



Connecticut Department of Energy and Environmental Protection License*

Inland Wetlands & Watercourses Permit

Licensee(s): Connecticut Department of
Transportation

Licensee Address(s): Newington, CT 06111

License Number(s): 202504143-IW

Municipality: Southbury

Project Description: Rehabilitation of Bridge 07043, I-84 Eastbound (EB) over Bullet
Hill Brook

Project Address/Location: I-84 EB over Bullet Hill Brook

Waters: Bullet Hill Brook

**Authorizing CT Statute(s)
and/or Federal Law:** CGS Section 22a-36 to 45

**Applicable Regulations of
CT State Agencies:** 22a-39-1 to 15

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

License Expiration: Five (5) years from the date of issuance of this license.

Project Site Plan Set: *Environmental Permit Plans State Project No. 0130-0187
Rehabilitation of Bridge No. 07043 Interstate 84 EB over Bullet
Hill Brook, 8 sheets, prepared by Weston & Sampson, and dated
April 8, 2025.*

License Enclosures: LWRD General Conditions; Site Plan Set; LWRD Work
Commencement Form; LWRD Compliance Certification Form

*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 # 202504143 and as depicted on any site plan sheets / sets cited herein:

Temporarily and permanently impact 2,200 square feet (sf) and 420 sf of Bullet Hill Brook, respectively, to rehabilitate Bridge 07043 which includes:

1. Temporarily installing cofferdams, a bypass pump and hose and/or a 42" bypass pipe for water handling during construction as depicted in site plan set sheet PMT-03 and PMT-04;
2. Cleaning and rehabilitating the existing Bridge 07043, an approximately 134' long, 9'4" wide by 6'3" high squashed corrugated metal pipe (CMP) by sliplining the CMP with a 134' long, 7'3" wide by 5'3" high squashed corrugated aluminum pipe (CAP) as depicted on site plan set sheets PMT-02, PMT-03, PMT-04, PMT-05, and PMT-06;
3. Repairing the existing inlet and outlet headwall, wingwalls, and endwall associated with Bridge 07043 as depicted on site plan set sheets PMT-02 and PMT-05;
4. Installing five angled corner baffles (6" high along the low side and 10" high along the tall side) within the CAP liner located 9' from the inlet and then spaced 30' apart along the culvert length as depicted in site plan set sheets PMT-05 and PMT-06;
5. Grading 12" of natural streambed material at the new invert elevations of the CAP liner inlet as depicted in site plan set sheets PMT-02, PMT-03, PMT-05, PMT-06, and PMT-07;
6. Installing granular fill (6") and intermediate rip rap (18") top-dressed with a minimum of 12" of natural streambed material and associated grading at the new invert elevation of the CAP liner outlet as depicted on site plan set sheets PMT-02, PMT-03, PMT-05, and PMT-06;
7. Installing a primary debris control system consisting of 5 angled, concrete filled 6" diameter galvanized pipes spaced 3' apart and located approximately 18' to 25.5' upgradient of the inlet of the sliplined Bridge No. 07043 as depicted on site plan set sheets PMT-02, PMT-03, PMT-06, and PMT-07;
8. Installing a secondary debris control system consisting of 6 galvanized bars spaced approximately 3.5' apart, protruding approximately 2' above the channel surface, and located approximately 8' to 18' upgradient of the inlet of the sliplined Bridge No. 07043 as depicted on site plan set sheets PMT-02, PMT-03, PMT-06, and PMT-07; and
9. Installing five rock weirs comprised of 2' to 4' diameter rounded boulders within the watercourse channel beginning 12' downstream of Bridge 07043 and spaced approximately 6' apart as depicted in site plan sheets PMT-02, PMT-03, and PMT-06.

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. **Temporary Water Handling.** If utilizing pumping for temporary water handling facilities, the Licensee shall conduct temporary water handling within the low flow period from June 1 to September 30, inclusive, and within a period of three (3) months, inclusive, unless otherwise authorized in writing by the Commissioner.
3. **Stockpile of Streambed Material.** The Licensee shall stockpile native streambed material excavated during the installation of Bridge 07043 and replace the native streambed material to the depths depicted in the site plan set herein. The Licensee shall locate the stockpile outside of wetlands and watercourses and protect the stockpile with an appropriate sedimentation control system.
4. **Discharge of Concrete.** At no time shall the Licensee allow concrete to discharge into Bullet Hill Brook.
5. **Baffle Installation within Rehabilitated Bridge 07043.** Upon initiation of the rehabilitation of Bridge 07043 in Authorized Activity 2 herein, the Licensee shall install the five (5) angled corner baffles within the rehabilitated Bridge 07043 as shown on plan sheets PMT-05 and PMT-06, unless otherwise authorized in writing by the Commissioner. The Licensee is responsible for maintaining the baffles for the life of Bridge 07043.
6. **Rock Weir Installation.** The Licensee shall notify DEEP Fisheries staff no less than ten (10) business days prior to the commencement of Authorized Activity 9 herein. The Licensee shall install the fisheries enhancements as shown on plan sheet PMT-06, subject to any field modifications as directed by DEEP Fisheries Division staff.

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

Date

Emma Cimino
Deputy Commissioner
Environmental Quality Branch



LWRD General Conditions

1. **Land Record Filing (for Structures Dredging & Fill, Tidal Wetlands, Certificate of Permission, and Long Island Sound General Permit Licenses only).** The Licensee shall file the Land Record Filing on the land records of the municipality in which the subject property is located not later than thirty (30) days after license issuance pursuant to Connecticut General Statutes (CGS) Section 22a-363g. A copy of the Notice with a stamp or other such proof of filing with the municipality shall be submitted to DEEP.LWRDRegulatory@ct.gov no later than sixty (60) days after license issuance. If a Land Record Filing form is not enclosed and the work site is not associated with an upland property, no filing is required.
2. **Contractor Notification.** The Licensee shall give a copy of the license and its attachments to the contractor(s) who will be carrying out the authorized activities prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The Licensee's contractor(s) shall conduct all operations at the site in full compliance with the license and, to the extent provided by law, may be held liable for any violation of the terms and conditions of the license. At the work site, the contractor(s) shall, whenever work is being performed, have on site and make available for inspection a copy of the license and the authorized plans.
3. **Work Commencement.** Not later than two (2) weeks prior to the commencement of any work authorized herein, the Licensee shall submit to DEEP.LWRDRegulatory@ct.gov, on the Work Commencement Form attached hereto, the name(s) and address(es) of all contractor(s) employed to conduct such work and the expected date for commencement and completion of such work, if any.
 - For water diversion activities authorized pursuant to 22a-377(c)-1 of the Regulations of Connecticut State Agencies, the Licensee shall also notify the Commissioner in writing two weeks prior to initiating the authorized diversion.
 - For emergency activities authorized pursuant to Connecticut General Statutes Section 22a-6k, the Licensee shall also 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.
 - The Work Commencement condition and the need for a Work Commencement Form is not applicable to Flood Management Certification approvals.
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

