



Connecticut Department of Energy and Environmental Protection License*

Structures, Dredging & Fill Permit
Section 401 Water Quality Certification

Licensee(s): Connecticut Department of
Transportation

Licensee Address(s): 2800 Berlin Turnpike
Newington, CT 06111

License Number(s): 202407421-SDFQ

Municipality: Derby and Shelton

Project Description: Scour countermeasures in the Housatonic River to rehabilitate the
Commodore Hull Bridge (Route 8) for infrastructure maintenance
and erosion control

Project Address/Location: Commodore Hull Bridge (Route 8) over the Housatonic River

Waters: Housatonic River

**Authorizing CT Statute(s)
and/or Federal Law:** CGS Section 22a-359 to 363g; Section 401 CWA (33 USC 1341)

**Applicable Regulations of
CT State Agencies:** 22a-426-1 to 9

Agency Contact: Land & Water Resources Division,
Bureau of Water Protection & Land Reuse, 860-424-3019

License Expiration: Five (5) years from the date of issuance of this license. Upon
expiration of the U.S. Army Corps of Engineers Section 404
permit for the same activity.

Project Site Plan Set: *Environmental Permit Plans State Project No. 126-176
Rehabilitation of Bridge No. 00571A (Commodore Hull Bridge)
Route 8 over the Housatonic River, 12 sheets, prepared by
AECOM, and dated June 17, 2024*

*Connecticut's Uniform Administrative Procedure Act defines License to include, "the whole or part of any agency permit, certificate, approval, registration, charter or similar form of permission required by law . . ."

License Enclosures: LWRD General Conditions; Section 1.10 Environmental Compliance Required Best Management Practices; Site Plan Set; LWRD Work Commencement Form; LWRD Compliance Certification Form

Authorized Activities:

The Licensee is hereby authorized to conduct the following work as described in application # 202407421 and as depicted on any site plan sheets / sets cited herein:

1. Install temporary Type 3 turbidity curtains within the Housatonic River and temporary sedimentation control systems along the northeastern (Derby) bank of the Housatonic River as depicted on site plan sheets PMT-03, PMT-04, PMT-09, PMT-10, and PMT-11;
2. Temporary removal of the existing scour monitoring system and its components surrounding Piers 9 and 10 (four sonar transducers and their mounting brackets and conduit on each pier);
3. Temporarily mooring two 80' by 28' work barges when not in active use (overnight) for the duration of construction as depicted on site plan set sheet PMT-12;
4. Using equipment on two 80' by 28' barges, excavate loose and unstable material in the area surrounding the undermined area surrounding Pier 9 as denoted on site plan set sheets PMT-05, PMT-06, and PMT-09;
5. Using equipment on two 80' by 28' barges, install grout bags and temporary grout and vent tubes to create a confined cavity below the existing tremie of Pier 9 as depicted on site plan set sheets PMT-05, PMT-06, and PMT-09;
6. Install tremie grout in the cavity confined by the grout bags as depicted on site plan set sheets PMT-05, PMT-06, and PMT-09;
7. Using equipment on two 80' by 28' barges, fill scour hole surrounding Pier 9 with the excavated native streambed material, or supplemental streambed material if needed, as depicted on site plan set sheets PMT-05 and PMT-06
8. Install a temporary stone causeway approximately 65' from the CT DOT parking lot adjacent to O'Sullivan's Island Recreation Park into the Housatonic River adjacent to Pier 10 comprised a geotextile base layer and modified rip rap as depicted on site plan set sheet PMT-10;
9. Using equipment on two 80' by 28' barges and/or the temporary stone causeway, excavate 1' of natural streambed material and install 2' concrete armor units (1.5' in height when placed) in bundles of 6 by 5 by 6 units with geotextile wrapping according to manufacturer specifications as depicted on PMT-02 in approximately 30' by 30' sections within the 31,120 sf footprint surrounding Piers 9 and 10 and backfill with 1' of the excavated native streambed material, or supplemental streambed material if needed, as depicted on site plan set sheets PMT-03, PMT-04, PMT-05, PMT-06, PMT-07, PMT-08, PMT-09, and PMT-10.

Failure to comply with the terms and conditions of this license shall subject the Licensee and / or the Licensee's contractor(s) to enforcement actions and penalties as provided by law.

This license is subject to the following Terms and Conditions:

1. **License Enclosure(s) and Conditions.** The Licensee shall comply with all applicable terms and conditions as may be stipulated within the License Enclosure(s) listed above.
2. **Peregrine Falcon Protection Measures.** The Licensee shall comply with all the protection measures and best management practices relating to the state-protected peregrine falcon (*Falco peregrinus*) within *Section 1.10 Environmental Compliance Required Best Management Practices*, revised 03-13-2024, attached hereto.
3. **Protection Measures for Fish.** The Licensee shall be restricted to the period from October 1 to March 31, inclusive, for any unconfined in-water work in the Housatonic River to protect fish and fisheries resources.
4. **Restriction for Turbidity Curtain Installation/Removal.** The Licensee shall limit any installation and/or removal of turbidity curtains to the period of July 1 to March 31, inclusive. The Licensee shall not install nor remove turbidity curtains outside of the above stated period unless otherwise authorized in writing by the Commissioner. The Licensee shall conduct Authorized Activities 4 through 9 within the turbidity curtains. The Licensee shall ensure that the turbidity curtains remain in optimal condition for the duration of their in-water use.
5. **Barge Use.** At no time shall the Licensee allow the barges to rest on the substrate. Any such barge utilized in the construction outlined herein, shall move to deeper waters during periods of low water when there is any potential of the barge to ground in shallow areas.
6. **Temporary Causeway.** Prior to the completion of work herein, the Licensee shall remove all stone (rip rap), geotextile, and other materials associated with Authorized Activity 8 herein from the Housatonic River unless otherwise authorized in writing by the Commissioner.

Issued under the authority of the Commissioner of Energy and Environmental Protection on:

Date

Emma Cimino
Deputy Commissioner
Environmental Quality Branch



LWRD General Conditions

- 1. Land Record Filing (for *Structures Dredging & Fill, Tidal Wetlands, Certificate of Permission, and Long Island Sound General Permit Licenses only*).** The Licensee shall file the Land Record Filing on the land records of the municipality in which the subject property is located not later than thirty (30) days after license issuance pursuant to Connecticut General Statutes (CGS) Section 22a-363g. A copy of the Notice with a stamp or other such proof of filing with the municipality shall be submitted to DEEP.LWRDRegulatory@ct.gov no later than sixty (60) days after license issuance. If a Land Record Filing form is not enclosed and the work site is not associated with an upland property, no filing is required.
- 2. Contractor Notification.** The Licensee shall give a copy of the license and its attachments to the contractor(s) who will be carrying out the authorized activities prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The Licensee's contractor(s) shall conduct all operations at the site in full compliance with the license and, to the extent provided by law, may be held liable for any violation of the terms and conditions of the license. At the work site, the contractor(s) shall, whenever work is being performed, have on site and make available for inspection a copy of the license and the authorized plans.
- 3. Work Commencement¹.** Not later than two (2) weeks prior to the commencement of any work authorized herein, the Licensee shall submit to DEEP.LWRDRegulatory@ct.gov, on the Work Commencement Form attached hereto, the name(s) and address(es) of all contractor(s) employed to conduct such work and the expected date for commencement and completion of such work, if any.
 - For water diversion activities authorized pursuant to 22a-377(c)-1 of the Regulations of Connecticut State Agencies, the Licensee shall also notify the Commissioner in writing two weeks prior to initiating the authorized diversion.
 - For emergency activities authorized pursuant Connecticut General Statutes Section 22a-6k, the Licensee shall notify the Commissioner, in writing, of activity commencement at least one (1) day prior to construction and of activity completion no later than five (5) days after conclusion.
- 4. For Coastal Licenses Only - License Notice.** The Licensee shall post the first page of the License in a conspicuous place at the work area while the work authorized therein is undertaken.
- 5. Unauthorized Activities.** Except as specifically authorized, no equipment or material, including but not limited to, fill, construction materials, excavated material or debris, shall be deposited, placed or stored in any wetland or watercourse on or off-site. The Licensee may not

¹ The Work Commencement condition and the need for a Work Commencement Form is not applicable to Flood Management Certification approvals.

conduct work within wetlands or watercourses other than as specifically authorized, unless otherwise authorized in writing by the Commissioner. Tidal wetlands means “wetland” as defined by section 22a-29 and “freshwater wetlands and watercourses” means “wetlands” and “watercourses” as defined by section 22a-38.

