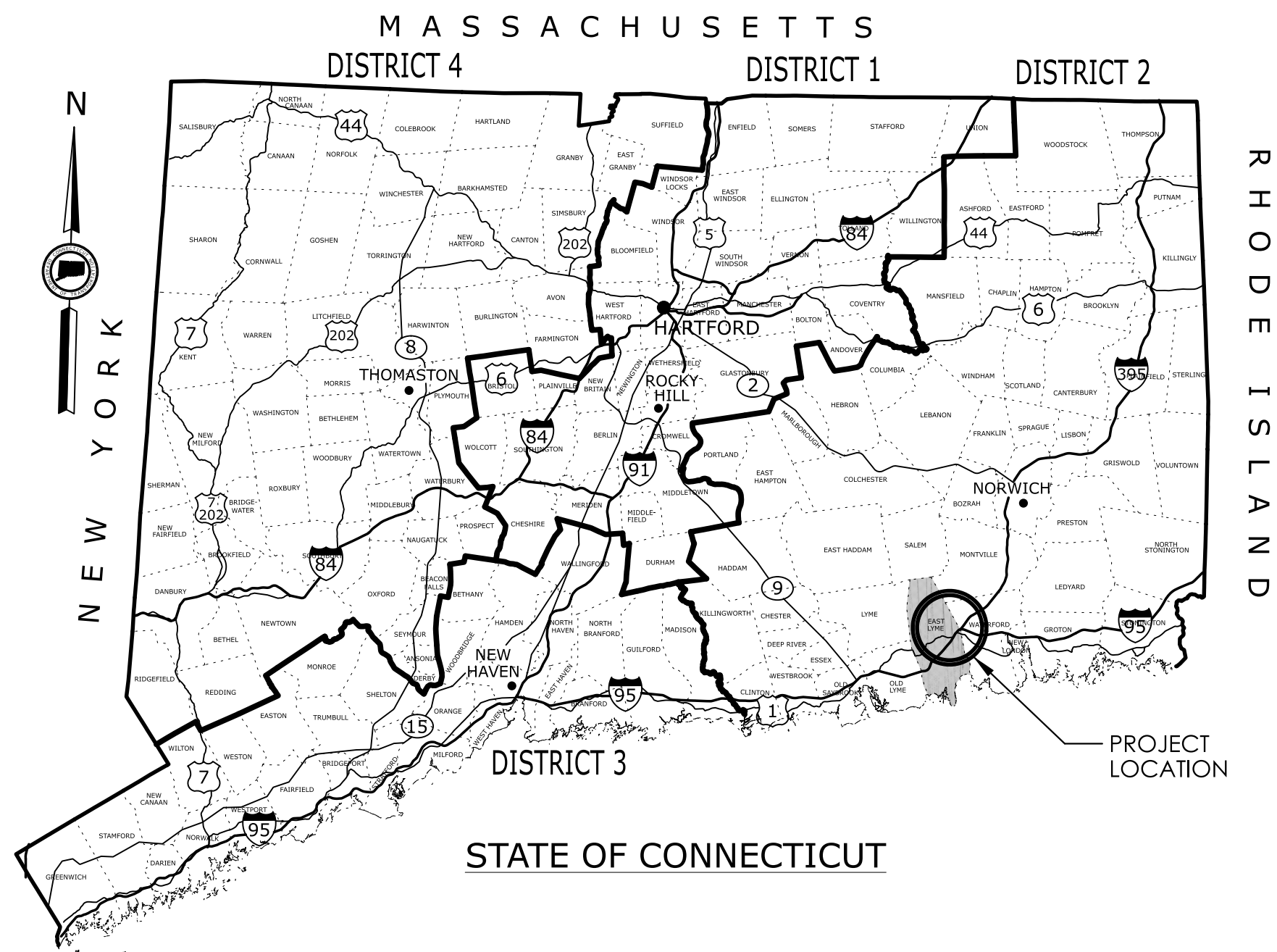
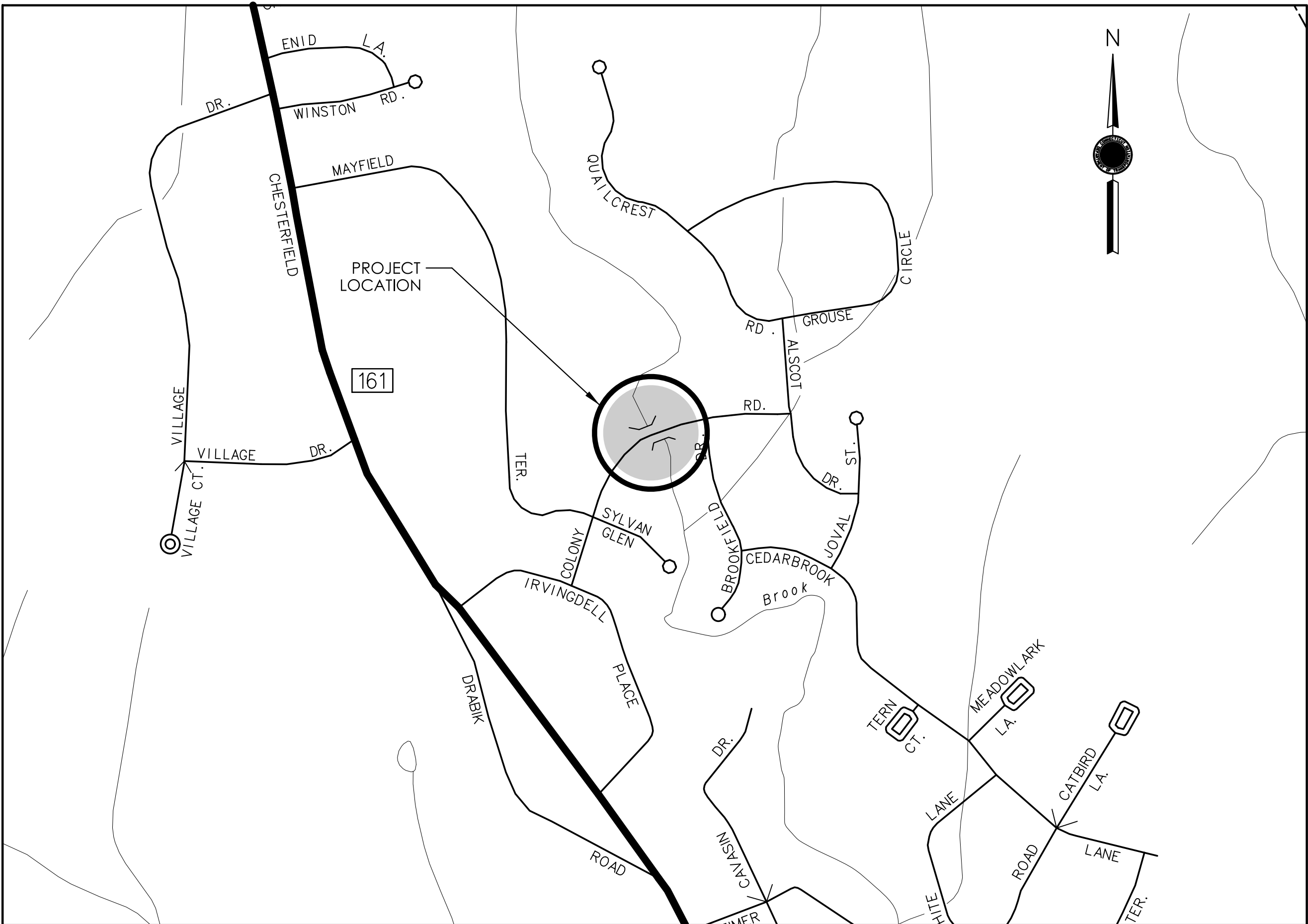




