

## **Connecticut Department of Energy and Environmental Protection License\***

### **Inland Wetlands & Watercourses Permit Flood Management Certification & Exemption Request Approval**

<b>Licensee(s):</b>	Connecticut Dept. of Transportation
<b>Licensee Address(s):</b>	2800 Berlin Turnpike Newington, CT 06111
<b>License Number(s):</b>	202108049-IW 202108050-FME
<b>Municipality:</b>	Greenwich
<b>Project Description:</b>	Bridge Replacement
<b>Project Address/Location:</b>	Bridge No. 01872, US Route 1 over Greenwich Creek
<b>Waters:</b>	Greenwich Creek, West Brothers Brook, and associated wetlands
<b>Authorizing CT Statute(s) and/or Federal Law:</b>	CGS Section 22a-36 to 45; CGS Section 25-68b to h with approved exemption from CGS Section 25-68h-2(c)(5)
<b>Applicable Regulations of CT State Agencies:</b>	22a-39-1 to 15, 25-68h-1 to 3
<b>Agency Contact:</b>	Land & Water Resources Division, Bureau of Water Protection & Land Reuse, 860-424-3019
<b>License Expiration:</b>	Five (5) years from the date of issuance of this license.
<b>Project Site Plan Set:</b>	<i>“Bridge Replacement, Bridge No. 01872 U.S. Route 1 over Greenwich Creek,”</i> thirteen (13) sheets, Prepared by A. DiCesare Associates, with sheets 1, 2, and 5 dated May 25, 2021, sheets 3, and 4-12 dated May 24, 2021 and, sheet 13 dated April 29, 2021.
<b>License Enclosures:</b>	LWRD Compliance Certification Form; LWRD General Conditions; LWRD Work Commencement Form; Site Plan Set

\*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 . . .*”

**Authorized Activities:**

The Licensee is hereby authorized to conduct the following work as described in application # 202108049 and as depicted on any site plan sheets / sets cited herein:

Temporarily and permanently impact 5,360 square feet (sf) of wetlands and watercourse, due to the replacement of Bridge No. 01872 which includes:

1. Construct, maintain and reconfigure as necessary all erosion and sedimentation controls during the course of construction.
2. Construct, maintain and reconfigure as necessary any water handling measures required for proposed activities.
3. Construct, maintain, and remove temporary utility bridge.
4. Remove the existing bridge and replace it with a 38-foot clear span prefabricated steel girder superstructure set on concrete abutments located behind the existing stone masonry abutments, including the following:
  - a. Cut existing abutments to below grade;
  - b. Placing boulders to mimic existing channel width;
  - c. Raising proposed roadway profile by approximately 3ft for increased hydraulic opening; and
  - d. Placing granular fill, modified riprap, natural streambed materials and channel boulders around substructure as shown on plans.
5. Remove and replace, with modifications, a stone weir controlling the elevation of the small pond downstream of bridge and replace the adjacent road retaining wall.
6. Construct three (3) rock weirs downstream of the stone weir in accordance with Terms and Conditions, below.
7. Remove existing stone arch dike approximately 300ft downstream of bridge.
8. Conduct miscellaneous drainage improvements, including:
  - a. Resetting catch basin grates;
  - b. Replacing reinforced concrete pipe;
  - c. Constructing outfall endwalls; and,
  - d. Providing outlet protection at stormwater outfalls.

***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. **Unconfined Instream Work.** Unconfined instream work is limited to the period June 1 through September 30.
  - a. 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.
  - b. Once a work area has been confined, in-water work within the confined area is allowed any time of the year.
  - c. 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.
3. **Fisheries Mitigation.** The Licensee shall conduct fisheries mitigation as follows:
  - a. contact, not less than ten days prior to the initiation of activities authorized herein, a biologist with the Department of Energy and Environmental Protection's (DEEP) Fisheries Division at 860-434-6043 to coordinate with the DOT Office of Environmental Planning;
  - b. construct/install fish habitat and fish passage improvements as detailed on sheet 10, attached hereto.
  - c. coordinate in-stream activities and on-site visits with the DEEP biologist;
  - d. install, at the DEEP biologist's discretion, habitat features such as fish weirs, rocks, gravel, cobble, or thalwegs, and
  - e. complete such mitigation prior to the end of the project completion.
4. **Water Handling.** If final water handling varies from that shown on the plans approved herein, the Licensee shall submit, at least two weeks prior to the commencement of work and for the Commissioner's review and written approval, a final water handling plan.
5. **Wetland Plantings.** The Licensee shall conduct plantings as shown on sheet 13, attached hereto, prior to project completion.

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](mailto: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 Commencement<sup>1</sup>.** Not later than two (2) weeks prior to the commencement of any work authorized herein, the Licensee shall submit to [DEEP.LWRDRegulatory@ct.gov](mailto: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

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<sup>1</sup> 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](mailto: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 Certification<sup>2</sup>.** Not later than 90 days after completion of the authorized work, the Licensee shall prepare and submit to [DEEP.LWRDRegulatory@ct.gov](mailto: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](mailto:DEEP.LWRDRegulatory@ct.gov) or

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<sup>2</sup> 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.

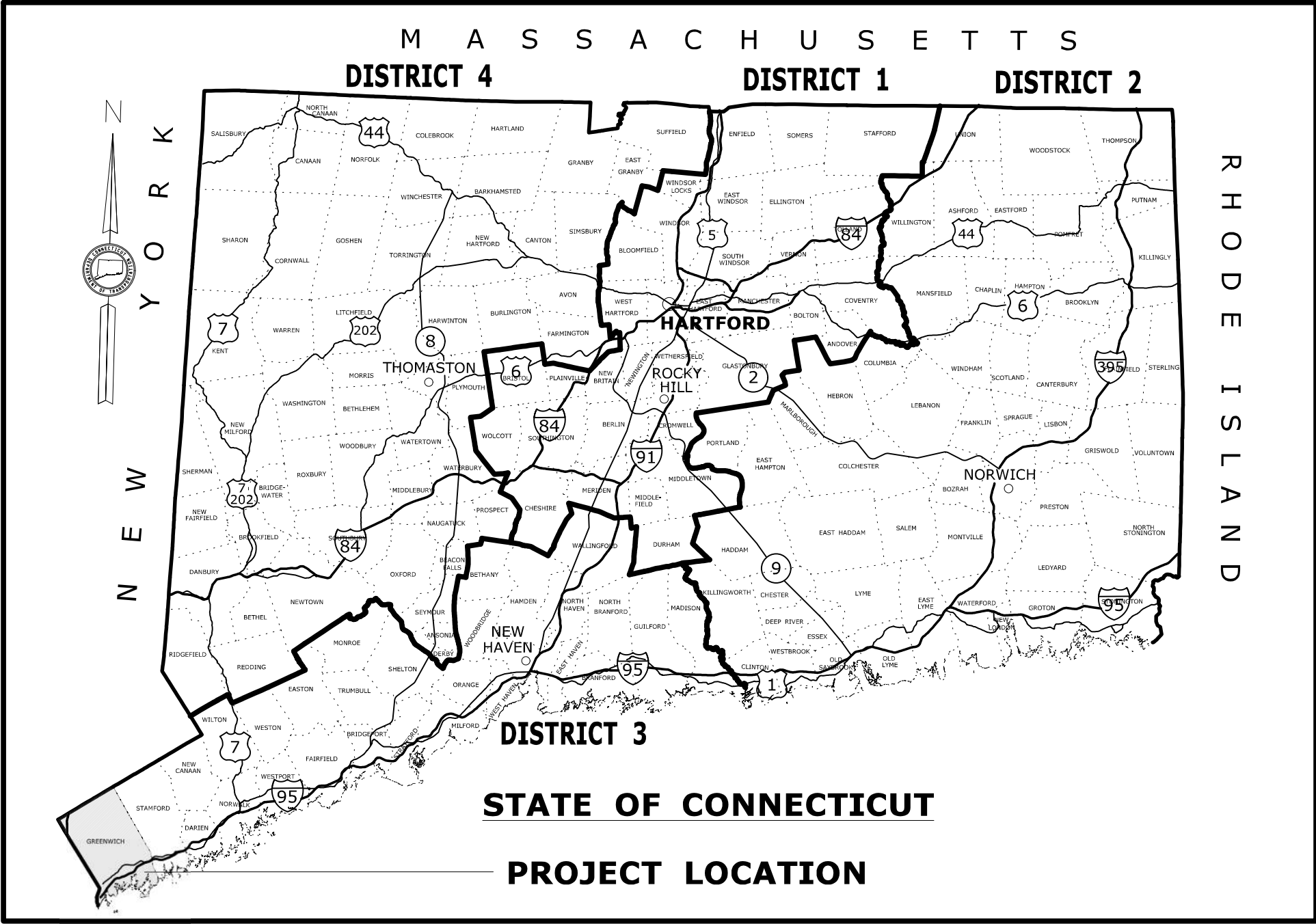
**28. Revocation/Suspension/Modification.** The license may be revoked, suspended, or modified in accordance with applicable law.

**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.





# ENVIRONMENTAL PERMIT PLANS

## STATE PROJECT NO. 056-305

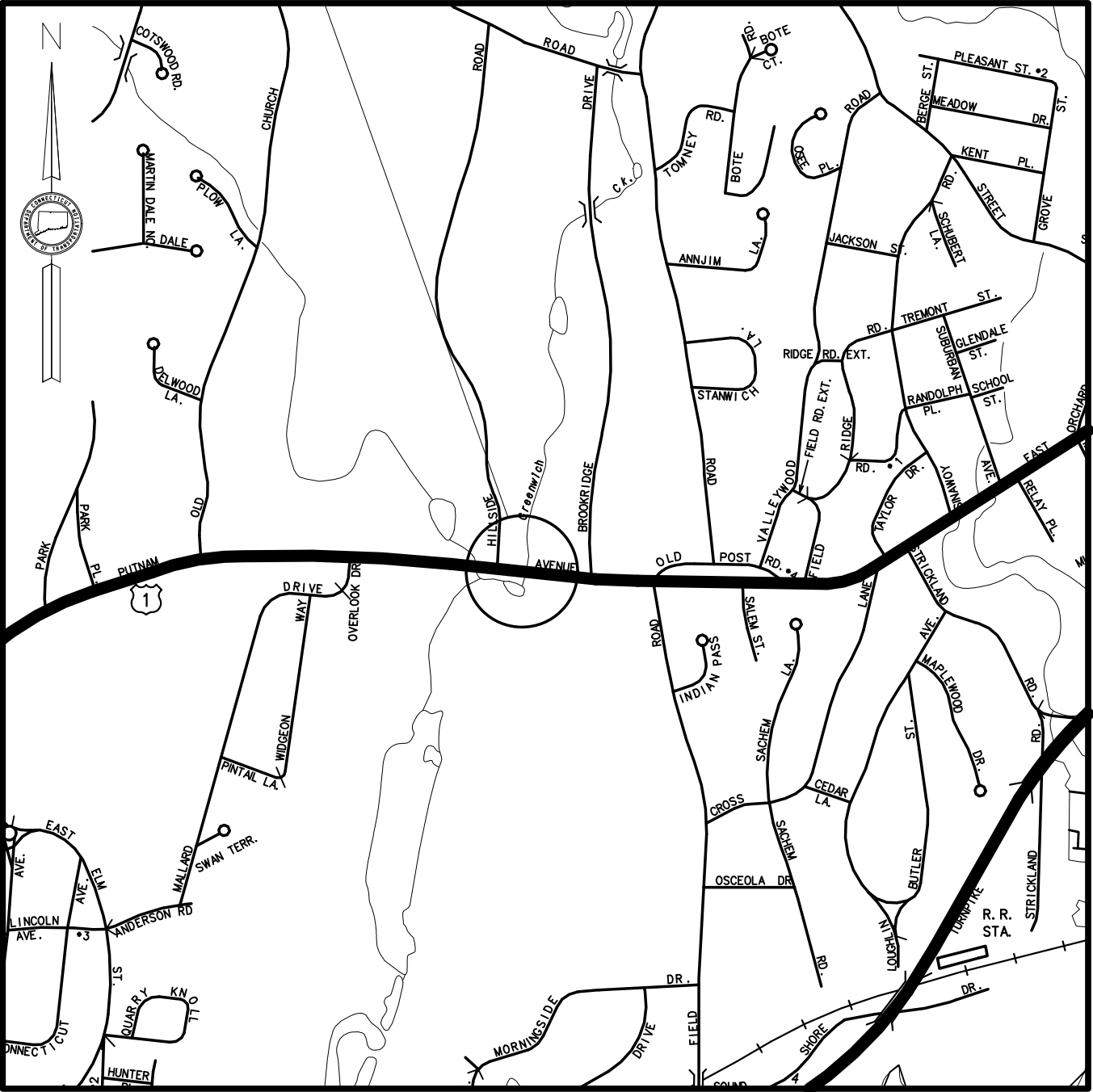
### BRIDGE REPLACEMENT

### BRIDGE NO. 01872, U.S. ROUTE 1

### OVER GREENWICH CREEK

### TOWN OF GREENWICH

PROJECT LOCATION  
BRIDGE NO. 01872

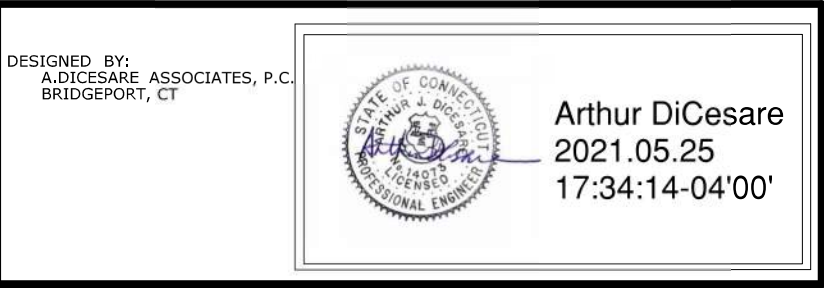


LOCATION PLAN  
SCALE  
1 INCH = 1,000 FEET

GENERAL NOTES:

1. THESE PLANS 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. VERTICAL DATUM BASED ON NGVD 1929.
5. ALL CONSTRUCTION ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 818, DATED 2020; SUPPLEMENTAL SPECIFICATIONS, DATED JULY 2020; SECTION 1.10 AND WILL ALSO FOLLOW REQUIRED BEST MANAGEMENT PRACTICES (BMPs) AND SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH THE 2002 EROSION AND SEDIMENTATION CONTROL GUIDELINES AND THE 2004 STORMWATER QUALITY CONTROL MANUAL.

