



PUBLIC NOTICE

Comment Period Begins: August 20, 2024

Comment Period Ends: September 19, 2024

File Number: NAE-2024-01826

In Reply Refer to: Eva Szigeti, Regulatory Division

Phone: (978) 318-8651

Email: eva.m.szigeti@usace.army.mil

The District Engineer, U.S. Army Corps of Engineers, New England District (USACE), has received a permit application, file number NAE-2024-01826, to conduct work in waters of the United States from the Connecticut Department of Transportation (CTDOT), 2800 Berlin Turnpike, Newington, Connecticut, 06131-7546. This work is proposed in the Housatonic River beneath Route 8 in Shelton and Derby, Connecticut. The site coordinates are Latitude 41.315093/Longitude -73.086237.

The project is CTDOT Project No. 0126-0176, Rehabilitation of the Commodore Hull Bridge, Bridge No. 00571A. The work would involve the permanent discharge of fill material within 31,120 square feet (0.7 acres) of waters of the U.S., consisting of open water below the Mean High Water (MHW) Line of the tidally-influenced Housatonic River. Piers 9 and 10 of the bridge would be armored using six-legged, two-foot-tall, precast concrete jacks to protect the riverbed around each pier, prevent future scour, and strengthen the existing structure. The permanent impacts within waters of the U.S. would be primarily due to the installation of the concrete jacks. Temporary impacts in 3,470 square feet (0.1 acre) below the MHW of the Housatonic River are also proposed and would primarily be associated with a temporary causeway access. Tidal wetlands are not present in the project area. Construction of the project would occur from barges and a temporary rock causeway at the eastern end of Pier 10. Temporary turbidity curtains would be installed around each pier and work area during construction activities. The barges are expected to launch from Long Island Sound and travel approximately 12 miles upstream to the project site, and work may occur on both piers simultaneously. Grout bags and concrete fill would be used to first fill the existing scour hole beneath the footings of Pier 9 before placing jacks around both piers. Permanent fill discharges would total 1,128 cubic yards: 860 cubic yards for concrete jacks, 32 cubic yards for grout bags, 29 cubic yards for tremie grout, and 207 cubic yards for native or supplemental riverbed material. The temporary causeway would be built 65 feet out from the edge of the upland staging area into the river near Pier 10. The causeway would be fully removed upon project completion, and the riverbank restored.

The work is shown on the enclosed plans titled "ENVIRONMENTAL PERMIT PLANS STATE PROJECT NO. 126-176, REHABILITATION BRIDGE NO. 0057A1 (COMMODORE HULL BRIDGE), ROUTE 8 OVER THE HOUSATONIC RIVER, Cities of SHELTON & DERBY," on twelve sheets, and dated 06/17/24.

The project has been designed to avoid and minimize impacts to waters of the U.S. through the use of best management practices including the installation of temporary erosion and sedimentation controls and turbidity curtains around the project site to minimize negative impacts to water quality from potential sedimentation and concrete

slurry runoff. To minimize impacts on fish, unconfined work would occur between October 1 and March 31.

AUTHORITY

Permits are required pursuant to:

- ☒ Section 10 of the Rivers and Harbors Act of 1899
- ☒ Section 404 of the Clean Water Act
- ☐ Section 103 of the Marine Protection, Research and Sanctuaries Act.

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The USACE is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties to consider and evaluate the impacts of this proposed activity. The USACE will consider all comments received to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an environmental assessment and/or an environmental impact statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The activities proposed herein may also require permission from the USACE pursuant to 33 U.S.C. 408 if they will alter or temporarily or permanently occupy or use a USACE federally authorized Civil Works project levee system located in Ansonia and Derby along the Naugatuck and Housatonic Rivers. If there is overlap between the scour countermeasure project activity and the levee flood control system, a 408 Authorization will be required. A permit pursuant to Section 10/404 shall not be granted until the Section 408 permission is issued. Through this public notice, we are soliciting information necessary to inform the USACE evaluation and review.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service (NMFS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). Essential Fish Habitat describes waters and substrate necessary for fish for spawning, breeding, feeding or growth to maturity.

The Federal Highway Administration (FHWA) is the lead federal agency responsible for EFH coordination. This project will impact 0.7 acres of EFH. This habitat consists of diadromous fish habitat with less than 100 square feet of natural rocky habitat. Potential stressors to species include underwater noise, water quality impacts, including turbidity, habitat alteration, and vessel traffic. Although FHWA is the lead federal agency, USACE has reviewed their EFH coordination documents to concur with a determination that the project activity is in compliance with all FHWA programmatic EFH conservation recommendations and adverse effects to EFH will not be substantial. The NMFS provided confirmation of this determination.

NATIONAL HISTORIC PRESERVATION ACT

FHWA is the lead federal agency responsible for coordination pursuant to Section 106 of the National Historic Preservation Act. Based on a Determination of Effect on Historic Properties report provided by the CTDOT, with funding support from the FHWA, it appears there is little likelihood that a historic property exists or may be affected due to the nature, scope, and magnitude of the work to be permitted. This is based upon the following: the permit area has been extensively modified by previous work and the nature of the proposed work would not affect historic properties even if such properties are present within the affected area. No properties listed on the National Register of Historic Places (NRHP) were found to exist in the project vicinity, nor is the Commodore Hull Bridge eligible for NRHP listing. No other structures of historical significance were found, and no documented archaeological resources were found in the area. Additional review and consultation to fulfill requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be ongoing as part of the permit review process.

ENDANGERED SPECIES CONSULTATION

FHWA is the lead federal agency responsible for coordination pursuant to Section 7 of the Endangered Species Act. Although FHWA is the lead federal agency, the USACE has reviewed and evaluated sufficient documentation to concur with a determination of

No Effect on any federally-listed threatened or endangered species and their designated critical habitat managed by the U.S. Fish and Wildlife Service (USFWS). The USACE has also reviewed correspondence from the NMFS regarding a determination that the project is not likely to adversely affect any federally-listed threatened or endangered species and their designated critical habitat managed by the NMFS. The USACE is coordinating with the NMFS and USFWS and the ESA consultation will be concluded prior to the final decision.

OTHER GOVERNMENT AUTHORIZATIONS

The states of Connecticut, Maine, Massachusetts, New Hampshire, and Rhode Island have approved Coastal Zone Management Programs. Where applicable, the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this public notice, we are requesting the state concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

- ☒ (X) Permit, license, or assent from State.
- ☐ () Permit from local wetland agency or conservation commission.
- ☒ (X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

COMMENTS

The USACE is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the USACE to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. People submitting comments are advised that all comments received will be available for public review in their entirety and will be considered a matter of public record.

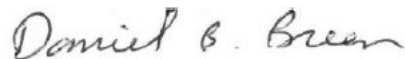
Comments should be submitted in writing by the above date. If you have any questions, please contact Eva Szigeti, Regulatory Division, at eva.m.szigeti@usace.army.mil, (978) 318-8651, (800) 343-4789 or (800) 362-4367.

CENAE-R
File No. NAE-2024-01826

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The USACE holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.

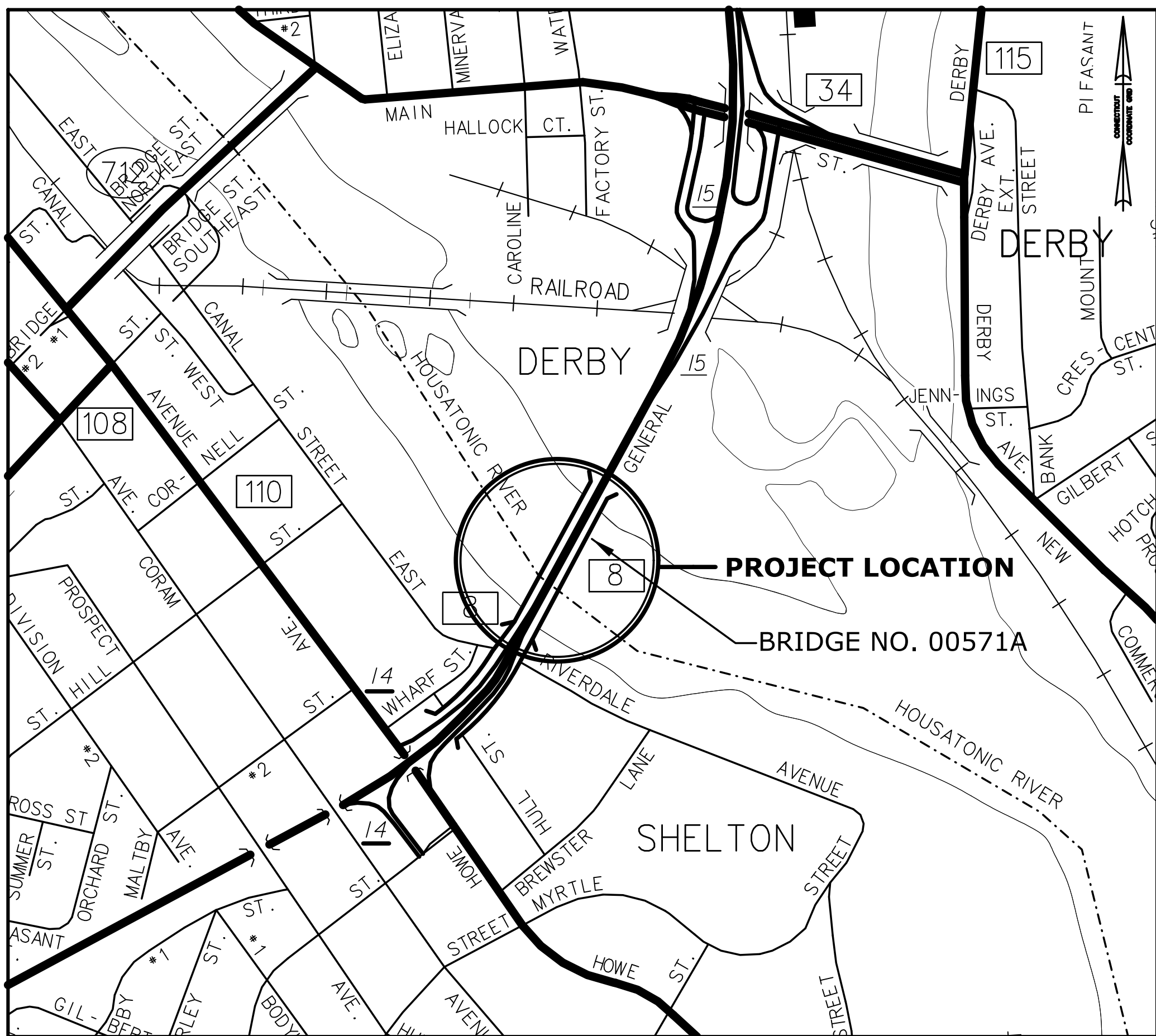
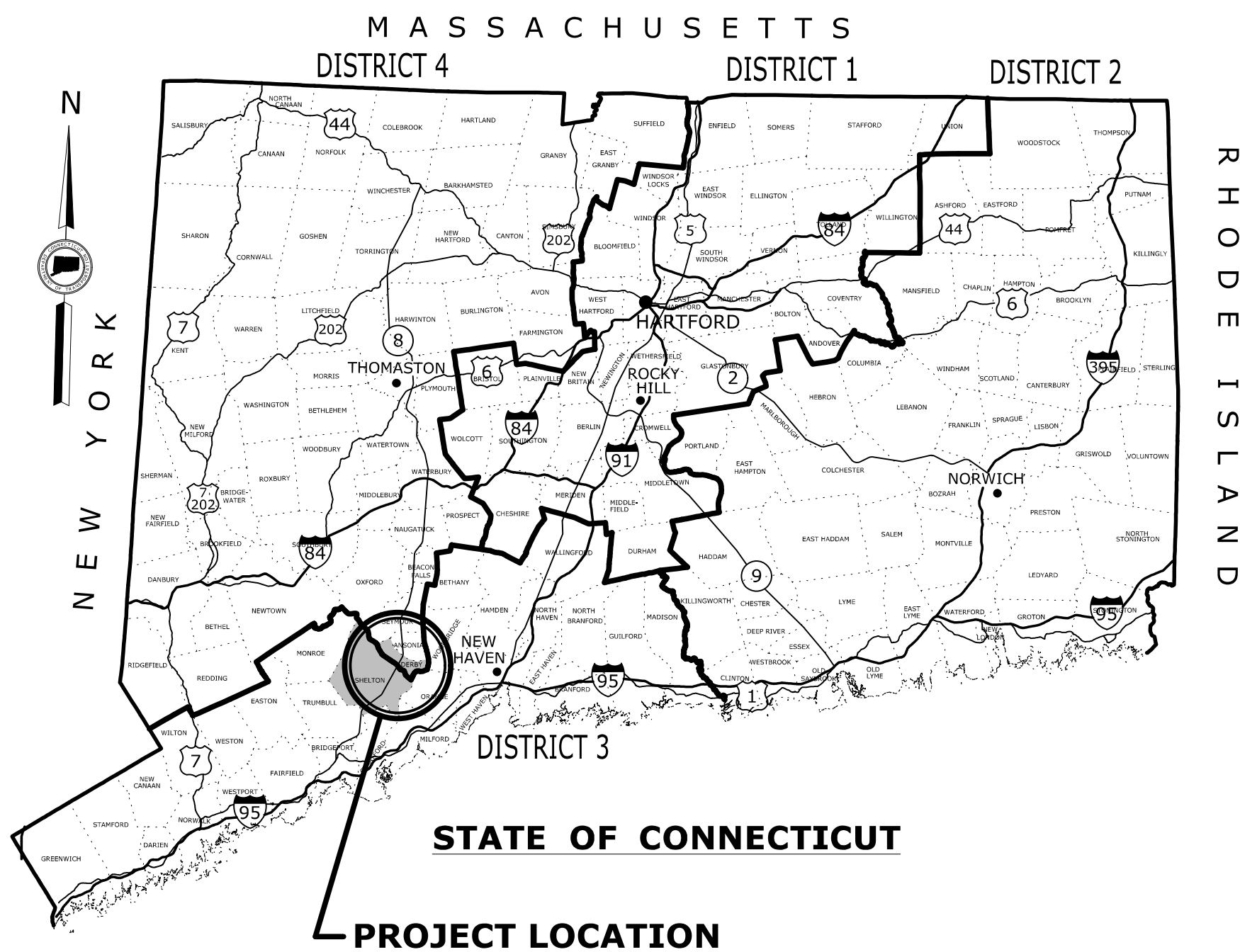