- 6. Management of Materials.** Any materials removed from the site shall be managed in accordance with all federal, state, and local requirements, including Chapter 446K Water Pollution Control, Chapter 445 Hazardous Waste, and Chapter 446d Solid Waste of the Connecticut General Statutes.
- 7. Unconfined Instream Work.** Unless otherwise noted in a condition of the license, the following conditions apply to projects in non-coastal waters:
 - Unconfined instream work is limited to the period June 1 through September 30.
 - Confinement of a work area by cofferdam techniques using sand bag placement, sheet pile installation (vibratory method only), portadam, or similar confinement devices is allowed any time of the year. The removal of such confinement devices is allowed any time of the year.
 - Once a work area has been confined, in-water work within the confined area is allowed any time of the year.
 - The confinement technique used shall completely isolate and protect the confined area from all flowing water. The use of silt boom/curtain or similar technique as a means for confinement is prohibited.
- 8. For State Actions Only - Material or Equipment Storage in the Floodplain.** Unless approved by a Flood Management Exemption, the storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five-hundred (500) year flood is prohibited. Any other material or equipment stored at the site below said elevation by the Licensee or the Licensee's contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day. In accordance with the licensee's Flood Contingency Plan, the Licensee shall remove equipment and materials from the floodplain during periods when flood warnings have been issued or are anticipated by a responsible federal, state or local agency. It shall be the Licensee's responsibility to obtain such warnings when flooding is anticipated.
- 9. Temporary Hydraulic Facilities for Water Handling.** If not reviewed and approved as a part of the license application, temporary hydraulic facilities shall be designed by a qualified professional and in accordance with the *Connecticut Guidelines for Soil Erosion and Sediment Control*, the *2004 Connecticut Stormwater Quality Manual*, or the *Department of Transportation's ConnDOT Drainage Manual*, as applicable. Temporary hydraulic facilities may include channels, culverts or bridges which are required for haul roads, channel relocations, culvert installations, bridge construction, temporary roads, or detours.
- 10. Excavated Materials.** Unless otherwise authorized, all excavated material shall be staged and

managed in a manner which prevents additional impacts to wetlands and watercourses.

- 11. Best Management Practices.** The Licensee shall not cause or allow pollution of any wetlands or watercourses, including pollution resulting from sedimentation and erosion. In constructing or maintaining any authorized structure or facility or conducting any authorized activity, or in removing any such structure or facility, the Licensee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. For purposes of the license, “pollution” means “pollution” as that term is defined by CGS section 22a-423. Best Management Practices include, but are not limited, to practices identified in the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, *2004 Connecticut Stormwater Quality Manual*, Department of Transportation’s *ConnDOT Drainage Manual* as revised, and the Department of Transportation Standard Specifications as revised.
- 12. In-Water Work Vessel Staging and Storage. (for Structures Dredging & Fill, Tidal Wetlands, Certificate of Permission, and Long Island Sound General Permit Licenses only).** For any barge, vessel, skiff or floating work platform (“work vessels”) utilized in the execution of the work authorized herein, the Licensee shall ensure that such work vessels:
- do not rest on, or come in contact with, the substrate at any time, unless specifically authorized in the license.
 - are not stored over intertidal flats, submerged aquatic vegetation or tidal wetland vegetation or in a location that interferes with navigation. In the event any work vessel is grounded, no dragging or prop dredging shall occur to free it.
- 13. Work Site Restoration.** Upon completion of any authorized work, the Licensee shall restore all areas temporarily impacted by construction, or used as a staging area or accessway in connection with such work, to their condition prior to the commencement of such work.
- 14. Inspection.** The Licensee shall allow any representative of the Commissioner to inspect the project location at reasonable times to ensure that work is being or has been conducted in accordance with the terms and conditions of this license.
- 15. Change of Use. (Applies only if a use is specified within the License “Project Description”)**
- a. The work specified in the license is authorized solely for the purpose set forth in the license. No change in purpose or use of the authorized work or facilities as set forth in the license may occur without the prior written approval of the Commissioner. The Licensee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this license, request permission from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.
 - b. A change in the form of ownership of any structure authorized herein from a rental/lease commercial marina to a wholly-owned common interest community or dockominium may constitute a change in purpose as specified in paragraph (a) above.
- 16. De Minimis Alteration.** The Licensee shall not deviate from the authorized activity without prior written approval from the Commissioner. The Licensee may request a de minimis change

to any authorized structure, facility, or activity. A de minimis alteration means a change in the authorized design, construction or operation that individually and cumulatively has minimal additional environmental impact and does not substantively alter the project as authorized.

- For diversion activities authorized pursuant to 22a-377(c)-2 of the Regulations of Connecticut State Agencies, a de minimis alteration means an alteration which does not significantly increase the quantity of water diverted or significantly change the capacity to divert water.

17. Extension Request. The Licensee may request an extension of the license expiration date. Such request shall be in writing and shall be submitted to DEEP.LWRDRegulatory@ct.gov at least thirty (30) days prior to the license expiration. Such request shall describe the work done to date, what work still needs to be completed, and the reason for such extension. The Commissioner may extend the expiration date of this license for a period of up to one year, in order for the Licensee to complete the authorized activities. It shall be at the Commissioner's sole discretion to grant or deny such request. No more than three (3) one-year extensions will be granted under this license.

18. Compliance Certification². Not later than 90 days after completion of the authorized work, the Licensee shall prepare and submit to DEEP.LWRDRegulatory@ct.gov, the attached Compliance Certification Form. Such Compliance Certification shall be completed, signed, and sealed by the Licensee and a Connecticut Licensed Design Professional. If non-compliance is indicated on the form, or the Commissioner has reason to believe the activities and/or structures were conducted in non-compliance with the license, the Commissioner may require the Licensee to submit as-built plans as a condition of this license.

19. Maintenance. The Licensee shall maintain all authorized structures or work in optimal condition or shall remove such structures or facility and restore the affected waters to their pre-work condition. Any such maintenance or removal activity shall be conducted in accordance with applicable law and any additional approvals required by law.

20. No Work After License Expiration. Work conducted after the license expiration date is a violation of the license and may subject the licensee to enforcement action, including penalties, as provided by law.

21. License Transfer. The license is not transferable without prior written authorization of the Commissioner. A request to transfer a license shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Licensee's obligations under the license shall not be affected by the passage of title to the license site to any other person or municipality until such time as a transfer is approved by the Commissioner.

22. Document Submission. Any document required to be submitted to the Commissioner under the license or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

DEEP.LWRDRegulatory@ct.gov or

² The Work Commencement condition and the need for a Work Commencement Form is not applicable to Flood Management Certification approvals.

Regulatory Section
Land & Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127
860-424-3019

- 23. Date of Document Submission.** The date of submission to the Commissioner of any document required by the license shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under the license, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three (3) days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in the license, the word “day” as used in the license means calendar day. Any document or action which is required by the license to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.
- 24. Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under the license shall be signed by the Licensee and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: “I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense.”
- 25. Accuracy of Documentation.** In evaluating the application for the license, the Commissioner has relied on information and data provided by the Licensee and on the Licensee’s representations concerning site conditions, design specifications and the proposed work, including but not limited to representations concerning the commercial, public or private nature of the work or structures, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, the license may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.
- 26. Limits of Liability.** In granting the license, the Commissioner has relied on all representations of the Licensee, including information and data provided in support of the Licensee’s application. Neither the Licensee’s representations nor the issuance of the license shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.
- 27. Reporting of Violations.** In the event that the Licensee becomes aware that they did not or may not comply, or did not or may not comply on time, with any provision of this license or

of any document incorporated into the license, the Licensee shall immediately notify the agency contact specified within the license and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the agency contact, the Licensee shall provide, for the agency's review and written approval, a report including the following information:

- a. the provision(s) of the license that has been violated;
- b. the date and time the violation(s) was first observed and by whom;
- c. the cause of the violation(s), if known;
- d. if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;
- e. if the violation(s) has not ceased, the anticipated date when it will be corrected;
- f. steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented; and
- g. the signatures of the Licensee and of the individual(s) responsible for actually preparing such report.

