



# City of New London

Department of Finance-Purchasing Agent  
13 Masonic Street • New London, CT 06320 • Phone (860) 447-5215 • Fax (860) 447-5297

## Request for Proposals

*Specifications and Proposal Documents Attached*

Proposal No.: 2024-13 CONL

Opening Date and Time: **March 15, 2024 @ 2:00 P.M.**

Bid opening will take place at 13 Masonic Street, New London, CT 06320

Title: Roadway Improvements Project- Governor Winthrop Boulevard

### Special Instructions:

- All proposals must include one (1) hard copy and one (1) digital USB copy.
- The selected contractor must coordinate schedules with the selected contractor for project 2024-09 CONL: The Garde Arts Loading Dock Addition.
- Mandatory pre-bid meeting: **February 22, 2024 at 10:00 A.M.** Meet behind The Garde Arts on Governor Winthrop Boulevard. Late arrivals after 10 minutes will not be allowed to attend.
- All questions should be directed to [jmontague@newlondonct.org](mailto:jmontague@newlondonct.org) no later than **March 7, 2024 by 2:00 P.M.**
- This is a prevailing wage job.

The following information must appear in the lower left-hand corner of the envelope:

Sealed Proposal No.: 2024-13 CONL

Not to be opened until March 15, 2024 at 2:00PM

### Mail proposal to:

Joshua Montague; Accounting/Purchasing Agent  
City of New London  
13 Masonic Street  
New London, CT 06320

\*Enter 13 Masonic Street through the single door to the right of the double doors on the front of the building.

Proposals shall not be accepted after the Opening Date and Time indicated above and will be returned unopened.



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## PLEASE RETURN THIS FORM IMMEDIATELY

Acknowledgement: Receipt of Request for Proposals

Bid No.: **2024-13 CONL**  
**Roadway Improvements Project- Governor Winthrop Boulevard**

Please take a moment to acknowledge receipt of the attached documents. Your compliance with this request will help us to maintain proper follow-up procedures and will ensure that you receive any addendum that may be issued.

Date Issued: February 15, 2024

Date documents received: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Do you plan to submit a response? Yes \_\_\_\_\_ No \_\_\_\_\_

Print or type the following information:

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

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

\_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Received by: \_\_\_\_\_

**Note: E-mailed acknowledgements are requested.**  
**E-mail: [jmontague@newlondonct.org](mailto:jmontague@newlondonct.org)**

**Email this sheet only.**



# City of New London

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## Standard Invitation for Bids (IFB) and Contract Terms and Conditions

All Invitations for Bids issued by the City of New London (City) will bind Bidders to the terms and conditions listed below, unless specified otherwise in any individual Invitation for Bids.

Incorporated by reference into this contract are the provisions of Section 2-66 through 2-71 and Section 2-73 of the Code of Ordinances of the City of New London.

The contractor agrees to comply with the Code of Ordinances as they exist on the date of the contract and as they may be adopted or amended from time to time during the term of this contract and any amendments thereto.

### Submission of Bids

1. Bids must be submitted on forms supplied by the City of New London. Telephone, facsimile or e-mail bids will not be accepted in response to an Invitation for Bids. An original and one (1) copy of the Proposal Form shall be returned to the Purchasing Agent.
2. The date and time bids are to be opened are given in each Invitation for Bids issued. Bids received after the specified date and time of the bid opening given in each Invitation for Bids will not be considered. Bid envelopes must clearly indicate the bid number as well as the date and time of the bid opening. The name and address of the bidder should appear in the upper left-hand corner of the envelope.
3. Incomplete proposal forms may result in the rejection of the bid Amendments to bids received by the Purchasing Agent after the date and time specified for the bid opening shall not be considered. Bids shall be computer prepared, typewritten or handwritten in ink. Bids submitted in pencil shall be rejected. A person duly authorized to sign bids for the bidder shall sign all bids. Unsigned bids shall be rejected. The person signing the Proposal Form or their authorized designee must initial errors, alterations or corrections on both the original and copy of the Proposal Form to be returned. In the event an authorized designee initials a correction, there must be written authorization from the person signing the Proposal Form to the person initialing the erasure, alterations or corrections. Failure to do so shall result in rejection of the bid for those items erased, altered or corrected and not initialed.
4. Conditional bids are subject to rejection in whole or in part. A conditional bid is defined as one that limits, modifies, expands or supplements any of the terms and conditions and/or specifications of the Invitation for Bids.
5. Alternate bids will not be considered. An alternate bid is defined as one that is submitted in addition to the bidder's primary response to the Invitation for Bids.
6. Prices should be extended in decimal, not fraction, to be net and shall include delivery and transportation charges fully prepaid by the Contractor to the destination specified in the Invitation for Bids and subject only to cash discount.
7. Pursuant to Sections 12-412 and 12-412(1) of the Connecticut General Statutes, the City of New London is exempt from the payment of excise, transportation and sales taxes imposed by the Federal Government and/or the State. Such taxes must not be included in the bid prices.
8. In the event of a discrepancy between the unit price and the extension, the unit price shall govern.
9. By its submission the Bidder represents that the bid is not made in connection with any other Bidder submitting a bid for the same commodity or commodities and is in all respects fair and without collusion or fraud.

## Standard Invitation for Bids (IFB) and Contract Terms and Conditions

10. All bids will be opened and read publicly and upon award are subject to public inspection.

### Guaranty or Surety

11. Bid bonds, performance bonds, and labor and material bonds will be required as specified below. Guaranty or surety may be in the form of certified check. Bonds must meet the following requirements: Corporation – must be signed by an official of the corporation above their official title and the corporate seal must be affixed over the signature; Firm or Partnership - must be signed by all of the partners and indicate they are “doing business as”; Individual – must be signed by the owner and indicated as “Owner”. The surety company executing the bond or countersigning must be licensed in Connecticut and an official of the surety company must sign the bond with the corporate seal affixed over the signature. Signatures of two (2) witnesses for both the principal and the surety must appear on the bond. Power of attorney for the official signing the bond for the surety company must be submitted with the bond.

**Bid Bond** – Ten percent (10%) due at time of bid for all contract services and public works/construction projects that exceed twenty thousand dollars (\$20,000.00)

**Performance Bond** – One hundred percent (100%) of contract price for projects that exceed fifty thousand dollars (\$50,000.00).

**Labor and Material Payment Bonds** – One hundred percent (100%) of contract price for projects that exceed fifty thousand dollars (\$50,000.00).

### Award

12. Award of this contract will be made to the lowest responsible, qualified bidder and will be based on net cost and City specifications. The City of New London reserves the right to award this contract to other than the low bidder and to make multiple awards if deemed in the best interest of the City.
13. The City of New London allows a fifteen percent (15%) local vendor preference. A New London based business will be considered the lowest responsible bidder if its bid is within fifteen percent (15%) of the low bid and it is willing to accept the award at the low bid price. Any bidder claiming to be a New London based business must provide documentation that all of its motor vehicles are registered in New London and that payment of all of its property and motor vehicle taxes are current.
14. The City of New London may reject any bidder in default of any prior contract or guilty of misrepresentation or any bidder with a member of its firm in default or guilty of misrepresentation.
15. The Purchasing Agent may correct inaccurate awards resulting from clerical or administrative errors.

### Other Requirements

16. The City has an employment preference goal that jobs be offered to local residents on public prevailing wage projects with thresholds great than \$100,000 for renovation and \$400,000 for new construction. For such projects, it is understood that contractors shall make a good faith effort to employ a participating workforce comprised of twenty-five (25%) local residents of New London County, CT, with residents of the City of New London, CT getting a priority representing fifty percent (50%) of said participation, which will include twenty-five percent (25%) female and minority.
17. The City has an employee training preference goal that apprenticeship opportunities be made available for state licensed trades on public prevailing wage projects with thresholds greater than \$100,000 for renovation and \$400,000 for new construction. For such projects, it is understood that contractors shall make a good faith effort to employ a minimum of ten percent (10%) of the workforce per state licensed trade as apprentices and, of this number, a minimum of fifty percent (50) shall be in the first year of apprenticeship training.



## Standard Invitation for Bids (IFB) and Contract Terms and Conditions (con't)

### Contract

18. The existence of a contract shall be determined in accordance with the requirements set forth above.
19. The Contractor shall not assign or otherwise dispose its contract or its right, title or interest, or its power to execute such contract to any other person, firm or corporation without the prior written consent of the City of New London.
20. Failure of a Contractor to deliver commodities or perform services as specified will constitute authority for the City of New London to purchase these commodities or services on the open market. The contractor agrees to promptly reimburse the City of New London for excess cost of these purchases. The purchases will be deducted from the contracted quantities.
21. The Contractor agrees to hold the City of New London harmless from liability of any kind for the use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention furnished or used in the performance of the Contract; Guarantee its products against defective material or workmanship; repair damages of any kind, for which it is responsible to the premises or equipment, to its own work or to the work of other contractors; obtain and pay for all licenses, permits, fees etc., and to give all notices and comply with all requirements of the City of New London, the State of Connecticut and the U.S. Government.
22. Insurance requirements generally apply to contract services, professional services and public works improvement/construction projects. The Contractor will carry commercial general liability insurance to protect the City of New London from loss. The following minimum limits shall be met:

**Bodily Injury and Property Damage** – One million dollars (\$1,000,000.00) each occurrence; two million dollars (\$2,000,000.00) aggregate

**Products or Completed Operations** - One million dollars (\$1,000,000.00) each occurrence; two million dollars (\$2,000,000.00) aggregate

**Professional Liability (Errors and Omissions) Coverage appropriate to the contractor's operations** – Two million dollars (\$2,000,000.00) each occurrence

**Commercial Automobile Coverage including owned, non-owned, leased and hired vehicles (if used on City of New London property)** – One million dollars (\$1,000,000.00) combined single limit for each accident.

**Workers' Compensation Coverage** - Will be in accordance with State of Connecticut requirements at the time of bid.

Any deductible or self-insured retention must be disclosed and any claim payments falling within the deductible shall be the responsibility of the contractor.

The Contractor shall require all subcontractors to carry the same forms and minimum coverages that it is required to provide. Evidence of these coverages must be provided to the City of New London Purchasing Agent prior to the contractor or subcontractor coming onto the work site.

All insurance policies shall be endorsed to the City of New London, its officers and employees as additional insured, and shall not be reduced or cancelled without thirty (30) days prior written notice to the Purchasing Agent. In addition, the contractor's insurance shall be primary as respects the City of New London, and any other insurance maintained by the City of New London shall be excess and not contributing insurance with the contractor's insurance.

Contractor shall agree to maintain in force at all times during the contract the following minimum coverages and shall name the City of New London as an Additional Insured on a primary and non-contributory basis to all policies, except Workers Compensation. All policies should also include a Waiver of Subrogation. The Additional Insured Endorsement shall be written on ISO Form 2010 and 2037 or its equivalent and shall include coverage for Products/Completed Operations after the work is complete.

## **Standard Invitation for Bids (IFB) and Contract Terms and Conditions (con't)**

23. Notwithstanding any provision or language in this contract to the contrary, the Mayor may, without cause, terminate this contract upon approval by the City Council, whenever he/she determines that such termination is in the best interest of the City of New London. Any such termination shall be effected by delivery to the Contractor of a written notice of termination. The notice of termination shall be sent by registered mail to the Contractor address furnished to the City of New London for purposes of correspondence or by hand delivery. Upon receipt of such notice, the Contractor shall both Immediately discontinue all services affected (unless the notice directs otherwise) and deliver to the City of New London all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Contractor in performing its duties under this contract, whether completed or in progress. All such documents, information and materials shall become the property of the City of New London. In the event of such termination, the contractor shall be entitled to reasonable compensation as determined by the Mayor, however, no compensation for lost profits shall be allowed.

### **Delivery**

24. All products and equipment delivered must be new unless otherwise stated in the proposal specifications.
25. All deliveries will be to the locations specified by the City of New London. The City of New London does not have a loading dock therefore all Contractors will be responsible for inside delivery without assistance from City of New London personnel.
26. Payment terms are net 45 days after receipt of goods or invoice, whichever is later, unless otherwise specified.
27. Charges against a Contractor shall be deducted from current obligations. Money paid to the City of New London shall be payable to the Treasurer, City of New London.

### **Saving Clause**

28. The Contractor shall not be liable for losses or delays in the fulfillment of the terms of the contract due to wars, acts of public enemies, strikes, fires, floods, acts of God or any other acts not within the control of or reasonably prevented by the Contractor. The contractor will give written notice of the cause and probable duration of any such delay.

### **Advertising**

29. Contractors may not reference sales to the City of New London for advertising and promotional purposes without prior approval of the City of New London.

### **Rights**

30. The City of New London has sole and exclusive right and title to all printed material produced for the City of New London and the Contractor shall not copyright the printed matter produced under this contract.
31. The Contractor assigns to the City of New London all rights, title and interests in and to all causes of action it may have under Section 4 of the Clayton Act, 15 USC 15, or under Chapter 624 of the Connecticut General Statutes. This assignment occurs when the contractor is awarded the contract.
32. The Contractor agrees that it is in compliance with all applicable federal, state and local regulations, including but not limited to Connecticut General Statutes Section 7-148i. The Contractor also agrees that it will hold the City of New London harmless and indemnify the City of New London from any action which may arise out of any act by the Contractor concerning lack of compliance with these laws and regulations. All purchases will be in compliance with Sections 22a-194 to 22a-194g of the Connecticut General Statutes related to product packaging.
33. This contract is subject to the provisions of Executive Order Number Three of Governor Thomas J. Meskill promulgated June 16, 1971, the provision of Executive Order Number Seventeen of Governor Thomas J. Meskill promulgated February 15, 1973 and Section 16 of Public Act 91-58, nondiscrimination regarding sexual orientation, and the provisions of Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999 regarding Violence in the Workplace Prevention Policy.



**THIS IS A PUBLIC WORKS PROJECT**

**Covered by the**

**PREVAILING WAGE LAW**

**CT General Statutes Section 31-53**

**If you have QUESTIONS regarding your wages  
CALL (860) 263-6790**

Section 31-55 of the CT State Statutes requires every contractor or subcontractor performing work for the state to post in a prominent place the prevailing wages as determined by the Labor Commissioner.

**Sec. 31-53b. Worker training requirements for public works projects. Enforcement. Regulations. Exceptions.** (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (h) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 46 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268, and, on or after July 1, 2012, that any plumber or electrician subject to the continuing education requirements of section 20-334d, who has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration five or more years prior to the date such electrician or plumber begins work on such public works project, has completed a supplemental refresher training course of at least four hours in duration in construction safety and health taught by a federal Occupational Safety and Health Administration authorized trainer.

(b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section.

(c) Not later than January 1, 2012, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or, in the case of a supplemental refresher training course, shall include, but not be limited to, an update of revised Occupational Safety and Health Administration standards and a review of required construction hazards training, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project or, in the case of supplemental refresher training, a student course completion card issued by said Occupational Safety and Health Administration authorized trainer dated not earlier than five years prior to the date such electrician or plumber begins work on such public works project.

(d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

(P.A. 06-175, S. 1; P.A. 08-83, S. 1; P.A. 10-47, S. 2; P.A. 11-63, S. 1.)

History: P.A. 08-83 amended Subsec. (a) by making provisions applicable to public works project contracts entered into on or after July 1, 2009, replacing provision re total cost of work with reference to Sec. 31-53(g), requiring proof in certified payroll form that new mechanic, laborer or worker has completed a 10-hour or more construction safety course and adding provision re new miner training program, amended Subsec. (b) by substituting "person" for "employee" and adding "or program", amended Subsec. (c) by adding "or in accordance with Federal Mine Safety and Health Administration Standards" and setting new deadline of January 1, 2009, deleted former Subsec. (d) re "public building", added new Subsec. (d) re exemptions for public service company employees and delivery drivers who perform no labor other than delivery and made conforming and technical changes, effective January 1, 2009; P.A. 10-47 made a technical change in Subsec. (a); P.A. 11-63 amended Subsec. (a) by adding provision re supplemental refresher training course for plumbers and electricians subject to Sec. 20-334d, amended Subsec. (c) by adding provisions re regulations and subject matter of refresher training course and refresher training course student completion cards, and made technical changes, effective July 1, 2011.

**Sec. 31-55. Posting of wage rates by contractors doing state work.** Every contractor or subcontractor performing work for the state subject to the provisions of section [31-53](#) or [31-54](#) shall post the prevailing wages as determined by the Labor Commissioner in prominent and easily accessible places at the site of work or at such place or places as are used to pay its employees their wages.

(1955, S. 3020d; P.A. 97-263, S. 16.)

History: P.A. 97-263 incorporated changes to Secs. 31-53 and 31-54 by reference.

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**Sec. 31-55a. Annual adjustments to wage rates by contractors doing state work.** Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section [31-54](#), or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section [31-53](#) shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.

(P.A. 02-69, S. 1.)

CONNECTICUT DEPARTMENT OF LABOR  
WAGE AND WORKPLACE STANDARDS DIVISION

**CONTRACTORS WAGE CERTIFICATION FORM**  
**Construction Manager at Risk/General Contractor/Prime Contractor**

I, \_\_\_\_\_ of \_\_\_\_\_  
Officer, Owner, Authorized Rep. Company Name

do hereby certify that the \_\_\_\_\_  
Company Name  
\_\_\_\_\_  
Street  
\_\_\_\_\_  
City

and all of its subcontractors will pay all workers on the  
\_\_\_\_\_  
Project Name and Number  
\_\_\_\_\_  
Street and City

the wages as listed in the schedule of prevailing rates required for such project (a copy of which is attached hereto).

\_\_\_\_\_  
Signed

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

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

Return to:

Connecticut Department of Labor  
Wage & Workplace Standards Division  
200 Folly Brook Blvd.  
Wethersfield, CT 06109

*Rate Schedule Issued (Date):* \_\_\_\_\_



**Connecticut Department of Labor  
Wage and Workplace Standards Division  
FOOTNOTES**

⇒ Please Note: If the “Benefits” listed on the schedule for the following occupations includes a letter(s) (+ a or + a+b for instance), refer to the information below.

Benefits to be paid at the appropriate prevailing wage rate for the listed occupation.

If the “Benefits” section for the occupation lists only a dollar amount, disregard the information below.

**Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers, Stone Masons  
(Building Construction) and  
(Residential- Hartford, Middlesex, New Haven, New London and Tolland Counties)**

- a. Paid Holiday: Employees shall receive 4 hours for Christmas Eve holiday provided the employee works the regularly scheduled day before and after the holiday. Employers may schedule work on Christmas Eve and employees shall receive pay for actual hours worked in addition to holiday pay.

**Elevator Constructors: Mechanics**

- a. Paid Holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Veterans’ Day, Thanksgiving Day, Christmas Day, plus the Friday after Thanksgiving.
- b. Vacation: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

**Glaziers**

- a. Paid Holidays: Labor Day and Christmas Day.

**Power Equipment Operators  
(Heavy and Highway Construction & Building Construction)**

- a. Paid Holidays: New Year’s Day, Good Friday, Memorial day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, provided the employee works 3 days during the week in which the holiday falls, if scheduled, and if scheduled, the working day before and the working day after the holiday. Holidays falling on Saturday may be observed on Saturday, or if the employer so elects, on the preceding Friday.

**Ironworkers**

- a. Paid Holiday: Labor Day provided employee has been on the payroll for the 5 consecutive work days prior to Labor Day.

**Laborers (Tunnel Construction)**

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. No employee shall be eligible for holiday pay when he fails, without cause, to work the regular work day preceding the holiday or the regular work day following the holiday.

**Roofers**

- a. Paid Holidays: July 4<sup>th</sup>, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

**Sprinkler Fitters**

- a. Paid Holidays: Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

**Truck Drivers**

(Heavy and Highway Construction & Building Construction)

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas day, and Good Friday, provided the employee has at least 31 calendar days of service and works the last scheduled day before and the first scheduled day after the holiday, unless excused.

# **Informational Bulletin**

## **THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE**

(applicable to public building contracts entered into *on or after July 1, 2007*, where the total cost of all work to be performed is at least \$100,000)

- (1) This requirement was created by Public Act No. 06-175, which is codified in Section 31-53b of the Connecticut General Statutes (pertaining to the prevailing wage statutes);
- (2) The course is required for public building construction contracts (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1, 2007;
- (3) It is required of private employees (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public building project where the total cost of all work to be performed is at least \$100,000;
- (4) The ten-hour construction course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- (5) The internet website for the federal OSHA Training Institute is [http://www.osha.gov/fso/ote/training/edcenters/fact\\_sheet.html](http://www.osha.gov/fso/ote/training/edcenters/fact_sheet.html);
- (6) The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- (7) Within 30 days of receiving a contract award, a general contractor must furnish proof to the Labor Commissioner that all employees and apprentices performing manual labor on the project will have completed such a course;
- (8) Proof of completion may be demonstrated through either: (a) the presentation of a *bona fide* student course completion card issued by the federal OSHA Training Institute; *or* (2) the presentation of documentation provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- (9) Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;

- (10) Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. § 31-53(f) on which such employee's name first appears;
- (11) Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in noncompliance;
- (12) Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- (13) The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- (14) The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- (15) Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of <http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm>; or by telephone at (860)263-6790.

**THE ABOVE INFORMATION IS PROVIDED EXCLUSIVELY AS AN EDUCATIONAL RESOURCE, AND IS NOT INTENDED AS A SUBSTITUTE FOR LEGAL INTERPRETATIONS WHICH MAY ULTIMATELY ARISE CONCERNING THE CONSTRUCTION OF THE STATUTE OR THE REGULATIONS.**

November 29, 2006

**Notice**  
**To All Mason Contractors and Interested Parties**  
**Regarding Construction Pursuant to Section 31-53 of the**  
**Connecticut General Statutes (Prevailing Wage)**

The Connecticut Labor Department Wage and Workplace Standards Division is empowered to enforce the prevailing wage rates on projects covered by the above referenced statute.

Over the past few years the Division has withheld enforcement of the rate in effect for workers who operate a forklift on a prevailing wage rate project due to a potential jurisdictional dispute.

The rate listed in the schedules and in our Occupational Bulletin (see enclosed) has been as follows:

**Forklift Operator:**

- **Laborers (Group 4) Mason Tenders** - operates forklift solely to assist a mason to a maximum height of nine feet only.
- **Power Equipment Operator (Group 9)** - operates forklift to assist any trade and to assist a mason to a height over nine feet.

The U.S. Labor Department conducted a survey of rates in Connecticut but it has not been published and the rate in effect remains as outlined in the above Occupational Bulletin.

*Since this is a classification matter and not one of jurisdiction, effective January 1, 2007 the Connecticut Labor Department will enforce the rate on each schedule in accordance with our statutory authority.*

Your cooperation in filing appropriate and accurate certified payrolls is appreciated.

## **Information Bulletin** ***Occupational Classifications***

The Connecticut Department of Labor has the responsibility to properly determine "job classification" on prevailing wage projects covered under C.G.S. Section 31-53(d).

***Note: This information is intended to provide a sample of some occupational classifications for guidance purposes only. It is not an all-inclusive list of each occupation's duties. This list is being provided only to highlight some areas where a contractor may be unclear regarding the proper classification. If unsure, the employer should seek guidelines for CTDOL.***

**Below are additional clarifications of specific job duties performed for certain classifications:**

- **ASBESTOS WORKERS**

Applies all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.

- **ASBESTOS INSULATOR**

Handle, install apply, fabricate, distribute, prepare, alter, repair, dismantle, heat and frost insulation, including penetration and fire stopping work on all penetration fire stop systems.

- **BOILERMAKERS**

Erects hydro plants, incomplete vessels, steel stacks, storage tanks for water, fuel, etc. Builds incomplete boilers, repairs heat exchanges and steam generators.

- **BRICKLAYERS, CEMENT MASONS, CEMENT FINISHERS, MARBLE MASONS, PLASTERERS, STONE MASONS, PLASTERERS. STONE MASONS, TERRAZZO WORKERS, TILE SETTERS**

Lays building materials such as brick, structural tile and concrete cinder, glass, gypsum, terra cotta block. Cuts, tools and sets marble, sets stone, finishes concrete, applies decorative steel, aluminum and plastic tile, applies cements, sand, pigment and marble chips to floors, stairways, etc.



- **CARPENTERS, MILLWRIGHTS. PILEDRIVERMEN. LATHERS. RESILEINT FLOOR LAYERS, DOCK BUILDERS, DIKERS, DIVER TENDERS**

Constructs, erects, installs and repairs structures and fixtures of wood, plywood and wallboard. Installs, assembles, dismantles, moves industrial machinery. Drives piling into ground to provide foundations for structures such as buildings and bridges, retaining walls for earth embankments, such as cofferdams. Fastens wooden, metal or rockboard lath to walls, ceilings and partitions of buildings, acoustical tile layer, concrete form builder. Applies firestopping materials on fire resistive joint systems only. Installation of curtain/window walls only where attached to wood or metal studs. Installation of insulated material of all types whether blown, nailed or attached in other ways to walls, ceilings and floors of buildings. Assembly and installation of modular furniture/furniture systems. Free-standing furniture is not covered. This includes free standing: student chairs, study top desks, book box desks, computer furniture, dictionary stand, atlas stand, wood shelving, two-position information access station, file cabinets, storage cabinets, tables, etc.

- **LABORER, CLEANING**

- The clean up of any construction debris and the general (heavy/light) cleaning, including sweeping, wash down, mopping, wiping of the construction facility and its furniture, washing, polishing, and dusting.

- **DELIVERY PERSONNEL**

- If delivery of supplies/building materials is to one common point and stockpiled there, prevailing wages are not required. If the delivery personnel are involved in the distribution of the material to multiple locations within the construction site then they would have to be paid prevailing wages for the type of work performed: laborer, equipment operator, electrician, ironworker, plumber, etc.

- An example of this would be where delivery of drywall is made to a building and the delivery personnel distribute the drywall from one "stockpile" location to further sub-locations on each floor. Distribution of material around a construction site is the job of a laborer or tradesman, and not a delivery personnel.

- **ELECTRICIANS**

Install, erect, maintenance, alteration or repair of any wire, cable, conduit, etc., which generates, transforms, transmits or uses electrical energy for light, heat, power or other purposes, including the Installation or maintenance of telecommunication, LAN wiring or computer equipment, and low voltage wiring. ***\*License required per Connecticut General Statutes: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9.***

- **ELEVATOR CONSTRUCTORS**

Install, erect, maintenance and repair of all types of elevators, escalators, dumb waiters and moving walks. *\*License required by Connecticut General Statutes: R-1,2,5,6.*

- **FORK LIFT OPERATOR**

Laborers Group 4) Mason Tenders - operates forklift solely to assist a mason to a maximum height of nine (9) feet only.

Power Equipment Operator Group 9 - operates forklift to assist any trade, and to assist a mason to a height over nine (9) feet.

- **GLAZIERS**

Glazing wood and metal sash, doors, partitions, and 2 story aluminum storefronts. Installs glass windows, skylights, store fronts and display cases or surfaces such as building fronts, interior walls, ceilings and table tops and metal store fronts. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers, which require equal composite workforce.

- **IRONWORKERS**

Erection, installation and placement of structural steel, precast concrete, miscellaneous iron, ornamental iron, metal curtain wall, rigging and reinforcing steel. Handling, sorting, and installation of reinforcing steel (rebar). Metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which require equal composite workforce.

- **INSULATOR**

- Installing fire stopping systems/materials for "Penetration Firestop Systems": transit to cables, electrical conduits, insulated pipes, sprinkler pipe penetrations, ductwork behind radiation, electrical cable trays, fire rated pipe penetrations, natural polypropylene, HVAC ducts, plumbing bare metal, telephone and communication wires, and boiler room ceilings.

- **LABORERS**

Acetylene burners, asphalt rakers, chain saw operators, concrete and power buggy operator, concrete saw operator, fence and guard rail erector (except metal bridge rail (traffic), decorative security fence (non-metal).

installation.), hand operated concrete vibrator operator, mason tenders, pipelayers (installation of storm drainage or sewage lines on the street only), pneumatic drill operator, pneumatic gas and electric drill operator, powermen and wagon drill operator, air track operator, block paver, curb setters, blasters, concrete spreaders.

- **PAINTERS**

Maintenance, preparation, cleaning, blasting (water and sand, etc.), painting or application of any protective coatings of every description on all bridges and appurtenances of highways, roadways, and railroads. Painting, decorating, hardwood finishing, paper hanging, sign writing, scenic art work and drywall hhg for any and all types of building and residential work.

- **LEAD PAINT REMOVAL**

- Painter's Rate

1. Removal of lead paint from bridges.
2. Removal of lead paint as preparation of any surface to be repainted.
3. Where removal is on a Demolition project prior to reconstruction.

- Laborer's Rate

1. Removal of lead paint from any surface NOT to be repainted.
2. Where removal is on a *TOTAL* Demolition project only.

- **PLUMBERS AND PIPEFITTERS**

Installation, repair, replacement, alteration or maintenance of all plumbing, heating, cooling and piping. ***\*License required per Connecticut General Statutes: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2 S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4.***

- **POWER EQUIPMENT OPERATORS**

Operates several types of power construction equipment such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers or motor graders, etc. Repairs and maintains equipment. ***\*License required, crane operators only, per Connecticut General Statutes.***

- **ROOFERS**

Covers roofs with composition shingles or sheets, wood shingles, slate or asphalt and gravel to waterproof roofs, including preparation of surface. (demolition or removal of any type of roofing and or clean-up of any and all areas where a roof is to be relaid.)

- **SHEETMETAL WORKERS**

Fabricate, assembles, installs and repairs sheetmetal products and equipment in such areas as ventilation, air-conditioning, warm air heating, restaurant equipment, architectural sheet metal work, sheetmetal roofing, and aluminum gutters. Fabrication, handling, assembling, erecting, altering, repairing, etc. of coated metal material panels and composite metal material panels when used on building exteriors and interiors as soffits, fascia, louvers, partitions, canopies, cornice, column covers, awnings, beam covers, cladding, sun shades, lighting troughs, spires, ornamental roofing, metal ceilings, mansards, copings, ornamental and ventilation hoods, vertical and horizontal siding panels, trim, etc. The sheet metal classification also applies to the vast variety of coated metal material panels and composite metal material panels that have evolved over the years as an alternative to conventional ferrous and non-ferrous metals like steel, iron, tin, copper, brass, bronze, aluminum, etc. Fabrication, handling, assembling, erecting, altering, repairing, etc. of architectural metal roof, standing seam roof, composite metal roof, metal and composite bathroom/toilet partitions, aluminum gutters, metal and composite lockers and shelving, kitchen equipment, and walk-in coolers. To include testing and air –balancing ancillary to installation and construction.

- **SPRINKLER FITTERS**

Installation, alteration, maintenance and repair of fire protection sprinkler systems.

***\*License required per Connecticut General Statutes: F-1,2,3,4.***

- **TILE MARBLE AND TERRAZZO FINISHERS**

Assists and tends the tile setter, marble mason and terrazzo worker in the performance of their duties.

- **TRUCK DRIVERS**

~How to pay truck drivers delivering asphalt is under REVISION~

Truck Drivers are requires to be paid prevailing wage for time spent "working" directly on the site. These drivers remain covered by the prevailing wage for any time spent transporting between the actual construction location and facilities (such as fabrication, plants, mobile factories, batch plant, borrow pits, job headquarters, tool yards, etc.) dedicated exclusively, or nearly so, to performance of the contract or project, which are so located in proximity to the actual construction location that it is reasonable to include them. ***\*License required, drivers only, per Connecticut General Statutes.***

***For example:***

- Material men and deliverymen are not covered under prevailing wage as long as they are not directly involved in the construction process. If, they unload the material, they would then be covered by prevailing wage for the classification they are performing work in: laborer, equipment operator, etc.
- Hauling material off site is not covered provided they are not dumping it at a location outlined above.
- Driving a truck on site and moving equipment or materials on site would be considered covered work, as this is part of the construction process.

➤ *Any questions regarding the proper classification should be directed to:*  
*Public Contract Compliance Unit*  
*Wage and Workplace Standards Division*  
*Connecticut Department of Labor*  
*200 Folly Brook Blvd, Wethersfield, CT 06109*  
*(860) 263-6790.*

[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

**PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS**

**WEEKLY PAYROLL**

Connecticut Department of Labor  
Wage and Workplace Standards Division  
200 Folly Brook Blvd.  
Wethersfield, CT 06109

In accordance with Connecticut General Statutes, 31-53 Certified Payrolls with a statement of compliance shall be submitted monthly to the contracting agency.

CONTRACTOR NAME AND ADDRESS:											SUBCONTRACTOR NAME & ADDRESS				WORKER'S COMPENSATION INSURANCE CARRIER						
PAYROLL NUMBER		Week-Ending Date	PROJECT NAME & ADDRESS										POLICY #	EFFECTIVE DATE:	EXPIRATION DATE:						
PERSON/WORKER, ADDRESS and SECTION	APPR RATE %	MALE/FEMALE AND RACE*	WORK CLASSIFICATION	DAY AND DATE						Total ST Hours	BASE HOURLY RATE	TYPE OF FRINGE BENEFITS Per Hour 1 through 6 (see back)	GROSS PAY FOR ALL WORK PERFORMED THIS WEEK	TOTAL DEDUCTIONS				GROSS PAY FOR THIS PREVAILING RATE JOB	CHECK # AND NET PAY		
				S	M	T	W	TH	F	S				Total O/T Hours	TOTAL FRINGE BENEFIT PLAN CASH	FICA	FEDERAL WITH-HOLDING			STATE WITH-HOLDING	LIST OTHER
			Trade License Type & Number - OSHA 10 Certification Number	HOURS WORKED EACH DAY							\$	1. \$									
											\$	2. \$									
											Base Rate	3. \$									
											\$	4. \$									
											Cash Fringe	5. \$									
											\$	6. \$									



**\*FRINGE BENEFITS EXPLANATION (P):**

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker’s compensation, income taxes, etc.).

Please specify the type of benefits provided:

- 1) Medical or hospital care \_\_\_\_\_ 4) Disability \_\_\_\_\_
- 2) Pension or retirement \_\_\_\_\_ 5) Vacation, holiday \_\_\_\_\_
- 3) Life Insurance \_\_\_\_\_ 6) Other (please specify) \_\_\_\_\_

**CERTIFIED STATEMENT OF COMPLIANCE**

For the week ending date of \_\_\_\_\_,

I, \_\_\_\_\_ of \_\_\_\_\_, (hereafter known as Employer) in my capacity as \_\_\_\_\_ (title) do hereby certify and state:

**Section A:**

1. All persons employed on said project have been paid the full weekly wages earned by them during the week in accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:

- a) The records submitted are true and accurate;
- b) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and said wages and benefits are not less than those which may also be required by contract;
- c) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and Section 31-54 if applicable for state highway construction);
- d) Each such person is covered by a worker’s compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;
- e) The Employer does not receive kickbacks, which means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a prime contractor in connection with a subcontractor relating to a prime contractor; and
- f) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.

2. OSHA~The employer shall affix a copy of the construction safety course, program or training completion document to the certified payroll required to be submitted to the contracting agency for this project on which such persons name first appears.

\_\_\_\_\_ (Signature)                      \_\_\_\_\_ (Title)                      \_\_\_\_\_ Submitted on (Date)



[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS											Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109										
In accordance with Connecticut General Statutes, 31-53 Certified Payrolls with a statement of compliance shall be submitted monthly to the contracting agency.											WEEKLY PAYROLL										
CONTRACTOR NAME AND ADDRESS: Landon Corporation, 15 Connecticut Avenue, Northford, CT 06472						SUBCONTRACTOR NAME & ADDRESS XYZ Corporation 2 Main Street Yantic, CT 06389					WORKER'S COMPENSATION INSURANCE CARRIER Travelers Insurance Company POLICY # #BAC8888928 EFFECTIVE DATE: 1/1/09 EXPIRATION DATE: 12/31/09										
PAYROLL NUMBER	Week-Ending Date	PROJECT NAME & ADDRESS									Total ST Hours	BASE HOURLY RATE	TYPE OF FRINGE BENEFITS Per Hour 1 through 6 (see back)	GROSS PAY FOR ALL WORK PERFORMED THIS WEEK	TOTAL DEDUCTIONS				GROSS PAY FOR THIS PREVAILING RATE JOB	CHECK # AND NET PAY	
		DAY AND DATE							HOURS WORKED EACH DAY						FICA	WITH-HOLDING	WITH-HOLDING	LIST OTHER			
PERSON/WORKER, ADDRESS and SECTION	APPR RATE %	MALE/FEMALE AND RACE*	WORK CLASSIFICATION	S	M	T	W	TH	F	S	Total O/T Hours	TOTAL FRINGE BENEFIT PLAN CASH									
Robert Craft 81 Maple Street Willimantic, CT 06226		M/C	Electrical Lineman E-1 1234567 Owner OSHA 123456	20	21	22	23	24	25	26	40	S-TIME	1. \$ 5.80	\$1,582.80							
					8	8	8	8	8			Base Rate	2. \$								
												O-TIME	3. \$ 2.01								
													4. \$								
													5. \$								
													6. \$								
Ronald Jones 212 Elm Street Norwich, CT 06360	65%	M/B	Electrical Apprentice  OSHA 234567		8	8	8	8	8		40	S-TIME	1. \$	\$1,464.80	xx.xx	xxx.xx	xx.xx	G-xxx	\$1,464.80	#124	
												Base Rate	2. \$								
												O-TIME	3. \$								
													4. \$								
													5. \$								
													6. \$								
Franklin T. Smith 234 Washington Rd. New London, CT 06320 SECTION B		M/H	Project Manager			8					8	S-TIME	1. \$	\$1,500.00	xx.xx	xx.xx	xx.xx	M-xx.x		xxx.xx	
												Base Rate	2. \$								
												O-TIME	3. \$								
													4. \$								
													5. \$								
													6. \$								
												S-TIME	1. \$								
												Base Rate	2. \$								
												O-TIME	3. \$								
													4. \$								
													5. \$								
													6. \$								

7/13/2009 \*IF REQUIRED  
WWS-CP1

\*SEE REVERSE SIDE

PAGE NUMBER 1 OF 2

OSHA 10 ~ATTACH CARD TO 1ST CERTIFIED PAYROLL

**\*FRINGE BENEFITS EXPLANATION (P):**

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

Please specify the type of benefits provided:

- 1) Medical or hospital care Blue Cross 4) Disability \_\_\_\_\_
- 2) Pension or retirement \_\_\_\_\_ 5) Vacation, holiday \_\_\_\_\_
- 3) Life Insurance Utopia 6) Other (please specify) \_\_\_\_\_

**CERTIFIED STATEMENT OF COMPLIANCE**

For the week ending date of 9/26/09,

I, Robert Craft of XYZ Corporation, (hereafter known as

Employer) in my capacity as Owner (title) do hereby certify and state:

**Section A:**

1. All persons employed on said project have been paid the full weekly wages earned by them during the week in accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:

- a) The records submitted are true and accurate;
- b) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such employee to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such employee to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and said wages and benefits are not less than those which may also be required by contract;
- c) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and Section 31-54 if applicable for state highway construction);
- d) Each such employee of the Employer is covered by a worker's compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;
- e) The Employer does not receive kickbacks, which means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a prime contractor in connection with a subcontractor relating to a prime contractor; and
- f) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.

2. OSHA~The employer shall affix a copy of the construction safety course, program or training completion document to the certified payroll required to be submitted to the contracting agency for this project on which such employee's name first appears.

Robert Craft      owner      10/2/09  
 (Signature)      (Title)      Submitted on (Date)

**Section B: Applies to CONNDOT Projects ONLY**

That pursuant to CONNDOT contract requirements for reporting purposes only, all employees listed under Section B who performed work on this project are not covered under the prevailing wage requirements defined in Connecticut General Statutes Section 31-53.

Robert Craft      owner      10/2/09  
 (Signature)      (Title)      Submitted on (Date)

Note: CTDOL will assume all hours worked were performed under Section A unless clearly delineated as Section B WWS-CP1 as such. Should an employee perform work under both Section A and Section B, the hours worked and wages paid must be segregated for reporting purposes.

**\*\*\*THIS IS A PUBLIC DOCUMENT\*\*\*  
 \*\*\*DO NOT INCLUDE SOCIAL SECURITY NUMBERS\*\*\***

**Minimum Rates and Classifications for Heavy/Highway Construction**

ID#: 24-58327

**Connecticut Department of Labor  
Wage and Workplace Standards**

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number: 2024-13

Project Town: New London

State#:

FAP#:

Project: Governor Winthrop Boulevard Realignment

<b>CLASSIFICATION</b>	<b>Hourly Rate</b>	<b>Benefits</b>
1) Boilermaker	46.21	29.35
1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	41.63	34.50
2) Carpenters, Piledrivermen	37.61	27.61
2a) Diver Tenders	37.61	27.61
3) Divers	46.07	27.61
03a) Millwrights	40.56	28.87
4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water, etc.), Spray	56.25	25.15
4a) Painters: Brush and Roller	37.62	24.55
4b) Painters: Spray Only	40.62	24.55

**As of:** February 13, 2024

4c) Painters: Steel Only	39.62	24.55
4d) Painters: Blast and Spray	40.62	24.55
4e) Painters: Tanks, Tower and Swing	39.62	24.55
4f) Elevated Tanks (60 feet and above)	46.62	24.55
5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	42.6	33.21+3% of gross wage
6) Ironworkers: Ornamental, Reinforcing, Structural, and Precast Concrete Erection	42.37	40.02 + a
7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2) and Pipefitters (Including HVAC Work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4 G-1, G-2, G-8, G-9)	48.28	35.50
----LABORERS----		
8) Group 1: General Laborers and concrete specialist	33.5	25.59
8) Group 1a: Acetylene Burners (Hours worked with a torch)	34.5	25.59
9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen	33.75	25.59
10) Group 3: Pipelayers	34.0	25.59
11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators, block paver, curb setter and forklift operators	34.0	25.59

**As of:** February 13, 2024



12) Group 5: Toxic waste removal (non-mechanical systems)	35.5	25.59
13) Group 6: Blasters	35.25	25.59
Group 7: Asbestos/lead removal, non-mechanical systems (does not include leaded joint pipe)	36.5	25.59
Group 8: Traffic control signalmen	20.1	25.59
Group 9: Hydraulic Drills	34.25	25.59
Group 10: Toxic Waste Removers A or B With PPE	36.5	25.59
----LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and Liner Plate Tunnels in Free Air.----		
13a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Tenders	35.73	25.59 + a
13b) Brakemen, Trackmen, Miners' Helpers and all other men	34.76	25.59 + a
----CLEANING, CONCRETE AND CAULKING TUNNEL----		
14) Concrete Workers, Form Movers, and Strippers	34.76	25.59 + a
15) Form Erectors	35.09	25.59 + a
----ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL IN FREE AIR:----		

**As of:** February 13, 2024

16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers, Miners Helpers	34.76	25.59 + a
17) Laborers Topside, Cage Tenders, Bellman	34.65	25.59 + a
18) Miners	35.73	25.59 + a
----TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR: ----		
18a) Blaster	42.22	25.59 + a
19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge Tenders	42.02	25.59 + a
20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	40.04	25.59 + a
21) Mucking Machine Operator, Grout Boss, Track Boss	42.81	25.59 + a
----TRUCK DRIVERS----(*see note below)		
Two Axle Trucks, Helpers	32.16	30.51 + a
Three Axle Trucks; Two Axle Ready Mix	32.27	30.51 + a
Three Axle Ready Mix	32.33	30.51 + a
Four Axle Trucks	32.39	30.51 + a
Four Axle Ready-Mix	32.44	30.51 + a

**As of:** February 13, 2024

Heavy Duty Trailer (40 tons and over)	34.66	30.51 + a
Specialized earth moving equipment other than conventional type on-the road trucks and semi-trailer (including Euclids)	32.44	30.51 + a
Heavy Duty Trailer (up to 40 tons)	33.39	30.51 + a
Snorkle Truck	32.54	30.51 + a
----POWER EQUIPMENT OPERATORS----		
Group 1: Crane Handling or Erecting Structural Steel or Stone, Hoisting Engineer (2 drums or over). (Trade License Required)	52.78	27.80 + a
Group 1a: Front End Loader (7 cubic yards or over); Work Boat 26 ft. and over.	48.37	27.80 + a
Group 2: Cranes (100 ton rate capacity and over); Bauer Drill/Caisson. (Trade License Required)	52.41	27.80 + a
Group 2a: Cranes (under 100 ton rated capacity).	51.51	27.80 + a
Group 2b: Excavator over 2 cubic yards; Pile Driver (\$3.00 premium when operator controls hammer).	48.0	27.80 + a
Group 3: Excavator; Gradall; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade (slopes, shaping, laser or GPS, etc.). (Trade License Required)	47.1	27.80 + a
Group 4: Trenching Machines; Lighter Derrick; CMI Machine or Similar; Koehring Loader (Skooper).	46.64	27.80 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Spreader; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps;	45.92	27.80 + a

**As of:** February 13, 2024

Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" mandrel)

Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller. 45.92 27.80 + a

Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer). 45.55 27.80 + a

Group 7: Asphalt Roller; Concrete Saws and Cutters (ride on types); Vermeer Concrete Cutter; Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and under Mandrel) 45.14 27.80 + a

Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine. 44.67 27.80 + a

Group 9: Front End Loader (under 3 cubic yards), Skid Steer Loader regardless of attachments (Bobcat or Similar); Fork Lift, Power Chipper; Landscape Equipment (including hydroseeder), Vacuum Excavation Truck and Hydrovac Excavation Truck (27 HG pressure or greater). 44.14 27.80 + a

Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc. 41.69 27.80 + a

Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment. 41.69 27.80 + a

Group 12: Wellpoint Operator. 41.61 27.80 + a

Group 13: Compressor Battery Operator. 40.92 27.80 + a

Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain). 39.54 27.80 + a

**As of:** February 13, 2024

Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	39.06	27.80 + a
Group 16: Maintenance Engineer.	38.28	27.80 + a
Group 17: Portable Asphalt Plant Operator; Portable Crusher Plant Operator; Portable Concrete Plant Operator., Portable Grout Plant Operator, Portable Water Filtration Plant Operator.	43.46	27.80 + a
Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	40.54	27.80 + a

**\*\*NOTE: SEE BELOW**

----LINE CONSTRUCTION----(Railroad Construction and Maintenance)----

20) Lineman, Cable Splicer, Technician	48.36	16.92
21) Heavy Equipment Operator	42.26	6.5% + 19.88
22) Equipment Operator, Tractor Trailer Driver, Material Men	40.96	6.5% + 19.21
23) Driver Groundmen	26.5	6.5% + 9.00
23a) Truck Driver	40.96	6.5% + 17.76

----LINE CONSTRUCTION----

24) Driver Groundmen	30.92	6.5% + 9.70
25) Groundmen	22.67	6.5% + 6.20

**As of:** February 13, 2024

26) Heavy Equipment Operators	37.1	6.5% + 10.70
27) Linemen, Cable Splicers, Dynamite Men	41.22	6.5% + 12.20
28) Material Men, Tractor Trailer Drivers, Equipment Operators	35.04	6.5% + 10.45

*Welders: Rate for craft to which welding is incidental.*

*\*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.*

*\*\*Note: Hazardous waste premium \$3.00 per hour over classified rate*

Crane with 150 ft. boom (including jib) - \$1.50 extra

Crane with 200 ft. boom (including jib) - \$2.50 extra

Crane with 250 ft. boom (including jib) - \$5.00 extra

Crane with 300 ft. boom (including jib) - \$7.00 extra

Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyman instructing and supervising the work of each apprentice in a specific trade.

~~Connecticut General Statute Section 31-55a: Annual Adjustments to wage rates by contractors doing state work  
~~

*The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.*

*Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.*

*It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.*

*The annual adjustments will be posted on the Department of Labor's Web page:*

*www.ct.gov/dol. For those without internet access, please contact the division listed below.*

*The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.*

*All subsequent annual adjustments will be posted on our Web Site for contractor access.*

*Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.*

*Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage*

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

**~~Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).**

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

SAMPLE

**CONTRACT FORMS**



## CONTRACT FOR SERVICES

THIS AGREEMENT made and entered into this *Xth* day of (*MONTH*), 2023, by and between (*Company Name, Address*), hereinafter called "**Contractor**" and the City of New London, 181 State Street, New London, CT 06320, hereinafter called "**City**."

WHEREAS, the City desires to enter into a contract for the (*state nature of work*) and the Contractor represents itself as competent and qualified to accomplish the specific requirements of this contract to the satisfaction of the City, therefore this contract is entered into under the following terms and conditions:

1. The Contractor agrees to perform the services described below or in attachments if applicable. Only those attachments specifically referenced in this Contract for Services shall apply. The terms and conditions as contained in this Contract for Services shall take precedence over any conflicting terms as may be attached hereto.
2. **Term of the Contract:** The start date for this Contract shall be (*Month, Day*), 2023 and the completion date of this Contract shall be (*Month, Day*), 2023, time being of the essence.
3. **Contract Price:** The City shall pay the Contractor for the performance of the Contract in current funds, for the total quantities of work performed for the price of (*Dollar Amount in words*) (\$).

Based upon Applications for Payment submitted by the Contractor, the City shall make progress payments on account of the Contract Sum to the Contractor. The period covered by each Application for Payment shall be one calendar month ending on the last day of the month. The City shall make payment to the Contractor within 30 days after the City receives the Application for Payment. With each Application for Payment, the Contractor shall submit the most recent schedule of values, which allocates the Contract Price among the various portions of the Work. The Applications for Payments shall indicate the percentage of completion of each portion of the Work. Such Applications may include requests for payment on account of changes in the Work, but not yet included in Change Orders. Partial payment shall be due Contractor in the amount of 95.0% of the work in place.

Final payment, constituting the entire unpaid balance of the Contract Price, including Change Orders, shall be made by the City to the Contractor no later than 30 days after the Contractor has fully performed the Contract and has provided to the Owner a final Application for Payment.

4. **Contract Documents:** The Contract Documents consist of this Agreement, the Standard Bid and Contract Terms and Conditions, the Instructions to Bidders, the Contractor's bid as accepted by the City, the General and Special Conditions of the Work, the Technical Specifications, the drawings and all Addenda attached hereto.

The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all. In the event of any conflict or inconsistency between the provisions of this Agreement and the provisions of any of the other Contract Documents, the provisions of the Agreement shall prevail.

Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the edition of the standard specification, manual, code or laws or regulations identified in the reference. In the event a particular edition is not identified, the reference shall mean the latest edition in effect at the time of receipt of the bid. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall change the duties and responsibilities of the City, the Contractor or any of their consultants, agents or employees from those set forth in the Contract Documents.

5. **Obligations And Liability Of The Contractor:** The Contractor shall do all the work and perform and furnish all the labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies and all other things (except as otherwise expressly provided herein) necessary and as herein specified for the proper performance and completion of the Work in the manner and within the time hereinafter specified, in strict accordance with the Drawings, Specifications and other Contract Documents, in conformity with the directions and to the satisfaction of the City, and at the prices herein agreed upon therefor.

All parts of the Work and all fixtures, equipment, apparatus and other items indicated on the Drawings and not mentioned in the Specifications, or vice versa, and all work and material usual and necessary to make the Work complete in all its parts, including all incidental work necessary to make it complete and satisfactory and ready for use and operation, whether

or not they are indicated on the Drawings or mentioned in the Specifications, shall be furnished and executed the same as if they were called for both by the Drawings and by the Specifications.

The Contractor shall coordinate his operations with those of any other contractors who may be employed on other work of the City, shall avoid interference therewith, and shall cooperate in the arrangements for storage of materials and equipment.

The Contractor shall conduct his work so as to interfere as little as possible with private business and public travel. Wherever and whenever necessary or required, he shall maintain fences, furnish watchmen, maintain lights, and take such other precaution as may be necessary to protect life and property.