LIST OF DRAWINGS	
DRAWING NO.	DRAWING TITLE
PMT-01	TITLE SHEET
PMT-02	GENERAL SITE PLAN
PMT-03	WATERCOURSE/WETLAND IMPACT PLAN
PMT-04	100-YEAR FLOOD IMPACT PLAN
PMT-05	BRIDGE SECTION AND ELEVATIONS
PMT-06	STAGE 1A AND 1D BRIDGE CONSTRUCTION
PMT-07	STAGE 1B AND 1C BRIDGE CONSTRUCTION
PMT-08	STAGE 2 BRIDGE CONSTRUCTION
PMT-09	RETAINING WALL CONSTRUCTION
PMT-10	ROCK WEIR DETAILS
PMT-11	TEMPORARY UTILITY BRIDGE
PMT-12	TOE BOULDER AND DIKE REMOVAL DETAILS
PMT-13	PERMIT PLANTING PLAN



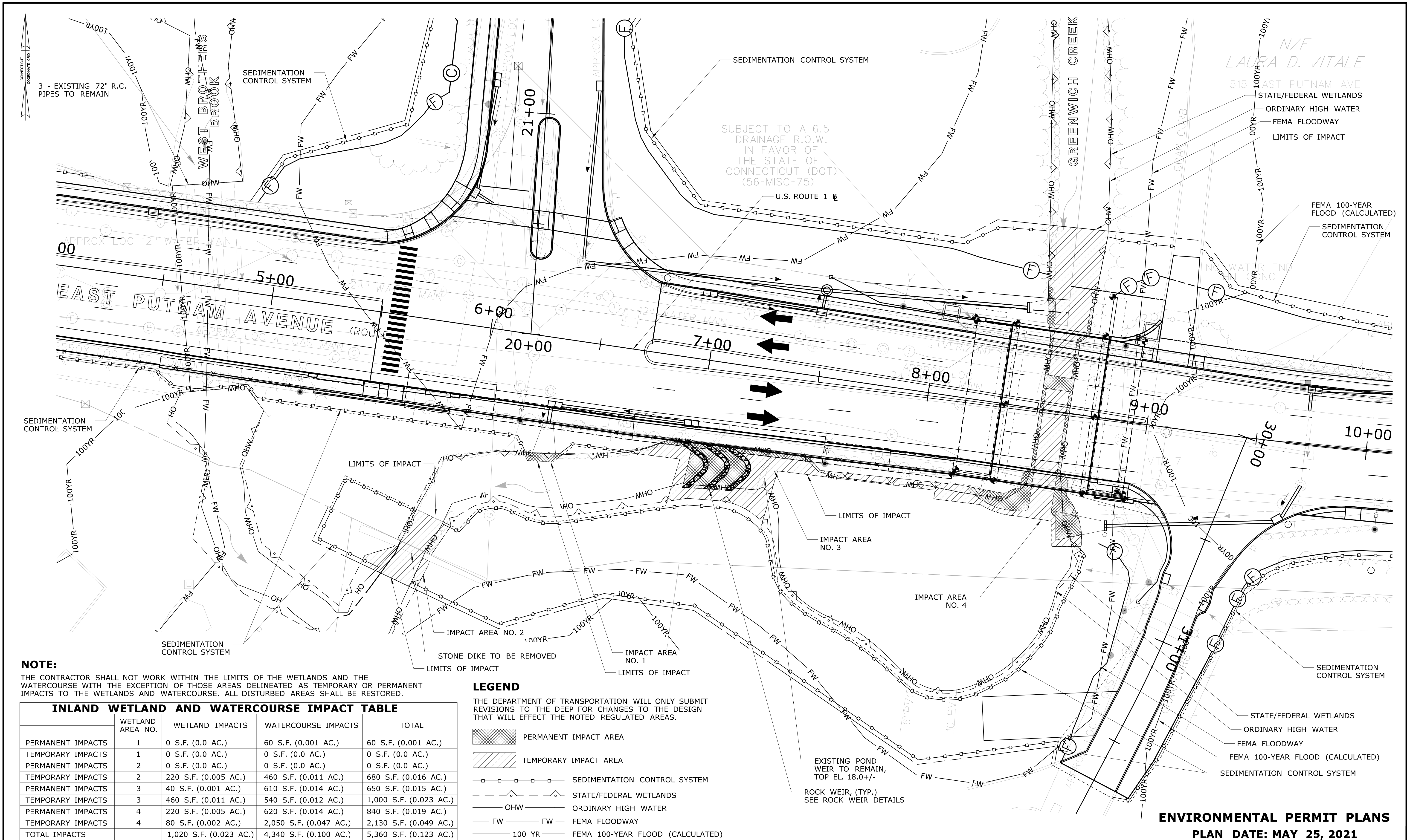
PLAN DATE: MAY 25, 2021

				DESIGNER/DRAFTER: <b>JVS/DSM</b> CHECKED BY: <b>ADC</b> SCALE AS NOTED		STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION Filename: ...\\ENV_MSH_056_305_PMT-01.dgn		SIGNATURE/ BLOCK: <b>ADA</b> A.DiCesare Associates, P.C. 690 Clinton Avenue Bridgeport, CT 06604 203-696-0444 www.adicassociates.com APPROVED BY: DATE: A. DICESARE 11/20/2020		PROJECT TITLE: <b>BRIDGE REPLACEMENT BRIDGE NO. 01872 U.S. ROUTE 1 OVER GREENWICH CREEK</b>		TOWN: <b>GREENWICH</b> DRAWING TITLE: <b>TITLE SHEET</b>		PROJECT NO. <b>056-305</b> DRAWING NO. <b>PMT-01</b> SHEET NO. <b>1</b>	
REV.	DATE	REVISION DESCRIPTION		SHEET NO.		Plotted Date: 5/24/2021									









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

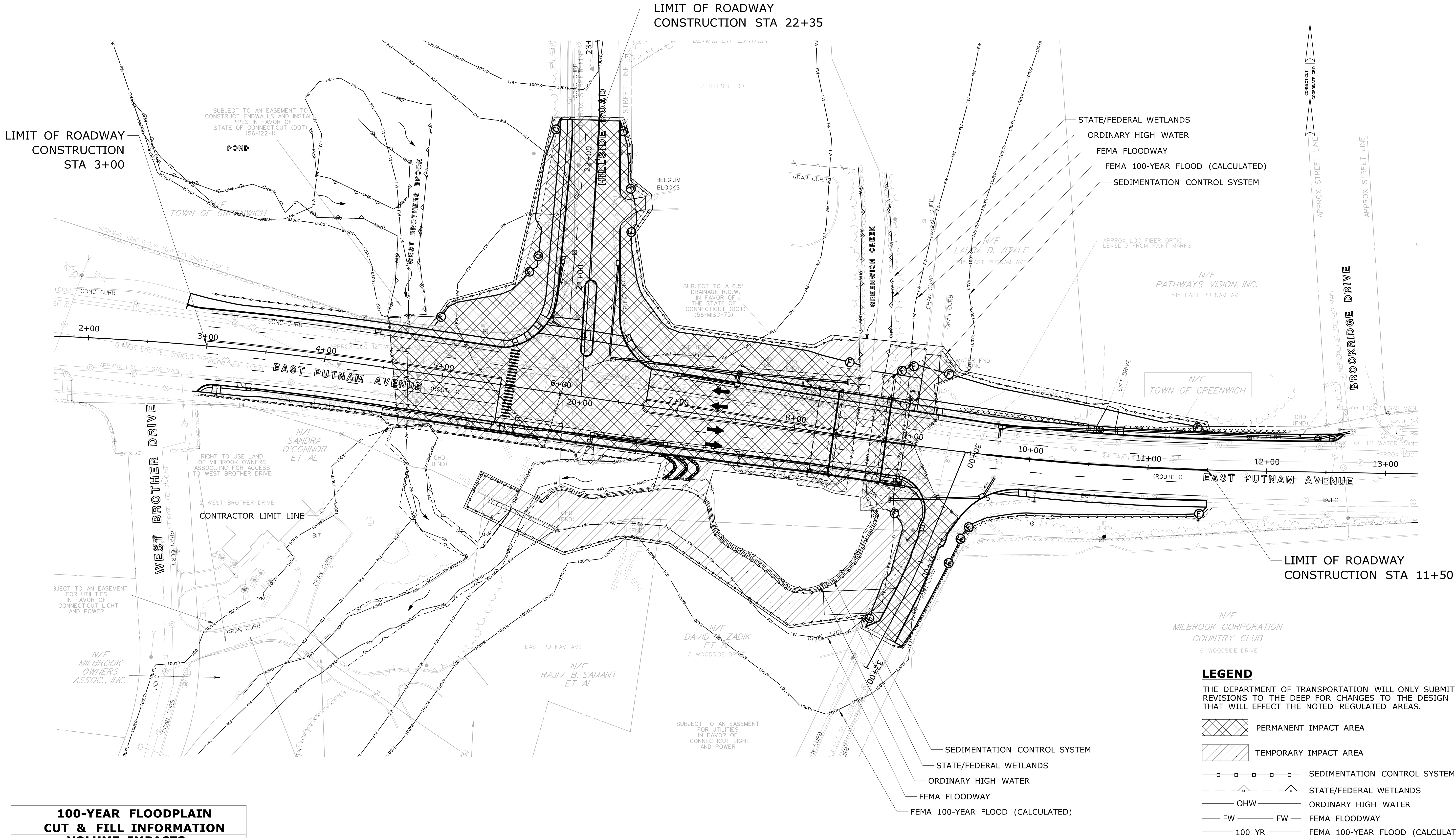
INLAND WETLAND AND WATERCOURSE IMPACT TABLE				
	WETLAND AREA NO.	WETLAND IMPACTS	WATERCOURSE IMPACTS	TOTAL
PERMANENT IMPACTS	1	0 S.F. (0.0 AC.)	60 S.F. (0.001 AC.)	60 S.F. (0.001 AC.)
TEMPORARY IMPACTS	1	0 S.F. (0.0 AC.)	0 S.F. (0.0 AC.)	0 S.F. (0.0 AC.)
PERMANENT IMPACTS	2	0 S.F. (0.0 AC.)	0 S.F. (0.0 AC.)	0 S.F. (0.0 AC.)
TEMPORARY IMPACTS	2	220 S.F. (0.005 AC.)	460 S.F. (0.011 AC.)	680 S.F. (0.016 AC.)
PERMANENT IMPACTS	3	40 S.F. (0.001 AC.)	610 S.F. (0.014 AC.)	650 S.F. (0.015 AC.)
TEMPORARY IMPACTS	3	460 S.F. (0.011 AC.)	540 S.F. (0.012 AC.)	1,000 S.F. (0.023 AC.)
PERMANENT IMPACTS	4	220 S.F. (0.005 AC.)	620 S.F. (0.014 AC.)	840 S.F. (0.019 AC.)
TEMPORARY IMPACTS	4	80 S.F. (0.002 AC.)	2,050 S.F. (0.047 AC.)	2,130 S.F. (0.049 AC.)
TOTAL IMPACTS		1,020 S.F. (0.023 AC.)	4,340 S.F. (0.100 AC.)	5,360 S.F. (0.123 AC.)

- LEGEND**
- THE DEPARTMENT OF TRANSPORTATION WILL ONLY SUBMIT REVISIONS TO THE DEEP FOR CHANGES TO THE DESIGN THAT WILL EFFECT THE NOTED REGULATED AREAS.
- PERMANENT IMPACT AREA
  - TEMPORARY IMPACT AREA
  - SEDIMENTATION CONTROL SYSTEM
  - STATE/FEDERAL WETLANDS
  - OHW
  - ORDINARY HIGH WATER
  - FW
  - FEMA FLOODWAY
  - 100 YR
  - FEMA 100-YEAR FLOOD (CALCULATED)

**ENVIRONMENTAL PERMIT PLANS**  
**PLAN DATE: MAY 25, 2021**

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 5/25/2021	DESIGNER/DRAFTER: <b>JVS/DSM</b> CHECKED BY: <b>ADC</b> SCALE IN FEET 0 20 40 SCALE 1"=20'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION Filename: ...\\ENV_MSH_056_305_PMT-03.dgn	SIGNATURE/ BLOCK: <b>ADA</b> A.Diccare Associates, P.C. 690 Clinton Avenue Bridgeport, CT 06604 203-696-0444 www.adiccare.com APPROVED BY: A. DICARE DATE: 11/20/2020	PROJECT TITLE: <b>BRIDGE REPLACEMENT BRIDGE NO. 01872 U.S. ROUTE 1 OVER GREENWICH CREEK</b>	TOWN: <b>GREENWICH</b>	DRAWING TITLE: <b>WATERCOURSE/WETLAND IMPACT PLAN</b>	PROJECT NO. <b>056-305</b> DRAWING NO. <b>PMT-03</b> SHEET NO. <b>3</b>
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100-YEAR FLOODPLAIN CUT & FILL INFORMATION VOLUME IMPACTS	
EXCAVATION IN FEMA FLOODPLAIN	FILL IN FEMA FLOODPLAIN
370 C.Y.	3,190 C.Y.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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.