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*](#) as revised, the [*Connecticut Stormwater Quality Manual*](#) as revised, or the Department of Transportation's [*CTDOT 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, [*Connecticut Stormwater Quality Manual*](#) as revised, Department of Transportation’s [*CTDOT Drainage Manual*](#) as revised, and the Department of Transportation Standard Specifications as revised.
- 12. In-Water Work Vessel Staging and Storage. (for Structures Dredging & Fill, Tidal Wetlands, Certificate of Permission, and Long Island Sound General Permit Licenses only).** For any barge, vessel, skiff or floating work platform (“work vessels”) utilized in the execution of the work authorized herein, the Licensee shall ensure that such work vessels:
 - do not rest on, or come in contact with, the substrate at any time, unless specifically authorized in the license.
 - are not stored over intertidal flats, submerged aquatic vegetation or tidal wetland vegetation or in a location that interferes with navigation. In the event any work vessel is grounded, no dragging or prop dredging shall occur to free it.
- 13. Work Site Restoration.** Upon completion of any authorized work, the Licensee shall restore all areas temporarily impacted by construction, or used as a staging area or accessway in connection with such work, to their condition prior to the commencement of such work.
- 14. Inspection.** The Licensee shall allow any representative of the Commissioner to inspect the project location at reasonable times to ensure that work is being or has been conducted in accordance with the terms and conditions of this license.
- 15. Change of Use. (Applies only if a use is specified within the License “Project Description”)**
 - a. The work specified in the license is authorized solely for the purpose set forth in the license. No change in purpose or use of the authorized work or facilities as set forth in the license may occur without the prior written approval of the Commissioner. The Licensee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this license, request permission from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.
 - b. A change in the form of ownership of any structure authorized herein from a rental/lease commercial marina to a wholly-owned common interest community or dockominium may constitute a change in purpose as specified in paragraph (a) above.

16. De Minimis Alteration. The Licensee shall not deviate from the authorized activity without prior written approval from the Commissioner. The Licensee may request a de minimis change to any authorized structure, facility, or activity. A de minimis alteration means a change in the authorized design, construction or operation that individually and cumulatively has minimal additional environmental impact and does not substantively alter the project as authorized.

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

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

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

- The Compliance Certification condition and the need for a Compliance Certification Form is not applicable to Flood Management Certification approvals.

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

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

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

22. Document Submission. Any document required to be submitted to the Commissioner under the license or any contact required to be made with the Commissioner shall, unless otherwise

specified in writing by the Commissioner, be directed to:

DEEP.LWRDRegulatory@ct.gov or

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.

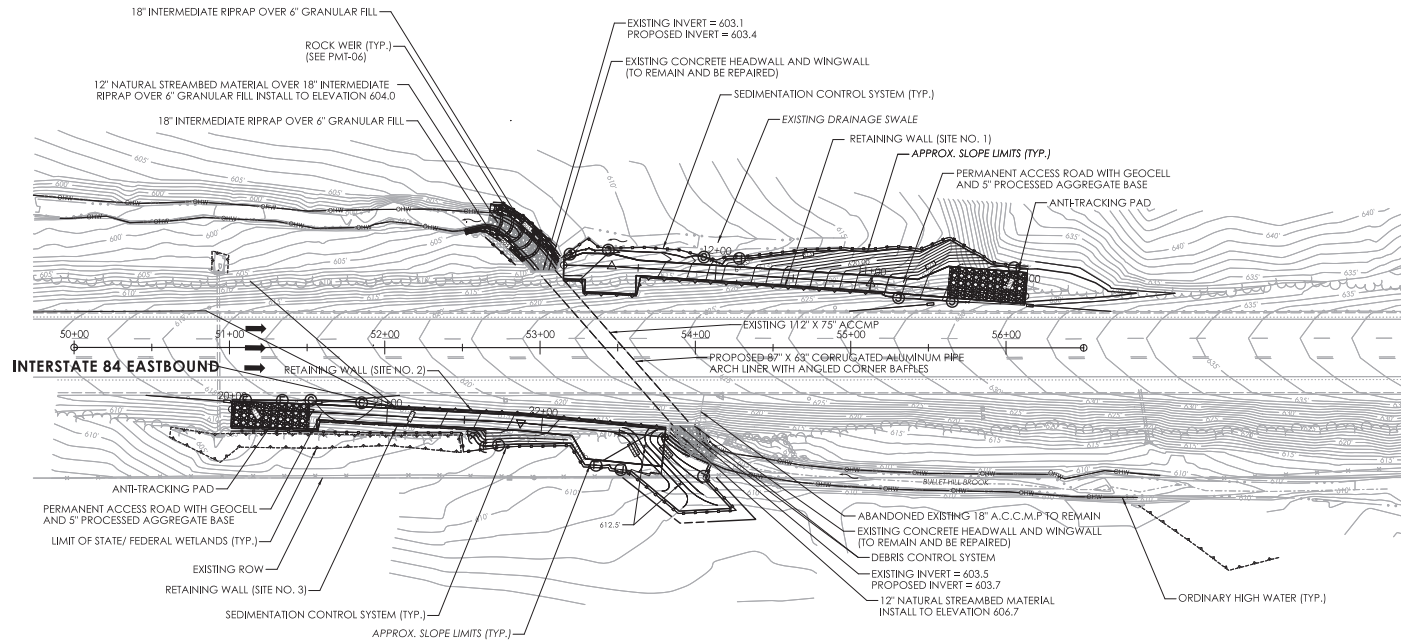
If the violation occurs outside of normal business hours, the Licensee shall contact the Department of Energy and Environmental Protection Emergency Dispatch at 860-424-3333. The Licensee shall comply with any dates which may be approved in writing by the Commissioner.

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.