The Contractor shall indemnify and save harmless the City and its officers, agents, servants and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, costs and expenses, including attorneys' fees, on account of bodily injury, sickness, disease or death sustained by any person or persons or injury or damage to or destruction of any property, directly or indirectly arising out of, relating to or in connection with the Work, whether or not due to or claimed to be due in whole or in part to the active, passive or concurrent negligence or fault of the Contractor, his officers, agents, servants or employees, any of his subcontractors, the City or any of their respective officers, agents, servants or employees and/or any other person or persons, and whether or not such claims, demands, suits or proceedings are just, unjust, groundless, false or fraudulent; and the Contractor shall and does hereby assume and agrees to pay for the defense of all such claims, demands, suits and proceedings, provided, however, that the Contractor shall not be required to indemnify the City, its officers, agents, servants, or employees, against any such damages occasioned solely by acts or omissions of the owner other than supervisory acts or omissions of the City in the Work.

The Contractor shall have complete responsibility for the Work and the protection thereof, and for preventing injuries to persons and damage to the Work and property and utilities on or about the Work, until final completion and final acceptance thereof. He shall in no way be relieved of his responsibility by any right of the City to give permission or directions relating to any part of the Work, by any such permission or directions given, or by failure of the City to give such permission or directions. The Contractor shall bear all costs, expenses, losses and damages on account of the quantity or character of the Work or the nature of the land (including but not limited to subsurface conditions) in or under or on which the Work is done being different from that indicated or shown in the Contract Documents or from what was estimated or expected, or on account of the weather, elements, or other causes unless information regarding such condition(s) was known and not disclosed by the City prior to Contractor commencing its work.

The Contractor shall conduct his operations so as not to damage existing structures or work installed either by him or by other contractors. In case of any such damage resulting from his operations, he shall repair and make good as new the damaged portions at his own expense with the consent of the damaged party. In the event that consent is not given, the Contractor shall continue liable for the damage caused.

The Contractor shall be as fully responsible to the City for the acts and omissions of his subcontractors, their officers, agents, servants and employees as he is for his own acts and omissions and those of his own officers, agents, servants and employees.

Should the Contractor sustain any loss, damage or delay through any act or omission of any other contractor or any subcontractor of any such other contractor, the Contractor shall have no claim against the City therefor, other than for an extension of time, but shall have recourse solely to such other contractor or subcontractor.

If any other contractor or any subcontractor of any such other contractor shall suffer or claim to have suffered loss, damage or delay by reason of the acts or omissions of the Contractor or of any of his subcontractors, the Contractor agrees to assume the defense against any such claim and to reimburse such other contractor or subcontractor for such loss or damage.

The Contractor agrees to and does hereby indemnify and save harmless the City from and against any and all claims by such other contractors or subcontractors alleging such loss, damage or delay and from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, costs and expenses, including attorneys' fees, arising out of, relating to or resulting from such claims.

The Contractor shall promptly pay all federal, state and local taxes which may be assessed against him in connection with the Work or his operations under this Agreement and/or the other Contract Documents, including, but not limited to, taxes attributable to the purchase of material and equipment, to the performance of services, and the employment of persons in the prosecution of the Work.

Because (i) anticipated damages hereunder are uncertain in amount and difficult to prove, (ii) the parties hereto wish to liquidate said damages in advance, and (iii) monies paid pursuant to this Agreement are not greatly disproportionate to the damage reasonably anticipated in the event of default, it is further agreed that if Contractor shall not complete all of its obligations under this contract within the time period and by the completion date specified in Paragraph 2 herein, Contractor shall pay liquidated damages to the City at a rate of \$\_\_\_1,000\_\_\_ per day for every day beyond the completion date until such time as the Contractor finally completes all of its obligations under this Contract.

**6. Supervision Of Work:** The Contractor shall be solely responsible for supervision of the Work, shall give the work the constant attention necessary to ensure the expeditious and orderly progress thereof, and shall cooperate with the City, its officers, agents or employees in every possible way.

At all times, the Contractor shall have as his agent on the Work a competent superintendent capable of reading and thoroughly understanding the Drawings and Specifications, with full authority to execute the directions of the Engineer without delay and to supply promptly such labor, services, materials, equipment, plant, apparatus, appliances, tools, supplies and other items as may be required. Such superintendent shall not be removed from the Work without the prior written consent of the City. If, in the opinion of the City, the superintendent or any successor proves incompetent, the Contractor shall replace him with another person approved by the City; such approval, however, shall in no way relieve or diminish the Contractor's responsibility for supervision of the Work.

Whenever the Contractor or his agent or superintendent is not present on any part of the Work where it may be necessary to give directions or instructions with respect to such work, such directions or instructions may be given by the City to and shall be received and obeyed by the foreman or any other person in charge of the particular work involved.

**7. Insurance:** The Contractor shall procure and maintain insurance of the types specified below, and to the limits for this insurance specified in the Standard Bid and Contract Terms and Conditions and the City of New London Code of Ordinances, Article IV., Section 2-71. All insurance shall be obtained from companies satisfactory to the City.

Insurance shall be in such forms as will protect the Contractor from all claims and liability for damages for bodily and personal injury, including accidental death, and for property damage, which may arise from operations under the Contract, whether such operations be by himself, his subcontractors, or by anyone directly or indirectly employed or engaged by him.

The following types of insurance shall be provided before starting and until final completion and acceptance of the Work and expiration of the guarantee period provided for in the Agreement.

- a. Workmen's Compensation and Employer's Liability Insurance.
- b. Bodily Injury Insurance for operations and completed operations and Contractor's Protective Bodily Injury Insurance.
- c. Property Damage Insurance for operations and completed operations and Contractor's Protective Property Damage Insurance, each including coverage for injury to or destruction of wires or pipes and similar property and appurtenant apparatus and the collapse of or structural injury to any building or structure except those on which work under the Contract is being done. Blasting and explosion coverage shall be obtained if there is a need for blasting under the Contract, and no blasting shall be performed until such insurance has been secured.
- d. Bodily Injury Insurance covering the operation of all motor vehicles owned by the Contractor.
- e. Personal Injury Insurance to cover claims for personal injury and including claims brought by employees.
- f. Property Damage Insurance covering the operation of all motor vehicles owned by the Contractor.
- g. Insurance to cover bodily injuries and property damage resulting from the use of motor vehicles not owned by the Contractor, while such vehicles are being operated in connection with the prosecution of the Work.

- h. Contractual Liability Insurance covering the liability assumed by the Contractor under the fifth paragraph of that subsection titled "Obligations and Liability of Contractor" of this Agreement.
- i. Owner's Protective Liability and Property Damage Insurance to protect the City and any Engineer against claims for Property damage and for bodily injuries, including accidental death, caused by the operations of the Contractor or his subcontractors on the Work. The policy shall indicate the City and any Engineer as the named insured. A copy of the policy shall be furnished to the City and a Certificate of Insurance shall be furnished to any Engineer.

Any of the above coverages written on a claims made form have an Extended Reporting Period of two years from the termination of the contract. If the policy is replaced and/or the retroactive date is changed, then the expiring policy must be endorsed to extend the reporting period for claims for the policy in effect during the contract for two (2) years from the completion date.

All policies shall be so written that the owner will be notified in writing of cancellation or restrictive amendment at least 30 days prior to the effective date of such cancellation or amendment.

Certificates from the Contractor's insurance carriers stating the coverages provided, the limits of liability, and expiration dates shall be filed in triplicate with the Engineer before operations are begun. Such certificates shall be on the form furnished by the Engineer.

The CITY requires that the aggregate limits be maintained by the CONTRACTOR as required. It is the responsibility of the CONTRACTOR or his representative to notify the CITY if ever or whenever claims reduce the General Aggregate below \$1,000,000.

Renewal certificates must be furnished by the Contractor prior to the expiration date of any of the initial insurances.

No insurance required or furnished hereunder shall in any way relieve the Contractor of or diminish any of his responsibilities, obligations and liabilities under the Contract.

Contractor shall agree to maintain in force during the contract the following minimum coverages and shall name the City of New London as an Additional Insured on a primary and non-contributory basis to all policies, except Workers Compensation. All policies should also include a Waiver of Subrogation.

Insurance shall be written with Carriers approved in the State of Connecticut and with a minimum AM Best's Rating of "A-VIII". In addition, all Carriers are subject to approval by City of New London.

**8. Contract:** This Agreement, which includes all the Contract Document elements listed in paragraph 1 above, forms the Contract between the parties identified in the heading of this document. In the event that any provision of the Contract conflicts with any other provision of this Contract, the decision of the City will be final.

**9. Funding and Fiscal Year Appropriations:** Appropriations for expenditures by the City and authorization to spend for a particular purpose are ordinarily made on a fiscal year basis. The fiscal year of the City is the twelve (12) month period ending June 30 of each year. The obligations of the City under this Contract for the present or any subsequent fiscal year following the fiscal year in which this Contract is executed are subject to the appropriation of funds sufficient to discharge the City's obligation, which accrues in this or any subsequent fiscal year. In the absence of such appropriation or authorization, this Contract shall be terminated immediately upon the Contractor's receipt of notice to said effect without liability for damages, penalties or other charges arising from early termination. Expenditures for Contracted services that will extend beyond a single fiscal year shall not exceed in any fiscal year the amount appropriated and authorized for said fiscal year. The Contractor's yearly costs, as contained herein, may not exceed the amount appropriated for said year.

**10. Termination:** The Contract may be terminated without cause by either party by giving written notice to the other at least thirty (30) calendar days prior to the effective date of termination stated in the notice. If Contractor fails to fulfill his obligations, the City may terminate this Contract by giving written notice to the Contractor at least seven (7) calendar days before the effective date of termination stated in the notice. The notice shall state the circumstances of the alleged breach and may state a period during which the alleged breach may be cured, which cure shall be subject to approval by the City.

**11. Obligations in Event of Termination:**



A. Upon termination, all finished or unfinished documents, data, studies, and reports prepared by the Contractor pursuant to this Contract, shall become the property of the City.

B. The City shall promptly pay the Contractor for all services performed to the effective date of termination, subject to indemnification provisions of Paragraph 5 hereof and subject to offset of sums due the Contractor against sums owed by the Contractor to the City.

**12. Record keeping, Audit, and Inspection of Records:** The Contractor shall maintain books, records and other compilations of data pertaining to the requirements of the Contract to the extent and in such detail as shall properly substantiate claims for payment under the Contract. All such records shall be kept for a period of six (6) years or for such longer period as is specified herein. All retention periods start on the first day after final payment under this Contract. If any litigation, claim, negotiation, audit or other action involving the records is commenced prior to the expiration of the applicable retention period, all records shall be retained until completion of the action and resolution of all issues resulting therefrom, or until the end of the applicable retention period, whichever is later. The Federal grantor agency, the State Auditor, the City, or any of their duly authorized representatives or designees shall have the right at reasonable times and upon reasonable notice, to examine and copy, at reasonable expense, the books, records, and other compilations of data of the Contractor which pertain to the provisions and requirements of this Contract. Such access shall include on-site audits, review, and copying of records.

**13. Publicity, Publication, Reproduction and Use of Contract Products or Materials:** Unless provided otherwise by law or the City, title and possession of all data, reports, programs, software, equipment, furnishings, and any other documentation or product paid for with City funds shall vest with the City at the termination of the Contract. The Contractor shall at all times obtain the prior written approval of the City before it, any of its officers, agents, employees or subcontractors, either during or after termination of the Contract, makes any statement bearing on the work performed or data collected under this Contract to the press or issues any material for publication through any medium of communication. If the Contractor, or any of its subcontractors, publishes a work dealing with any aspect of performance under the Contract, or of the results and accomplishments attained in such performance, the City shall have a royalty-free non-exclusive and irrevocable license to reproduce, publish or otherwise use and to authorize others to use the publication. The Contractor shall use reasonable means to inform the public that the City provides financial support for its operations and services by explicitly stating on publicity material, stationery, posters and other written materials, and on its premises the following: "This program is supported in part (in full) by the City of New London."

**14. Assignment by Contractor and Subcontracting:** The Contractor shall not assign or in any way transfer any interest in this Contract without the prior written consent of the City, nor shall he subcontract any services without the prior written approval of the City.

**15. Connecticut Law:** It is agreed that this contract shall be governed by, construed, and enforced in accordance with the internal laws of the State of Connecticut.

**16. Venue:** In the event of litigation, the parties do agree to be contractually bound to submit themselves to the personal jurisdiction of the state courts of Connecticut. The venue for any court proceeding shall be in the Superior Court for the Judicial District for New London at New London, Connecticut.

**17. Waiver of Jury Trial:** CONTRACTOR HEREBY EXPRESSLY WAIVES ANY AND ALL RIGHTS IT MAY HAVE TO TRIAL BY JURY OF ANY CLAIM, DEMAND, ACTION OR CAUSE OF ACTION (1) ARISING UNDER THIS AGREEMENT OR ANY OTHER INSTRUMENT, DOCUMENT OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HERewith, OR (2) IN ANY WAY CONNECTED WITH OR RELATED OR INCIDENTAL TO THE DEALINGS OF THE PARTIES HERETO OR ANY OF THEM WITH RESPECT TO THIS AGREEMENT OR ANY OTHER INSTRUMENT, DOCUMENT OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HERewith, OR THE TRANSACTIONS RELATED HERETO OR THERETO, IN EACH CASE WHETHER NOW EXISTING OR HEREAFTER ARISING, AND WHETHER SOUNDING IN CONTRACT OR TORT OR OTHERWISE; AND CONTRACTOR HEREBY AGREES AND CONSENTS THAT ANY SUCH CLAIM, DEMAND, ACTION OR CAUSE OF ACTION SHALL BE DECIDED BY COURT TRIAL WITHOUT A JURY, AND THE CITY MAY FILE AN ORIGINAL COUNTERPART OR A COPY OF THIS SECTION WITH ANY COURT AS WRITTEN EVIDENCE OF CONTRACTOR'S CONSENT TO THE WAIVER OF ITS RIGHT TO TRIAL BY JURY.

**18. Nondiscrimination and affirmative action provisions, nondiscrimination provisions regarding sexual orientation, Executive Order Number Three and guidelines and rules, Executive Order Number Seventeen, Executive Order Number Sixteen and sexual harassment policy:**

For the purposes of this article, the word “contractor” is substituted for and has the same meaning and effect as if it read “Contractor’s name.” Section A of this article is inserted in connection with subsection (a) of Section 4a-60 of the General Statutes of Connecticut, as revised. Section B of this article is inserted in connection with subsection (a) of Section 4a-60a of the General Statutes of Connecticut, as revised.

A. (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, or 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. Section 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 purposes of this section, “Commission” means the Commission on Human Rights and Opportunities.

For the purposes of this section, “public works contract” means any agreement between any individual, firm, or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance, or guarantees.

(b) (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 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 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, 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 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; (4) the contractor agrees to comply with each provision of this section and Conn. Gen. Stat. Sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to Conn. Gen. Stat. Sections 46a-56, 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 they relate to the provisions of this section and Conn. Gen. Stat. 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 project.

(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. Section 46a-56; 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.

B. (a) (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 of the Connecticut General Statutes; (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 that relate to the provisions of this section and Section 46a-56 of the Connecticut General Statutes.

(b) The contractor shall include the provisions of subsection (a) 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 Section 46a-56 of the Connecticut General Statutes; 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.

(c) 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.

C. 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 noncompliance with said Executive Order No. Three, or any State or federal law concerning nondiscrimination, notwithstanding that the State 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 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 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.

D. This contract is subject to the provisions of Executive Order No. Seventeen of Governor Thomas J. Meskill promulgated February 15, 1973, and, as such, this contract may be cancelled, terminated, or suspended by the contracting agency or the State Labor Commissioner for violation of or noncompliance with said Executive Order No. Seventeen, notwithstanding that the State Labor Commissioner may not be a party to this contract. The parties to this contract, as part of the consideration hereof, agree that Executive Order No. Seventeen is incorporated herein by reference and made a part hereof. The parties agree to abide by said Executive Order and agree that the contracting agency and the State Labor Commissioner shall have joint and several continuing jurisdiction in respect to contract performance in regard to listing all employment openings with the Connecticut State Employment Service.

E. This contract is subject to the provisions of Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, and, as such, the contract may be canceled, terminated, or suspended by the State for violation of or noncompliance with said Executive Order No. Sixteen. Executive Order No. Sixteen is attached hereto and made a part hereof. The parties agree to comply with such executive order. In addition, the contractor agrees to include a copy of

Executive Order No. Sixteen, and the requirement to comply with said executive order, in all contracts with its contractors, subcontractors, consultants, sub-consultants, and vendors.

F. This contract is subject to the provisions of the City of New London Sexual Harassment Policy ("Policy") and, as such, the contract may be canceled, terminated, or suspended by the City in the event that the contractor, its employees, contractors, subcontractors, consultants, sub-consultants, or vendors engages in behavior prohibited by the provisions of the Policy (a copy of the Policy is attached hereto). The contractor agrees to include a copy of the Policy, and the requirement to prevent behavior as defined in such Policy, in all contracts with its contractors, subcontractors, consultants, sub-consultants, and vendors.

**19. Force Majeure:** Neither party shall be liable to the other or be deemed to be in breach of this Contract for any failure or delay in rendering performance arising out of causes beyond its reasonable control and without its fault or negligence. Such causes may include, but are not limited to, acts of God or of a public enemy, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or unusually severe weather. Dates or times of performance shall be extended to the extent of delays excused by this section, provided that the party whose performance is affected notifies the other promptly of the existence and nature of such delay.

**20. Compliance with Laws and Indemnification of the City of New London:** The Contractor shall comply with all applicable laws, rules, regulations, ordinances, orders or requirements of the State of Connecticut and any governmental authority relating to the delivery of the services specified in this Contract. The City may require the Contractor to pay fines, penalties, and damages that may arise out of or may be imposed because of, the Contractor's breach or failure to comply with the provisions of this Contract. Unless otherwise provided by law the Contractor shall indemnify and hold harmless the City, its agents, officers and employees against any and all liability, loss, damages, penalties, costs or expenses for personal injury or damage to real or tangible personal property which the City may sustain, incur or be required to pay resulting from, arising out of, or in connection with the services performed or delivered under this Contract by reason of acts, inactions, omissions, negligence, reckless or intentional misconduct of the Contractor, its agent(s), officers, employees or subcontractors; provided that the Contractor is notified of any claim within a reasonable time after the City becomes aware of it, and the Contractor is afforded an opportunity to participate in the defense of such claim. In such event, no negotiated settlement agreement shall be binding on the Contractor without the Contractor's concurrence.

**21. Waivers And Severability:** All conditions, covenants, duties and obligations contained in this Contract can be waived only by written agreement. Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any way limit the legal or equitable remedies available to that party. A waiver or breach of any term, condition, or covenant by a party shall not constitute a waiver or breach of any other term, condition or covenant. If any court of competent jurisdiction declares a provision of this Agreement invalid, illegal, or otherwise unenforceable, the remaining provisions of the Agreement shall remain in full force and effect.

**22. Amendments:** No amendment to this Contract shall be effective unless it is signed by authorized representatives of both parties and complies with all other regulations and requirements of law.

**23. Entire Agreement:** The parties understand and agree that this Contract and attachments (if any), which includes all Contract Documents, supersede all other verbal and written agreements and negotiations by the parties relating to the services under this Contract.

**24. Notice:** Unless otherwise specified in an attachment hereto, any notice hereunder shall be in writing addressed to the persons and addresses indicated in the caption of this Contract on page 1.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed in two (2) original copies on the day and year first above written.

OWNER:

CONTRACTOR:

\_\_\_\_\_  
Michael Passero  
Its Mayor

\_\_\_\_\_  
Its Duly Authorized Agent

Approved as to form:

\_\_\_\_\_  
Jeffrey T. Londregan, Esq., Director of Law

Date Signed \_\_\_\_\_



BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we \_\_\_\_\_

as Principal, and \_\_\_\_\_  
a corporation duly organized under the laws of the State of \_\_\_\_\_ as Surety are held and firmly  
bound unto the **City of New London, 181 State Street, New London, CT 06320**, hereinafter called the "Owner" in the  
sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment of which sum  
well and truly to be made, the said Principal and Surety, bind ourselves, our heirs, executors, administrators, successors,  
and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid dated \_\_\_\_\_ to

NOW THEREFORE, if the Owner shall accept the bid of the Principal and the Principal shall enter into a Contract with the  
Owner in accordance with the terms of such bid and give such bond or bonds as may be specified in the bidding or  
Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt  
payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter  
such Contract and give such bond or bonds, if the Principal shall pay to the Owner the difference not to exceed the  
penalty hereof between the amount specified in said bid and such larger amount for which the Owner may in good faith  
contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise  
to remain in full force and effect.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
(Principal) (Seal)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Surety) (Seal)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Witness)

Attorney-in-Fact, State of \_\_\_\_\_, Power-of-Attorney for person signing for Surety Company must be attached to Bond.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, \_\_\_\_\_ certify that I am the \_\_\_\_\_  
\_\_\_\_\_, of the Corporation named as Principal in the within bond; that \_\_\_\_\_  
\_\_\_\_\_ who signed the said bond on behalf of the Principal was then the \_\_\_\_\_  
\_\_\_\_\_ of said corporation; that I know his signature, and his signature thereto is genuine; and  
that said bond was duly signed, sealed, and attested to for and in behalf of said corporation by authority of this governing  
body.

\_\_\_\_\_ Affix  
Corporate  
Seal

Title \_\_\_\_\_

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That \_\_\_\_\_, as Principal

(hereinafter called Principal) and \_\_\_\_\_  
as Surety, (hereinafter called Surety) are held and firmly bound unto \_\_\_\_\_  
as Obligee (hereinafter called Owner), for the use and  
benefit of claimants as hereinbelow defined;  
in the amount of \_\_\_\_\_ Dollars (\$  
\_\_\_\_\_) for the payment whereof the Principal and Surety bind themselves, their heirs, executors,  
administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated \_\_\_\_\_ entered into a Contract with the  
owner for \_\_\_\_\_

\_\_\_\_\_ which Contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that, if the said Principal shall promptly pay for all materials furnished and labor supplied or performed in the prosecution of the work included in and under the aforesaid Contract, whether or not the material or labor enters into and becomes a component part of the real asset, then this obligation shall be null and void otherwise it shall remain in full force and effect.

PROVIDED, that any alterations which may be made in the terms of the Contract or in the work to be done under it, or the giving by the Owner or any other forbearance on the part of either the Owner or the Principal to the other shall not in any way release the Principal and the Surety or either or any of them, their heirs, executors, administrators, successors or assigns from their liability hereunder, notice to the Surety for any such alterations, extension or forbearance being hereby waived.

Any party, whether a subcontractor or otherwise, who furnished materials or supplies or performs labor or services in the prosecution of the work under said Contract, and who is not paid therefore, may bring a suit on this Bond in the name of the person suing, prosecute the same to a final judgment and have the execution thereon for such sum as may be justly due.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and these presents signed by its undersigned representative, pursuant to authority of its governing body.

\_\_\_\_\_  
(Corporate Principal)

Attest:

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_ By

\_\_\_\_\_  
Affix  
Corporate  
Seal

\_\_\_\_\_  
(Corporate Surety)

Attest:

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_ By

\_\_\_\_\_  
Affix  
Corporate  
Seal

Countersigned  
by \_\_\_\_\_

Attorney-in-Fact, State of \_\_\_\_\_, Power-of- Attorney for person signing for  
Surety Company must be attached to Bond.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That \_\_\_\_\_ as Principal, hereinafter called Contractor, and \_\_\_\_\_ as Surety, hereinafter called Surety, are held and firmly bound unto \_\_\_\_\_ as Obligee, hereinafter called Owner, in the amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contract has by written agreement dated \_\_\_\_\_ entered into a Contract with Owner for \_\_\_\_\_

\_\_\_\_\_ which Contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that, if Contractor shall promptly and faithfully perform said Contract, including such remedial work as may be required under the guaranty during the period of guaranty and shall certify in writing that all wages paid under said Contract to any mechanic, laborer or workman were equal to the rates or wages customary or then prevailing for the same trade or occupation in Connecticut, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default or shall promptly:

- (1) Complete the Contract in accordance with its terms and conditions, by another Contractor acceptable to the Owner, said other Contractor to act as an agent for the Surety, or
- (2) Obtain a Bid or Bids for submission to the Owner for completing the Contract in accordance with its terms and conditions, and upon determination by the Owner and Surety of the lowest responsible Bidder, arrange for a Contract as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price, but not exceeding, including, other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The terms "balance of the contract price", as used in this paragraph, shall mean the total amount payable by the Owner to the Contractor under the Contract and any amendments thereto, less the amount properly paid by the Owner to the Contractor.

Unless otherwise required by law, any suit under this Bond must be instituted before the expiration of one (1) year from the date on which the guaranty period under the Contract expires.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators and successors of the Owner.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and these presents signed by its undersigned representative, pursuant to authority of its governing body.

No extension of time or other modification of this Bid Bond shall be valid unless agreed in writing by the parties to this Bond.

\_\_\_\_\_  
(Corporate Principal)

Attest:

\_\_\_\_\_  
(Business Address)

By

\_\_\_\_\_  
Affix  
Corporate  
Seal

\_\_\_\_\_  
(Corporate Surety)

Attest:

\_\_\_\_\_  
(Business Address)

By

\_\_\_\_\_  
Affix  
Corporate  
Seal

Countersigned  
by \_\_\_\_\_

Attorney-in-Fact, State of \_\_\_\_\_, Power-of- Attorney for person signing for Surety Company must be attached to Bond.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, \_\_\_\_\_ certify that I am the \_\_\_\_\_ of the Corporation named as Principal in the within bond; that \_\_\_\_\_ who signed the said bond on behalf of the Principal was then the \_\_\_\_\_ of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed, and attested to for and in behalf of said corporation by authority of this governing body.

\_\_\_\_\_  
Affix  
Corporate  
Seal

Title \_\_\_\_\_







**AFFIRMATIVE ACTION POLICY STATEMENT**  
**(must be submitted on your firm's letterhead)**

It has always been the policy and will continue to be the strong commitment of \_\_\_\_\_ and all contractors and subcontractors who do business with this City to provide equal opportunities in employment to all qualified persons solely on the basis of job-related skills, ability and merit. \_\_\_\_\_ will continue to take Affirmative Action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, national origin, ancestry, mental disorder (present or past history thereof), age, physical disability (but not limited to blindness), marital status, mental retardation, and criminal record. Such action includes, but is not limited to, employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation and selection for training including apprenticeship. \_\_\_\_\_, and its subcontractors will continue to make good faith efforts to comply with all federal and state laws and policies which speak to equal employment opportunity.

The principles of Affirmative Action are addressed in the 13th, 14th, and 15th Amendments of the United States Constitution, Civil Rights Act of 1866, 1870, 1871, Equal Pay Act of 1963, Title VI and VII of - the 1964 United States Civil Rights Act, Presidential Executive Orders 11246, amended by 11375, (nondiscrimination under federal contracts), Act I, Sections 1 and 20 of the Connecticut Constitution, Governor Grasso's Executive Order Number 11, Governor O'Neill's Executive Order Number 9, the Connecticut Fair Employment Practices Law (Sec. 46a-60-69) of the Connecticut General Statutes, Connecticut Code of Fair Practices (46a-70-81), Deprivation of Civil Rights (46a-58(a)(d)), Public Accommodations Law (46a-63-64), Discrimination against Criminal Offenders (46a-80), definition of Blind (46a-51(1)), definition of Physically Disabled (46a-51(15)), definition of Mentally Retarded (46a-51(13)), cooperation with the Commission on Human Rights and Opportunities ( 46 - 77), Sexual Harassment (46a-60(a)-8), Connecticut Credit Discrimination Law (36-436 through 439), Title I of the State and Local Fiscal Assistance Act of 1972.

This Affirmative Action Policy Statement re-affirms my personal commitment to the principles of Equal Employment Opportunity.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
Signature of Authorized Signer

CERTIFICATION OF BIDDER REGARDING  
EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 Part II, Section 203(b), (30 FR 12319, 12935). The implementing rules and regulations provide that any bidder or prospective contractor, or any of its proposed subcontractors, shall state whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicated that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven (7) calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION BY BIDDER

Bidder's Name \_\_\_\_\_

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

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.

Yes ( ) No ( ) If answer is yes, identify the most recent contract.

2. Compliance reports were required to be filed in connection with such contract or subcontract

Yes ( ) No ( ) If answer is yes, identify the most recent contract.

3. Bidder has filed all compliance reports due under applicable instructions, including SF. 100.

Yes ( ) No ( ) Not Required ( )

4. If answer to Item 3 is "No" please explain in detail on reverse side of this Certification.

Certification - The information above is true and complete to the best of my knowledge and belief. A willfully false statement is punishable by law (U.S. Code, Title 18, Section 1001).

\_\_\_\_\_  
Name and Title of Signer (Please Type)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

CERTIFICATION OF NON-SEGREGATED FACILITIES

This Bidder certifies that he does not maintain or provide his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Bidder certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any locations, under his control, where segregated facilities are maintained. The Bidder agrees that a breach of his certification will be a violation of the Equal Opportunity clause and any Contract resulting from acceptance of this Bid. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, color, religion or national origin, because of habit, local custom or otherwise. The Bidder agrees that (except where he has obtained identical certification from proposed Subcontractors for specific time periods) he will obtain identical certifications from proposed Subcontractors prior to the award of Subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certifications in his files; and that he will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have already submitted identical certifications for the specific time periods):

“Notice to prospective subcontractors of requirements for non-segregated facilities. A certification of non-segregated facilities must be submitted prior to the award of a subcontract exceeding the Equal Opportunity Clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e. quarterly, semi-annually, or annually).

Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. Paragraph 1001.

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

By: \_\_\_\_\_

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

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

\_\_\_\_\_

Statement of Bidder's Qualifications

All items and questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The bidder may submit any additional information it desires.

1. Name of Bidder \_\_\_\_\_
2. Bidder's Tax Identification No. \_\_\_\_\_
3. Permanent main office address \_\_\_\_\_  
\_\_\_\_\_
4. When organized \_\_\_\_\_
5. If corporation, where incorporated \_\_\_\_\_
6. Number of years have you been engaged in the contracting business under your present firm or trade name \_\_\_\_\_
7. Contracts on hand: (Schedule these showing amount of each contract and the appropriate anticipated dates of completion) \_\_\_\_\_  
\_\_\_\_\_
8. General character of work performed by your company \_\_\_\_\_  
\_\_\_\_\_
9. Have you ever failed to complete any work awarded to you? If so, where and why? \_\_\_\_\_  
\_\_\_\_\_
10. Have you ever defaulted on a contract? If so, where and why? \_\_\_\_\_  
\_\_\_\_\_
11. List the more important projects recently completed by your company, stating the approximate cost for each, and the month and year completed (use a separate sheet if necessary) \_\_\_\_\_  
\_\_\_\_\_
12. List your major equipment available for this Contract \_\_\_\_\_  
\_\_\_\_\_
13. List your experience in work similar to this project \_\_\_\_\_  
\_\_\_\_\_

14. List the background and experience of the principal members of your organization, including officers \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
15. List the work to be done by Subcontractors and summarize the dollar value of each Subcontract  
\_\_\_\_\_
16. Credit available \$ \_\_\_\_\_
17. Give Bank reference \_\_\_\_\_
18. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the Owner? \_\_\_\_\_  
\_\_\_\_\_
19. The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the Owner in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated \_\_\_\_\_ (Name of Bidder)

By \_\_\_\_\_

Title \_\_\_\_\_

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss.

\_\_\_\_\_ being duly sworn deposes and says that (s)he is \_\_\_\_\_  
\_\_\_\_\_ of \_\_\_\_\_

\_\_\_\_\_, and that the answers to the foregoing items and questions and all statements therein contained are true and correct.

Subscribed and sworn to before me this

\_\_\_\_\_ day of \_\_\_\_\_ 20

\_\_\_\_\_  
(Notary Public)

My Commission expires \_\_\_\_\_



City of New London  
 Finance Department  
 13 Masonic Street,  
 New London, CT 06320  
 www.newlondonct.org

# Vendor Registration Form

Please type or print your responses to the applicable items below. Your responses will assist in assuring that checks for payment are correctly issued. Return form and a completed W-9 to [jmontague@newlondonct.org](mailto:jmontague@newlondonct.org) or address listed to left.

<b>1. Company Name</b> <i>Invoices <b>must</b> be submitted using the name in 1b</i>	<b>a. Corporate Name:</b>		<b>b. Issue Checks to:</b> <i>(pay to the order of)</i>	
<b>2. Mailing Address</b> <i>Purchase Orders will be sent to this address</i>	Street / P.O. Box		Email	
	City	State	Zip + 4	
<b>3. Contact Person</b> <i>Contact for quotes, etc.</i>	Contact Person		Title	
<b>4. Contact Information</b> <i>Internet &amp; Telephone</i>	Telephone #	Fax	Toll Free	Cell Phone
	EMail Address		Website Home Page	
<b>5. Payment Address</b> <i>Where to send payments see section 1b above</i>	Street Address			
	City	State	Zip + 4	
<b>6. Corporate Headquarters</b> <i>If different from above</i>	Street / P.O. Box			
<i>address, see section 1a above</i>	City	State	Zip + 4	
<b>7. IRS required information:</b> <i>Only one is required</i>	Federal Employer Identification Number		Social Security Number	
	<b>The purpose of collecting the FEIN/SSN is to comply with IRS regulations to file 1099 forms.</b>			
<b>8. Type of Business:</b>	<input type="checkbox"/> Corporation <input type="checkbox"/> Sole Proprietor <input type="checkbox"/> Partnership			
<b>9. State of CT Approved Vendor</b>	If your company is on the current State of Connecticut contract list please enter your contract number:			
<b>10. Does your company accept purchase orders to provide goods and/or services?</b>			<input type="checkbox"/> Y	<input type="checkbox"/> N
<b>11. Is your company able to provide the goods and/or services prior to receiving check payment?</b>			<input type="checkbox"/> Y	<input type="checkbox"/> N
<b>12. Is your company a sole source provider? (If yes, please attach sole source provider letter.)</b>			<input type="checkbox"/> Y	<input type="checkbox"/> N
<b>13. Check which all that apply (if applicable):</b> <input type="checkbox"/> Locally-owned Business <input type="checkbox"/> Sustainable / Eco-friendly <input type="checkbox"/> Minority-owned <input type="checkbox"/> Women-owned <input type="checkbox"/> Alternative Corp. Structure				
<b>14. Please provide a brief description of goods/services provided:</b>	_____ _____ _____			
I agree that I will not provide goods and/or services prior to the receipt of a Purchase Order provided by the City of New London. Please note: orders and/or purchases without a valid Purchase Order are not authorized by the City of New London therefore, invoices for such orders/purchases may not be paid.				
Agreed By: _____ Printed Name _____ Signature _____ Title _____				

# Request for Taxpayer Identification Number and Certification

Give Form to the  
 requester. Do not  
 send to the IRS.

▶ Go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9) for instructions and the latest information.

Print or type. See Specific Instructions on page 3.	<p><b>1</b> Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.</p> <hr/> <p><b>2</b> Business name/disregarded entity name, if different from above</p> <hr/> <p><b>3</b> Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.</p> <p> <input type="checkbox"/> Individual/sole proprietor or single-member LLC                 <input type="checkbox"/> C Corporation                 <input type="checkbox"/> S Corporation                 <input type="checkbox"/> Partnership                 <input type="checkbox"/> Trust/estate         </p> <p> <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____         </p> <p><b>Note:</b> Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is <b>not</b> disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.</p> <p> <input type="checkbox"/> Other (see instructions) ▶ _____         </p>	<p><b>4</b> Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):</p> <p>Exempt payee code (if any) _____</p> <p>Exemption from FATCA reporting code (if any) _____</p> <p><small>(Applies to accounts maintained outside the U.S.)</small></p>
	<p><b>5</b> Address (number, street, and apt. or suite no.) See instructions.</p> <hr/> <p><b>6</b> City, state, and ZIP code</p> <hr/> <p><b>7</b> List account number(s) here (optional)</p>	<p>Requester's name and address (optional)</p> <hr/> <hr/>

## Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

**Note:** If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 5%; border: 1px solid black; text-align: center;">-</td> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 5%; border: 1px solid black; text-align: center;">-</td> <td style="width: 40%; border: 1px solid black; height: 20px;"></td> </tr> </table>		-		-	
	-		-		
or					
Employer identification number					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 5%; border: 1px solid black; text-align: center;">-</td> <td style="width: 70%; border: 1px solid black; height: 20px;"></td> </tr> </table>		-			
	-				

## Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

**Sign Here**

Signature of  
 U.S. person ▶

Date ▶

## General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9).

### Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

*If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.*



By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

**Note:** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-9 or Form 8233.

## Backup Withholding

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

**Payments you receive will be subject to backup withholding if:**

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

## What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the instructions for the Requester of Form W-9 for more information.

## Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

## Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.



**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

## Specific Instructions

### Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

**Note: ITIN applicant:** Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

### Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

### Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

### Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

#### Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 5 <sup>2</sup>
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

**Exemption from FATCA reporting code.** The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(ii)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

**Note:** You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

### Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

### Line 6

Enter your city, state, and ZIP code.

## Part I. Taxpayer Identification Number (TIN)

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note:** See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at [www.SSA.gov](http://www.SSA.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/Businesses](http://www.irs.gov/Businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. Go to [www.irs.gov/Forms](http://www.irs.gov/Forms) to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to [www.irs.gov/OrderForms](http://www.irs.gov/OrderForms) to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note:** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

## Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

**Signature requirements.** Complete the certification as indicated in items 1 through 5 below.



**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

**What Name and Number To Give the Requester**

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee <sup>1</sup>
b. So-called trust account that is not a legal or valid trust under state law	The actual owner <sup>1</sup>
6. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor <sup>4</sup>
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

\*Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

**Secure Your Tax Records From Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.** Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at [spam@uce.gov](mailto:spam@uce.gov) or report them at [www.ftc.gov/complaint](http://www.ftc.gov/complaint). You can contact the FTC at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see [www.IdentityTheft.gov](http://www.IdentityTheft.gov) and Pub. 5027.

Visit [www.irs.gov/IdentityTheft](http://www.irs.gov/IdentityTheft) to learn more about identity theft and how to reduce your risk.

## Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

## Section II

### CITY OF NEW LONDON, CT PUBLIC WORKS DEPARTMENT

*2024-13 CONL*

GENERAL CONDITIONS AND SPECIFICATIONS

REQUEST FOR PROPOSALS FOR REPAIRS AND IMPROVEMENTS  
TO GOVERNOR WINTHROP BOULEVARD,  
NEW LONDON, CONNECTICUT

1.0 **INTRODUCTION**

- 1.1 The City of New London Public Works Department is requesting bids from qualified contractors in good standing for repairs and improvements to Governor Winthrop Boulevard, in the City of New London.
- 1.2 Contractors are required to comply with the instructions contained within these General Conditions and Specifications and to provide information where requested.
- 1.3 The Work is expected to be completed in phases and in close coordination with concurrent work to be performed by the Garde Arts Center. Thus, it is the City’s preference to retain the services of a qualified Contractor who can perform the Work of both projects simultaneously.

2.0 **KEY EVENT DATES**

- 2.1 Request for Bids Advertised FEBRUARY 14, 2024
- 2.2 Mandatory walk-thru FEBRUARY 22, 2024 @ 10:00 A.M.
- 2.3 Questions Due by MARCH 7, 2024 BY 2:00 P.M.
- 2.4 Bid Opening MARCH 15, 2024 @ 2:00 P.M.  
Purchasing Department, 13 Masonic Street

3.0 **BID FORMS AND SUBMISSION INSTRUCTIONS**

- 3.1 Ditto marks are not considered writing; shall not be used; and can be reason for non-acceptance of a bid.
- 3.2 All bids must be submitted in a sealed envelope, clearly marked “2024-13 CONL: GOVERNOR WINTHROP BOULEVDARD ROADWAY IMPROVEMENTS” and received in the Purchasing Department office by the time of the bid opening defined in Section 2.3 above. Bids, corrections and/or modifications received after the time City officials open the first bid, will not be accepted.
- 3.3 The bid form must be signed by an authorized agent of the submitting company.
- 3.4 All information submitted, must be in ink or typewritten. Mistakes may be crossed out and corrections inserted. The person signing the bid form must initial such corrections.
- 3.5 At the time of bid form submission, Contractors shall be presumed to have read, and be thoroughly familiar with all specifications in this document. Failure of any Contractor to receive or examine any form, instruction or document, shall not relieve any Contractor from obligations with respect to their bid.
- 3.6 The specifications listed are to be interpreted as meaning those acceptable to the City of New London. Substitutions that are “an approved equal,” will be considered.
- 3.7 The completed bid package shall be in conformance with all other requirements as stated herein.

#### 4.0 **MISCELLANEOUS**

- 4.1 The City of New London is exempt from Connecticut Sales and Use Taxes and Federal Excise Taxes. Contractors shall avail themselves of these exemptions.
- 4.2 The City of New London reserves the right to accept any, all or any part of bids, to waive any informalities, to take into account the residency and business location of bidders within the City of New London, and to award the bid deemed by the City of New London to be in its best interest. The lowest price shall not be the sole determining factor when awarding the contract for the proposed work.
- 4.3 The bid price(s) on the submitted bid form shall be held firm from the date of submission for 90 days.
- 4.4 Payment terms are net 45 days.
- 4.5 Retainage of 5% will be held.
- 4.6 Completion shall be determined by the City of New London, through an authorized representative.
- 4.7 Successful Contractor shall obtain all Local, State and Federal permits, as deemed necessary.
- 4.8 General questions concerning these General Conditions and Specifications shall be directed to:

Joshua Montague  
Purchasing Agent  
[jmontague@newlondonct.org](mailto:jmontague@newlondonct.org)

#### 5.0 **SPECIFICATIONS**

##### 5.1 **General**

###### Approximated Quantities:

The quantities listed in the bid proposal are estimated and are for comparison bidding purposes only. They are in no way warranted to be the actual quantity of work to be completed.

###### Work in Active Traffic Areas:

Under this program, the Contractor should expect to perform work in active traffic lanes and provide suitable Maintenance and Protection of Traffic measures at all times.

###### Phasing:

As noted in the Contractor Documents the project is expected to occur in phases. All work is expected to be closely coordinated with the adjacent Garde Arts Center project.

###### Utility Coordination:

The Contractor is expected to closely coordinate their work with the local utility companies as needed. This includes the relocation of existing gas and electrical services.

###### Limited Inconvenience:

It is expected that the Contractor shall schedule the work to minimize the duration between roadway demolition and installation of new granite curbing along the south side of relocated Gov. Winthrop Boulevard so that Garde Arts Center can adequately schedule their work.

#### Public Safety:

The Contractor shall furnish and install barricades, warning tape, or other acceptable material to clearly demarcate and protect any excavated areas. This includes measures to redirect pedestrians to the north side of Gov. Winthrop Boulevard around the construction zone using appropriate temporary signage and crosswalks if necessary. At the completion of Phase 1, the Contractor shall install temporary chain link fencing (driven posts) behind the relocated granite curb along the south shoulder of the Boulevard so that Garde Arts Center can perform their work in a safe manner.

#### Design Build Work:

The Contractor Documents call for a portion of the Work to be performed on a Design-Build basis. The Contractor shall prepare all design documents in accordance with all State and Local Building Codes and shall submit such documents to the appropriate authorities for review and approval prior to beginning any Design-Build Work.

#### Disposal of Surplus Material:

Surplus materials are the responsibility of the Contractor and shall be properly disposed of in accordance with all local, state and federal regulations.

#### Work on State Roads:

The Contractor may be required to perform work under this project on State-owned roads. When work is scheduled within State of Connecticut right-of-way, the Contractor will be required to take out an "Encroachment Permit" with the Connecticut Department of Transportation. The permit fees will be reimbursed by the City of New London with no additional markup.

This Bid Specification pertains to the Contractor's requirements. The Contractor shall furnish all labor, material and equipment to perform the work.

### 5.2 **General Scope of Project**

The City of New London is modifying the alignment of Governor Winthrop Boulevard for a distance of approximately 250 lineal feet. This work is being performed to allow Garde Arts Center to construct a new loading dock and driveway along the rear (north) side of their property. The street right-of-way line will be adjusted accordingly so that the new loading dock and driveway will be located entirely within the Garde Arts Center property. Approximately 235 lineal feet of an existing sanitary sewer line will be shifted northerly outside of the Garde Arts Center property. Storm drainage, roadway line striping and streetlight modifications will be made to accommodate the shifted roadway. Existing gas and electrical services will be relocated by the respective utility companies.

As part of the Work, the Contractor shall remove the left-turn only lane at the intersection of Gov. Winthrop Boulevard and Union Street and expand the existing street median. Modifications to the existing traffic signals shall be performed on a Design-Build basis.

At the conclusion of the Garde Arts Center project, the Contractor shall mill and repave the work area to the limits shown on the documents, as well as provide permanent line striping and traffic signage.

### 5.3 **Detailed Description of Work**

It will be the Contractor's responsibility to construct the new roadway alignment and to coordinate the work of the various utility companies and the Garde Arts Center. Work shall include but not be limited to the following:



1. Demolition of the existing grass median and eastbound lanes of Gov. Winthrop Boulevard to the limits shown.
2. Relocation of the existing sanitary sewer and storm drainage lines and structures as shown on the documents, including all trenching, shoring, traffic control, temporary road plating and paving, etc. as necessary to perform the Work in a safe manner and in accordance with the Specifications.
3. Installation of a new stamped concrete median, asphalt pavement, street lighting and granite curbing along the eastbound lanes.
4. Removal of existing line striping and symbols and installation of temporary painted line striping, cross walk(s), traffic signs and traffic symbols as necessary to phase the Work and provide for safe pedestrian passage around the work zone.
5. Installation of a new concrete sidewalk (with stamped concrete banking) along the south shoulder of Gov. Winthrop Boulevard (work to be performed after completion of the Garde Arts loading dock project).
6. Milling and repaving of Governor Winthrop Boulevard including permanent line striping and pavement markings.
7. Traffic control measures including the installation of temporary barriers and signs as well as providing flagmen and/or Municipal Traffic Officers as needed. At the conclusion of Phase 1, the Contractor shall install temporary chain link fencing behind the (relocated) curb on the south side of Gov. Winthrop Boulevard so that Garde Arts Center can perform their work in a safe manner.
8. Phasing and Coordinating the Work with the respective utility companies and the Garde Arts Center. (Work within the loading dock area shall be performed by Garde Arts Center separately from the City.)
9. Modifying the traffic signal heads and expanding the grass median at the intersection of Gov. Winthrop Boulevard and Union Street.

#### 5.4 **Specifications and List of Drawings**

<u>Drawing #</u>	<u>Drawing Title</u>
01	Roadway Plan
02	Grading & Utility Plan
03	Roadway Sections
04	San. Sewer Plan & Profile
05	Union Street Intersection
06	Typ. Roadway Details
07	Typ. Utility Details
08	Temp. Traffic Phasing Plan

<u>Spec. No.</u>	<u>Title</u>
02 22 00	Site Preparation
26 00 00	Electrical Design-Build Work
31 10 00	Site Clearing
31 20 00	Earthmoving
32 01 16	Bituminous Concrete Pavement Milling
32 01 30	Maintenance & Protection of Traffic
32 12 16	Asphalt Paving
32 13 13	Site Concrete
33 41 00	Storm and Sanitary Utility Piping

Appendix #1 Geotechnical Engineering Report, Down to Earth Consulting, LLC

# TECHNICAL SPECIFICATIONS

## Roadway Improvements Project Governor Winthrop Boulevard

Huntington Avenue (S.R. 641) to Union Street  
City of New London

November 28, 2023

<u>Section</u>	<u>Title</u>
02 22 00	Site Preparation
26 00 00	Electrical Design-Build Work
31 10 00	Site Clearing
31 20 00	Earthmoving
32 01 16	Bituminous Concrete Pavement Milling
32 01 30	Maintenance & Protection of Traffic
32 12 16	Asphalt Paving
32 13 13	Site Concrete
33 41 00	Storm and Sanitary Utility Piping
Appendix 1	Geotechnical Engineering Report, Down to Earth Consulting, LLC

SECTION 022200

SITE PREPARATION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. The general provisions of the Contract including General and Supplementary Conditions, and General Requirements apply to the work specified in this Section.

1.2 SECTION INCLUDES

- A. Work Included: Providing all Site Preparation as shown on the Drawings, and as specified, including, but not necessarily limited to the following:
  - 1. Review of existing conditions and subsurface data.
  - 2. Provide and install safety barriers, construction fencing and temporary signage as necessary and as directed by the Owner and Engineer.

- 1.3 EXISTING CONDITIONS - It shall be the obligation of each bidder to satisfy himself by examination of the site that the existing conditions, existing elevation grades, and existing improvements shown are accurate. No claim for extra compensation for inaccuracies of existing conditions will be allowed.

- 1.4 ADDITIONAL INFORMATION - Upon award of contract, the Contractor may make their own subsurface and site investigations to substantiate existing subsurface soil conditions, as approved and reviewed by the Owner and Engineer.

1.5 JOB CONDITIONS

- A. Contact Call-Before-You-Dig services for Connecticut (1.800.922.4455) to locate underground utilities prior to commencing site preparation operations.
- B. The Contractor shall perform all work necessary to provide for maintenance and protection of vehicular traffic and pedestrian through traffic along sidewalks during the entire construction period. The Contractor shall coordinate work with the Engineer and the Owner in this regard.
- C. No areas under construction shall be left accessible to pedestrians at any time. The Contractor shall take all necessary steps, as requested or approved by the Engineer, to secure the site. When making water, sewer drainage or any other utility connections, the Contractor is responsible for securing work areas that occur outside of the proposed construction fence line for the entire time construction is taking place.

- D. For construction access to the site, the Contractor shall use entrances as approved by the Owner for access and egress to the site. All damage to pavement, grounds and trees to remain caused by vehicular access to the site shall be repaired at the Contractor's expense to the satisfaction of the Engineer and the Owner.
- E. The Contractor is responsible for protecting survey monuments, benchmarks and property boundary pins within the contract limits shown. The Contractor shall locate, maintain, raise, lower, or remove and replace to suit the new field conditions or if damaged by Contractor's operations. State of Connecticut requirements and specifications for monument location and installation must be followed.
- F. Peripheral areas outside of the limit of work line shall not be disturbed or used for storing or stockpiling materials without the prior written approval of the Owner.
- G. Stockpile Areas shall be as shown on the Plans and as approved by the Engineer prior to placement of material stockpiles. Stockpiles shall be maintained in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

## PART 2 PRODUCTS

### 2.1 TEMPORARY SIGNAGE

- A. All safety signs and barricades shall conform to standards specified in the "Manual on Uniform Traffic Control Devices" unless otherwise noted.

### 2.2 CONSTRUCTION FENCE

- A. Chain-Link Fencing: Minimum two (2) inch, 0.148 inch thick, galvanized steel, chain-link fabric fencing; minimum six (6) feet high with galvanized steel pipe posts; minimum 2-3/8 inch OD line posts and 2-7/8 inch OD corner and pull posts, with 1-5/8 inch OD top rails.
- B. Posts may be pedestal or post mounted as required by field conditions or as ordered by the Engineer.

## PART 3 EXECUTION

### 3.1 CONSTRUCTION FENCE

- A. Review all limits of construction fencing and barriers with the Engineer and Owner prior to installation. No work shall commence until all construction fencing is in place. Fencing shall be provided and maintained as necessary and as directed by the Engineer and/or Owner throughout the duration of the Contract.

- B. Install in a manner that will prevent people, dogs, and other animals from easily entering site except by entrance gates.
- C. Remove fencing upon completion of the Contract, or as directed.
- D. Additional Barricades, Warning Signs, and Lights: Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.
  - 1. For safety barriers, sidewalk bridges, and similar uses, provide minimum 5/8-inch thick exterior plywood.

### 3.2 PROTECTION AND MAINTENANCE OF TRAFFIC

- A. Supply, install, relocate and maintain signs and other approved devices for warning, controlling, routing, directing and detouring traffic as directed by the Engineer and in accordance with the “Manual on Uniform Traffic Control Devices.”
- B. Provide access for emergency vehicles at all times.