ENVIRONMENTAL PERMIT PLANS
STATE PROJECT NO. 0044-0161
REPLACEMENT OF BRIDGE NO. 05623
IN THE TOWN OF EAST LYME



LOCATION PLAN
SCALE: 1" = 500'

GENERAL NOTES:

- THESE PLANS ARE NOT FOR CONSTRUCTION AND ARE INTENDED ONLY FOR ENVIRONMENTAL PERMITTING PURPOSES. THESE PLANS HOLD AUTHORITY FOR ALL ACTIVITIES CONCERNING THE REGULATED AREA. FOR DETAILED PLANIMETRIC INFORMATION AND PAYMENT, REFER TO THE APPLICABLE CONTRACT DOCUMENTS.
- FOR A DESCRIPTION OF THE WATERCOURSES, WETLANDS AND WETLAND SOILS SEE RELEVANT SECTIONS OF THE PERMIT APPLICATION.
- 400 FOOT GRID BASED ON CONNECTICUT COORDINATE SYSTEM NAD83. VERTICAL DATUM BASED ON NAVD88
- ALL CONSTRUCTION ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 819 DATED 2024 SECTION 1.10 AND WILL ALSO FOLLOW BEST MANAGEMENT PRACTICES (BMPs) AND SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH THE 2024 CONNECTICUT SOIL AND EROSION CONTROL GUIDELINES AND 2024 STORMWATER MANUAL GUIDELINES.

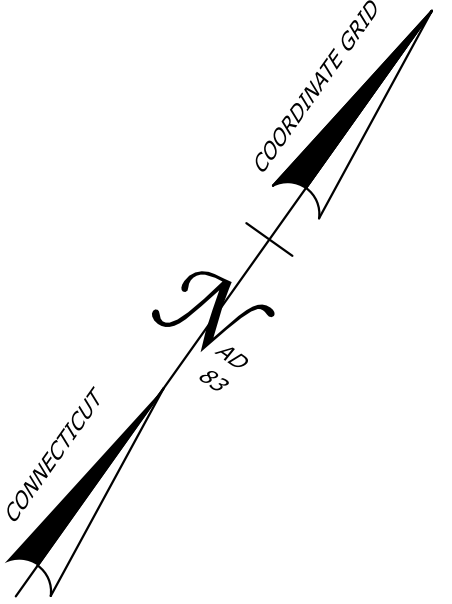
LIST OF DRAWINGS	
DRAWING NO.	DRAWING TITLE
PMT-01	TITLE SHEET
PMT-02	GENERAL SITE PLAN
PMT-03	WETLAND/WATERCOURSE IMPACT PLAN
PMT-04	100-YEAR FLOOD IMPACT PLAN
PMT-05	BRIDGE PLAN AND ELEVATION
PMT-06 & PMT-07	STAGING AND WATER HANDLING PLANS