Daniel B. Breen
Chief, Transportation and Utilities Section
Regulatory Division

Please contact Ms. Tina Chaisson at bettina.m.chaisson@usace.army.mil or (978) 318-8058 if you would like to be removed from our public notice mailing list.

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:

- 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.
- THE DEPARTMENT OF TRANSPORTATION WILL ONLY SUBMIT REVISIONS TO DEEP AND USACE FOR CHANGES TO THE DESIGN THAT WILL AFFECT REGULATED AREAS.
- FOR A DESCRIPTION OF THE WATERCOURSES, WETLANDS, AND WETLAND SOILS SEE RELEVANT SECTIONS OF THE PERMIT APPLICATION.
- 400 FOOT GRID BASED ON CONNECTICUT COORDINATE SYSTEM N.A.D. 1983 (2011).VERTICAL DATUM BASED ON NAVD 1988.
- 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.
- 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. Rolfe	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION Filename: ...PMT-01.dgn	SIGNATURE/ BLOCK: 	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						

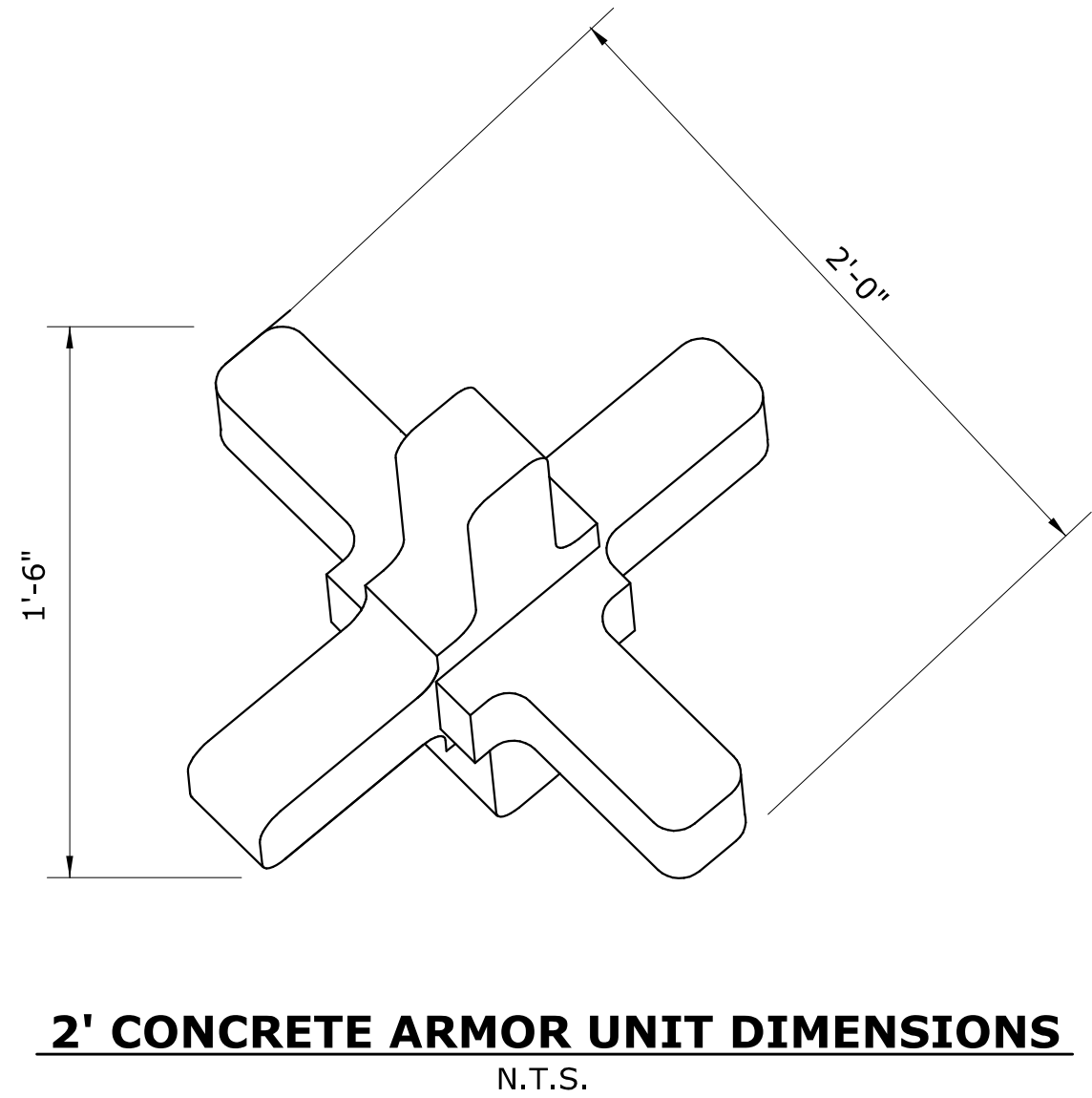
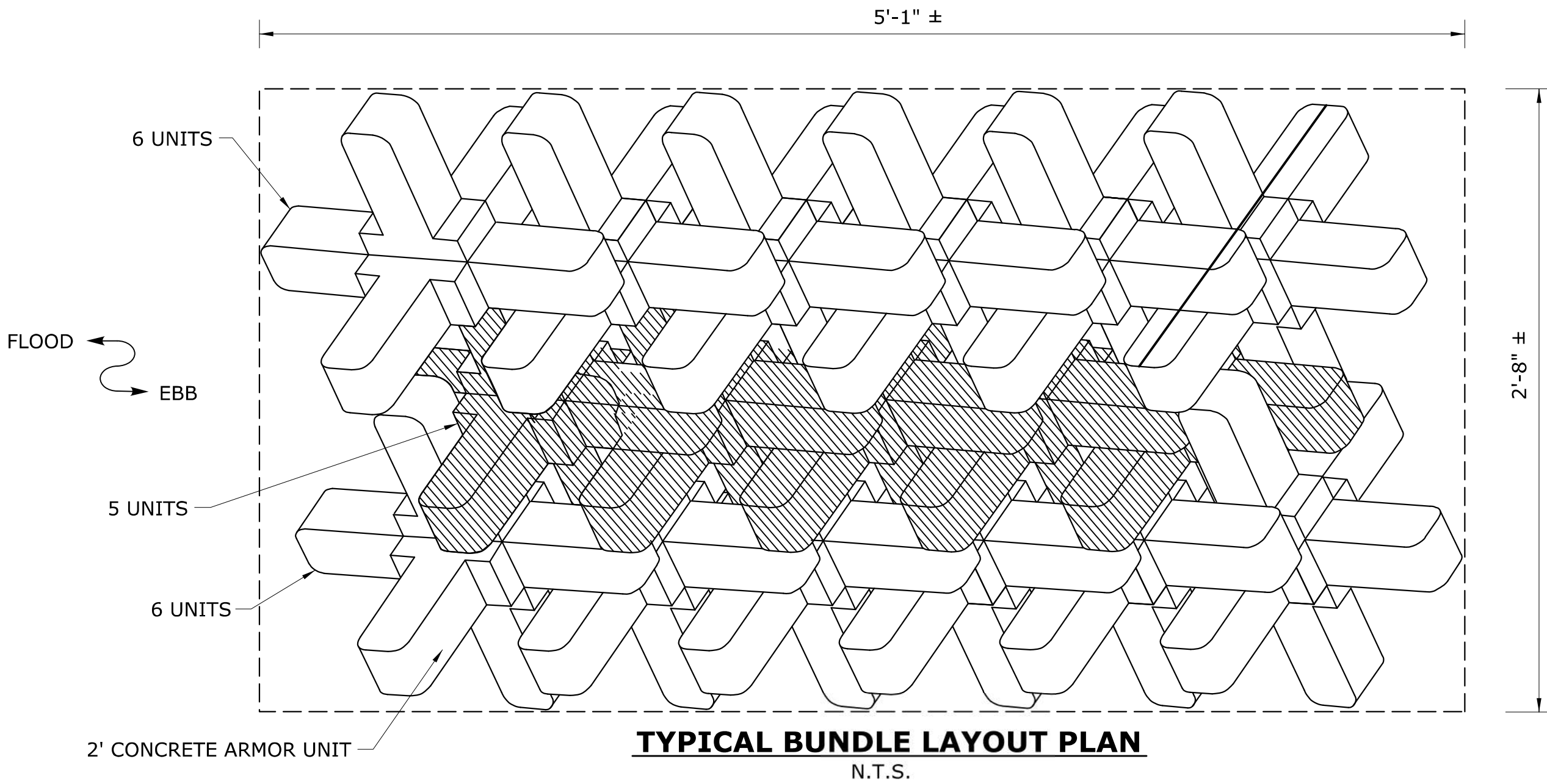
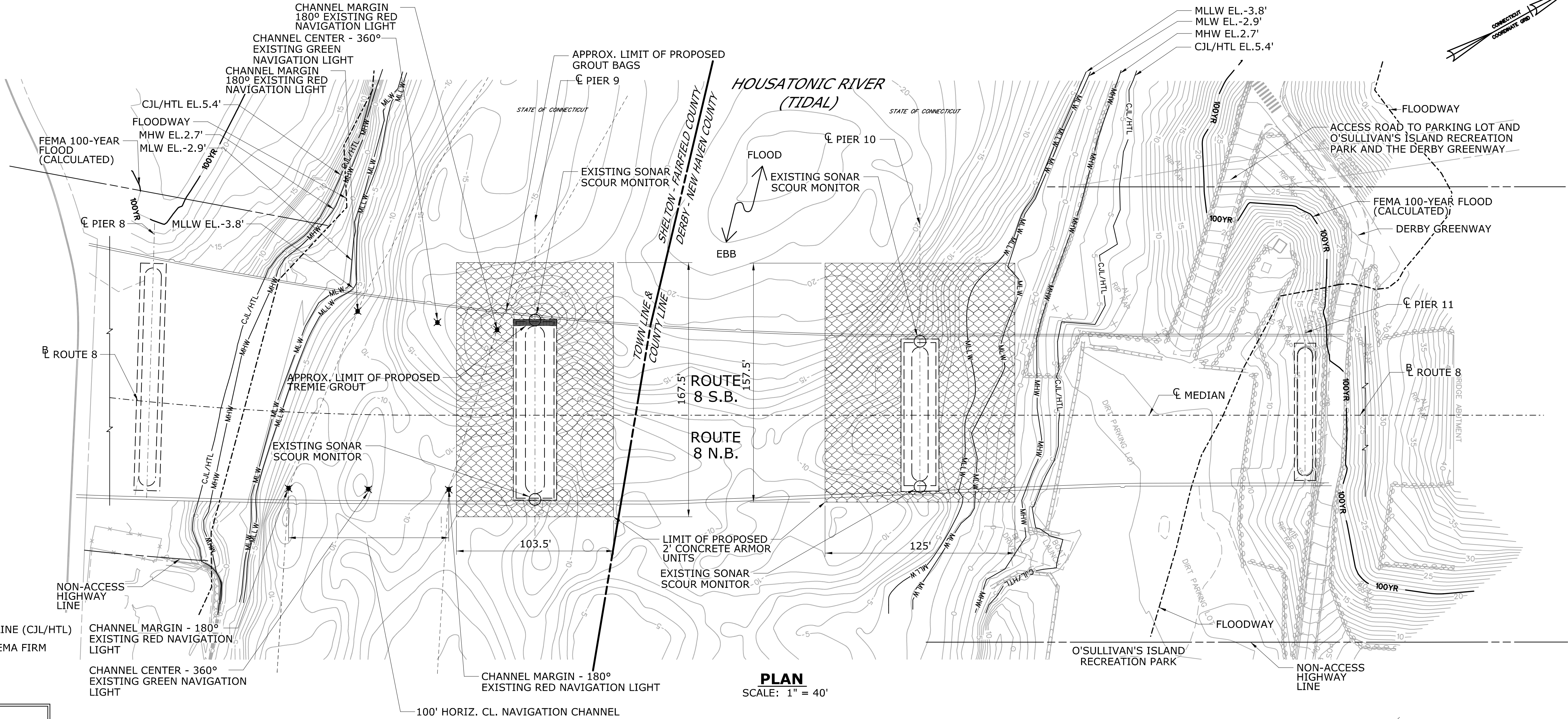
7/8/2024
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LEGEND