If the violation occurs outside of normal business hours, the Licensee shall contact the Department of Energy and Environmental Protection Emergency Dispatch at 860-424-3333. The Licensee shall comply with any dates which may be approved in writing by the Commissioner.

- 28. Revocation/Suspension/Modification.** The license may be revoked, suspended, or modified in accordance with applicable law.
- 29. Other Required Approvals.** License issuance does not relieve the Licensee of their obligations to obtain any other approvals required by applicable federal, state and local law.
- 30. Rights.** The license is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.
- 31. Condition Conflicts.** In the case where a project specific special condition listed on the license differs from, or conflicts with, one of the general conditions listed herein, the project specific special condition language shall prevail. It is the licensee's responsibility to contact the agency contact person listed on the license for clarification if needed prior to conducting any further regulated activities.

SECTION 1.10 ENVIRONMENTAL COMPLIANCE

In Article 1.10.03-Water Pollution Control: REQUIRED BEST MANAGEMENT PRACTICES

Add the following after Required Best Management Practices Number 13:

14. The peregrine falcon (*Falco peregrinus*) is a State threatened species and Connecticut's largest falcon, measuring up to 20 inches. Adults are slate gray above and pale underneath with fine bars and spots of black; they have long pointed wings with a narrow tail. Young peregrine falcons have the same composition but are darker underneath and brown all over. Peregrine falcons have adapted to life in urban settings. In Connecticut, they sometimes utilize bridges for nesting and brood rearing purposes. Peregrine falcons will actively and aggressively defend the nest. The peregrine falcon will attack anyone or anything that comes within the area of its nest. The peregrine falcon nesting season occurs between the months of April and July. For this reason, special conditions regarding the timing of work within the Project limits, and immediate area that have nesting peregrine falcons must be adhered to by the Contractor.

In order to protect this species and project personnel, the Contractor shall not introduce new work activities and staging areas within 330-foot radius of an active nest that is out of line of sight, or within a 660-foot radius from an active nest that is in the line of sight of work during nesting season (April 1 - July 31). Any change in construction sequencing, scheduling, or timing affecting work within a 330-foot radius or 660-foot radius of a known nest shall not be permitted.

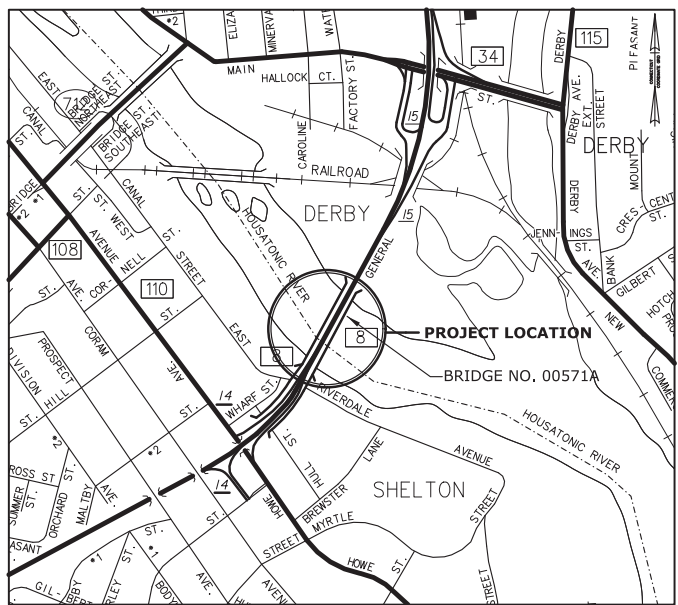
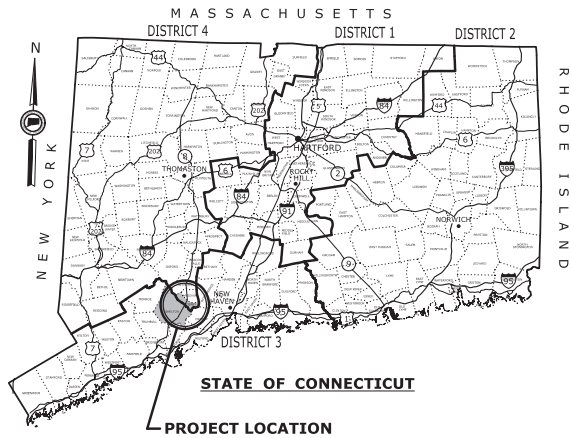
The Contractor shall, through the Engineer, at least 10 days prior to the commencement of any construction activities, arrange for a CT DOT Environmental Inspector from the Office of Environmental Planning (OEP) or their authorized delegate to be available to meet and identify the nest location as well as discuss proper protocol for maintaining environmental commitments made to the protection of this species and habitat.

The peregrine falcon is protected by State laws which prohibit killing, harming, taking, or keeping them in your possession. Workers shall be notified of the existence of peregrine falcons in the area and be apprised of the laws protecting them. Fact sheet of the peregrine falcon shall be posted in the Contractor's and inspection field offices.

If any peregrine falcons are observed in or around the Project area, the OEP must be notified at Andrew.Piraneo@ct.gov or at Marilyn.Gould@ct.gov. If OEP staff cannot be reached at either of the above referenced emails, the District Environmental Coordinator will need to be contacted to facilitate further coordination with OEP's Environmental Resource Compliance Unit.

CTDEEP's Fact Sheet for the peregrine falcon:
[Peregrine Falcon Fact Sheet](#)

ENVIRONMENTAL PERMIT PLANS
STATE PROJECT NO. 126-176
REHABILITATION BRIDGE NO. 00571A
(COMMODORE HULL BRIDGE)
ROUTE 8 OVER THE HOUSATONIC RIVER
Cities of
SHELTON & DERBY



LOCATION PLAN
SCALE: 1" = 500'

| LIST OF DRAWINGS | |
|--------------------------------------|-------------|
| DRAWING TITLE | DRAWING NO. |
| TITLE SHEET | PMT-01 |
| GENERAL SITE PLAN | PMT-02 |
| WETLAND/WATERCOURSE IMPACT PLAN | PMT-03 |
| 100-YEAR FLOODPLAIN IMPACT PLAN | PMT-04 |
| PIER 9 ELEVATIONS | PMT-05 |
| PIER 9 SECTIONS | PMT-06 |
| PIER 10 ELEVATIONS | PMT-07 |
| PIER 10 SECTIONS | PMT-08 |
| CONSTRUCTION STAGING PLAN - PIER 9 | PMT-09 |
| CONSTRUCTION STAGING PLAN - PIER 10 | PMT-10 |
| TURBIDITY CONTROL CURTAIN - DETAILS | PMT-11 |
| CONSTRUCTION ACCESS AND STAGING PLAN | PMT-12 |

GENERAL NOTES:

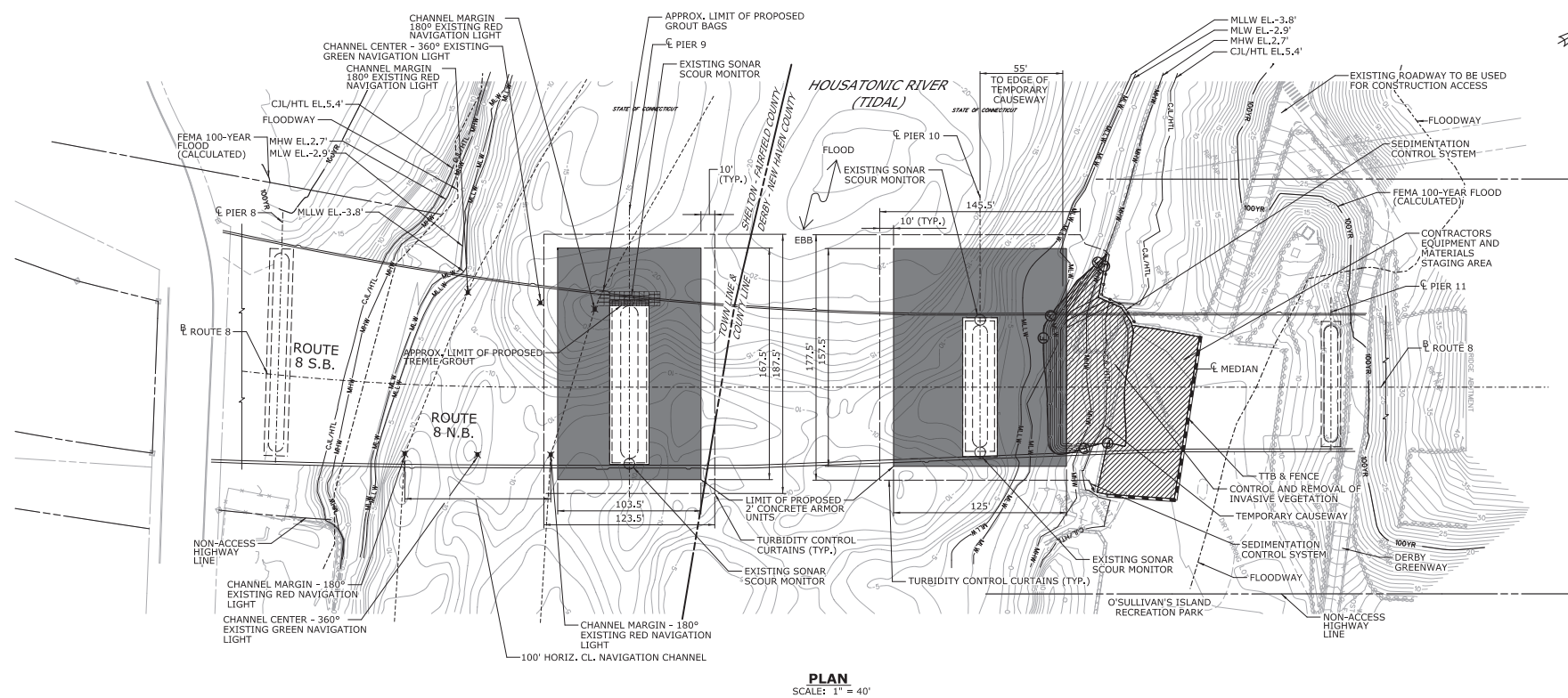
1. THESE PLANS ARE NOT FOR CONSTRUCTION AND ARE INTENDED ONLY FOR ENVIRONMENTAL PERMITTING PURPOSES. THESE PLANS HOLD AUTHORITY FOR ALL ACTIVITIES CONCERNING THE REGULATED AREA. FOR DETAILED PLANIMETRIC INFORMATION AND PAYMENT, REFER TO THE APPLICABLE CONTRACT DOCUMENTS.
2. THE DEPARTMENT OF TRANSPORTATION WILL ONLY SUBMIT REVISIONS TO DEEP AND USACE FOR CHANGES TO THE DESIGN THAT WILL AFFECT REGULATED AREAS.
3. FOR A DESCRIPTION OF THE WATERCOURSES, WETLANDS, AND WETLAND SOILS SEE RELEVANT SECTIONS OF THE PERMIT APPLICATION.
4. 400 FOOT GRID BASED ON CONNECTICUT COORDINATE SYSTEM N.A.D. 1983 (2011), VERTICAL DATUM BASED ON NAVD 1988.
5. ALL CONSTRUCTION ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION, FORM 818, DATED 2020 SECTION 1.10 AND WILL ALSO FOLLOW REQUIRED BEST MANAGEMENT PRACTICES (BMPs) AND SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH THE 2024 EROSION & SEDIMENTATION CONTROL GUIDELINES AND THE 2024 STORMWATER QUALITY MANUAL.
6. MHW, MLW AND HTL ELEVATIONS ARE DEPICTED AS OBTAINED FROM PREVIOUS STATE PROJECT NO. 126-170 IN THE SAME LOCATION.

DESIGNED BY:
AECOM
AECOM
500 ENTERPRISE DRIVE
ROCKY HILL, CT 06067

Digitally signed by Andre St. Germain
Date: 2024.07.09
11:49:32-04'00'

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24



| | | | | | | | | | | | |
|---|------|----------------------|-----------|--|------------------------|---|--|--|--|---|--|
| DESIGNER/DRAFTER: B. Hunt/G. Hricko CHECKED BY: N. Raffe SCALE AS NOTED | | | | STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION | | PROJECT TITLE REHABILITATION BRIDGE N°00571A ROUTE 8 OVER THE HOUSATONIC RIVER | | TOWN: SHELTON DERBY DRAWING TITLE: TITLE SHEET | | PROJECT NO. 126-176 DRAWING NO. PMT-01 SHEET NO. 1 | |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 11/17/23 | FILENAME: \\PMT-01.dgn | | | | | | |

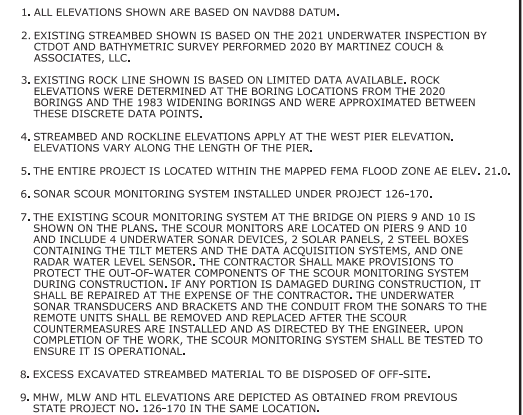


PLAN
SCALE: 1" = 40'

LEGEND

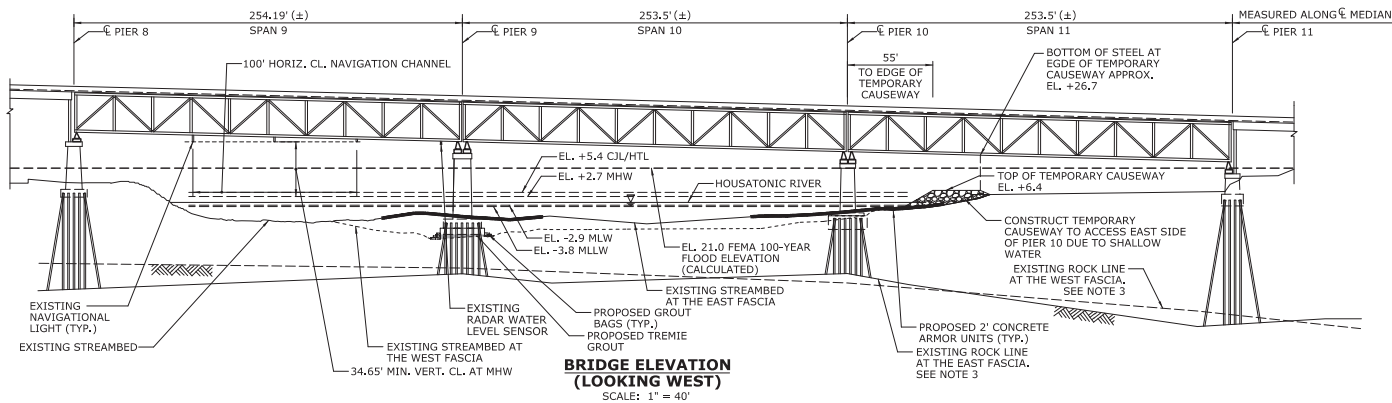
| 100-YEAR FLOODPLAIN IMPACTS | | | |
|-----------------------------|-------------------------------|-------------------------|------------|
| | EXCAVATION IN FEMA FLOODPLAIN | FILL IN FEMA FLOODPLAIN | NET IMPACT |
| PERMANENT | 935 CY | 1,128 CY | +193 CY |

| | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|---|--|--|--|----------------------|--|---|--|---|--|-----------------------------------|--|-------------------------------|--|
| | | THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. | | DESIGNER/DRAFTER: B. Hunt/G. Hricko CHECKED BY: H. Rolfe | |  STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION | | SIGNATURE/ BLOCK: | |  | | PROJECT TITLE: REHABILITATION BRIDGE N°00571A ROUTE 8 OVER THE HOUSATONIC RIVER | | TOWN: SHELTON DERBY | | PROJECT NO: 126-176 | |
| SCALE AS NOTED | | FILENAME: 126t4d3.dwg | | | | | | | | | | DRAWING TITLE: 100-YEAR FLOODPLAIN IMPACT PLAN | | DRAWING NO: PMT-04 | | SHEET NO: 4 | |