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: SEPTEMBER 29, 2025

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:		 CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE:	TOWN(S):	DRAWING TITLE:	PROJECT NO.:	DRAWING NO.:
DESIGNER/DRAFTER: L. BUCHELI CHECKED BY: S. PLUDE			REPLACEMENT OF BRIDGE NO. 05623 COLONY ROAD OVER LATIMER BROOK	EAST LYME	ENVIRONMENTAL PERMIT PLAN	0044-0161	PMT-01 SHEET NO.: 01



1. ONCE A LOCATION(S) FOR STAGING HAS BEEN IDENTIFIED, THE SITE(S) SHALL BE REVIEWED BY THE PROJECT HERPETOLOGIST TO DETERMINE IF SWEEPS ARE NEEDED FOR ANY OF THE TARGET SPECIES.
2. CONDUCT IN-STREAM AND BANK SWEEPS FOR TURTLES ALONG LATIMER BROOK SOUTH OF COLONY ROAD PRIOR TO ANY WORK IN THIS AREA (APRIL 1- MAY 30). THIS IS ESPECIALLY IMPORTANT DURING THE PERIOD PRIOR TO THE INSTALLATION OF THE EXCLUSIONARY FENCING (APRIL 1- 15). SWEEPS SHOULD BE CONDUCTED BY A QUALIFIED HERPETOLOGIST WITH EXPERIENCE IN CONDUCTING SURVEYS FOR WOOD TURTLES. THE SWEEPS MUST OCCUR NO MORE THAN 24-HRS PRIOR TO ANY WORK. IF WOOD TURTLES ARE ENCOUNTERED, THE CONSULTING HERPETOLOGIST SHALL RELOCATE THEM TO APPROPRIATE HABITAT OUTSIDE OF THE PROJECT AREA ALONG LATIMER BROOK.
3. INSTALLATION OF THE EXCLUSIONARY FENCING MUST BE COMPLETED BY APRIL 15. IF INSTALLATION IS DELAYED, ADDITIONAL STEPS TO SURVEY FOR AND RELOCATE ANY INDIVIDUALS WITHIN THE CONSTRUCTION ZONE MAY BE REQUIRED.
4. EXCLUSIONARY FENCING AT LEAST 20-IN ABOVE GROUND LEVEL SHALL BE INSTALLED AT THE LIMITS OF DISTURBANCE. THE FENCING SHOULD BE STAKED (12-IN INTO THE GROUND) AT APPROPRIATE DISTANCES TO MAINTAIN RIGIDITY (6-10 FT INTERVALS). AND THE FENCING BURIED AT LEAST 4-IN INTO THE GROUND AND BACK-FILLED. STANDARD EROSION CONTROL/SILT FENCING (GEOTEXTILE) CAN BE USED. NYLON MESH FENCING IS NOT PERMITTED. THE LIMIT OF FENCING SHOULD BE ANGLED BACK FROM THE ROAD TO DIVERT ANIMALS BACK INTO UNDISTURBED HABITAT. INSTALLATION OF FENCE SHOULD BE COORDINATED WITH THE PROJECT HERPETOLOGIST TO DETERMINE THE BEST ANGLE AND PLACEMENT. A "J-HOOK" DESIGN WITH AN INTERIOR WIDTH OF NO MORE THAN 18-IN. AND RETURN LENGTH OF APPROXIMATELY 10-FT SHOULD BE USED.
5. THE EXCLUSIONARY FENCING MUST BE TIED IN TO THE COFFERDAM TO PREVENT TURTLES FROM ACCESSING THE WORK AREA IN THE RIVER FROM THE EMBANKMENTS. LOCATION AND LAYOUT OF THE FENCING WILL BE DETERMINED IN COORDINATION WITH THE PROJECT HERPETOLOGIST.
6. A FIELD MEETING SHOULD BE HELD TO PROVIDE INFORMATION ON WOOD TURTLES, INCLUDING IDENTIFICATION AND WHAT TO DO IF WOOD TURTLES ARE ENCOUNTERED. THE MEETING SHOULD BE CONDUCTED WITH A QUALIFIED HERPETOLOGIST.
7. CONDUCT REGULAR MONITORING OF THE EXCLUSIONARY FENCING, FOLLOWING HEAVY RAIN OR WIND EVENTS THE FENCING SHALL BE INSPECTED WITHIN 24-HRS AND ANY NECESSARY REPAIRS MADE.
8. CONDUCT SWEEPS OF AREAS TO BE CLEARED OR WHERE HEAVY MACHINERY WILL BE IN USE THROUGHOUT THE DURATION OF THE PROJECT. PRIOR TO CLEARING ANY AREAS, INCLUDING ANY TEMPORARY STAGING AREAS, A QUALIFIED HERPETOLOGIST SHOULD CONDUCT VISUAL SWEEPS TO CAPTURE AND RELOCATE ANY ANIMALS ENCOUNTERED. SWEEPS SHOULD BE CONDUCTED EACH MORNING IN ANY AREAS WHERE HEAVY MACHINERY WILL BE IN USE DURING THE PERIOD APRIL 1- OCTOBER 15.
9. RESTORE DISTURBED AREAS IN A MANNER THAT AVOIDS IMPACTS TO SURROUNDING HABITAT OR INDIVIDUAL ANIMALS.
10. REMOVE ALL EXCLUSIONARY FENCING ONCE AREAS OF DISTURBANCE ARE STABILIZED.