### 3.3 DISPOSAL

- A. Confirm with Engineer items that are to be salvaged. All demolished, excavated and removed materials not scheduled to be salvaged by the Owner for re-use on site or for future projects shall be removed and disposed of off-site legally and promptly.
- B. All waste material shall be disposed of legally off site.
- C. No Burning or burying of tree stumps on-site will be allowed.

END OF SECTION 022200

SECTION 260000

ELECTRICAL DESIGN BUILD WORK

PART 1 - GENERAL

- A. Refer to the Drawings, the Invitation to Bid, the Special Conditions, and the General Conditions of Contract prior to commencing any work. Coordinate work with other trades.
- B. The Design-Build subcontractor shall renovate, modify and add to the existing electrical and traffic signal systems as required to accommodate the new site lighting as delineated in the Contract Drawings.
- C. All electrical devices, equipment and fixtures are shown for coordination purposes only and DO NOT imply any design of the system. The Design-Build subcontractor shall be responsible for verifying the quantity, spacing and final layout of all devices to ensure the final installation meets code prior to submitting a bid.
- D. All required modifications of and additions to the existing electric service, existing wiring and/or circuiting, shall be determined in the field by a qualified, Licensed Electrician specializing in those specific systems. The Design-Build subcontractor shall provide a full scope of design, qualified supervision, labor, materials and incidentals required for a complete installation conforming to the requirements herein.
- E. The Design-Build subcontractor shall be responsible for providing all necessary field verification, field measuring, design and documentation required for code review purposes, permitting, construction and installation.
- F. The Design-Build subcontractor shall also provide "As-Built" documentation of all new and modified systems at the end of the job. The Engineer will provide electronic copies of floor plans in the most current version of Autodesk AutoCAD format for the subcontractors' use in preparing their own design documentation.
- G. ABSOLUTELY NO WORK SHALL BE PERFORMED FROM THE DRAWINGS IN THE PROVIDED BID DOCUMENTS ALONE.

PART 2 - PRODUCTS

- A. Submit original manufacturer's product literature of all items visible from the occupied space for aesthetic review purposes. Function, adequacy and code compliance of the design is the sole responsibility of the Design-Build subcontractor.
- B. Provide a full list of all proposed materials, equipment and incidentals complying with the requirements herein and all applicable codes.
- C. Submit design documents showing all required devices and conduit locations, mounting details, etc. for coordination review. All design drawings shall be stamped by a PE licensed and insured in the State of Connecticut.

PART 3 - EXECUTION

- A. The system shall comply with the current Connecticut Building Code (2021 IBC with the 2022 Connecticut Supplement and all subsequent Amendments).
- B. The system shall be sized adequately to power all specified equipment. The Design-Build subcontractor shall coordinate power requirements with all other sub-contractors and the utility company.
- C. Install all line and low voltage wiring in accordance with the applicable sections of the 2020 NFPA 70 National Electric Code.
- D. Coordinate all lighting locations with site plans and photometric plans. Discrepancies from layout due to site constraints and conditions shall be brought to the attention of the Engineer prior to installation.
- E. Light pole bases (foundations) shall be precast concrete and shall be designed in accordance with CTDOT Standard Specifications for Roads, Bridges, and Incidental Construction, Form 818, dated 2016. Where poles are subject to damage from vehicle traffic, the bottom of light pole base shall be 2'-6" above finished grade. Where light poles are only subject to pedestrian and bicycle traffic, the light pole base shall be flush with finish grade. Install grounding rod and #6 copper ground wire through center of each light pole base. Coordinate bolt size and layout with light fixture poles.
- F. Provide 11-1/2" x 21-1/2" x 8" deep, open bottom type, UL Tier 10, fiberglass handhole at each light pole base where handhole is located in landscaped areas. Handholes in roadway or paved areas shall be Type II concrete with cast iron cover as detailed on CTDOT Standard Sheet TR-1010\_01. Regardless of material, all handhole covers shall be inscribed by manufacturer in 2" high block letters designating "LIGHTING". Handhole covers shall be secured with stainless steel penta-head bolts. Coordinate orientation of handhole with Engineer prior to finalizing installation to assure handhole is parallel to major adjacent site features. Handhole shall be set on 12" bed of compacted crushed stone or processed gravel that extends 6" beyond all sides of the handhole casing.
- G. Provide adequately sized conduit for all wire runs. Assume 2" diameter conduit with pull rope between all pole bases and a 3" conduit from the service entrance at the respective building and the first conduit. All conduit shall be installed in trenches with a minimum of 36" of cover to the top of conduit. Embed conduit in sand with a minimum of 4" of sand on all sides of the conduit, provide 2" of spacing between conduit sharing a trench. Provide warning tape 12" above each embedded conduit and fill trench above sand level with compacted backfill material and processed stone as appropriate for finish grade material.
- H. Light Poles and Luminaires shall be as noted in the Contract Documents as prepared by Spring City Electrical Manufacturing Company without exception.
  - 1. Roadway lighting shall be 3000 K LED lamps – submit shop drawing for approval.



## ELECTRICAL DESIGN-BUILD WORK

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- I. All wiring shall be copper with 600V insulation type THWN/THHN or THHN/THWN-2 and sized in accordance with the current edition of the NFPA 70 National Electric Code. Size 4 AWG and larger shall be Type XHHW-2.
- J. All wiring shall be installed in approved conduit.
- K. Exposed conduit in dry locations shall be type EMT with set-screw fittings.
- L. Conduit below slab or in wet locations shall be rigid galvanized steel. In exposed wet locations, conduits shall be primed and painted.

END OF SECTION 260000

SECTION 311000

SITE CLEARING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Protecting existing vegetation to remain.
2. Removing existing vegetation.
3. Clearing and grubbing.
4. Stripping and stockpiling topsoil.
5. Removing above- and below-grade site improvements.
6. Disconnecting, capping or sealing, and removing site utilities.
7. Temporary erosion- and sedimentation-control measures.

B. Related Sections:

1. Section 02 22 00 Site Preparation
2. Section 31 20 00 Earth Moving
3. Section 31 25 13 Erosion Control

1.3 DEFINITIONS

- A. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow.
- D. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches (50 mm) in diameter; and free of subsoil and weeds, roots, toxic materials, or other nonsoil materials.

- E. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and indicated on Drawings.
- F. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction.
- G. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

#### 1.4 MATERIAL OWNERSHIP

- A. Except for stripped topsoil and other materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

#### 1.5 SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
  - 1. Use sufficiently detailed photographs or videotape.
  - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.
- B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

#### 1.6 QUALITY ASSURANCE

- A. Preinstallation Conference: Conduct conference as requested by Owner.

#### 1.7 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
  - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
  - 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing site clearing indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
  - 1. Do not proceed with work on adjoining property until directed by Owner.

- C. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
- D. Utility Locator Service: Notify **Call Before You Dig** for area where Project is located before site clearing.
- E. Do not commence site clearing operations until temporary erosion- and sedimentation-control measures are in place.
- F. The following practices are prohibited within protection zones:
  - 1. Storage of construction materials, debris, or excavated material.
  - 2. Parking vehicles or equipment.
  - 3. Foot traffic.
  - 4. Erection of sheds or structures.
  - 5. Impoundment of water.
  - 6. Excavation or other digging unless otherwise indicated.
  - 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- G. Do not direct vehicle or equipment exhaust towards protection zones.
- H. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.
- I. Soil Stripping, Handling, and Stockpiling: Perform only when the topsoil is dry or slightly moist.

## PART 2 - PRODUCTS

- 2.1 MATERIALS – Not Application to this Section.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Locate and clearly identify trees, shrubs, and other vegetation to remain.
- C. Protect existing site improvements to remain from damage during construction.

1. Restore damaged improvements to their original condition, as acceptable to Owner.

### 3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

### 3.3 TREE AND PLANT PROTECTION

- A. General: Protect trees and plants remaining on-site according to requirements in Division 01 Section "Temporary Tree and Plant Protection" or as directed by Owner.
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Owner.

### 3.4 EXISTING UTILITIES

- A. Owner will arrange for disconnecting and sealing indicated utilities that serve existing structures before site clearing, when requested by Contractor.
  1. Verify that utilities have been disconnected and capped before proceeding with site clearing.
- B. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.
  1. Arrange with utility companies to shut off indicated utilities.
  2. Owner will arrange to shut off indicated utilities when requested by Contractor.
- C. Locate, identify, and disconnect utilities indicated to be abandoned in place.

- D. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
  - 1. Notify Engineer not less than 48 hours in advance of proposed utility interruptions.
  - 2. Do not proceed with utility interruptions without Architect's written permission.
- E. Excavate for and remove underground utilities indicated to be removed.

### 3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
  - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
  - 2. Grind down stumps and remove roots, obstructions, and debris to a depth of 18 inches (450 mm) below exposed subgrade in lawn areas. In all other areas remove stumps and roots in their entirety.
  - 3. Use only hand methods for grubbing within protection zones.
  - 4. Chip removed tree branches and dispose of off-site.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
  - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches (200 mm), and compact each layer to a density equal to adjacent original ground.

### 3.6 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to depth indicated on Drawings (6" minimum) in a manner to prevent intermingling with underlying subsoil or other waste materials.
  - 1. Remove subsoil and nonsoil materials from topsoil, including clay lumps, gravel, and other objects more than 2 inches (50 mm) in diameter; trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.
  - 1. Limit height of topsoil stockpiles to 72 inches (1800 mm).
  - 2. Do not stockpile topsoil within protection zones.

3. Dispose of surplus topsoil. Surplus topsoil is that which exceeds quantity indicated to be stockpiled or reused.
4. Stockpile surplus topsoil to allow for respreading deeper topsoil.

### 3.7 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
  1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.
  2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.

### 3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION 311000



SECTION 312000

EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The General Provisions of the Contract, including General and Supplementary Conditions, and Division One General Requirements apply to the work specified in this section.
- B. Form 818 shall mean the State of Connecticut, Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818-2020 or its latest edition and any supplemental specifications.
- C. Geotechnical Study: See Study borings performed by Down to Earth Consulting LLC, dated September 18, 2023.

1.2 SUMMARY

- A. This Section includes the following:
  - 1. All earthwork, not included under other sections, required for grading, trenching, paving, curbs, construction and reconstruction of structures, such as foundation structures or any other subsurface structures. The Contractor shall place, compact and dispose of excess excavated materials in accordance with the plans, specifications and directions of the Engineer.
  - 2. Unclassified Excavation shall include the removal of existing pavements, curbs, earth, boulders, buried timber, tree stumps, broken concrete pieces, existing foundations (e.g. concrete block), brick and other materials of any nature that may be encountered.
  - 3. The Contractor shall procure and place borrow fill and backfill material in accordance with this specification.
  - 4. The Contractor shall saw cut existing pavements and/or saw cut existing curbs in accordance with these specifications and the direction of the Engineer.
  - 5. Classified Excavation shall consist of either “Unsuitable Material” or “Rock Excavation” as defined herein, which shall be paid for on a unit basis as described in the General Conditions.

1.3 DEFINITIONS

- A. “Suitable Material” or “Acceptable Material”

1. ASTM D 2487 soil classification groups GW, GP, GM, SW, SP, and SM; free of rock or gravel larger than 6 inches in any dimension, debris, waste, frozen material, vegetation and other deleterious material
  2. Any mineral (inorganic) soil, blasted or broken rock and similar materials of natural or man made origin, including mixtures thereof, are considered acceptable materials.
- B. "Unacceptable Material" or "Unsuitable Material" - ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH and PT.
- C. "Rock Excavation" shall include the excavation, removal and disposal of solid rock, concrete and all boulders one cubic yard or more in volume that require blasting or drilling and splitting. Boulders of less than one cubic yard in volume or other materials found in excavations, however stiff, heavy and compact, including ripable rock, which, in the opinion of the Engineer, can be removed without blasting or drilling and wedging, shall not be considered as rock excavation.
1. The Contractor shall notify the Engineer immediately if Rock is discovered. The Engineer will make the final determination if the material is to be classified as Rock Excavation.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Backfill and Borrow Fill Materials: Any Acceptable Material.
- B. Subbase: Conform to Form 818, Section M.02.02 - Subbase.
- C. Base: Conform to Form 818, Section M.05.01 – Processed Aggregate Base (Broken Stone option).
- D. Bedding Material: Sand or sandy soil, all of which passes a 3/8" sieve, and not more than ten percent (10%) passes a No. 200 sieve.

## PART 3 - EXECUTION

### 3.1 GENERAL

- A. The entire area of work shall be brought to the required lines and grades by excavation and filling. Excavated materials, acceptable in the opinion of the Engineer, shall be used in making embankments and filling the low areas of the work, and at such places as the Engineer may direct.

- B. Construct base course to required depths and elevations below all concrete pads and walks, building slabs and foundations, light pole foundations, and precast concrete post foundations.
- C. Construct subbase course to required depths and elevations below parking lot areas and concrete pads.
- D. Construct bedding course below all drainage and utility structures.
- E. Construct acceptable material below all lawn and landscaped areas.

### 3.2 COMPACTION REQUIREMENTS

- A. See Geotechnical Study. At a minimum, all base and subbase shall be compacted to 95% relative maximum compaction as verified by an independent testing laboratory via field testing.

### 3.3 EXCAVATION

- A. Protect existing structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Protect subgrade and foundation soils against freezing temperatures or frost. Provide protective insulating materials as necessary.
- C. Provide erosion and control measures to prevent erosion or displacement of soils and discharge of soil-bearing water run-off or airborne dust to adjacent properties and watercourses, in accordance with the Sediment and Erosion Control Plan and as directed by the Engineer.
- D. Subbase: All soft, boggy, clayey or other objectionable material below the proposed subbase shall be removed, and the area refilled with acceptable material.
- E. Boulders: The Contractor shall remove all boulders, stone or pieces of concrete, lumber, iron or other material that project above subgrade. Any stone larger than two (2) cubic feet in volume shall not be placed within two (2) feet of the finished surface.
- F. Excavating for Foundations: All excavations shall be cut accurately to required lines and dimensions for work on drawings and shall be large enough to provide adequate clearance for the proper execution of the work.
- G. Bottoms of Excavations: The Contractor shall level the bottoms of all excavations, to receive footings or other work supported on soil, accurately, to the lines and levels shown on the plans or as directed by the Engineer.

Where excavation for a foundation has been carried below the indicated level by error on the part of the Contractor, he will be required to fill the space between the incorrect and required depth with concrete at no additional cost to the Owner.

- H. Storage and Placement: All those excavated materials which in the opinion of the Engineer are suitable for backfill shall be stored or placed within the limits of the Contract, where directed by the Engineer.
- I. Surplus: All surplus materials and materials not suitable for backfill shall be removed from the site and disposed of by the Contractor. No additional payment will be made for this, but the cost thereof shall be deemed included in the price bid for "Earth Moving".
- J. Shoring: Wherever necessary to maintain the banks of excavation in a safe and stable condition, the Contractor shall furnish and install temporary sheet piling or planks, braces and shores of good sound timber of adequate strength, and shall remove such piling or shoring as the foundation work progresses.

Sheeting and bracing of a type approved by the Engineer, shall be installed when the Contractor's employees are required to enter into excavations which exceed four (4) feet in depth.

The foregoing shall include the construction and removal of sheeting and bracing, the excavation and maintenance of temporary ditches, and the furnishing and operation of pumps or other appliances needed to properly drain the work. No direct compensation will be made for this work, but payment therefore shall be deemed included in the price bid.

- K. Inspection: When the excavations have been carried to the required depth as shown on the drawings, the Contractor shall do no more work until after inspection by the Engineer, who shall order the foundation or other work to proceed, or further excavation, as the conditions indicate and no foundation or other work shall be done until the excavations have been approved by the Engineer.
- L. Dewatering: The Contractor shall furnish all materials, appliances and labor required to keep the site free from water, ice and snow during construction. No additional payment shall be made for dewatering. All dewatering effluent shall be handled in accordance with all pertinent State and local regulations regarding the discharge of water from the site.
- M. Utilities and Services: When any sewer, water, gas, electric or other utility service connections are encountered in the excavation operations, the service shall not be interrupted or disturbed by the Contractor unless called for on the plans and/or directed by the Engineer. It is the Contractor's responsibility to detect and protect existing utilities (to remain) from damage during construction. The Contractor shall locate buried utilities, to the best of his ability, using electronic probes, or other methods, prior to the start of excavation. The Contractor shall then proceed cautiously and perform hand excavation, as

necessary, to protect the utility as directed by the Engineer, at no extra cost to the Owner. If a utility is inadvertently damaged, it is the Contractor's responsibility to restore that utility to operating condition, equal to that existing prior to damage. The Contractor shall remain at the site with the damaged utility until it has been restored and there is no danger to the public (i.e. exposed live electrical wires, etc.).

Should the Contractor need to cut off utilities or services during the performances of the work, he shall notify the City Department or Utility Company owning or controlling services, to cut off these services.

Any services cut off or interrupted by the Contractor's operations shall be restored at the Contractor's expense.

### 3.4 FILL

- A. Remove all vegetation, topsoil, debris, wet and unsatisfactory soil materials, obstructions, and deleterious materials from the ground surface prior to placing fills.
- B. Fill and Compacting shall be carried out as directed by the Engineer, and shall be constructed in successive horizontal layers not over 6 inches in depth. It shall be spread by a "Bulldozer", or other acceptable methods, and shall be thoroughly compacted by rolling with a self-propelling roller weighing not less than ten (10) tons and completed to the satisfaction of the Engineer. In places where the character of the material makes the use of this roller impracticable or where drains or other construction may be damaged a lighter one may be substituted, or the area shall be compacted by vibratory tamping, all with the approval, and to the satisfaction of the Engineer.
- C. All hollows and depressions which develop during the process of rolling and compacting shall be filled with acceptable material, and the subgrade shall again be compacted. This process of filling and compacting shall be repeated until no depressions develop.
- D. Plow, strip or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing surface.
- E. When subgrade or existing ground surface to receive fill has a density less than that required for fill, break up ground surface to depth required, pulverize, moisture-condition or aerate soil and recompact to required density.

### 3.5 BACKFILL

- A. After inspection and approval of foundations and other work which is to be covered by backfill, the excavated voids shall be filled with clean excavated material, puddled and rammed solid every 6" of depth.
- B. After areas and trenches have been excavated and structures constructed therein, the spaces around and above them shall be carefully backfilled with acceptable material. Backfill shall

be placed on both sides of structures to approximately the same elevation at the same time. All backfill shall be thoroughly tamped and rammed in place in layers not over six (6) inches in depth, using rammers of a weight acceptable to the Engineer. If directed by the Engineer, the backfill shall be thoroughly saturated with water as it is placed.

- C. Backfill adjacent to foundation walls shall be pneumatically compacted.
- D. Backfilling around masonry manholes and catch basins shall not take place until the mortar has hardened and the possibility of movement is slight. Backfilling shall take place uniformly around all sides of the structure.
- E. When sheeting is being withdrawn, all cavities left thereby shall be filled with acceptable material, tamped in place so as to fill all voids thoroughly. Backfill inside of sheeting shall be placed before sheeting is removed.

### 3.6 UTILITY TRENCHES

- A. Trench excavation shall be as described in Form 818, Article 2.86.03, under the "Drainage Trench Excavation" classifications and guidelines presented therein.
- B. Excavate trenches to uniform widths to provide a working clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit.
- C. Clearance: 24 inches minimum each side of pipe or conduit.
- D. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove stones and sharp objects to avoid point loading.
- E. Place and compact bedding material on rock or other unyielding bearing surfaces and to fill unauthorized excavations. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

### 3.7 SAW CUTTING

- A. All work shall be done by competent mechanics in an approved manner to the satisfaction of the Engineer.

- B. All saw cutting shall be carried out to the full depth of the pavement, curb or concrete walk to be cut. Saw cutting shall be done to accurate, neat and straight lines marked previous to commencement of work. Saw cutting shall be done with approved power saws specifically designed and manufactured for such a purpose. Compressor, backhoe or spade-cutting of the pavement will not be allowed.
- C. Workmen shall wear safety clothing and eye protection while operating saw equipment and shall be thoroughly familiar in the safe operation of the equipment.

### 3.8 ROCK EXCAVATION

- A. Contractor shall immediately notify the Owner if Rock is found within the work limits.
- B. Rock excavation shall include the excavation, removal and disposal of solid rock, concrete and all boulders one cubic yard or more in volume that require blasting or drilling and splitting. Boulders of less than one cubic yard in volume or other materials found in excavations, however stiff, heavy and compact, including ripable rock, which, in the opinion of the Engineer, can be removed without blasting or drilling and wedging, shall not be considered as rock excavation.
- C. Blasts shall be covered to prevent scattering of material, and all adjacent property shall be suitably protected. Explosives shall be transported, handled and stored in a safe manner and in compliance with all state and local regulations. Charges shall not be so large as to shake, loosen or endanger adjacent structures or their contents or to harm their occupants. Responsibility for damage to persons or property shall rest solely with the Contractor. Only personnel qualified in the use of explosives shall be employed for blasting. The Contractor is responsible for obtaining all necessary permits at no additional cost to the Owner.
- D. The Contractor shall design his blast pattern and use blast control methods to prevent detrimental effects to the rock outside of the excavation limits. All loose, unsound or semidetached rock fragments, as determined by the Engineer, which may be detrimental to the proposed structure or installation shall be removed from the excavation. Excavation beyond the necessary limits, made to remove damaged rock shall be backfilled by the Contractor with compacted gravel fill at no additional cost to the Owner.
- E. Where boulders are on the sides of or in the bottom of excavations, they shall be wholly or partially removed at a minimum to the limits as specified and/or as determined by the Engineer. In removing boulders lodged in the sides of the excavations, the Contractor shall not disturb or undermine adjacent pavement or structures. Pavement surfaces damaged beyond reasonable limits as determined by the Engineer, shall be repaired by the Contractor at no additional cost to the Owner. In general, boulders or rock fragments which extend under paved surfaces shall be removed by blasting or mechanical splitting.



- F. Unauthorized excavations in rock, or excavations made beyond or below the indicated limits shall be refilled and compacted with approved gravel fill at no additional cost to the Owner.
- G. Depressions below the required grade resulting from the removal of boulders and rock fragments shall be refilled with compacted gravel fill at no additional cost to the Owner.
- H. Rock payment lines are to be measured “in place” and are limited to the following:
  - 1. Two feet outside of concrete work for which forms are required, except footings.
  - 2. In pipe trenches, 6" below invert elevation of pipe and 2 feet wider than the inside diameter of pipe, but not less than 3 feet minimum trench width.
  - 3. Neat outside dimensions of concrete work where no forms are required.

END OF SECTION 312000

SECTION 320116

BITUMINOUS CONCRETE PAVEMENT MILLING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including Division 1 General Requirements and Specific Requirements, apply to this Section.
- B. "Form 818" shall mean the State of Connecticut, Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818 - 2020 or its latest edition and any supplemental specifications.

1.2 SUMMARY

- A. This work shall consist of the milling, removal, and disposal of existing bituminous concrete pavement. It shall be performed in accordance with these specifications and in conformity with the line, grade, and typical cross-section shown on the plans.
- B. Unless otherwise specified, the milled material shall become the property of the Contractor.

1.3 RELATED SECTIONS

- A. Section 32 01 30 – Maintenance & Protection of Traffic

PART 2 PRODUCTS

2.1 BITUMINOUS CONCRETE PAVEMENT

- A. The equipment for milling the pavement surface shall be designed and built for milling flexible pavements and shall have a minimum 6 foot cutting width. It shall be self propelled with sufficient power, traction, and stability to maintain depth and slope and shall be capable of removing the existing bituminous concrete pavement to the line, grade, and typical cross-section shown on the plans.
- B. The milling machine shall be equipped with a built in automatic grade control system that can control the longitudinal profile and the transverse cross-slope to produce the specified results. The longitudinal controls shall be capable of operating from any longitudinal grade reference, including string line, ski (30 feet minimum), mobile string

line (30 foot minimum), or matching shoe. The transverse controls shall have an automatic system for controlling cross-slope at a given rate.

- C. The machine shall be capable of operating at a minimum speed of 10 feet per minute and be able to provide a 0 to 4 inch deep cut (minimum) in one pass. It shall be designed so that the operator can at all times observe the milling operation without leaving the control area of the machine.
- D. The teeth on the revolving cutting drum must be continually maintained and shall be replaced as warranted to provide a uniform pavement texture.
- E. The machine shall be equipped with an integral pickup and conveying device to immediately remove material being milled from the surface of the roadway and discharge the millings into a truck, all in one operation. The machine shall also be equipped with a means of effectively limiting the amount of dust escaping from the milling and removal operation in accordance with local, State, and Federal air pollution control laws and regulations.
- F. When milling smaller areas or areas where it is impractical to use the above described equipment, the use of a smaller or lesser equipped milling machine may be permitted when approved by the Engineer.
- G. A sweeper equipped with a water tank, spray assembly to control dust, a pick-up broom, a dual gutter broom, and a dirt hopper shall be provided by the Contractor. The sweeper shall be capable of removing millings and loose debris from the textured pavement. Other sweeping equipment may be provided in lieu of the sweeper when approved by the Engineer.

### PART 3 EXECUTION

#### 3.1 CONSTRUCTION METHODS

- A. The pavement surface shall be removed to the line, grade, and typical cross-section shown on the plans. The milling operation shall proceed in accordance with the requirements of the “Maintenance and Protection of Traffic” and “Prosecution and Progress” specifications.
- B. The milled surface shall provide a satisfactory riding surface with a uniform textured appearance. The milled surface shall be free from gouges, excessive longitudinal grooves and ridges, oil film, and other imperfections that are a result of defective equipment, improper use of equipment, or poor workmanship. Any unsatisfactory surfaces produced are the responsibility of the Contractor and shall be corrected at the Contractor’s expense and to the satisfaction of the Engineer.

## BITUMINOUS CONCRETE PAVEMENT MILLING

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- C. When removing a bituminous concrete pavement from an underlying Portland cement concrete pavement, all of the bituminous concrete pavement shall be removed to the greatest extent practicable, leaving a uniform surface of Portland cement concrete, unless otherwise directed by the Engineer.
- D. Unless otherwise specified, milling shall be done to improve rideability and/or cross-slope. The existing pavement shall be removed to the average depth shown on the plans, in a manner that will restore the pavement surface to a uniform cross-section and longitudinal profile. The longitudinal profile of the milled surface shall be established by a stringline, mobile stringline, or mobile ski. The cross-slope of the milled surface shall be established by a second sensing device or by an automatic cross-slope control mechanism. The Contractor will be responsible for providing all grades necessary to remove the material to the proper line, grade, and typical cross-section shown on the plans. The Engineer may waive the requirement for automatic grade or slope controls where the situation warrants such action.
- E. Protection shall be provided around existing catch basin inlets, manholes, utility valve boxes, and any similar structures. Any damage to such structures as a result of the milling operation is the Contractor's responsibility and shall be repaired at the Contractor's expense.
- F. To prevent the infiltration of milled material into the storm sewer system the Contractor shall take special care to prevent the milled material from falling into the inlet openings or inlet grates. Any milled material that has fallen into inlet openings or inlet grates shall be removed at the Contractor's expense.
- G. At all permanent limits of milling, a clean vertical face shall be established prior to paving. No vertical faces, transverse or longitudinal, shall be left exposed to traffic. If any vertical face is formed in an area exposed to traffic a temporary paved transition will be established according to the requirements of CT DOT. If a vertical face is not formed and the milling machine is used to temporarily transition the milled pavement surface to the existing pavement surface, the length of the temporary transition shall conform to the requirements of CT DOT.
- H. Prior to opening an area which has been milled to traffic, the pavement shall be thoroughly swept with a sweeper or other approved equipment to remove, to the greatest extent practicable, material which will become airborne under traffic. This operation shall be conducted in a manner so as to minimize the potential for creation of a traffic hazard and to comply with local, State, and Federal air pollution control laws and regulations. Any damage done to traffic as a result of milled material becoming airborne is the responsibility of the Contractor and shall be repaired at the Contractor's expense.
- I. The milled surface will be tested with a 10 foot straightedge furnished by the Contractor. The variation of the top of ridges from the testing edge of the straightedge,

## BITUMINOUS CONCRETE PAVEMENT MILLING

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between any two ridge contact points, shall not exceed 3/8 inch. The variation of the top of any ridge from the bottom of the groove adjacent to that ridge shall not exceed 3/8 inch. Any point in the surface not meeting these requirements shall be corrected as directed by the Engineer at the Contractor's expense.

- J. The Contractor may be waived of the straightedge surface requirements stated in the preceding paragraph in areas where a surface lamination between bituminous concrete layers or a surface lamination of bituminous concrete on Portland cement concrete causes a non-uniform texture to occur. This is subject to the approval of the Engineer.

END OF SECTION 320116

SECTION 320130

MAINTENANCE & PROTECTION OF TRAFFIC

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including Division 1 General Requirements and Specific Requirements, apply to this Section.
- B. State of Connecticut, Department of Transportation (CTDOT), Standard Specifications for Road, Bridges, and Incidental Construction, Form 818, 2020 or latest amendment shall apply to this Section.
- C. Manual of Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, latest edition, shall apply to this Section.

1.2 SECTION INCLUDES

- A. The Contractor shall furnish a sufficient number of signs, barricades, drums, traffic cones and delineators to forewarn traffic of the construction operations, and shall erect, maintain, move, adjust, clean, relocate and store these signs, barricades, drums, traffic cones and delineators when, where and as directed by the Owner and/or Engineer.
- B. The Contractor shall provide safety measures, pavement markings, warning devices and signs as deemed necessary to safeguard and guide the traveling public through detours as shown on the project plans or as ordered by the Engineer.
- C. The Contractor shall furnish and erect signs legally closing the roadway to traffic, as shown on the plans or as ordered by the Engineer, prior to commencing any work.
- D. The Contractor shall provide the services of a traffic person of the type and number, and for such periods as the Engineer approves, for the control and direction of vehicular traffic and pedestrians.

1.3 QUALITY ASSURANCE

- A. All traffic control devices shall be constructed in accordance with the standards and specifications of the CTDOT Form 818 and/or MUTCD, as appropriate. The use of unauthorized or unapproved signs, barricades, drums, traffic cones or delineators will not be permitted.

1.4 PROJECT CONDITIONS

- A. Unless other provisions are made on the plans or in the special provisions of the contract, the Contractor shall keep the roadway under construction open to traffic for the full length of the project and shall provide a sufficient number of travel lanes and pedestrian passageways to move that traffic ordinarily using the roadway.
- B. The travel lanes and pedestrian passageways shall be drained and kept reasonably smooth and in suitable condition at all times in order to provide minimum interference to traffic consistent with the proper prosecution of the work.
- C. Suitable ingress and egress shall be provided at all times where required, for all intersecting roads and for all abutting properties having legal access.
- D. Additional control measures will be installed during the construction period as required by field conditions or as requested by the Engineer.
- E. The Contractor, when ordered by the Owner or Engineer, shall remove snow and take care of icy conditions on temporary, new and existing sidewalks and road surfaces within any part of the limits of the Project. Payment for this work shall be considered Additional Work. Snow removal and correction of icy conditions, other than those resulting from the Contractor's operations, on completed portions of the Project, will remain the responsibility of the Owner.
- F. Shall the Contractor fail to perform any of the work required under this Section, the Owner may perform or arrange for others to perform such work. In such cases, the Owner will deduct from money due or to become due the Contractor all expenses connected therewith.

#### 1.5 TRAFFIC PERSON

- A. State Police Officer: State Police Officers shall be uniformed off-duty sworn Connecticut State Police Officers. Their services shall also include the use of official State Police vehicles.
- B. Uniformed Municipal Police Officer: Uniformed Municipal Police Officers shall be uniformed off-duty sworn Municipal Police Officers or Uniformed Constables who perform criminal law enforcement duties from the Municipality in which the project is located. Their services shall also include the use of official municipal Police vehicles when required by the Engineer.
- C. Uniformed Flagger: Uniformed Flaggers shall be persons who have successfully completed flagger training by the National Safety Council or other such program as approved by the Owner or Engineer. A copy of the Flagger's training certificate shall be provided to the Engineer before the Flagger performs any work on the Project.

PART 2 - PRODUCTS

2.1 EQUIPMENT AND GARMENTS

- A. Uniformed Police officers shall wear the high visibility safety garment provided by their law enforcement agency. If no high visibility garment is provided, the Contractor shall provide the law enforcement officer with a garment meeting the requirements of this Section.
- B. Flaggers shall wear a high visibility safety garment that complies with OSHA, MUTCD, or ASTM Standards. The safety garment shall be of fluorescent orange, yellow or yellow-green color, and shall comply with CTDOT Form 818 Section 9.70.03 regarding vertical and horizontal stripe markings of contrasting color, and bearing the words "Traffic Control."
- C. Worn or faded garments shall not be used. The Engineer shall direct the replacement of any worn/faded garments at no additional cost to the Owner.
- D. STOP/SLOW Paddle: Flaggers shall utilize a Stop/Slow paddle that is at least 18" in width with letters that are at least 6" high. Comply with MUTCD and CTDOT Form 818 Section 9.70.03 requirements.

2.2 BARRICADE WARNING LIGHTS: Comply with CTDOT Form 818 Section 9.76 for Type A, B or C as may be required.

2.3 TRAFFIC CONE: Comply with CTDOT Form 818 Section 9.77 and 9.81 as applicable.

2.4 TRAFFIC DRUM: Comply with CTDOT Form 818 Section 9.78.

2.5 CONSTRUCTION BARRICADES: Comply with CTDOT Form 818 Section 9.79.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prior to the start of operations on the Project requiring the use of Traffic Persons, a meeting shall be held with the Contractor, Traffic Person, Owner and Engineer to review the Traffic Person operations, lines of responsibility, and operating guidelines which will be used on the project.
- B. Any scheme for maintenance of traffic, which may include detours, as shown on the plans or as described in the special provisions of the contract, shall govern unless an alternate scheme acceptable to the Engineer is offered by the Contractor at no additional cost to the Owner. If no scheme is shown or described in the contract documents, and the Contractor wishes to deviate from the provisions of maintaining traffic as described in this Section, then the Contractor may submit a schedule showing a proposed sequence of operations and a



## MAINTENANCE & PROTECTION OF TRAFFIC

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compatible method of maintaining traffic, to be reviewed and approved by the Engineer and Owner prior to construction.

- C. On a weekly basis, the Contractor shall inform the Engineer of their scheduled operations for the following week and the number of Traffic Persons required, including any changes to the approved traffic control plan that may be necessary.

### 3.2 GENERAL

- A. All Traffic Persons shall assist in implementing the traffic control plan as approved by the Engineer. Any situation requiring a Traffic Person to operate in a manner contrary to this Section shall be authorized in writing by the Engineer.
- B. In the event of an unplanned emergency, or short term operation, the Engineer may approve the use of a properly clothed, non-certified Traffic Person until such time as a certified Traffic Person may be obtained. In no case shall this temporary use exceed 8 hours for any particular operation.
- C. Signs
  1. The signs in any one signing pattern shall be mounted at the same height above the travel surface.
  2. The Contractor will be responsible for keeping all signs in proper position, clean and legible at all times. Care shall be taken so that weeds, shrubbery, construction materials or equipment, stockpiled soil, etc., are not allowed to obscure any sign, light, or barricade.
  3. Any new or existing signs that do not apply to the current Traffic Control scheme shall be removed or adjusted so that the legend is not visible to approaching traffic.
- D. When the signs, barricades, cones, traffic drums and delineators, etc., are no longer required on the Project, they shall remain the property of the Contractor and shall be removed from the site or stored temporarily in an area approved by the Owner until such time they are required again.

END OF SECTION 320130

SECTION 321216

ASPHALT PAVING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including Division 1 General Requirements and Specific Requirements, apply to this Section.
- B. "Form 816" shall mean the State of Connecticut, Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 816-2004 or its latest edition and any supplemental specifications.

1.2 SUMMARY

- A. This Section includes the materials, labor, installation and incidental costs for the installation of subbase material, base materials, bituminous concrete pavement and painted pavement markings.

1.3 RELATED SECTIONS

- A. Section 31 20 00 – Earth Moving

1.4 SUBMITTALS

- A. Material Certificates: Provide material certificates signed by the material producer and the Contractor, certifying that materials and products comply with specified requirements.

1.5 QUALITY ASSURANCE

- A. Material and Methods of Construction: Shall comply with the following standards:
  - 1. American Society for Testing and Materials (ASTM).
  - 2. American Association of State Highway and Transportation Officials (AASHTO).
  - 3. Asphalt Institute (AI).
  - 4. State of Connecticut DOT Standard Specifications, Form 816, inclusive of all supplements.

- B. Testing: Compaction tests will be required by the Owner and shall be paid for by the Owner. Testing shall consist of density testing of the base and top courses of pavement. (Subbase shall be tested in accordance with Section 312000 "Earthwork.")
  - 1. Class 1 and 2 pavement shall be compacted to a density of at least 92 percent and no more than 97 percent of the theoretical density in accordance with CT DOT standards as outlined in Form 816.
  - 2. The Contractor is responsible to schedule compaction tests and to allow adequate time for the proper execution of said tests. If tests indicate that density requirements have not been achieved, the Contractor shall continue compacting. If after recompacting, sufficient density is still not achieved, the Contractor shall remove all pavement from that day's paving operation and place and compact new pavement.
- C. Pavement cores: The Owner may require paving cores to be taken to determine final pavement thickness. The amount and location of cores shall be determined by the Engineer and paid for by the Contractor.
- D. Allowable Tolerances: Final surface of base materials within 3/8" from a required grade. Final pavement thicknesses shall conform to specified requirements as shown in the Drawings. Test for smoothness using a ten (10) foot long straightedge. Surface shall not vary more than 1/4" from straightedge when placed in any direction. In no case will water be allowed to stand or puddle on any finished pavement.
- E. Permits/Approvals: The Contractor shall obtain approval of construction and secure all permits for all work from any authorities having jurisdiction.

#### 1.6 DELIVERY, STORAGE AND HANDLING

- A. Transporting shipments of bituminous concrete material shall be made in tight vehicles previously cleaned of all foreign material, and delivered to the site, so that it will not become contaminated in any way.

#### 1.7 PROJECT CONDITIONS

- A. Weather Limitations
  - 1. Base material shall not be placed on frozen or saturated subbase material.
  - 2. Bituminous concrete paving material shall not be placed on frozen or saturated base material.

3. Cold weather: Bituminous concrete paving materials shall be mixed and placed in accordance with minimum placement temperature as specified in Article 4.06.03, Item 8 - Placing of Mixture, Form 816.
  4. Precipitation or Moisture: Placement of bituminous concrete paving materials shall not be scheduled when weather conditions of fog or rain prevail nor when the pavement surface shows signs of any moisture.
  5. Precipitation Probability: Placement of bituminous concrete paving materials shall not be scheduled when the Precipitation Probability, obtained by the Contractor from the U.S. Weather Bureau Within three (3) hours prior to the start of such operations, equals or exceeds fifty (50) percent. The Contractor shall notify the Engineer of the exact time at which the above information was obtained.
- B. Grade Control: Establish and maintain the required lines and grades for each course during paving operations.
  - C. Provide temporary barricades and warning lights as required for protection of project work and public safety.
  - D. Protect adjacent work from damage, soiling and staining during paving operations.
  - E. Inspection Costs: All costs associated with material certifications, plant inspection and laboratory tests shall be borne by the Contractor and shall be deemed included in the price bid for asphalt pavement.

## PART 2 PRODUCTS

### 2.1 BITUMINOUS CONCRETE PAVEMENT

- A. Conform to the requirements of Article M.04.01 and M.04.02, Form 816, Class 1 or 2 as indicated on the Plans.

### 2.2 TACK COAT

- A. Conform to the requirements of Article M.04.01, Sub-item (4), Item (c), Form 816. Tack Coat shall be Grade CRS-1 unless otherwise approved by the Engineer.

### 2.3 PROCESSED STONE AGGREGATE BASE

- A. Conform to the requirements of Article M.05.01, Form 816.
- B. Existing bituminous concrete may be used as base material if suitably pulverized in accordance with Form 816 requirements and these Specifications.

2.4 PAINT

- A. Paint shall be hot-applied, fast drying type in accordance with Form 816, Section M.07.21.

PART 3 EXECUTION

3.1 INSPECTION

- A. Verify that all existing utility openings, valves, and other project installations are at their proper finished grade elevations, within areas to be paved. Provide temporary closures and protection over openings until completion of rolling operations. Remove closures at completion of the work. Set covers to grade, flush with the surface of the adjoining pavement.

3.2 SUBGRADE PREPARATION

- A. Prior to placing the bottom course of processed stone aggregate base, the prepared subgrade shall be maintained true to line and grade, at all times for a minimum distance of 200 feet in advance of the work. No placement of the processed aggregate is to commence until acceptance by the Engineer of the subgrade on which it is to be placed.
- B. The formation and protection of subgrade shall conform to the requirements of Article 2.09.01 and 2.09.03, Form 816.

3.3 BASE COURSE MATERIAL PLACEMENT/COMPACTION

- A. Install processed aggregate base material at the locations as shown on the Drawings and in accordance with Article 3.04.03, Conn DOT Form 816. Dimensions specified are after compaction.
- B. Compact base material with vibratory roller to minimum 95% modified AASHTO laboratory density (ASTM D-1557, Method C).
- C. Insure thorough and proper compaction around all yard drains, catch basins, structures, utility valves, and other improvements that project above base material.

3.4 BITUMINOUS CONCRETE PAVEMENT

- A. General
  - 1. Install the bituminous concrete pavement to the lines, grades, and details shown on the Drawings. Neatly and cleanly meet and match abutting pavements. Remove all soft or yielding material below grade and replace with suitable material.

2. Thicknesses after compaction shall conform to the details on the Drawings. The pavement shall consist of the number of courses and thickness as detailed. Remove and replace areas showing deficiencies in required thickness with new material as directed by the Engineer.
3. Protect existing abutting pavement during paving operations. Replace any abutting pavement damaged during paving operations. Joint between bituminous pavement and existing Portland cement concrete pavement shall be tightly compacted and pavement edge shall be of equal density to other areas of pavement.
4. Provide a cross-pitch of 1/4" per foot for proper drainage. Ensure that there are no "low" spots that may trap water and create a slipping hazard.

B. Forms

1. Provide wood edge forms of an approved type and a minimum length of ten (10) feet for tangents and curves, unless otherwise shown on the plans. Wood forms shall be of a depth equal to the depth of the pavement and shall be securely staked and braced to the required line and grade. Note: Hand tamp edges and bevel if wood forms are not used.
2. Install wood forms along all edges of pavement to produce a clean vertical edge. Secure strips to allow for proper compaction of bituminous concrete. Do not remove edge screed strips until pavement is thoroughly compacted. Raveled edges will not be accepted. Wood forms are to be removed after the bituminous pavement has completely set.
3. All forms shall be straight, free from bends and warps at all times, and shall be cleaned thoroughly and oiled before pavement is placed against them, this cleaning and oiling being repeated daily as the forms are moved ahead.
4. The forms shall rest firmly upon the thoroughly compacted sub-grade throughout their entire length, shall be joined neatly and tightly and staked securely to line and grade, three (3) bracing pins or stakes, each ten (10) foot length of side form, so that they will resist the pressure of the pavement and the impact of the roller without springing.

C. Placing

1. Bituminous concrete pavement shall be constructed and compacted in conformance with Conn DOT Form 816 requirements.
2. Coat the edge of all abutting pavement with tack coat before installing bituminous concrete pavements. Insure that the abutting pavement has a sound, clean, straight

edge. Feathering of edges and transitions between new and existing pavements is not acceptable. Protect surfaces of abutting pavement from tack coat overspray.

3. Each mixture shall be furnished and laid by means of a mechanical spreader of approved design to a depth, which after final compaction shall be equal to the specified depth. In areas where the use of a mechanical spreader is impractical, as determined by the Engineer, other means of spreading and compacting may be permitted. The use of hand rakes will not be permitted. The Contractor shall use lutes where necessary.
4. After placing and compacting binder course, tack coat shall be applied prior to placement of the wearing (top) course.
5. Each mixture shall be laid only where the surface to be covered is free from loose or foreign material, dry, and only when weather conditions, in the opinion of the Engineer, are suitable.
6. The Contractor shall provide suitable means for keeping all small tools clean and free from bituminous accumulations.
7. Pavement may be laid by hand with the approval of the Engineer. Pavement shall be compacted by making multiple passes with a roller weighing not less than 2,000 pounds. After compaction, the thickness shall be that as specified on the drawings.

D. Compacting

1. Upon completion of the spreading of each mixture, the material shall be consolidated thoroughly and uniformly with self-propelled tandem rollers. The top course shall be free from roller marks.
2. Rollers used for compacting the top course shall be well balanced, self-propelled, tandem rollers, weighing between seven (7) and eight (8) tons. The roller shall have a compression under the rear wheel of between 200 and 300 pounds per linear inch of roll at a rate not exceeding 800 square yards per hour per roller. After compaction, the surface course shall have a density not less than 97% theoretical maximum density as determined by Appendix B of The Asphalt Institute Manual MS-2.
3. Locations inaccessible to the roller, the compression shall be effected with iron tampers weighing not less than twenty-five (25) pounds and having a bearing area not exceeding forty-eight (48) square inches, or other impact type equipment.
4. Perform breakdown, second and finish rolling until the bituminous concrete mixture has been compacted to the required surface density and smoothness. Continue

rolling until all roller marks are eliminated. Provide a smooth compacted surface true to thickness and elevations required.

5. After final rolling, do not permit vehicular traffic on the pavement until it has cooled and hardened, and in no case sooner than 8 hours.

E. Joints for New Construction and Between Existing Pavement:

1. Carefully make joints between old and new pavements, and between successive day's work, to ensure a continuous bond between adjoining work. Construct joints to have the same texture, density, and smoothness as other sections of the asphalt concrete course.
2. Construction shall be as nearly continuous as is possible. The roller shall pass over the end of the laid mixture only when a practical necessity.
3. When the operation of laying is interrupted, the end of the laid material shall be left unrolled until such time as work is resumed, in order that there be no joints throughout the project.
4. If it is necessary to roll the end of the laid mixture during construction, thus consolidating it, the joint so made shall be cut back before recommencing the operation of laying, in order to present a fresh, clean surface for contact with the newly placed material.
5. The edges of such joints shall be painted with liquid asphalt (RC-70 or MC-70) and the use of hot smoothing irons in finishing such joints, shall not be permitted.

F. Finished Surface

1. The surface of the top course of the pavement after compression shall be smooth and true to crown and grade, free from depressions, waves, bunches, overlapping seams and unevenness in surface. All new surfaces shall meet existing surfaces smoothly and evenly.
2. After the compaction of the top course, the Contractor shall check the entire paved area for depressions, using a ten (10) foot wood or metal straightedge. Any depressions greater than one-quarter (1/4) of an inch shall be corrected by removing the top course of the affected areas, and replacing with new material to form a true and even surface.

- G. Defects: Where defects in composition, compression or finish appear in the completed work, such finished areas shall be removed to the full depth of the course and the defective material replaced with the required thickness of pavement at the expense of the contractor.



1. Patching: Remove and replace mixtures that become mixed with foreign materials and all defective areas. Cut out such areas and fill with fresh hot asphalt concrete. Compact by rolling to the required surface density and smoothness. Remove deficient areas for the full depth of the course. Cut sides perpendicular and parallel to the directions of traffic with edges vertical. Apply a tack coat before placing asphalt concrete mixture.

3.5 PAINTED PAVEMENT MARKINGS FOR ROADWAYS AND PARKING LOTS

- A. Pavement areas to be painted shall be dry and sufficiently cleaned of sand, dust and road debris so as to provide an acceptable bond between the paint and the pavement.
- B. Fast drying paint shall be applied at a temperature of 120 F to 150 F at the spray gun.
- C. All paint shall be performed in a neat and workmanlike manner, using approved mechanical equipment. Lines shall be sharp and clear with no feathered edging or fogging and precautions shall be taken to prevent tracking by tires of the striping equipment. Paint shall be applied as shown on the plans with no unsightly deviations.
- D. After application, the paint shall be protected from crossing vehicles for a time at least equivalent to the drying time of the paint.

3.6 PROTECTION/CLEAN-UP

- A. Protect all work until acceptance of the project. Replace or repair pavement if damaged prior to acceptance.
- B. Clean up all debris from installation procedures, including but not limited to bituminous concrete and base material overflow into/onto areas indicated to be lawn or other surfaces. Remove from site all excess materials, debris and equipment. Contractor shall dispose of debris material legally.
- C. Repair damage resulting from paving operation to other areas of the work.

END OF SECTION 321216

SECTION 321313

SITE CONCRETE

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. "Form 818" shall mean the State of Connecticut, Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818-2020 or its latest edition and any supplemental specifications.

1.2 SUMMARY

- A. This Section includes specifications for cast-in-place concrete.

1.3 RELATED SECTIONS

- A. Section 31 20 00 "Earth Moving"
- B. Section 33 41 00 "Storm and Sanitary Utility Piping" for pre-cast drainage structures

1.4 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, expansive hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume.

1.5 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixes: For concrete pavement mix.
- C. Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated, based on comprehensive testing of current materials. Contractor shall pay for all testing of concrete materials.
- D. Material Certificates: Signed by manufacturers certifying that each of the following materials complies with requirements:
  - 1. Cementitious materials and aggregates.
  - 2. Steel reinforcement and reinforcement accessories.
  - 3. Admixtures.
  - 4. Curing compounds.
  - 5. Applied finish materials (i.e., traffic paint).

## 6. Joint fillers.

## 1.6 QUALITY ASSURANCE, CAST IN PLACE CONCRETE

- A. Materials and methods of construction shall comply with the following standards:
  - 1. American Society for Testing and Materials (ASTM)
  - 2. American Concrete Institute (ACI)
  - 3. State of Connecticut DOT Standard Specifications (DOT Form 818 - 2020)
- B. Installer Qualifications: An experienced installer who has completed concrete work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
  - 1. Manufacturer must be certified according to the National Ready Mix Concrete Association's Plant Certification Program.
- D. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant and each aggregate from one source. Do not change source of brands of cement, aggregate materials, or batching plant during course of work.
- E. ACI Publications: Comply with all ACI requirements unless modified by the requirements of the Contract Documents.

## 1.7 QUALITY ASSURANCE, PRE-CAST CONCRETE

- A. Fabricator Qualifications: A firm that complies with the following requirements and is experienced in manufacturing precast structural concrete units similar to those indicated for this Project and with a record of successful in-service performance.
  - 1. Assumes responsibility for engineering precast structural concrete units to comply with performance requirements. This responsibility includes preparation of Shop Drawings by a qualified professional engineer.
  - 2. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of precast structural concrete that are similar to those indicated for this Project in material, design, and extent.
  - 3. Participates in PCI's Plant Certification program and is designated a PCI-certified plant.
  - 4. Source Limitations: Obtain precast concrete light pole foundations through one source from a single manufacturer.
- B. Design Standards: Comply with **ACI 318** and the design recommendations of PCI MNL 120, "PCI Design Handbook – Precast and Prestressed Concrete."
- C. Product Options: Drawings indicate size, profiles, and dimensional requirements of precast concrete units and are based on the specific types of units indicated. Other

fabricators' precast concrete units complying with requirements may be considered.