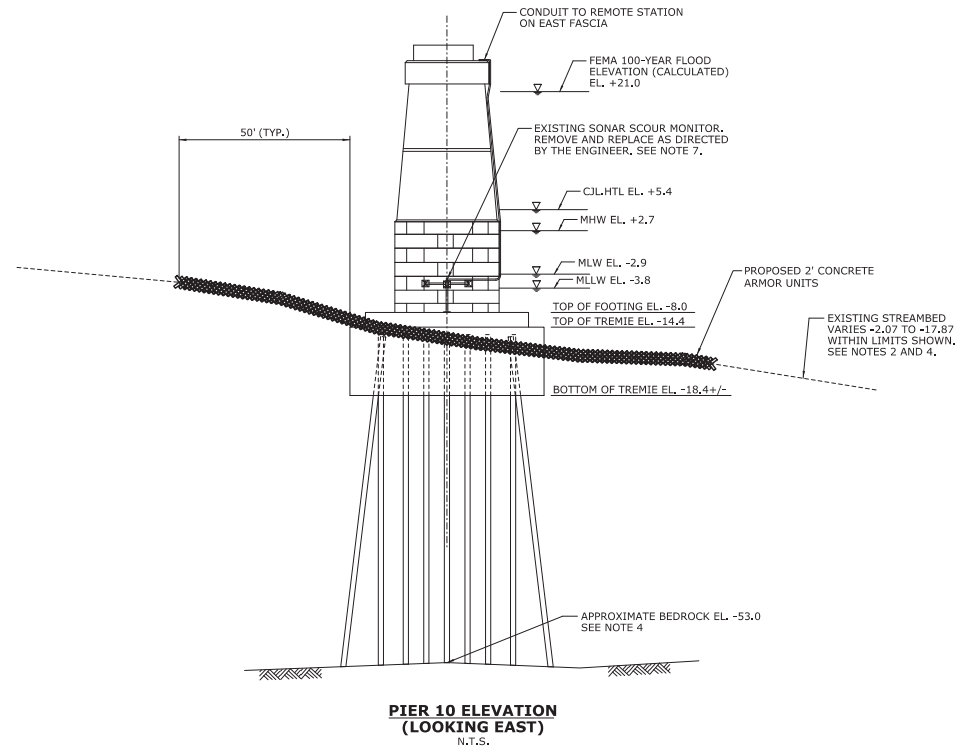
| | |
|-------------|----------------|
| PROJECT NO. | 126-176 |
| DRAWING NO. | PMT-05 |
| SHEET NO. | 5 |

| | |
|----------------|--------------------------|
| TOWN: | SHELTON DERBY |
| DRAWING TITLE: | PIER 9 ELEVATIONS |



NOTES

1. ALL ELEVATIONS SHOWN ARE BASED ON NAVD88 DATUM.
2. EXISTING STREAMBED SHOWN IS BASED ON THE 2021 UNDERWATER INSPECTION BY CTDOT AND BATHYMETRIC SURVEY PERFORMED 2020 BY MARTINEZ COUCH & ASSOCIATES, LLC.
3. EXISTING ROCK LINE SHOWN IS BASED ON LIMITED DATA AVAILABLE. ROCK ELEVATIONS WERE DETERMINED AT THE BORING LOCATIONS FROM THE 2020 BORINGS AND THE 1983 WIDENING BORINGS AND WERE APPROXIMATED BETWEEN THESE DISCRETE DATA POINTS.
4. STREAMBED AND ROCKLINE ELEVATIONS APPLY AT THE WEST PIER ELEVATION. ELEVATIONS VARY ALONG THE LENGTH OF THE PIER.
5. THE ENTIRE PROJECT IS LOCATED WITHIN THE MAPPED FEMA FLOOD ZONE AE ELEV. 21.0.
6. SONAR SCOUR MONITORING SYSTEM INSTALLED UNDER PROJECT 126-170.
7. THE EXISTING SCOUR MONITORING SYSTEM AT THE BRIDGE ON PIERS 9 AND 10 IS SHOWN ON THE PLANS. THE SCOUR MONITORS ARE LOCATED ON PIERS 9 AND 10 AND INCLUDE 4 UNDERWATER SONAR DEVICES, 2 SOLAR PANELS, 2 STEEL BOXES CONTAINING THE TILT METERS AND THE DATA ACQUISITION SYSTEMS, AND ONE RADAR WATER LEVEL SENSOR. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROTECT THE OUT-OF-WATER COMPONENTS OF THE SCOUR MONITORING SYSTEM DURING CONSTRUCTION. IF ANY PORTION IS DAMAGED DURING CONSTRUCTION, IT SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR. THE UNDERWATER SONAR TRANSDUCERS AND BRACKETS AND THE CONDUIT FROM THE SONARS TO THE REMOTE UNITS SHALL BE REMOVED AND REPLACED AFTER THE SCOUR COUNTERMEASURES ARE INSTALLED AND AS DIRECTED BY THE ENGINEER. UPON COMPLETION OF THE WORK, THE SCOUR MONITORING SYSTEM SHALL BE TESTED TO ENSURE IT IS OPERATIONAL.
8. EXCESS EXCAVATED STREAMBED MATERIAL TO BE DISPOSED OF OFF-SITE.
9. MHW, MLW AND HTL ELEVATIONS ARE DEPICTED AS OBTAINED FROM PREVIOUS STATE PROJECT NO. 126-170 IN THE SAME LOCATION.