GENERAL SITE PLAN

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: APRIL 8, 2025

REV.	DATE	DESCRIPTION

SIGNATURE BLOCK:
 DESIGNER/DRAFTER: **DK** CHECKED BY: **KAC**



CONNECTICUT
 DEPARTMENT OF
 TRANSPORTATION

PROJECT TITLE:
**REHABILITATION OF BRIDGE NO. 07043 - INTERSTATE 84 EB
 OVER BULLET HILL BROOK**

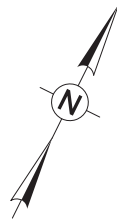
TOWNSHIP:
SOUTHURY

DRAWING TITLE:
GENERAL SITE PLAN

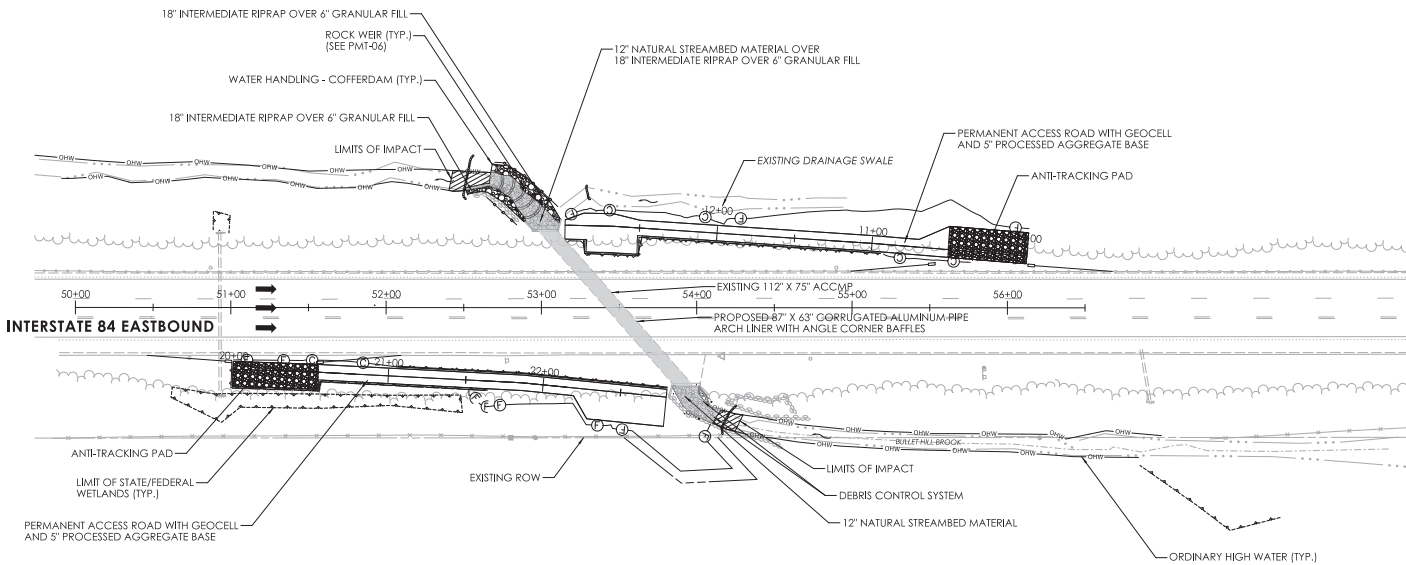
PROJECT NO.:
0130-0187

DRAWING NO.:
PMT-02
 SHEET NO.:

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 PLOTTED DATE: 4/8/2025



NOTES:
 THE CONTRACTOR SHALL NOT WORK WITHIN THE LIMITS OF THE WETLANDS AND WATERCOURSE WITH EXCEPTION OF THOSE AREAS DELINEATED AS TEMPORARY OR PERMANENT IMPACTS TO THE WETLANDS AND WATERCOURSE. ALL DISTURBED AREAS SHALL BE RESTORED. O.H.W. ELEVATIONS SHOWN ON THIS SHEET ARE BASED ON O.H.W. FLAGGING PROVIDED BY A WETLAND SCIENTIST.



WETLAND / WATERCOURSE IMPACT PLAN
 SCALE: 1" = 40'

LEGEND

- TEMPORARY WETLAND / WATERCOURSE IMPACT
- PERMANENT WETLAND / WATERCOURSE IMPACT

WETLAND IMPACT TABLE			
	WETLAND IMPACT [S.F.]	WATERCOURSE IMPACTS [S.F.]	TOTAL [S.F.]
PERMANENT IMPACTS	0 S.F. (0 AC)	2200 S.F. (0.05 AC)	2200 S.F. (0.05 AC)
TEMPORARY IMPACTS	0 S.F. (0 AC)	420 S.F. (0.01 AC)	420 S.F. (0.01 AC)
TOTAL IMPACTS	0 S.F. (0 AC)	2620 S.F. (0.06 AC)	2620 S.F. (0.06 AC)

ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: **APRIL 8, 2025**

SIGNATURE BLOCK: DESIGNER/DRAFTER: DK CHECKED BY: KAC		 CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: REHABILITATION OF BRIDGE NO. 07043 - INTERSTATE 84 EB OVER BULLET HILL BROOK	TOWNSHIP: SOUTHURY	DRAWING TITLE: WETLAND / WATERCOURSE IMPACT PLAN	PROJECT NO.: 0130-0187	DRAWING NO.: PMT-03 SHEET NO.:
<small> LASTED SAVED BY: Koopman, Danyoung FILE NAME: F:\CTDOT\DOT\Projects\0130\0187_Southury\44 EB\Env\Contract\Draws\0130\0187_Wetland Watercourse Impact Per\0130\0187.dgn PLOTTED DATE: 4/8/2025 </small>							

WATER HANDLING NOTES:

1. CONTRACTOR SHALL MAINTAIN THE WATER HANDLING SYSTEM AS REQUIRED DURING CONSTRUCTION.
2. A DEWATERING BASIN SHALL BE ESTABLISHED OUTSIDE OF THE WETLAND LIMITS.
3. TEMPORARY WATER HANDLING COFFERDAM SHALL CONSIST OF AN APPROVED SYSTEM THAT THE CONTRACTOR ELECTS TO USE WHICH WILL SAFELY CONVEY WATER FLOWS THROUGH THE CONSTRUCTION AREA. SHALL BE ABLE TO SUPPORT CONSTRUCTION ACTIVITY AND SHALL CONFORM TO PERMITS. ANY WATER HANDLING SCHEME DEPICTED WITHIN THE DEPARTMENTS' HANDLING WATER TYPICAL SCHEMATICS MAY BE UTILIZED UNLESS SPECIFICALLY PROHIBITED. A MEANS AND METHOD FOR WATER HANDLING SYSTEM SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL.
4. WATER HANDLING MEASURES SHALL NOT EXCEED IMPACT AREAS SHOWN ON THE WETLAND IMPACT SHEET OF THE PERMIT PLANS.
5. ANY STORM DRAINAGE DISCHARGING INTO A CONFINED WORK AREA FROM EXISTING STORM DRAINAGE PIPES SHALL BE DIVERTED OR PUMPED OUTSIDE 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 THE ENGINEER FOR APPROVAL AND IS INCLUDED AS PART OF WATER HANDLING.
6. BASED UPON FIELD CONDITIONS, WORK DURATION, AND EXPECTED WEATHER CONDITIONS, THE ENGINEER MAY APPROVE A CONSTRUCTION WATER HANDLING PLAN WITH LOWER PUMPING FLOWS, PROVIDED THAT THIS INCLUDES A CONTINGENCY PLAN, WHICH MINIMIZES NEGATIVE IMPACTS AND SAFELY CONVEYS LARGER FLOWS THROUGH THE WORK AREA. IF A PUMP SYSTEM IS PROPOSED DURING LOW FLOW CONDITIONS, THE PUMP SYSTEM SHALL BE DESIGNED BY THE CONTRACTOR. THE PUMP SYSTEM SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