## Part 2 – PRODUCTS

### 2.1 FORMS

- A. Conform to Article 8.11.03-3 and 9.21.03-3 of CTDOT Form 818, latest revision.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

### 2.2 REINFORCING MATERIALS:

- A. Reinforcing Bars and Tie Bars: ASTM A 615, Grade 60, deformed.
- B. Plain, Cold-Drawn Steel Wire: ASTM A 82.
- C. Steel Welded Wire Fabric: ASTM A 185.
- D. Joint Dowel Bars: Plain steel bars, ASTM A 615, Grade 60. Cut bars true to length with ends square and free of burrs.
- E. Supports for Reinforcement: Chairs, spacers, dowel bar supports and other devices for spacing, supporting, and fastening reinforcing bars, welded wire fabric, and dowels in place. Use wire bar-type supports complying with CRSI specifications.
  - 1. Use supports with sand plates or horizontal runners where base material will not support chair leg.
- F. Bending: All reinforcement shall be bent cold. Only competent mechanics shall be employed for cutting and bending, and proper appliances shall be provided for such work. The reinforcement shall be bent to the shapes shown on the plans. Bends for stirrups and ties shall be made around a pin having a diameter not less than two times the minimum thickness of the bar. Bends for other bars shall be made around a pin having a diameter not less than six times the minimum thickness of the bar, except that for bar larger than one inch the pin shall not be less than eight times the minimum thickness of the bar. Reinforcement shall be formed to the dimensions indicated on the plans before it is embedded in the concrete.
- G. Splices: All Splicing shall be as specified in American Concrete Institute (ACI) Building Code.
- H. Placing and Fastening: Placing and Fastening shall be as specified in ACI Standards. Before any concrete is placed, all mortar shall be cleaned from the reinforcement. No concrete shall be poured until the Engineer has inspected the placing of the reinforcing metal and permission to place concrete is granted. All concrete placed in violation of this provision shall be rejected and removed.

### 2.3 CONCRETE MATERIALS

- A. General: Use the same brand and type of cementitious material from the same manufacturer throughout the Project.

- B. Concrete: Conform to the requirements of Form 818-2020, Article M.03.01 and M.03.02 Class PCC-033-4-1 or as noted on the Plans and ASTM C-94. Batch mixing at project site IS not acceptable.
- C. Compressive strength: Min. 3,300 psi at 28 days unless otherwise noted on the Plans.
- D. Entrained air: 5 to 7%.
- E. Reactive aggregates and calcium chloride are not allowed.
- F. Water: Potable.

#### 2.4 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cement and to be compatible with other admixtures.
- B. Air-Entraining Admixture: ASTM C 260.
- C. Water-Reducing Admixture: ASTM C 494, Type A.
- D. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.

#### 2.5 CURING MATERIALS

- A. Conform to Article 4.01.03, Item F7 “Curing”, Form 818-2020.

#### 2.6 CONCRETE MIXING

- A. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94 and ASTM C 1116.
  - 1. When air temperature is between 85 deg F (30 deg C) and 90 deg F (32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

#### 2.7 CONCRETE MIX

- A. Prepare design mixes for each type and strength of normal-weight concrete by either laboratory trial batch or field experience methods as specified in ACI 301. For the trial batch method, use a qualified independent testing agency for preparing and reporting proposed mix designs.
- B. Proportion mixes to provide normal-weight concrete with the following properties:
  - 1. Compressive Strength (28-Day): Min. 3000 psi or as shown on Plans.
  - 2. Slump Limit at Point of Placement: 2 to 4 inches.
  - 3. Air Entrainment of Between 4-6%. Air entrainment agent shall conform to ASTM C260.
- C. Adjustment to Concrete Mixes: Mix design adjustments may be requested by

Contractor when characteristics of materials, project conditions, weather, test results, or other circumstances warrant.

## 2.8 EXPANSIONS JOINTS

- A. Premolded joint filler: ASTM D-994, premolded, resilient, non-extruding, joint filler, as distributed by A. H. Harris, New Britain, CT or approved equal.
  - 1. Expansion joint filler shall be preformed bituminous cellular type conforming to the requirements of ASHTO M213.
  - 2. Thickness: as indicated on the drawings.
  - 3. Depth: to match concrete section
- B. Joint Sealer (for non-colored concrete): Two component polyurethane elastomeric type complying with FS-TT-S-00227, self-leveling, designed for foot traffic, as manufactured by SIKA, Pecora, or approved equal.
  - 1. Color to match finished/cured concrete. Final color to be approved by Owner.
  - 2. Provide backer rod and primer per manufacturer recommendation.

## 2.9 RELATED MATERIALS

- A. Epoxy Adhesive: ASTM C 881, two-component material suitable for dry or damp surfaces. Provide material type, grade, and class to suit requirements.
- B. Products: Subject to compliance with requirements, provide one of the following:
  - 1. Epoxy Adhesive:
    - a. Burke Epoxy M.V.; The Burke Co.
    - b. Resi-Bond (J-58); Dayton Superior.
    - c. Euco Epoxy System #452 or #620; Euclid Chemical Co.
    - d. Concrevice Standard Liquid; Master Builders, Inc.
    - e. Rezi-Weld 1000; W.R. Meadows, Inc.
    - f. Sikadur 32 Hi-Mod; Sika Corp.
    - g. R-600 Series; Symons Corp.

## PART 3 – EXECUTION

### 3.1 SURFACE PREPARATION

- A. Proof-roll prepared sub base surface to check for unstable areas and verify need for additional compaction. Do not begin concrete work until such conditions have been corrected and are ready to receive concrete.
- B. Remove loose material from compacted sub base surface and excavations immediately before placing concrete. Comply with Section 312000 “Earth Moving” for construction of base and sub base material.

### 3.2 FORMS

- A. Set, brace, and secure forms, bulkheads, and intermediate screed guides to required

lines, grades, and elevations. Install forms to allow continuous progress of work and so that forms can remain in place at least 72 hours after concrete placement.

- B. Check completed formwork and screeds for grade and alignment to following tolerances:
  - 1. Top of Forms: Not more than 1/8 inch in 10 feet.
  - 2. Vertical Face on Longitudinal Axis: Not more than 1/4 inch in 10 feet.
- C. Clean forms after each use and coat with form release agent as required to ensure separation from concrete without damage.
- D. Form recess to receive brick facing masonry in exposed ramp wall as detailed in the Drawings.

### 3.3 PLACING REINFORCEMENT

- A. General: Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars" for placing and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

### 3.4 JOINTS

- A. General: Construct contraction, construction, and isolation joints true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to the centerline, unless indicated otherwise.
  - 1. When joining existing paving, place transverse joints to align with previously placed joints, unless indicated otherwise.
- B. Contraction Joints: Provide weakened-plane contraction joints, sectioning concrete into areas as shown on Drawings. Construct contraction joints for a depth equal to at least 1/4 of the concrete thickness, as follows:
  - 1. Tooled Joints: Form contraction joints in fresh concrete by grooving and finishing each edge of joint with a radiused jointer tool.
  - 2. Inserts: Form contraction joints by inserting pre-molded plastic, hardboard, or fiberboard strips into fresh concrete until top surface of strip is flush with paving surface. Radius each joint edge with a jointer tool. Carefully remove strips or caps of two-piece assemblies after concrete has hardened. Clean groove of loose debris.
- C. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than 2 hour, unless paving terminates at isolation joints.
  - 1. Provide preformed galvanized steel or plastic keyway-section forms or bulkhead

- forms with keys, unless indicated otherwise. Embed keys at least 1-1/2 inches into concrete.
2. Continue reinforcement across construction joints unless indicated otherwise. Do not continue reinforcement through sides of strip paving unless indicated.
  3. Provide tie bars at sides of paving strips where indicated.
  4. Use bonding agent on existing concrete surfaces that will be joined with fresh concrete.
- D. Isolation Joints: Form isolation joints of preformed joint filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.
1. Locate expansion joints at intervals of 20 feet, unless indicated otherwise.
  2. Extend joint fillers full width and depth of joint, not less than 2 inch or more than 1 inch below finished surface where joint sealant is indicated. Place top of joint filler flush with finished concrete surface when no joint sealant is required.
  3. Furnish joint fillers in one-piece lengths for full width being placed wherever possible. Where more than one length is required, lace or clip joint filler sections together.
  4. Protect top edge of joint filler during concrete placement with a metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- E. Installation of joint fillers and sealants shall conform applicable sections of Form 818.
- F. Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt-coat one half of dowel length to prevent concrete bonding to one side of joint.

### 3.5 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, reinforcing steel, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. Remove snow, ice, or frost from sub base surface and reinforcing before placing concrete. Do not place concrete on surfaces that are frozen.
- C. Moisten sub base to provide a uniform dampened condition at the time concrete is placed. Do not place concrete around manholes or other structures until they are at the required finish elevation and alignment.
- D. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
  1. When concrete placing is interrupted for more than 2 hour, place a construction joint.
- E. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- F. Consolidate concrete by mechanical vibrating equipment supplemented by hand-



spading, rodding, or tamping. Use equipment and procedures to consolidate concrete complying with ACI 309R.

1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand-spreading and consolidation. Consolidate with care to prevent dislocating reinforcing, dowels, and joint devices.
- G. Screed paved surfaces with a straightedge and strike off. Use bull floats or darbies to form a smooth surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces prior to beginning finishing operations.
- H. Place concrete in two operations; strike off initial pour for entire width of placement and to the required depth below finish surface. Lay welded wire fabric or fabricated bar mats immediately in final position. Place top layer of concrete, strike off, and screed.
  1. Remove and replace portions of bottom layer of concrete that have been placed more than 15 minutes without being covered by top layer or use bonding agent if acceptable to Engineer.
- I. Curbs and Gutters: Produce curbs and gutters to required cross section, lines, grades, finish, and jointing as specified for formed concrete.
- J. Cold-Weather Placement: Comply with provisions of ACI 306R and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
  1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
  2. Do not use frozen materials or materials containing ice or snow.
  3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise accepted in mix designs.
- K. Hot-Weather Placement: Place concrete complying with ACI 305R and as specified when hot weather conditions exist.
  1. Cool ingredients before mixing to maintain concrete temperature at time of placement to below 90 deg F. Mixing water may be chilled or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
  2. Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedding in concrete.
  3. Fog spray forms, reinforcing steel, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

### 3.6 CONCRETE FINISHING

- A. Float Finish: Begin floating when bleed water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven

floats, or by hand-floating if area is small or inaccessible to power units. Finish surfaces to true planes within a tolerance of ¼ inch in 10 feet as determined by a 10-foot-long straightedge placed anywhere on the surface in any direction. Cut down high spots and fill low spots. Refloat surface immediately to a uniform granular texture.

1. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across concrete sidewalk surface perpendicular to line of traffic to provide a uniform fine line texture finish.
- B. Final Tooling: Radius: 3/8 inch. Tool edges of paving, curbs, and joints formed in fresh concrete with a jointing tool to the following radius. Repeat tooling of edges and joints after applying surface finishes. Eliminate tool marks on concrete surfaces.
- C. Rubbed Finish: Conform to Form 818, Section 6.01.03-II-10(b).

### 3.7 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with the recommendations of ACI 306R for cold weather protection and ACI 305R for hot weather protection during curing.
- B. Evaporation Control: In hot, dry, and windy weather, protect concrete from rapid moisture loss before and during finishing operations with an evaporation-control material. Apply according to manufacturer's instructions after screeding and bull floating, but before floating.
- C. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- D. Curing Methods: Cure concrete by curing compound, as follows:
  1. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's directions. Recoat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.

### 3.8 FIELD QUALITY CONTROL TESTING

- A. Employ a qualified independent testing and inspection agency to sample materials, perform tests, and submit test reports during concrete placement as directed.
- B. The Contractor will employ a qualified testing and inspection agency to sample materials, perform tests, and submit test reports during concrete placement.
- C. Sampling and testing for quality control may include the following:
  1. Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.
    - a. Slump: ASTM C 143; one test at point of placement for each compressive-strength test but no less than one test for each day's pour of each type of concrete. Additional tests will be required when concrete consistency changes.
    - b. Air Content: ASTM C 231, pressure method; one test for each compressive-strength test but no less than one test for each day's pour of each type of air-

- entrained concrete.
- c. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F (4 deg C) and below and when 80 deg F (27 deg C) and above, and one test for each set of compressive-strength specimens.
  - d. Compression Test Specimens: ASTM C 31; one set of four standard cylinders for each compressive-strength test, unless directed otherwise. Mold and store cylinders for laboratory-cured test specimens except when field-cured test specimens are required.
  - e. Compressive-Strength Tests: ASTM C 39; one set for each day's pour of each concrete class exceeding 5 cu. yd. but less than 25 cu. yd., plus one set for each additional 50 cu. yd. Test one specimen at 7 days, test two specimens at 28 days, and retain one specimen in reserve for later testing if required.
2. When frequency of testing will provide fewer than five strength tests for a given class of concrete, conduct testing from at least five randomly selected batches or from each batch if fewer than five are used.
  3. When total quantity of a given class of concrete is less than 50 cu. yd., the Engineer may waive strength testing if adequate evidence of satisfactory strength is provided.
  4. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, evaluate current operations and provide corrective procedures for protecting and curing the in-place concrete.
  5. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive strength test results equal or exceed specified compressive strength and no individual strength test result falls below specified compressive strength by more than 500 psi.
- D. Test results will be reported in writing to the Engineer, Owner, concrete manufacturer and Contractor within 24 hours of testing. Reports of compressive strength tests shall contain the Project identification name and number, date of concrete placement, name of concrete testing agency, concrete type and class, location of concrete batch in paving, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7-day and 28-day tests.

### 3.9 REPAIRS AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective, or does not meet the requirements of this Section.
- B. Drill test cores where directed by the Engineer when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with Portland cement concrete bonded to paving with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep concrete paving not more than 2 days prior to date scheduled for Substantial Completion inspections.

3.10 PROTECTION/CLEAN-UP

- A. Protect work completed until acceptance of project. Replace or repair concrete if damaged prior to acceptance. As work proceeds, maintain premises free of unnecessary accumulation of tools, equipment, surplus materials and debris related to this work.

END OF SECTION 321313

SECTION 334100

STORM AND SANITARY UTILITY PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Form 818 shall mean the State of Connecticut, Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818-2020 or its latest edition and any supplemental specifications.

1.2 SUMMARY

- A. This Section includes gravity drainage and sanitary sewerage construction including piping, precast concrete catch basins, manholes and other related structures.
- B. Related Sections include the following:
  - 1. Section 31 20 00 – “Earth Moving”
  - 2. Section 32 13 13 – “Site Concrete” for cast-in-place concrete structures

1.3 SUBMITTALS

- A. Shop Drawings: Include plans, elevations, details, and attachments for the following:
  - 1. Storm Piping, fittings and other related items.
  - 2. Precast and Cast-in-place concrete manholes and other structures, including frames, covers, and grates.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Do not store plastic structures, pipe, and fittings in direct sunlight.
- B. Protect pipe, pipe fittings, and seals from dirt and damage.
- C. Handle precast concrete manholes and other structures according to manufacturer's written rigging instructions.

PART 2 - PRODUCTS

2.1 PIPING

- A. Polyethylene (PE) Pipe: Double-walled (corrugated exterior with smooth-lined interior) high-density polyethylene pipe, type N-12 as manufactured by Advanced Drainage Systems, Inc (ADS) or equal. Pipe coupler connections shall be watertight type "Pro-Link WT" by ADS.
- B. Polyvinyl Chloride (PVC) Pipe:
  - 1. Schedule 40 or 80 conforming to ASTM D2241 within building areas.
  - 2. SDR 35 conforming to ASTM D3034 for gravity sewer applications. All sanitary sewer piping shall have rubber gasket push-on type joints.
- C. Reinforced Concrete Pipe (RCP): All 12" and 15" RCP shall be Class V, conforming to ASTM C-76. All other RCP storm drain pipe shall be Class IV conforming to ASTM C-76, unless otherwise noted on the Plans.

2.2 MANHOLES

- A. Precast Concrete Manholes:
  - 1. Precast Units shall conform to Form 818, Article M.08.02, 4- Precast Units for Drainage Structures and ASTM C 478, precast, reinforced concrete, of depth indicated, with provision for rubber gasketed joints.
  - 2. Diameter: 48 inches minimum, unless otherwise indicated.
  - 3. Ballast: Increase thickness of precast concrete sections or add concrete to base section, as required to prevent flotation.
  - 4. Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and having separate base slab or base section with integral floor.
  - 5. Riser Sections: 4-inch minimum thickness, and lengths to provide depth indicated.
  - 6. Top Section: Eccentric-cone type, unless concentric-cone or flat-slab-top type is indicated. Top of cone of size that matches grade rings.
  - 7. Gaskets: ASTM C 443, rubber.
  - 8. Grade Rings: Include two or three reinforced-concrete rings, of 6- to 9-inch total thickness, that match 24-inch diameter frame and cover.

B. Manhole Frames and Covers:

1. Frames and Grates shall conform to 818, Article M.08.02, 5- Metal for Drainage Structures.
2. Storm Drains: ASTM A 536, Grade 60-40-18, ductile-iron castings designed for heavy-duty service. Include 24-inch ID by 7 to 9-inch riser with 4-inch minimum width flange, and 26-inch diameter cover. Include indented top design with lettering "STORM DRAIN" cast into cover.
3. Sanitary Sewers: Conform to City or Town standards.

C. Manhole Steps:

1. Steps shall be fiberglass, individual steps or ladder. Include width that allows worker to place both feet on one step and is designed to prevent lateral slippage off step. Cast or anchor into base, riser, and top section sidewalls with steps at 12- to 16-inch intervals. Omit steps for manholes less than 60 inches deep.

## 2.3 CATCH BASINS

A. Precast Concrete Catch Basins:

1. Precast Units shall conform to Form 818, Article M.08.02, 4- Precast Units for Drainage Structures and ASTM C 478, precast, reinforced concrete, of depth indicated, with provision for rubber gasketed joints.
2. Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and having separate base slab or base section with integral floor.

B. Masonry Catch Basins:

1. Masonry Units shall conform to Form 818, Article M.08.02, 1- Brick or 2- Concrete Building Brick or 3- Masonry Concrete Units for Catch Basins, Manholes or Drop Inlets.
2. Mortar shall conform to Form 818, Article M.11.04.

C. Catch Basin Frames and Grates:

1. Frames and Grates shall conform to 818, Article M.08.02, 5- Metal for Drainage Structures.

## 2.4 CONCRETE FOR CAST-IN-PLACE STRUCTURES

- A. General: Cast-in-place concrete according to ACI 318, ACI 350R, and the following:
  - 1. Cement: ASTM C 150, Type II.
  - 2. Fine Aggregate: ASTM C 33, sand.
  - 3. Coarse Aggregate: ASTM C 33, crushed gravel.
  - 4. Water: Potable.
- B. Portland Cement Design Mix: 4000 psi (27.6 MPa) minimum, with 0.45 maximum water-cementitious ratio.
  - 1. Reinforcement Fabric: ASTM A 185, steel, welded wire fabric, plain.
  - 2. Reinforcement Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed steel.
- C. Ballast and Pipe Supports: Portland cement design mix, 3000 psi (20.7 MPa) minimum, with 0.58 maximum water-cementitious ratio.
  - 1. Reinforcement Fabric: ASTM A 185, steel, welded wire fabric, plain.
  - 2. Reinforcement Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed steel.

## PART 3 - EXECUTION

### 3.1 TRENCHING

- A. Excavating, trenching, bedding material and backfilling are specified in Section 31 20 00 "Earth Moving."

### 3.2 INSTALLATION, GENERAL

- A. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground storm drainage piping. Location and arrangement of piping layout take design considerations into account. Install piping as indicated, to extent practical.
- B. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions



for use of lubricants, cements, and other installation requirements. Maintain swab or drag in line, and pull past each joint as it is completed.

- C. Use manholes for changes in direction, unless fittings are indicated. Use fittings for branch connections, unless direct tap into existing sewer is indicated.
- D. Use proper size increasers, reducers, and couplings where different sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.
- E. Install gravity-flow piping and connect to existing drains and structures, of sizes and in locations indicated. Terminate piping as indicated.
  - 1. Install piping pitched down in direction of flow, at minimum slope of 1/2 of 1 percent, unless otherwise indicated.
  - 2. Install piping with 24-inch minimum cover.
- F. Join piping made of different materials or dimensions with couplings made for this application. Use couplings that are compatible with and that fit both systems' materials and dimensions.

### 3.3 MANHOLE INSTALLATION

- A. General: Install manholes, complete with appurtenances and accessories indicated.
- B. Set tops of frames and covers flush with finished surface of manholes that occur in pavements. Set tops 1 inch above finished surface elsewhere, unless otherwise indicated.
- C. Construct cast-in-place manholes as indicated.

### 3.4 CATCH-BASIN INSTALLATION

- A. Construct catch basins to sizes and shapes indicated.
- B. Set frames and grates to elevations indicated.

### 3.5 CLOSING ABANDONED STORM DRAINAGE SYSTEMS

- A. Abandoned Piping: Close open ends of abandoned underground piping indicated to remain in place. Include closures strong enough to withstand hydrostatic and earth pressures that may result after ends of abandoned piping have been closed. Use either procedure below:

1. Close open ends of concrete piping with at least 8-inch thick, brick masonry bulkheads.
  2. Close open ends of other piping with threaded metal caps, plastic plugs, or other acceptable methods suitable for size and type of material being closed. Do not use wood plugs.
- B. Existing Structures to be Abandoned: Excavate around structure as required and use one of the procedures below:
1. Remove structure and close open ends of remaining piping with 8" brick and mortar.
  2. Remove top of structure down to at least 36 inches below final grade. Fill to within 12 inches of top with stone, rubble, gravel, or compacted dirt. Fill to top with concrete.
  3. Backfill to grade according to Section 31 20 00 "Earth Moving."

### 3.6 FIELD QUALITY CONTROL

- A. Clear interior of piping and structures of dirt and superfluous material as work progresses. Maintain swab or drag in piping, and pull past each joint as it is completed.
1. In large, accessible piping, brushes and brooms may be used for cleaning.
  2. Place plug in end of incomplete piping at end of day and when work stops.
  3. Flush piping between manholes and other structures to remove collected debris, if required by authorities having jurisdiction.
- B. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.

END OF SECTION 334100

## Appendix #1

Geotechnical Engineering Report

Down to Earth Consulting LLC



September 18, 2023

Mr. Brian Sear, Director of Public Works  
City of New London  
City Hall / 181 State Street  
New London, CT 06320

Via email: [BSear@newlondonct.org](mailto:BSear@newlondonct.org)

**Re: In-Situ Environmental Soil Testing  
City of New London DPW  
Governor Winthrop Boulevard Improvements  
New London, Connecticut**

Dear Brian:

Down To Earth, LLC (DTE) completed in-situ environmental testing of soils in support of the above-referenced public works project. The work was performed to obtain environmental data to pre-characterize earth materials to be handled as part of the construction of a sanitary sewer line and to verify that soils excavated during construction will not require special handling or disposal in accordance with environmental regulations.

The sanitary sewer alignment was specified on a plan developed and provided by Cabezas-DeAngelis of Bridgeport, Connecticut.

## **SITE DESCRIPTION**

The subject area is an approximately 280-ft section of Governor Winthrop Boulevard located between cross streets Huntington Street to the west and Meridian Street to the east. A landscaped median is located in the middle of the roadway in the area of the work. The Site is in a primarily commercial area of New London, Connecticut. A Locus Plan is provided as Figure 1. A Site Plan with Cabezas-DeAngelis' proposed sewer alignment is provided as Figure 2.

Groundwater at the subject area and vicinity is mapped by the Connecticut Department of Energy and Environmental Protection (CTDEEP) as Class GB. Class GB groundwater is defined as being located within a historically highly urbanized area or an area of intense industrial activity and where public water supply service is available. Such groundwater may not be suitable for human consumption without treatment due to waste discharges, spills or leaks of chemicals or land use impacts.<sup>1</sup>

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<sup>1</sup> State of Connecticut Department of Energy and Environmental Protection, "Water Quality Standards", Effective February 25, 2011 and April 12, 1996, Revised November 21, 2015.



Based on regional topography and drainage, DTE infers that groundwater flow is in an easterly direction towards the Thames River.

## **SOIL SAMPLING**

On August 30, 2023, four soil borings were completed along the proposed sewer alignment (see Figure 2). Boring B-3 was moved approximately 1.5-feet to the south within the landscaped median due to the potential presence of underground electrical lines.

The borings were completed by Complete Environmental Services, LLC (CES) of Bethany, Connecticut using a track-mounted Geoprobe® 7822DT drill rig and the direct-push drilling method. Soil samples were collected using a 2.25-inch stainless-steel macrocore sampler. The four borings were designated B-1 through B-4, and the boring locations are shown on Figure 2.

The borings were advanced to a depth of 10 feet below grade (fbg), except for B-4 where refusal was encountered at 8 fbg. Subsurface conditions in each boring are summarized on the boring logs included in Appendix 1. No evidence of contaminated fill material was observed in the samples collected (no odors, sheens, staining, etc.). The subsurface soils consisted of sand with variable percentages of gravel and silt. Groundwater was not encountered in the borings, although soils appeared moist towards the end of exploration depth (10 fbg). Obtaining stabilized groundwater readings was not in the scope of the project.

Soils were screened in the field by DTE for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID). VOCs were not detected from the field PID screening.

## **LABORATORY TESTING**

Soil analyses were conducted by Phoenix Environmental Laboratories, Inc. of Manchester, Connecticut (Phoenix). Phoenix is a state certified laboratory and was requested to report all data in conformance with the Reasonable Confidence Protocol (RCP) Guidance published by the CTDEEP.<sup>2</sup>

The laboratory results were compared to the risk-based remedial standards specified in the state's Remediation Standard Regulations (RCSA Section 22a-133(k)). Soil results were compared to the residential direct exposure criteria (R-DEC), industrial commercial direct exposure criteria (I/C-DEC), and GB groundwater pollutant mobility criteria (GB-PMC).

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<sup>2</sup> State of Connecticut Department of Energy and Environmental Protection, "Laboratory Quality Assurance and Quality Control, Data Quality Assessment and Data Usability Evaluation Guidance Document", May 2009.



### Soil Sampling and Analytical Results

A discrete soil sample was collected from each boring for analysis of VOCs, in accordance with CTDEEP guidance.<sup>3</sup> The VOC samples were collected from shallower soils (between 2 and 3 fbg) in B-2 and B-3 and at deeper depths (7.5-8 fbg) in B-1 and B-4. A trip blank was submitted for analysis of VOCs for quality assurance/quality control purposes.

Composite soil samples were then prepared from each boring by mixing the vertical profile of the collected soil samples in a bowl from approximately 0.5 to 2 fbg to the total depth of the boring (8 to 10 fbg). The composited soil samples were then placed in laboratory containers and submitted for analysis of: polynuclear aromatic hydrocarbons (PAHs), extractable total petroleum hydrocarbons (ETPH), polychlorinated biphenyls, and total RCRA-8 metals.<sup>4</sup>

The results of laboratory analysis are summarized on Tables 1 and 2 with comparison to the R-DEC, I/C-DEC and GB-PMC remedial standards. The results can be summarized as follows:

- Tetrachloroethene was detected in sample B-3 @ 2.5-3' at a concentration of 7.8 µg/Kg. This concentration was well below applicable remedial criteria. No other VOCs were detected in the four discrete soil samples or trip blank.
- No PAHs, ETPH, or PCB compounds were detected in the four composite soil samples.
- Arsenic, barium, cadmium, chromium, and lead were detected in two to four of the composite soil samples (see Table 2). None of the detections exceeded the applicable remedial criteria. Mercury, selenium, and silver were not detected.

The concentrations of total metals in the soil samples were consistent with background concentrations reported in the northeastern portion of the country by the United States Geological Society.<sup>5</sup>

### SUMMARY & CONCLUSIONS

Down To Earth oversaw the completion of four soil borings to a maximum depth of 10 fbg along the alignment of the proposed sewer upgrade. Our objective was to assess if the soils were contaminated to the extent that the means, methods, and cost of construction might be affected.

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<sup>3</sup> State of Connecticut Department of Energy and Environmental Protection, "Guidance for Collecting and Preserving Soil and Sediment Samples for Laboratory Determination of Volatile Organic Compounds", Ver. 2, February 28, 2006.

<sup>4</sup> Arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.

<sup>5</sup> Hansford T. Shacklette and Josephine G. Boerngen, 1984, "Element Concentrations in Soils and other Surficial Materials of the Conterminous United States", U.S. Geological Survey Professional Paper 1270.



**In-Situ Environmental Soil Testing  
Gov. Winthrop Blvd Improvements  
New London, Connecticut  
September 18, 2023 – Page No. 4**

Down To Earth did not observe evidence of contamination in the soil samples collected from the four borings. Four soil samples were analyzed for volatile organic compounds, polynuclear aromatic hydrocarbons, extractable total petroleum hydrocarbons, polychlorinated biphenyls (PCBs), and certain metal elements. There were no exceedances of risk-based remediation standards in the four soil samples analyzed. The results of soil analyses for common environmental contaminants were non-detected or well below state risk-based standards.

Based on our findings, excess soils generated during relocation of the sewer line should not require special handling or disposal.

Please contact the undersigned if you have any questions.

Sincerely,

**DOWN TO EARTH, LLC.**

*Michelle Rajpolt*

Michelle Rajpolt  
Environmental Scientist

*Timothy Carr*  
Timothy Carr, LEP  
Principal

Cc: Thomas Quintin, City of New London DPW  
Christopher DeAngelis, PE - Cabeza-DeAngelis

Figures

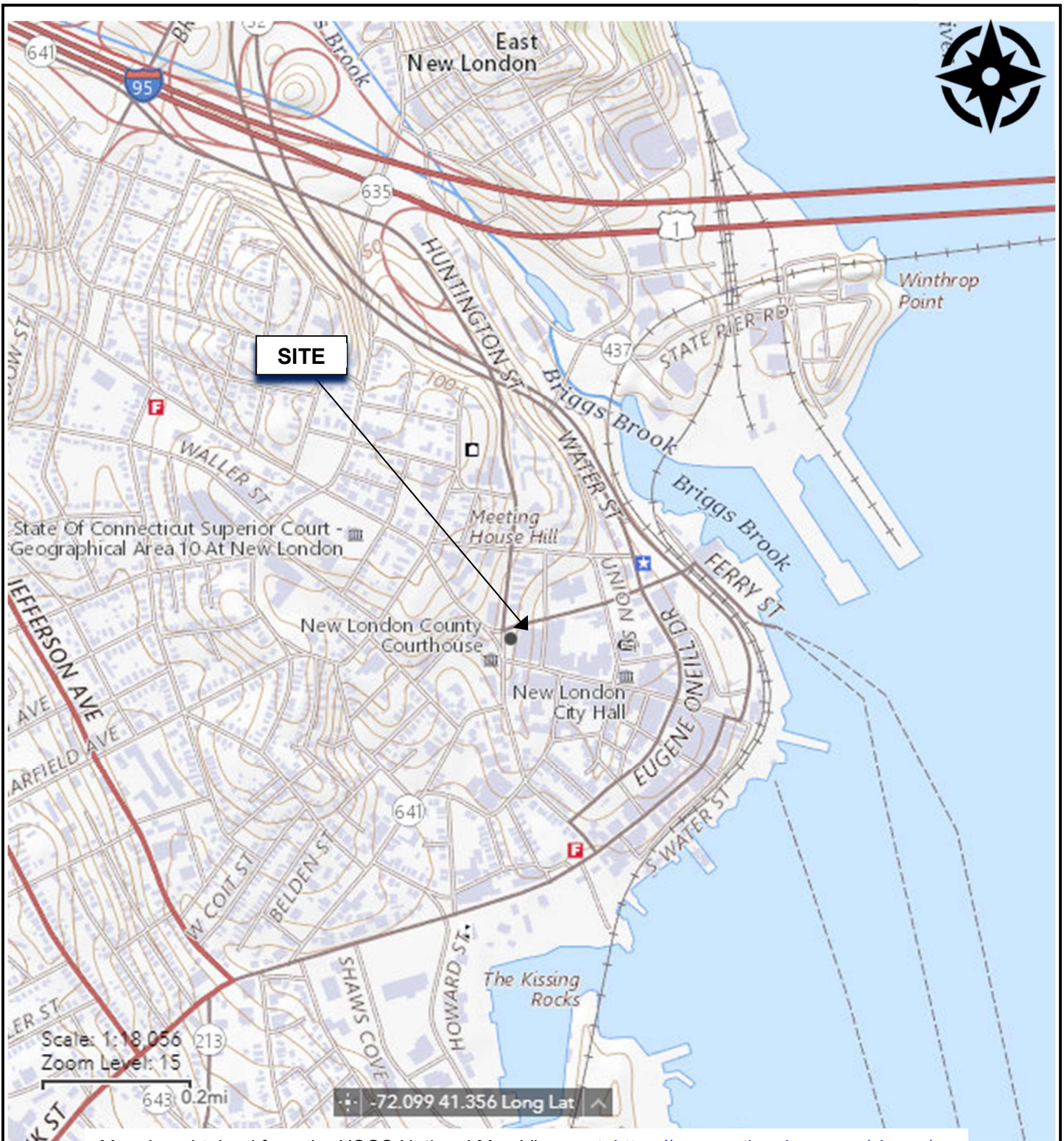
Tables

Appendix 1 Boring Logs

Appendix 2 Laboratory Report

## FIGURES





Mapping obtained from the USGS National Map Viewer at: <https://apps.nationalmap.gov/viewer/>



**DOWN TO EARTH CONSULTING, LLC**  
GEO TECHNICAL AND ENVIRONMENTAL ENGINEERING

**122 Church Street  
 Naugatuck, CT**

**AREA PLAN  
 CITY OF NEW LONDON DPW  
 GOVERNOR WINTHROP BOULEVARD IMPROVEMENTS  
 NEW LONDON, CONNECTICUT**

**Scale:** As Shown

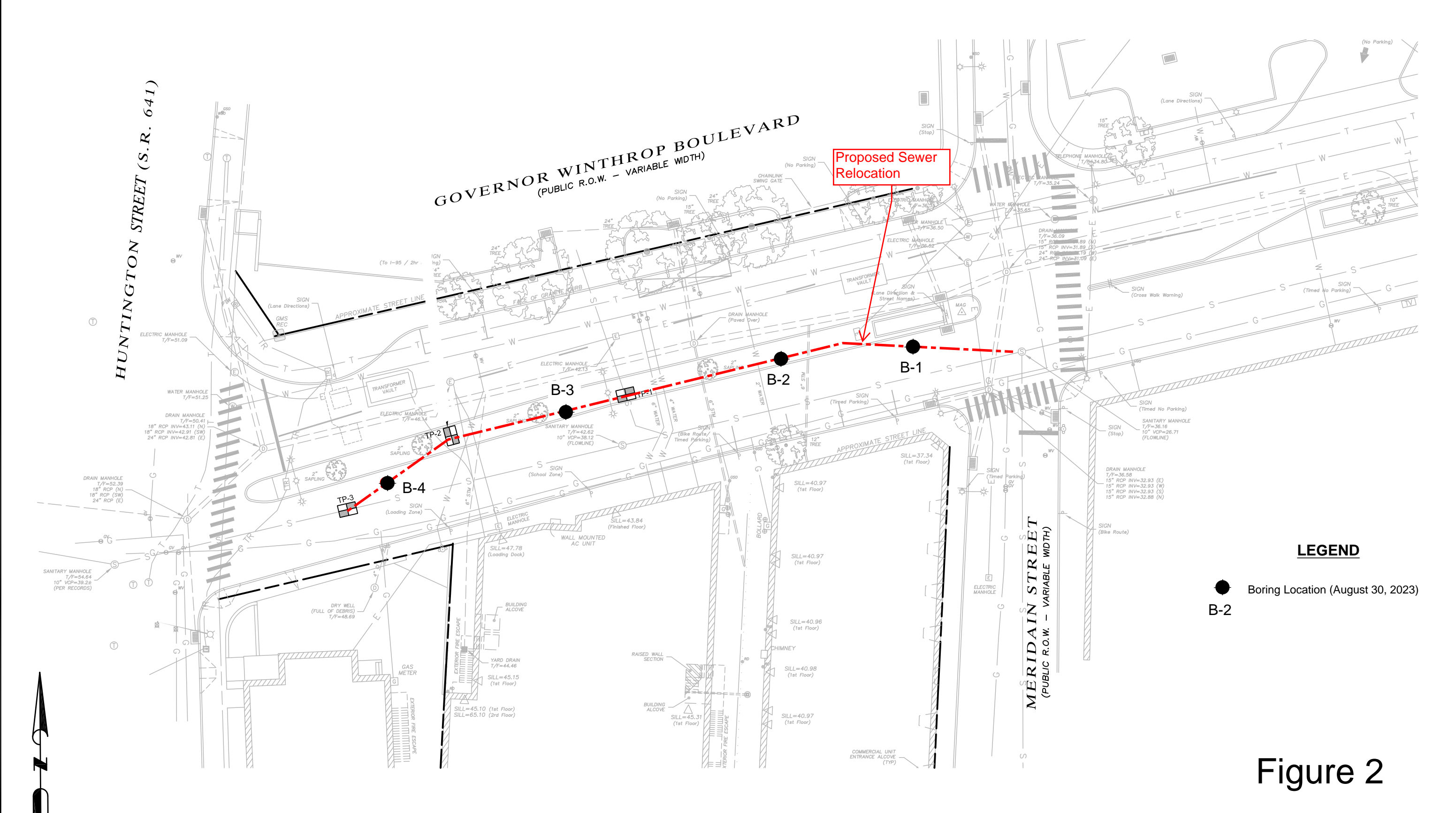
**Figure No.** 1

**Drawn By:** MSR

**Checked By:** TFC

**Date:** September 2023





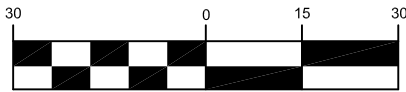
Proposed Sewer Relocation

**LEGEND**

● Boring Location (August 30, 2023)  
 B-2

Figure 2

- Notes**
1. The base map and location of proposed sewer relocation was provided by Cabeza-DeAngelis of Bridgeport, Connecticut.
  2. Boring locations are approximate and based on line of sight from existing features.



78 ELM STREET, BRIDGEPORT, CT 06604  
 P:203 330 8700 • F:203 330 8701

**SITE PLAN**

CITY OF NEW LONDON D.P.W.  
 GOV. WINTHROP BLVD. IMPROVEMENTS  
 NEW LONDON, CONNECTICUT

SEPT 2023



## TABLES

**TABLE 1**  
**VOLATILE ORGANIC COMPOUNDS IN SOIL**  
**IN-SITU ENVIRONMENTAL TESTING OF SOILS**  
**GOVERNOR WINTHROP BOULEVARD IMPROVEMENTS**  
**NEW LONDON, CONNECTICUT**

Analyte	Units	Remedial Criteria			Sample Designation and Depth				QA/QC	
		I/C-DEC	R-DEC	GB-PMC	B1 @ 7.5-8'	B2 @ 2-2.5'	B3 @ 2.5-3'	B4 @ 7.5-8'	TRIP BLANK LL	TRIP BLANK HL
<b>Volatile Organic Compounds (VOCs)</b>										
1,1,1,2-Tetrachloroethane	µg/Kg	220,000	24,000	200	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,1,1-Trichloroethane	µg/Kg	1,000,000	500,000	40,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,1,2-Trichloroethane	µg/Kg	100,000	11,000	1,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,1-Dichloroethane	µg/Kg	1,000,000	500,000	14,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,1-Dichloroethene	µg/Kg	9,500	1,000	1,400	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,1-Dichloropropene	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,2-Dibromo-3-chloropropane	µg/Kg	820	90	40	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,2-Dibromoethane	µg/Kg	67	7	100	< 0.68	< 0.42	< 0.43	< 0.55	< 0.50	< 250
1,2-Dichlorobenzene	µg/Kg	1,000,000	500,000	3,100	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,2-Dichloroethane	µg/Kg	63,000	6,700	200	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,3,5-Trimethylbenzene	µg/Kg	1,000,000	500,000	28,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,3-Dichlorobenzene	µg/Kg	1,000,000	500,000	120,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,3-Dichloropropane	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,4-Dichlorobenzene	µg/Kg	240,000	26,000	15,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
2,2-Dichloropropane	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
2-Chlorotoluene	µg/Kg	1,000,000	500,000	28,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
2-Hexanone	µg/Kg	1,000,000	340,000	7,000	< 34	< 21	< 22	< 27	< 25	< 1300
2-Isopropyltoluene	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
4-Chlorotoluene	µg/Kg	1,000,000	500,000	28,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
4-Methyl-2-pentanone	µg/Kg	1,000,000	500,000	14,000	< 34	< 21	< 22	< 27	< 25	< 1300
Acetone	µg/Kg	1,000,000	500,000	140,000	< 340	< 210	< 220	< 270	< 250	< 5000
Acrylonitrile	µg/Kg	11,000	1,100	100	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 500
Benzene	µg/Kg	200,000	21,000	200	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Bromobenzene	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Bromochloromethane	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Bromodichloromethane	µg/Kg	170,000	18,000	210	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Bromoform	µg/Kg	720,000	78,000	800	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Bromomethane	µg/Kg	1,000,000	34,000	700	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Carbon Disulfide	µg/Kg	1,000,000	500,000	8,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Carbon tetrachloride	µg/Kg	44,000	4,700	1,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Chlorobenzene	µg/Kg	1,000,000	500,000	20,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Chloroethane	µg/Kg	1,000,000	130,000	1,500	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Chloroform	µg/Kg	940,000	100,000	1,200	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Chloromethane	µg/Kg	1,000,000	180,000	3,600	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
cis-1,2-Dichloroethene	µg/Kg	1,000,000	500,000	14,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
cis-1,3-Dichloropropene	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Dibromochloromethane	µg/Kg	68,000	7,300	100	< 4.1	< 2.5	< 2.6	< 3.3	< 3.0	< 250
Dibromomethane	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Dichlorodifluoromethane	µg/Kg	1,000,000	500,000	70,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Ethylbenzene	µg/Kg	1,000,000	500,000	10,100	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Hexachlorobutadiene	µg/Kg	1,200,000	130,000	1,500	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Isopropylbenzene	µg/Kg	1,000,000	500,000	5,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
m&p-Xylene	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Methyl Ethyl Ketone	µg/Kg	1,000,000	500,000	80,000	< 41	< 25	< 26	< 33	< 30	< 3000
Methyl t-butyl ether (MTBE)	µg/Kg	1,000,000	500,000	20,000	< 14	< 8.3	< 8.7	< 11	< 10	< 250
Methylene chloride	µg/Kg	760,000	82,000	1,000	< 14	< 8.3	< 8.7	< 11	< 10	< 500
n-Butylbenzene	µg/Kg	1,000,000	500,000	70,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Toluene	µg/Kg	1,000,000	500,000	67,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Total Xylenes	µg/Kg	1,000,000	500,000	19,500	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
trans-1,3-Dichloropropene	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
trans-1,4-dichloro-2-butene	µg/Kg	NE	NE	NE	< 14	< 8.3	< 8.7	< 11	< 10	< 500
Trichloroethene	µg/Kg	520,000	56,000	1,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250

Analyte	Units	Remedial Criteria			Sample Designation and Depth				QA/QC	
		I/C-DEC	R-DEC	GB-PMC	B1 @ 7.5-8'	B2 @ 2-2.5'	B3 @ 2.5-3'	B4 @ 7.5-8'	TRIP BLANK LL	TRIP BLANK HL
Trichlorofluoromethane	µg/Kg	1,000,000	500,000	200,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Trichlorotrifluoroethane	µg/Kg	1,000,000	500,000	200,000	< 14	< 8.3	< 8.7	< 11	< 10	< 250
Vinyl chloride	µg/Kg	3,000	320	400	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,1,2,2-Tetrachloroethane	µg/Kg	29,000	3,100	100	< 4.1	< 2.5	< 2.6	< 3.3	< 3.0	< 250
1,2,3-Trichlorobenzene	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,2,3-Trichloropropane	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,2,4-Trichlorobenzene	µg/Kg	200,000	21,000	14,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,2,4-Trimethylbenzene	µg/Kg	1,000,000	500,000	28,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
1,2-Dichloropropane	µg/Kg	84,000	9,000	1,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Naphthalene	µg/Kg	2,500,000	1,000,000	56,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
n-Propylbenzene	µg/Kg	1,000,000	500,000	10,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
o-Xylene	µg/Kg	NE	NE	NE	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
p-Isopropyltoluene	µg/Kg	1,000,000	500,000	5,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
sec-Butylbenzene	µg/Kg	1,000,000	500,000	70,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Styrene	µg/Kg	1,000,000	500,000	20,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
tert-Butylbenzene	µg/Kg	1,000,000	500,000	70,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250
Tetrachloroethene	µg/Kg	110,000	12,000	1,000	< 6.8	< 4.2	7.8	< 5.5	< 5.0	< 250
Tetrahydrofuran (THF)	µg/Kg	570,000	61,000	800	< 14	< 8.3	< 8.7	< 11	< 10	< 500
trans-1,2-Dichloroethene	µg/Kg	1,000,000	500,000	20,000	< 6.8	< 4.2	< 4.3	< 5.5	< 5.0	< 250

**LEGEND:**

Result Detected   
Result Exceeds Criteria   
NE: None Established

I/C-DEC: Industrial/Commercial Direct Exposure Criteria  
R-DEC: Residential Direct Exposure Criteria  
GB-PMC: Class GB Groundwater Pollutant Mobility Criteria

**NOTES:**

1. The samples were collected by Down To Earth on August 30, 2023, and analyzed by Phoenix Environmental Laboratories of Manchester, CT.
2. VOC samples were discrete and preserved in accordance with CTDEEP guidance.
3. The Remedial Standards were obtained from regulations for Connecticut Agencies section 22a133k-2. Additional Polluting Substance Criteria were used, if published by the CTDEEP.

**TABLE 2**  
**MISCELLANEOUS PARAMETERS IN SOIL**  
**IN-SITU ENVIRONMENTAL TESTING OF SOILS**  
**GOVERNOR WINTHROP BOULEVARD IMPROVEMENTS**  
**NEW LONDON, CONNECTICUT**

Analyte	Units	Remedial Criteria			Sample Designation, Depth, and Result			
		I/C-DEC	R-DEC	GB-PMC	B1 @ 1-10'	B2 @ 2-10'	B3 @ 1-10'	B4 @ 0.5-8'
<b>Polynuclear Aromatic Hydrocarbons (PAHs)</b>								
2-Methylnaphthalene	µg/Kg	1,000,000	270,000	5,600	< 250	< 300	< 340	< 250
Acenaphthene	µg/Kg	2,500,000	1,000,000	84,000	< 250	< 300	< 340	< 250
Acenaphthylene	µg/Kg	2,500,000	1,000,000	84,000	< 250	< 300	< 340	< 250
Anthracene	µg/Kg	2,500,000	1,000,000	400,000	< 250	< 300	< 340	< 250
Benz(a)anthracene	µg/Kg	7,800	1,000	1,000	< 250	< 300	< 340	< 250
Benzo(a)pyrene	µg/Kg	1,000	1,000	1,000	< 250	< 300	< 340	< 250
Benzo(b)fluoranthene	µg/Kg	7,800	1,000	1,000	< 250	< 300	< 340	< 250
Benzo(ghi)perylene	µg/Kg	78,000	8,400	1,000	< 250	< 300	< 340	< 250
Benzo(k)fluoranthene	µg/Kg	78,000	8,400	1,000	< 250	< 300	< 340	< 250
Chrysene	µg/Kg	780,000	84,000	1,000	< 250	< 300	< 340	< 250
Dibenz(a,h)anthracene	µg/Kg	1,000	1,000	1,000	< 250	< 300	< 340	< 250
Fluoranthene	µg/Kg	2,500,000	1,000,000	56,000	< 250	< 300	< 340	< 250
Fluorene	µg/Kg	2,500,000	1,000,000	56,000	< 250	< 300	< 340	< 250
Indeno(1,2,3-cd)pyrene	µg/Kg	7,800	1,000	1,000	< 250	< 300	< 340	< 250
Naphthalene	µg/Kg	2,500,000	1,000,000	56,000	< 250	< 300	< 340	< 250
Phenanthrene	µg/Kg	2,500,000	1,000,000	40,000	< 250	< 300	< 340	< 250
Pyrene	µg/Kg	2,500,000	1,000,000	40,000	< 250	< 300	< 340	< 250
<b>Extractable Total Petroleum Hydrocarbons (ETPH)</b>								
ETPH (C9-C36)	mg/Kg	2,500	500	2,500	< 54	< 64	< 71	< 52
<b>Polychlorinated Biphenyls (PCBs)</b>								
PCB-1016	µg/Kg	NE	NE	NE	< 360	< 420	< 470	< 350
PCB-1221	µg/Kg	NE	NE	NE	< 360	< 420	< 470	< 350
PCB-1232	µg/Kg	NE	NE	NE	< 360	< 420	< 470	< 350
PCB-1242	µg/Kg	NE	NE	NE	< 360	< 420	< 470	< 350
PCB-1248	µg/Kg	NE	NE	NE	< 360	< 420	< 470	< 350
PCB-1254	µg/Kg	NE	NE	NE	< 360	< 420	< 470	< 350
PCB-1260	µg/Kg	NE	NE	NE	< 360	< 420	< 470	< 350
PCB-1262	µg/Kg	NE	NE	NE	< 360	< 420	< 470	< 350
PCB-1268	µg/Kg	NE	NE	NE	< 360	< 420	< 470	< 350
Total PCBs	µg/Kg	10,000	1,000	NE	ND	ND	ND	ND
<b>Metals, Total</b>								
Arsenic	mg/Kg	10	10	NE	1.67	2.6	2.18	< 0.72
Barium	mg/Kg	140,000	4,700	NE	29.7	24.6	46.8	32.3
Cadmium	mg/Kg	1,000	34	NE	< 0.39	0.48	0.63	< 0.36
Chromium	mg/Kg	NE	NE	NE	6.99	8.88	13.4	4.6
Lead	mg/Kg	1,000	400	NE	6.93	4.83	5.17	2.84
Mercury	mg/Kg	610	20	NE	< 0.03	< 0.03	< 0.04	< 0.03
Selenium	mg/Kg	10,000	340	NE	< 1.6	< 1.6	< 1.7	< 1.4
Silver	mg/Kg	10,000	340	NE	< 0.39	< 0.41	< 0.43	< 0.36

**LEGEND:**

Result Detected   
Result Exceeds Criteria

NE: None Established  
ND: Not Detected

I/C-DEC: Industrial/Commercial Direct Exposure Criteria  
R-DEC: Residential Direct Exposure Criteria  
GB-PMC: Class GB Groundwater Pollutant Mobility Criteria

**NOTES:**

- The samples were collected by Down To Earth on August 30, 2023, and analyzed by Phoenix Environmental Laboratories of Manchester, CT.
- The Remedial Standards were obtained from regulations for Connecticut Agencies section 22a133k-2. Additional Polluting Substance Criteria were used, if published by the CTDEEP.

**APPENDIX 1  
BORING LOGS**



**DOWN TO EARTH CONSULTING, LLC**  
 GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING  
 Down To Earth, LLC  
 122 Church Street  
 Naugatuck, Connecticut 06770

**Project Name & Location**

**In-Situ Environmental Testing**

Governor Winthrop Boulevard Improvements  
 New London, Connecticut

Probe No. **B-1**

Page No.: 1 of 1

Checked By: TFC

**Sampler(s):** MSR

**Date Start:** 8/30/2023

**Start Time:** 8:35 AM

**Date End:** 8/30/2023

**End Time:** 8:55 AM

**Driller:** Complete Environmental Services (CES)

Sampler:

Liner:

Type: Geoprobe 7822 DT

I.D.: 1.5"

O.D.: 2.25"

Other:

Name of Driller: Dave Robeau

**Groundwater Readings**

**Date/Time**

**Depth**

**Stab. Time**

N/A

**D  
e  
p  
t  
h**

**Sample Information**

**Sample**

**Stratum**

**R  
M  
K  
S**

**Equipment Installed**

**Sample No.**

**Pen./ Rec.**

**Depth (ft)**

**Field Screening**

**Description & Classification**

**Description**

**None**

1

S1

60/40

0-5

ND

Asphalt and Subbase

Asphalt

1

2

3

4

5

6

S2

60/38

5-10

ND

Brown to black fine to medium SAND, trace Silt

Brown fine to coarse SAND, trace Silt (moist 8.5-10 fbg)

Sand

2

7

8

9

10

11

12

End of Exploration (10 fbg)

**R  
e  
m  
a  
r  
k  
s**

- Field screening for volatile organic compounds performed in the field using a MiniRae 3000 photoionization detector (PID). Results are in ppm (parts per million), relative to 100 ppm isobutylene calibration standard. ND = Not Detected
- Discrete VOC sample collected @ 7.5-8 fbg. Composite sample collected for laboratory analyses (PAHs, ETPH, PCBs, RCRA-8 metals) @ 1-10 fbg.