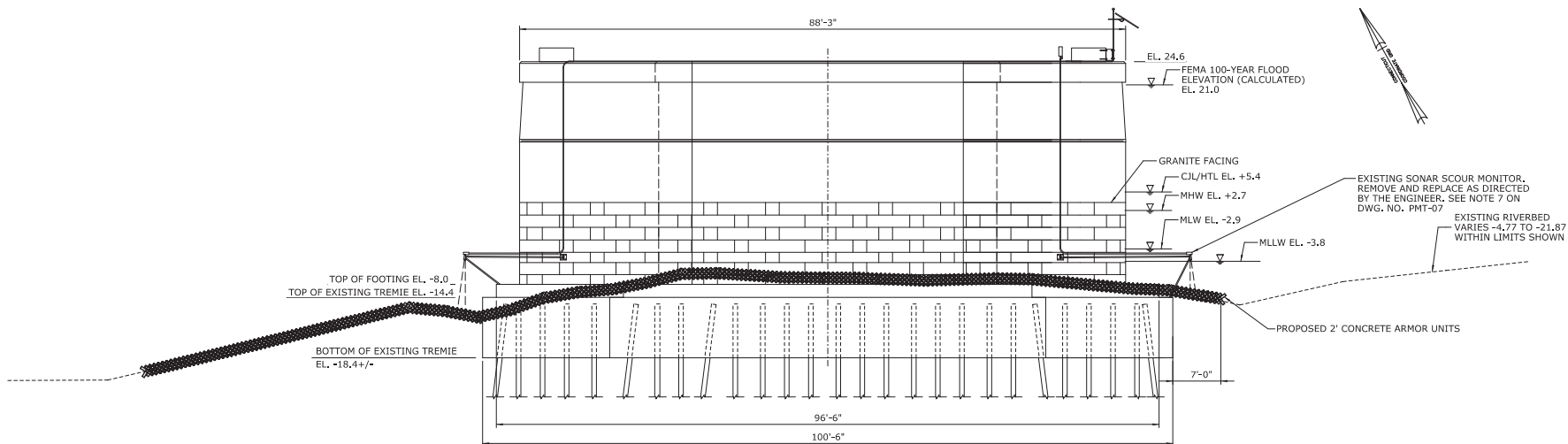


ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

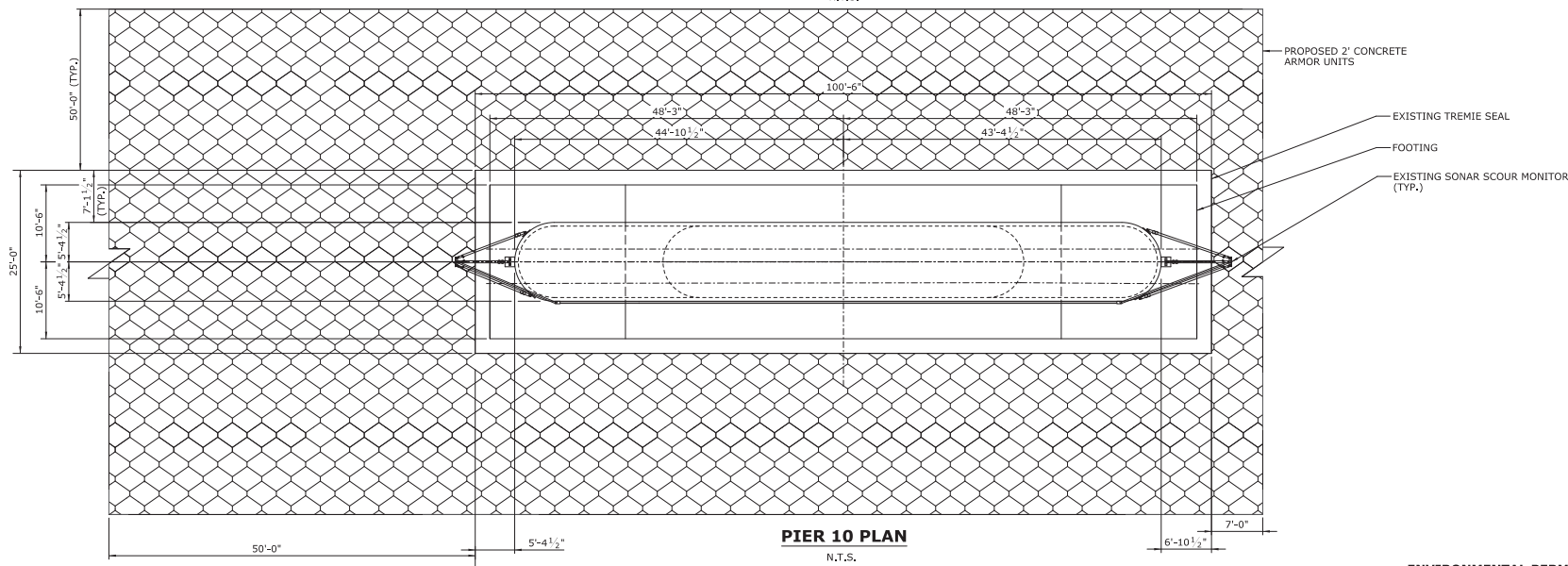
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|---|------|----------------------|-----------|--|--|------------------------|--|---|---|-------------------------------|
| THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OR EXISTING QUANTITIES OF WORK WHICH WILL BE REQUIRED. | | | | DESIGNER/DRAWER: B. Hunt/G. Hricko CHECKED BY: N. Raffe | STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION | SIGNATURE/ BLOCK: | | PROJECT TITLE: REHABILITATION BRIDGE N°00571A ROUTE 8 OVER THE HOUSATONIC RIVER | TOWN: SHELTON DERBY | PROJECT NO. 126-176 |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 11/17/23 | SCALE AS NOTED | FILENAME: \\PMT-07.dgn | | | DRAWING TITLE: PIER 10 ELEVATIONS | DRAWING NO. PMT-07 |
| | | | | | | | | | | SHEET NO. 7 |

7/10/2024

Border Version: 11/29/13



PIER 10 SOUTH ELEVATION
N.T.S.

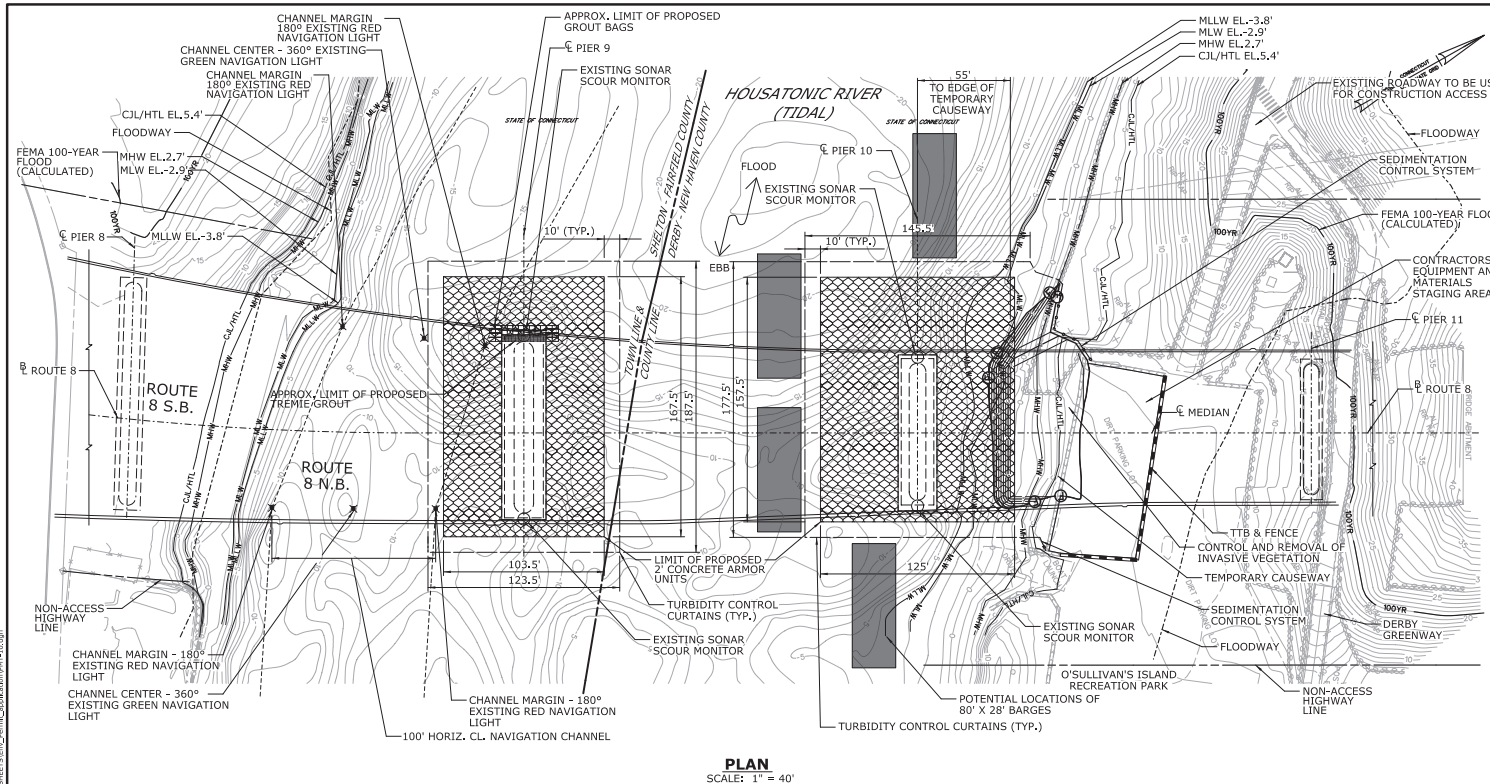


PIER 10 PLAN
N.T.S.