	EXISTING 100-YEAR FLOOD PLAIN (INTERPOLATED)
	FEMA FLOODWAY
	ORDINARY HIGH WATER (OHW)
	STATE/FEDERAL WETLANDS
	SEDIMENTATION CONTROL SYSTEM (SCS)
	SURVEYED EDGE OF WATER

PROCESSED AGGREGATE AT GUIDERAIL

1. SEDIMENTATION CONTROL SYSTEM TO BE PLACED AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. SEDIMENTATION CONTROL SYSTEM SHOWN IN FINAL CONDITION (APPROXIMATE LOCATION).
3. NO TRIMMING, CUTTING, OR REMOVAL OF TREES WITH A 3" DIAMETER AT BREAST HEIGHT (DBH) OR GREATER FROM APRIL 15 TO OCTOBER 31.

SIGNATURE BLOCK:	
DESIGNER/DRAFTER: L. BUCHELI	CHECKED BY: S. PLUDE



CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PROJECT TITLE:

**REPLACEMENT OF BRIDGE NO. 05623 COLONY ROAD
OVER LATIMER BROOK**

TOWN(S): **EAST LYME**

DRAWING TITLE:

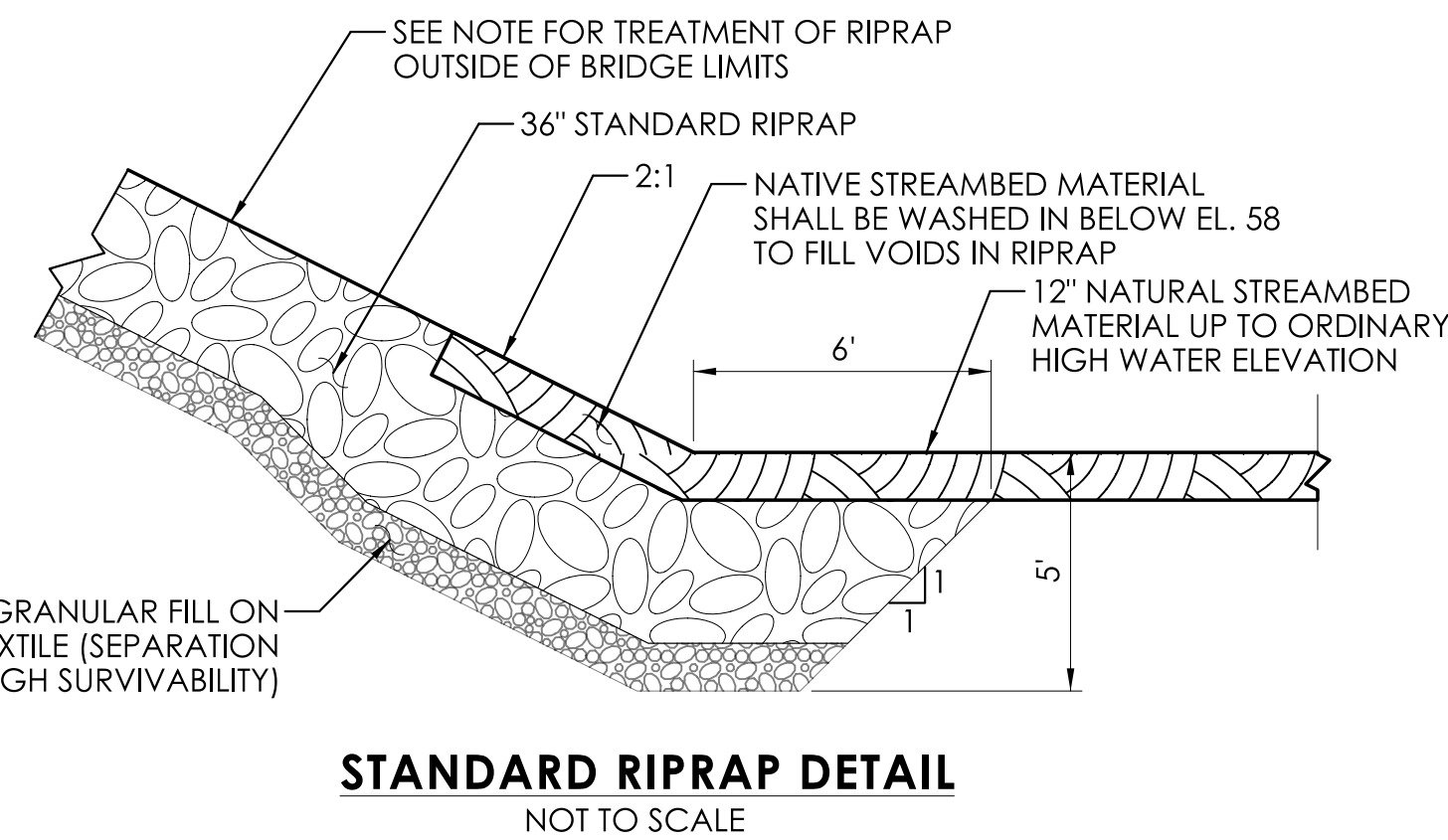
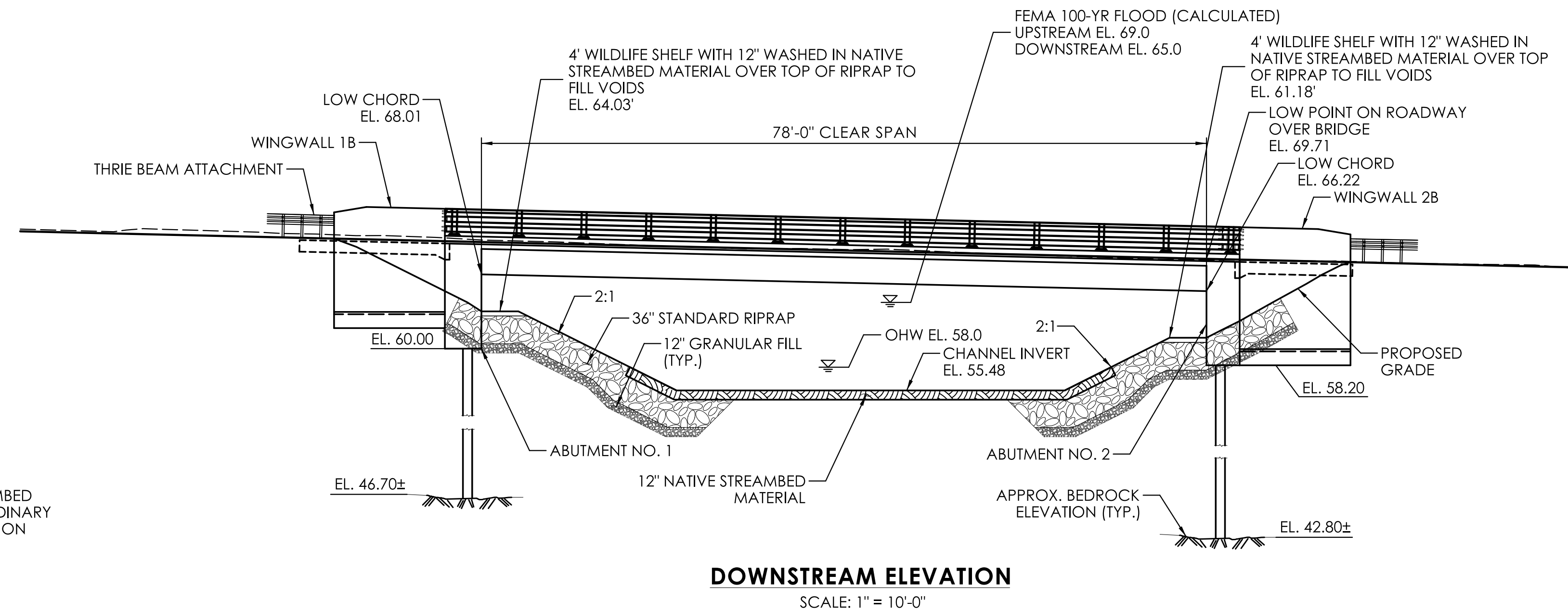
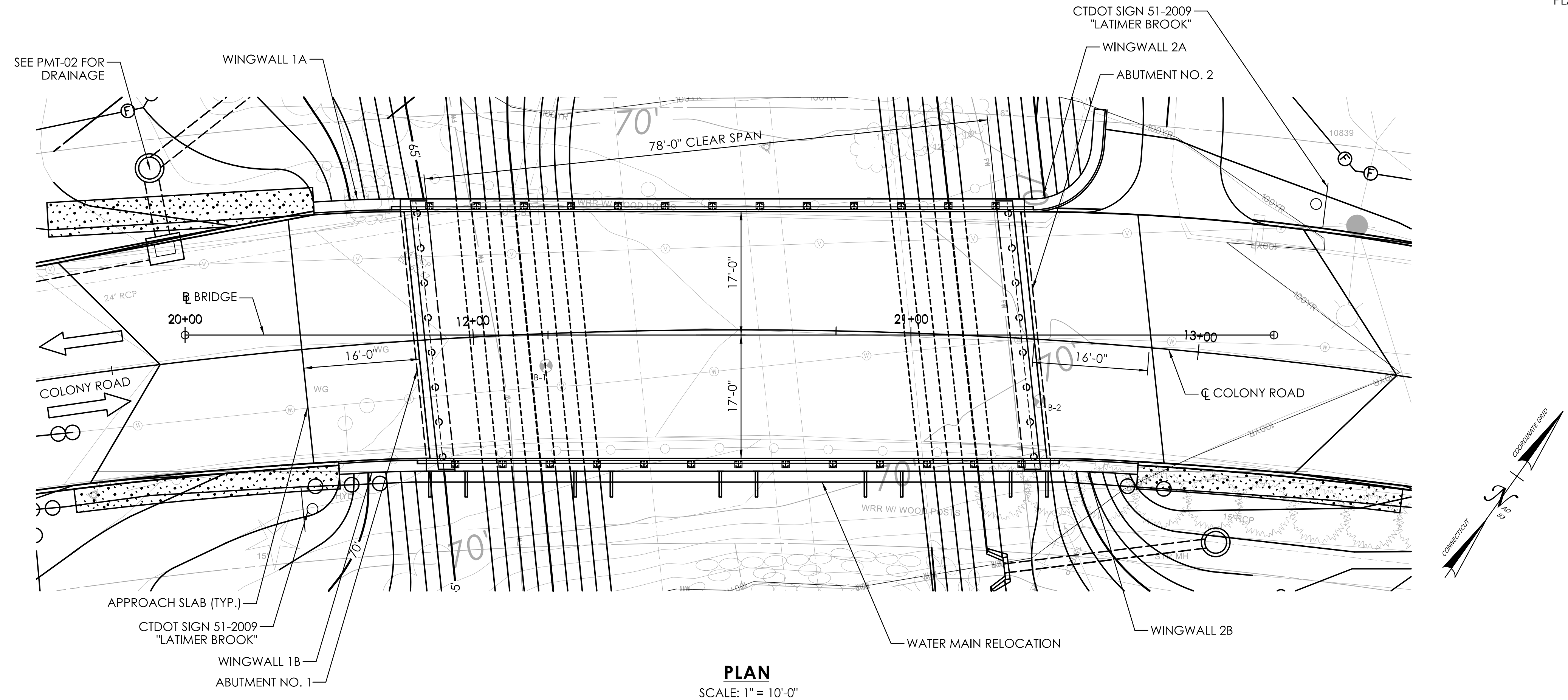
GENERAL SITE PLAN