**Notes:** 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.





**DOWN TO EARTH CONSULTING, LLC**  
 GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING  
 Down To Earth, LLC  
 122 Church Street  
 Naugatuck, Connecticut 06770

**Project Name & Location**

**In-Situ Environmental Testing**

Governor Winthrop Boulevard Improvements  
 New London, Connecticut

Probe No. **B-2**

Page No.: 1 of 1

Checked By: TFC

**Sampler(s):** MSR

**Date Start:** 8/30/2023

**Start Time:** 8:55 AM

**Date End:** 8/30/2023

**End Time:** 9:17 AM

**Driller:** Complete Environmental Services (CES)

Sampler:

Liner:

Type: Geoprobe 7822 DT

I.D.: 1.5"

O.D.: 2.25"

Other:

Name of Driller: Dave Robeau

**Groundwater Readings**

**Date/Time**

**Depth**

**Stab. Time**

8/30/2023 9:05

9.2 (Dry)

0

Depth	Sample Information				Sample	Stratum	R M K S	Equipment Installed	
	Sample No.	Pen./ Rec.	Depth (ft)	Field Screening	Description & Classification	Description		None	
1	S1	60/30	0-5	ND	Dark brown fine to medium SAND, trace Organics (roots, woodchips)	Topsoil, Sand	1, 2	None	
2									
3					Light brown fine SAND, little fine to coarse Sand, trace Silt	Sand	3		
4									
5									
6	S2	60/38	5-10	ND					
7					Light brown fine to coarse SAND, trace Silt				
8									
9									
10									
11					End of Exploration (10 fbg)				
12									

**Remarks:**

- Boring completed on landscaped roadway median.
- Field screening for volatile organic compounds performed in the field using a MiniRae 3000 photoionization detector (PID). Results are in ppm (parts per million), relative to 100 ppm isobutylene calibration standard. ND = Not Detected
- Discrete VOC sample collected @ 2-2.5 fbg. Composite sample collected for laboratory analyses (PAHs, ETPH, PCBs, RCRA-8 metals) @ 2-10 fbg.

**Notes:**

- STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.



**DOWN TO EARTH CONSULTING, LLC**  
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING  
 Down To Earth, LLC  
 122 Church Street  
 Naugatuck, Connecticut 06770

**Project Name & Location**

**In-Situ Environmental Testing**

Governor Winthrop Boulevard Improvements  
 New London, Connecticut

Probe No. **B-3**

Page No.: 1 of 1

Checked By: TFC

**Sampler(s):** MSR

**Date Start:** 8/30/2023

**Start Time:** 9:19 AM

**Date End:** 8/30/2023

**End Time:** 9:30 AM

**Driller:** Complete Environmental Services (CES)

Sampler:

Liner:

Type: Geoprobe 7822 DT

I.D.: 1.5"

O.D.: 2.25"

Other:

Name of Driller: Dave Robeau

**Groundwater Readings**

Date/Time	Depth	Stab. Time
N/A		

Depth	Sample Information				Sample	Stratum	RMS	Equipment Installed
	Sample No.	Pen./ Rec.	Depth (ft)	Field Screening	Description & Classification	Description		None
1	S1	60/26	0-5	ND	Dark brown fine to coarse SAND, little Organics (roots, woodchips)	Topsoil	1, 2	
2					Brown to black fine to coarse SAND, little fine Gravel	Sand	3	
3					Light brown fine to medium SAND, little fine to coarse Sand, trace Silt			
4								
5					Gray to brown fine to coarse SAND and black to gray fine to coarse SAND (layers), some fine Gravel	Sand and Gravel		
6	S2	60/48	5-10	ND				
7								
8								
9					End of Exploration (10 fbg)			
10								
11								
12								

- Remarks:**
- Boring completed on landscaped roadway median.
  - Field screening for volatile organic compounds performed in the field using a MiniRae 3000 photoionization detector (PID). Results are in ppm (parts per million), relative to 100 ppm isobutylene calibration standard. ND = Not Detected
  - Discrete VOC sample collected @ 2.5-3 fbg. Composite sample collected for laboratory analyses (PAHs, ETPH, PCBs, RCRA-8 metals) @ 1-10 fbg.

**Notes:** 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.  
 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.



**DOWN TO EARTH CONSULTING, LLC**  
 GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING  
 Down To Earth, LLC  
 122 Church Street  
 Naugatuck, Connecticut 06770

**Project Name & Location**

**In-Situ Environmental Testing**

Governor Winthrop Boulevard Improvements  
 New London, Connecticut

Probe No.           B-4          

Page No.:       1       of       1      

Checked By:           TFC          

**Sampler(s):** MSR

**Date Start:** 8/30/2023

**Start Time:** 9:40 AM

**Date End:** 8/30/2023

**End Time:** 9:50 AM

**Driller:** Complete Environmental Services (CES)

Sampler:

Type: Geoprobe 7822 DT

I.D.: 1.5"

O.D.: 2.25"

Other:

Name of Driller: Dave Robeau

Liner:

1.275"

1.375"

**Groundwater Readings**

**Date/Time**

**Depth**

**Stab. Time**

N/A

Depth	Sample Information				Sample	Stratum	R M K S	Equipment Installed
	Sample No.	Pen./ Rec.	Depth (ft)	Field Screening	Description & Classification	Description		None
1	S1	60/36	0-5	ND	Black fine to coarse SAND	Sand	1, 2	
2					Brown to gray fine to coarse SAND, little fine to coarse Gravel, trace Silt, trace Brick	Sand and Gravel	3	
3								
4								
5								
6	S2	36/33	5-8	ND	Gray fine to coarse SAND, little fine to coarse Gravel, trace Silt (moist 7 to 8 fbg)			
7					Refusal at 8 fbg			
8								
9								
10								
11								
12								

- R e m a r k s**
- Boring completed on approximately 3-inch wide crack in the roadway asphalt.
  - Field screening for volatile organic compounds performed in the field using a MiniRae 3000 photoionization detector (PID). Results are in ppm (parts per million), relative to 100 ppm isobutylene calibration standard. ND = Not Detected
  - Discrete VOC sample collected @ 7.5-8 fbg. Composite sample collected for laboratory analyses (PAHs, ETPH, PCBs, RCRA-8 metals) @ 0.5-8 fbg.

**Notes:** 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.  
 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

**APPENDIX 2**  
**LABORATORY REPORTS – SOIL ANALYSES**



Monday, September 18, 2023

Attn: Timothy Carr, LEP  
Down To Earth, LLC  
122 Church Street  
Naugatuck, CT 06770

Project ID: GOV. WINTHROP BLVD  
SDG ID: GCO87351  
Sample ID#s: CO87351 - CO87360

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

Phyllis Shiller

Laboratory Director

NELAC - #NY11301  
CT Lab Registration #PH-0618  
MA Lab Registration #M-CT007  
ME Lab Registration #CT-007  
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003  
NY Lab Registration #11301  
PA Lab Registration #68-03530  
RI Lab Registration #63  
VT Lab Registration #VT11301



Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

## Sample Id Cross Reference

September 18, 2023

SDG I.D.: GCO87351

Project ID: GOV. WINTHROP BLVD

---

Client Id	Lab Id	Matrix
B1 @ 1-10`	CO87351	SOIL
B1 @ 7.5-8`	CO87352	SOIL
B2 @ 2-10`	CO87353	SOIL
B2 @ 2-2.5`	CO87354	SOIL
B3 @ 1-10`	CO87355	SOIL
B3 @ 2.5-3`	CO87356	SOIL
B4 @ 0.5-8`	CO87357	SOIL
B4 @ 7.5-8`	CO87358	SOIL
TRIP BLANK LL	CO87359	SOIL
TRIP BLANK HL	CO87360	SOIL



**Environmental Laboratories, Inc.**

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823

**Analysis Report**

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
 Down To Earth, LLC  
 122 Church Street  
 Naugatuck, CT 06770

Sample Information

Matrix: SOIL  
 Location Code: DOWNDAS  
 Rush Request: Standard  
 P.O.#: DAS-CITY OF NEW L

Custody Information

Collected by: MSR  
 Received by: SR1  
 Analyzed by: see "By" below

Date

08/30/23  
 08/31/23

Time

8:52  
 11:20

Laboratory Data

SDG ID: GCO87351  
 Phoenix ID: CO87351

Project ID: GOV. WINTHROP BLVD  
 Client ID: B1 @ 1-10`

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	1	09/14/23	TH	SW6010D
Arsenic	1.67	0.78	mg/Kg	1	09/14/23	TH	SW6010D
Barium	29.7	0.39	mg/Kg	1	09/14/23	TH	SW6010D
Cadmium	< 0.39	0.39	mg/Kg	1	09/14/23	TH	SW6010D
Chromium	6.99	0.39	mg/Kg	1	09/14/23	TH	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	09/12/23	AL1	SW7471B
Lead	6.93	0.39	mg/Kg	1	09/14/23	TH	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	09/14/23	TH	SW6010D
Percent Solid	92		%		08/31/23	CV	SW846-%Solid

Mercury Digestion	Completed				09/12/23	AL/AL	SW7471B
Extraction of ETPH	Completed				09/12/23	H/A	SW3546
Soil Extraction for SVOA PAH	Completed				09/12/23	HL/F	SW3546
Extraction for PCB	Completed				09/12/23	Q/R/AC1	SW3540C
Total Metals Digest	Completed				08/31/23	Y/AG	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	54	mg/Kg	1	09/13/23	JRB	CTETPH
Identification	ND		mg/Kg	1	09/13/23	JRB	CTETPH

**QA/QC Surrogates**

% COD (surr)	96		%	1	09/13/23	JRB	50 - 150 %
% Terphenyl (surr)	98		%	1	09/13/23	JRB	50 - 150 %

**PCB (Soxhlet SW3540C)**

PCB-1016	ND	360	ug/Kg	10	09/13/23	SC	SW8082A
PCB-1221	ND	360	ug/Kg	10	09/13/23	SC	SW8082A
PCB-1232	ND	360	ug/Kg	10	09/13/23	SC	SW8082A
PCB-1242	ND	360	ug/Kg	10	09/13/23	SC	SW8082A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1248	ND	360	ug/Kg	10	09/13/23	SC	SW8082A
PCB-1254	ND	360	ug/Kg	10	09/13/23	SC	SW8082A
PCB-1260	ND	360	ug/Kg	10	09/13/23	SC	SW8082A
PCB-1262	ND	360	ug/Kg	10	09/13/23	SC	SW8082A
PCB-1268	ND	360	ug/Kg	10	09/13/23	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	76		%	10	09/13/23	SC	30 - 150 %
% DCBP (Confirmation)	71		%	10	09/13/23	SC	30 - 150 %
% TCMX	53		%	10	09/13/23	SC	30 - 150 %
% TCMX (Confirmation)	52		%	10	09/13/23	SC	30 - 150 %

**Polynuclear Aromatic HC**

2-Methylnaphthalene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Acenaphthene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Anthracene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Chrysene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Fluoranthene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Fluorene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Naphthalene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Phenanthrene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Pyrene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D

**QA/QC Surrogates**

% 2-Fluorobiphenyl	59		%	1	09/13/23	KCA	30 - 130 %
% Nitrobenzene-d5	65		%	1	09/13/23	KCA	30 - 130 %
% Terphenyl-d14	63		%	1	09/13/23	KCA	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.  
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**Phyllis Shiller, Laboratory Director**

**September 18, 2023**

**Reviewed and Released by: Ethan Lee, Project Manager**





Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
Down To Earth, LLC  
122 Church Street  
Naugatuck, CT 06770

Sample Information

Matrix: SOIL  
Location Code: DOWNDAS  
Rush Request: Standard  
P.O.#: DAS-CITY OF NEW L

Custody Information

Collected by: MSR  
Received by: SR1  
Analyzed by: see "By" below

Date

08/30/23  
08/31/23

Time

8:50  
11:20

Laboratory Data

SDG ID: GCO87351  
Phoenix ID: CO87352

Project ID: GOV. WINTHROP BLVD  
Client ID: B1 @ 7.5-8`

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	80		%		08/31/23	CV	SW846-%Solid
Field Extraction	Completed				08/30/23		SW5035A

Volatiles

1,1,1,2-Tetrachloroethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,1-Trichloroethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	4.1	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloropropene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichloropropane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromoethane	ND	0.68	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloroethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloropropane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichloropropane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
2,2-Dichloropropane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
2-Chlorotoluene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
2-Hexanone	ND	34	ug/Kg	1	09/01/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2-Isopropyltoluene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
4-Chlorotoluene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	34	ug/Kg	1	09/01/23	JLI	SW8260D
Acetone	ND	340	ug/Kg	1	09/01/23	JLI	SW8260D
Acrylonitrile	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Benzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Bromobenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Bromochloromethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Bromodichloromethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Bromoform	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Bromomethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon Disulfide	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon tetrachloride	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Chlorobenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroform	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Chloromethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromochloromethane	ND	4.1	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromomethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Dichlorodifluoromethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Ethylbenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Hexachlorobutadiene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Isopropylbenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
m&p-Xylene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl Ethyl Ketone	ND	41	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	14	ug/Kg	1	09/01/23	JLI	SW8260D
Methylene chloride	ND	14	ug/Kg	1	09/01/23	JLI	SW8260D
Naphthalene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
n-Butylbenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
n-Propylbenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
o-Xylene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
p-Isopropyltoluene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
sec-Butylbenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Styrene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
tert-Butylbenzene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrachloroethene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrahydrofuran (THF)	ND	14	ug/Kg	1	09/01/23	JLI	SW8260D
Toluene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Total Xylenes	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	14	ug/Kg	1	09/01/23	JLI	SW8260D
Trichloroethene	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorofluoromethane	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	14	ug/Kg	1	09/01/23	JLI	SW8260D
Vinyl chloride	ND	6.8	ug/Kg	1	09/01/23	JLI	SW8260D

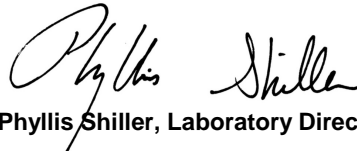
**QA/QC Surrogates**

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% 1,2-dichlorobenzene-d4	98		%	1	09/01/23	JLI	70 - 130 %
% Bromofluorobenzene	101		%	1	09/01/23	JLI	70 - 130 %
% Dibromofluoromethane	103		%	1	09/01/23	JLI	70 - 130 %
% Toluene-d8	98		%	1	09/01/23	JLI	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**September 18, 2023**

**Reviewed and Released by: Ethan Lee, Project Manager**



**Environmental Laboratories, Inc.**

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823

**Analysis Report**

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
 Down To Earth, LLC  
 122 Church Street  
 Naugatuck, CT 06770

Sample Information

Matrix: SOIL  
 Location Code: DOWNDAS  
 Rush Request: Standard  
 P.O.#: DAS-CITY OF NEW L

Custody Information

Collected by: MSR  
 Received by: SR1  
 Analyzed by: see "By" below

Date

08/30/23  
 08/31/23

Time

9:15  
 11:20

Laboratory Data

SDG ID: GCO87351  
 Phoenix ID: CO87353

Project ID: GOV. WINTHROP BLVD  
 Client ID: B2 @ 2-10`

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	1	09/14/23	TH	SW6010D
Arsenic	2.60	0.82	mg/Kg	1	09/14/23	TH	SW6010D
Barium	24.6	0.41	mg/Kg	1	09/14/23	TH	SW6010D
Cadmium	0.48	0.41	mg/Kg	1	09/14/23	TH	SW6010D
Chromium	8.88	0.41	mg/Kg	1	09/14/23	TH	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	09/12/23	AL1	SW7471B
Lead	4.83	0.41	mg/Kg	1	09/14/23	TH	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	09/14/23	TH	SW6010D
Percent Solid	77		%		08/31/23	CV	SW846-%Solid

Mercury Digestion	Completed				09/12/23	AL/AL	SW7471B
Extraction of ETPH	Completed				09/12/23	H/A	SW3546
Soil Extraction for SVOA PAH	Completed				09/12/23	HL/F	SW3546
Extraction for PCB	Completed				09/08/23	/R/AC1, R1	SW3540C
Total Metals Digest	Completed				08/31/23	Y/AG	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	64	mg/Kg	1	09/13/23	JRB	CTETPH
Identification	ND		mg/Kg	1	09/13/23	JRB	CTETPH

**QA/QC Surrogates**

% COD (surr)	98		%	1	09/13/23	JRB	50 - 150 %
% Terphenyl (surr)	99		%	1	09/13/23	JRB	50 - 150 %

**PCB (Soxhlet SW3540C)**

PCB-1016	ND	420	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1221	ND	420	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1232	ND	420	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1242	ND	420	ug/Kg	10	09/12/23	SC	SW8082A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1248	ND	420	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1254	ND	420	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1260	ND	420	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1262	ND	420	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1268	ND	420	ug/Kg	10	09/12/23	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	60		%	10	09/12/23	SC	30 - 150 %
% DCBP (Confirmation)	68		%	10	09/12/23	SC	30 - 150 %
% TCMX	37		%	10	09/12/23	SC	30 - 150 %
% TCMX (Confirmation)	39		%	10	09/12/23	SC	30 - 150 %

**Polynuclear Aromatic HC**

2-Methylnaphthalene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Acenaphthene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Acenaphthylene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Anthracene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Benz(a)anthracene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Benzo(a)pyrene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Benzo(b)fluoranthene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Benzo(ghi)perylene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Benzo(k)fluoranthene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Chrysene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Dibenz(a,h)anthracene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Fluoranthene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Fluorene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Naphthalene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Phenanthrene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
Pyrene	ND	300	ug/Kg	1	09/12/23	KCA	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	49		%	1	09/12/23	KCA	30 - 130 %
% Nitrobenzene-d5	45		%	1	09/12/23	KCA	30 - 130 %
% Terphenyl-d14	63		%	1	09/12/23	KCA	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**  
**September 18, 2023**  
**Reviewed and Released by: Ethan Lee, Project Manager**



**Environmental Laboratories, Inc.**

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

**Analysis Report**

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
Down To Earth, LLC  
122 Church Street  
Naugatuck, CT 06770

Sample Information

Matrix: SOIL  
Location Code: DOWNDAS  
Rush Request: Standard  
P.O.#: DAS-CITY OF NEW L

Custody Information

Collected by: MSR  
Received by: SR1  
Analyzed by: see "By" below

Date

08/30/23  
08/31/23

Time

9:08  
11:20

Laboratory Data

SDG ID: GCO87351  
Phoenix ID: CO87354

Project ID: GOV. WINTHROP BLVD  
Client ID: B2 @ 2-2.5`

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	90		%		08/31/23	CV	SW846-%Solid
Field Extraction	Completed				08/30/23		SW5035A

Volatiles

1,1,1,2-Tetrachloroethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,1-Trichloroethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	2.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloropropene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichloropropane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromoethane	ND	0.42	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloroethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloropropane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichloropropane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
2,2-Dichloropropane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
2-Chlorotoluene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
2-Hexanone	ND	21	ug/Kg	1	09/01/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2-Isopropyltoluene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
4-Chlorotoluene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	21	ug/Kg	1	09/01/23	JLI	SW8260D
Acetone	ND	210	ug/Kg	1	09/01/23	JLI	SW8260D
Acrylonitrile	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Benzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Bromobenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Bromochloromethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Bromodichloromethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Bromoform	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Bromomethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon Disulfide	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon tetrachloride	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Chlorobenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroform	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Chloromethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromochloromethane	ND	2.5	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromomethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Dichlorodifluoromethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Ethylbenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Hexachlorobutadiene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Isopropylbenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
m&p-Xylene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl Ethyl Ketone	ND	25	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	8.3	ug/Kg	1	09/01/23	JLI	SW8260D
Methylene chloride	ND	8.3	ug/Kg	1	09/01/23	JLI	SW8260D
Naphthalene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
n-Butylbenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
n-Propylbenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
o-Xylene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
p-Isopropyltoluene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
sec-Butylbenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Styrene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
tert-Butylbenzene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrachloroethene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrahydrofuran (THF)	ND	8.3	ug/Kg	1	09/01/23	JLI	SW8260D
Toluene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Total Xylenes	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	8.3	ug/Kg	1	09/01/23	JLI	SW8260D
Trichloroethene	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorofluoromethane	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	8.3	ug/Kg	1	09/01/23	JLI	SW8260D
Vinyl chloride	ND	4.2	ug/Kg	1	09/01/23	JLI	SW8260D

**QA/QC Surrogates**

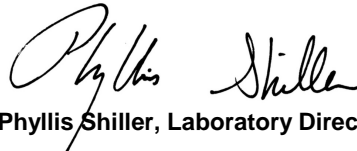
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% 1,2-dichlorobenzene-d4	98		%	1	09/01/23	JLI	70 - 130 %
% Bromofluorobenzene	94		%	1	09/01/23	JLI	70 - 130 %
% Dibromofluoromethane	104		%	1	09/01/23	JLI	70 - 130 %
% Toluene-d8	98		%	1	09/01/23	JLI	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

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**Phyllis Shiller, Laboratory Director**

**September 18, 2023**

**Reviewed and Released by: Ethan Lee, Project Manager**





**Environmental Laboratories, Inc.**

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823

**Analysis Report**

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
 Down To Earth, LLC  
 122 Church Street  
 Naugatuck, CT 06770

Sample Information

Matrix: SOIL  
 Location Code: DOWNDAS  
 Rush Request: Standard  
 P.O.#: DAS-CITY OF NEW L

Custody Information

Collected by: MSR  
 Received by: SR1  
 Analyzed by: see "By" below

Date

08/30/23  
 08/31/23

Time

9:40  
 11:20

Laboratory Data

SDG ID: GCO87351  
 Phoenix ID: CO87355

Project ID: GOV. WINTHROP BLVD  
 Client ID: B3 @1-10`

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.43	0.43	mg/Kg	1	09/14/23	CPP	SW6010D
Arsenic	2.18	0.86	mg/Kg	1	09/14/23	CPP	SW6010D
Barium	46.8	0.43	mg/Kg	1	09/14/23	CPP	SW6010D
Cadmium	0.63	0.43	mg/Kg	1	09/14/23	CPP	SW6010D
Chromium	13.4	0.43	mg/Kg	1	09/14/23	CPP	SW6010D
Mercury	< 0.04	0.04	mg/Kg	2	09/12/23	AL1	SW7471B
Lead	5.17	0.43	mg/Kg	1	09/14/23	CPP	SW6010D
Selenium	< 1.7	1.7	mg/Kg	1	09/14/23	CPP	SW6010D
Percent Solid	69		%		08/31/23	CV	SW846-%Solid

Mercury Digestion	Completed				09/12/23	AL/AL	SW7471B
Extraction of ETPH	Completed				09/12/23	H/A	SW3546
Soil Extraction for SVOA PAH	Completed				09/12/23	HL/F	SW3546
Extraction for PCB	Completed				09/08/23	/R/AC1, R	SW3540C
Total Metals Digest	Completed				08/31/23	Y/AG	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	71	mg/Kg	1	09/13/23	JRB	CTETPH
Identification	ND		mg/Kg	1	09/13/23	JRB	CTETPH

**QA/QC Surrogates**

% COD (surr)	98		%	1	09/13/23	JRB	50 - 150 %
% Terphenyl (surr)	100		%	1	09/13/23	JRB	50 - 150 %

**PCB (Soxhlet SW3540C)**

PCB-1016	ND	470	ug/Kg	10	09/11/23	SC	SW8082A
PCB-1221	ND	470	ug/Kg	10	09/11/23	SC	SW8082A
PCB-1232	ND	470	ug/Kg	10	09/11/23	SC	SW8082A
PCB-1242	ND	470	ug/Kg	10	09/11/23	SC	SW8082A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1248	ND	470	ug/Kg	10	09/11/23	SC	SW8082A
PCB-1254	ND	470	ug/Kg	10	09/11/23	SC	SW8082A
PCB-1260	ND	470	ug/Kg	10	09/11/23	SC	SW8082A
PCB-1262	ND	470	ug/Kg	10	09/11/23	SC	SW8082A
PCB-1268	ND	470	ug/Kg	10	09/11/23	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	71		%	10	09/11/23	SC	30 - 150 %
% DCBP (Confirmation)	68		%	10	09/11/23	SC	30 - 150 %
% TCMX	46		%	10	09/11/23	SC	30 - 150 %
% TCMX (Confirmation)	48		%	10	09/11/23	SC	30 - 150 %

**Polynuclear Aromatic HC**

2-Methylnaphthalene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Acenaphthene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Acenaphthylene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Anthracene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Benz(a)anthracene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(a)pyrene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(b)fluoranthene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(ghi)perylene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(k)fluoranthene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Chrysene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Dibenz(a,h)anthracene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Fluoranthene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Fluorene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Naphthalene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Phenanthrene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
Pyrene	ND	340	ug/Kg	1	09/13/23	KCA	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	45		%	1	09/13/23	KCA	30 - 130 %
% Nitrobenzene-d5	49		%	1	09/13/23	KCA	30 - 130 %
% Terphenyl-d14	54		%	1	09/13/23	KCA	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**September 18, 2023**

**Reviewed and Released by: Ethan Lee, Project Manager**



**Environmental Laboratories, Inc.**

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

**Analysis Report**

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
Down To Earth, LLC  
122 Church Street  
Naugatuck, CT 06770

Sample Information

Matrix: SOIL  
Location Code: DOWNDAS  
Rush Request: Standard  
P.O.#: DAS-CITY OF NEW L

Custody Information

Collected by: MSR  
Received by: SR1  
Analyzed by: see "By" below

Date

08/30/23  
08/31/23

Time

9:35  
11:20

Laboratory Data

SDG ID: GCO87351  
Phoenix ID: CO87356

Project ID: GOV. WINTHROP BLVD  
Client ID: B3 @ 2.5-3`

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	90		%		08/31/23	CV	SW846-%Solid
Field Extraction	Completed				08/30/23		SW5035A

Volatiles

1,1,1,2-Tetrachloroethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,1-Trichloroethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	2.6	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloropropene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichloropropane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromoethane	ND	0.43	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloroethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloropropane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichloropropane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
2,2-Dichloropropane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
2-Chlorotoluene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
2-Hexanone	ND	22	ug/Kg	1	09/01/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2-Isopropyltoluene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
4-Chlorotoluene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	22	ug/Kg	1	09/01/23	JLI	SW8260D
Acetone	ND	220	ug/Kg	1	09/01/23	JLI	SW8260D
Acrylonitrile	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Benzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Bromobenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Bromochloromethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Bromodichloromethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Bromoform	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Bromomethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon Disulfide	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon tetrachloride	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Chlorobenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroform	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Chloromethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromochloromethane	ND	2.6	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromomethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Dichlorodifluoromethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Ethylbenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Hexachlorobutadiene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Isopropylbenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
m&p-Xylene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl Ethyl Ketone	ND	26	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	8.7	ug/Kg	1	09/01/23	JLI	SW8260D
Methylene chloride	ND	8.7	ug/Kg	1	09/01/23	JLI	SW8260D
Naphthalene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
n-Butylbenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
n-Propylbenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
o-Xylene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
p-Isopropyltoluene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
sec-Butylbenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Styrene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
tert-Butylbenzene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrachloroethene	7.8	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrahydrofuran (THF)	ND	8.7	ug/Kg	1	09/01/23	JLI	SW8260D
Toluene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Total Xylenes	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	8.7	ug/Kg	1	09/01/23	JLI	SW8260D
Trichloroethene	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorofluoromethane	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	8.7	ug/Kg	1	09/01/23	JLI	SW8260D
Vinyl chloride	ND	4.3	ug/Kg	1	09/01/23	JLI	SW8260D

**QA/QC Surrogates**

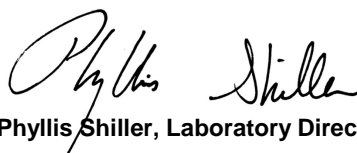
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% 1,2-dichlorobenzene-d4	99		%	1	09/01/23	JLI	70 - 130 %
% Bromofluorobenzene	98		%	1	09/01/23	JLI	70 - 130 %
% Dibromofluoromethane	105		%	1	09/01/23	JLI	70 - 130 %
% Toluene-d8	98		%	1	09/01/23	JLI	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

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**Phyllis Shiller, Laboratory Director**

**September 18, 2023**

**Reviewed and Released by: Ethan Lee, Project Manager**



**Environmental Laboratories, Inc.**

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 Tel. (860) 645-1102 Fax (860) 645-0823

**Analysis Report**

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
 Down To Earth, LLC  
 122 Church Street  
 Naugatuck, CT 06770

Sample Information

Matrix: SOIL  
 Location Code: DOWNDAS  
 Rush Request: Standard  
 P.O.#: DAS-CITY OF NEW L

Custody Information

Collected by: MSR  
 Received by: SR1  
 Analyzed by: see "By" below

Date

08/30/23  
 08/31/23

Time

10:00  
 11:20

Laboratory Data

SDG ID: GCO87351  
 Phoenix ID: CO87357

Project ID: GOV. WINTHROP BLVD  
 Client ID: B4 @ 0.5-8`

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	09/14/23	CPP	SW6010D
Arsenic	< 0.72	0.72	mg/Kg	1	09/14/23	CPP	SW6010D
Barium	32.3	0.36	mg/Kg	1	09/14/23	CPP	SW6010D
Cadmium	< 0.36	0.36	mg/Kg	1	09/14/23	CPP	SW6010D
Chromium	4.60	0.36	mg/Kg	1	09/14/23	CPP	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	09/12/23	AL1	SW7471B
Lead	2.84	0.36	mg/Kg	1	09/14/23	CPP	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	09/14/23	CPP	SW6010D
Percent Solid	94		%		08/31/23	CV	SW846-%Solid

Mercury Digestion	Completed				09/12/23	AL/AL	SW7471B
Extraction of ETPH	Completed				09/12/23	H/A	SW3546
Soil Extraction for SVOA PAH	Completed				09/12/23	HL/F	SW3546
Extraction for PCB	Completed				09/11/23	/R/AC1, R	SW3540C
Total Metals Digest	Completed				08/31/23	Y/AG	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	52	mg/Kg	1	09/13/23	JRB	CTETPH
Identification	ND		mg/Kg	1	09/13/23	JRB	CTETPH

**QA/QC Surrogates**

% COD (surr)	99		%	1	09/13/23	JRB	50 - 150 %
% Terphenyl (surr)	99		%	1	09/13/23	JRB	50 - 150 %

**PCB (Soxhlet SW3540C)**

PCB-1016	ND	350	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1221	ND	350	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1232	ND	350	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1242	ND	350	ug/Kg	10	09/12/23	SC	SW8082A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1248	ND	350	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1254	ND	350	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1260	ND	350	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1262	ND	350	ug/Kg	10	09/12/23	SC	SW8082A
PCB-1268	ND	350	ug/Kg	10	09/12/23	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	78		%	10	09/12/23	SC	30 - 150 %
% DCBP (Confirmation)	81		%	10	09/12/23	SC	30 - 150 %
% TCMX	71		%	10	09/12/23	SC	30 - 150 %
% TCMX (Confirmation)	72		%	10	09/12/23	SC	30 - 150 %

**Polynuclear Aromatic HC**

2-Methylnaphthalene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Acenaphthene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Anthracene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Chrysene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Fluoranthene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Fluorene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Naphthalene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Phenanthrene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
Pyrene	ND	250	ug/Kg	1	09/13/23	KCA	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	39		%	1	09/13/23	KCA	30 - 130 %
% Nitrobenzene-d5	45		%	1	09/13/23	KCA	30 - 130 %
% Terphenyl-d14	44		%	1	09/13/23	KCA	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
 QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.  
 If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.  
 The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

  
**Phyllis Shiller, Laboratory Director**  
**September 18, 2023**  
 Reviewed and Released by: Ethan Lee, Project Manager



### Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

## Analysis Report

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
Down To Earth, LLC  
122 Church Street  
Naugatuck, CT 06770

#### Sample Information

Matrix: SOIL  
Location Code: DOWNDAS  
Rush Request: Standard  
P.O.#: DAS-CITY OF NEW L

#### Custody Information

Collected by: MSR  
Received by: SR1  
Analyzed by: see "By" below

#### Date

08/30/23  
08/31/23

#### Time

9:55  
11:20

### Laboratory Data

SDG ID: GCO87351  
Phoenix ID: CO87358

Project ID: GOV. WINTHROP BLVD  
Client ID: B4 @ 7.5-8`

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	93		%		08/31/23	CV	SW846-%Solid
Field Extraction	Completed				08/30/23		SW5035A

#### Volatiles

1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,1-Trichloroethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloropropene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichloropropane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromoethane	ND	0.55	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
2,2-Dichloropropane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
2-Chlorotoluene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
2-Hexanone	ND	27	ug/Kg	1	09/01/23	JLI	SW8260D



Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2-Isopropyltoluene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
4-Chlorotoluene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	27	ug/Kg	1	09/01/23	JLI	SW8260D
Acetone	ND	270	ug/Kg	1	09/01/23	JLI	SW8260D
Acrylonitrile	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Benzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Bromobenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Bromochloromethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Bromodichloromethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Bromoform	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Bromomethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon Disulfide	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon tetrachloride	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Chlorobenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroform	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Chloromethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromochloromethane	ND	3.3	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromomethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Ethylbenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Hexachlorobutadiene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Isopropylbenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
m&p-Xylene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl Ethyl Ketone	ND	33	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	09/01/23	JLI	SW8260D
Methylene chloride	ND	11	ug/Kg	1	09/01/23	JLI	SW8260D
Naphthalene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
n-Butylbenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
n-Propylbenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
o-Xylene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
p-Isopropyltoluene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
sec-Butylbenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Styrene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
tert-Butylbenzene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrachloroethene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	09/01/23	JLI	SW8260D
Toluene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Total Xylenes	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	1	09/01/23	JLI	SW8260D
Trichloroethene	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	11	ug/Kg	1	09/01/23	JLI	SW8260D
Vinyl chloride	ND	5.5	ug/Kg	1	09/01/23	JLI	SW8260D

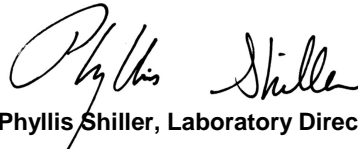
**QA/QC Surrogates**

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% 1,2-dichlorobenzene-d4	100		%	1	09/01/23	JLI	70 - 130 %
% Bromofluorobenzene	101		%	1	09/01/23	JLI	70 - 130 %
% Dibromofluoromethane	105		%	1	09/01/23	JLI	70 - 130 %
% Toluene-d8	100		%	1	09/01/23	JLI	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**September 18, 2023**

**Reviewed and Released by: Ethan Lee, Project Manager**



### Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

## Analysis Report

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
Down To Earth, LLC  
122 Church Street  
Naugatuck, CT 06770

#### Sample Information

Matrix: SOIL  
Location Code: DOWNDAS  
Rush Request: Standard  
P.O.#: DAS-CITY OF NEW L

#### Custody Information

Collected by: MSR  
Received by: SR1  
Analyzed by: see "By" below

#### Date

08/30/23

#### Time

11:20

### Laboratory Data

SDG ID: GCO87351  
Phoenix ID: CO87359

Project ID: GOV. WINTHROP BLVD  
Client ID: TRIP BLANK LL

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed				08/30/23		SW5035A
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,1-Dichloropropene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,3-Trichloropropane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dibromoethane	ND	0.50	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
2,2-Dichloropropane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
2-Chlorotoluene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
2-Hexanone	ND	25	ug/Kg	1	09/01/23	JLI	SW8260D
2-Isopropyltoluene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	25	ug/Kg	1	09/01/23	JLI	SW8260D
Acetone	ND	250	ug/Kg	1	09/01/23	JLI	SW8260D
Acrylonitrile	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Benzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Bromobenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Bromochloromethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Bromodichloromethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Bromoform	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Bromomethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon Disulfide	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Carbon tetrachloride	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Chlorobenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Chloroform	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Chloromethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromochloromethane	ND	3.0	ug/Kg	1	09/01/23	JLI	SW8260D
Dibromomethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Ethylbenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Hexachlorobutadiene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Isopropylbenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
m&p-Xylene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl Ethyl Ketone	ND	30	ug/Kg	1	09/01/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	1	09/01/23	JLI	SW8260D
Methylene chloride	ND	10	ug/Kg	1	09/01/23	JLI	SW8260D
Naphthalene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
n-Butylbenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
n-Propylbenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
o-Xylene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
p-Isopropyltoluene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
sec-Butylbenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Styrene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
tert-Butylbenzene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrachloroethene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Tetrahydrofuran (THF)	ND	10	ug/Kg	1	09/01/23	JLI	SW8260D
Toluene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Total Xylenes	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	1	09/01/23	JLI	SW8260D
Trichloroethene	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	10	ug/Kg	1	09/01/23	JLI	SW8260D
Vinyl chloride	ND	5.0	ug/Kg	1	09/01/23	JLI	SW8260D
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	99		%	1	09/01/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	97		%	1	09/01/23	JLI	70 - 130 %
% Dibromofluoromethane	98		%	1	09/01/23	JLI	70 - 130 %
% Toluene-d8	94		%	1	09/01/23	JLI	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

TRIP BLANK INCLUDED.

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

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**Phyllis Shiller, Laboratory Director**

**September 18, 2023**

**Reviewed and Released by: Ethan Lee, Project Manager**



Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

September 18, 2023

FOR: Attn: Timothy Carr, LEP  
Down To Earth, LLC  
122 Church Street  
Naugatuck, CT 06770

Sample Information

Matrix: SOIL  
Location Code: DOWNDAS  
Rush Request: Standard  
P.O.#: DAS-CITY OF NEW L

Custody Information

Collected by: MSR  
Received by: SR1  
Analyzed by: see "By" below

Date

08/30/23

Time

11:20

Laboratory Data

SDG ID: GCO87351  
Phoenix ID: CO87360

Project ID: GOV. WINTHROP BLVD  
Client ID: TRIP BLANK HL

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed				08/30/23		SW5035A
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Volatiles

1,1,1,2-Tetrachloroethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,1,1-Trichloroethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,1-Dichloroethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,1-Dichloroethene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,1-Dichloropropene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,2,3-Trichloropropane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,2-Dibromoethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,2-Dichloroethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,2-Dichloropropane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,3-Dichloropropane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
2,2-Dichloropropane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
2-Chlorotoluene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
2-Hexanone	ND	1300	ug/Kg	50	09/01/23	JLI	SW8260D
2-Isopropyltoluene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	1300	ug/Kg	50	09/01/23	JLI	SW8260D
Acetone	ND	5000	ug/Kg	50	09/01/23	JLI	SW8260D
Acrylonitrile	ND	500	ug/Kg	50	09/01/23	JLI	SW8260D
Benzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Bromobenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Bromochloromethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Bromodichloromethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Bromoform	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Bromomethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Carbon Disulfide	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Carbon tetrachloride	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Chlorobenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Chloroethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Chloroform	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Chloromethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Dibromochloromethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Dibromomethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Dichlorodifluoromethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Ethylbenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Hexachlorobutadiene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Isopropylbenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
m&p-Xylene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Methyl Ethyl Ketone	ND	3000	ug/Kg	50	09/01/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Methylene chloride	ND	500	ug/Kg	50	09/01/23	JLI	SW8260D
Naphthalene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
n-Butylbenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
n-Propylbenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
o-Xylene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
p-Isopropyltoluene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
sec-Butylbenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Styrene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
tert-Butylbenzene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Tetrachloroethene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Tetrahydrofuran (THF)	ND	500	ug/Kg	50	09/01/23	JLI	SW8260D
Toluene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Total Xylenes	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	500	ug/Kg	50	09/01/23	JLI	SW8260D
Trichloroethene	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Trichlorofluoromethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
Vinyl chloride	ND	250	ug/Kg	50	09/01/23	JLI	SW8260D
<b>QA/QC Surrogates</b>							
% 1,2-dichlorobenzene-d4 (50x)	98		%	50	09/01/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene (50x)	95		%	50	09/01/23	JLI	70 - 130 %
% Dibromofluoromethane (50x)	93		%	50	09/01/23	JLI	70 - 130 %
% Toluene-d8 (50x)	93		%	50	09/01/23	JLI	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

TRIP BLANK INCLUDED.

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**Phyllis Shiller, Laboratory Director**

**September 18, 2023**

**Reviewed and Released by: Ethan Lee, Project Manager**





**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102

# QA/QC Report

September 18, 2023

## QA/QC Data

SDG I.D.: GCO87351

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 696576 (mg/kg), QC Sample No: CO87351 2X (CO87351, CO87353, CO87355, CO87357)

Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	107	104	2.8	101	101	0.0	70 - 130	30
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Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 695093 (mg/kg), QC Sample No: CO87255 (CO87351, CO87353, CO87355, CO87357)

### ICP Metals - Soil

Arsenic	BRL	0.67	2.02	1.02	NC	97.9	99.5	1.6	96.4			75 - 125	35
Barium	BRL	0.33	31.5	29.2	7.60	105	104	1.0	114			75 - 125	35
Cadmium	BRL	0.33	0.46	0.38	NC	104	98.4	5.5	94.5			75 - 125	35
Chromium	BRL	0.33	10.6	9.34	12.6	100	101	1.0	97.2			75 - 125	35
Lead	BRL	0.33	4.54	3.49	26.2	94.2	95.3	1.2	99.7			75 - 125	35
Selenium	BRL	1.3	<1.3	<1.3	NC	103	103	0.0	98.6			75 - 125	35
Silver	BRL	0.33	<0.33	<0.32	NC	98.0	98.8	0.8	96.5			75 - 125	35

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.



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 Tel. (860) 645-1102

# QA/QC Report

September 18, 2023

## QA/QC Data

SDG I.D.: GCO87351

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 696625 (mg/Kg), QC Sample No: CO94096 (CO87351, CO87353, CO87355, CO87357)

### TPH by GC (Extractable Products) - Soil

Ext. Petroleum H.C. (C9-C36)	ND	50	121	119	1.7	120	84	35.3	60 - 120	30	l,r
% COD (surr)	104	%	122	132	7.9	40	95	81.5	50 - 150	30	m,r
% Terphenyl (surr)	105	%	116	116	0.0	39	46	16.5	50 - 150	30	m

Comment:

Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

QA/QC Batch 696624 (ug/Kg), QC Sample No: CO87099 10X (CO87351)

### Polychlorinated Biphenyls - Soil

PCB-1016	ND	170	97	94	3.1	78	42	60.0	40 - 140	30	r
PCB-1221	ND	170							40 - 140	30	
PCB-1232	ND	170							40 - 140	30	
PCB-1242	ND	170							40 - 140	30	
PCB-1248	ND	170							40 - 140	30	
PCB-1254	ND	170							40 - 140	30	
PCB-1260	ND	170	110	104	5.6	79	41	63.3	40 - 140	30	r
PCB-1262	ND	170							40 - 140	30	
PCB-1268	ND	170							40 - 140	30	
% DCBP (Surrogate Rec)	107	%	116	114	1.7	97	50	63.9	30 - 150	30	r
% DCBP (Surrogate Rec) (Confirm	113	%	115	111	3.5	102	51	66.7	30 - 150	30	r
% TCMX (Surrogate Rec)	58	%	57	52	9.2	65	33	65.3	30 - 150	30	r
% TCMX (Surrogate Rec) (Confirm	58	%	58	53	9.0	65	34	62.6	30 - 150	30	r

QA/QC Batch 696284 (ug/Kg), QC Sample No: CO87355 10X (CO87353, CO87355)

### Polychlorinated Biphenyls - Soil

PCB-1016	ND	170	105	100	4.9	74	68	8.5	40 - 140	30	
PCB-1221	ND	170							40 - 140	30	
PCB-1232	ND	170							40 - 140	30	
PCB-1242	ND	170							40 - 140	30	
PCB-1248	ND	170							40 - 140	30	
PCB-1254	ND	170							40 - 140	30	
PCB-1260	ND	170	114	108	5.4	79	77	2.6	40 - 140	30	
PCB-1262	ND	170							40 - 140	30	
PCB-1268	ND	170							40 - 140	30	
% DCBP (Surrogate Rec)	86	%	110	105	4.7	75	75	0.0	30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	92	%	108	121	11.4	84	81	3.6	30 - 150	30	
% TCMX (Surrogate Rec)	83	%	94	89	5.5	60	56	6.9	30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	80	%	95	93	2.1	64	60	6.5	30 - 150	30	

QA/QC Batch 696472 (ug/Kg), QC Sample No: CO92349 10X (CO87357)

### Polychlorinated Biphenyls - Soil

PCB-1016	ND	170	92	91	1.1	89	85	4.6	40 - 140	30	
PCB-1221	ND	170							40 - 140	30	

## QA/QC Data

SDG I.D.: GCO87351

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
PCB-1232	ND	170							40 - 140	30
PCB-1242	ND	170							40 - 140	30
PCB-1248	ND	170							40 - 140	30
PCB-1254	ND	170							40 - 140	30
PCB-1260	ND	170	90	87	3.4	86	82	4.8	40 - 140	30
PCB-1262	ND	170							40 - 140	30
PCB-1268	ND	170							40 - 140	30
% DCBP (Surrogate Rec)	105	%	102	101	1.0	95	92	3.2	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	107	%	100	100	0.0	97	91	6.4	30 - 150	30
% TCMX (Surrogate Rec)	96	%	89	90	1.1	84	82	2.4	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	96	%	89	90	1.1	84	82	2.4	30 - 150	30

QA/QC Batch 696599 (ug/kg), QC Sample No: CO88376 (CO87351, CO87353, CO87355, CO87357)

### Polynuclear Aromatic HC - Soil

2-Methylnaphthalene	ND	230	62	66	6.3	45	50	10.5	40 - 140	30
Acenaphthene	ND	230	57	61	6.8	43	51	17.0	30 - 130	30
Acenaphthylene	ND	230	54	57	5.4	41	47	13.6	40 - 140	30
Anthracene	ND	230	62	67	7.8	45	54	18.2	40 - 140	30
Benz(a)anthracene	ND	230	59	64	8.1	46	53	14.1	40 - 140	30
Benzo(a)pyrene	ND	230	70	75	6.9	54	62	13.8	40 - 140	30
Benzo(b)fluoranthene	ND	230	66	70	5.9	49	59	18.5	40 - 140	30
Benzo(ghi)perylene	ND	230	66	68	3.0	51	60	16.2	40 - 140	30
Benzo(k)fluoranthene	ND	230	58	64	9.8	45	52	14.4	40 - 140	30
Chrysene	ND	230	57	58	1.7	43	50	15.1	40 - 140	30
Dibenz(a,h)anthracene	ND	230	68	70	2.9	52	62	17.5	40 - 140	30
Fluoranthene	ND	230	63	69	9.1	48	55	13.6	40 - 140	30
Fluorene	ND	230	63	65	3.1	46	55	17.8	40 - 140	30
Indeno(1,2,3-cd)pyrene	ND	230	69	72	4.3	53	63	17.2	40 - 140	30
Naphthalene	ND	230	58	61	5.0	42	46	9.1	40 - 140	30
Phenanthrene	ND	230	62	65	4.7	45	53	16.3	40 - 140	30
Pyrene	ND	230	64	69	7.5	49	56	13.3	30 - 130	30
% 2-Fluorobiphenyl	55	%	55	58	5.3	41	47	13.6	30 - 130	30
% Nitrobenzene-d5	60	%	61	64	4.8	46	50	8.3	30 - 130	30
% Terphenyl-d14	66	%	59	64	8.1	43	51	17.0	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 695289 (ug/kg), QC Sample No: CO87426 (CO87359)

### Volatiles - Soil (Low Level)

1,1,1,2-Tetrachloroethane	ND	5.0	109	109	0.0				70 - 130	30
1,1,1-Trichloroethane	ND	5.0	102	107	4.8				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	87	89	2.3				70 - 130	30
1,1,2-Trichloroethane	ND	5.0	94	94	0.0				70 - 130	30
1,1-Dichloroethane	ND	5.0	96	95	1.0				70 - 130	30
1,1-Dichloroethene	ND	5.0	97	94	3.1				70 - 130	30
1,1-Dichloropropene	ND	5.0	98	96	2.1				70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	97	98	1.0				70 - 130	30
1,2,3-Trichloropropane	ND	5.0	89	99	10.6				70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	95	94	1.1				70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	97	101	4.0				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	99	100	1.0				70 - 130	30
1,2-Dibromoethane	ND	5.0	97	99	2.0				70 - 130	30
1,2-Dichlorobenzene	ND	5.0	93	97	4.2				70 - 130	30

## QA/QC Data

SDG I.D.: GCO87351

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
1,2-Dichloroethane	ND	5.0	106	103	2.9				70 - 130	30
1,2-Dichloropropane	ND	5.0	80	81	1.2				70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	97	101	4.0				70 - 130	30
1,3-Dichlorobenzene	ND	5.0	93	96	3.2				70 - 130	30
1,3-Dichloropropane	ND	5.0	95	95	0.0				70 - 130	30
1,4-Dichlorobenzene	ND	5.0	93	95	2.1				70 - 130	30
2,2-Dichloropropane	ND	5.0	104	104	0.0				70 - 130	30
2-Chlorotoluene	ND	5.0	94	96	2.1				70 - 130	30
2-Hexanone	ND	25	84	84	0.0				70 - 130	30
2-Isopropyltoluene	ND	5.0	99	101	2.0				70 - 130	30
4-Chlorotoluene	ND	5.0	91	93	2.2				70 - 130	30
4-Methyl-2-pentanone	ND	25	86	85	1.2				70 - 130	30
Acetone	ND	10	77	81	5.1				70 - 130	30
Acrylonitrile	ND	5.0	77	80	3.8				70 - 130	30
Benzene	ND	1.0	90	90	0.0				70 - 130	30
Bromobenzene	ND	5.0	98	98	0.0				70 - 130	30
Bromochloromethane	ND	5.0	94	91	3.2				70 - 130	30
Bromodichloromethane	ND	5.0	104	106	1.9				70 - 130	30
Bromoform	ND	5.0	114	118	3.4				70 - 130	30
Bromomethane	ND	5.0	104	103	1.0				70 - 130	30
Carbon Disulfide	ND	5.0	97	97	0.0				70 - 130	30
Carbon tetrachloride	ND	5.0	102	120	16.2				70 - 130	30
Chlorobenzene	ND	5.0	96	97	1.0				70 - 130	30
Chloroethane	ND	5.0	98	97	1.0				70 - 130	30
Chloroform	ND	5.0	95	98	3.1				70 - 130	30
Chloromethane	ND	5.0	68	69	1.5				70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	88	90	2.2				70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	98	97	1.0				70 - 130	30
Dibromochloromethane	ND	3.0	112	113	0.9				70 - 130	30
Dibromomethane	ND	5.0	90	93	3.3				70 - 130	30
Dichlorodifluoromethane	ND	5.0	71	73	2.8				70 - 130	30
Ethylbenzene	ND	1.0	92	95	3.2				70 - 130	30
Hexachlorobutadiene	ND	5.0	97	103	6.0				70 - 130	30
Isopropylbenzene	ND	1.0	96	99	3.1				70 - 130	30
m&p-Xylene	ND	2.0	93	94	1.1				70 - 130	30
Methyl ethyl ketone	ND	5.0	69	71	2.9				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	101	100	1.0				70 - 130	30
Methylene chloride	ND	5.0	90	90	0.0				70 - 130	30
Naphthalene	ND	5.0	100	100	0.0				70 - 130	30
n-Butylbenzene	ND	1.0	89	91	2.2				70 - 130	30
n-Propylbenzene	ND	1.0	92	93	1.1				70 - 130	30
o-Xylene	ND	2.0	99	100	1.0				70 - 130	30
p-Isopropyltoluene	ND	1.0	97	99	2.0				70 - 130	30
sec-Butylbenzene	ND	1.0	92	95	3.2				70 - 130	30
Styrene	ND	5.0	91	93	2.2				70 - 130	30
tert-Butylbenzene	ND	1.0	101	105	3.9				70 - 130	30
Tetrachloroethene	ND	5.0	96	100	4.1				70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	76	74	2.7				70 - 130	30
Toluene	ND	1.0	86	87	1.2				70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	98	97	1.0				70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	106	108	1.9				70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	100	95	5.1				70 - 130	30
Trichloroethene	ND	5.0	99	99	0.0				70 - 130	30