Plotted Date: 5/25/2021

DESIGNER/DRAFTER:  
**JVS/DSM**

CHECKED BY:  
**ADC**

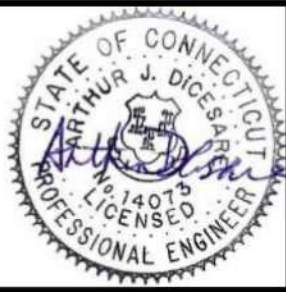
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0 40 80  
SCALE 1"=40'

**STATE OF CONNECTICUT**  
**DEPARTMENT OF TRANSPORTATION**

File name: ...\\ENV\_MSH\_056\_305\_PMT-04.dgn

SIGNATURE/BLOCK:  
**ADA**

APPROVED BY: DATE:  
A. DICESARE 11/20/2020



PROJECT TITLE:  
**BRIDGE REPLACEMENT  
BRIDGE NO. 01872 U.S. ROUTE 1  
OVER GREENWICH CREEK**

TOWN:  
**GREENWICH**

DRAWING TITLE:  
**100-YEAR FLOOD  
IMPACT PLAN**

PROJECT NO.  
**056-305**

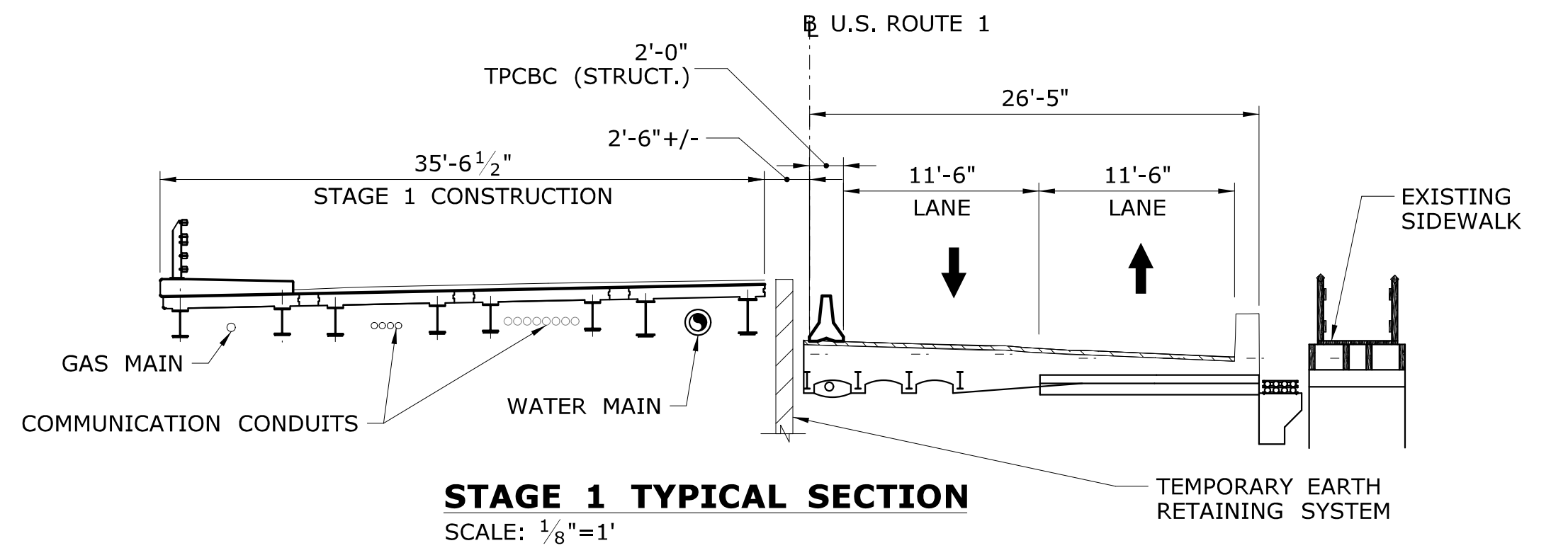
DRAWING NO.  
**PMT-04**

SHEET NO.  
**4**









STAGE 1A CONSTRUCTION

1. INSTALL TEMPORARY UTILITY BRIDGE NORTH OF EXISTING BRIDGE
2. RELOCATE EXISTING WATER MAINS AND GAS MAIN ONTO TEMPORARY UTILITY BRIDGE.
3. INSTALL DEBRIS SHIELD (BOTTOM EL. 25.0, MIN.). REMOVE EXISTING SUPERSTRUCTURE AT NORTH SIDE OF BRIDGE AND LEAVE ABUTMENT STEMS IN PLACE.
4. CONSTRUCT TEMPORARY UTILITY SUPPORT ACROSS WATERWAY AND SUPPORT EXISTING COMMUNICATION LINES (CENTURY LINK AND VERIZON) IN PLACE.
5. INSTALL TEMPORARY EARTH RETAINING SYSTEM AT STAGE CONSTRUCTION LINE.
6. INSTALL COFFERDAM WITHIN CHANNEL AND AROUND PROPOSED PRECAST SUBSTRUCTURE ELEMENTS WITHIN STAGE 1 CONSTRUCTION LIMITS AS SHOWN.
7. REMOVE AND STOCKPILE NATURAL STREAM BED MATERIAL.
8. DEWATER WORK AREA AND REMOVE EXISTING ABUTMENTS WITHIN COFFERDAM TO EL. 17.50.

STAGE 1D

1. EXCAVATE WITHIN COFFERDAM AND INSTALL PILES.
2. INSTALL PRECAST CONCRETE ABUTMENTS, BRIDGE SEATS AND WINGWALLS.
3. BACKFILL ABUTMENTS AND WINGWALLS.
4. REGRADE AROUND ABUTMENTS, WINGWALLS AND PLACE CHANNEL TOE BOULDERS, RIPRAP AND NATURAL STREAM BED MATERIAL. THE INSTALLATION OF TOE BOULDERS SHALL BE DIRECTED IN THE FIELD BY CT DEEP FISHERIES OR DOT OEP STAFF.
5. REMOVE COFFERDAM.
6. INSTALL PREFABRICATED BRIDGE UNITS.
7. INSTALL WATER MAIN, GAS MAIN AND COMMUNICATION LINES WITHIN BRIDGE AND AT APPROACHES AND REMOVE TEMPORARY UTILITY BRIDGE.
8. COMPLETE ROADWAY CONSTRUCTION.

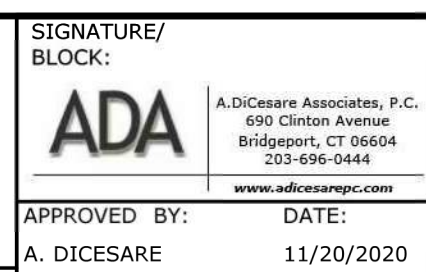
1. THE CONTRACTOR SHALL MAINTAIN WATER THROUGH THE TEMPORARY WATER HANDLING SYSTEM AS REQUIRED DURING CONSTRUCTION OF THE NEW STRUCTURE.
2. EQUIPMENT SHALL NOT BE PERMITTED IN THE STREAM WHEN TEMPORARY WATER HANDLING SYSTEM IS NOT IN PLACE WITHOUT APPROVAL FROM THE ENGINEER.
3. A DEWATERING BASIN SHALL BE ESTABLISHED OUTSIDE OF THE WETLAND LIMITS.
4. TEMPORARY WATER-HANDLING COFFERDAM SHALL CONSIST OF AN APPROVED SYSTEM THAT THE CONTRACTOR ELECTS TO USE WHICH WILL SAFELY CONVEY WATER FLOWS AROUND THE CONSTRUCTION AREA, SHALL BE ABLE TO SUPPORT CONSTRUCTION ACTIVITIES AND SHALL CONFORM TO PERMITS.

5. WATER HANDLING MEASURES SHALL NOT EXCEED IMPACT AREAS SHOWN ON THE WETLAND AND FLOODPLAIN IMPACT SHEETS OF THE PERMIT PLANS.
6. ANY STORM DRAINAGE DISCHARGING INTO A CONFINED WORK AREA FROM EXISTING OR PROPOSED STORM DRAINAGE PIPES SHALL BE DIVERTED OR PUMPED OUTSIDE OF THE CONFINED AREAS. PUMPS/PIPES SHALL BE SIZED BY THE CONTRACTOR TO HANDLE THE EXPECTED FLOWS AND BE DISCHARGED TO A STABLE LOCATION. THE CONTRACTOR SHALL SUBMIT THE MEANS AND METHODS OF HANDLING STORM DRAINAGE TO ENGINEER FOR APPROVAL AND IS INCLUDED AS PART OF WATER HANDLING.
7. IF A SHORT DURATION PUMP SYSTEM IS PROPOSED DURING LOW FLOW CONDITIONS, THE PUMP SYSTEM SHALL BE DESIGNED BY THE CONTRACTOR AND HAVE A MINIMUM CAPACITY AS SHOWN IN THE TEMPORARY HYDRAULIC TABLE. PUMP SYSTEM PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

ANY "UNCONFINED" INSTREAM WORK WITHIN THE WATERCOURSE SHALL BE RESTRICTED TO THE PERIOD FROM JUNE 1 TO SEPTEMBER 30, INCLUSIVE.

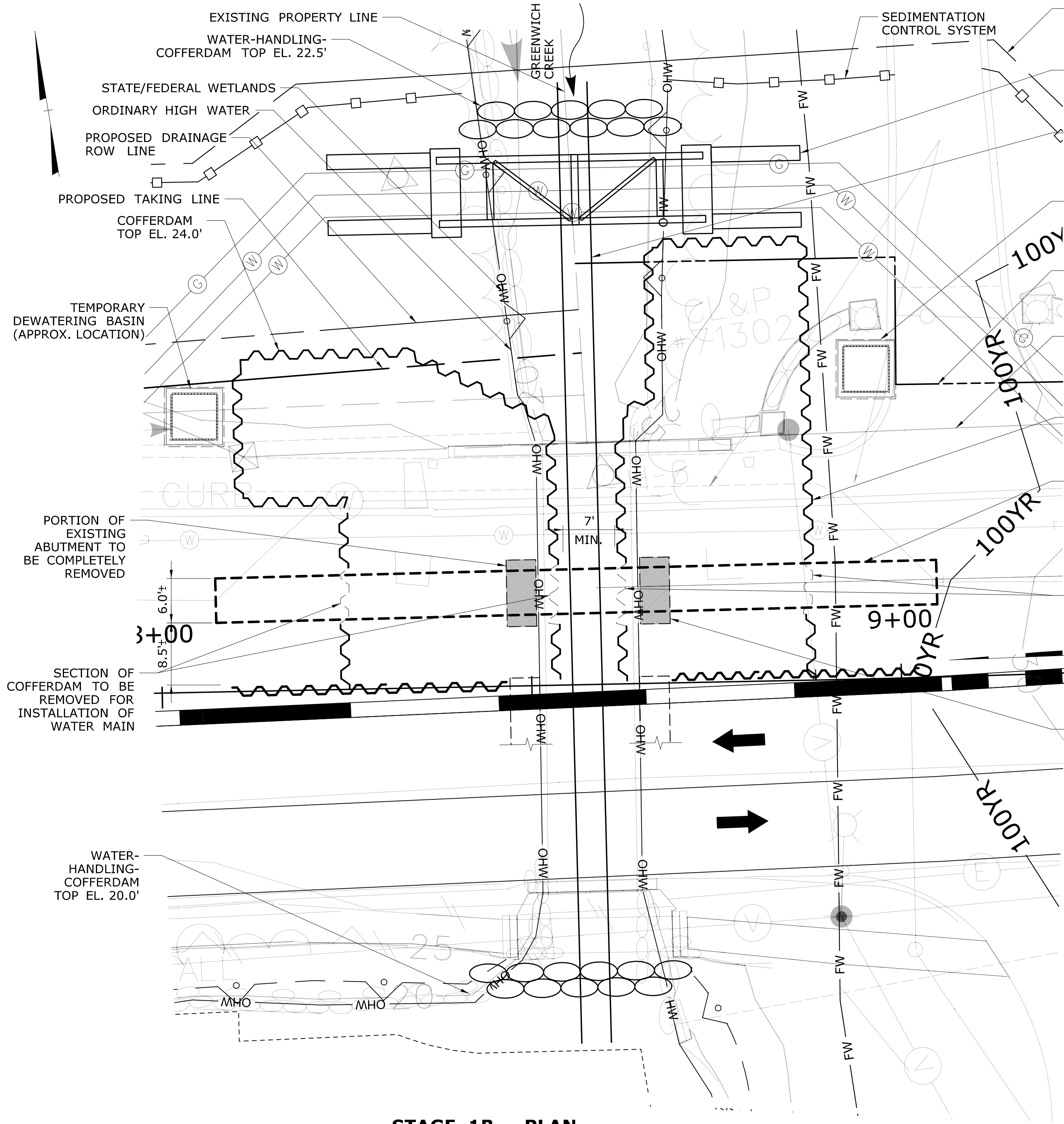
PROJECT NO.	056-305
DRAWING NO.	PMT-06
SHEET NO.	6