PROJECT NO.:

0044-0161

DRAWING NO.:
PMT-02

SHEET NO.:
02



NOTE:

RIPRAP SHALL BE TOPPED WITH NATIVE STREAMBED MATERIAL BELOW THE ORDINARY HIGH WATER MARK (EL. 58.0). OUTSIDE OF THE BRIDGE AND ABOVE THE ORDINARY HIGH WATER MARK, THE VOIDS WITHIN THE RIPRAP SHALL BE FILLED WITH TOPSOIL AND SEEDED WITH CONSERVATION SEEDING FOR SLOPES

OPENNESS RATIO (OR):
OR = OPEN AREA / STRUCTURE LENGTH
OR = 703 S.F. / 37.5 FT = 18.7 FT
18.7 FT > 0.82 FT. (RECOMMENDED MINIMUM)

BANKFULL WIDTH (BFW):
BFW = 45.0 FT
1.2 X BFW = 54.0 FT
54.0 FT < 78.0 FT PROPOSED CLEAR SPAN

HYDRAULIC DATA	
DRAINAGE AREA	16.2 SQMI
DESIGN FREQUENCY	100-YEAR
DESIGN DISCHARGE	1930-CFS
AVERAGE DAILY FLOW ELEVATION	57.0 FT
UPSTREAM DESIGN WATER SURFACE ELEVATION	63.3 FT
DOWNSTREAM DESIGN WATER SURFACE ELEVATION	61.8 FT
MAXIMUM SCOUR ELEVATION	3.4 FT
FREQUENCY	500-YEAR
DISCHARGE	2820-CFS
WORST CASE SUBSTRUCTURE UNIT	LEFT ABUTMENT
AVERAGE DAILY FLOW	29-CFS
AVERAGE SPRING FLOW	57-CFS

NATIVE STREAMBED MATERIAL NOTES:

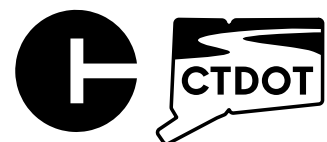
1. NATIVE STREAMBED MATERIAL EXCAVATED DURING THE INSTALLATION OF THE STRUCTURE SHALL BE STOCKPILED AND THEN REPLACED TO THE DEPTH SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THE SPECIAL PROVISION "EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL".
2. ADDITIONAL STREAMBED MATERIAL SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION "SUPPLEMENTAL STREAMBED MATERIAL".
3. THE STOCKPILE SHALL BE LOCATED OUTSIDE OF THE WETLAND LIMITS AND PROTECTED WITH SEDIMENTATION CONTROL SYSTEM.
4. THE WASHING IN OF SUPPLEMENTAL STREAMBED MATERIAL AS NECESSARY FOR FILLING IN THE VOIDS BETWEEN THE RIPRAP SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION "WASHING-IN SUPPLEMENTAL STREAMBED MATERIAL."