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

HYDRAULIC DATA		
MEAN LOW WATER	-2.9 FT	
MEAN HIGH WATER	2.7 FT	
HIGH TIDE LINE (1-YEAR TIDE)	5.4 FT	
10-YEAR TIDE	7.5 FT	
100-YEAR TIDE	9.2 FT	
DESIGN FREQUENCY/EVENT:	TIDAL: MHHW	RIVERINE: 100-YEAR
RIVERINE	100-YEAR	
DESIGN DISCHARGE (CFS)	92,302 CFS	
DESIGN WATER SURFACE ELEVATION - EBB DIRECTION	29.5 FT	
DESIGN WATER SURFACE ELEVATION - FLOOD DIRECTION	3.48 FT	
MAXIMUM SCOUR ELEVATION	-53.3 FT*	
FREQUENCY / EVENT	TIDAL: MHHW	RIVERINE: 500-YEAR
	DISCHARGE 131,407 CFS	
WORST CASE SCOUR SUB-STRUCTURE UNIT	PIER 10	

NOTES:
* CALCULATED SCOUR ELEVATION IS -71.8 FT. HOWEVER, BEDROCK IS AT APPROX. ELEVATION -53.3 FT. ELEVATIONS REPORTED IN NAVD88.
TIDAL PROFILES FOR THE 10-YEAR TIDE AND 100-YEAR TIDE ARE REFERENCED FROM THE NEW ENGLAND USACE TIDAL FLOOD PROFILES OF THE NEW ENGLAND COASTLINE (1988) AT STATION 45+00.



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 11/17/23

DESIGNER/DRAFTER:
B. Hunt/G. Hricko
CHECKED BY:
N. Rolfe
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Signature/Block: [Signature]

PROJECT TITLE:
REHABILITATION BRIDGE N°00571A
ROUTE 8 OVER THE
HOUSATONIC RIVER

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REHABILITATION BRIDGE N°00571A
ROUTE 8 OVER THE
HOUSATONIC RIVER

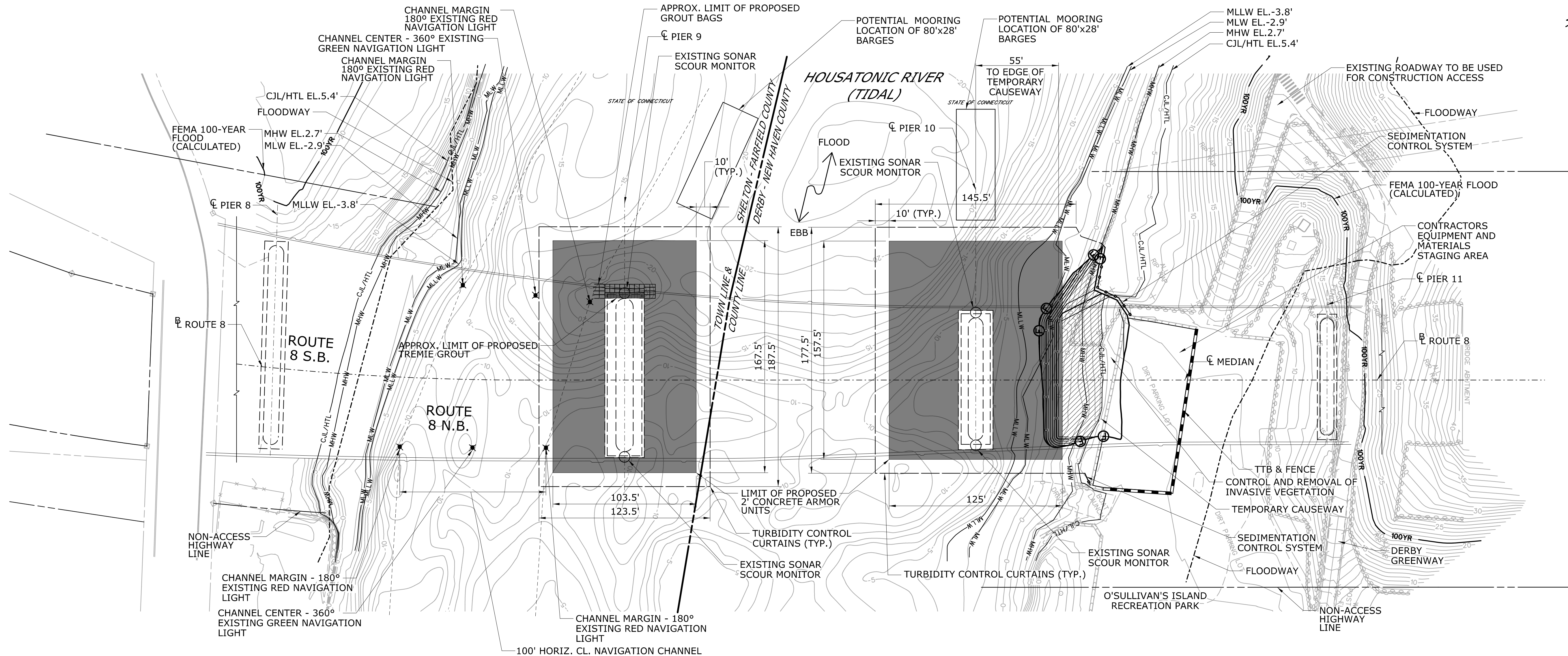
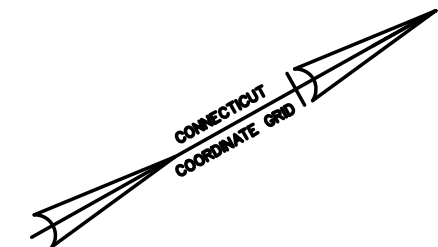
TOWN:
SHELTON
DERBY

DRAWING TITLE:
GENERAL SITE PLAN

PROJECT NO.
126-176

DRAWING NO.
PMT-02

SHEET NO.
2



PLAN
SCALE: 1" = 40'

LEGEND

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

NOTE:

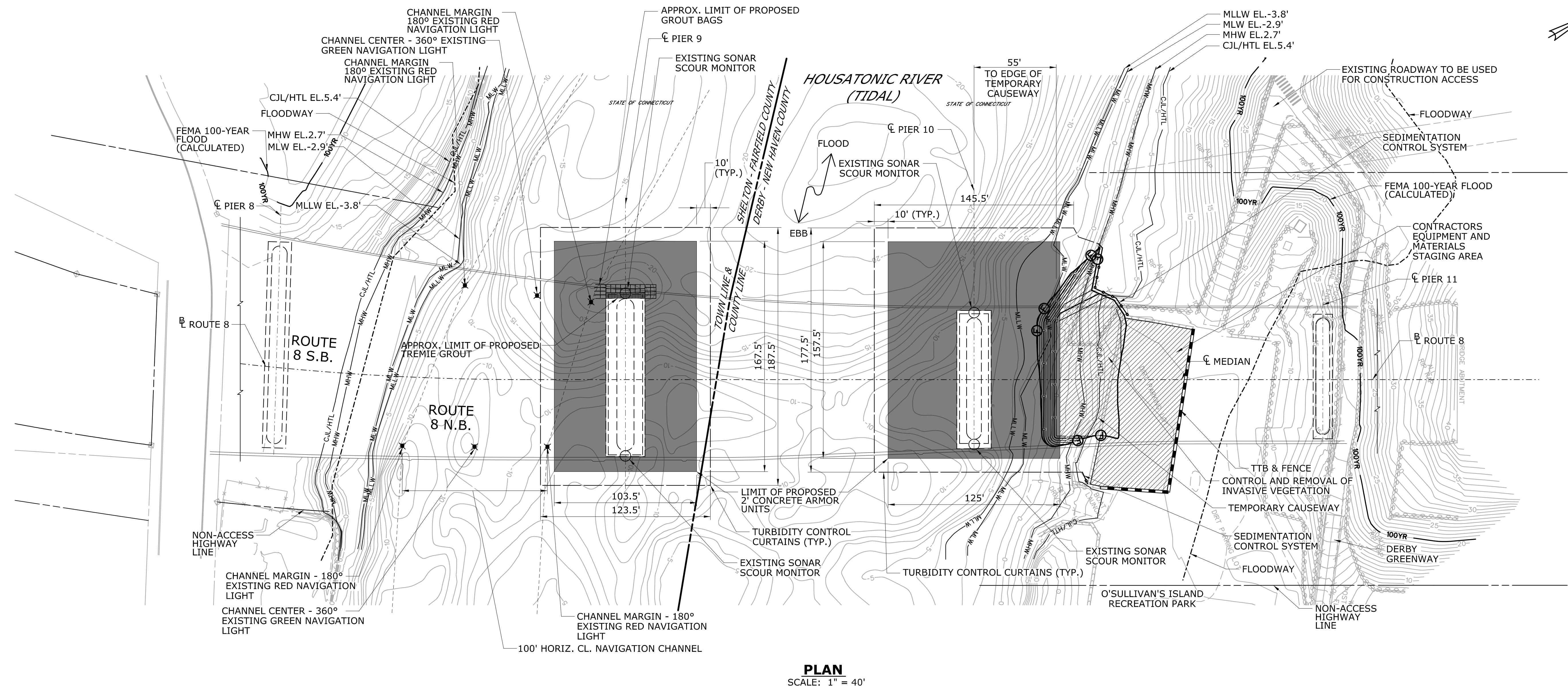
THE CONTRACTOR SHALL NOT WORK WITHIN THE LIMITS OF THE TIDAL WETLANDS AND WATERCOURSE WITH THE EXCEPTION OF THOSE AREAS DELINEATED AS TEMPORARY OR PERMANENT IMPACTS TO THE TIDAL WETLANDS AND WATERCOURSE. ALL DISTURBED AREAS SHALL BE RESTORED.

