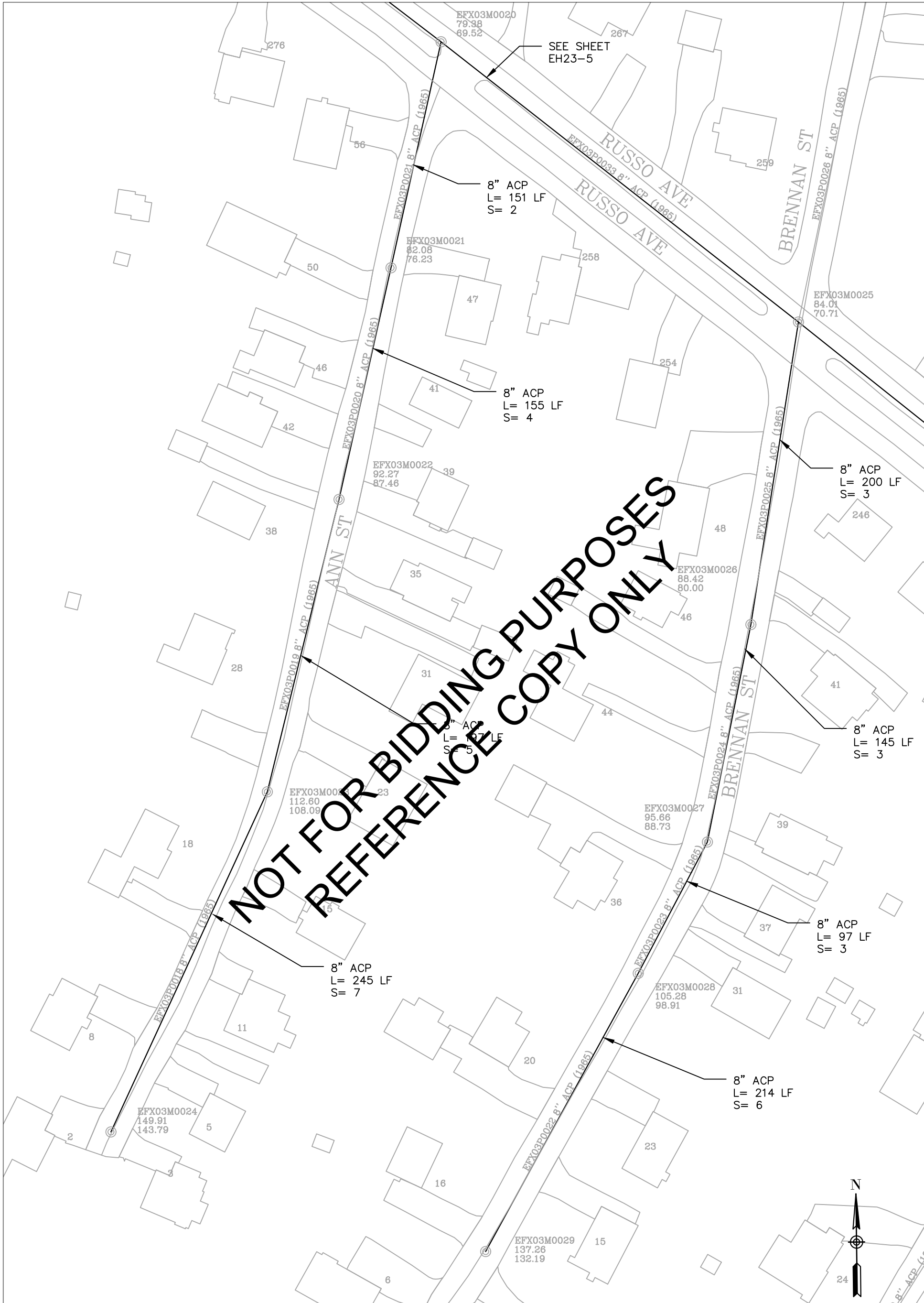


**Greater New Haven Water Pollution Control Authority**  
ENGINEERING DEPARTMENT  
260 East Street  
New Haven, CT 06511  
(203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: EH23-5



NTC:  
 A GNHWPCA REPRESENTATIVE SHALL BE PRESENT DURING THE CLEANING/CCTV INSPECTION OF THE SEWER SEGMENTS HIGHLIGHTED IN THIS SHEET. PLEASE CONTACT LUIGI DIMONACO, GNHWPCA CONSTRUCTION ADMINISTRATOR AT 203-466-4182.

SANITARY SEWER REHABILITATION AREA EH23 VI

PLAN

1" = 60'

LEGEND

- L= LINEAR FEET OF PIPE
- S= No. OF SERVICE LATERALS PRESENT
- = MANHOLE REHABILITATION
- - CIPP LINING



Greater New Haven Water Pollution Control Authority  
 ENGINEERING DEPARTMENT

260 East Street  
 New Haven, CT 06511  
 (203) 466 5280 p (203) 722-1564 f

Drawn By: NS    Approved By: RC    Date: 10/25/2023

INFILTRATION AND INFLOW IMPROVEMENTS  
 WOODBRIDGE AREAS 2 AND 2A AND EAST HAVEN  
 AREAS 15, 18 AND 23

Project No.: CWF 2019-02    Sheet: EH23-6