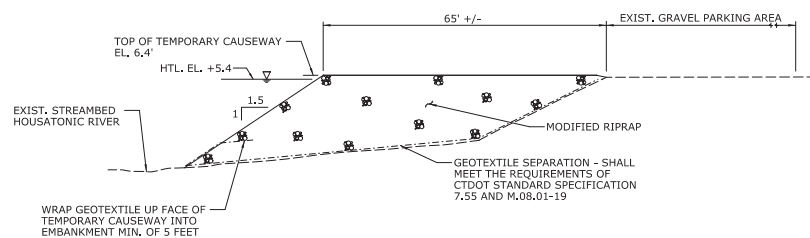
ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

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| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 11/17/23 | SCALE AS NOTED | Filename: \\PMT-08.dgn | | | | | |





PLAN
SCALE: 1" = 40'



TEMPORARY CAUSEWAY
TYPICAL SECTION
SCALE: 1" = 5'

SUGGESTED CONSTRUCTION SEQUENCE-PIER 10

1. MOBILIZE EQUIPMENT AND MATERIALS UTILIZING FACTORY STREET AND DERRY GREENWAY. UTILIZE O'SULLIVAN'S ISLAND RECREATION PARK (WITHIN CITY LIMITS) FOR STAGING AREA. CONTRACTOR SHALL NOT OBSTRUCT PUBLIC ACCESS TO EXISTING ROADWAY BEING USED FOR CONSTRUCTION ACCESS, CLEAR AND GRUB AS NECESSARY.
2. INSTALL TURBIDITY CONTROL CURTAINS AND ANCHOR.
3. CONSTRUCT TEMPORARY CAUSEWAY.
4. PROTECT THE ABOVE-WATER COMPONENTS OF THE EXISTING SCOUR MONITORING SYSTEM IN PLACE DURING CONSTRUCTION (I.E. TILT METERS, WATER STAGE, REMOTE AND MASTER STATIONS, SOLAR PANELS, AND CONDUIT).
5. REMOVE THE UNDERWATER COMPONENTS OF THE EXISTING SCOUR MONITORING SYSTEM. DURING THE INSTALLATION OF THE SCOUR COUNTERMEASURES, THIS WORK REQUIRES THE FOUR LONGER TRANSCEIVERS AND THEIR STAINLESS-STEEL MOUNTING BRACKETS AND CONDUIT, THESE ITEMS SHALL BE REPLACED.
6. ASSEMBLE 2' CONCRETE ARMOR UNITS INTO BUNDLES OF 6 X 5 X 6 ON SHORE, AND COVER WITH GEOTEXTILE FABRIC WRAPPING, AND PLACE ONTO BARGE 2 OR ON CAUSEWAY.
7. WORK FROM TEMPORARY CAUSEWAY: WORK SHALL PROGRESS REMOVING TEMP. CAUSEWAY AND BARGE 2 AS REQUIRED TO REACH, EXCAVATION AND SCOUR COUNTERMEASURE MATERIALS PLACEMENT.
8. PERFORMING WORK IN SECTIONS OF APPROXIMATELY 30' X 30'. EXCAVATE 1' DEEP OF STREAMBED FROM BARGE OR CAUSEWAY. PLACE EXCAVATED MATERIAL ONTO TEMPORARY CAUSEWAY OR ONTO THE ROCKPILE AREA.
9. PILE 2' CONCRETE ARMOR UNITS FROM BARGE 2 OR CAUSEWAY AND GUIDE INTO FINAL POSITION WITH THE ASSISTANCE OF A COMMERCIAL DIVE TEAM. INSTALL THE LIGHT WING (APPROXIMATELY 10' LONG) ONTO THE STAINLESS-STEEL MOUNTING BRACKETS AND CONDUIT. IN ACCORDANCE WITH THE SPECIAL PROVISIONS, THERE IS NO NEED FOR GROUTING OR MECHANICALLY FASTENING TO EACH OTHER OTHER THEY HAVE BEEN SET.
10. REPEAT THIS PROCESS UNTIL THE ENTIRE PIER 10 FOOTPRINT IS COMPLETED.
11. REPLACE THE UNDERWATER COMPONENTS OF THE EXISTING SCOUR MONITORING SYSTEM FOLLOWING THE INSTALLATION OF THE SCOUR COUNTERMEASURES.
12. THE GUIDES SHALL BE PLACED ON THE EXISTING STAINLESS-STEEL MOUNTING BRACKETS AND CONDUIT. TEST THE SCOUR MONITORING SYSTEM TO MAKE SURE IT IS OPERATIONAL.
13. REMOVE TEMPORARY CAUSEWAY.
14. REMOVE TURBIDITY CONTROL CURTAINS.
15. DEMOBILIZE BARGES AND CONTRACTOR EQUIPMENT. RESTORE DERRY GREENWAY, PARKING LOT AND TEMPORARY IMPACT AREAS TO ORIGINAL OR BETTER CONDITION.

| HYDRAULIC DATA - TEMPORARY | |
|------------------------------|--------------------------------|
| MEAN LOW WATER | -2.9 FT |
| MEAN HIGH WATER | 2.7 FT |
| HIGH TIDE LINE (1-YEAR TIDE) | 5.4 FT |
| TEMPORARY DESIGN FREQUENCY | TIDAL: MHHW* RIVERINE: 2 YEAR* |
| TEMPORARY DESIGN DISCHARGE | 21,970 CFS* |
| TEMPORARY DESIGN ELEVATION | 6.4 FT |



NOTE: THIS TABLE APPLIES TO ALL TEMPORARY STAGES

* THE TEMPORARY DESIGN ELEVATION COULD NOT BE SET AT THE 2-YEAR FLOOD DUE TO INADEQUATE CLEARANCE. THE TEMPORARY DESIGN ELEVATION IS SET EQUAL TO THE HIGH TIDE LINE +1 FOOT.

LEGEND





- | | |
|---------------------|--|
| ----- 100YR ----- | FEMA 100-YEAR FLOOD (CALCULATED) |
| ----- MHW ----- | MEAN HIGH WATER (MHW) |
| ----- MLW ----- | MEAN LOW WATER (MLW) |
| ----- MLLW ----- | MEAN LOWER LOW WATER (MLLW) |
| ----- C/L/HTL ----- | COASTAL JURISDICTION LINE / HIGH TIDE LINE (C/L/HTL) |
| ----- | FEMA FLOODWAY (LIMITS DERIVED FROM FEMA FIRM PANELS 09001C0305F AND 09009C0404J) |
| ----- | NAVIGATION CHANNEL |