DESIGNER/DRAFTER:	<b>JVS/DSM</b>
CHECKED BY:	<b>ADC</b>
SCALE AS NOTED	



TOWN:	<b>GREENWICH</b>	PROJECT NO.:	<b>0</b>
DRAWING TITLE:	<b>STAGE 1A AND 1D BRIDGE CONSTRUCTION</b>	DRAWN BY:	
		SHOWN BY:	





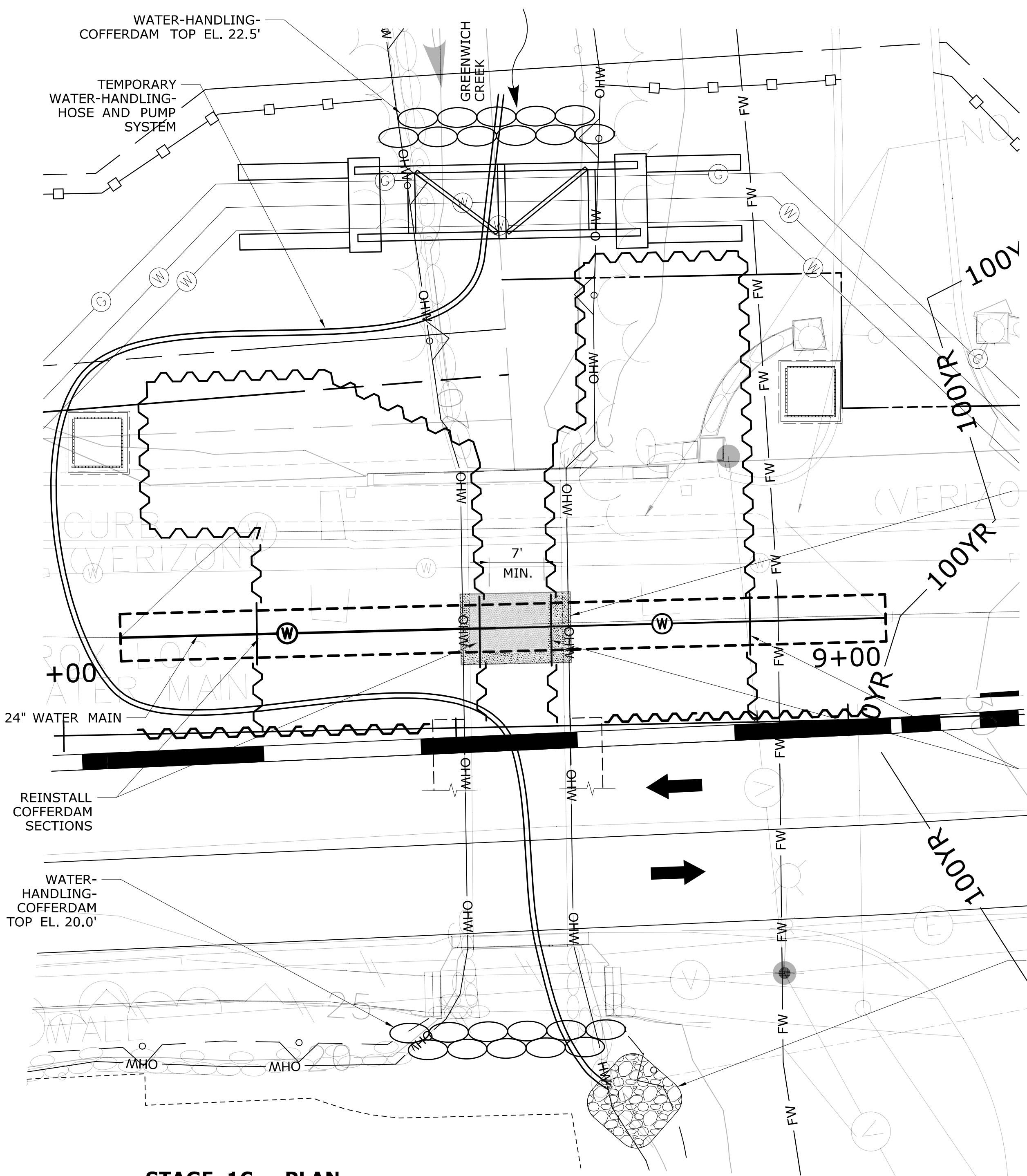
**STAGE 1B - PLAN**  
SCALE: 1"=10'

**STAGE 1B - WATERMAIN INSTALLATION  
SUGGESTED CONSTRUCTION SEQUENCE**

- STAGE 1B CONSTRUCTION
1. INSTALL 4' DIAMETER TEMPORARY WATER-HANDLING-PIPE AND WATER-HANDLING-COFFERDAM UPSTREAM AND DOWNSTREAM OF BRIDGE AND DIVERT STREAM THROUGH PIPE.
  2. REMOVE COFFERDAM SECTIONS TO ALLOW FOR WATER MAIN TRENCH EXCAVATION.
  3. REMOVE PORTION OF EXISTING ABUTMENT AND EXCAVATE TRENCH TO REQUIRED EXTENTS AND DEPTH. WATER MAIN EXTENTS SHALL BE BEYOND EXTENTS OF APPROACH SLAB. SHIFT 4' PIPE AS REQUIRED TO COMPLETE TRENCH EXCAVATION.

**LEGEND:**

➔ DIRECTION OF TRAFFIC






**STAGE 1C - PLAN**  
SCALE: 1"=10'

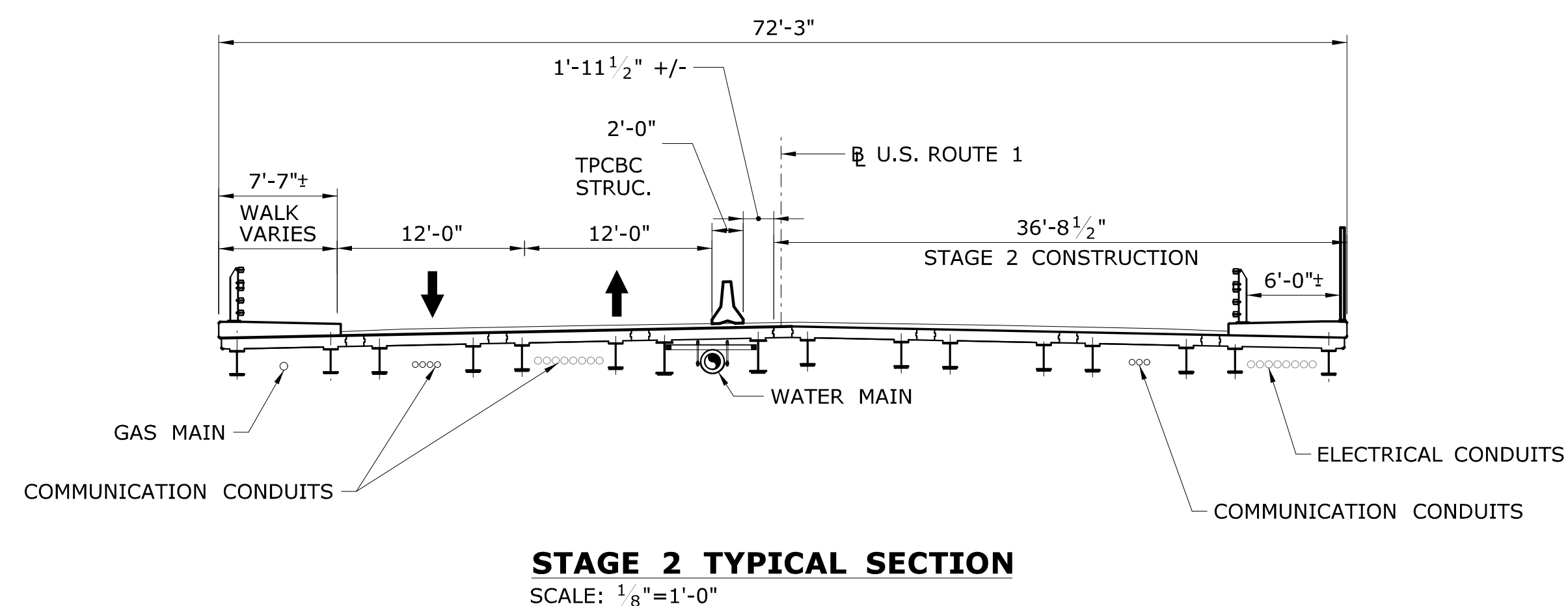
**STAGE 1C - WATERMAIN INSTALLATION  
SUGGESTED CONSTRUCTION SEQUENCE**

- STAGE 1C CONSTRUCTION
1. INSTALL AND IMPLEMENT TEMPORARY WATER-HANDLING-HOSE AND PUMP SYSTEM.
  2. REMOVE 4' DIAMETER TEMPORARY WATER-HANDLING-PIPE.
  3. INSTALL 24" WATER MAIN BELOW MUDLINE. REFER TO WATER MAIN RELOCATION PLANS FOR WATERMAIN INSTALLATION DETAILS.
  4. BACKFILL WATERMAIN TRENCH TO UNDERSIDE OF FOUNDATION SUBGRADE ELEVATION. WITHIN CHANNEL BACKFILL TRENCH WITH NATURAL STREAMBED MATERIAL.
  5. REINSTALL COFFERDAM SECTIONS. MAINTAIN A MINIMUM 7' CLEAR CHANNEL BETWEEN COFFERDAMS.
  6. REMOVE TEMPORARY WATER-HANDLING-HOSE AND PUMP SYSTEM, REMOVE WATER-HANDLING-COFFERDAM UPSTREAM AND DOWN STREAM OF BRIDGE AND DIVERT WATER THROUGH COFFERDAM CHANNEL.
  7. REFER TO DRAWING NO. PMT-06 FOR STAGE 1D CONSTRUCTION.

**ENVIRONMENTAL PERMIT PLANS  
PLAN DATE: MAY 25, 2021**

						DESIGNER/DRAFTER: <b>JVS/DSM</b>		 <b>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</b>		 <b>ADA</b> A.D. Cesare Associates, P.C. 490 Clinton Avenue Bridgeport, CT 06604 203-696-0444 www.adacesare.com		 APPROVED BY: DATE: A. DICESARE 11/20/2020		PROJECT TITLE: <b>BRIDGE REPLACEMENT BRIDGE NO. 01872 U.S. ROUTE 1 OVER GREENWICH CREEK</b>		TOWN: <b>GREENWICH</b>		PROJECT NO. <b>056-305</b>		
						CHECKED BY: <b>ADC</b>												DRAWING NO. <b>PMT-07</b>		
						SCALE AS NOTED												SHEET NO. <b>7</b>		
						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: 5/24/2021		Filename: ...\\ENV_MSH_056_305_PMT-07.dgn													





## STAGE 2 CONSTRUCTION

1. IMPLEMENT MAINTENANCE AND TRAFFIC CONTROL MEASURES AND SINGLE LANE SHIFTING PATTERNS.
2. DIVERT TRAFFIC TO NORTHERN SIDE OF ROADWAY.
3. INSTALL DEBRIS SHIELD (BOTTOM EL. 25.0, MIN.). REMOVE EXISTING SUPERSTRUCTURE AT SOUTH SIDE OF BRIDGE AND LEAVE ABUTMENT STEMS IN PLACE.
4. INSTALL COFFERDAM WITHIN CHANNEL AND AROUND PROPOSED PRECAST SUBSTRUCTURE ELEMENTS WITHIN STAGE 2 CONSTRUCTION LIMITS AS SHOWN.
5. REMOVE AND STOCKPILE NATURAL STREAMBED MATERIAL.
6. DEWATER WORK AREA AND REMOVE EXISTING ABUTMENTS DOWN TO EL. 17.50.
7. EXCAVATE WITHIN COFFERDAM AND INSTALL PILES.
8. REMOVE PORTION OF TEMPORARY EARTH RETAINING SYSTEM TO ALLOW FOR INSTALLATION OF PRECAST CONCRETE ABUTMENTS.
9. INSTALL PRECAST CONCRETE ABUTMENTS, BRIDGE SEATS AND WINGWALLS.
10. BACKFILL ABUTMENTS AND WINGWALLS.
11. REGRADE AROUND WALLS AND PLACE CHANNEL BOULDERS, RIPRAP AND NATURAL STREAMBED MATERIAL. THE INSTALLATION OF BOULDERS SHALL BE DIRECTED IN THE FIELD BY CT DEEP FISHERIES OR DOT OEP STAFF.
12. REMOVE COFFERDAM AND TEMPORARY EARTH RETAINING SYSTEM WITHIN CHANNEL.
13. CUT TEMPORARY EARTH RETAINING SYSTEM LOCATED WITHIN EXTENTS OF APPROACH SLAB, 1' BELOW BOTTOM OF APPROACH SLAB.
14. CONSTRUCT RETAINING WALL ALONG SOUTH SIDE OF ROUTE 1, INSTALL ROCK WEIR AND REMOVE STONE DIKE.
15. COMPLETE ROADWAY CONSTRUCTION
16. PERFORM FINAL SITE GRADING AND INSTALLATION OF PLANTINGS.
17. REMOVE ALL EROSION AND SEDIMENTATION CONTROL SYSTEMS UPON FINAL STABILIZATION OF SITE GROUNDS.