WETLAND AND WATERWAY IMPACT TABLE

	WETLAND IMPACTS	WATERWAY IMPACTS	TOTAL
PERMANENT IMPACTS	0 SF (0.0 AC)	31,120 SF (0.7 AC)	31,120 SF (0.7 AC)
TEMPORARY IMPACTS	0 SF (0.0 AC)	3,470 SF (0.1 AC)	3,470 SF (0.1 AC)
TOTAL IMPACTS	0 SF (0.0 AC)	34,590 SF (0.8 AC)	34,590 SF (0.8 AC)

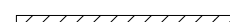

**ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24**

<div>7/8/2024 pwt:\aecom-nr-pw-bentley.com\AECOM_USA_Connecticut\Documents\60692660-Commodore Hull Scour Final Design\900-CAD GIS\910_CAD\20_SHEETS\Env_Permits_application\PMT-03.dgn</div>				<div>DESIGNER/DRAFTER: B. Hunt/G. Hricko CHECKED BY: N. Rolfe</div>		<div>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</div>		<div>SIGNATURE/ BLOCK:</div>		<div>PROJECT TITLE: REHABILITATION BRIDGE N°00571A ROUTE 8 OVER THE HOUSATONIC RIVER</div>		<div>TOWN: SHELTON DERBY</div>		<div>PROJECT NO. 126-176</div>	
<div>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.</div>				<div>SCALE AS NOTED</div>		<div>File name: ...PMT-03.dgn</div>		<div>NO. 30876 LICENSED PROFESSIONAL ENGINEER</div>		<div>DRAWING TITLE: WETLAND/WATERCOURSE IMPACT PLAN</div>		<div>DRAWING NO. PMT-03</div>			
<div>REV. DATE REVISION DESCRIPTION SHEET NO. Plotted Date: 11/17/23</div>				<div>SCALE AS NOTED</div>						<div>SHEET NO. 3</div>					





NOTE: EXCESS EXCAVATED STREAMBED MATERIAL TO BE DISPOSED OF OFF-SITE

LEGEND

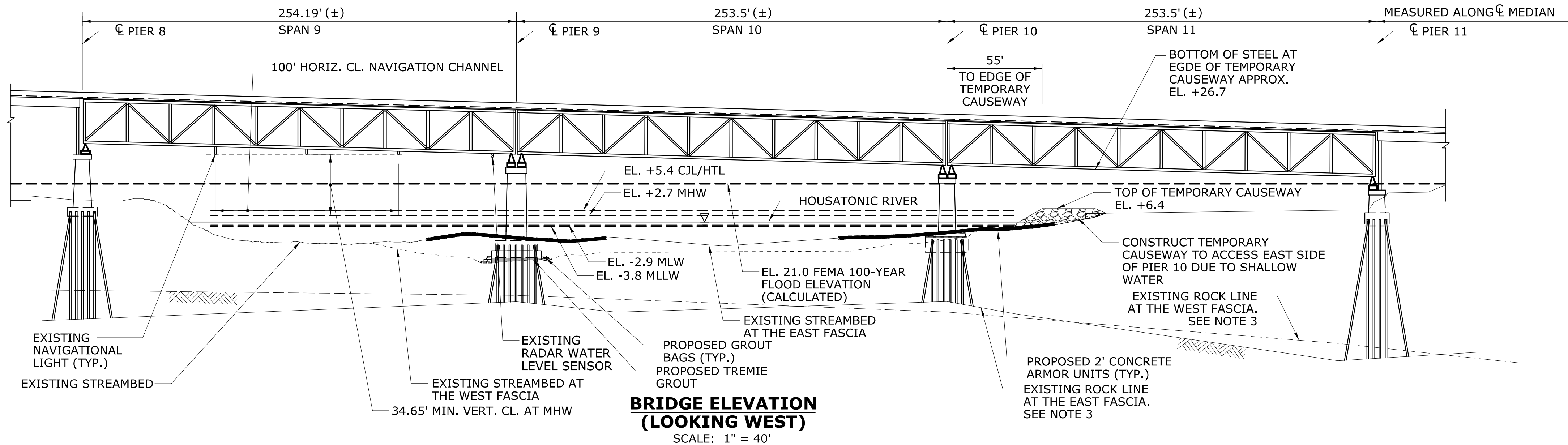
- | | |
|---|---|
|  | TEMPORARY IMPACT |
|  | PERMANENT IMPACT |
| — 100YR — | FEMA 100-YEAR FLOOD (CALCULATED) |
| — MHW — | MEAN HIGH WATER (MHW) |
| — MLW — | MEAN LOW WATER (MLW) |
| — MLLW — | MEAN LOWER LOW WATER (MLLW) |
| — CJL/HTL — | COASTAL JURISDICTION LINE / HIGH TIDE LINE (CJL/HTL) |
|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

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

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

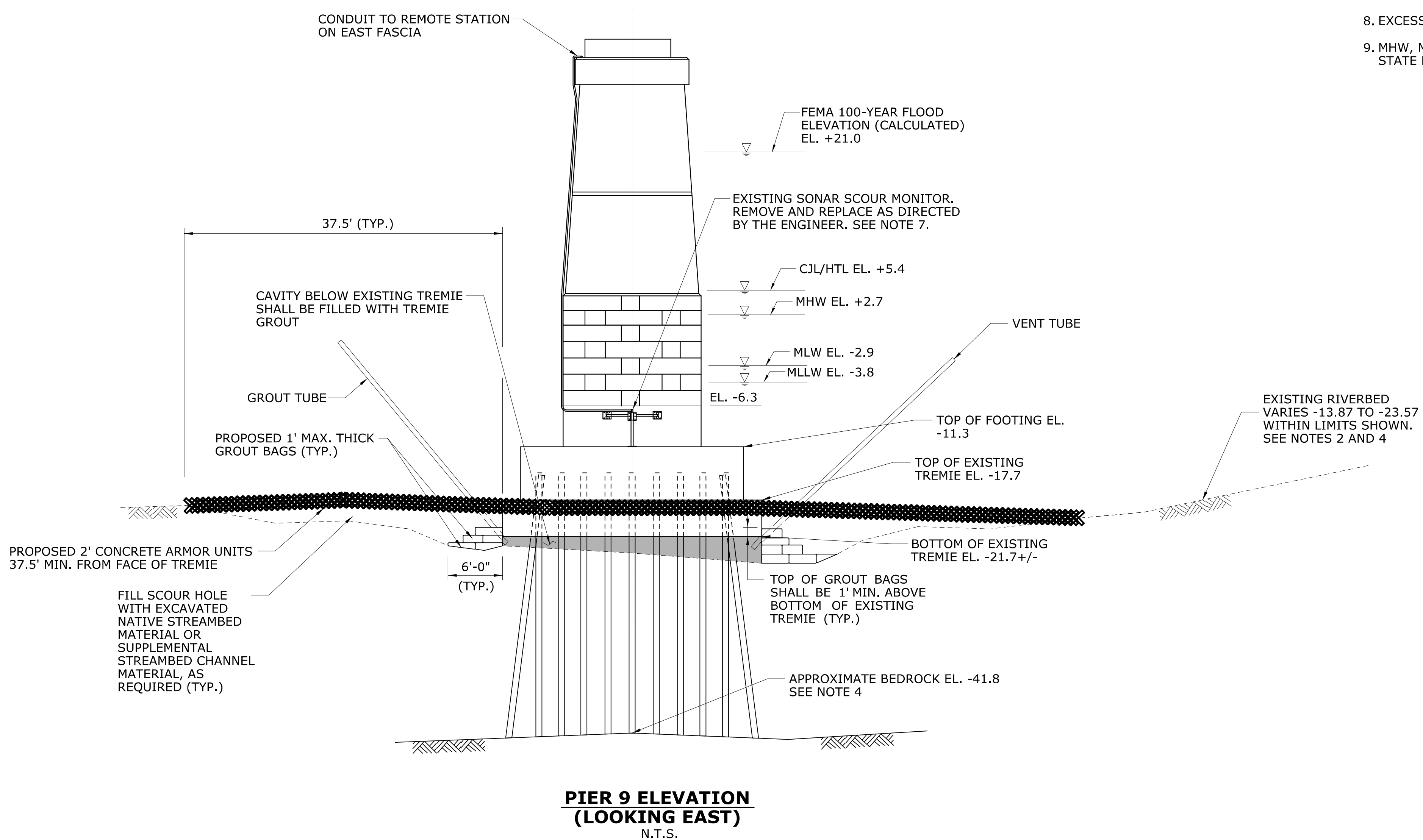
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				CHECKED BY: N. Rolfe								DRAWING TITLE: 100-YEAR FLOODPLAIN IMPACT PLAN		DRAWING NO. PMT-04	
				SCALE AS NOTED		Filename: ... \PMT-04.dgn						SHEET NO. 4			
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS 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.															
REV. DATE REVISION DESCRIPTION SHEET NO.				Plotted Date: 11/17/23											