SUGGESTED SEQUENCE OF CONSTRUCTION

1. EXISTING 3 CABLE GUARDRAIL OR METAL BEAM SHALL BE REMOVED AS INDICATED DURING WORK.
2. INSTALL ANTI-TRACKING PAD, SEDIMENTATION CONTROL SYSTEM AND CLEAR & GRUB THE WORK AREA.
3. CONSTRUCT PERMANENT ACCESS ROADS.
4. INSTALL BYPASS PIPE OR TEMPORARY HOSE, WATER HANDLING COFFERDAM AND DEWATERING BASIN.
5. CLEAN AND PERFORM REPAIRS TO EXISTING CULVERT.
6. INSTALL 87" x 43" ALUMINUM PIPE ARCH LINER WITH BAFFLES AND GROUT THE ANNULAR SPACE BETWEEN THE EXISTING AND PROPOSED PIPE.
7. REPAIR INLET AND OUTLET HEADWALLS AND WINGWALLS.
8. INSTALL RIPRAP AND NATURAL STREAMBED MATERIAL TO BRING THE STREAMBED UP TO THE NEW INVERT ELEVATIONS.
9. REMOVE BYPASS PIPE OR TEMPORARY HOSE, WATERHANDLING COFFERDAM AND DEWATERING BASIN.
10. INSTALL ROCK WEIRS AT OUTLET DURING LOW FLOW CONDITIONS.
11. INSTALL R-B MASH GUIDERAIL AS REQUIRED.
12. PERFORM FINAL GRADING, INSTALL PLANTS AND ESTABLISH VEGETATION.
13. REMOVE SEDIMENTATION CONTROL SYSTEM UPON FINAL STABILIZATION.

UNCONFINED IN-STREAM WORK BMP NOTE:

ANY UNCONFINED IN-STREAM WORK WITHIN THE WATERCOURSE SHALL BE RESTRICTED TO THE PERIOD FROM JUNE 1 TO SEPTEMBER 30, INCLUSIVE.

THE DEPARTMENT WILL REVIEW AND MAY APPROVE THE METHOD OF UNCONFINED IN-WATER WORK WITH CONSIDERATION OF THE FOLLOWING:

- * PROPOSED SCHEDULE FOR WORK OPERATIONS
- * ALL UNCONFINED IN-WATER WORK SHALL BE MINOR IN NATURE
- * DISTURBANCE SHALL BE LIMITED TO AREAS THAT HAVE BEEN APPROVED FOR TEMPORARY AND PERMANENT IMPACT
- * BEST MANAGEMENT PRACTICE SHALL BE UTILIZED WHENEVER POSSIBLE TO MINIMIZE TURBIDITY/SEDIMENT TRANSPORT DOWNSTREAM
- * DISTURBED AREAS AND THE DURATION OF DISTURBANCE SHALL BE MINIMIZED TO THE EXTENT POSSIBLE
- * IN-STREAM WORK SHALL BE DONE DURING PERIODS OF LOW FLOW

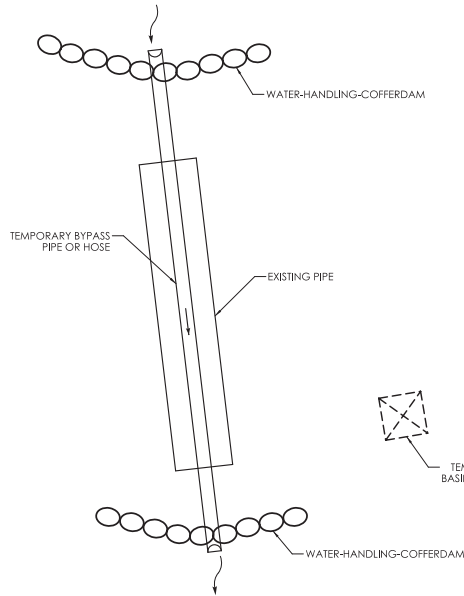
TEMPORARY HYDRAULIC DATA	
AVERAGE DAILY FLOW (CFS)	0.5
AVERAGE SPRING FLOW (CFS)	1.0
2-YEAR FREQUENCY DISCHARGE (CFS)	70
LOW FLOW PUMPING TEMPORARY DESIGN DISCHARGE = 6 X ASF (CFS)	6*
GRAVITY FLOW BYPASS PIPE TEMPORARY DESIGN DISCHARGE = 2-YEAR FREQUENCY (CFS)	70
2-YEAR WATER SURFACE ELEVATION UPSTREAM (FT)	606.9
2-YEAR WATER SURFACE ELEVATION DOWNSTREAM (FT)	604.2
*6 CFS BASED ON 1.0 AVG. SPRING FLOW & 2-MONTH PUMPING DURATION	

LOW FLOW PUMPING IS ALLOWED BETWEEN JUNE 1 TO SEPTEMBER 30 FOR NO LONGER THAN 3 MONTHS AT ANY GIVEN TIME.

NOTES:

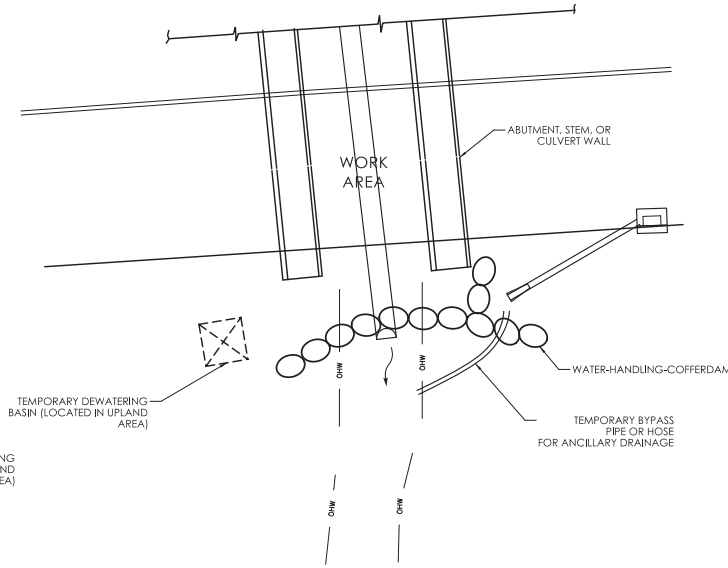
VALUES AND ELEVATIONS MAY VARY SLIGHTLY FROM THE CONTRACT PLANS.

NO TRIMMING, CUTTING, OR REMOVAL OF TREES WITH A 3" DBH OR GREATER FROM APRIL 15 TO OCT 31



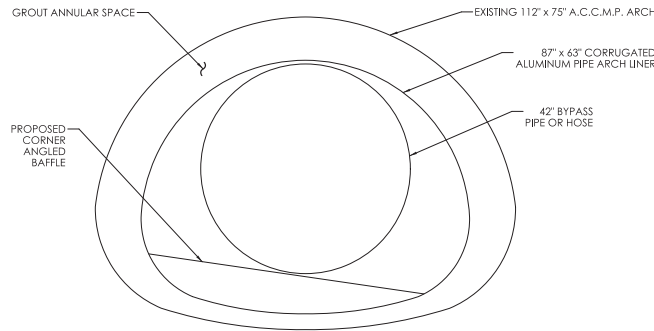
TEMPORARY PIPE/HOSE THROUGH EXISTING PIPE

NOT TO SCALE



ANCILLARY STORM DRAINAGE NEAR WORK AREA

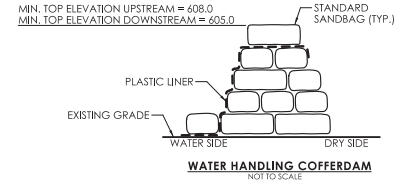
NOT TO SCALE



PIPE LAYOUT

SCALE: NTS

NOTE: FOR CULVERT LINER DETAIL SEE DRAWING NO. PMT-06



WATER HANDLING COFFERDAM

NOT TO SCALE

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: **APRIL 08, 2025**

NO.	DATE	REVISION/DESCRIPTION

SIGNATURE BLOCK:

710 Brook Street, Suite 100
Southbury, CT 06488
TEL: 860.241.4773
WWW.WESTONANDSAMPSON.COM

DESIGNER/DATE: BDL
CHECKED BY: P.J.G.

CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 07043 - INTERSTATE 84 EB OVER BULLET HILL BROOK

TOWNSHIP:
SOUTHURY

DRAWING TITLE:
WATER HANDLING PLAN

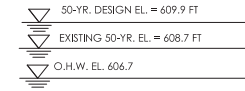
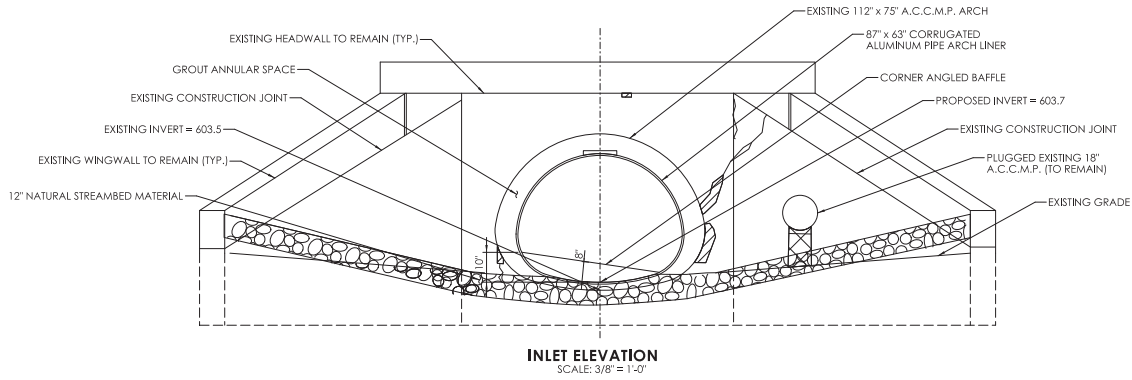
PROJECT NO.: **0130-0187**

DRAWING NO.: **PMT-04**

SHEET NO.:

NATIVE STREAMBED MATERIAL NOTES:

1. NATIVE STREAMBED MATERIAL EXCAVATED DURING THE INSTALLATION OF THE STRUCTURE SHALL BE STOCKPILED AND THEN REPLACED 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 THE WETLAND LIMITS AND PROTECTED WITH SEDIMENTATION CONTROL SYSTEM.
4. WASHING-IN SUPPLEMENTAL STREAMBED MATERIAL SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION "WASHING-IN SUPPLEMENTAL STREAMBED MATERIAL"



OPENNESS RATIO (OR):
 87" ALUMINUM
 OR = OPEN AREA / CULVERT LENGTH
 OR = 30 SF / 134 FT = 0.22 FT
 0.22 FT. < 0.82 FT. (RECOMMENDED MINIMUM)

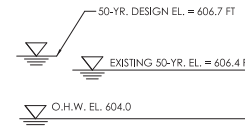
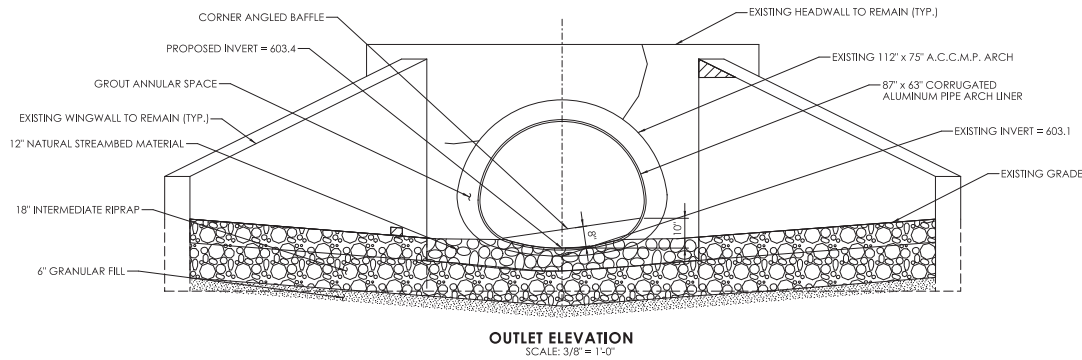
BANKFULL WIDTH (BFW):
 BFW = 11 FT. EXISTING UPDATE
 1.2 * BFW = 13.2 FT.
 13.2 FT. > 7.25 FT. PROPOSED CULVERT SPAN

HYDRAULIC DATA	
DRAINAGE AREA	0.27 SQ. MILES
DESIGN DISCHARGE [CFS]	220
DESIGN FREQUENCY	50 YR.
AVERAGE DAILY FLOW ELEVATION [FT]	605.0
50-YR UPSTREAM DESIGN WATER SURFACE ELEVATION [FT.]	611.3
50-YEAR DOWNSTREAM DESIGN WATER SURFACE ELEVATION [FT.]	606.7

NOTES:
 THE UPSTREAM DESIGN WATER SURFACE ELEVATIONS ARE APPROXIMATELY 40 FEET UPSTREAM OF THE INLET. THE DOWNSTREAM DESIGN WATER SURFACE ELEVATION IS IMMEDIATELY DOWNSTREAM OF THE OUTLET

CONCRETE DETERIORATION/REPAIR LEGEND

- INDICATES LIMITS OF EXISTING DETERIORATE CONCRETE REMOVAL AND REPAIRS AT HEADWALL AND WINGWALLS
- INDICATES LIMITS OF CONCRETE SCALING
- INDICATES CRACKS AT HEADWALL AND WINGWALLS