TEMPORARY HYDRAULIC DATA - STAGE 2	
AVERAGE DAILY FLOW (CFS)	10.6-CFS
AVERAGE SPRING FLOW (CFS)	20.7-CFS
2-YR FREQUENCY DISCHARGE (CFS)	200-CFS
TEMPORARY DESIGN DISCHARGE (CFS)	124-CFS
SHORT-TERM, LOW FLOW PUMPING TEMPORARY DESIGN DISCHARGE = 2 X ADF	21-CFS
TEMPORARY DESIGN FREQUENCY	6 x ASF
TEMPORARY WATER SURFACE EL. UPSTREAM (FT)	22.5-FT
TEMPORARY WATER SURFACE EL. DOWNSTREAM (FT)	22.5-FT

**LEGEND:**

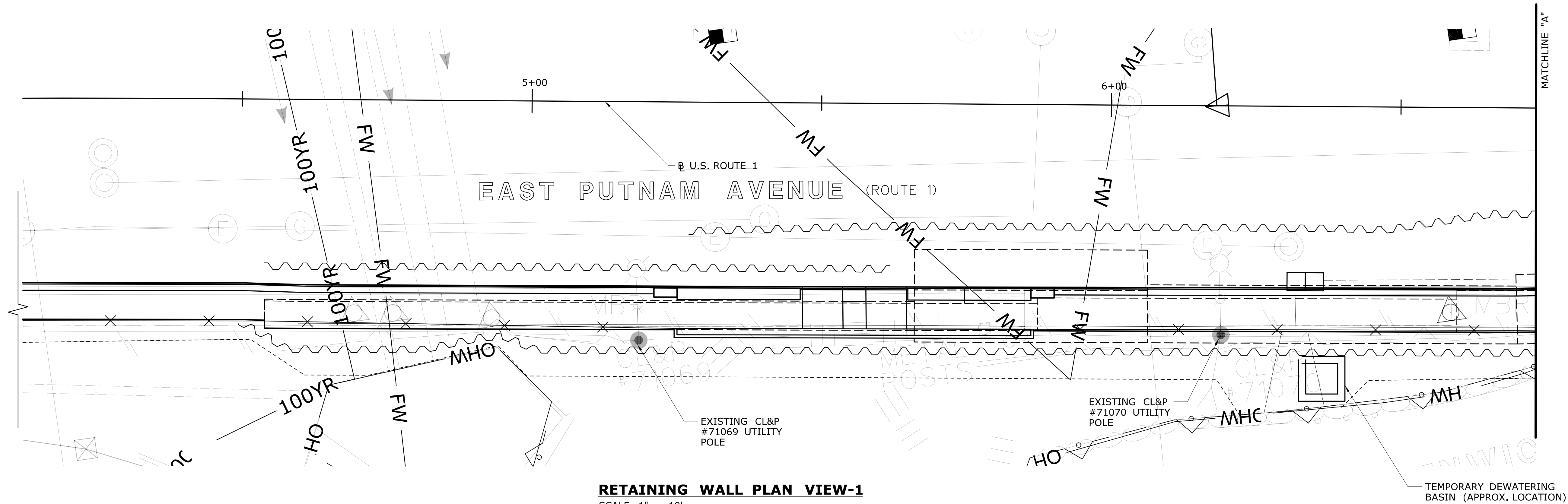


DIRECTION OF TRAFFIC

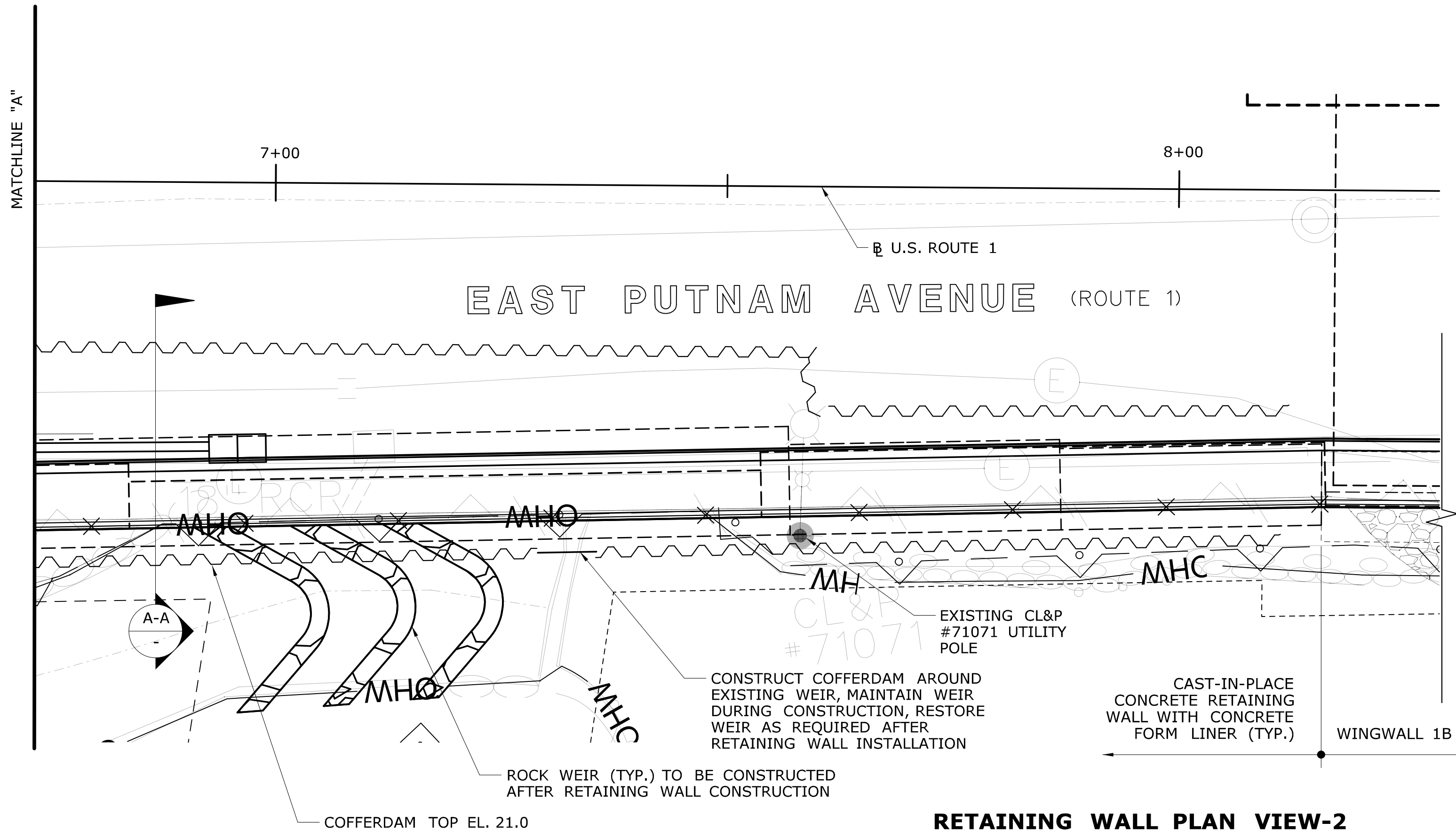
**ENVIRONMENTAL PERMIT PLANS**  
**PLAN DATE: MAY 25, 2021**

					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>JVS/DSM</b>		SIGNATURE/ BLOCK:  A.DiCesare Associates, P.C. 690 Clinton Avenue Bridgeport, CT 06604 203-696-0444 www.adicassocpc.com		PROJECT TITLE:	TOWN:	PROJECT NO.		
						CHECKED BY: <b>ADC</b>		STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION		APPROVED BY: A. DICESARE	DATE: 11/20/2020	<b>BRIDGE REPLACEMENT BRIDGE NO. 01872 U.S. ROUTE 1 OVER GREENWICH CREEK</b>	<b>GREENWICH</b>	<b>056-305</b>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 5/24/2021		SCALE AS NOTED						DRAWING TITLE:	<b>STAGE 2 BRIDGE CONSTRUCTION</b>	DRAWING NO. <b>PMT-08</b>
													SHEET NO. <b>8</b>	