[illegible]

SIGNATURE BLOCK:

DESIGNER/DRAFTER: L. BUCHELI

CHECKED BY: S. PLUDE



CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PROJECT TITLE:

REPLACEMENT OF BRIDGE NO. 05623 COLONY ROAD OVER LATIMER BROOK

TOWN(S):

EAST LYME

DRAWING TITLE:

BRIDGE PLAN AND ELEVATION

PROJECT NO.:

0044-0161

DRAWING NO.:

PMT-05

SHEET NO.: 05

SUGGESTED CONSTRUCTION SEQUENCE:

STAGE 1

1. INSTALL DETOUR SIGNAGE AND CLOSE COLONY ROAD TO TRAFFIC.
2. INSTALL SEDIMENTATION CONTROL SYSTEM.
3. PERFORM CLEARING AND GRUBBING TO THE LIMITS SHOWN.
4. INSTALL PROPOSED FIRE HYDRANT.
5. INSTALL TEMPORARY UTILITY BRIDGE AND TEMPORARY WATER MAIN AS SHOWN. TEMPORARY BRIDGE LOW CHORD MUST BE A MINIMUM OF 1 FOOT ABOVE THE TOP OF TEMPORARY COFFERDAM ELEVATION (I.E. MIN TEMPORARY UTILITY BRIDGE LOW CHORD ELEVATION = 61.5 FT).

STAGE 2

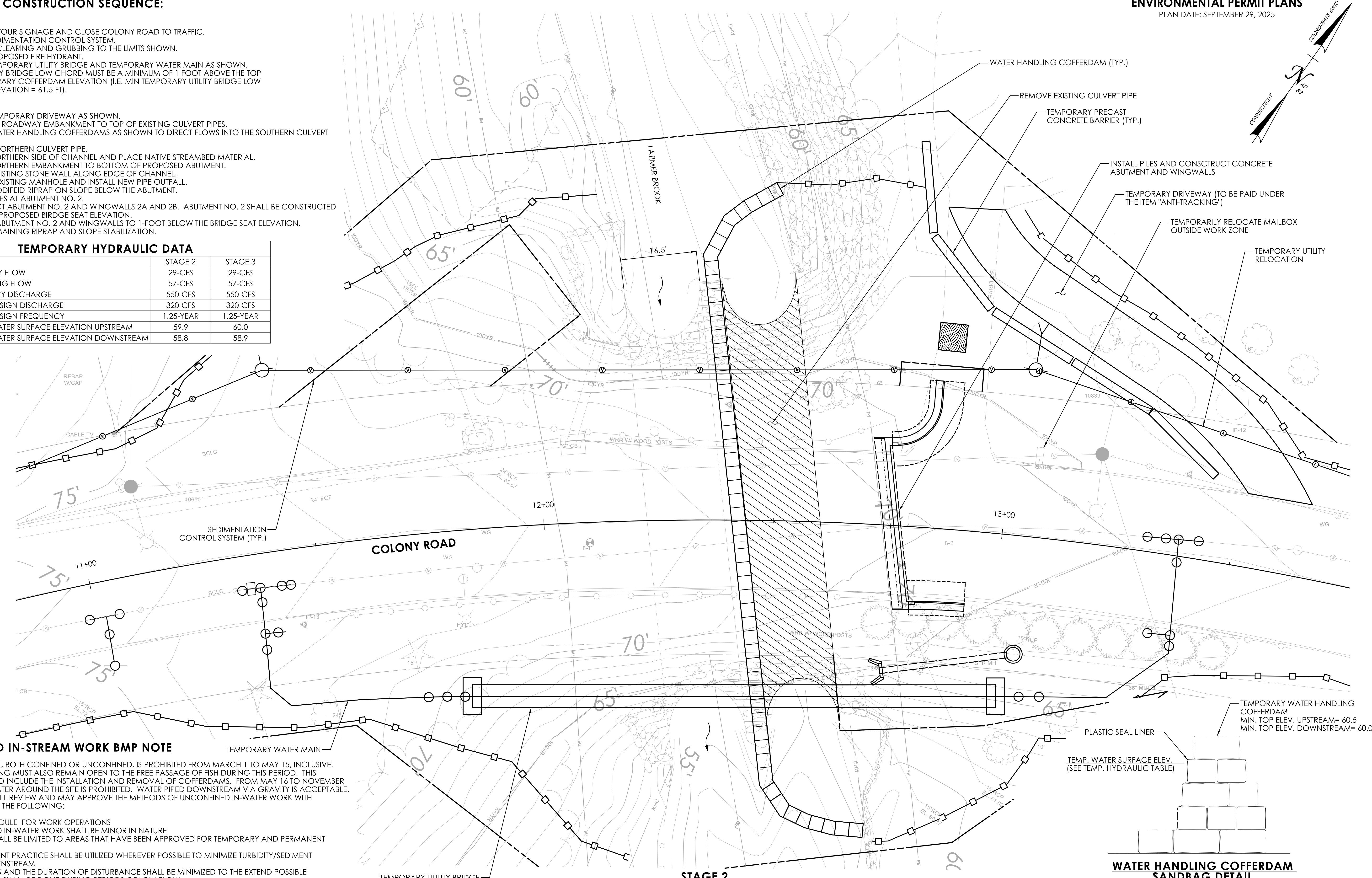
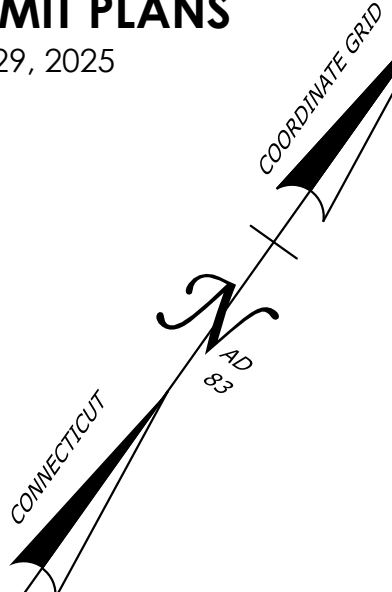
1. INSTALL TEMPORARY DRIVEWAY AS SHOWN.
2. EXCAVATE ROADWAY EMBANKMENT TO TOP OF EXISTING CULVERT PIPES.
3. INSTALL WATER HANDLING COFFERDAMS AS SHOWN TO DIRECT FLOWS INTO THE SOUTHERN CULVERT BARREL.
4. REMOVE NORTHERN CULVERT PIPE.
5. GRADE NORTHERN SIDE OF CHANNEL AND PLACE NATIVE STREAMBED MATERIAL.
6. GRADE NORTHERN EMBANKMENT TO BOTTOM OF PROPOSED ABUTMENT.
7. REBUILD EXISTING STONE WALL ALONG EDGE OF CHANNEL.
8. REPLACE EXISTING MANHOLE AND INSTALL NEW PIPE OUTFALL.
9. PLACE MODIFIED RIPRAP ON SLOPE BELOW THE ABUTMENT.
10. INSTALL PILES AT ABUTMENT NO. 2.
11. CONSTRUCT ABUTMENT NO. 2 AND WINGWALLS 2A AND 2B. ABUTMENT NO. 2 SHALL BE CONSTRUCTED UP TO THE PROPOSED BRIDGE SEAT ELEVATION.
12. BACKFILL ABUTMENT NO. 2 AND WINGWALLS TO 1-FOOT BELOW THE BRIDGE SEAT ELEVATION.
13. PLACE REMAINING RIPRAP AND SLOPE STABILIZATION.