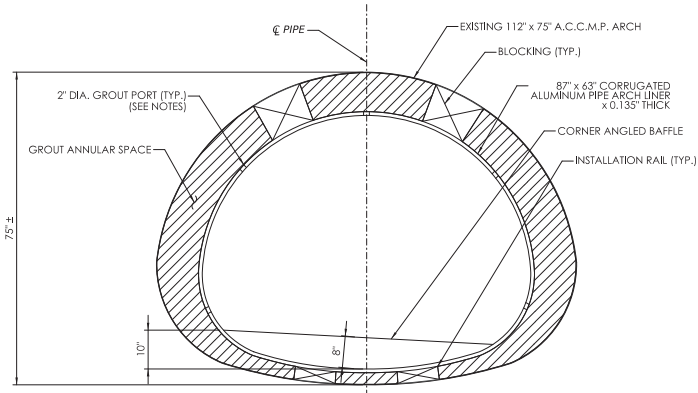
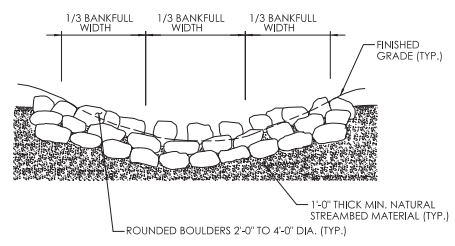
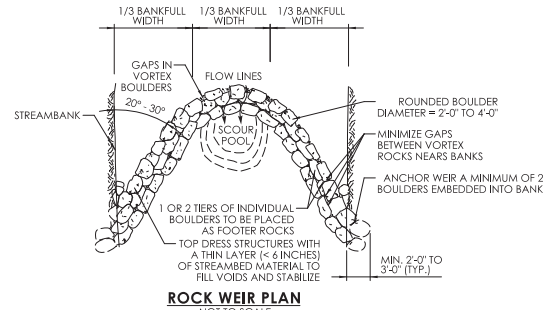
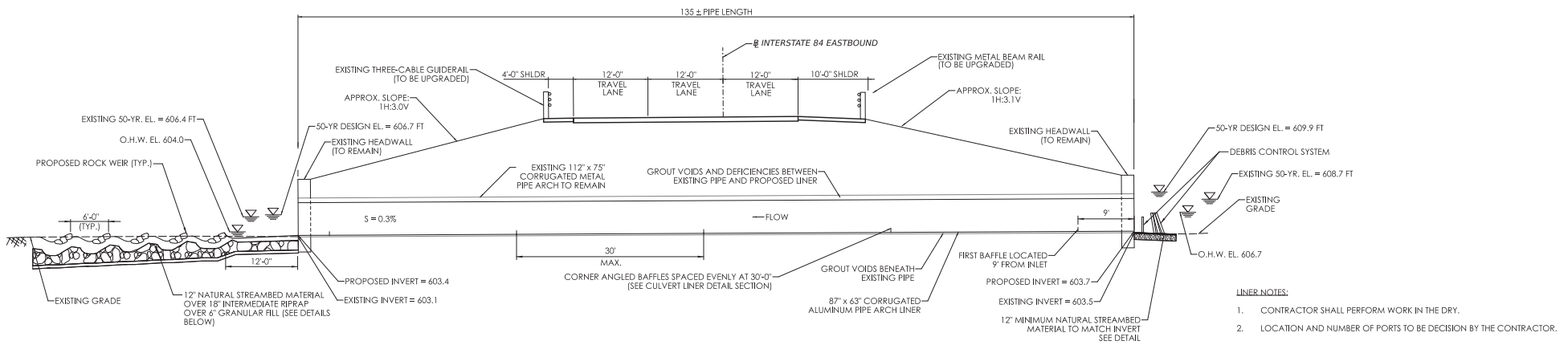


ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: **APRIL 08, 2025**

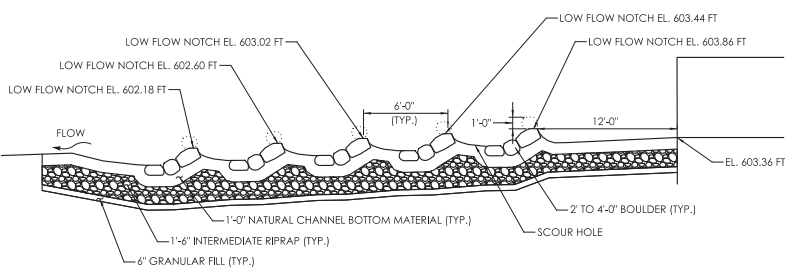
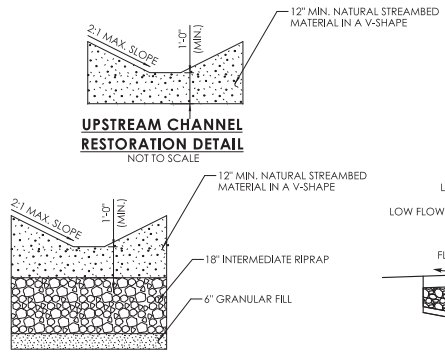
NO.	DATE	DESCRIPTION

SIGNATURE BLOCK: 712 Brook Street, Suite 103 North Haven, CT 06460 PHONE: 860.215.4473 WWW.WESTONANDSAMPSON.COM	 CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: REHABILITATION OF BRIDGE NO. 07043 - INTERSTATE 84 EB OVER BULLET HILL BROOK	TOWNSHIP: SOUTHURY	DRAWING TITLE: CULVERT ELEVATIONS AND DETAILS	PROJECT NO.: 0130-0187	DRAWING NO.: PMT-05 SHEET NO.:
---	--	---	------------------------------	---	----------------------------------	---

LASTED SAVED BY: Levesque, Benjamin FILE NAME: P:\CT\DOT\CT\Projects\0130\0187 Southbury\84 EB\Drawn\Control\Plans\SR_CP_0130\0187_CULVERT PLAN PERM.PMT 05.dgn
 PLOTTED DATE: 4/8/2025

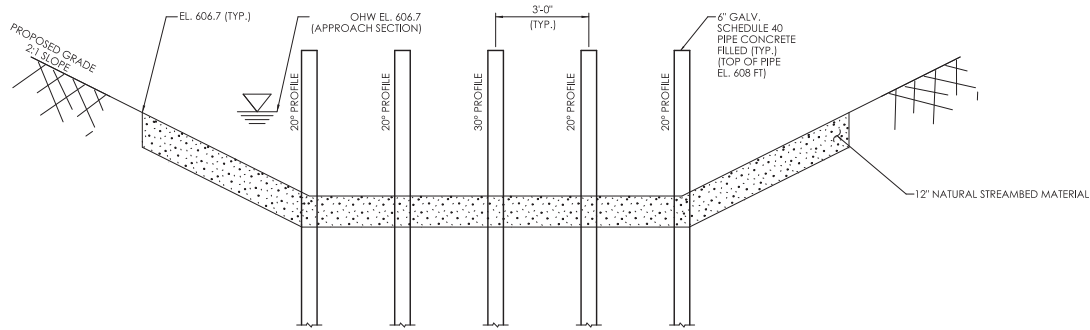


- ROCK WEIR NOTES:**
- PLACEMENT OF THE ROCK WEIR SHALL BE UNDER THE SUPERVISION OF CTDEEP FISHERIES DIVISION STAFF (OR AUTHORIZED DELEGATE). THE CONTRACTOR SHALL COORDINATE THROUGH A MINIMUM OF 10 DAYS IN ADVANCE OF THE WEIR INSTALLATION TO ALLOW FOR CTDEEP FISHERIES TO BE PRESENT ON SITE.
 - SUPPLEMENTAL NATURAL STREAMBED MATERIAL SHALL BE AVAILABLE ON SITE PRIOR TO ROCK WEIR INSTALLATION.
 - FOOTER ROCKS SHALL SERVE AS FOUNDATION FOR THE TOP LAYER OF THE WEIR. FOOTER ROCKS SHALL HAVE REASONABLY FLAT TOPS AND BOTTOMS TO ENABLE BETTER PLACEMENT OF THE TOP LAYER OF THE WEIR.
 - BOULDERS SHALL BE ROUNDED 2'-0" TO 4'-0" IN DIAMETER AS SPECIFIED BY CTDEEP FISHERIES OR AS RECOMMENDED BY THE OFFICE OF ENVIRONMENTAL PLANNING (OEP). THE CONTRACTOR SHALL COORDINATE THE TYPE AND SIZE WITH CTDEEP FISHERIES OR OEP.
 - BOULDERS SHALL BE PLACED WITHIN THE DEPARTMENT'S RIGHT-OF-WAY OR EASEMENT.
 - MAXIMUM 5' DROP BETWEEN WEIR ELEVATIONS
 - BANKFULL WIDTH DISTANCE IS MEASURED AT THE LOCATION OF THE PROPOSED WEIR.