## QA/QC Data

SDG I.D.: GCO87351

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Trichlorofluoromethane	ND	5.0	103	105	1.9				70 - 130	30
Trichlorotrifluoroethane	ND	5.0	107	111	3.7				70 - 130	30
Vinyl chloride	ND	5.0	83	82	1.2				70 - 130	30
% 1,2-dichlorobenzene-d4	97	%	98	98	0.0				70 - 130	30
% Bromofluorobenzene	95	%	97	98	1.0				70 - 130	30
% Dibromofluoromethane	99	%	97	101	4.0				70 - 130	30
% Toluene-d8	92	%	94	92	2.2				70 - 130	30

Comment:

The MS/MSD are not reported for this batch.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

QA/QC Batch 695289H (ug/kg), QC Sample No: CO87426 50X (CO87360 (50X) )

### Volatiles - Soil (High Level)

1,1,1,2-Tetrachloroethane	ND	250	109	104	4.7				70 - 130	30
1,1,1-Trichloroethane	ND	250	98	99	1.0				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	250	86	83	3.6				70 - 130	30
1,1,2-Trichloroethane	ND	250	91	88	3.4				70 - 130	30
1,1-Dichloroethane	ND	250	96	92	4.3				70 - 130	30
1,1-Dichloroethene	ND	250	98	96	2.1				70 - 130	30
1,1-Dichloropropene	ND	250	101	97	4.0				70 - 130	30
1,2,3-Trichlorobenzene	ND	250	108	103	4.7				70 - 130	30
1,2,3-Trichloropropane	ND	250	89	81	9.4				70 - 130	30
1,2,4-Trichlorobenzene	ND	250	116	109	6.2				70 - 130	30
1,2,4-Trimethylbenzene	ND	250	109	104	4.7				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	250	98	95	3.1				70 - 130	30
1,2-Dibromoethane	ND	250	97	95	2.1				70 - 130	30
1,2-Dichlorobenzene	ND	250	103	97	6.0				70 - 130	30
1,2-Dichloroethane	ND	250	103	98	5.0				70 - 130	30
1,2-Dichloropropane	ND	250	85	81	4.8				70 - 130	30
1,3,5-Trimethylbenzene	ND	250	107	103	3.8				70 - 130	30
1,3-Dichlorobenzene	ND	250	103	100	3.0				70 - 130	30
1,3-Dichloropropane	ND	250	95	92	3.2				70 - 130	30
1,4-Dichlorobenzene	ND	250	104	100	3.9				70 - 130	30
2,2-Dichloropropane	ND	250	103	99	4.0				70 - 130	30
2-Chlorotoluene	ND	250	102	100	2.0				70 - 130	30
2-Hexanone	ND	1300	75	72	4.1				70 - 130	30
2-Isopropyltoluene	ND	250	107	102	4.8				70 - 130	30
4-Chlorotoluene	ND	250	102	97	5.0				70 - 130	30
4-Methyl-2-pentanone	ND	1300	76	73	4.0				70 - 130	30
Acetone	ND	500	62	60	3.3				70 - 130	30
Acrylonitrile	ND	250	74	71	4.1				70 - 130	30
Benzene	ND	250	94	90	4.3				70 - 130	30
Bromobenzene	ND	250	102	101	1.0				70 - 130	30
Bromochloromethane	ND	250	94	89	5.5				70 - 130	30
Bromodichloromethane	ND	250	104	99	4.9				70 - 130	30
Bromoform	ND	250	107	102	4.8				70 - 130	30
Bromomethane	ND	250	90	91	1.1				70 - 130	30
Carbon Disulfide	ND	250	102	100	2.0				70 - 130	30
Carbon tetrachloride	ND	250	102	98	4.0				70 - 130	30
Chlorobenzene	ND	250	99	97	2.0				70 - 130	30
Chloroethane	ND	250	95	91	4.3				70 - 130	30
Chloroform	ND	250	97	94	3.1				70 - 130	30

QA/QC Data

SDG I.D.: GCO87351

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Chloromethane	ND	250	70	67	4.4				70 - 130	30
cis-1,2-Dichloroethene	ND	250	89	86	3.4				70 - 130	30
cis-1,3-Dichloropropene	ND	250	99	92	7.3				70 - 130	30
Dibromochloromethane	ND	150	110	104	5.6				70 - 130	30
Dibromomethane	ND	250	92	88	4.4				70 - 130	30
Dichlorodifluoromethane	ND	250	76	72	5.4				70 - 130	30
Ethylbenzene	ND	250	100	96	4.1				70 - 130	30
Hexachlorobutadiene	ND	250	118	108	8.8				70 - 130	30
Isopropylbenzene	ND	250	106	102	3.8				70 - 130	30
m&p-Xylene	ND	250	101	98	3.0				70 - 130	30
Methyl ethyl ketone	ND	250	64	60	6.5				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	250	100	94	6.2				70 - 130	30
Methylene chloride	ND	250	92	85	7.9				70 - 130	30
Naphthalene	ND	250	102	99	3.0				70 - 130	30
n-Butylbenzene	ND	250	105	100	4.9				70 - 130	30
n-Propylbenzene	ND	250	102	101	1.0				70 - 130	30
o-Xylene	ND	250	105	101	3.9				70 - 130	30
p-Isopropyltoluene	ND	250	110	104	5.6				70 - 130	30
sec-Butylbenzene	ND	250	102	98	4.0				70 - 130	30
Styrene	ND	250	97	92	5.3				70 - 130	30
tert-Butylbenzene	ND	250	108	104	3.8				70 - 130	30
Tetrachloroethene	ND	250	105	101	3.9				70 - 130	30
Tetrahydrofuran (THF)	ND	250	69	65	6.0				70 - 130	30
Toluene	ND	250	93	88	5.5				70 - 130	30
trans-1,2-Dichloroethene	ND	250	100	97	3.0				70 - 130	30
trans-1,3-Dichloropropene	ND	250	106	98	7.8				70 - 130	30
trans-1,4-dichloro-2-butene	ND	250	90	85	5.7				70 - 130	30
Trichloroethene	ND	250	103	99	4.0				70 - 130	30
Trichlorofluoromethane	ND	250	64	64	0.0				70 - 130	30
Trichlorotrifluoroethane	ND	250	117	111	5.3				70 - 130	30
Vinyl chloride	ND	250	75	74	1.3				70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	99	97	2.0				70 - 130	30
% Bromofluorobenzene	94	%	97	94	3.1				70 - 130	30
% Dibromofluoromethane	91	%	101	97	4.0				70 - 130	30
% Toluene-d8	93	%	94	92	2.2				70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

QA/QC Batch 695553 (ug/kg), QC Sample No: CO88196 (CO87352, CO87354, CO87356, CO87358)

Volatiles - Soil (Low Level)

1,1,1,2-Tetrachloroethane	ND	5.0	96	107	10.8	99	98	1.0	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	96	104	8.0	90	89	1.1	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	104	119	13.5	115	113	1.8	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	100	114	13.1	105	106	0.9	70 - 130	30
1,1-Dichloroethane	ND	5.0	99	107	7.8	94	92	2.2	70 - 130	30
1,1-Dichloroethene	ND	5.0	99	108	8.7	94	91	3.2	70 - 130	30
1,1-Dichloropropene	ND	5.0	96	105	9.0	95	96	1.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	96	102	6.1	91	93	2.2	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	104	119	13.5	111	110	0.9	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	99	103	4.0	90	91	1.1	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	95	104	9.0	93	93	0.0	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	109	133	19.8	118	119	0.8	70 - 130	30

## QA/QC Data

SDG I.D.: GCO87351

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
1,2-Dibromoethane	ND	5.0	104	116	10.9	108	109	0.9	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	97	105	7.9	98	98	0.0	70 - 130	30
1,2-Dichloroethane	ND	5.0	98	109	10.6	98	100	2.0	70 - 130	30
1,2-Dichloropropane	ND	5.0	96	109	12.7	100	99	1.0	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	96	104	8.0	96	96	0.0	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	99	106	6.8	96	97	1.0	70 - 130	30
1,3-Dichloropropane	ND	5.0	98	106	7.8	104	103	1.0	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	97	106	8.9	95	95	0.0	70 - 130	30
2,2-Dichloropropane	ND	5.0	109	112	2.7	93	94	1.1	70 - 130	30
2-Chlorotoluene	ND	5.0	98	107	8.8	100	97	3.0	70 - 130	30
2-Hexanone	ND	25	99	116	15.8	103	105	1.9	70 - 130	30
2-Isopropyltoluene	ND	5.0	94	103	9.1	96	95	1.0	70 - 130	30
4-Chlorotoluene	ND	5.0	98	104	5.9	97	97	0.0	70 - 130	30
4-Methyl-2-pentanone	ND	25	111	130	15.8	116	121	4.2	70 - 130	30
Acetone	ND	10	97	107	9.8	81	96	16.9	70 - 130	30
Acrylonitrile	ND	5.0	120	133	10.3	118	118	0.0	70 - 130	30
Benzene	ND	1.0	94	103	9.1	95	95	0.0	70 - 130	30
Bromobenzene	ND	5.0	100	109	8.6	103	102	1.0	70 - 130	30
Bromochloromethane	ND	5.0	101	111	9.4	100	97	3.0	70 - 130	30
Bromodichloromethane	ND	5.0	97	109	11.7	98	99	1.0	70 - 130	30
Bromoform	ND	5.0	107	123	13.9	109	110	0.9	70 - 130	30
Bromomethane	ND	5.0	101	108	6.7	97	94	3.1	70 - 130	30
Carbon Disulfide	ND	5.0	102	111	8.5	94	92	2.2	70 - 130	30
Carbon tetrachloride	ND	5.0	100	107	6.8	90	88	2.2	70 - 130	30
Chlorobenzene	ND	5.0	95	103	8.1	97	95	2.1	70 - 130	30
Chloroethane	ND	5.0	101	111	9.4	95	94	1.1	70 - 130	30
Chloroform	ND	5.0	99	110	10.5	96	94	2.1	70 - 130	30
Chloromethane	ND	5.0	101	110	8.5	95	92	3.2	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	103	111	7.5	99	99	0.0	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	104	116	10.9	103	104	1.0	70 - 130	30
Dibromochloromethane	ND	3.0	104	118	12.6	107	107	0.0	70 - 130	30
Dibromomethane	ND	5.0	104	117	11.8	108	107	0.9	70 - 130	30
Dichlorodifluoromethane	ND	5.0	93	101	8.2	82	80	2.5	70 - 130	30
Ethylbenzene	ND	1.0	96	103	7.0	98	97	1.0	70 - 130	30
Hexachlorobutadiene	ND	5.0	93	98	5.2	89	88	1.1	70 - 130	30
Isopropylbenzene	ND	1.0	99	106	6.8	102	100	2.0	70 - 130	30
m&p-Xylene	ND	2.0	96	102	6.1	94	95	1.1	70 - 130	30
Methyl ethyl ketone	ND	5.0	107	119	10.6	101	106	4.8	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	103	113	9.3	101	99	2.0	70 - 130	30
Methylene chloride	ND	5.0	95	106	10.9	93	90	3.3	70 - 130	30
Naphthalene	ND	5.0	101	114	12.1	102	103	1.0	70 - 130	30
n-Butylbenzene	ND	1.0	97	102	5.0	90	91	1.1	70 - 130	30
n-Propylbenzene	ND	1.0	98	104	5.9	98	97	1.0	70 - 130	30
o-Xylene	ND	2.0	96	105	9.0	99	97	2.0	70 - 130	30
p-Isopropyltoluene	ND	1.0	99	106	6.8	96	97	1.0	70 - 130	30
sec-Butylbenzene	ND	1.0	97	104	7.0	96	96	0.0	70 - 130	30
Styrene	ND	5.0	97	104	7.0	95	95	0.0	70 - 130	30
tert-Butylbenzene	ND	1.0	97	105	7.9	100	98	2.0	70 - 130	30
Tetrachloroethene	ND	5.0	99	109	9.6	98	97	1.0	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	118	134	12.7	112	116	3.5	70 - 130	30
Toluene	ND	1.0	94	104	10.1	95	96	1.0	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	103	110	6.6	95	94	1.1	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	110	124	12.0	107	109	1.9	70 - 130	30

QA/QC Data

SDG I.D.: GCO87351

Parameter	BIK		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
trans-1,4-dichloro-2-butene	ND	5.0	121	140	14.6	118	120	1.7	70 - 130	30	I
Trichloroethene	ND	5.0	96	107	10.8	97	97	0.0	70 - 130	30	
Trichlorofluoromethane	ND	5.0	100	106	5.8	91	89	2.2	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	101	107	5.8	94	93	1.1	70 - 130	30	
Vinyl chloride	ND	5.0	102	109	6.6	94	91	3.2	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	%	100	101	1.0	101	102	1.0	70 - 130	30	
% Bromofluorobenzene	100	%	100	100	0.0	98	99	1.0	70 - 130	30	
% Dibromofluoromethane	108	%	110	109	0.9	100	97	3.0	70 - 130	30	
% Toluene-d8	97	%	101	101	0.0	99	99	0.0	70 - 130	30	


Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.  
 m = This parameter is outside laboratory MS/MSD specified recovery limits.  
 r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

- RPD - Relative Percent Difference
- LCS - Laboratory Control Sample
- LCSD - Laboratory Control Sample Duplicate
- MS - Matrix Spike
- MS Dup - Matrix Spike Duplicate
- NC - No Criteria
- Intf - Interference

  
 Phyllis Shiller, Laboratory Director  
 September 18, 2023



Monday, September 18, 2023

Criteria: CT: GBM, I/C, RC

State: CT

## Sample Criteria Exceedances Report

### GCO87351 - DOWNDAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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\*\*\* No Data to Display \*\*\*

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



# REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

**Laboratory Name:** Phoenix Environmental Labs, Inc.

**Client:** Down To Earth, LLC

**Project Location:** GOV. WINTHROP BLVD

**Project Number:**

**Laboratory Sample ID(s):** CO87351-CO87360

**Sampling Date(s):** 8/30/2023

**List RCP Methods Used (e.g., 8260, 8270, et cetera)** 6010, 7470/7471, 8082, 8260, 8270, ETPH

<b>1</b>	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1A</b>	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1B</b>	<u><i>YPH and EPH methods only:</i></u> Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
<b>2</b>	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>3</b>	Were samples received at an appropriate temperature (< 6 Degrees C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
<b>4</b>	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? See Sections: ETPH Narration, VOA Narration.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5</b>	a) Were reporting limits specified or referenced on the chain-of-custody?  b) Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>6</b>	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>7</b>	Are project-specific matrix spikes and laboratory duplicates included in the data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

**I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.**

**Authorized Signature:** Ethan Lee **Position:** Project Manager

**Printed Name:** Ethan Lee **Date:** Monday, September 18, 2023

**Name of Laboratory** Phoenix Environmental Labs, Inc.

**This certification form is to be used for RCP methods only.**



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## RCP Certification Report

September 18, 2023

SDG I.D.: GCO87351

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### SDG Comments

#### Metals Analysis:

The client requested a shorter list of elements than the 6010 RCP list. Only the RCRA 8 Metals are reported as requested on the chain of custody.

#### 8270 Semi-volatile Organics:

The client requested a short list for 8270 RCP Semivolatile. Only the PAH constituents are reported as requested on the chain-of-custody.

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### ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

**QC Batch 696625 (Samples: CO87351, CO87353, CO87355, CO87357): -----**

**The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Ext. Petroleum H.C. (C9-C36))**

#### Instrument:

**AU-FID11 09/13/23-1** Jeff Bucko, Chemist 09/13/23

CO87351 (1X), CO87353 (1X), CO87355 (1X), CO87357 (1X)

The initial calibration (ETPH8011) RSD for the compound list was less than 30% except for the following compounds: None.

As per section 7.2.3, a discrimination check standard was run (913A003\_1) and contained the following outliers: None.

The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

#### QC (Batch Specific):

##### **Batch 696625 (CO94096)**

CO87351, CO87353, CO87355, CO87357

All LCS recoveries were within 60 - 120 with the following exceptions: Ext. Petroleum H.C. (C9-C36)(121%)

All LCSD recoveries were within 60 - 120 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

---

### Mercury Narration

Were all QA/QC performance criteria specified in the analytical method achieved? Yes.

#### Instrument:

**MERLIN 09/12/23 18:29** Alexander Latka, Chemist 09/12/23

CO87351, CO87353, CO87355, CO87357

The method preparation blank, ICB, and CCBs contain all of the acids and reagents as the samples.

The initial calibration met all criteria including a standard run at or below the reporting level.

All calibration verification standards (ICV, CCV) met criteria.

All calibration blank verification standards (ICB, CCB) met criteria.

The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.



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## Certification Report

September 18, 2023

SDG I.D.: GCO87351

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### Mercury Narration

#### QC (Site Specific):

##### Batch 696576 (CO87351)

CO87351, CO87353, CO87355, CO87357

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

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### ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? Yes.

#### Instrument:

##### ARCOS-2 09/14/23 10:23

Cindy Pearce, Tina Hall, Chemist 09/14/23

CO87351, CO87353, CO87355, CO87357

The linear range is defined daily by the calibration range.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

#### QC (Batch Specific):

##### Batch 695093 (CO87255)

CO87351, CO87353, CO87355, CO87357

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 35% with the following exceptions: None.

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

---

### PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

#### Instrument:

##### AU-ECD1 09/12/23-1

Saadia Chudary, Chemist 09/12/23

CO87357 (10X)

The initial calibration (PC0816AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC0816BI) RSD for the compound list was less than 20% except for the following compounds: None.

The continuing calibration %D for the compound list was less than 15% except for the following compounds: None.

##### AU-ECD3 09/11/23-1

Saadia Chudary, Chemist 09/11/23

CO87353 (10X)

The initial calibration (PC0721AI) RSD for the compound list was less than 20% except for the following compounds: None.



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## RCP Certification Report

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### **PCB Narration**

The initial calibration (PC0721BI) RSD for the compound list was less than 20% except for the following compounds: None.  
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

**AU-ECD5 09/13/23-1** Saadia Chudary, Chemist 09/13/23

CO87351 (10X)

The initial calibration (PC0912AI) RSD for the compound list was less than 20% except for the following compounds: None.  
The initial calibration (PC0912BI) RSD for the compound list was less than 20% except for the following compounds: None.  
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

**AU-ECD7 09/11/23-1** Saadia Chudary, Chemist 09/11/23

CO87355 (10X)

The initial calibration (PC0808AI) RSD for the compound list was less than 20% except for the following compounds: None.  
The initial calibration (PC0808BI) RSD for the compound list was less than 20% except for the following compounds: None.  
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

### **QC (Batch Specific):**

#### **Batch 696472 (CO92349)**

CO87357

All LCS recoveries were within 40 - 140 with the following exceptions: None.  
All LCSD recoveries were within 40 - 140 with the following exceptions: None.  
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

#### **Batch 696624 (CO87099)**

CO87351

All LCS recoveries were within 40 - 140 with the following exceptions: None.  
All LCSD recoveries were within 40 - 140 with the following exceptions: None.  
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

### **QC (Site Specific):**

#### **Batch 696284 (CO87355)**

CO87353, CO87355

All LCS recoveries were within 40 - 140 with the following exceptions: None.  
All LCSD recoveries were within 40 - 140 with the following exceptions: None.  
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.  
All MS recoveries were within 40 - 140 with the following exceptions: None.  
All MSD recoveries were within 40 - 140 with the following exceptions: None.  
All MS/MSD RPDs were less than 30% with the following exceptions: None.

### **SVOA Narration**

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

#### **Instrument:**

**CHEM36 09/12/23-2** Matt Richard, Chemist 09/12/23

CO87351 (1X), CO87353 (1X), CO87355 (1X), CO87357 (1X)

Initial Calibration Evaluation (CHEM36/36\_BN\_0728):



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## RCP Certification Report

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SDG I.D.: GCO87351

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### **SVOA Narration**

100% of target compounds met criteria.

The following compounds had %RSDs >20%: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM36/0912\_20-36\_BN\_0728):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

100% of target compounds met criteria.

The following compounds did not meet % deviation criteria: None.

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet minimum response factors: None.

### **QC (Batch Specific):**

#### **Batch 696599 (CO88376)**

CO87351, CO87353, CO87355, CO87357

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

---

### **VOA Narration**

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

**QC Batch 695289 (Samples: CO87359): -----**

**One or more analytes is below the method criteria. A low bias for these analytes is possible. (Chloromethane)**

**The LCS and/or the LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Methyl ethyl ketone)**

**QC Batch 695289H: -----**

**One or more analytes is below the method criteria. A low bias for these analytes is possible. (Acetone, Methyl ethyl ketone, Tetrahydrofuran (THF), Trichlorofluoromethane)**

**The LCS and/or the LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Chloromethane)**

**QC Batch 695553 (Samples: CO87352, CO87354, CO87356, CO87358): -----**

**The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (1,2-Dibromo-3-chloropropane, Acrylonitrile, Tetrahydrofuran (THF), trans-1,4-dichloro-2-butene)**

**Instrument:**

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## RCP Certification Report

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SDG I.D.: GCO87351

### VOA Narration

#### **CHEM26 09/01/23-1**

Jane Li, Chemist 09/01/23

CO87352 (1X), CO87354 (1X), CO87356 (1X), CO87358 (1X)

Initial Calibration Evaluation (CHEM26/VT-083123):

99% of target compounds met criteria.

The following compounds had %RSDs >20%: Acetone 22% (20%)

The following compounds did not meet Table 4 recommended minimum response factors: None.

The following compounds did not meet the minimum response factor of 0.05: None.

Continuing Calibration Verification (CHEM26/0901\_05-VT-083123):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

100% of target compounds met criteria.

The following compounds did not meet % deviation criteria: None.

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet Table 4 recommended minimum response factors: None.

#### **CHEM31 08/31/23-2**

Jane Li, Chemist 08/31/23

CO87359 (1X), CO87360 (50X)

Initial Calibration Evaluation (CHEM31/VT-L082523):

100% of target compounds met criteria.

The following compounds had %RSDs >20%: None.

The following compounds did not meet Table 4 recommended minimum response factors: Tetrachloroethene 0.172 (0.2)

The following compounds did not meet the minimum response factor of 0.05: None.

Continuing Calibration Verification (CHEM31/0831\_35-VT-L082523):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

99% of target compounds met criteria.

The following compounds did not meet % deviation criteria: Methyl Ethyl Ketone 31%L (30%)

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet Table 4 recommended minimum response factors: None.

### QC (Batch Specific):

#### **Batch 695289 (CO87426)**

CHEM31 8/31/2023-2

CO87359(1X)

All LCS recoveries were within 70 - 130 with the following exceptions: Chloromethane(68%), Methyl ethyl ketone(69%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Chloromethane(69%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

The MS/MSD are not reported for this batch.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

#### **Batch 695289H (CO87426)**

CHEM31 8/31/2023-2

CO87360(50X)

All LCS recoveries were within 70 - 130 with the following exceptions: Acetone(62%), Methyl ethyl ketone(64%), Tetrahydrofuran (THF)(69%), Trichlorofluoromethane(64%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Acetone(60%), Chloromethane(67%), Methyl ethyl ketone(60%), Tetrahydrofuran (THF)(65%), Trichlorofluoromethane(64%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-



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## RCP Certification Report

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SDG I.D.: GCO87351

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### ***VOA Narration***

160% for Chloroethane-HL and Trichlorofluoromethane-HL.

**Batch 695553 (CO88196)** CHEM26 9/1/2023-1

CO87352(1X), CO87354(1X), CO87356(1X), CO87358(1X)

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: 1,2-Dibromo-3-chloropropane(133%), Acrylonitrile(133%), Tetrahydrofuran (THF)(134%), trans-1,4-dichloro-2-butene(140%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

---

### ***Temperature Narration***

The samples were received at 1.2C with cooling initiated.

(Note acceptance criteria for relevant matrices is above freezing up to 6°C)





SECTION 010100

SUMMARY OF WORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and General provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this Section.

1.02 INTENT OF PLANS AND SPECIFICATIONS

- A. The intent of the Plans and Specifications is to describe The Work which the Contractor undertakes to do, in full compliance with the Contract, and it is understood that the Contractor will furnish, unless otherwise provided in the Contract, all materials, machinery, equipment, tools, supplies, transportation, labor, and all other incidentals necessary to the satisfactory prosecution and completion of the Work. The Plans and Specifications are complementary, and what is called for by either is as binding as if called for by both.
- B. The Supplemental Conditions shall control where in conflict with the Standard Specifications. However, such portions of the Standard Specifications not in conflict or not rendered meaningless by the Special provisions shall remain in full force and effect and be binding on the parties hereto.
- C. In the event the Contractor discovers any error or discrepancy in the Contract Documents, he shall immediately call upon the Engineer for his decision. The Engineer shall then make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the Specifications, Special Provisions, Plans and other Contract Documents, as construed by him and his decision shall be final.

1.03 SUMMARY OF WORK

- A. The following items shall be considered as the Base Bid:

- 1. General Mobilization/Demobilization and Coordination.

This work consists of all labor, materials, tools and equipment required for setting-up general plant, storage/staging areas and facilities, as well as the procurement of all bonds, permits, and insurance necessary for this project and as required by State Laws and City Ordinances; and the general mobilization of equipment required for the completion of the work shown on the Contract Documents. The cost of this item

shall include all permits and fees required to perform the project, unless otherwise noted in the Contract Documents, and all expenses for the de-mobilization after the work has been completed. If a building permit is required, it will be the contractor's responsibility to get the necessary permit to perform the repair work, unless noted otherwise in the documents.

Electricity (power) and water required for the completion of the work shall be furnished by the Owner at existing fixtures or outlets if existing. (The Owner will not provide any temporary pipes, cables, etc.) The contractor shall provide temporary lighting in the work areas, as required, during the work. If the existing capacity is insufficient for the contractor's use, the contractor is responsible for supplementing existing capacity as needed.

This work shall also consist of items not otherwise specifically indicated or shown on the plans, but which are ancillary to the specified scope of work.

Work shall include the furnishing, installing, maintaining, relocating and removing of all signs, barricades, cones, warning lights, and other safety control devices and temporary signage required for the proper execution of the project. The Engineer and the Owner shall review the safety control device placement before work begins and also prior to the beginning of work on any subsequent construction stages. Any deficiencies in the location or arrangement of devices shall be corrected by the contractor before starting work.

2. Site Preparation, removal and disposal of designated and related materials, placement of islands and curbing, placement of pavement, other related site materials, along with all other work required for the satisfactory performance of this work item.
3. Installation of catch basins, manholes, sanitary sewer and drainage structures and piping, and other related materials, along with all other work required for the satisfactory performance of this work item.
4. Installation of lighting, electrical infrastructure and related materials, along with all other work required for the satisfactory performance of this work item. Electrical work shall be performed on a "Design-Build" basis per the Specifications.
5. Installation of fencing related site materials, along with all other work required for the satisfactory performance of this work item.
6. Installation of roadway traffic signals, pavement line striping, traffic markings and signage, along with all other work required for the satisfactory performance of this work item.

7. Miscellaneous coordination and/or items of work not otherwise noted but depicted on/in the Drawings or Specifications. This includes coordination of the Contractor's work with the various Utility Companies and Garde Arts Center as noted in the Contract Drawings and Documents.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 0 0100

## BID FORM

#	Description	Cost
1	General Requirements & Mobilization	
2	Demolition, Sawcutting and Removals	
3	Maintenance & Protection of Traffic (incl. Temp. Striping and Signage for Phased Work)	
4	Temp. 6' H C.L.F. and Gates (w/ Driven Posts)	
5	Granite Stone Curbing	
6	Concrete Sidewalk and Curb Ramp	
7	Concrete Driveway Apron and Heavy Duty Pavement Section	
8	Concrete Median with Stamped Concrete and Integral Color	
9	18" W Brick Band (Stamped Concrete Sidewalk w/ Integral Color)	
10	Traffic Signs	
11	Epoxy Pavement Line Striping, Pavement Markings and Symbols	
12	Mill Ex. Asphalt Pavement	
13	Full Depth Pavement Section (Including P.A.B.)	
14	Bituminous Concrete Overlay	
15	Drainage Work: All Piping, Trenching, Catch Basins, Manholes, etc.	
16	Sanitary Sewer Work: All Piping Trenching, Manholes, By-pass Pumping, Reconnection to Existing Manhole, etc.	
17	Reset Ex. Valves, MH Frames, CBs and Traffic Boxes to New Grade	
18	Water Work: New Fire Hydrant Including Lateral and Valve(s)	
19	Electrical Work: New Light Poles, Luminaires, Foundations, etc.	
20	Traffic Signal Work: Modify Ex. Traffic Signal at Union Street	
21	Establish Lawn (Topsoil, Mulch and Seed)	
<b>Grand Total Lump Sum Base Bid Price</b>		

Grand Total Lump Sum Base Bid Price Written in Words:

\_\_\_\_\_ Dollars

and \_\_\_\_\_ Cents

**Unit Prices**

At the direction of the Engineer or Owner, the Contractor may be asked to perform additional work which may include some of the following items. The Contractor shall be paid at the “unit bid price” for the following items:

#	Description	Unit Bid Price
Unit 1	Remove Unsuitable Soil and Replace w/ Compacted Gravel Fill	Per CY
Unit 2	Rock Excavation	Per CY
Unit 3	Uniformed Municipal Police Officer	Per Day

**Note:**

*Each bidder shall be responsible for determining actual quantities of work to his own satisfaction. The project shall be bid on a “lump sum” basis with unit prices only used for any additional work that may be requested by the City.*

**Subcontractors:**

Prime Bidders: Please list all subcontractors that are expected to provide work on the project:
---

**Assumptions & Exclusions:**

Prime Bidders: Please list any other assumptions or exclusions here associated with this bid:

**This Bid is Approved and Submitted by:**

\_\_\_\_\_  
Name of Company and Address

\_\_\_\_\_  
Name and Title of Authorized Representative  
(*please print*)

\_\_\_\_\_  
Signature and Date

Notary Certification:

State of Connecticut, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

Notary Public: \_\_\_\_\_, My Commission Expires: \_\_\_\_\_



# ROADWAY IMPROVEMENTS PROJECT

# GOVERNOR WINTHROP BOULEVARD

- LOCATED BETWEEN -

## HUNTINGTON AVENUE (STATE ROUTE 641) TO UNION STREET NEW LONDON, CONNECTICUT

- PREPARED FOR THE CITY OF NEW LONDON -

DEPARTMENT OF PUBLIC WORKS  
181 STATE STREET, CITY HALL, NEW LONDON, CT 06320

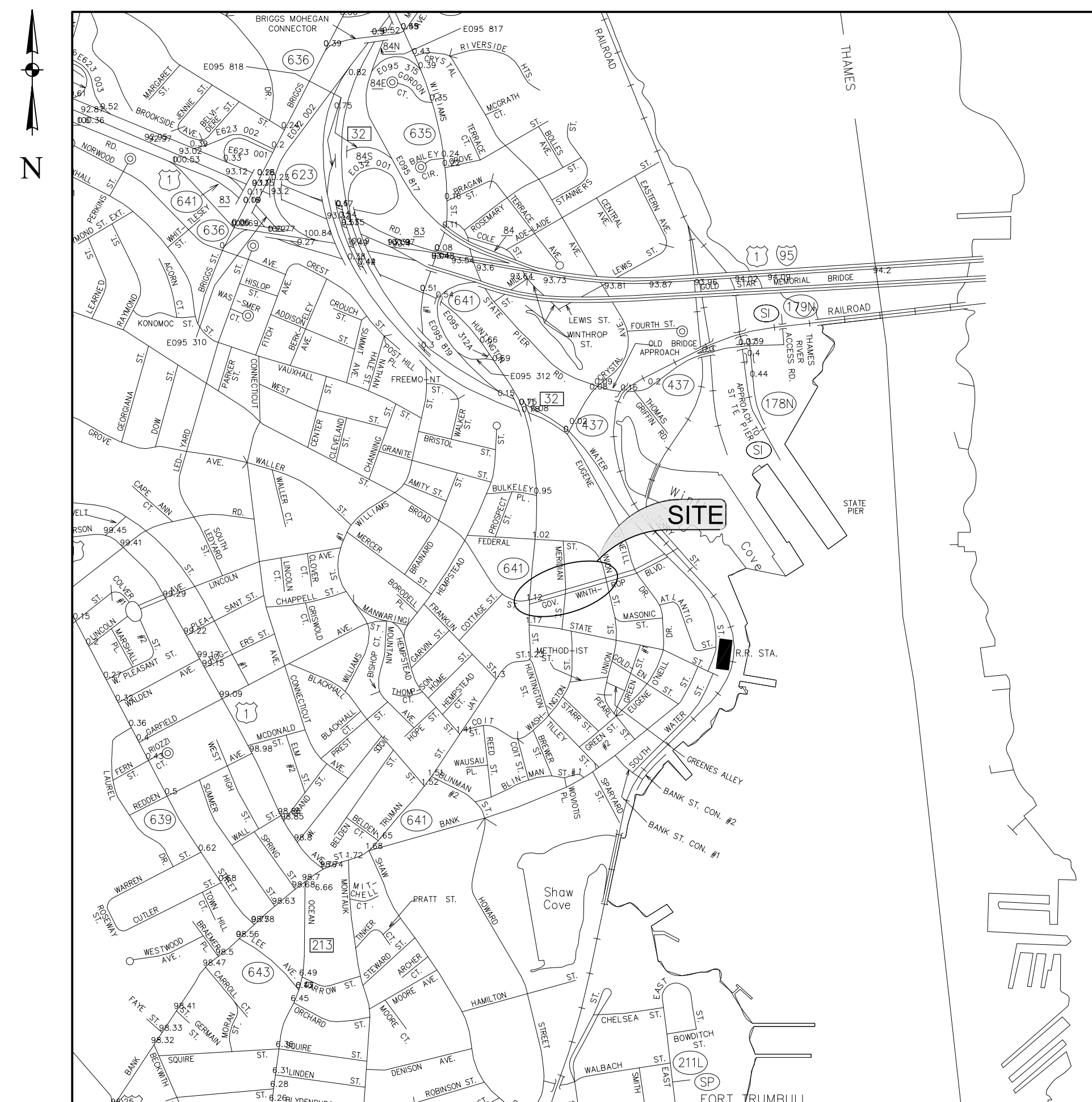
- RELEASED FOR BIDDING -  
- 28 NOVEMBER 2023 -

### GENERAL NOTES FOR CONSTRUCTION

- CONTRACTOR SHALL CONTACT "CALL-BEFORE-YOU-DIG" SERVICES AT 1-800-922-4455 A MINIMUM OF TWO (2) DAYS BEFORE BEGINNING ANY EXCAVATION AT THE SITE.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONSTRUCTION OPERATIONS WITHIN AND OUTSIDE OF THE LIMITS OF CONSTRUCTION AS SHOWN ON THE PLANS.
- NEW WORK SHALL BLEND SMOOTHLY WITH EXISTING GRADES. UNLESS OTHERWISE SHOWN, ALL PAVEMENTS SHALL HAVE A TWO PERCENT CROSS-PITCH TO INSURE PROPER DRAINAGE.
- ALL DISTURBED AREAS WITHIN OR OUTSIDE THE LIMITS OF CONSTRUCTION NOT COVERED BY BUILDINGS, PAVEMENT, PLANTING BEDS OR OTHER IMPROVEMENTS ARE TO BE TOPSOILED (4" DEPTH MIN.) AND SEEDED PER DIRECTION OF THE OWNER.
- SILTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS NECESSARY PRIOR TO THE START OF GRADING AND MAINTAINED UNTIL ALL GROUND SURFACES ARE STABILIZED, I.E. WITH TURF, PAVEMENTS, ETC.
- ANY DIMENSION LINE SHOWN FROM PROPERTY LINE, FACE OF CURB OR BUILDING IS PERPENDICULAR UNLESS OTHERWISE SHOWN.
- PROTECT EXISTING UTILITIES TO REMAIN FROM DAMAGE. ACTIVE UTILITY LINES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL SUBSURFACE UTILITIES PRIOR TO THE START OF WORK. ANY FIELD CONDITIONS THAT DIFFER FROM THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- PROVIDE, ERECT AND MAINTAIN BARRICADES, WARNING LIGHTS, SIGNS, ETC., AS REQUIRED FOR SAFETY OF PERSONNEL, PUBLIC AND OCCUPANTS OF THE FACILITIES AFFECTED BY THE CONTRACTOR'S OPERATIONS. CONTRACTOR SHALL MAINTAIN TRAFFIC ACCESS AND EGRESS PATTERNS AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND IN ACCORDANCE WITH CTDOT STANDARDS.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO CTDOT FORM 818, LATEST EDITION, AS AMENDED, UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN.
- THE CONTRACTOR SHALL CAREFULLY SAWCUT EXISTING CURBS AND PAVEMENTS PRIOR TO REMOVAL. ALL EXISTING CURBING, PAVEMENTS AND OTHER AMENITIES THAT MAY INTERFERE WITH THE NEW WORK SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
- COMPACT MATERIAL TO NOT LESS THAN THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557 AND D-2049 AS FOLLOWS:
  - FOR UNPAVED AREAS, COMPACT TOP 6" OF SUBGRADE AND EACH LAYER OF BACKFILL OF FILL MATERIAL TO 85% MAXIMUM DRY DENSITY.
  - FOR PAVEMENTS, COMPACT TOP 12" OF SUBGRADE AND EACH LAYER OF BACKFILL MATERIAL TO 95% MAXIMUM DRY DENSITY.
- ALL UNSUITABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL LAWS.
- REPAIR ALL DAMAGED LAWN AREAS WITH MINIMUM 4" TOPSOIL, SEED & MULCH. GRADE AS DIRECTED BY CITY ENGINEER.
- REMOVAL OF ANY TREES WITHIN TOWN R.O.W. REQUIRES APPROVAL OF TOWN TREE WARDEN.

### CALL BEFORE YOU DIG

ALL UTILITY AND SUB-SURFACE INFORMATION SHOWN HEREON IS TO BE CONSIDERED APPROXIMATE BOTH AS TO SIZE AND LOCATION. THE CONTRACTOR SHALL MAKE INVESTIGATIONS IN THE FIELD TO VERIFY ALL EXACT UTILITY LOCATIONS BEFORE CONSTRUCTION. CALL TELEPHONE 1-800-922-4455 "CALL BEFORE YOU DIG" A MINIMUM OF 2 DAYS BEFORE BEGINNING ANY EXCAVATION AT THE SITE.



SITE LOCATION MAP  
SCALE: 1"=1,000'

### LIST OF DRAWINGS

	SITE DEVELOPMENT PLANS	DATE
--	Title Sheet	11-28-2023
01	Roadway Plan	11-28-2023
02	Grading & Utility Plan	11-28-2023
03	Roadway Sections	11-28-2023
04	San. Sewer Plan & Profile	11-28-2023
05	Union Street Intersection	11-28-2023
06	Typ. Roadway Details	11-28-2023
07	Typ. Utility Details	11-28-2023
08	Temp. Traffic Phasing Plan	11-28-2023

### SURVEY NOTES

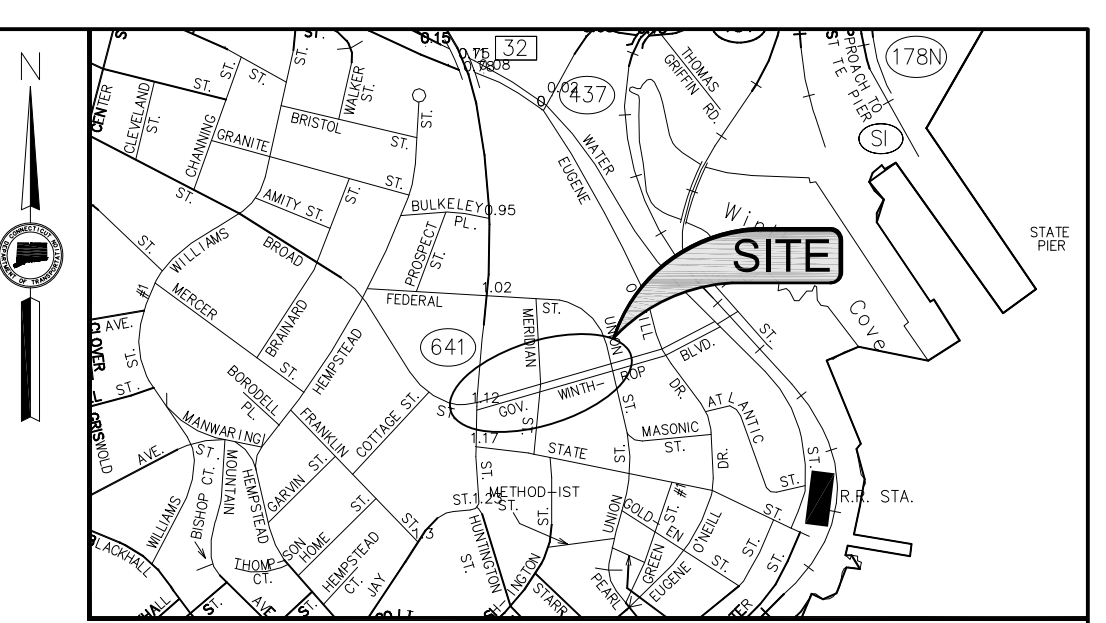
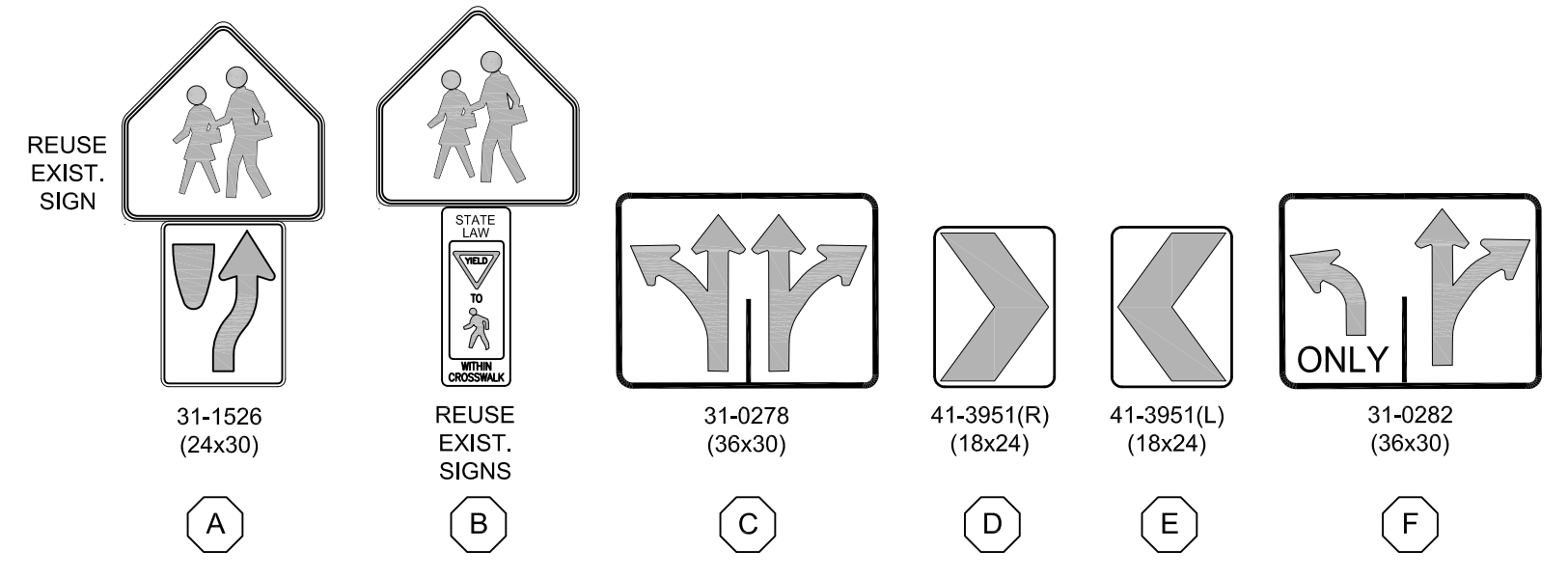
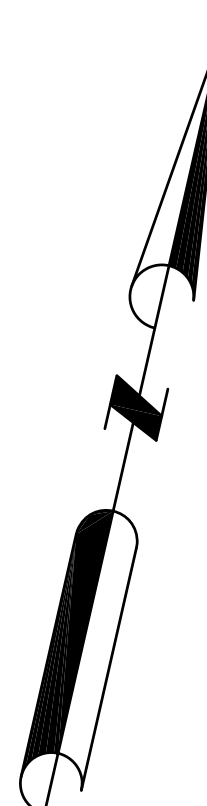
- SURVEY INFORMATION BASED ON A PRELIMINARY MAP PROVIDED BY THE CITY OF NEW LONDON. THE MAP IS ENTITLED "IMPROVEMENT LOCATION SURVEY, DEPICTING THE EXISTING CONDITIONS OF THE PROPERTY OWNED BY THE GARDE ARTS CENTER, INC., PREPARED FOR SILVER PETRUCCELLI + ASSOCIATES, 325 STATE STREET, GOVERNOR WINTHROP BOULEVARD MERIDIAN STREET, NEW LONDON, CONNECTICUT." THE MAP WAS PREPARED BY STADIA ENGINEERING ASSOCIATES AND IS DATED MAY 6, 2022 WITH A DRAWING NUMBER OF D-424A AND A REVISION DATE OF APRIL 2022. NOTING: "INITIAL RELEASE FOR REVIEW & COMMENT." CABEZAS-DeANGELIS, LLC ASSUMES THE INFORMATION DEPICTED ON THE SURVEY MAP IS SUBSTANTIALLY CORRECT AS PRESENTED.
- ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. CABEZAS-DeANGELIS MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. CABEZAS-DeANGELIS FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH IT IS CERTIFIED THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. CABEZAS-DeANGELIS HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

CIVIL ENGINEERING CONSULTANT:

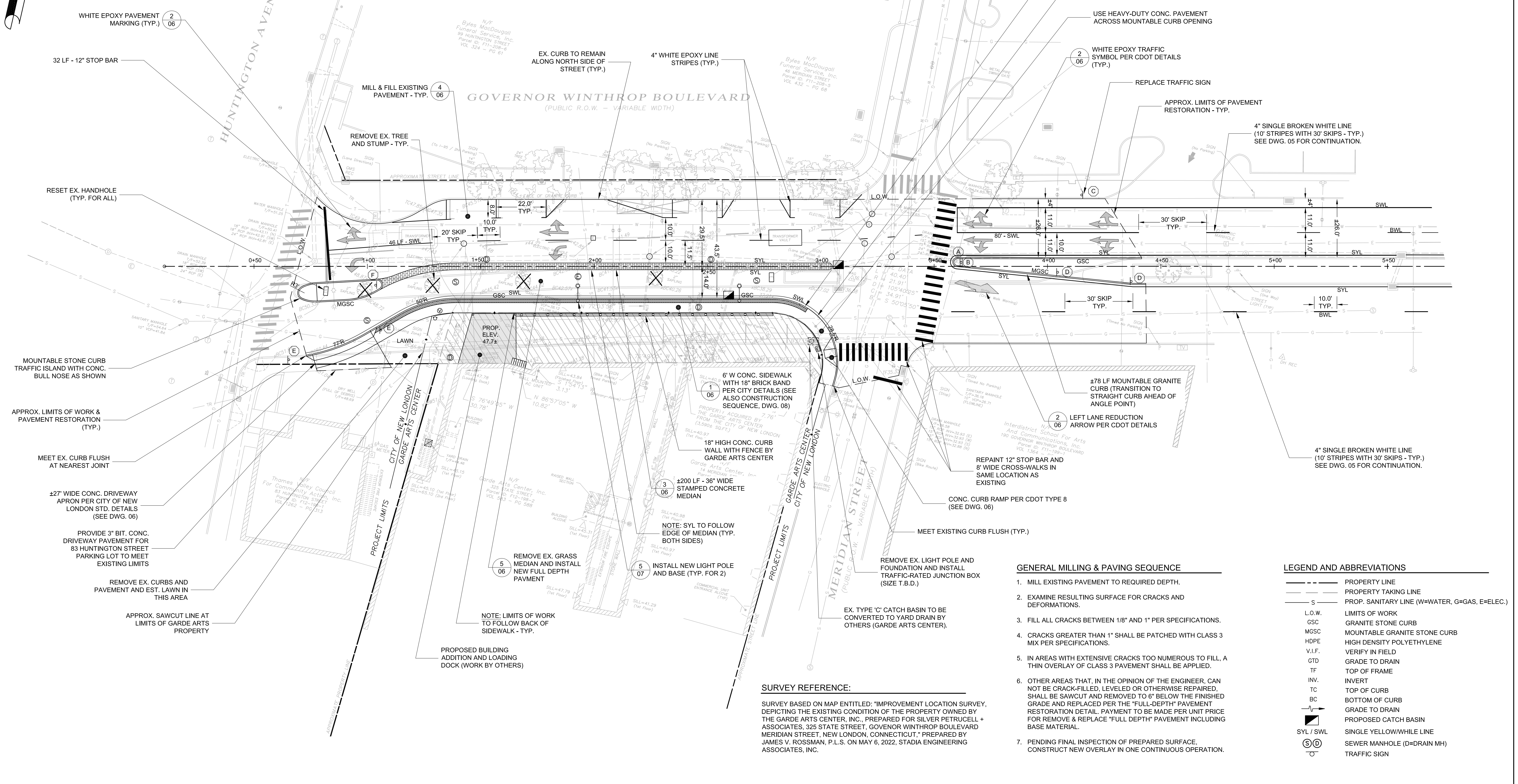
**Cabezas  
DeAngelis**  
ENGINEERS & SURVEYORS

78 ELM STREET, BRIDGEPORT, CT 06604  
P:203 330 8700 • F:203 330 8701





LOCATION MAP  
SCALE: 1" = 1,000'



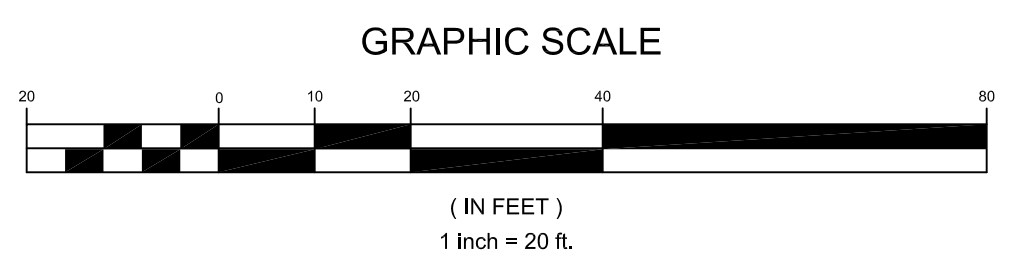
- GENERAL MILLING & PAVING SEQUENCE**
- MILL EXISTING PAVEMENT TO REQUIRED DEPTH.
  - EXAMINE RESULTING SURFACE FOR CRACKS AND DEFORMATIONS.
  - FILL ALL CRACKS BETWEEN 1/8" AND 1" PER SPECIFICATIONS.
  - CRACKS GREATER THAN 1" SHALL BE PATCHED WITH CLASS 3 MIX PER SPECIFICATIONS.
  - IN AREAS WITH EXTENSIVE CRACKS TOO NUMEROUS TO FILL, A THIN OVERLAY OF CLASS 3 PAVEMENT SHALL BE APPLIED.
  - OTHER AREAS THAT, IN THE OPINION OF THE ENGINEER, CAN NOT BE CRACK-FILLED, LEVELED OR OTHERWISE REPAIRED, SHALL BE SAWCUT AND REMOVED TO 6" BELOW THE FINISHED GRADE AND REPLACED PER THE "FULL-DEPTH" PAVEMENT RESTORATION DETAIL. PAYMENT TO BE MADE PER UNIT PRICE FOR REMOVE & REPLACE "FULL DEPTH" PAVEMENT INCLUDING BASE MATERIAL.
  - PENDING FINAL INSPECTION OF PREPARED SURFACE, CONSTRUCT NEW OVERLAY IN ONE CONTINUOUS OPERATION.