7/8/2024
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NOTES

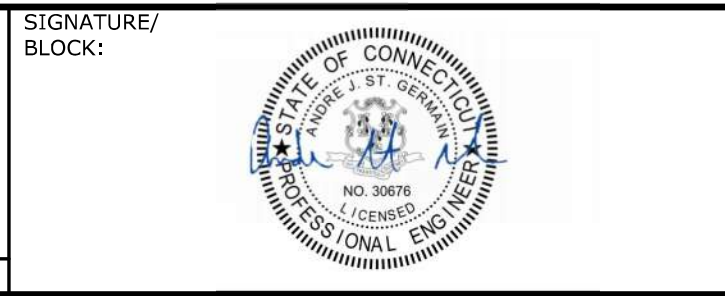
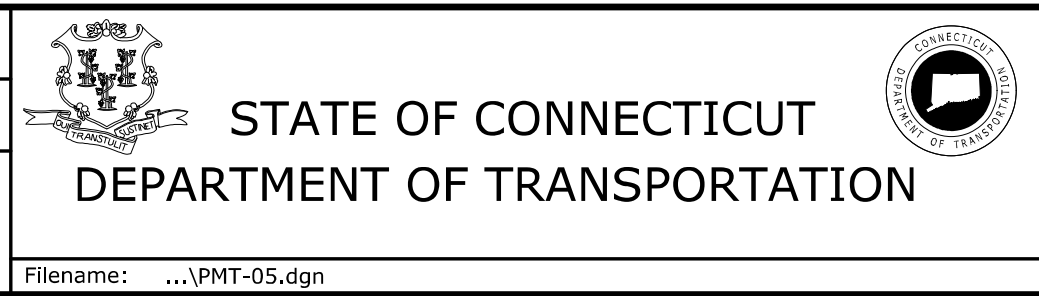
- ALL ELEVATIONS SHOWN ARE BASED ON NAVD88 DATUM.
- EXISTING STREAMBED SHOWN IS BASED ON THE 2021 UNDERWATER INSPECTION BY CTDOT AND BATHYMETRIC SURVEY PERFORMED 2020 BY MARTINEZ COUCH & ASSOCIATES, LLC.
- EXISTING ROCK LINE SHOWN IS BASED ON LIMITED DATA AVAILABLE. ROCK ELEVATIONS WERE DETERMINED AT THE BORING LOCATIONS FROM THE 2020 BORINGS AND THE 1983 WIDENING BORINGS AND WERE APPROXIMATED BETWEEN THESE DISCRETE DATA POINTS.
- STREAMBED AND ROCKLINE ELEVATIONS APPLY AT THE WEST PIER ELEVATION. ELEVATIONS VARY ALONG THE LENGTH OF THE PIER.
- THE ENTIRE PROJECT IS LOCATED WITHIN THE MAPPED FEMA FLOOD ZONE AE ELEV. 21.0.
- SONAR SCOUR MONITORING SYSTEM INSTALLED UNDER PROJECT 126-170.
- 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.
- EXCESS EXCAVATED STREAMBED MATERIAL TO BE DISPOSED OF OFF-SITE.
- 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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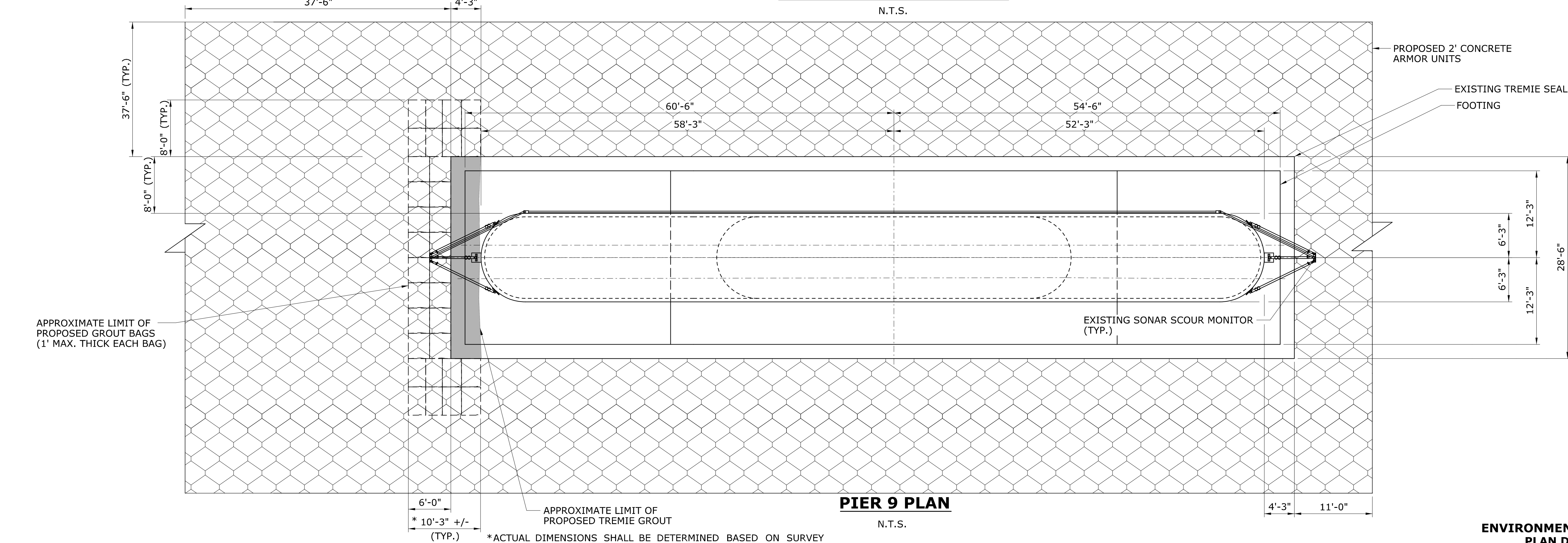
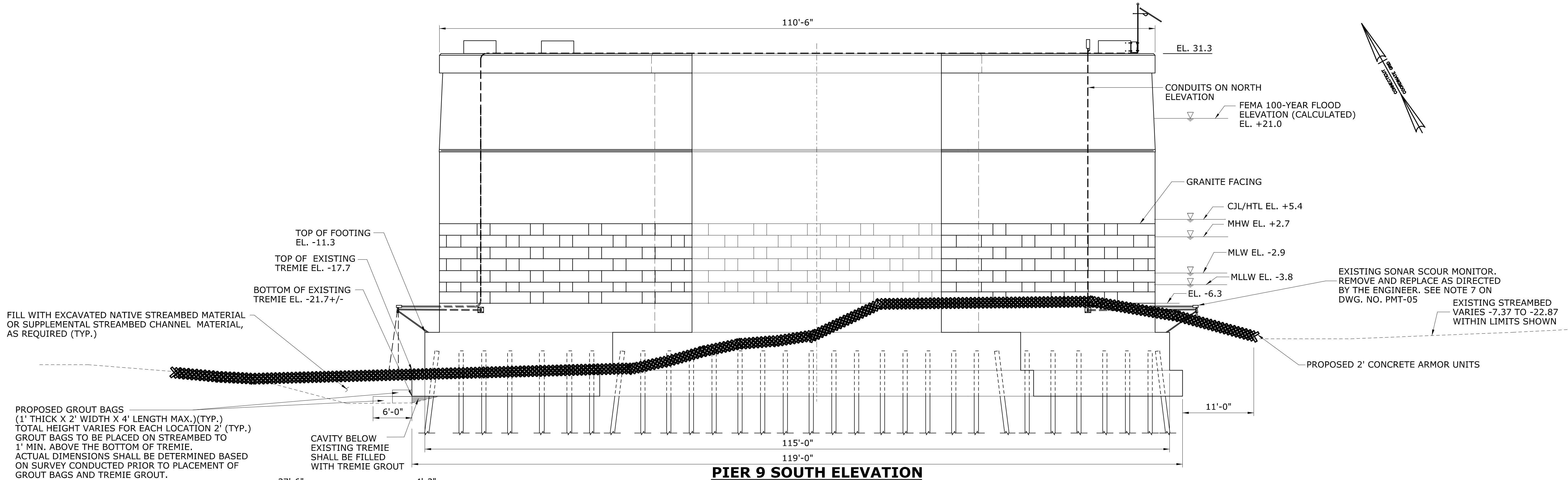
DESIGNER/DRAFTER:
B. Hunt/G. Hricko
CHECKED BY:
N. Rolfe
SCALE AS NOTED



PROJECT TITLE:
**REHABILITATION BRIDGE N°00571A
ROUTE 8 OVER THE
HOUSATONIC RIVER**

TOWN: SHELTON DERBY	PROJECT NO. 126-176
DRAWING TITLE: PIER 9 ELEVATIONS	DRAWING NO. PMT-05
	SHEET NO. 5

7/9/2024
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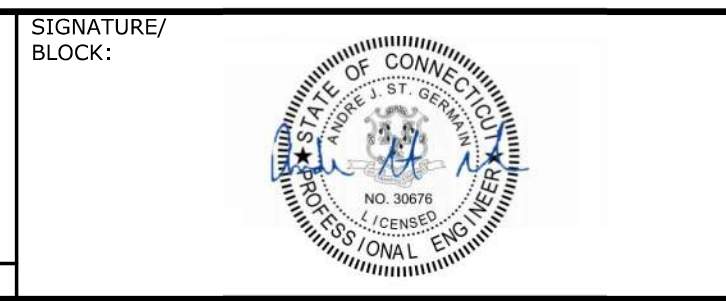
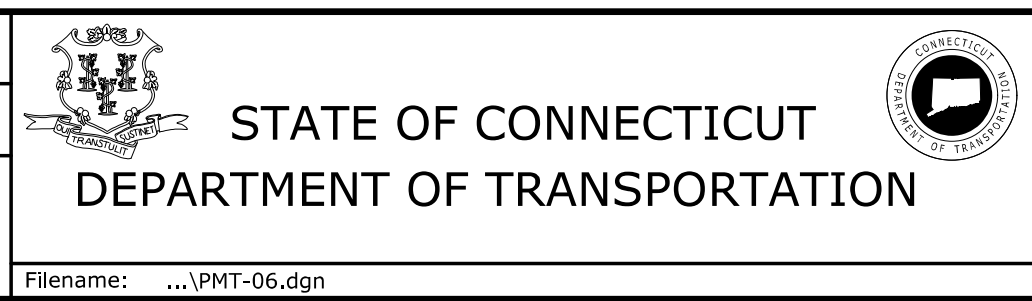
ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 11/17/23