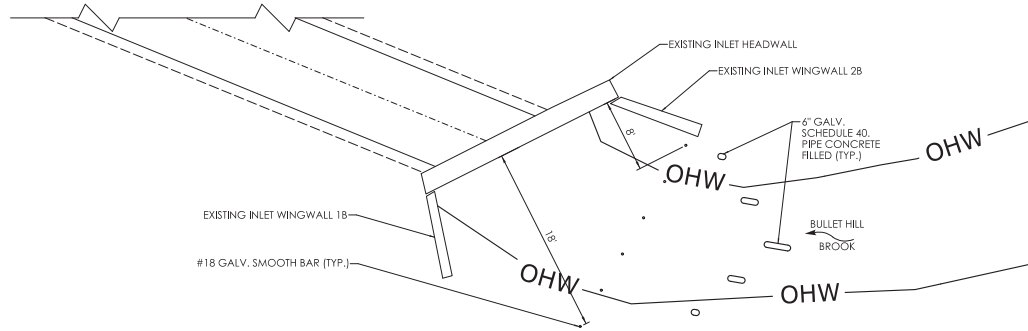


ENVIRONMENTAL PERMIT PLANS
PLAN DATE: **APRIL 08, 2025**

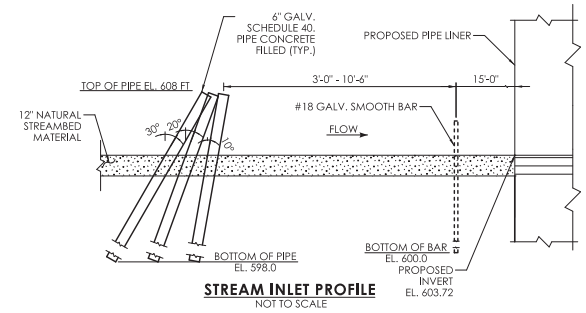
REV. DATE	DESIGNED BY: BXL	CHECKED BY: P.J.G.	PROJECT TITLE: REHABILITATION OF BRIDGE NO. 07043 - INTERSTATE 84 EB OVER BULLET HILL BROOK	TOWNSHIP: SOUTHURY	DRAWING TITLE: CULVERT SECTION AND ROCK WEIR DETAILS	PROJECT NO.: 0130-0187	DRAWING NO.: PMT-06
	SIGNATURE BLOCK: Weston & Sampson 712 Brook Street, Suite 103 North Andover, MA 01845 www.westonsampson.com	CONNECTICUT DEPARTMENT OF TRANSPORTATION CTDOT					



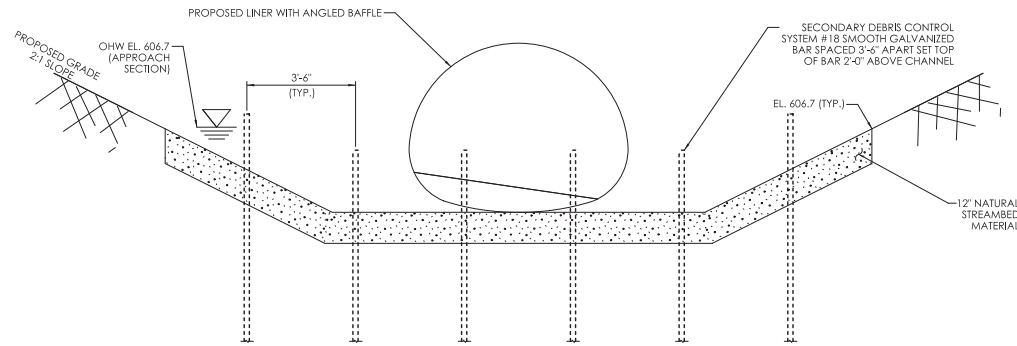
PRIMARY DEBRIS CONTROL STRUCTURE
SCALE: 1/2" = 1'-0"



DEBRIS CONTROL STRUCTURE PLAN
NOT TO SCALE



STREAM INLET PROFILE
NOT TO SCALE



SECONDARY DEBRIS CONTROL STRUCTURE INLET ELEVATION
SCALE: 1/2" = 1'-0"

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: **APRIL 08, 2025**

NO.	DATE	DESCRIPTION

SIGNATURE BLOCK

Weston & Sampson
712 Brook Street, Suite 103
P.O. Box 103
186-860, 215, 473
www.westonsampson.com

DESIGNER/DRAWER: BDL
CHECKED BY: P.J.G.

CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 07043 - INTERSTATE 84 EB OVER BULLET HILL BROOK