**LEGEND AND ABBREVIATIONS**

---	PROPERTY LINE
---	PROPERTY TAKING LINE
---	PROP. SANITARY LINE (W=WATER, G=GAS, E=ELEC.)
L.O.W.	LIMITS OF WORK
GSC	GRANITE STONE CURB
MGSC	MOUNTABLE GRANITE STONE CURB
HDPE	HIGH DENSITY POLYETHYLENE
V.I.F.	VERIFY IN FIELD
GTD	GRADE TO DRAIN
TF	TOP OF FRAME
INV.	INVERT
TC	TOP OF CURB
BC	BOTTOM OF CURB
→	GRADE TO DRAIN
▣	PROPOSED CATCH BASIN
SYL / SWL	SINGLE YELLOW/WHITE LINE
⊙	SEWER MANHOLE (D=DRAIN MH)
⊕	TRAFFIC SIGN

**SURVEY REFERENCE:**  
SURVEY BASED ON MAP ENTITLED: "IMPROVEMENT LOCATION SURVEY, DEPICTING THE EXISTING CONDITION OF THE PROPERTY OWNED BY THE GARDE ARTS CENTER, INC., PREPARED FOR SILVER PETRUCELLI + ASSOCIATES, 325 STATE STREET, GOVERNOR WINTHROP BOULEVARD MERIDIAN STREET, NEW LONDON, CONNECTICUT," PREPARED BY JAMES V. ROSSMAN, P.L.S. ON MAY 6, 2022. STADIA ENGINEERING ASSOCIATES, INC.

NO.	DESCRIPTION	DATE



ENGINEERING CONSULTANT:

79 ELM STREET, BRIDGEPORT, CT 06604  
P: 203 330 8700 • F: 203 330 8701

APPROVED BY:

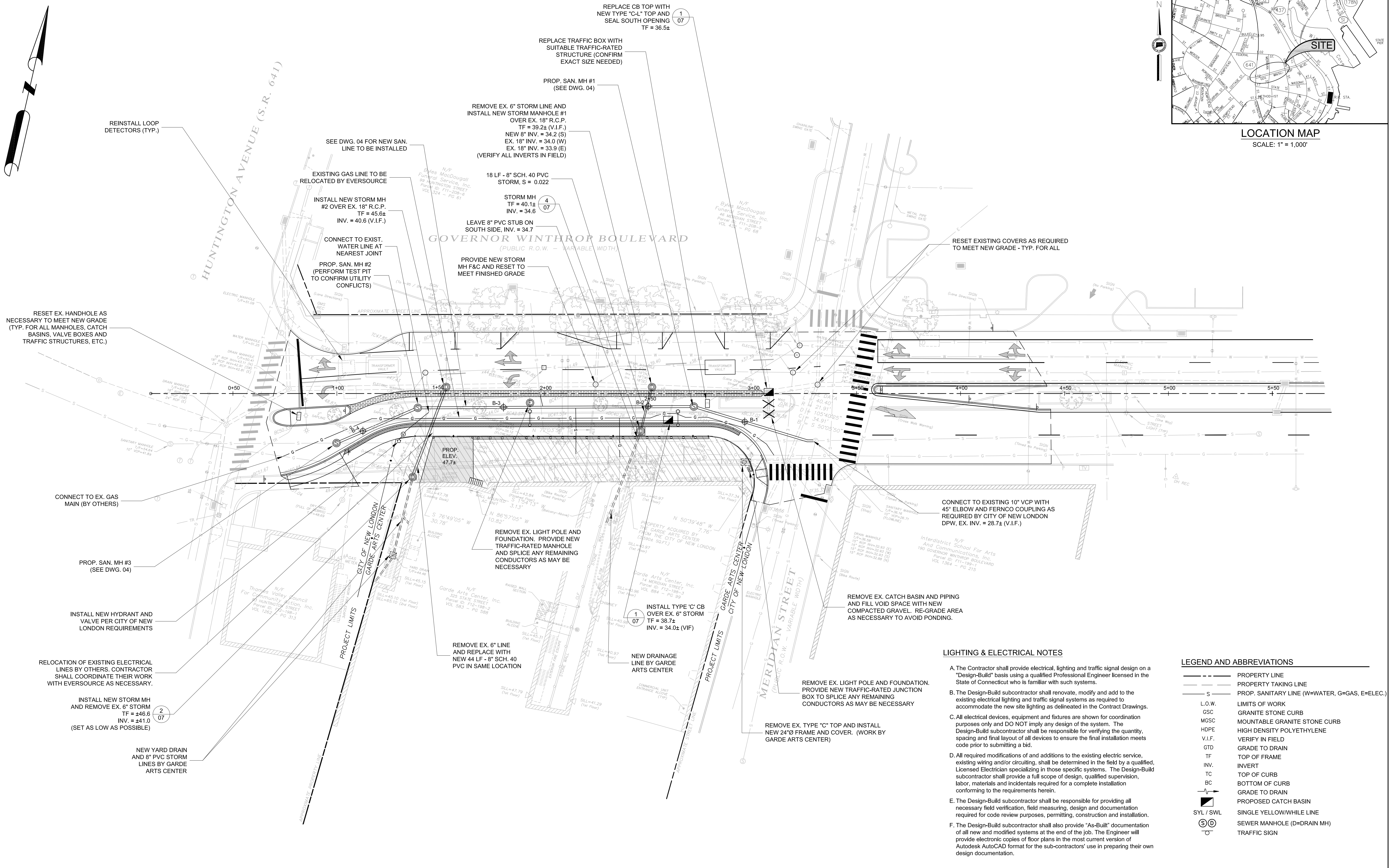
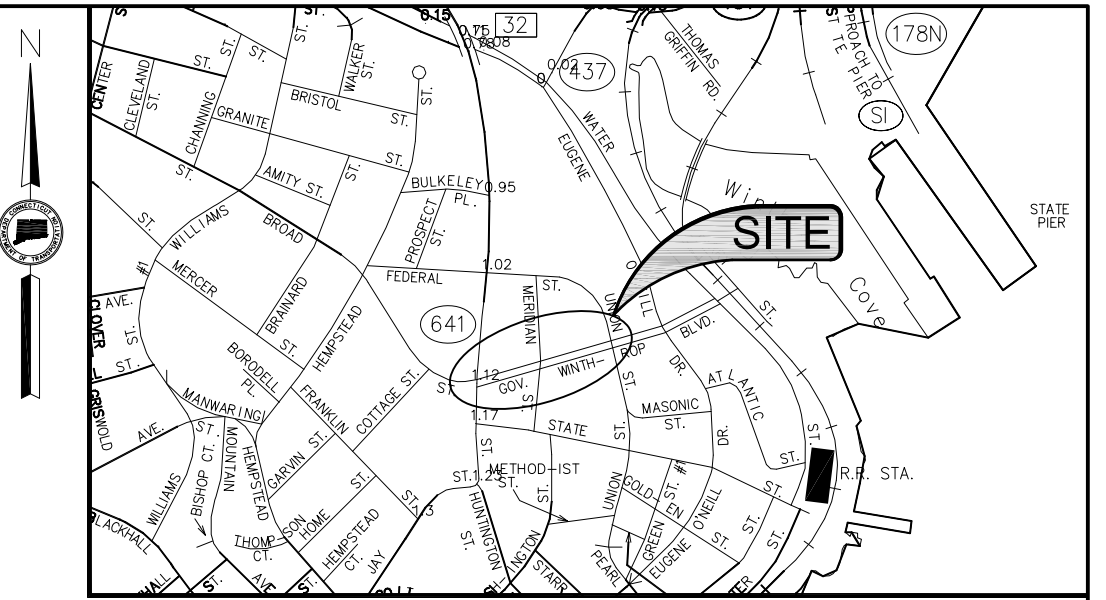
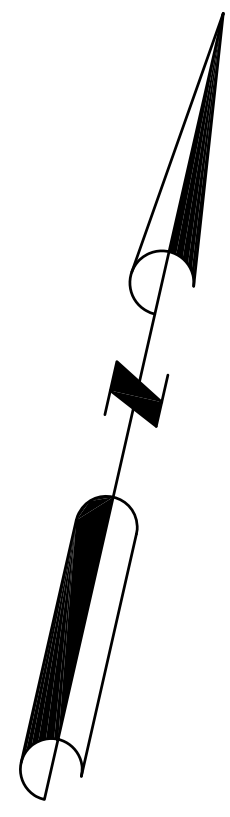
MR. BRIAN SEAR  
DIRECTOR OF PUBLIC WORKS

GOVERNOR WINTHROP BOULEVARD  
ROADWAY IMPROVEMENT PROJECT  
HUNTINGTON AVENUE (S.R. 641) TO UNION STREET  
DEPARTMENT OF PUBLIC WORKS  
NEW LONDON, CONNECTICUT

DRAWING NO. **01**  
JOB NO. 23.06  
CONTRACT NO. \_\_\_\_\_  
DESIGNED CAD DRAWN CAD CHECKED CAD SCALE 1"=20'-0" DATE 11-28-2023 SHEET 1 OF 8 SHEETS

DEPARTMENT OF PUBLIC WORKS  
**ROADWAY PLAN**  
CITY OF NEW LONDON





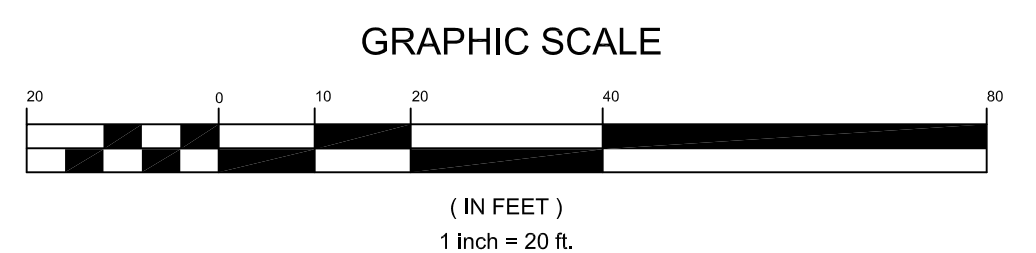
**LIGHTING & ELECTRICAL NOTES**

- A. The Contractor shall provide electrical, lighting and traffic signal design on a "Design-Build" basis using a qualified Professional Engineer licensed in the State of Connecticut who is familiar with such systems.
- B. The Design-Build subcontractor shall renovate, modify and add to the existing electrical lighting and traffic signal systems as required to accommodate the new site lighting as delineated in the Contract Drawings.
- C. All electrical devices, equipment and fixtures are shown for coordination purposes only and DO NOT imply any design of the system. The Design-Build subcontractor shall be responsible for verifying the quantity, spacing and final layout of all devices to ensure the final installation meets code prior to submitting a bid.
- D. All required modifications of and additions to the existing electric service, existing wiring and/or circuiting, shall be determined in the field by a qualified, Licensed Electrician specializing in those specific systems. The Design-Build subcontractor shall provide a full scope of design, qualified supervision, labor, materials and incidentals required for a complete installation conforming to the requirements herein.
- E. The Design-Build subcontractor shall be responsible for providing all necessary field verification, field measuring, design and documentation required for code review purposes, permitting, construction and installation.
- F. The Design-Build subcontractor shall also provide "As-Built" documentation of all new and modified systems at the end of the job. The Engineer will provide electronic copies of floor plans in the most current version of Autodesk AutoCAD format for the sub-contractors' use in preparing their own design documentation.

**LEGEND AND ABBREVIATIONS**

- PROPERTY LINE
- PROPERTY TAKING LINE
- S --- PROP. SANITARY LINE (W=WATER, G=GAS, E=ELEC.)
- L.O.W. LIMITS OF WORK
- M.G.S.C. MOUNTABLE GRANITE STONE CURB
- H.D.P.E. HIGH DENSITY POLYETHYLENE
- V.I.F. VERIFY IN FIELD
- G.T.D. GRADE TO DRAIN
- T.F. TOP OF FRAME
- I.N.V. INVERT
- T.C. TOP OF CURB
- B.C. BOTTOM OF CURB
- GRADE TO DRAIN
- PROPOSED CATCH BASIN
- SYL / SWL SINGLE YELLOW/WHITE LINE
- ⊙ ⊕ SEWER MANHOLE (D=DRAIN MH)
- ⊕ TRAFFIC SIGN

NO.	DESCRIPTION	DATE



ENGINEERING CONSULTANT:

78 ELM STREET, BRIDGEPORT, CT 06604  
P: 203 330 8700 • F: 203 330 8701

APPROVED BY:

MR. BRIAN SEAR  
DIRECTOR OF PUBLIC WORKS

**GOVERNOR WINTHROP BOULEVARD  
ROADWAY IMPROVEMENT PROJECT**  
HUNTINGTON AVENUE (S.R. 641) TO UNION STREET  
DEPARTMENT OF PUBLIC WORKS  
NEW LONDON, CONNECTICUT

DESIGNED CAD DRAWN CAD CHECKED CAD SCALE 1"=20'-0" DATE 11-28-2023

DRAWING NO. **02**  
JOB NO. 23.06  
CONTRACT NO. \_\_\_\_\_

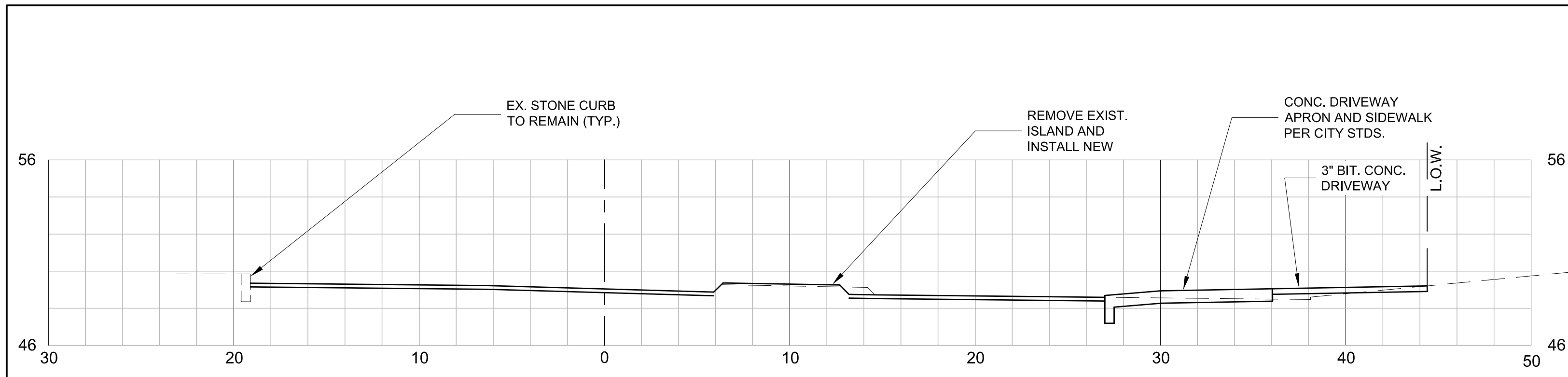
SHEET 2 OF 8 SHEETS

DEPARTMENT OF PUBLIC WORKS

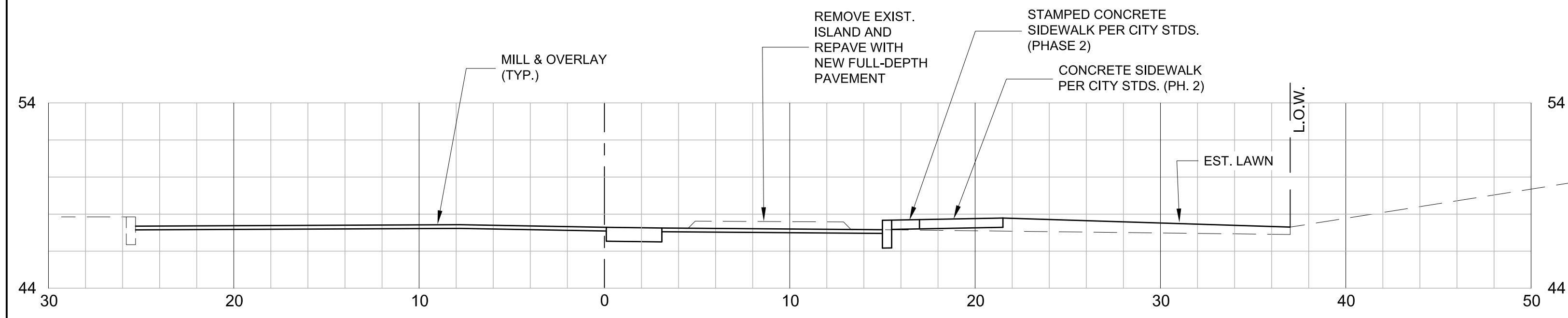
**GRADING & UTILITY PLAN**

CITY OF NEW LONDON

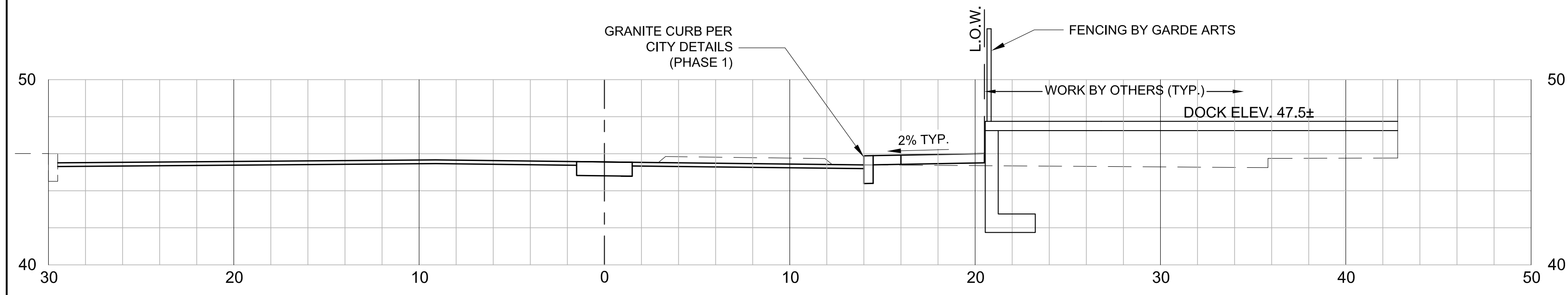




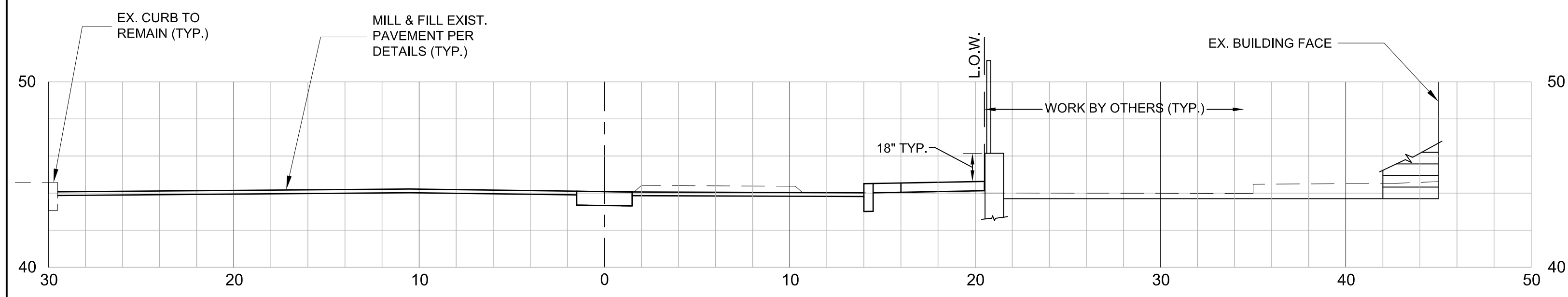
STATION 1+00



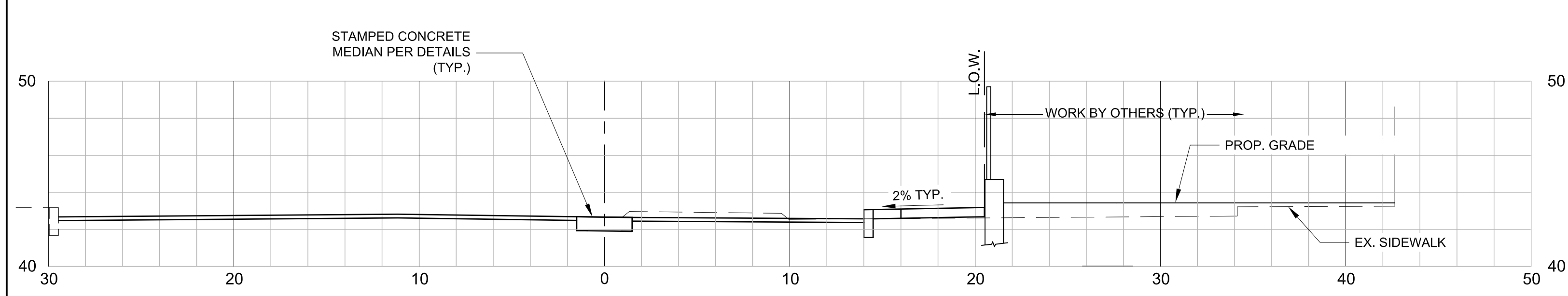
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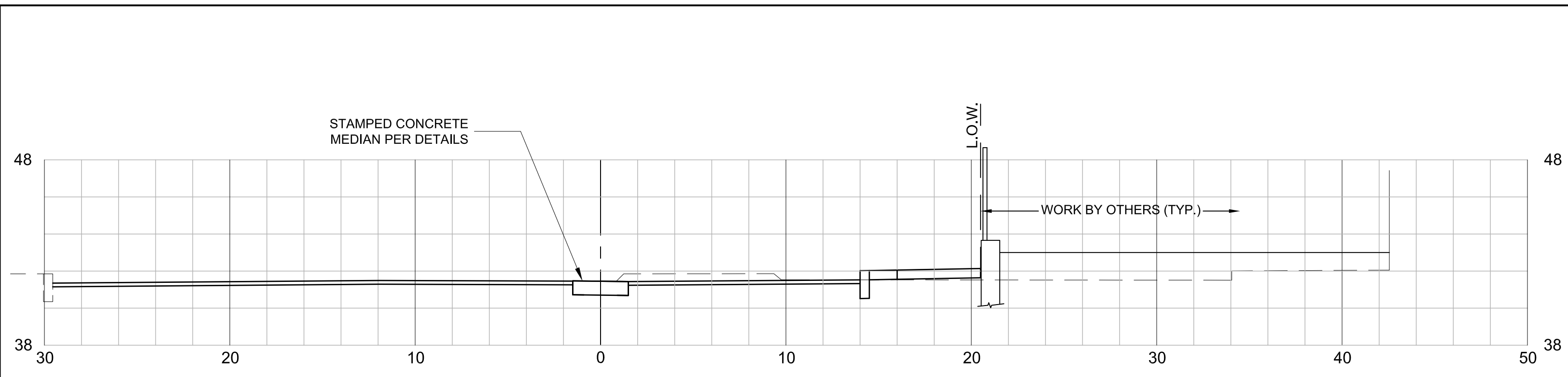
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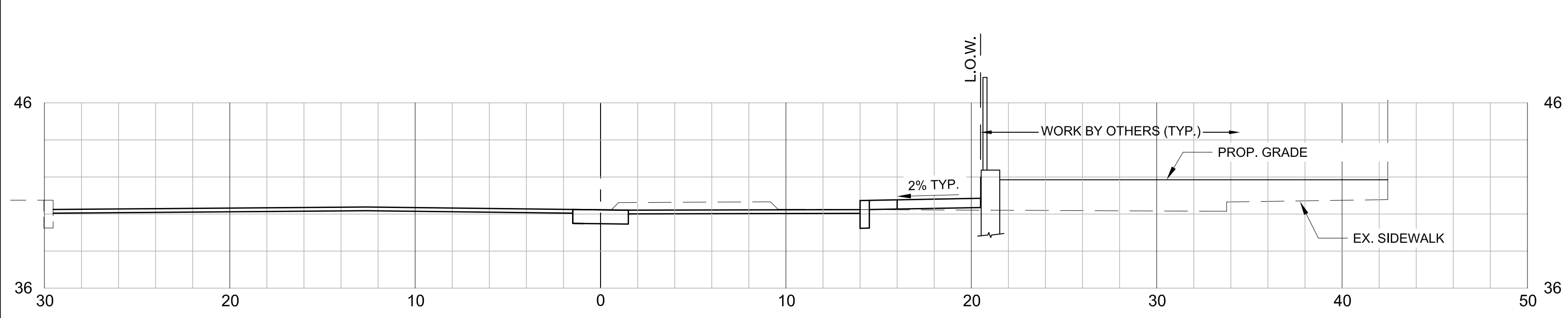
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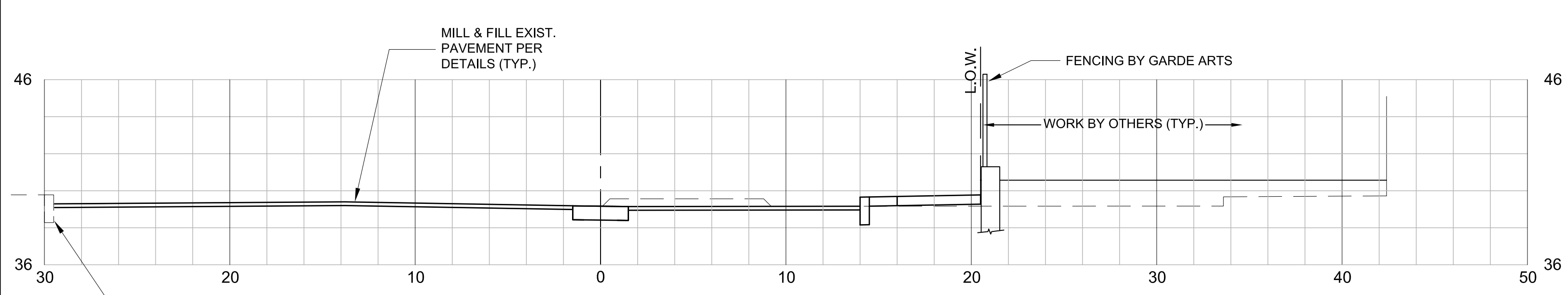
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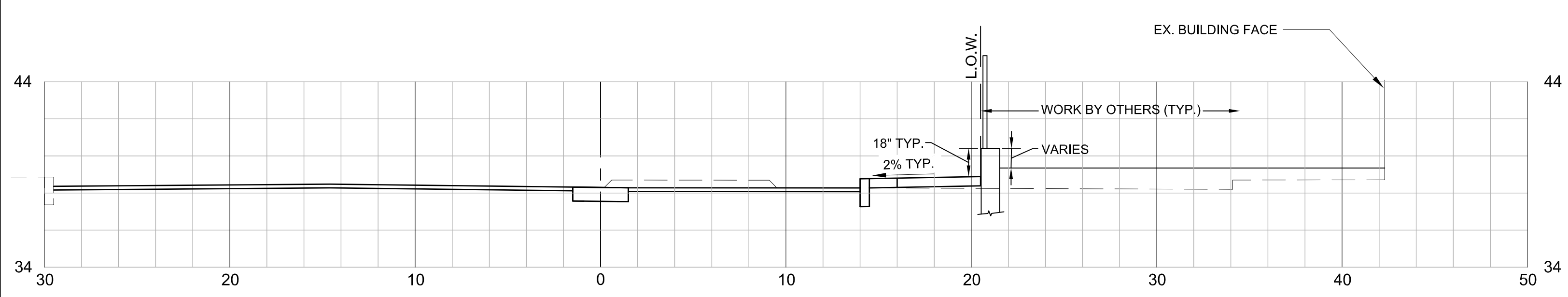
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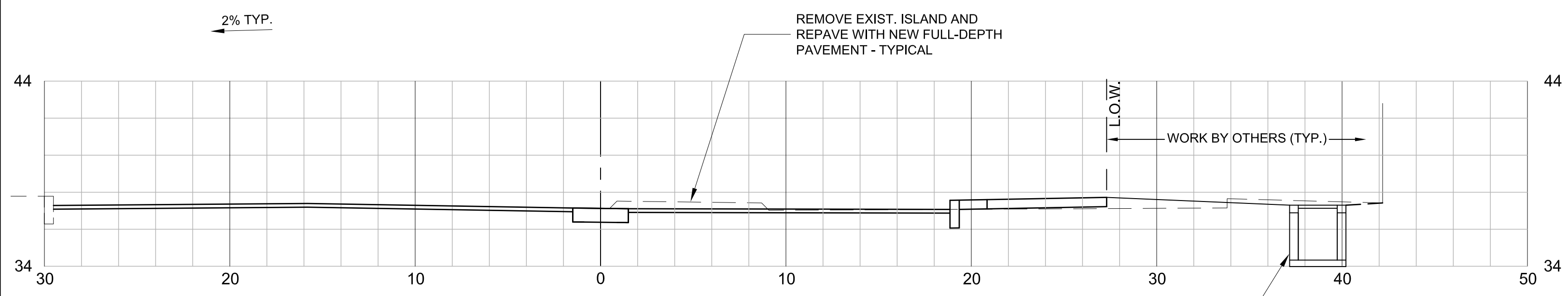
STATION 2+30



STATION 2+50

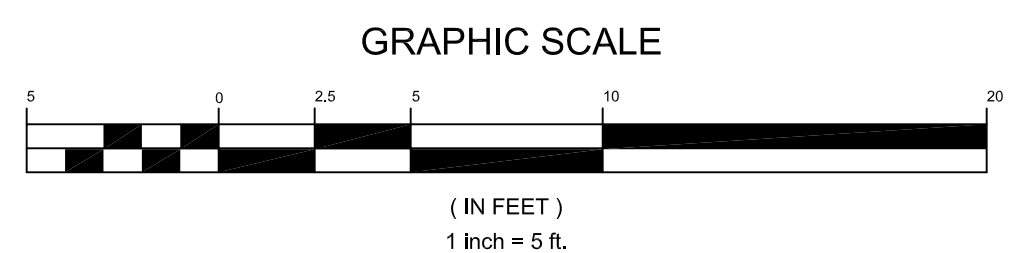


STATION 2+70



STATION 2+95

NO.	DESCRIPTION	DATE



ENGINEERING CONSULTANT:

78 ELM STREET, BRIDGEPORT, CT 06604  
P: 203 330 8700 • F: 203 330 8701

APPROVED BY:

MR. BRIAN SEAR  
DIRECTOR OF PUBLIC WORKS

GOVERNOR WINTHROP BOULEVARD  
ROADWAY IMPROVEMENT PROJECT  
HUNTINGTON AVENUE (S.R. 641) TO UNION STREET  
DEPARTMENT OF PUBLIC WORKS  
NEW LONDON, CONNECTICUT

DESIGNED CAD DRAWN CAD CHECKED CAD SCALE 1"=5'-0" DATE 11-28-2023

DRAWING NO. 03  
JOB NO. 23.06  
CONTRACT NO. \_\_\_\_\_

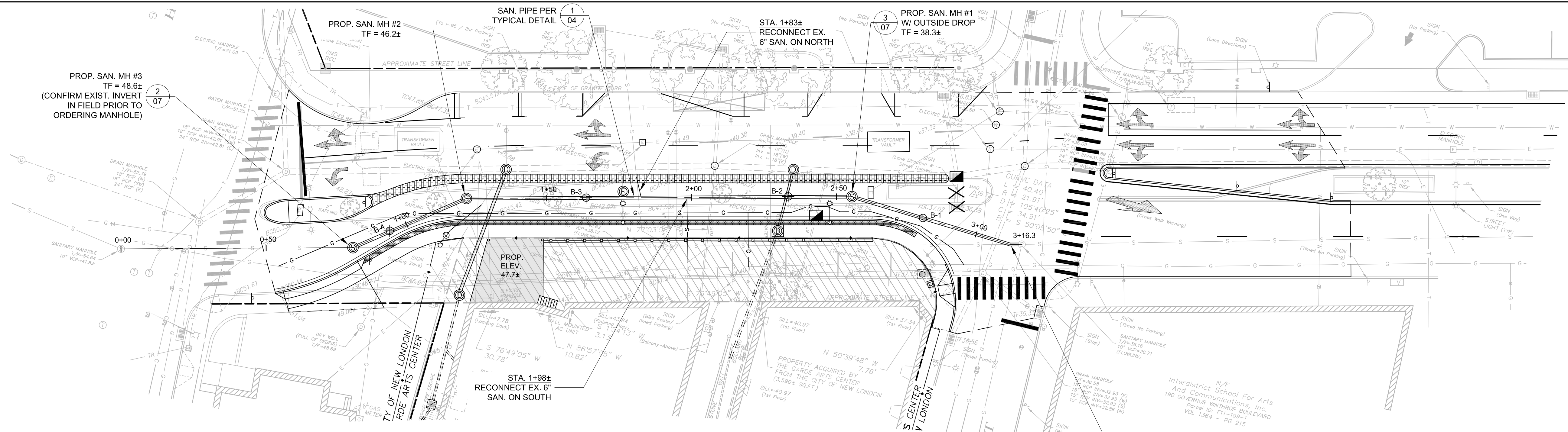
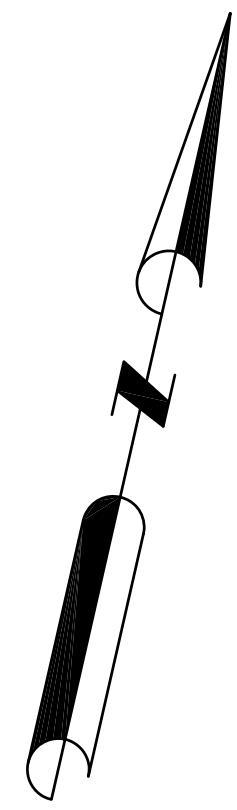
SHEET 3 OF 8 SHEETS

DEPARTMENT OF PUBLIC WORKS

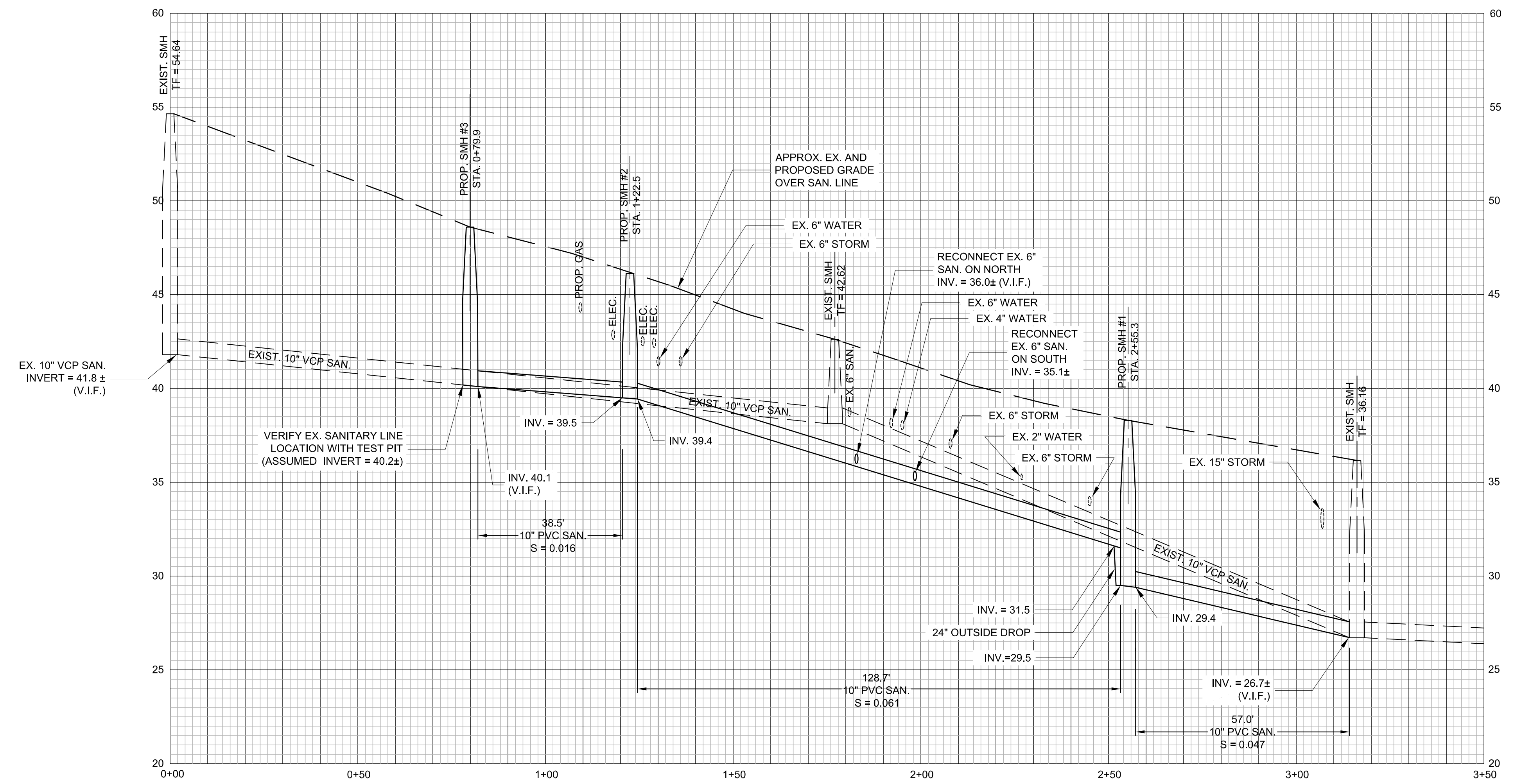
ROADWAY SECTIONS

CITY OF NEW LONDON

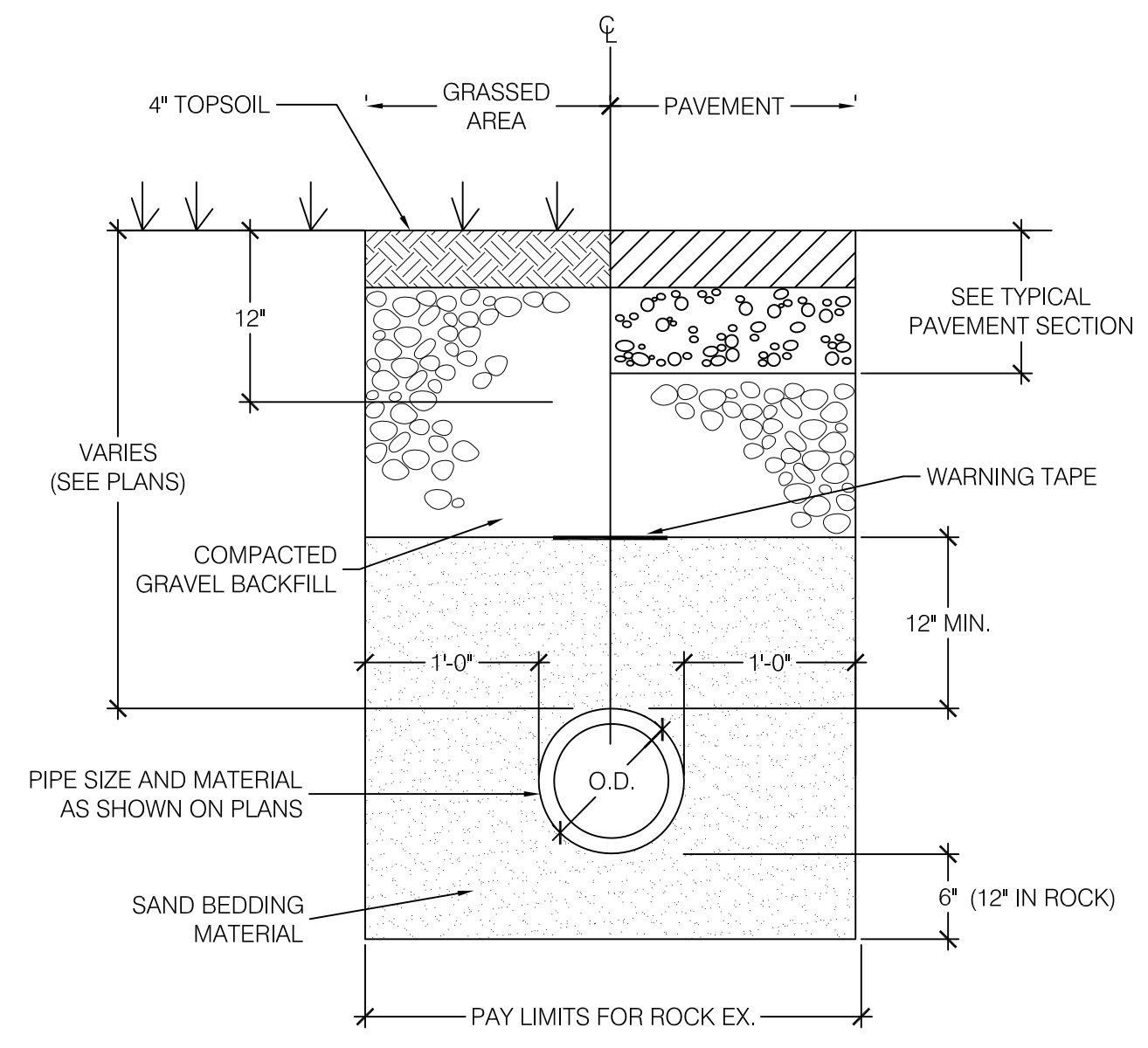




45° ELBOW, CONNECT TO EXISTING 10" VCP WITH FERNCO COUPLING PER NEW LONDON DPW REQUIREMENTS

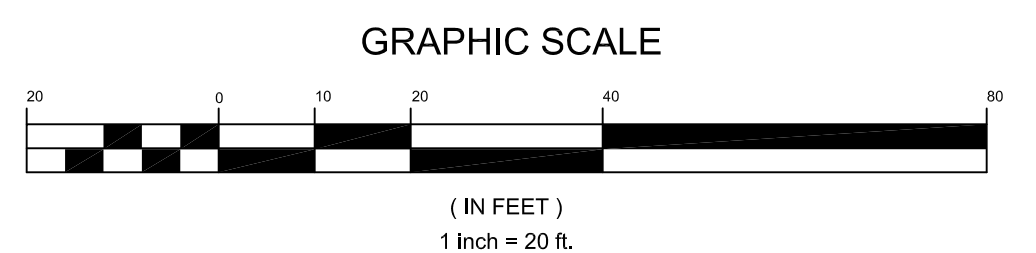


**SANITARY SEWER PROFILE**  
SCALE: 1" = 20' HORIZ.  
1" = 4' VERT.



1 TYPICAL TRENCH SECTION (SANITARY SEWER PIPE)  
SCALE: NOT TO SCALE

NO.	DESCRIPTION	DATE



ENGINEERING CONSULTANT:

**Cabezas DeAngelis**  
ENGINEERS & SURVEYORS

78 ELM STREET, BRIDGEPORT, CT 06604  
P: 203 330 8700 • F: 203 330 8701

APPROVED BY:

MR. BRIAN SEAR  
DIRECTOR OF PUBLIC WORKS

GOVERNOR WINTHROP BOULEVARD  
ROADWAY IMPROVEMENT PROJECT  
HUNTINGTON AVENUE (S.R. 641) TO UNION STREET  
DEPARTMENT OF PUBLIC WORKS  
NEW LONDON, CONNECTICUT

DESIGNED CAD DRAWN CAD CHECKED CAD SCALE 1"=20'-0" DATE 11-28-2023

DRAWING NO. **04**  
JOB NO. 23.06  
CONTRACT NO. \_\_\_\_\_

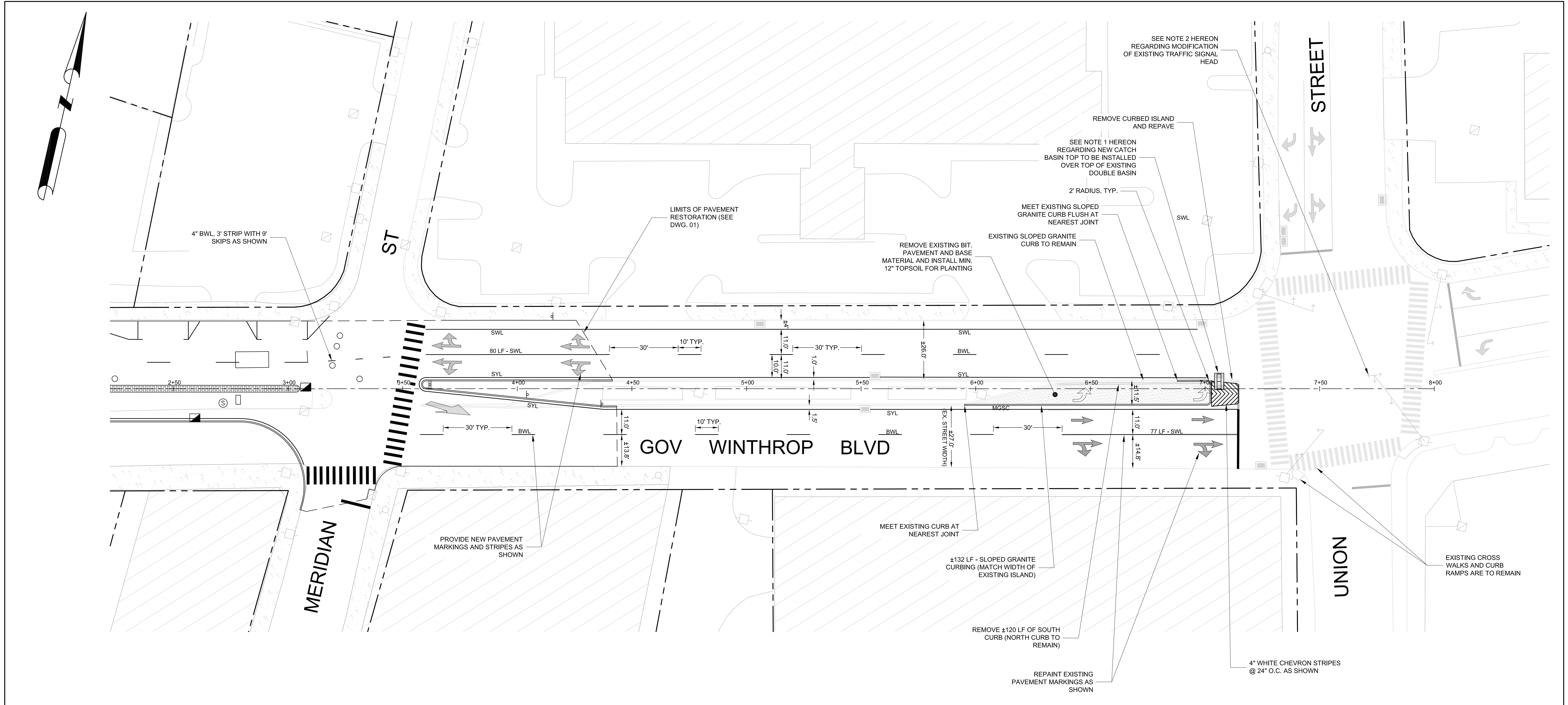
SHEET 4 OF 8 SHEETS

DEPARTMENT OF PUBLIC WORKS

**SAN. SEWER PLAN & PROFILE**

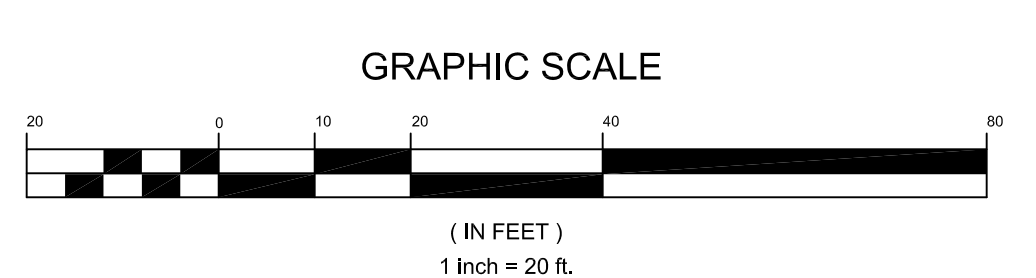
CITY OF NEW LONDON





- NOTES**
1. PROVIDE SPECIAL TYPE "C-L" DOUBLE BASIN (TYPE 2) TOP WITH H-20 TRAFFIC LOADING TO FIT OVER EXISTING BASIN. CONTRACTOR SHALL CLEAN INTERIOR OF BASIN AND REMORTAR ALL JOINTS AS DIRECTED BY CITY ENGINEER. REMOVE AND REPLACE ANY LOOSE OR DAMAGED BLOCKS OR STONES AS APPROPRIATE.
  2. TRAFFIC SIGNAL HEAD TO BE MODIFIED TO REMOVE EXISTING LEFT TURN ONLY SIGNAL. THIS WORK SHALL BE PROVIDED TO THE CITY AS A "DESIGN-BUILD" PROJECT. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED PROFESSIONAL ENGINEER TO PROVIDE A TRAFFIC SIGNAL PLAN FOR CITY REVIEW. WORK SHALL INCLUDE ALL MODIFICATIONS TO THE EXISTING SIGNAL, CONTROL BOX AND LOOP DETECTORS AS MAY BE NECESSARY TO PROVIDE A COMPLETE WORKING DESIGN PACKAGE.
  3. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICIAN WHO IS FAMILIAR WITH SUCH SYSTEMS. THE CONTRACTOR SHALL PROVIDE AN "AS-BUILT" DIAGRAM SHOWING ALL MODIFICATIONS MADE TO THE EXISTING SYSTEM.