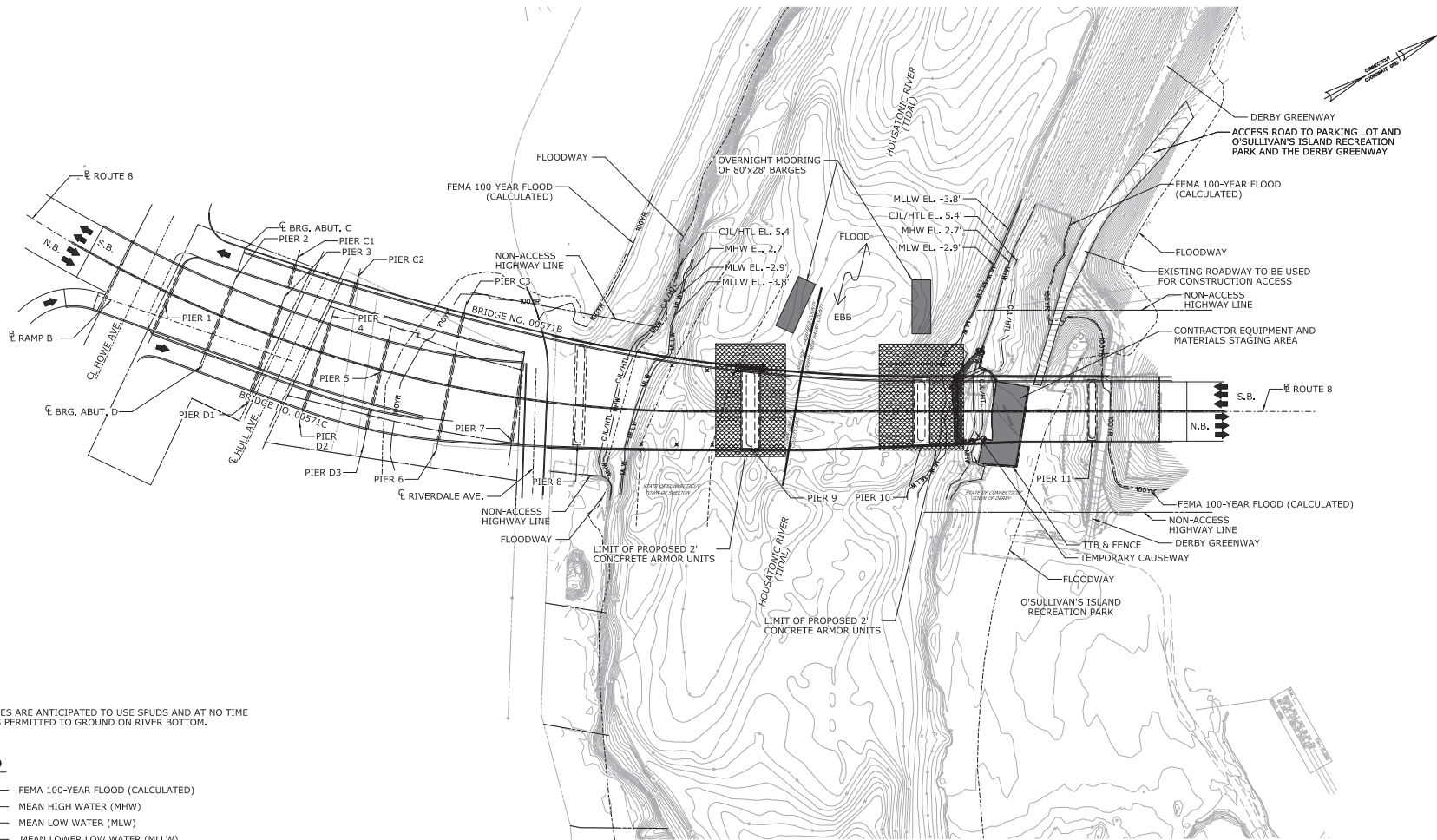
ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

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| SCALE AS NOTED | | | | SHEET NO.: Sheet No. 11 of 13 | | | | | | | | E&S: DATE: | | | | REVISIONS: (DESC/REASON) | | | | DRAWING TITLE: CONSTRUCTION STAGING PLAN PIER 10 | | | | SHEET NO.: 10 | | | | | | | |



- NOTES:
1. THE DETAILS SHOWN FOR THE TURBIDITY CURTAIN ARE SUGGESTED. THE CONTRACTOR SHALL DESIGN THE SYSTEM.
 2. THE WATER DEPTH IN THE VICINITY OF THE WORK EXCEEDS 12.0'.
 3. AT NO TIME SHALL THE TURBIDITY CURTAIN OR BALLAST REST ALONG THE MUDLINE.

| | | | | | | | | | | | | | |
|--|--|--|--|--|--|---|--|---|--|---|--|-----------------------------------|--|
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| SCALE AS NOTED | | | | STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION | |  | |  | | DRAWING TITLE: TURBIDITY CONTROL CURTAIN DETAILS | | DRAWING NO: PMT-11 | |
| SHEET NO. | | | | Plotted Date: 11/17/23 | | Filename: 00PMT-11.dgn | | SHEET NO. | | SHEET NO. | | SHEET NO. | |
| REV. DATE REVISION DESCRIPTION | | | | SCALE AS NOTED | | STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION | |  | |  | | SHEET NO. | |






NOTE: BARGES ARE ANTICIPATED TO USE SPUDS AND AT NO TIME ARE BARGES PERMITTED TO GROUND ON RIVER BOTTOM.

LEGEND

- 100YR FEMA 100-YEAR FLOOD (CALCULATED)
- MHW MEAN HIGH WATER (MHW)
- MLW MEAN LOW WATER (MLW)
- MLLW MEAN LOWER LOW WATER (MLLW)
- CL/HTL COASTAL JURISDICTION LINE / HIGH TIDE LINE (CL/HTL)
- FEMA FLOODWAY (LIMITS DERIVED FROM FEMA FIRM PANELS 09001C0305F AND 09009C0404J)
- NAVIGATION CHANNEL

PLAN
SCALE: 1" = 80'

| | | | | | | | | | | | | |
|--|------|----------------------|--|--|--|---|---|----------------------|---|--|-----------------------------------|--------------------------------|
| | | | | DESIGNER/DRAFTER: B. Hunt/G. Hricko | |  |  | SIGNATURE/ BLOCK: |  | PROJECT TITLE REHABILITATION BRIDGE N°00571A ROUTE 8 OVER THE HOUSATONIC RIVER | TOWN: SHELTON DERBY | PROJECT NO.: 126-176 |
| | | | | CHECKED BY: N. Raffe | | | | | | | | |
| | | | | SCALE AS NOTED | | FILE NAME: \\PMT-12.dgn | | | | DRAWING TITLE: CONSTRUCTION ACCESS AND STAGING PLAN | SHEET NO.: 12 | |
| REV. | DATE | REVISION DESCRIPTION | | SHEET NO. | | | | | | | | Plotted Date: 11/17/23 |
| THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE OR CONFIRM ANY SPECIFIC QUANTITIES OF WORK WHICH WILL BE REQUIRED. | | | | | | | | | | | | |



LWRD Work Commencement Form

To: DEEP.LWRDRegulatory@ct.gov or
Regulatory Section
Department of Energy and Environmental Protection
Land & Water Resources Division
79 Elm Street
Hartford, CT 06106-5127

Licensee Name: _____

Municipality in which the project is occurring: _____

DEEP License No(s): _____

CONTRACTOR(s):

1 Name: _____
Address: _____
Telephone: _____
E-mail: _____

2 Name: _____
Address: _____
Telephone: _____
E-mail: _____

3 Name: _____
Address: _____

Date Contractor(s) received a copy
of the license and approved plans: _____

EXPECTED DATE OF COMMENCEMENT OF WORK: _____

EXPECTED DATE OF COMPLETION OF WORK: _____

LICENSEE: _____
(Signature) (Date)



Compliance Certification Form

The following certification must be signed by the licensee working in consultation with a Connecticut-licensed design professional and must be submitted to the address indicated at the end of this form within ninety (90) days of completion of the authorized work.

| | |
|--|------------------|
| 1. Licensee Name: <u>Connecticut Department of Transportation</u> | |
| DEEP License Number(s): <u>202407421</u> | |
| Municipality in which project is occurring: <u>Derby & Shelton</u> | |
| 2. Check one: | |
| (a) <input type="checkbox"/> "I certify that the final site conditions and / or structures are in general conformance with the approved site plans". Identify and describe any deviations and attach to this form. | |
| (b) <input type="checkbox"/> "The final site conditions and / or structures are not in general conformance with the approved site plans. The enclosed "as-built" plans note the modifications". | |
| 3. "I understand that any false statement in this certification is punishable as a criminal offence under section 53a-157b of the General Statutes and under any other applicable law." | |
| _____ Signature of Licensee | _____ Date |
| _____ Name of Licensee (print or type) | |
| _____ Signature of CT-Licensed Design Professional | _____ Date |
| _____ Name of CT-Licensed Design Professional (print or type) | |
| _____ Professional License Number (if applicable) | Affix Stamp Here |
| <ul style="list-style-type: none">As-built plans shall include: elevations or tidal datums, as applicable, and structures, including any proposed elevation views and cross sections included in the approved license plans. Such as-built plans shall be the original ones and be signed and sealed by an engineer, surveyor or architect, as applicable, who is licensed in the State of Connecticut.The Licensee will be notified by staff of the Land and Water Resources Division (LWRD) if further compliance review is necessary. Lack of response by LWRD staff does not imply compliance. <p>Submit this completed form to : DEEP.LWRDRegulatory@ct.gov or Regulatory Section Department of Energy and Environmental Protection Land & Water Resources Division 79 Elm Street Hartford, CT 06106-5127</p> | |