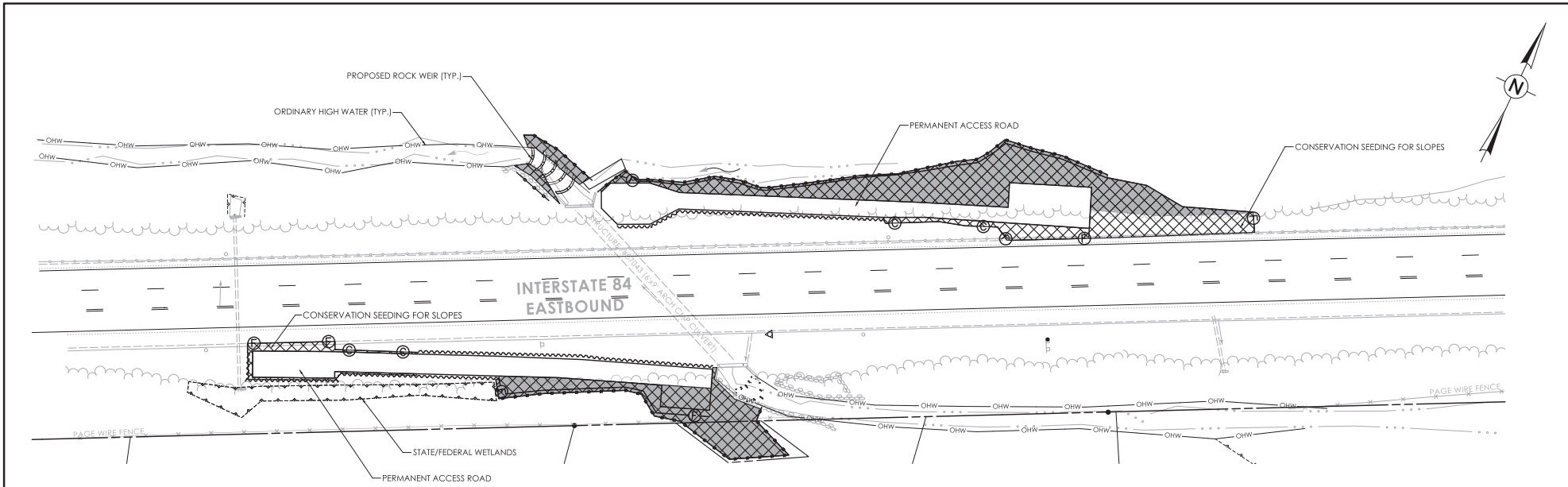
TOWNSHIP:
SOUTHURY

DRAWING TITLE:
DEBRIS CONTROL SYSTEM

PROJECT NO.:
0130-0187

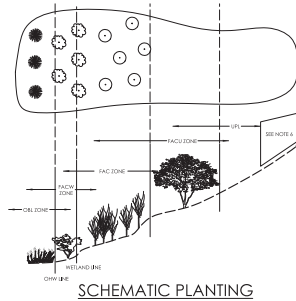
DRAWING NO.:
PMT-07

SHEET NO.:



NOTES

1. THE PLANTINGS ON THIS SHEET ARE FOR ENVIRONMENTAL PERMITTING. ANY SUBSTITUTIONS TO THE PERMIT PLANTINGS SHALL BE COORDINATED WITH THE DEPARTMENT'S OFFICE OF ENVIRONMENTAL PLANNING (OEP).
2. PROPOSED PLANTINGS TO BE FIELD LOCATED BY CTDOT OEP OR THEIR DESIGNATED REPRESENTATIVE.
3. WOOD CHIP MULCH SHALL NOT BE PLACED IN THE WETLAND AREA.
4. DISTURBED AREAS BELOW THE WETLAND LIMIT SHALL BE SEEDED WITH WETLAND GRASS ESTABLISHMENT. DISTURBED AREAS ABOVE THE WETLAND LIMIT SHALL BE SEEDED WITH CONSERVATION SEEDING FOR SLOPES. OR OTHER SEED MIX AS SPECIFIED. ALL DISTURBED AREAS SHALL BE RESTORED.
5. ALL PLANT MATERIAL SHALL BE NURSERY GRADE STRAIGHT SPECIES, CONFORMING TO SECTION 3 OF THE AMERICAN STANDARDS FOR NURSERY STOCK. NO VARIETIES OR CULTIVARS WILL BE ACCEPTED. CTDOT OEP SHALL REVIEW AND APPROVE PROPOSED PLANTINGS.
6. NO PLANTINGS TO BE PLACED IN MOW AREA.
7. AREA TO BE TREATED FOR INVASIVES AND PROPERLY PREPARED FOR FINAL PLANTING, SEEDING, AND RESTORATION.



LEGEND

- CONTROL AND REMOVAL OF INVASIVE VEGETATION (SEE NOTE 7)
- AREA TO BE RESTORED WITH PLANTINGS
TOTAL PLANTS = 134
TOTAL PLANTING AREA = 9,190 S.F.
- OHW - ORDINARY HIGH WATER
- SEDIMENTATION CONTROL SYSTEM
- STATE/FEDERAL WETLANDS

PERMIT PLANT LIST

BOTANICAL NAME	COMMON NAME	SIZE	QTY.	SPACING	WETLAND INDICATOR
<i>Lindera benzoin</i>	COMMON SPICEBUSH	2'-3" HT. B.B.	30	FIELD LOCATED	FACW
<i>Clethra alnifolia</i>	SUMMERSWEET	3'-4" HT. B.B.	30	FIELD LOCATED	FAC
<i>Cornus amomum</i>	SILKY DOGWOOD	3'-4" HT. B.B.	20	FIELD LOCATED	FACW
<i>Acer rubrum</i>	RED MAPLE	2'-2 1/2" CAL. B.B.	15	FIELD LOCATED	FAC
<i>Alnus incana</i>	SPECKLED ALDER	4'-5" HT. B.B.	15	FIELD LOCATED	FACW
<i>Asclepias tuberosa</i>	BUTTERFLY MILKWEED	2" PLUG, GROUPS OF 3	24	FIELD LOCATED	NI
TOTAL			134		

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: **MARCH 17, 2025**

REVISIONS	DATE	BY	DESCRIPTION

SIGNATURE BLOCK

DESIGNER/DRAWER: RGR CHECKED BY: DMG

SCALE: 1" = 50'

CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: **REHABILITATION OF BRIDGE NO. 07043 - I-84 EB OVER BULLET HILL BROOK**

TOWNSHIP: **SOUTHURY**

DRAWING TITLE: **PERMIT PLANTING PLAN**

PROJECT NO.: **0130-0187**

DRAWING NO.: **PMT-08**

SHEET NO.:



LWRD Work Commencement Form

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

Licensee Name: _____

Municipality in which the project is occurring: _____

DEEP License No(s): _____

CONTRACTOR(s):

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

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

3 Name: _____
Address: _____

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

EXPECTED DATE OF COMMENCEMENT OF WORK: _____

EXPECTED DATE OF COMPLETION OF WORK: _____

LICENSEE: _____
(Signature) (Date)



Compliance Certification Form

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

1. Licensee Name: <u>Connecticut Department of Transportation</u>	
DEEP License Number(s): <u>202504143</u>	
Municipality in which project is occurring: <u>Southbury</u>	
2. Check one:	
(a) <input type="checkbox"/> "I certify that the final site conditions and / or structures are in general conformance with the approved site plans". Identify and describe any deviations and attach to this form.	
(b) <input type="checkbox"/> "The final site conditions and / or structures are not in general conformance with the approved site plans. The enclosed "as-built" plans note the modifications".	
3. "I understand that any false statement in this certification is punishable as a criminal offence under section 53a-157b of the General Statutes and under any other applicable law."	
_____ Signature of Licensee	_____ Date
_____ Name of Licensee (print or type)	
_____ Signature of CT-Licensed Design Professional	_____ Date
_____ Name of CT-Licensed Design Professional (print or type)	
_____ Professional License Number (if applicable)	Affix Stamp Here
<ul style="list-style-type: none"> As-built plans shall include: elevations or tidal datums, as applicable, and structures, including any proposed elevation views and cross sections included in the approved license plans. Such as-built plans shall be the original ones and be signed and sealed by an engineer, surveyor or architect, as applicable, who is licensed in the State of Connecticut. The Licensee will be notified by staff of the Land and Water Resources Division (LWRD) if further compliance review is necessary. Lack of response by LWRD staff does not imply compliance. <p>Submit this completed form to : DEEP.LWRDRegulatory@ct.gov or Regulatory Section Department of Energy and Environmental Protection Land & Water Resources Division 79 Elm Street Hartford, CT 06106-5127</p>	