DESIGNER/DRAFTER:
B. Hunt/G. Hricko

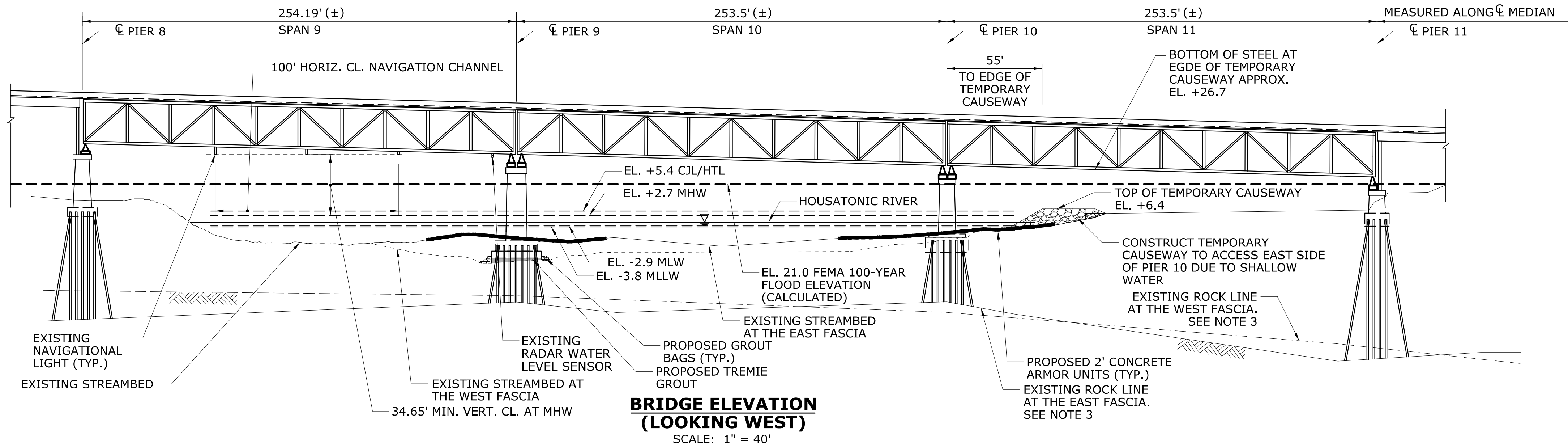
CHECKED BY:
N. Rolfe

SCALE AS NOTED

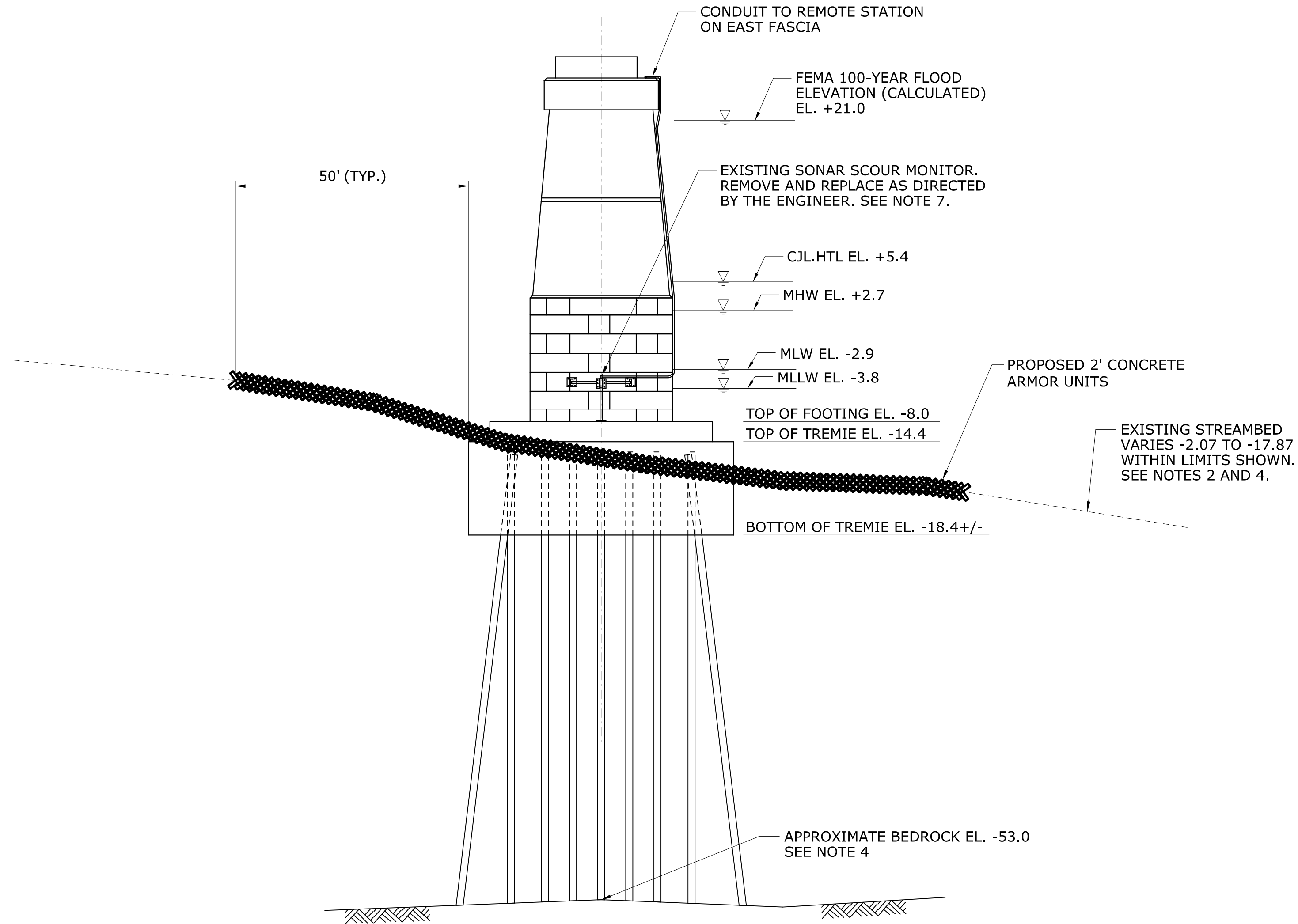


PROJECT TITLE:
**REHABILITATION BRIDGE N°00571A
ROUTE 8 OVER THE
HOUSATONIC RIVER**

TOWN: SHELTON DERBY	PROJECT NO. 126-176
DRAWING TITLE: PIER 9 SECTIONS	DRAWING NO. PMT-06
	SHEET NO. 6



**BRIDGE ELEVATION
(LOOKING WEST)**
SCALE: 1" = 40'





**PIER 10 ELEVATION
(LOOKING EAST)**
N.T.S.

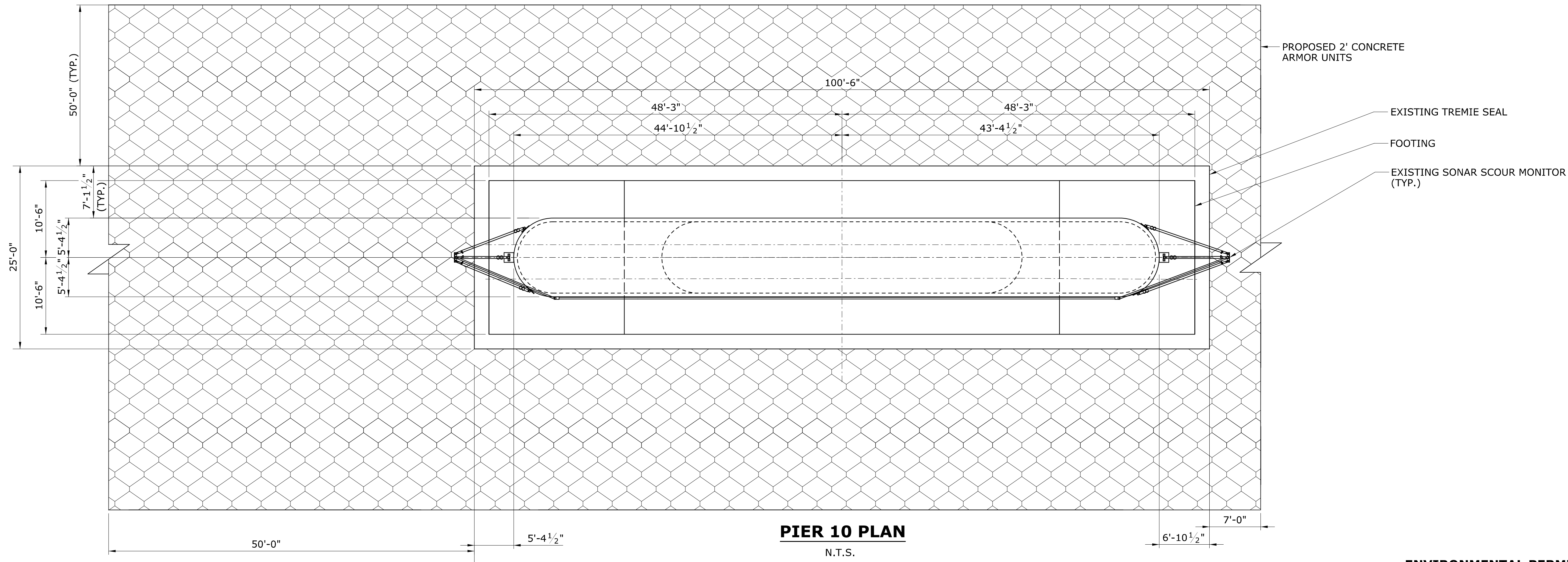
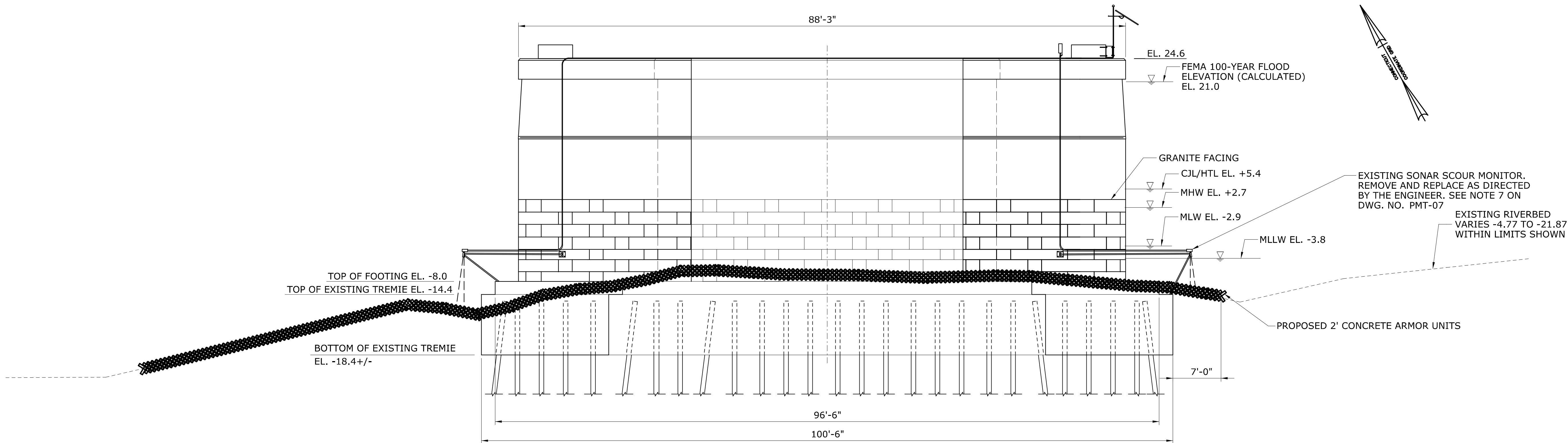
NOTES

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**

				DESIGNER/DRAFTER: B. Hunt/G. Hricko CHECKED BY: N. Rolfe		 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION Filename: ...PMT-07.dgn	SIGNATURE/ BLOCK: 	PROJECT TITLE: REHABILITATION BRIDGE N°00571A ROUTE 8 OVER THE HOUSATONIC RIVER	TOWN: SHELTON DERBY	PROJECT NO. 126-176 DRAWING NO. PMT-07 SHEET NO. 7
				SCALE AS NOTED						
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.										
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 11/17/23						

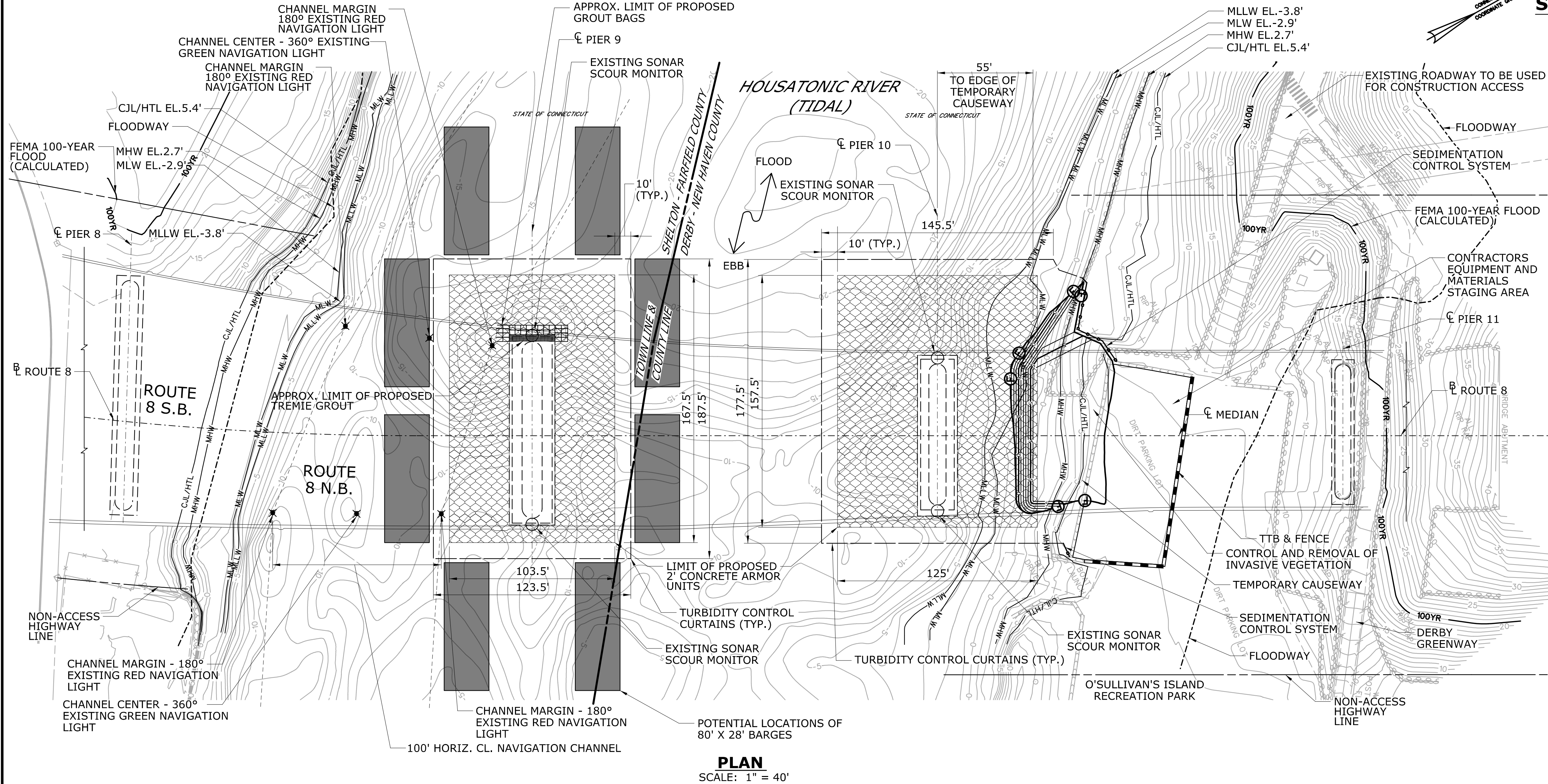
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ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

				DESIGNER/DRAFTER: B. Hunt/G. Hricko		 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							
				CHECKED BY: N. Rolfe															
				SCALE AS NOTED															
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 11/17/23		Filename: ...PMT-08.dgn						DRAWING TITLE: PIER 10 SECTIONS	DRAWING NO. PMT-08						
												SHEET NO. 8							

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SUGGESTED CONSTRUCTION SEQUENCE-PIER 9