NO.	DESCRIPTION	DATE



ENGINEERING CONSULTANT:

**Cabezas DeAngelis**  
ENGINEERS & SURVEYORS

78 ELM STREET, BRIDGEPORT, CT 06604  
P: 203 330 8700 • F: 203 330 8701

APPROVED BY:

MR. BRIAN SEAR  
DIRECTOR OF PUBLIC WORKS

GOVERNOR WINTHROP BOULEVARD  
ROADWAY IMPROVEMENT PROJECT  
HUNTINGTON AVENUE (S.R. 641) TO UNION STREET  
DEPARTMENT OF PUBLIC WORKS  
NEW LONDON, CONNECTICUT

DESIGNED CAD DRAWN CAD CHECKED CAD SCALE 1"=20'-0" DATE 11-28-2023

DRAWING NO. **05**

JOB NO. 23.06

CONTRACT NO. \_\_\_\_\_

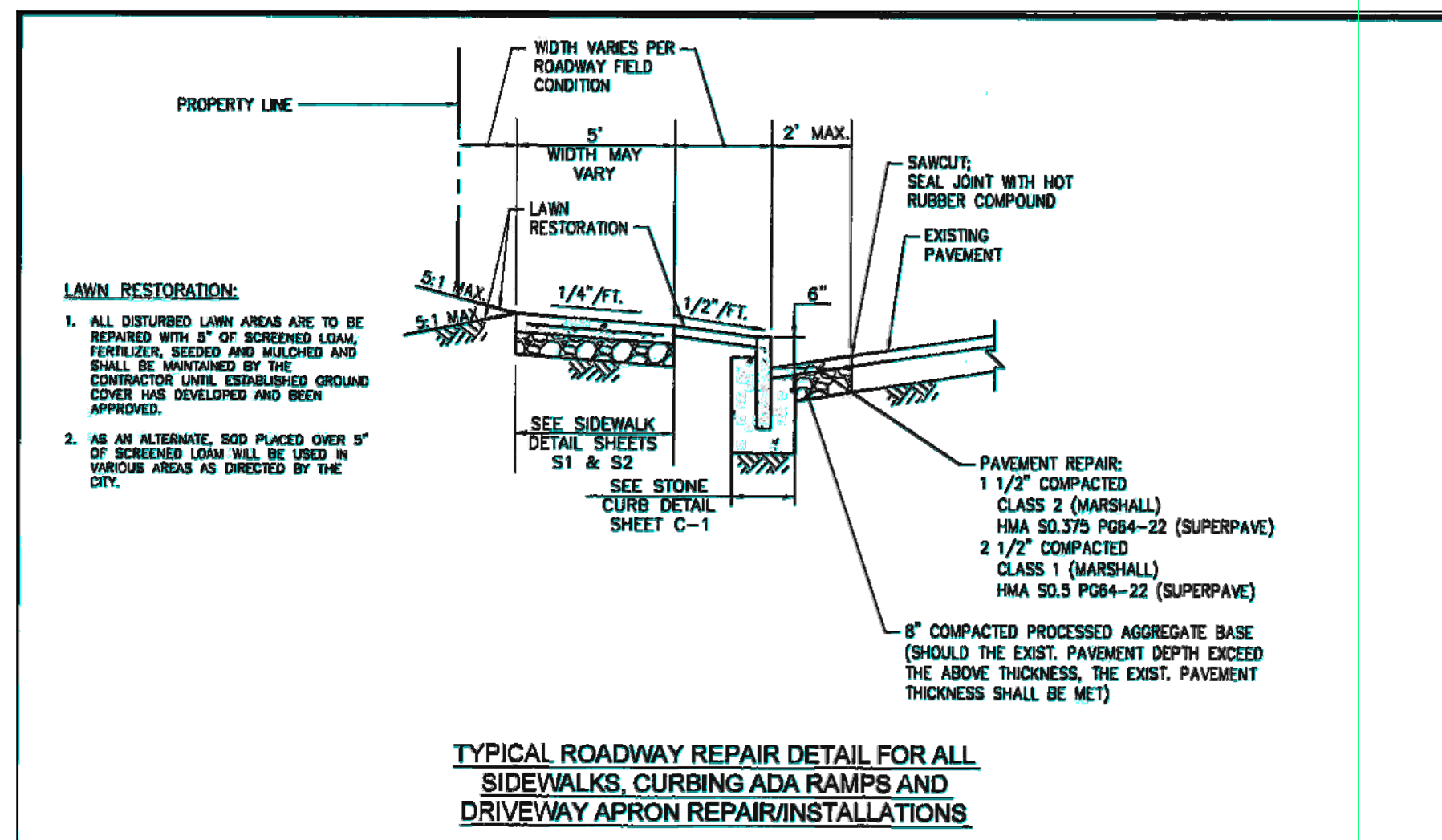
SHEET 5 OF 8 SHEETS

DEPARTMENT OF PUBLIC WORKS

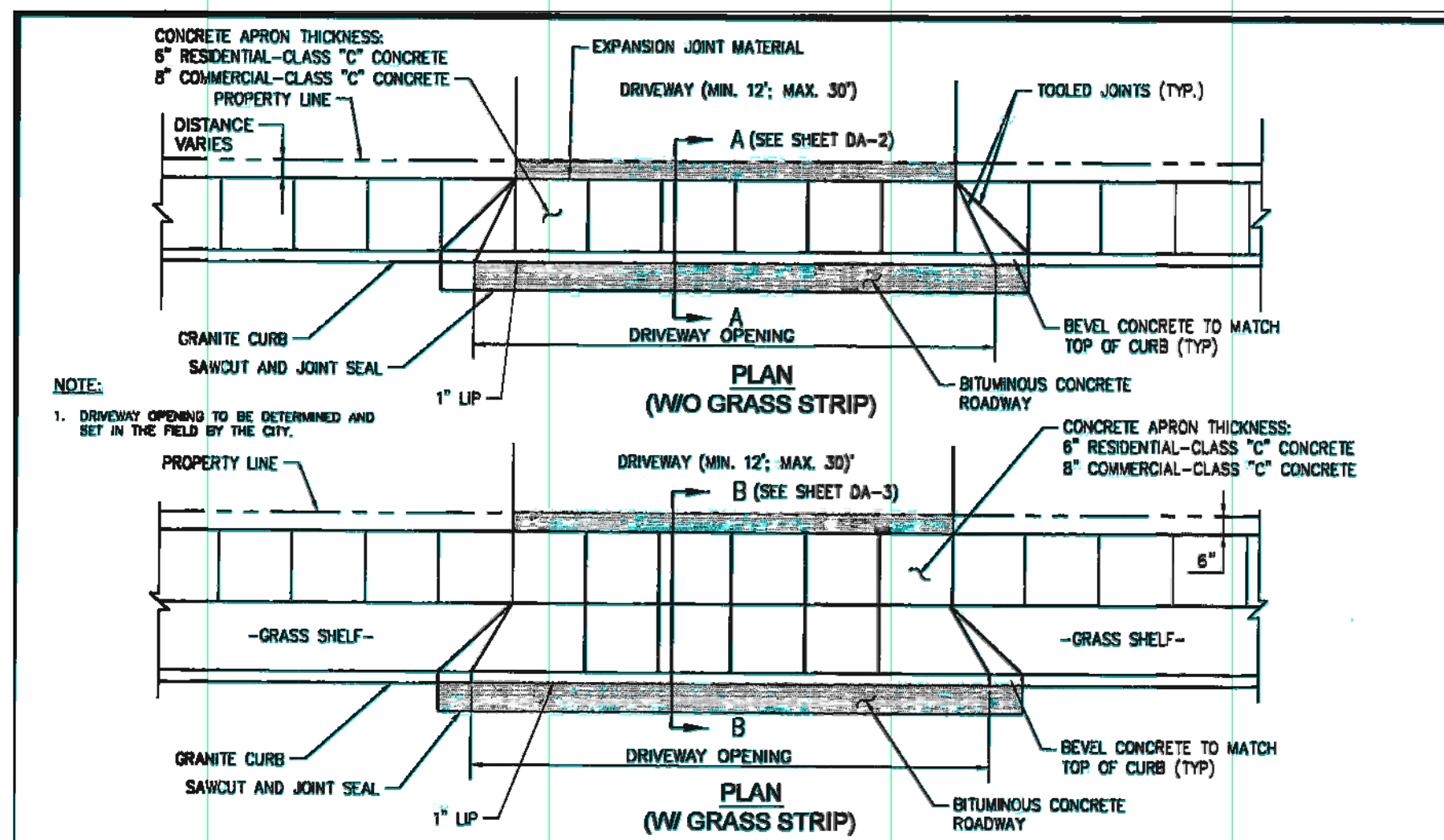
**UNION STREET INTERSECTION**

CITY OF NEW LONDON

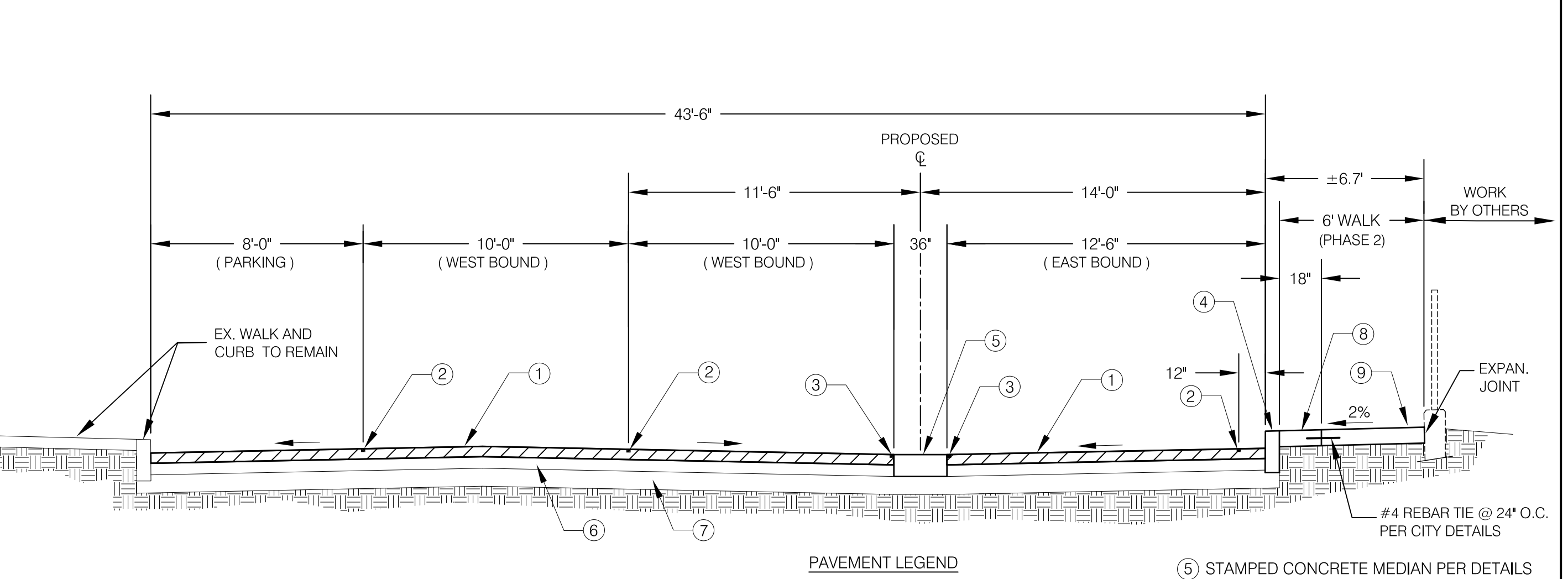




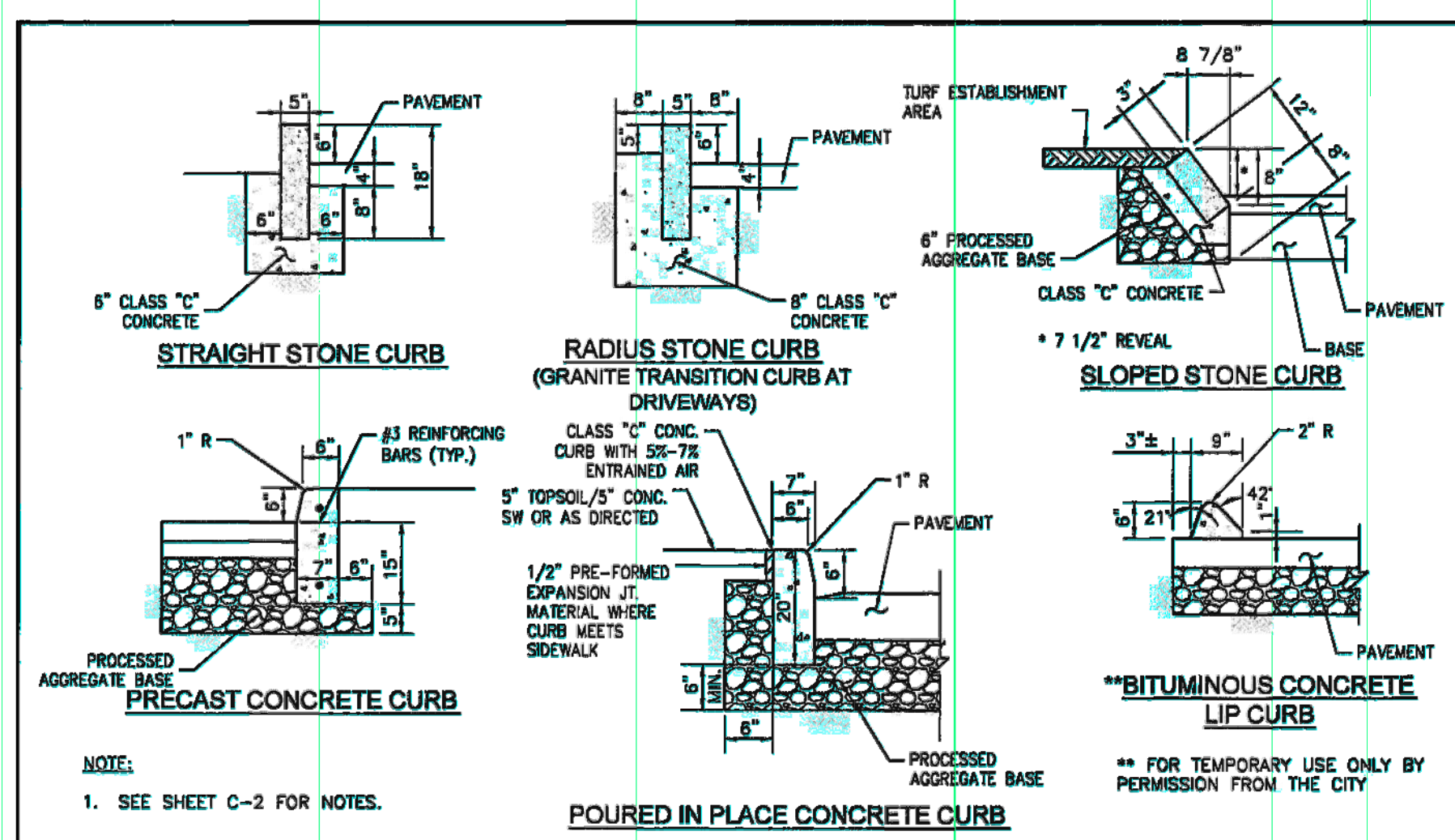
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REV. NO.	DATE	ENGINEER	DESCRIPTION	SUBMITTED BY: JAH DATE: 03.08.2015	SHEET NO.: 2
REVISIONS				APPROVED BY: WJC DATE: 03.08.2015	DRAWING NO.: RW-3



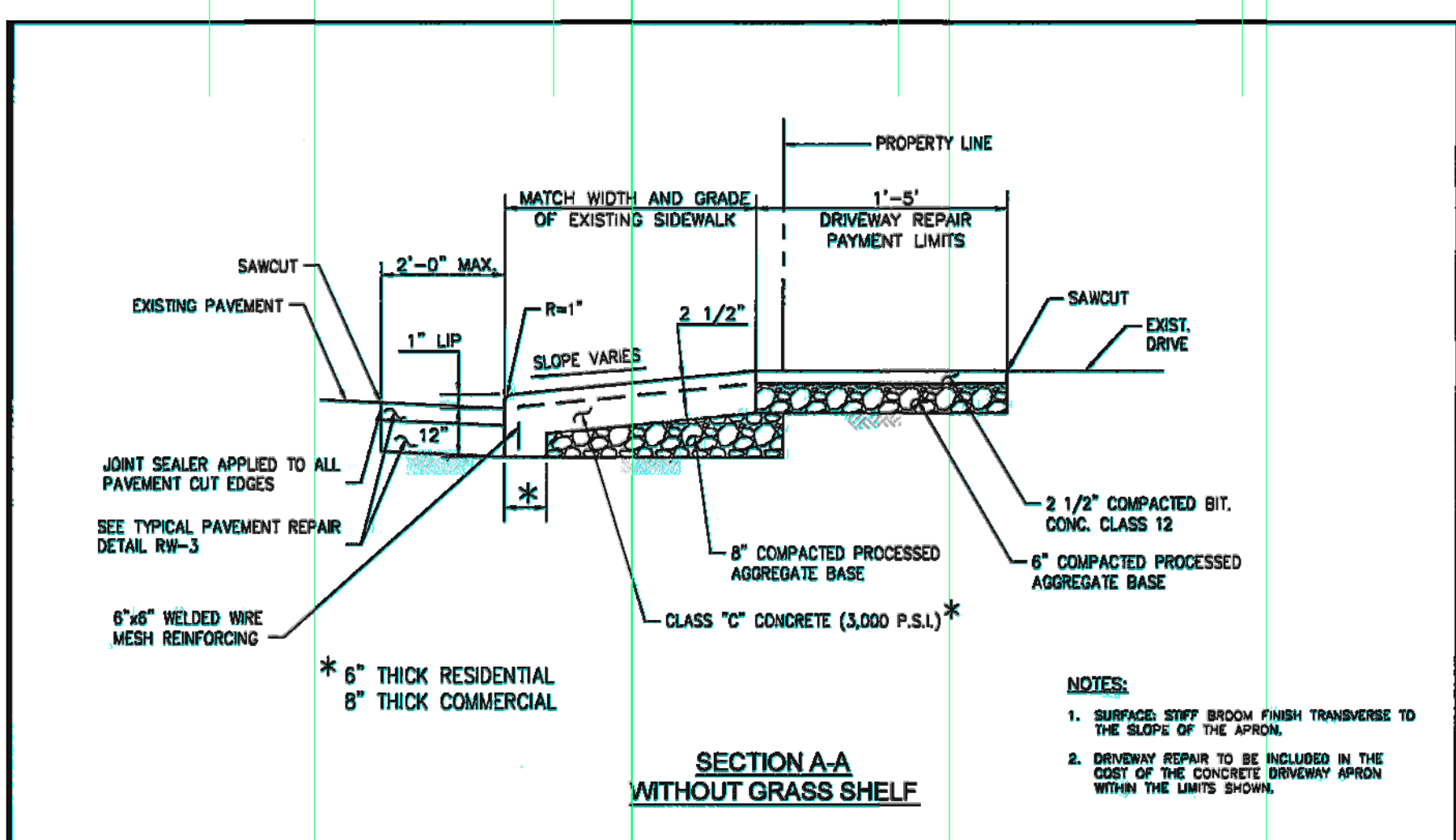
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REV. NO.	DATE	ENGINEER	DESCRIPTION	SUBMITTED BY: JAH DATE: 03.08.2015	SHEET NO.: 10
REVISIONS				APPROVED BY: WJC DATE: 03.08.2015	DRAWING NO.: DA-1



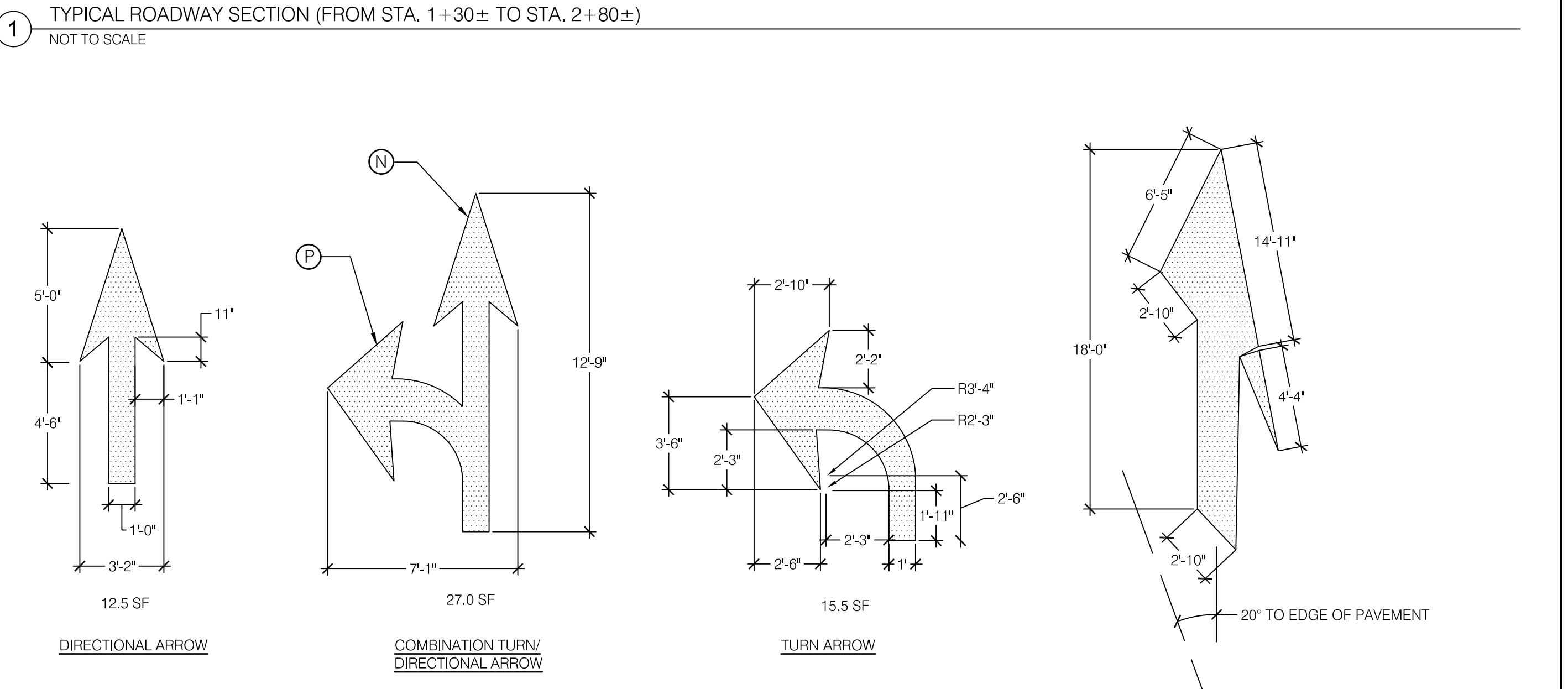
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REV. NO.	DATE	ENGINEER	DESCRIPTION	SUBMITTED BY: JAH DATE: 03.08.2015	SHEET NO.: 11
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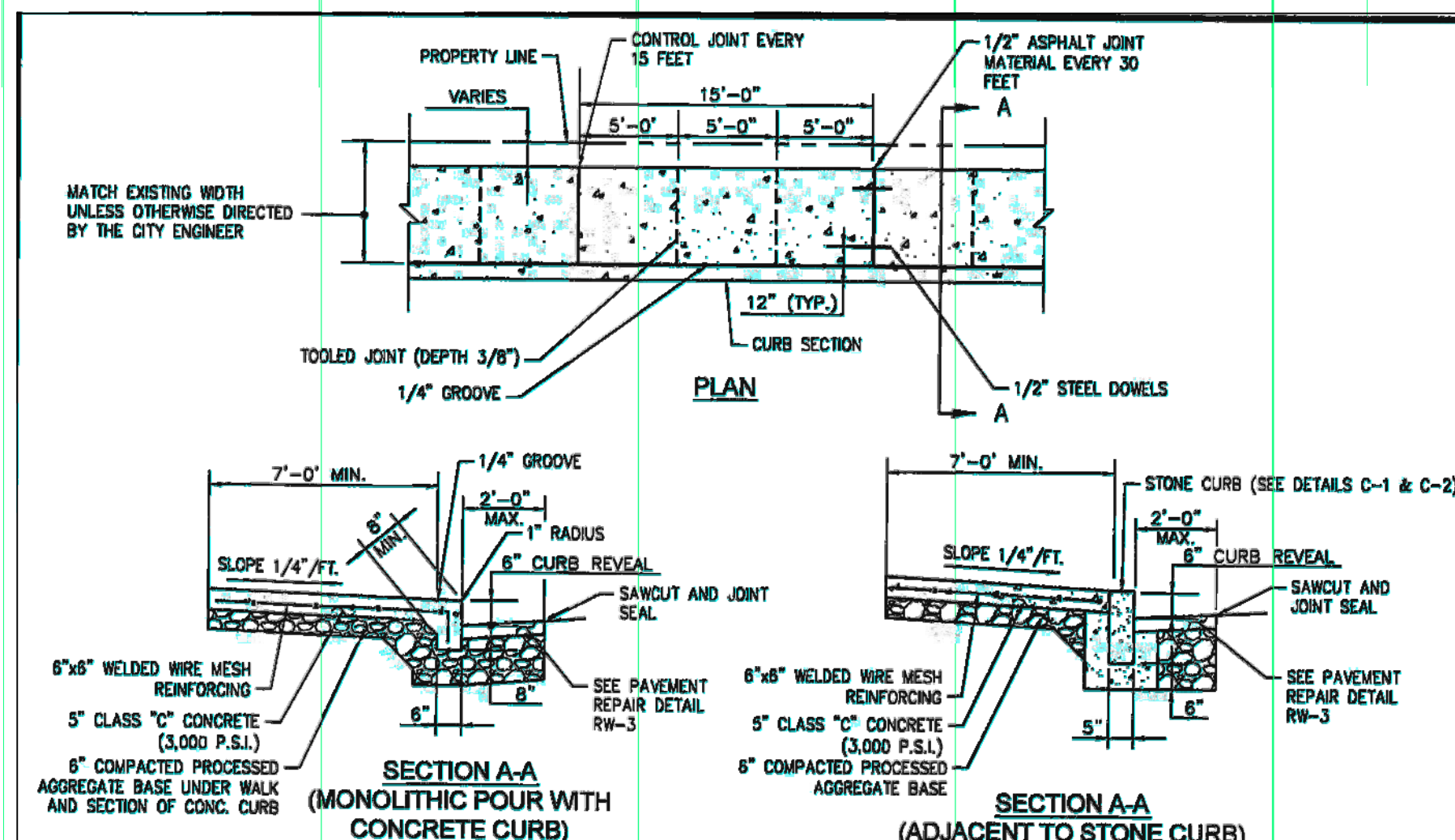
City of New London		CITY OF NEW LONDON STANDARD DETAILS		DRAWING TITLE: VARIOUS CURB TYPES	1 OF 2
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REVISIONS				APPROVED BY: WJC DATE: 03.08.2015	DRAWING NO.: C-1



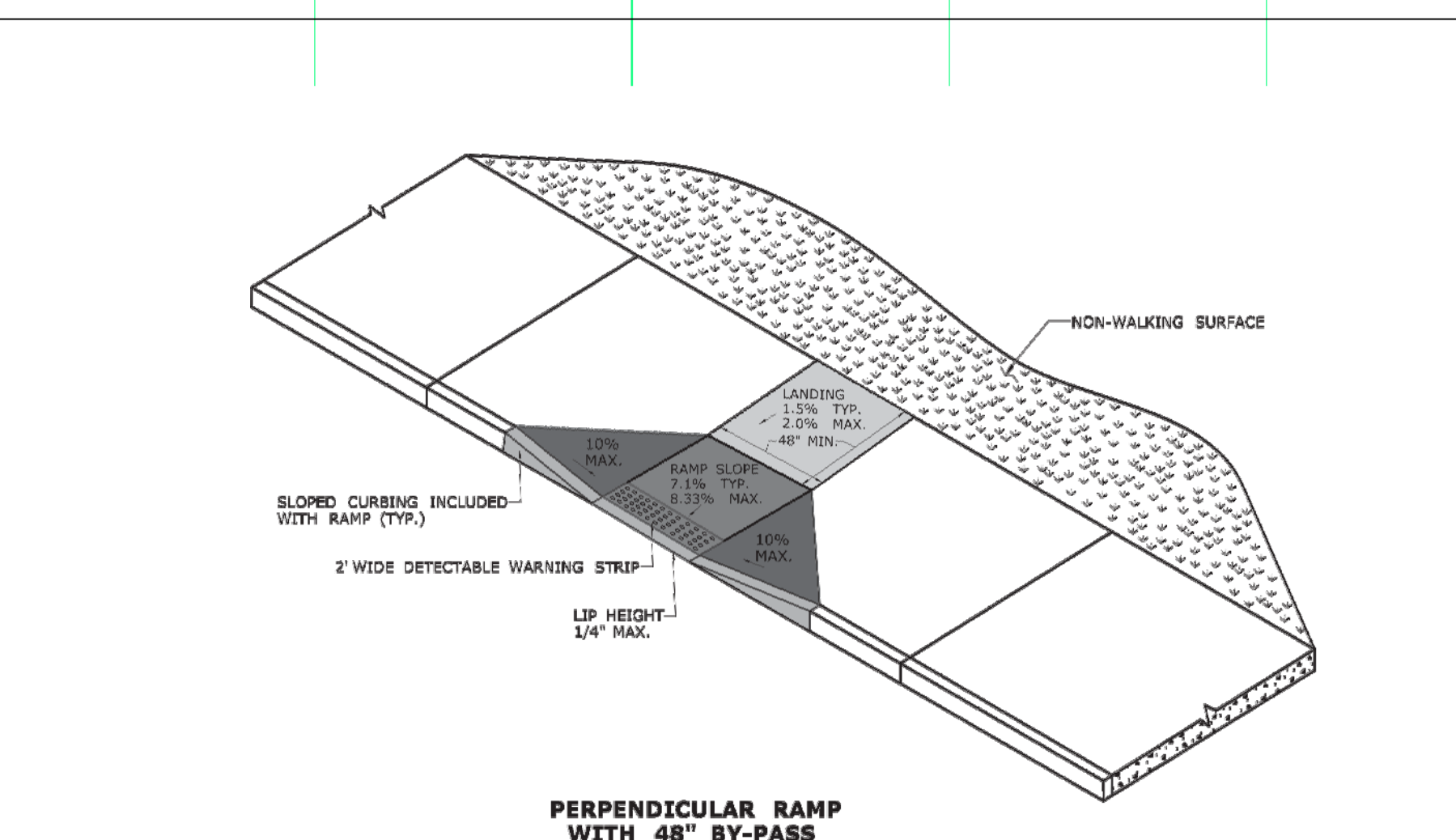
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REV. NO.	DATE	ENGINEER	DESCRIPTION	SUBMITTED BY: JAH DATE: 03.08.2015	SHEET NO.: 11
REVISIONS				APPROVED BY: WJC DATE: 03.08.2015	DRAWING NO.: DA-2



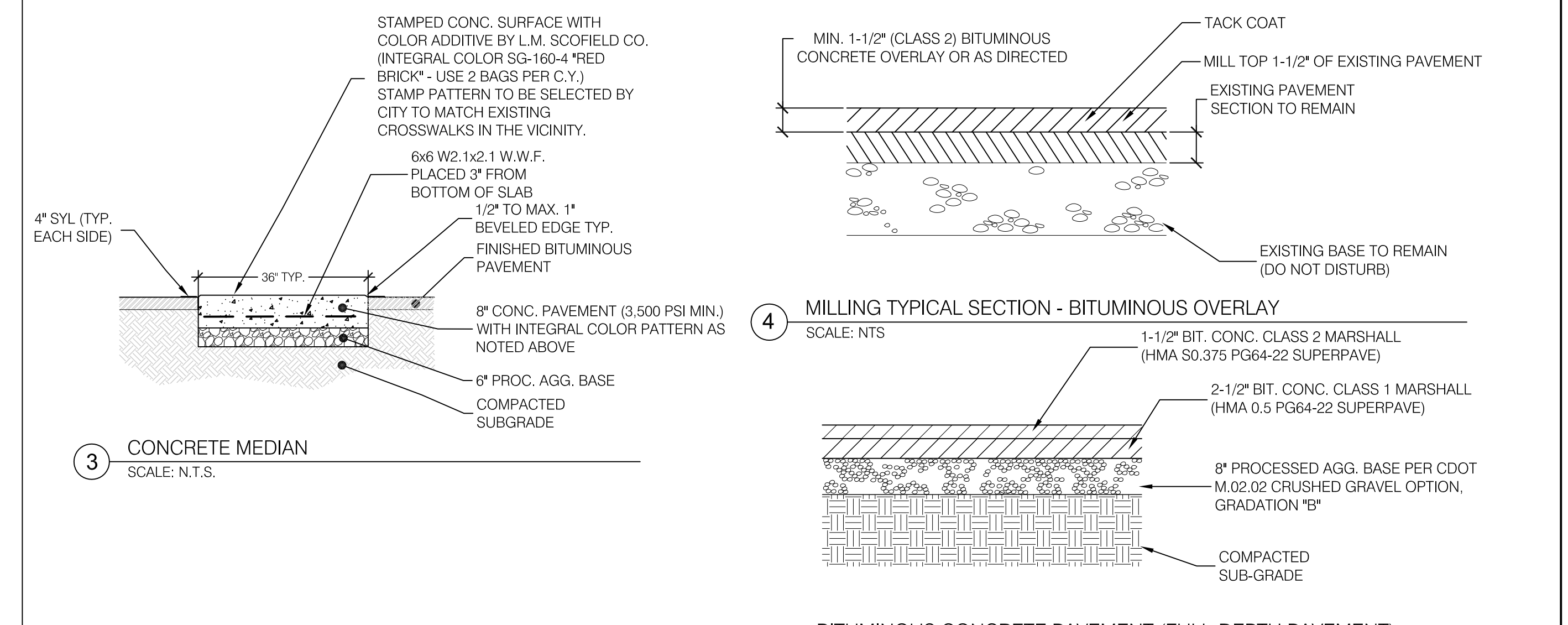
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REV. NO.	DATE	ENGINEER	DESCRIPTION	SUBMITTED BY: JAH DATE: 03.08.2015	SHEET NO.: 6
REVISIONS				APPROVED BY: WJC DATE: 03.08.2015	DRAWING NO.: S-2



City of New London		CITY OF NEW LONDON STANDARD DETAILS		DRAWING TITLE: CONCRETE SIDEWALK ADJACENT TO CURB	2 OF 2
REV. NO.	DATE	ENGINEER	DESCRIPTION	SUBMITTED BY: JAH DATE: 03.08.2015	SHEET NO.: 6
REVISIONS				APPROVED BY: WJC DATE: 03.08.2015	DRAWING NO.: S-2



City of New London		CITY OF NEW LONDON STANDARD DETAILS		DRAWING TITLE: CONCRETE SIDEWALK ADJACENT TO CURB	2 OF 2
REV. NO.	DATE	ENGINEER	DESCRIPTION	SUBMITTED BY: JAH DATE: 03.08.2015	SHEET NO.: 6
REVISIONS				APPROVED BY: WJC DATE: 03.08.2015	DRAWING NO.: S-2



City of New London		CITY OF NEW LONDON STANDARD DETAILS		DRAWING TITLE: CONCRETE SIDEWALK ADJACENT TO CURB	2 OF 2
REV. NO.	DATE	ENGINEER	DESCRIPTION	SUBMITTED BY: JAH DATE: 03.08.2015	SHEET NO.: 6
REVISIONS				APPROVED BY: WJC DATE: 03.08.2015	DRAWING NO.: S-2

NO.	DESCRIPTION	DATE

City of New London		CITY OF NEW LONDON STANDARD DETAILS		DRAWING TITLE: CONCRETE SIDEWALK ADJACENT TO CURB	2 OF 2
REV. NO.	DATE	ENGINEER	DESCRIPTION	SUBMITTED BY: JAH DATE: 03.08.2015	SHEET NO.: 6
REVISIONS				APPROVED BY: WJC DATE: 03.08.2015	DRAWING NO.: S-2

ENGINEERING CONSULTANT:

**Cabezas DeAngelis**  
ENGINEERS & SURVEYORS

78 ELM STREET, BRIDGEPORT, CT 06604  
P-203 330 8700 • F-203 330 8701

APPROVED BY:

MR. BRIAN SEAR  
DIRECTOR OF PUBLIC WORKS

DESIGNED	DRAWN	CHECKED	SCALE	DATE
CAD	CAD	CAD	AS SHOWN	11-28-2023

GOVERNOR WINTHROP BOULEVARD  
ROADWAY IMPROVEMENT PROJECT  
HUNTINGTON AVENUE (S.R. 641) TO UNION STREET  
DEPARTMENT OF PUBLIC WORKS  
NEW LONDON, CONNECTICUT

DRAWING NO.	06
JOB NO.	23.06
CONTRACT NO.	

DEPARTMENT OF PUBLIC WORKS

**TYP. CITY ROADWAY DETAILS**

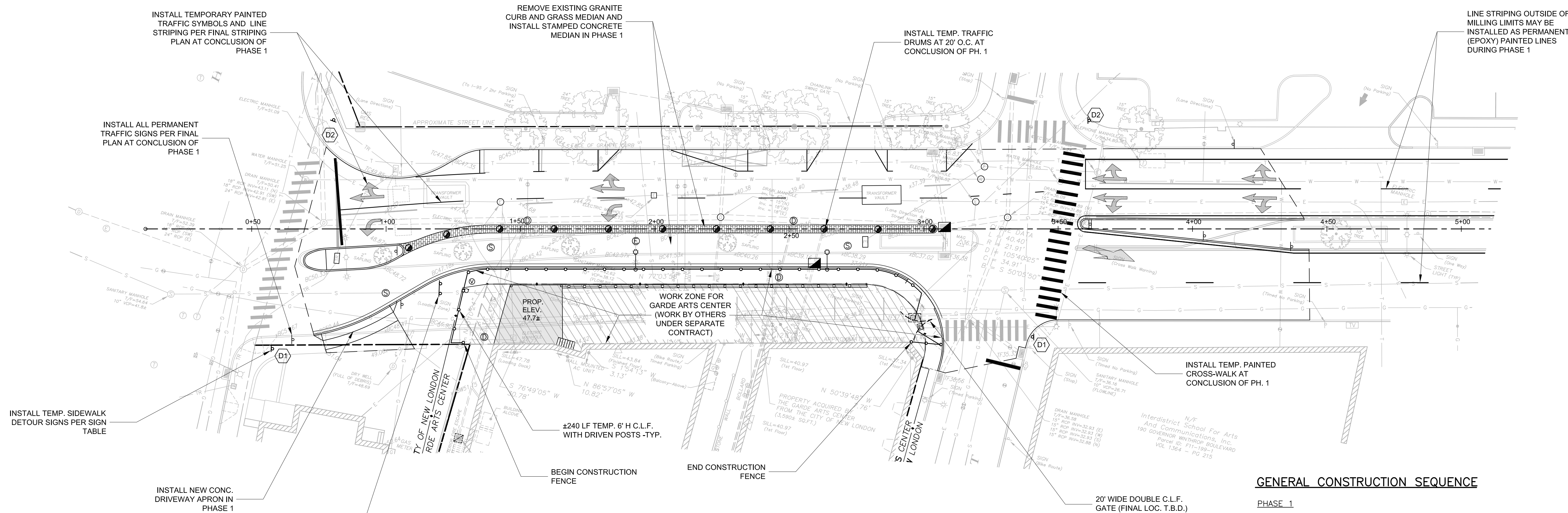
CITY OF NEW LONDON

SHEET	6	OF	8	SHEETS
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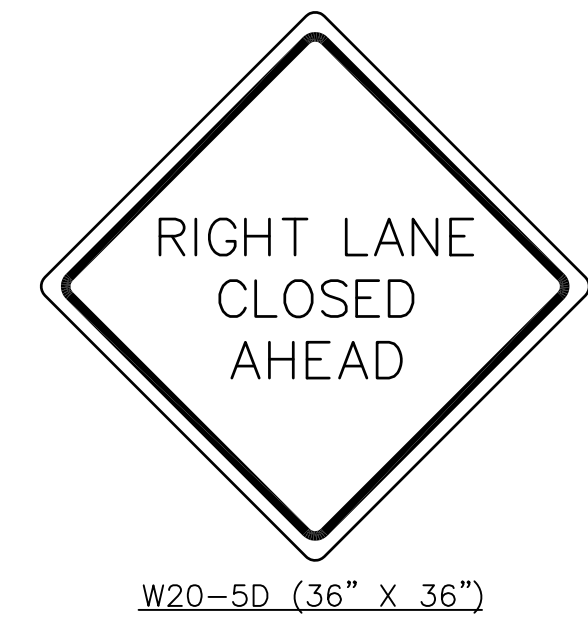
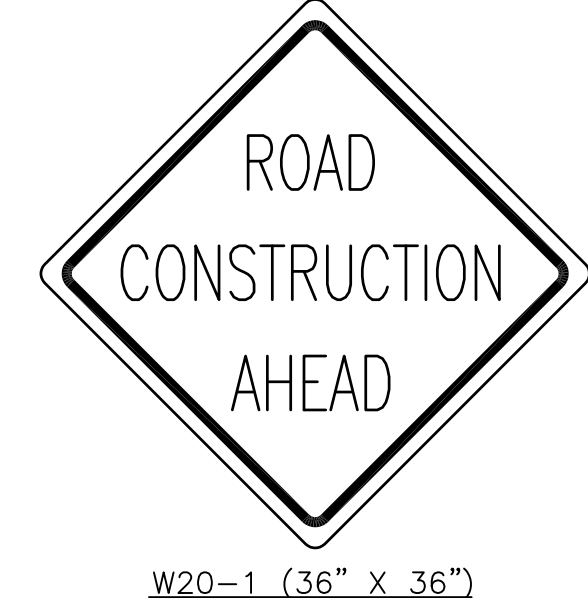
**TEMPORARY MPT PLAN BETWEEN PHASES 1 AND 2**  
SCALE: 1" = 20'

**PEDESTRIAN DETOUR SIGN TABLE**

SYM.	SIGN	MUTCD #	QUANTITY
D1		R9-11 24"x18"	2
D2		M4-9b 30"x24"	2

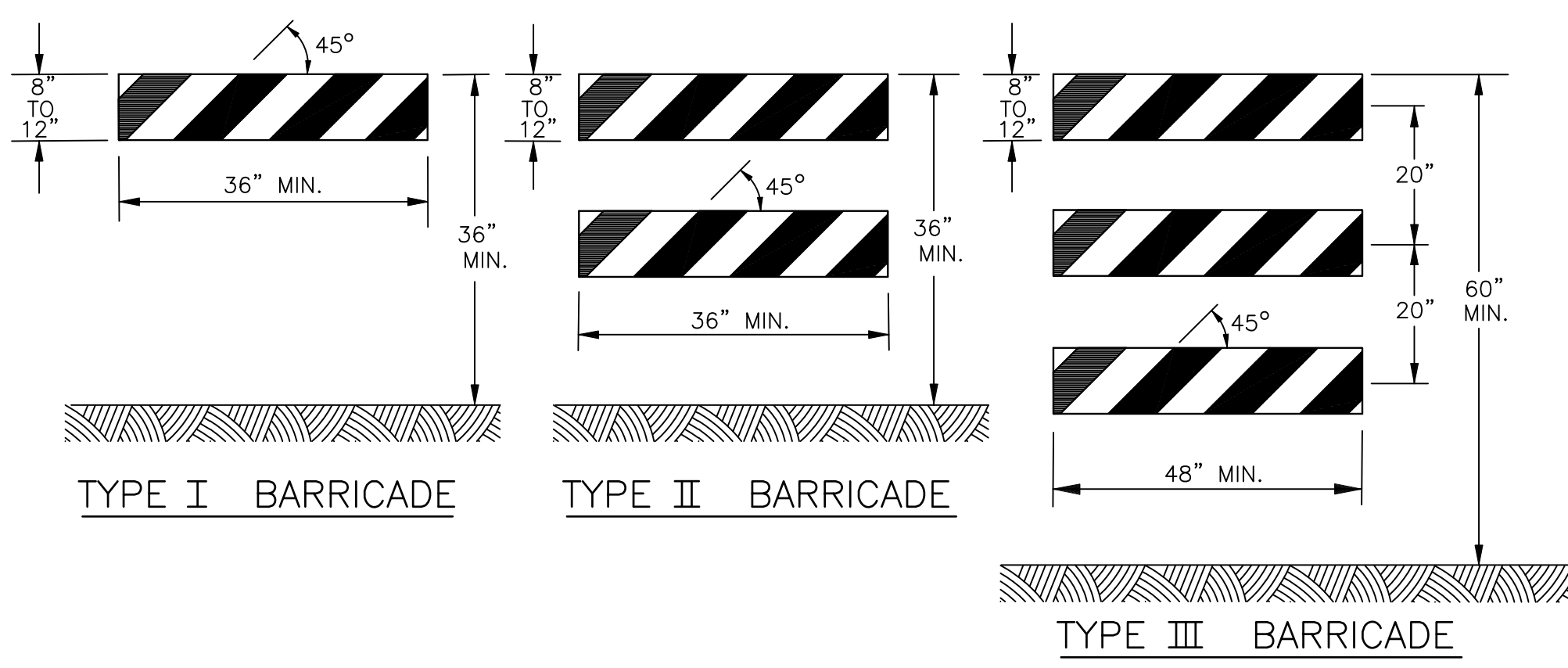
**SIDEWALK DETOUR NOTES:**

- ALL SIGNS SHALL CONFORM TO CDOT AND MUTCD SPECIFICATIONS.
- CONTRACTOR SHALL INSTALL SIGNAGE AS SHOWN FOR REVIEW BY CITY PRIOR TO CLOSING EXISTING WALK. ADJUST SIGNAGE AS MAY BE RECOMMENDED BY CITY.



**TYP. CONSTRUCTION SIGNS**

- NOTES:**
- SIGN COLORS:  
BACKGROUND - ORANGE, REFLECTORIZED ENCAPSULATED LENS  
LEGEND - BLACK PLAIN
  - SIGNS SHOWN ARE TYPICAL FOR CONSTRUCTION. OTHER SIGNS MAY BE NECESSARY AS ORDERED BY THE ENGINEER.
  - FOR SPECIFIC SIGN DESIGN, REFER TO CONN. DEPARTMENT OF TRANSPORTATION DIVISION OF TRAFFIC DETAILED DRAWINGS.



**CONSTRUCTION BARRICADES**

- NOTES:**
- MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE STRIPES SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS. 6" WIDE STRIPES SHALL BE USED.
  - THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE REFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS. RAILS FOR TYPE I AND TYPE II BARRICADES SHALL BE REFLECTORIZED ON BOTH SIDES. WHERE TRAFFIC PASSES ONLY IN ONE DIRECTION OF TRAVEL, ONLY THE SIDE FACING TRAFFIC SHALL BE REFLECTORIZED.
  - THE ENGINEER RESERVES THE RIGHT TO REJECT ANY BARRICADE DEEMED A HAZARD, OR NOT IN THE BEST INTEREST OF THE MOTORING PUBLIC.
  - CORNERS OF ALUMINUM BARRICADE RAILS SHALL BE ROUNDED.

- NOTES:**
- TRAFFIC DRUM SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD.
  - THE ENGINEER RESERVES THE RIGHT TO REJECT ANY DRUM DEEMED UNSUITABLE FOR THE PURPOSE INTENDED, AS REQUIRED IN THE SPECIFICATIONS.
  - THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE REFLECTIVE SHEETING.
  - REFLECTORIZED STRIPES SHOULD NOT BE PLACED OVER THE PROTRUDING CIRCUMFERENCIAL RIBS OF DRUMS.
  - THE SECTIONS OF DRUMS NOT COVERED WITH REFLECTORIZED STRIPES SHALL BE ORANGE.
  - THE DESIGN OF THE DRUM WILL ALLOW FOR ATTACHMENT OF A BARRICADE WARNING LIGHT.

**TRAFFIC DRUM (FRONT VIEW)**

**GENERAL CONSTRUCTION SEQUENCE**

- PHASE 1**
- REROUTE ELECTRIC LINES TO BUILDING (WORK TO BE DONE BY POWER CO.)
  - INSTALL NEW SEWER AND DRAINAGE LINES. ABANDON EXISTING SEWER ONCE NEW SEWER IS OPERATIONAL. INSTALL TEMPORARY PAVEMENT OVER TRENCHES.
  - INSTALL NEW CONCRETE MEDIAN, GRANITE CURB AND LIGHT POLES. (SIDEWALK TO BE POURED AT A LATER TIME, SEE PHASE 2 BELOW). INSTALL 6" HIGH TEMPORARY C.L. FENCING (DRIVEN POSTS) BEHIND NEW CURBING.
  - INSTALL TEMPORARY PAVEMENT MARKINGS ON EXISTING PAVEMENT AS NECESSARY TO PROVIDE FOR SAFE TRAVEL. INSTALL TEMPORARY DETOUR AND TRAFFIC SIGNS.
  - INSTALL NEW GAS LINE (WORK BY GAS COMPANY).
- PHASE 2**
- AFTER NEW LOADING DOCK AND RAMP WORK IS COMPLETE BY GARDE ARTS CONTRACTOR, REMOVE TEMPORARY FENCE AND POUR NEW CONCRETE SIDEWALK BEHIND GRANITE CURB.
  - MILL EXISTING PAVEMENT TO LIMITS SHOWN ON PLANS AND PERFORM FINAL PAVING AND LINE STRIPING, PAVEMENT MARKINGS, ETC.
  - FINAL CLEANUP AND REMOVAL OF ALL TEMPORARY SIGNAGE, FENCING, EROSION CONTROLS, ETC.

**MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) NOTES**

- THE EXACT LOCATION OF ALL TRAFFIC CONTROL DEVICES IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- EXISTING CONFLICTING PAVEMENT MARKINGS OR SIGNAGE SHALL BE REMOVED OR COVERED, INCLUDING THOSE PAVEMENT MARKINGS OUTSIDE OF THE TRAVELWAY.
- THE CONTRACTOR SHALL KEEP A MINIMUM OF ONE MEANS OF EGRESS/INGRESS TO ALL DRIVEWAYS ALONG THE CONSTRUCTION LIMITS. THE CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH INDIVIDUAL OWNERS SO AS TO PROVIDE THE LEAST DISTURBANCE POSSIBLE. INSTALL PROCESSED STONE DRIVES OR OTHER SUITABLE MATERIAL FOR TEMPORARY DRIVES AS DIRECTED BY THE ENGINEER.
- EXISTING SIGNS ARE TO BE RELOCATED AS NEEDED AND AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION SO THAT THEY ARE IN THE APPROPRIATE LOCATION AND VISIBLE TO MOTORISTS. SOME SIGNS MAY HAVE TO BE TEMPORARILY LOCATED WITHIN THE WORK AREA.
- THE LOCATION OF TEMPORARY SIGNS SHOWN ON THE PLANS IS APPROXIMATE AND SHALL BE ADJUSTED BY THE CONTRACTOR TO MEET FIELD CONDITIONS.
- TEMPORARY SIGNS SHALL BE MOUNTED ON POSTS WHEN NECESSARY.
- THE LOCATION TRAFFIC DRUMS SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL BE ADJUSTED BY THE CONTRACTOR TO MEET FIELD CONDITIONS AND TO CLEARLY DEFINE ACCESS TO AND EGRESS FROM ALL ROADWAYS AND DRIVEWAYS.
- CONTRACTOR SHALL MAINTAIN ACCESS TO INTERSECTION OF GOV. WINTHROP BLVD. AND MERIDIAN STREET AT ALL TIMES. USE TRAFFIC OFFICERS WHEN WORKING IN STREET INTERSECTIONS.
- ALL EXCAVATIONS SHALL BE SUITABLY COVERED AT THE END OF EACH WORK DAY. UNDER NO CONDITIONS SHALL THE TRENCH OPENING BE LEFT OPEN DURING NON-WORKING HOURS.

NO.	DESCRIPTION	DATE	ENGINEERING CONSULTANT:  <b>Cabezas DeAngelis</b> ENGINEERS & SURVEYORS 78 ELM STREET, BRIDGEPORT, CT 06604 P: 203 330 8700 • F: 203 330 8701	APPROVED BY:   MR. BRIAN SEAR DIRECTOR OF PUBLIC WORKS	GOVERNOR WINTHROP BOULEVARD ROADWAY IMPROVEMENT PROJECT HUNTINGTON AVENUE (S.R. 641) TO UNION STREET DEPARTMENT OF PUBLIC WORKS NEW LONDON, CONNECTICUT	DRAWING NO.	<b>08</b>	DEPARTMENT OF PUBLIC WORKS  <b>TEMP. TRAFFIC PHASING PLAN</b>  CITY OF NEW LONDON										
	REVISIONS					JOB NO.	23.06		DESIGNED	CAD	DRAWN	CAD	CHECKED	CAD	SCALE	AS SHOWN	DATE	11-28-2023