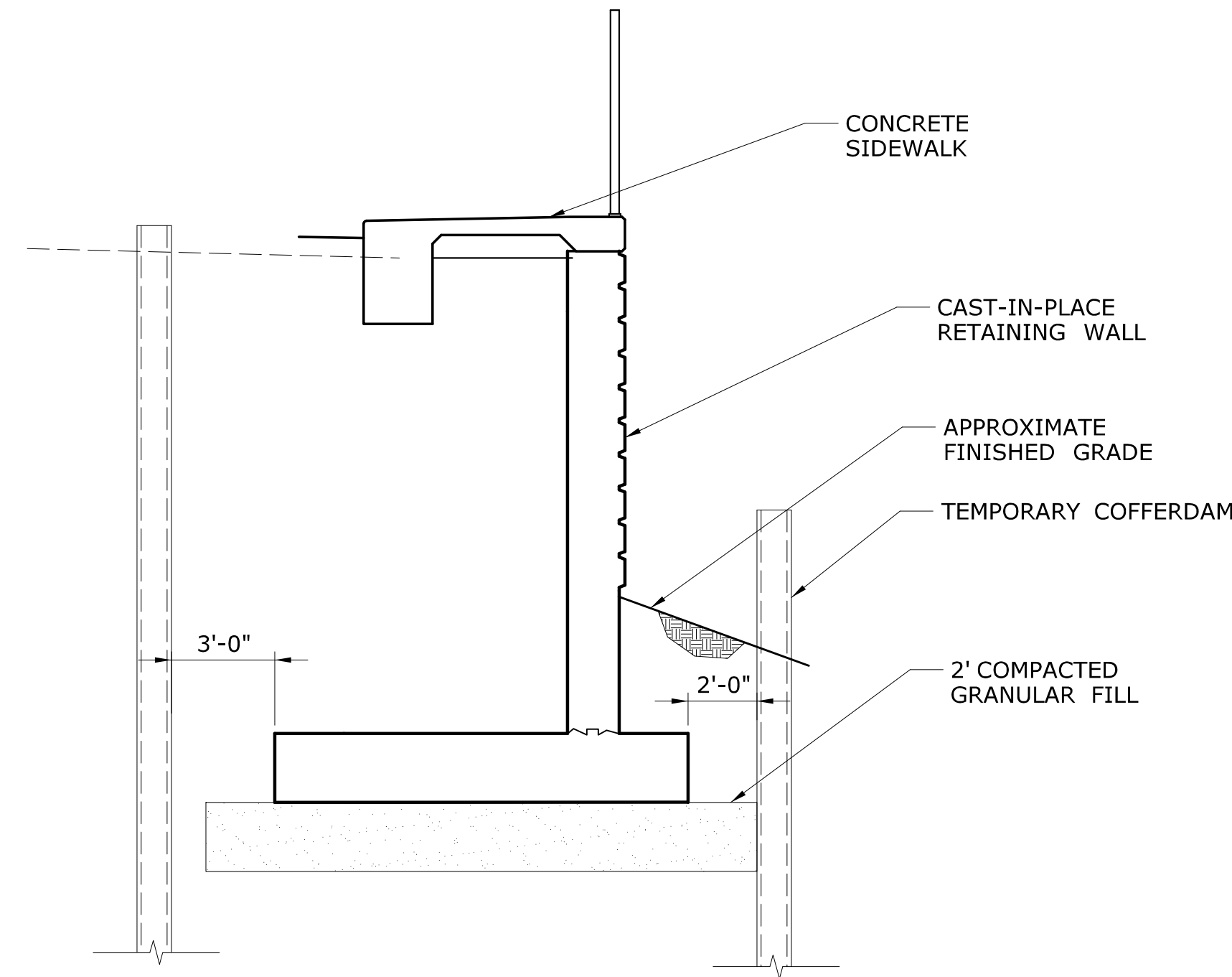




**RETAINING WALL PLAN VIEW-1**  
SCALE: 1" = 10'






**RETAINING WALL PLAN VIEW-2**  
SCALE: 1" = 10'

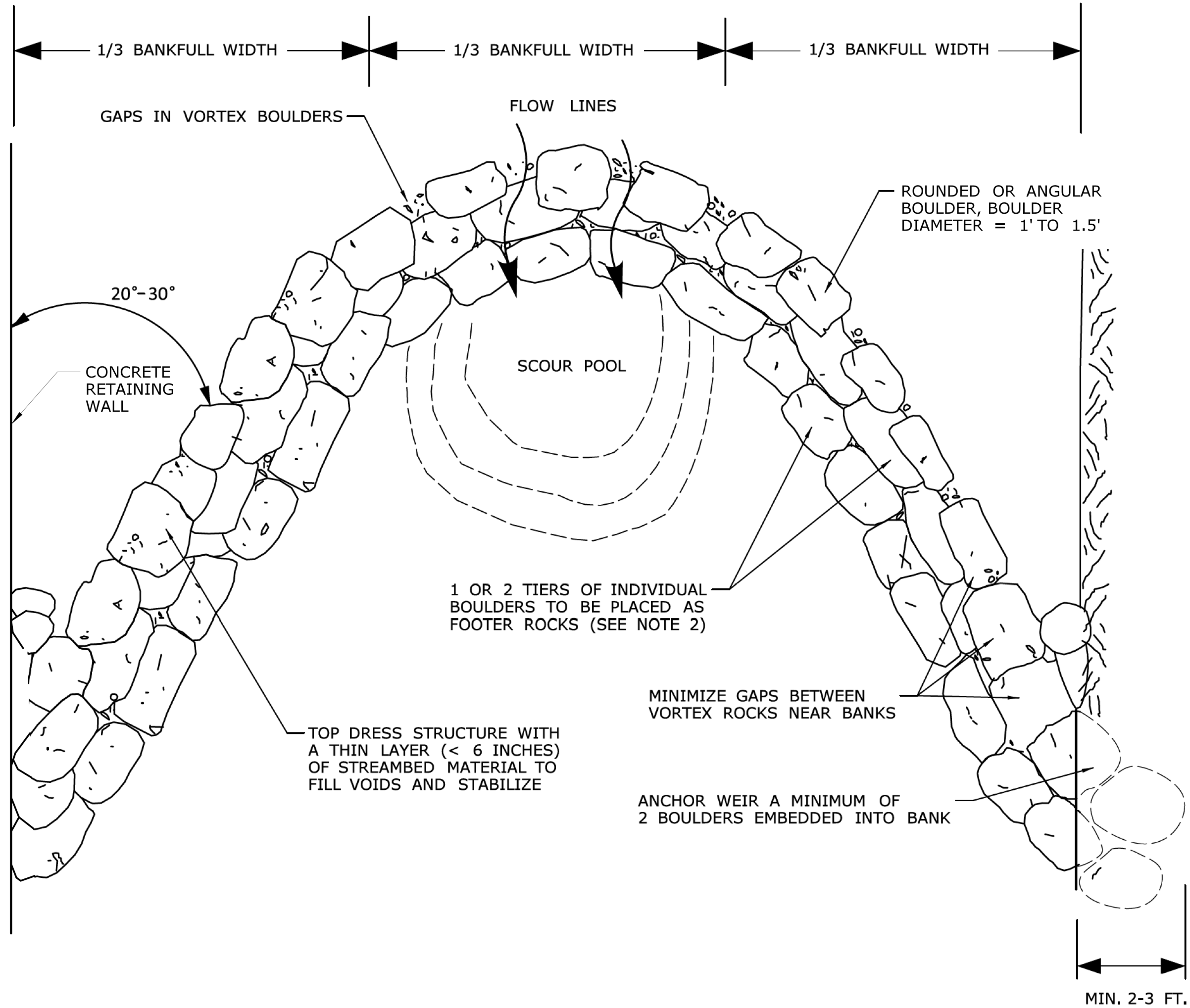


**SECTION A-A**  
N.T.S.

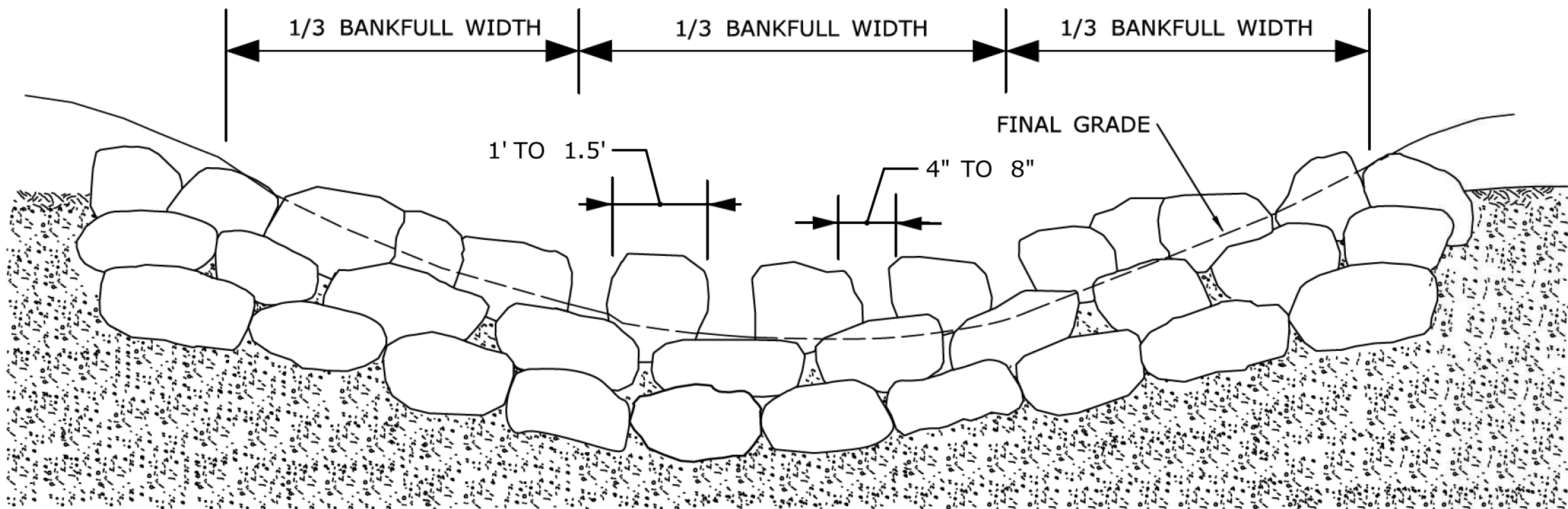
**ENVIRONMENTAL PERMIT PLANS**  
**PLAN DATE: MAY 25, 2021**

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						SCALE AS NOTED												SHEET NO. <b>9</b>			
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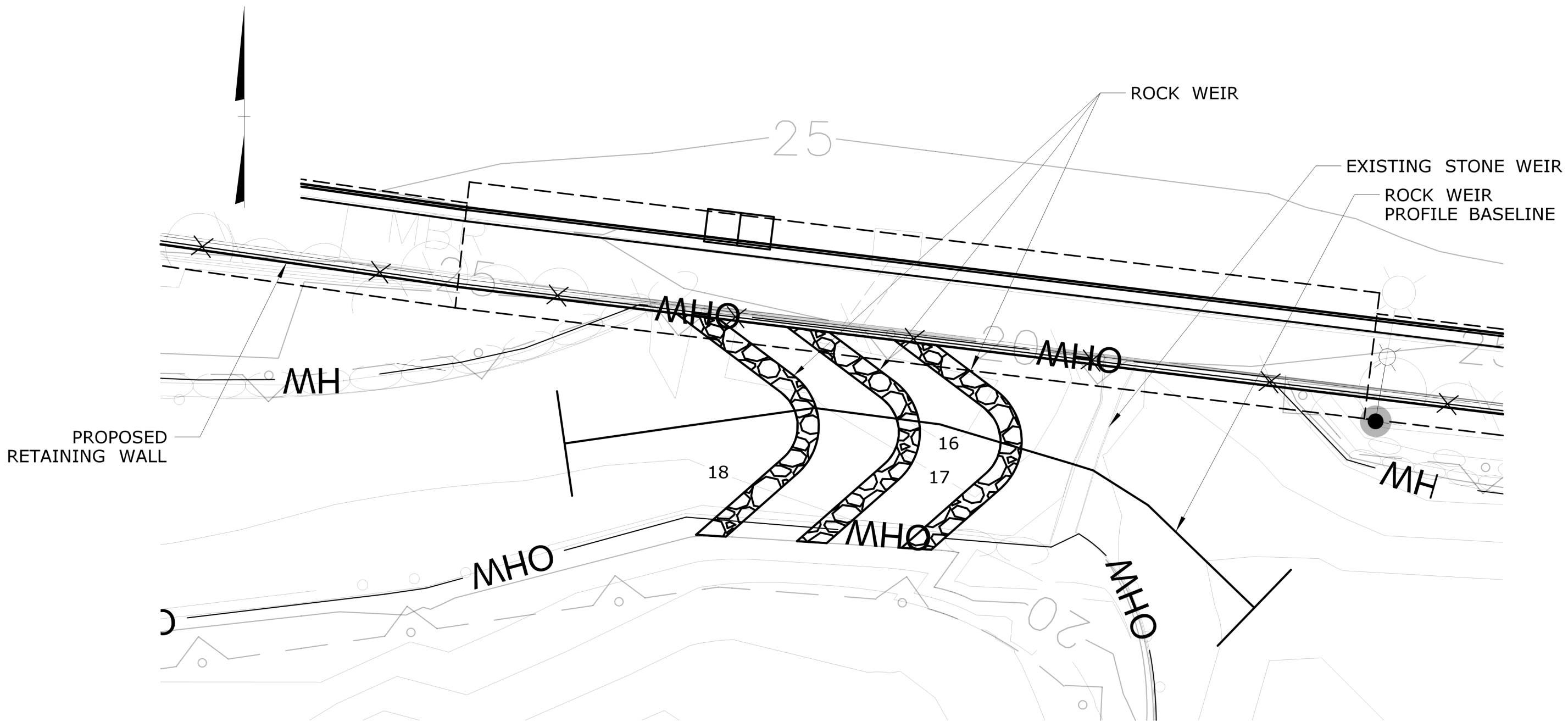




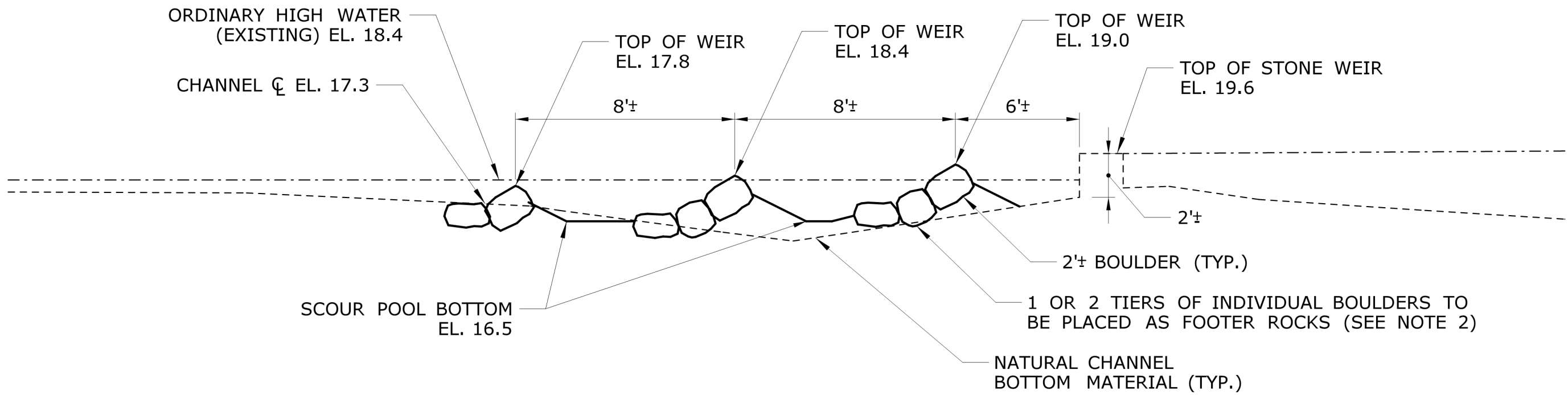
**ROCK WEIR - PLAN VIEW**  
N.T.S.