1. FLOAT IN TWO APPROX. 80' X 28' BARGES FROM LONG ISLAND SOUND.
2. MOBILIZE EQUIPMENT AND MATERIALS UTILIZING FACTORY STREET AND DERBY GREENWAY. UTILIZE O'SULLIVAN'S ISLAND RECREATION PARK PARKING LOT WITHIN CTDOT ROW AS STAGING AREA. CONTRACTOR SHALL NOT OBSTRUCT PUBLIC ACCESS TO EXISTING ROADWAY BEING USED FOR CONSTRUCTION ACCESS. CLEAR AND GRUB AS NECESSARY.
3. REMOVE INVASIVE VEGETATION.
4. INSTALL TURBIDITY CONTROL CURTAINS AND ANCHOR.
5. 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).
6. REMOVE THE UNDERWATER COMPONENTS OF THE EXISTING SCOUR MONITORING SYSTEM PRIOR TO THE INSTALLATION OF THE SCOUR COUNTERMEASURES. THIS INCLUDES THE FOUR SONAR TRANSDUCERS AND THEIR STAINLESS-STEEL MOUNTING BRACKETS AND CONDUIT. THESE ITEMS SHALL BE REPLACED.
7. PRIOR TO INSTALLING GROUT BAGS AND FILLING WITH TREMIE GROUT, ANY LOOSE DEBRIS AND UNSTABLE MATERIAL ALONG THE BOTTOM OF THE UNDERMINED AREA SHALL BE REMOVED.
8. INSTALL 1' MAX. THICK GROUT BAGS AT EXISTING SCOUR HOLE AT WEST END OF PIER 9.
9. EXTEND TREMIE PIPES INTO THE SCOUR HOLE AND FILL CAVITY BELOW TREMIE WITH GROUT. GROUT BAGS SHALL BE LEFT IN PLACE.
10. ASSEMBLE 2' CONCRETE ARMOR UNITS INTO BUNDLES OF 6 X 5 X 6 ON SHORE, WITH GEOTEXTILE FABRIC WRAPPING, AND PLACE ONTO BARGE 2.
11. PERFORMING WORK IN SECTIONS OF APPROXIMATELY 30' X 30', EXCAVATE 1' DEEP OF RIVERBED. PLACE EXCAVATED RIVERBED MATERIAL ONTO BARGE 1.
12. PICK 2' CONCRETE ARMOR UNITS FROM BARGE 2 AND GUIDE INTO FINAL POSITION WITH THE ASSISTANCE OF A COMMERCIAL DIVE TEAM. INSTALL WITH A TIGHT WEAVE (APPROXIMATELY 2 TO 6 INCHES APART FROM EACH OTHER) IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THERE IS NO NEED FOR GROUTING OR MECHANICALLY FASTENING TO EACH OTHER ONCE THEY HAVE BEEN SET.
13. REPEAT THIS PROCESS UNTIL THE ENTIRE PIER 9 FOOTPRINT IS COMPLETED.
14. REPLACE THE UNDERWATER COMPONENTS OF THE EXISTING SCOUR MONITORING SYSTEM FOLLOWING THE INSTALLATION OF THE SCOUR COUNTERMEASURES. THIS INCLUDES THE FOUR SONAR TRANSDUCERS AND THEIR STAINLESS-STEEL MOUNTING BRACKETS AND CONDUIT. TEST THE SCOUR MONITORING SYSTEM TO MAKE SURE IT IS OPERATIONAL.
15. REMOVE TURBIDITY CONTROL CURTAINS.
16. ACCESS TO O'SULLIVAN'S ISLAND RECREATION PARK AND TO THE PARKING LOT MUST REMAIN OPEN AT ALL TIMES.

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

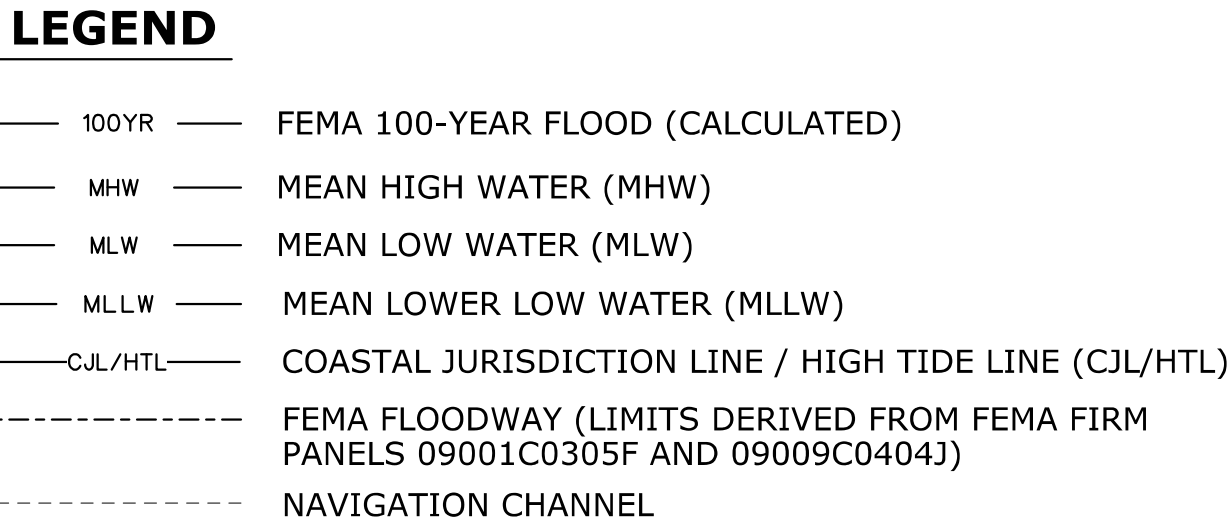
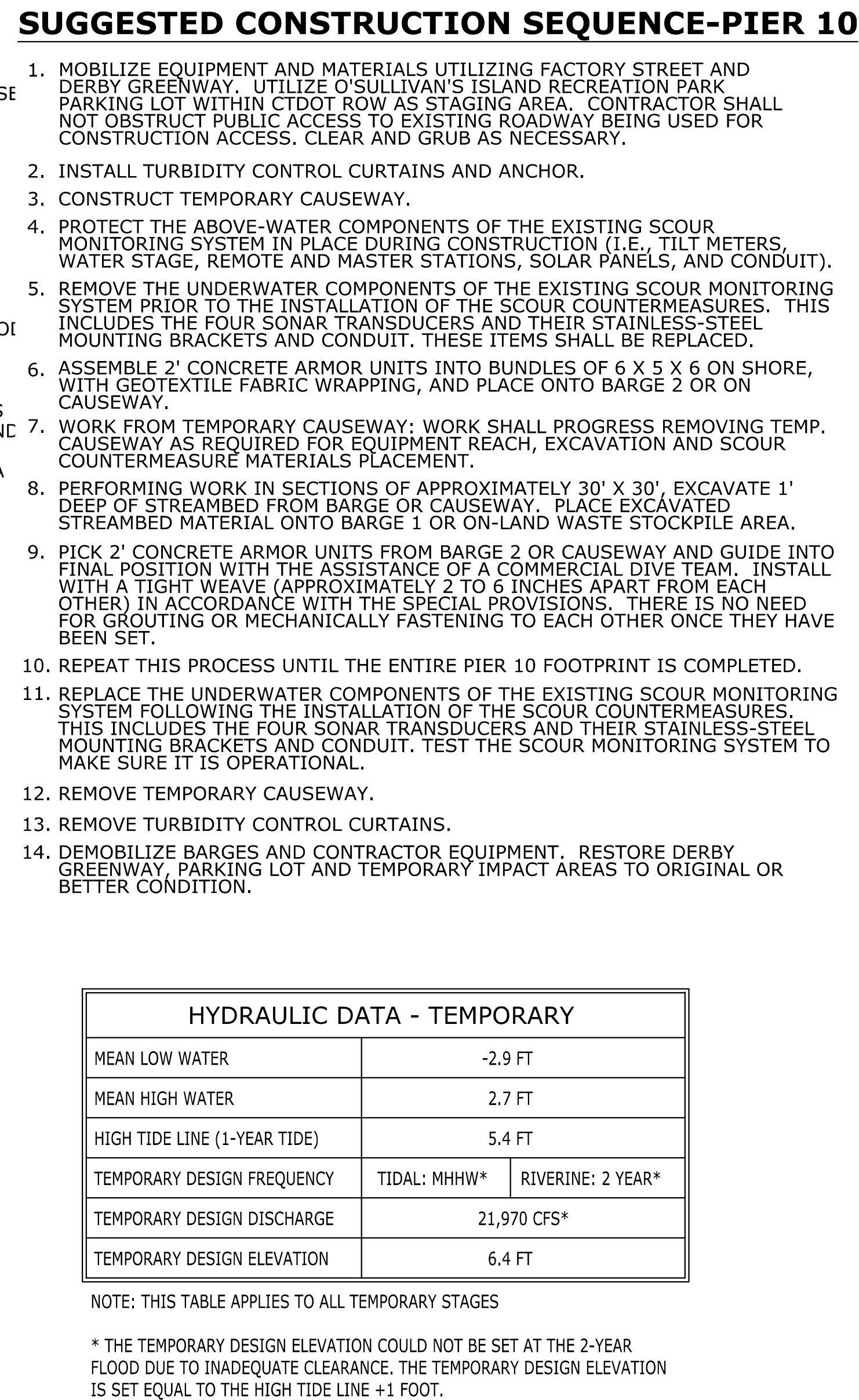
* THE TEMPORARY DESIGN ELEVATION COULD NOT BE SET AT THE 2-YEAR FLOOD DUE TO INADEQUATE CLEARANCE. THE TEMPORARY DESIGN ELEVATION IS SET EQUAL TO THE HIGH TIDE LINE +1 FOOT.

LEGEND



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

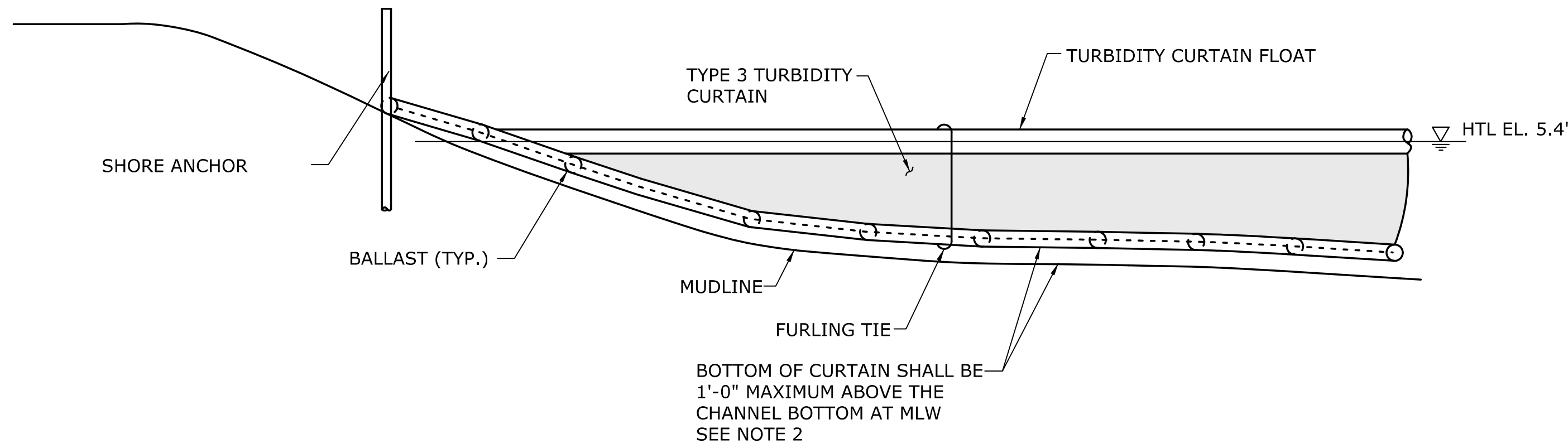
ENVIRONMENTAL PERMIT PLANS PLAN DATE: 06/17/24

				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: N. Rolfe	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION Filename: ...PMT-09.dgn	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					DRAWING TITLE: CONSTRUCTION STAGING PLAN PIER 9