**ROCK WEIR - SECTION VIEW (UPSTREAM)**  
N.T.S.



**ROCK WEIR PLAN**  
N.T.S.





**ROCK WEIR PROFILE**  
N.T.S.

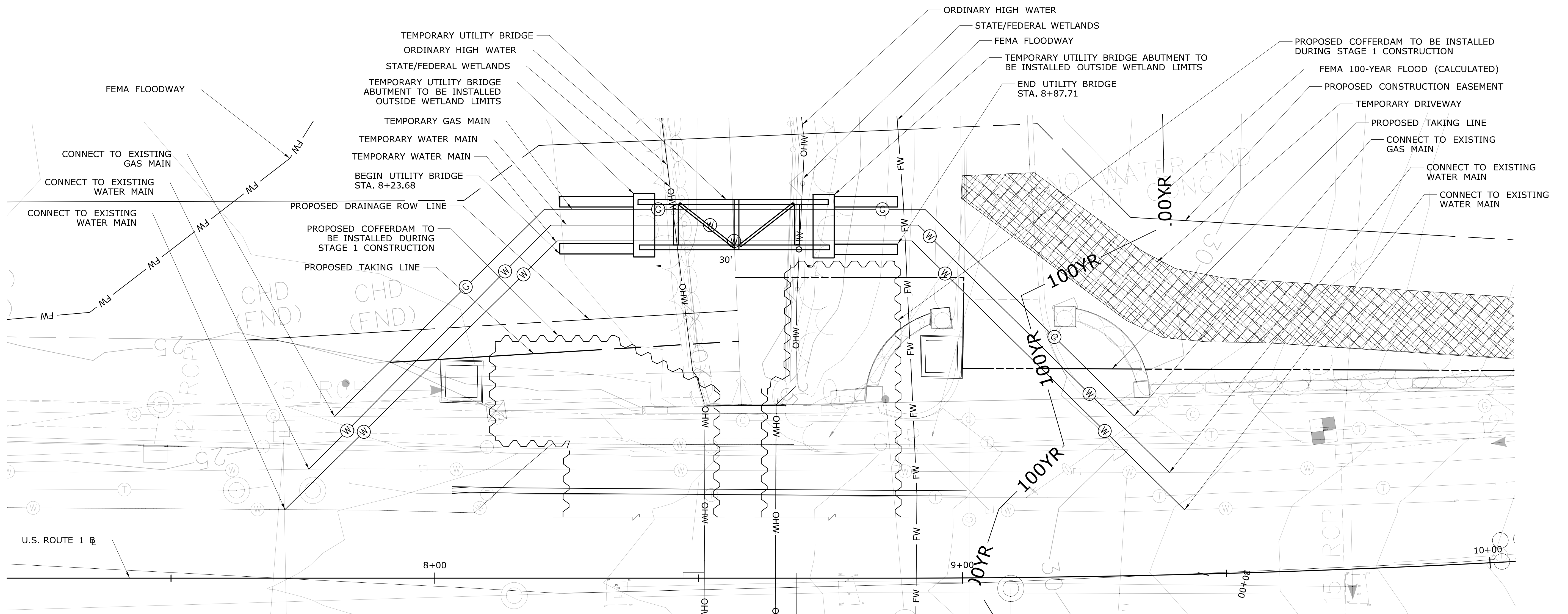
**ROCK WEIR NOTES:**

1. PLACEMENT OF THE ROCK WEIR SHALL BE UNDER THE SUPERVISION OF CTDEEP FISHERIES DIVISION STAFF (OR THEIR AUTHORIZED DELEGATE). THE CONTRACTOR SHALL COORDINATE THROUGH THE ENGINEER A MINIMUM OF 10-DAYS IN ADVANCE OF THE WEIR INSTALLATION TO ALLOW FOR CTDEEP FISHERIES DIVISION TO BE PRESENT ON SITE.
2. FOOTER ROCKS SHALL SERVE AS THE FOUNDATION FOR THE TOP LAYER OF THE WEIR. FOOTER ROCKS SHALL HAVE REASONABLE FLAT TOPS AND BOTTOMS TO ENABLE BETTER PLACEMENT OF THE TOP LAYER OF THE WEIR.
3. BOULDER TYPE (ROUNDED OR ANGULAR) AND SIZE (MINIMUM DIAMETER OR RANGE) SHALL BE AS SPECIFIED BY DEEP FISHERIES OR AS RECOMMENDED BY THE OFFICE OF ENVIRONMENTAL PLANNING (OEP). CONTRACTOR SHALL COORDINATE TYPE AND SIZE WITH DEEP FISHERIES OR OEP.
4. ALL WORK ASSOCIATED WITH THE INSTALLATION OF THE ROCK WEIR SHALL BE PAID FOR UNDER THE ITEM FOR "ROCK WEIR". EXISTING OR NATURAL STREAMBED MATERIAL SHALL BE PAID FOR UNDER THE ITEM FOR "EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL" AND "SUPPLEMENTAL STREAMBED CHANNEL MATERIAL."
5. BOULDERS SHALL BE PLACED WITHIN THE DEPARTMENT'S RIGHT-OF-WAY OR EASEMENT.

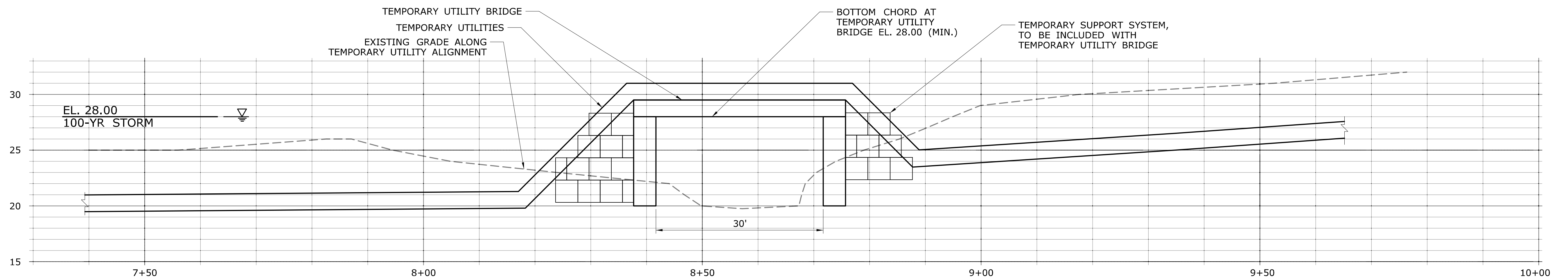
**ENVIRONMENTAL PERMIT PLANS**  
**PLAN DATE: MAY 25, 2021**

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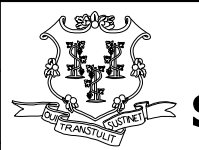


**PLAN**  
SCALE: 1"=10'



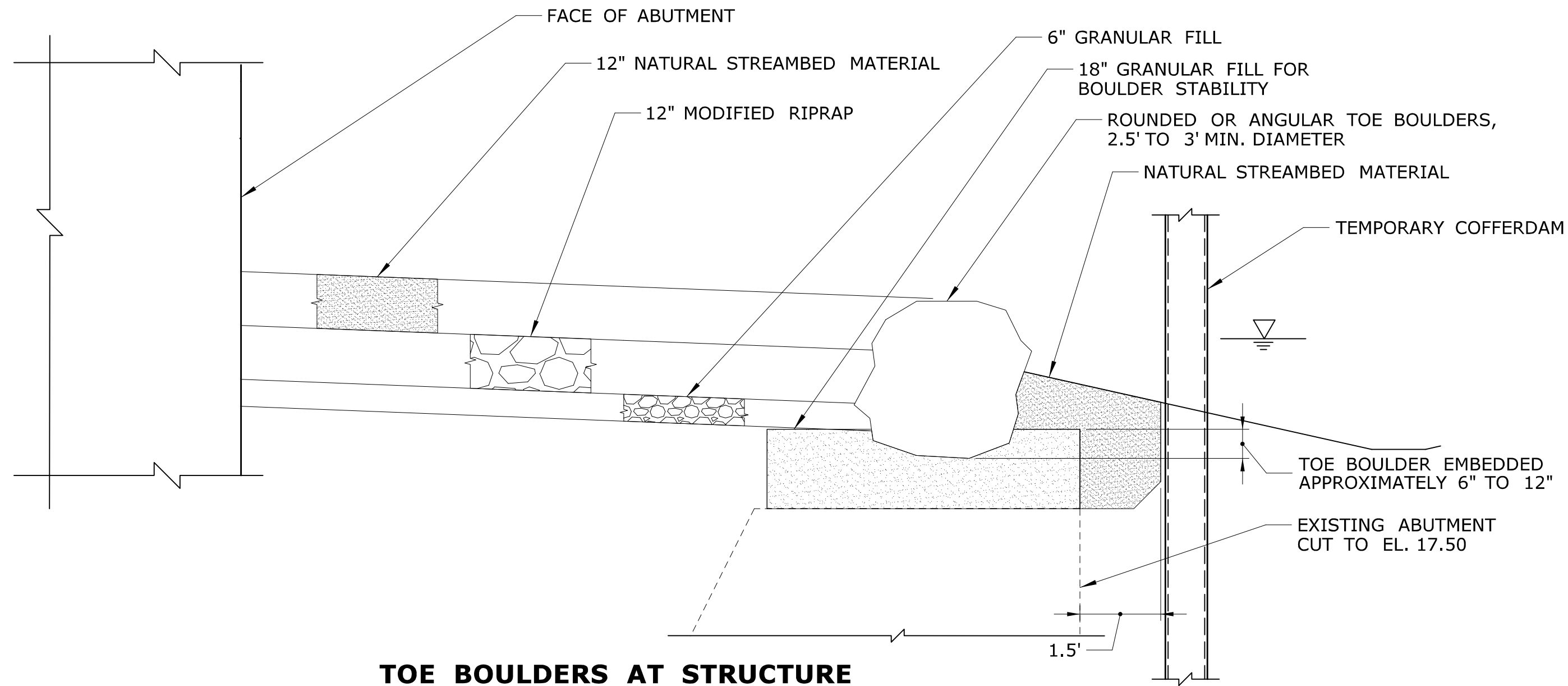
**PROFILE ALONG TEMPORARY UTILITIES**  
SCALE: HORIZ. - 1" = 10'  
SCALE: VERT. - 1" = 5'

NOTE: THIS SKETCH IS UTILIZED TO ESTIMATE THE EXTENT OF INLAND WETLAND IMPACTS DUE TO THE TEMPORARY RELOCATED UTILITIES AND TO PROVIDE THE CONTRACTOR GUIDANCE ON SPANNING OVER THE WATER COURSE. LOCATIONS OF TEMPORARY UTILITIES AS SHOWN ARE APPROXIMATE. LOCATIONS AND ELEVATIONS FOR TEMPORARY UTILITIES SHALL BE DETERMINED BY THE APPROPRIATE UTILITY COMPANY. THE UTILITY BRIDGE SHALL BE DESIGNED BY THE CONTRACTOR.

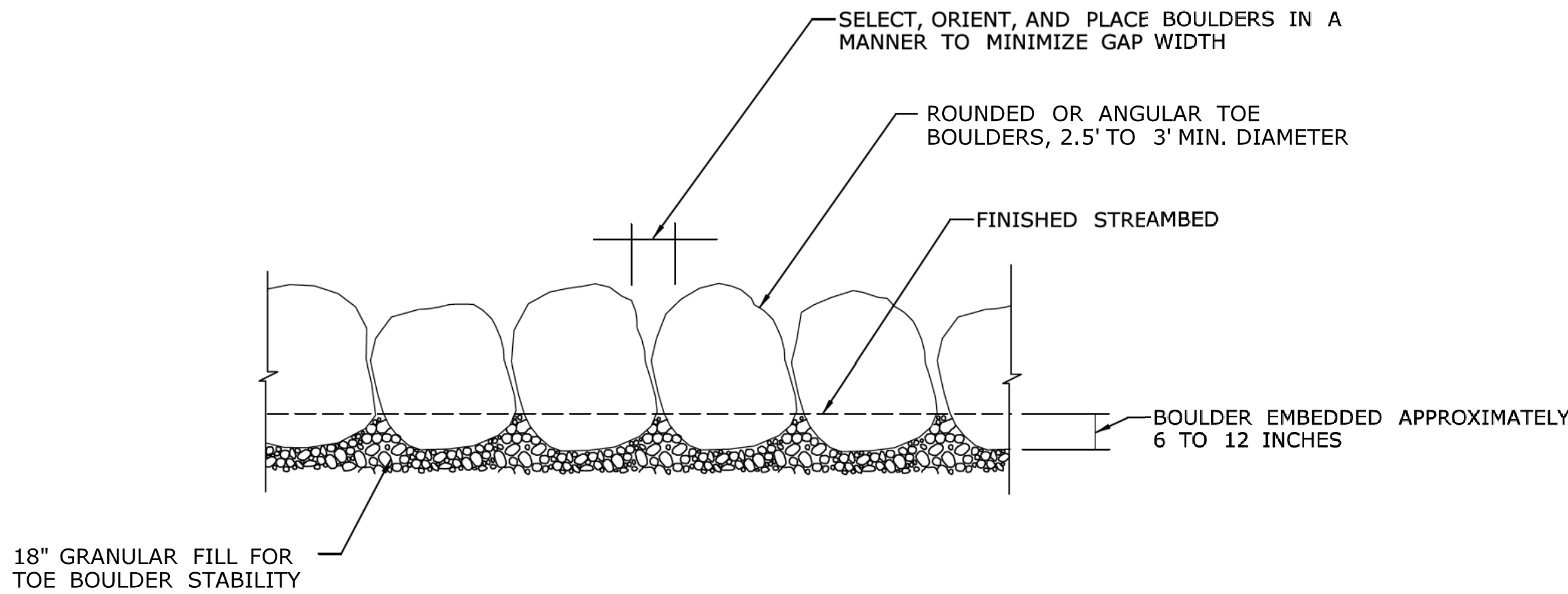
**ENVIRONMENTAL PERMIT PLANS**  
**PLAN DATE: MAY 25, 2021**

				DESIGNER/DRAFTER: <b>JVS/DSM</b>		 <b>STATE OF CONNECTICUT</b> <b>DEPARTMENT OF TRANSPORTATION</b>	SIGNATURE/ BLOCK:  <b>ADA</b> A. Dicesare Associates, P.C. 690 Clinton Avenue Bridgeport, CT 06604 203-696-0444 www.adassociates.com		PROJECT TITLE: <b>BRIDGE REPLACEMENT BRIDGE NO. 01872 U.S. ROUTE 1 OVER GREENWICH CREEK</b>	TOWN: <b>GREENWICH</b>	PROJECT NO. <b>056-305</b>						
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											SHEET NO. <b>11</b>						

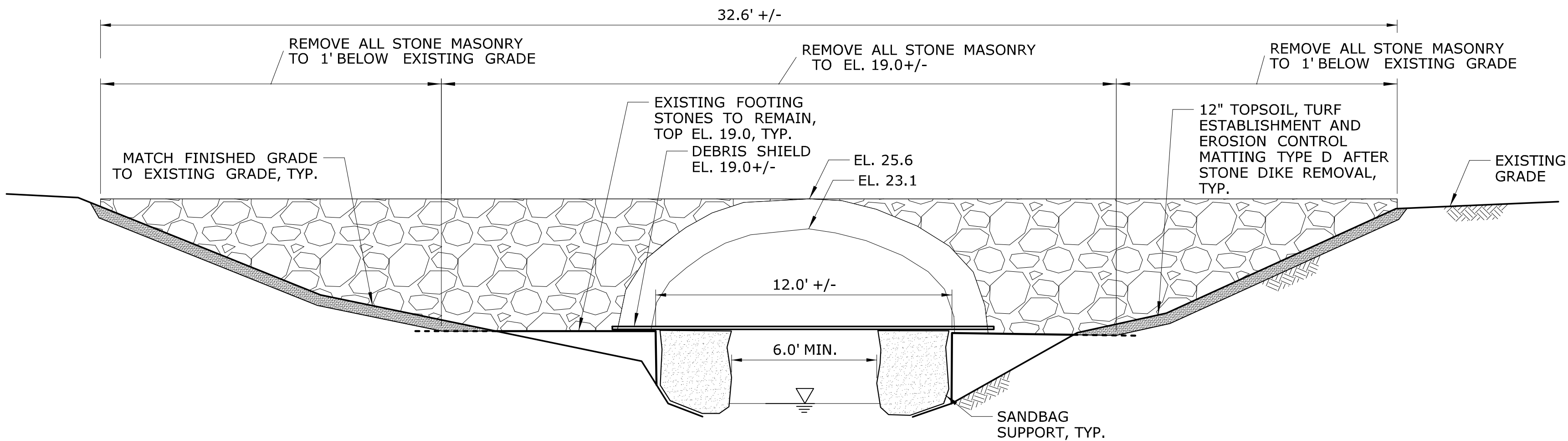




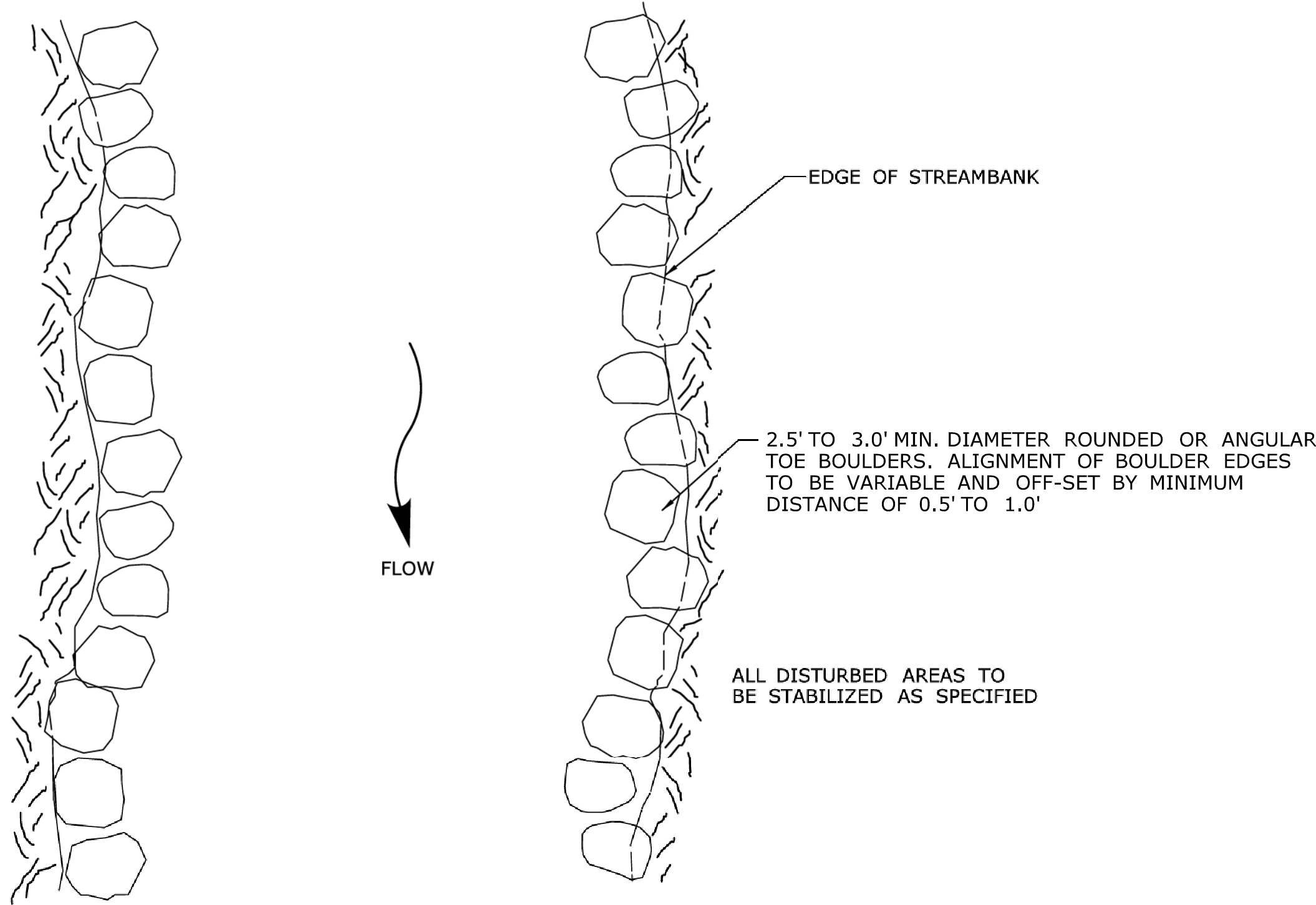
TOE BOULDERS AT STRUCTURE  
N.T.S.



TOE BOULDERS PROFILE VIEW  
N.T.S.



STONE DIKE REMOVAL  
N.T.S.



TOE BOULDERS PLAN VIEW  
N.T.S.

NOTES:

1. PLACEMENT OF TOE BOULDERS SHALL BE DIRECTED IN THE FIELD BY THE ENGINEER OR THE AUTHORIZED DELEGATE. SEE SPECIAL PROVISIONS "PLACEMENT OF TOE BOULDERS".
2. BOULDERS SHALL BE PLACED WITHIN THE DEPARTMENT'S RIGHT-OF-WAY OR EASEMENT.
3. ALL WORK ASSOCIATED WITH THE PLACEMENT OF TOE BOULDERS SHALL BE PAID FOR UNDER "PLACEMENT OF TOE BOULDERS." EXISTING OR NATURAL STREAMBED MATERIAL SHALL BE PAID FOR UNDER SPECIAL PROVISION "EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL", AND SUPPLEMENTAL STREAMBED CHANNEL MATERIAL."

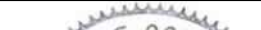


NATIVE STREAMBED MATERIAL NOTES:

1. NATIVE STREAMBED MATERIAL EXCAVATED DURING THE BRIDGE INSTALLATION SHALL BE STOCKPILED AND THEN REPLACED WITHIN THE WATERWAY CHANNEL TO THE DEPTH SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THE SPECIAL PROVISION "EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL."
2. ADDITIONAL STREAMBED MATERIAL IF REQUIRED, SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION "SUPPLEMENTAL STREAMBED CHANNEL MATERIAL."
3. THE STOCKPILE SHALL BE LOCATED OUTSIDE OF THE WETLAND LIMITS AND PROTECTED WITH SEDIMENTATION CONTROL SYSTEM.

STONE DIKE REMOVAL NOTES:

1. REMOVAL OF STONE DIKE SHALL BE PAID FOR UNDER ITEM REMOVAL OF EXISTING MASONRY.
2. STONE DIKE IS 3' +/- WIDE. STONE DIKE DIMENSIONS AND ELEVATIONS ARE APPROXIMATE FOR ESTIMATING PURPOSES ONLY AND SHALL BE FIELD VERIFIED.
3. REMOVAL OF THE STONE DIKE SHALL OCCUR DURING LOW FLOW PERIODS.
4. IF THE WATER SURFACE ELEVATION APPROACHES THE TOP OF THE DEBRIS SHIELD (WITHIN 3 INCHES), THE CONTRACTOR SHALL STOP WORK, REMOVE ACCUMULATED DEBRIS, AND REMOVE THE DEBRIS SHIELD AND SANDBAG SUPPORTS UNTIL FLOW BEGINS TO RECEDE.
5. THE DEBRIS SHIELD SHALL EXTEND A MINIMUM OF 4-FEET UPSTREAM AND DOWNSTREAM OF THE LIMITS OF THE STONE DIKE.
6. THE WATERCOURSE AREA SHALL BE RESTORED TO EXISTING CONDITIONS WITH NATURAL STREAMBED MATERIAL.

ENVIRONMENTAL PERMIT PLANS  
PLAN DATE: MAY 25, 2021

				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>JVS/JVS</b>	 <b>STATE OF CONNECTICUT</b> <b>DEPARTMENT OF TRANSPORTATION</b>	 <b>ADA</b> A.DiCesare Associates, P.C. 690 Clinton Avenue Bridgeport, CT 06604 203-698-0444 www.adacorp.com	 STATE OF CONNECTICUT J. DICESARE 134075 LICENSED PROFESSIONAL ENGINEER	PROJECT TITLE: <b>BRIDGE REPLACEMENT BRIDGE NO. 01872 U.S. ROUTE 1 OVER GREENWICH CREEK</b>	TOWN: <b>GREENWICH</b>	PROJECT NO. <b>056-305</b>	
				CHECKED BY: <b>ADC</b>									DRAWING NO. <b>PMT-12</b>
				SCALE AS NOTED		SHEET NO. <b>12</b>							
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 5/24/2021	Filename: ...\\ENV_MSH_056_305_PMT-12.dgn	APPROVED BY: DATE: A. DICESARE 11/20/2020	DRAWING TITLE: <b>TOE BOULDER AND DIKE REMOVAL DETAILS</b>						



LIMIT OF ROADWAY  
CONSTRUCTION  
STA 3+00

LIMIT OF ROADWAY  
CONSTRUCTION STA 22+25

LIMIT OF ROADWAY  
CONSTRUCTION STA 11+50

NOTES

1. ANY CHANGES TO PERMIT PLANTINGS SHALL BE COORDINATED WITH THE DEPARTMENT'S OFFICE OF ENVIRONMENTAL PLANNING.
2. WOOD CHIP MULCH SHALL NOT BE PLACED IN WETLAND AREAS.
3. DISTURBED AREAS BELOW THE WETLAND LIMIT SHALL BE SEEDED WITH A WETLAND SEED MIX. DISTURBED AREAS ABOVE THE WETLAND LIMIT SHALL BE SEEDED WITH CONSERVATION SEED MIX UNLESS SPECIFIED OTHERWISE. ALL DISTURBED AREAS SHALL BE RESTORED.
4. DISTURBED AREA OUTSIDE ROW LINE (CALLED OUT ON PLANS) SHALL BE SEEDED WITH TURF ESTABLISHMENT-LAWN. RESTORATION OUTSIDE OF ROW IS REQUIRED TO BE RESTORED TO EXISTING CONDITIONS FOR THE PERMIT PLANS AS IT IS WITHIN REGULATED AREAS.
5. ALL TREES AND SHRUBS MUST CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK FOR DECIDUOUS SHRUBS, CHAPTER THREE, AND MEET THE MINIMUM CONTAINER SIZE AND ROOT MASS AND NUMBER OF CANES FOR TYPE AND HEIGHT SPECIFIED.
6. ALL PLANTS SHALL BE STRAIGHT SPECIES. NO VARIETIES OR CULTIVARS WILL BE ACCEPTED.

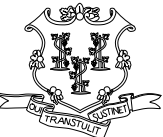

PERMIT PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	SPACING	COMMENTS	WETLAND INDICATOR
A.a.	Aronia arbutifolia	Red Chokecherry	2'-3' Ht. B.B.	18	4' On Center		FACW
Am.c.	Amelanchier canadensis	Shadblow Serviceberry	4'-5' Ht. B.B.	1	Field Locate		FAC
C.a.	Cornus amomum	Silky Dogwood	2'-3' Ht. B.B.	4	4' On Center		FACW
C.s.	Cornus sericea	Redosier Dogwood	2'-3' Ht. B.B.	17	4' On Center		
Q.p.	Quercus palustris	Pin Oak	3'-4' Ht. Whips B.B.	8	4' On Center		FACW
S.d.	Salix discolor	Pussy Willow	2'-3' Ht. B.B.	2	4' On Center		FACW
S.p.	Spirea alba	Meadowsweet	18"-24" Ht. B.B.	7	4' On Center		FACW
V.d.	Viburnum dentatum	Arrowwood Viburnum	2'-3' Ht. B.B.	10	4' On Center		FAC
Control and Removal of Invasive Vegetation				1,780 S.Y.			
Wood Chip Mulch				90 S.Y.			

LEGEND

- CONTROL AND REMOVAL OF INVASIVE VEGETATION
- SEDIMENTATION CONTROL SYSTEM
- STATE/FEDERAL WETLANDS
- ORDINARY HIGH WATER
- FEMA FLOODWAY
- FEMA 100-YEAR FLOOD (CALCULATED)

ENVIRONMENTAL PERMIT PLANS  
APRIL 28, 2021

				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: MR			STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION		SIGNATURE/ BLOCK:  OFFICE OF ENGINEERING		PROJECT TITLE:  BRIDGE REPLACEMENT BRIDGE NO. 01872 U.S. ROUTE 1 OVER GREENWICH CREEK		TOWN:  GREENWICH		PROJECT NO.  56-305	
						CHECKED BY: MV					APPROVED BY:				DRAWING TITLE:  PERMIT PLANTING PLAN		SHEET NO.  13	
						SCALE IN FEET 0 40 80 SCALE 1"=40'					Filename: ...\\Landscape\HW_56-305_LND_01.dgn							
REV.	DATE	REVISION DESCRIPTION				SHEET NO.	Plotted Date: 4/29/2021											



## **LWRD Work Commencement Form**

**To:** [DEEP.LWRDRegulatory@ct.gov](mailto: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>CT DOT</u>	
DEEP License Number(s): <u>202108049-IW, 202108080-FME</u>	
Municipality in which project is occurring: <u>Greenwich</u>	
2. <b>Check one:</b>	
(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"><li>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.</li><li>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.</li></ul> <p>Submit this completed form to : <a href="mailto:DEEP.LWRDRegulatory@ct.gov">DEEP.LWRDRegulatory@ct.gov</a> or <b>Regulatory Section</b> <b>Department of Energy and Environmental Protection</b> <b>Land &amp; Water Resources Division</b> <b>79 Elm Street</b> <b>Hartford, CT 06106-5127</b></p>	