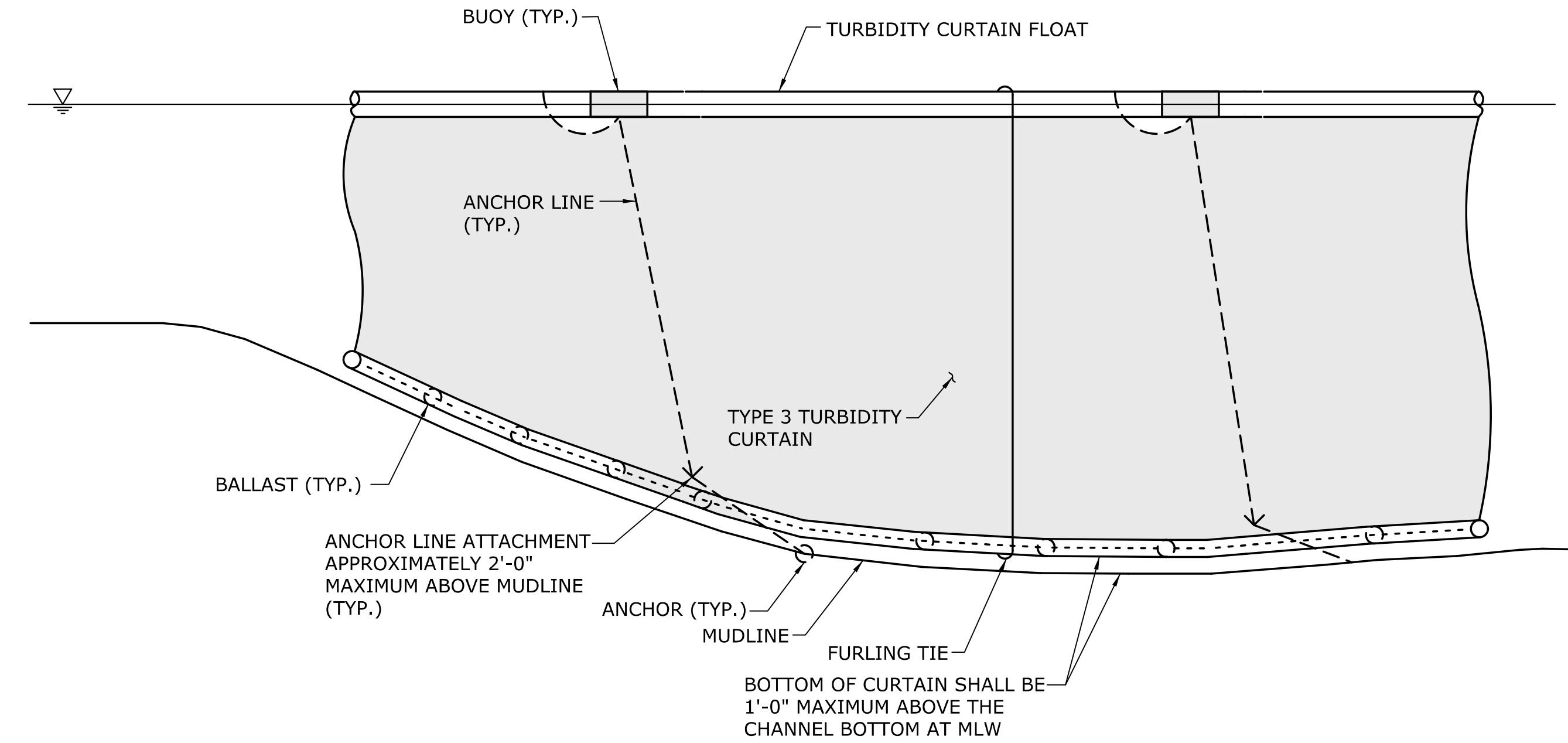


ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

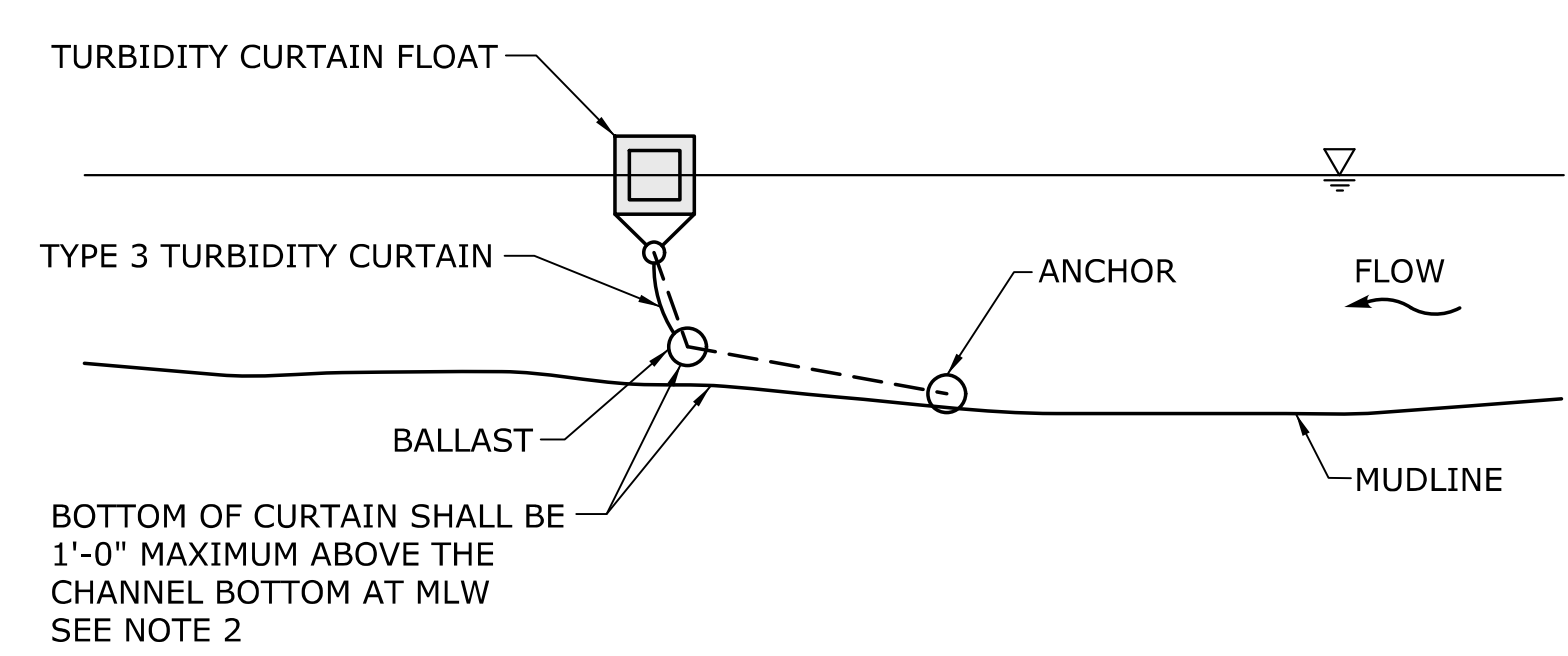
				THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: B. Hunt/G. Hricko CHECKED BY: N. Rolfe		 STATE OF 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		File name: ... \PMT-10.dgn				DRAWING TITLE: CONSTRUCTION STAGING PLAN PIER 10		DRAWING NO. PMT-10		SHEET NO. 10			
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 11/17/23															



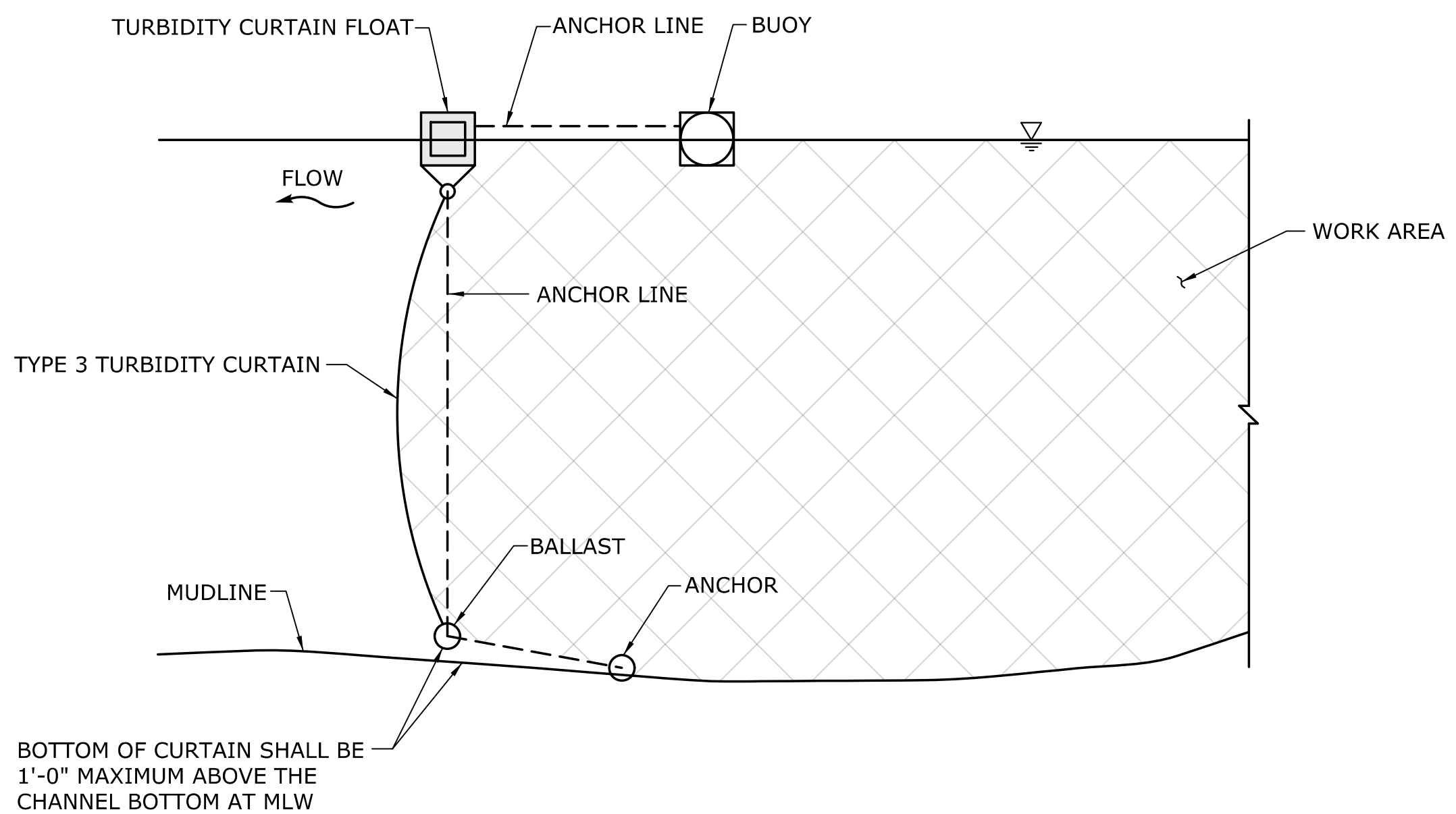
SUGGESTED ELEVATION - TURBIDITY CURTAIN AT SHORELINE
N.T.S.



SUGGESTED ELEVATION - TURBIDITY CURTAIN UPSTREAM/DOWNSTREAM
N.T.S.






SUGGESTED SECTION - AT SHORELINE
N.T.S.



SUGGESTED SECTION - TURBIDITY CURTAIN UPSTREAM/DOWNSTREAM
N.T.S.

- 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.

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

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				CHECKED BY: N. Rolfe							DRAWING NO. PMT-11
				SCALE AS NOTED							SHEET NO. 11
6/13/2024	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 11/17/23		Filename: ...PMT-11.dgn					

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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)
- CJL/HTL COASTAL JURISDICTION LINE / HIGH TIDE LINE (CJL/HTL)
- FEMA FLOODWAY (LIMITS DERIVED FROM FEMA FIRM PANELS 09001C0305F AND 09009C0404J)
- NAVIGATION CHANNEL


PLAN
SCALE: 1" = 80'

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 06/17/24

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DESIGNER/DRAFTER:
B. Hunt/G. Hricko
CHECKED BY:
N. Rolfe
SCALE AS NOTED



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...PMT-12.dgn



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PROJECT TITLE:
**REHABILITATION BRIDGE N°00571A
ROUTE 8 OVER THE
HOUSATONIC RIVER**

TOWN:
**SHELTON
DERBY**
DRAWING TITLE:
**CONSTRUCTION ACCESS
AND STAGING PLAN**

PROJECT NO.
126-176
DRAWING NO.
PMT-12
SHEET NO.
12