TEMPORARY HYDRAULIC DATA

	STAGE 2	STAGE 3
AVERAGE DAILY FLOW	29-CFS	29-CFS
AVERAGE SPRING FLOW	57-CFS	57-CFS
2-YR FREQUENCY DISCHARGE	550-CFS	550-CFS
TEMPORARY DESIGN DISCHARGE	320-CFS	320-CFS
TEMPORARY DESIGN FREQUENCY	1.25-YEAR	1.25-YEAR
TEMPORARY WATER SURFACE ELEVATION UPSTREAM	59.9	60.0
TEMPORARY WATER SURFACE ELEVATION DOWNSTREAM	58.8	58.9

ENVIRONMENTAL PERMIT PLANS

PLAN DATE: SEPTEMBER 29, 2025



UNCONFINED IN-STREAM WORK BMP NOTE

ALL IN-WATER WORK, BOTH CONFINED OR UNCONFINED, IS PROHIBITED FROM MARCH 1 TO MAY 15, INCLUSIVE. THE STREAM CROSSING MUST ALSO REMAIN OPEN TO THE FREE PASSAGE OF FISH DURING THIS PERIOD. THIS PROHIBITION SHOULD INCLUDE THE INSTALLATION AND REMOVAL OF COFFERDAMS. FROM MAY 16 TO NOVEMBER 30, PUMPING OF WATER AROUND THE SITE IS PROHIBITED. WATER PIPED DOWNSTREAM VIA GRAVITY IS ACCEPTABLE. THE DEPARTMENT WILL REVIEW AND MAY APPROVE THE METHODS 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 WHEREVER POSSIBLE TO MINIMIZE TURBIDITY/SEDIMENT TRANSPORT DOWNSTREAM
- DISTURBED AREAS AND THE DURATION OF DISTURBANCE SHALL BE MINIMIZED TO THE EXTEND POSSIBLE
- IN-STREAM WORK SHALL BE DONE DURING PERIODS OF LOW FLOW
- CONTACT CTDEEP FISHERIES PRIOR TO COMMENCING CONSTRUCTION

WATER HANDLING COFFERDAM
SANDBAG DETAIL

NOT TO SCALE

TEMPORARY WATER HANDLING COFFERDAM
MIN. TOP ELEV. UPSTREAM= 60.5
MIN. TOP ELEV. DOWNSTREAM= 60.0

TEMP. WATER SURFACE ELEV.
(SEE TEMP. HYDRAULIC TABLE)

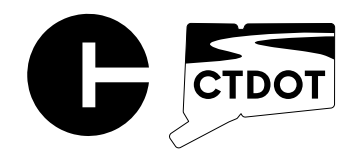
PLASTIC SEAL LINER

STAGE 2

SCALE: 1" = 10'-0"

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:	
DESIGNER/DRAFTER:	CHECKED BY:



CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PROJECT TITLE:
REPLACEMENT OF BRIDGE NO. 05623 COLONY ROAD OVER LATIMER BROOK

TOWN(S):
EAST LYME

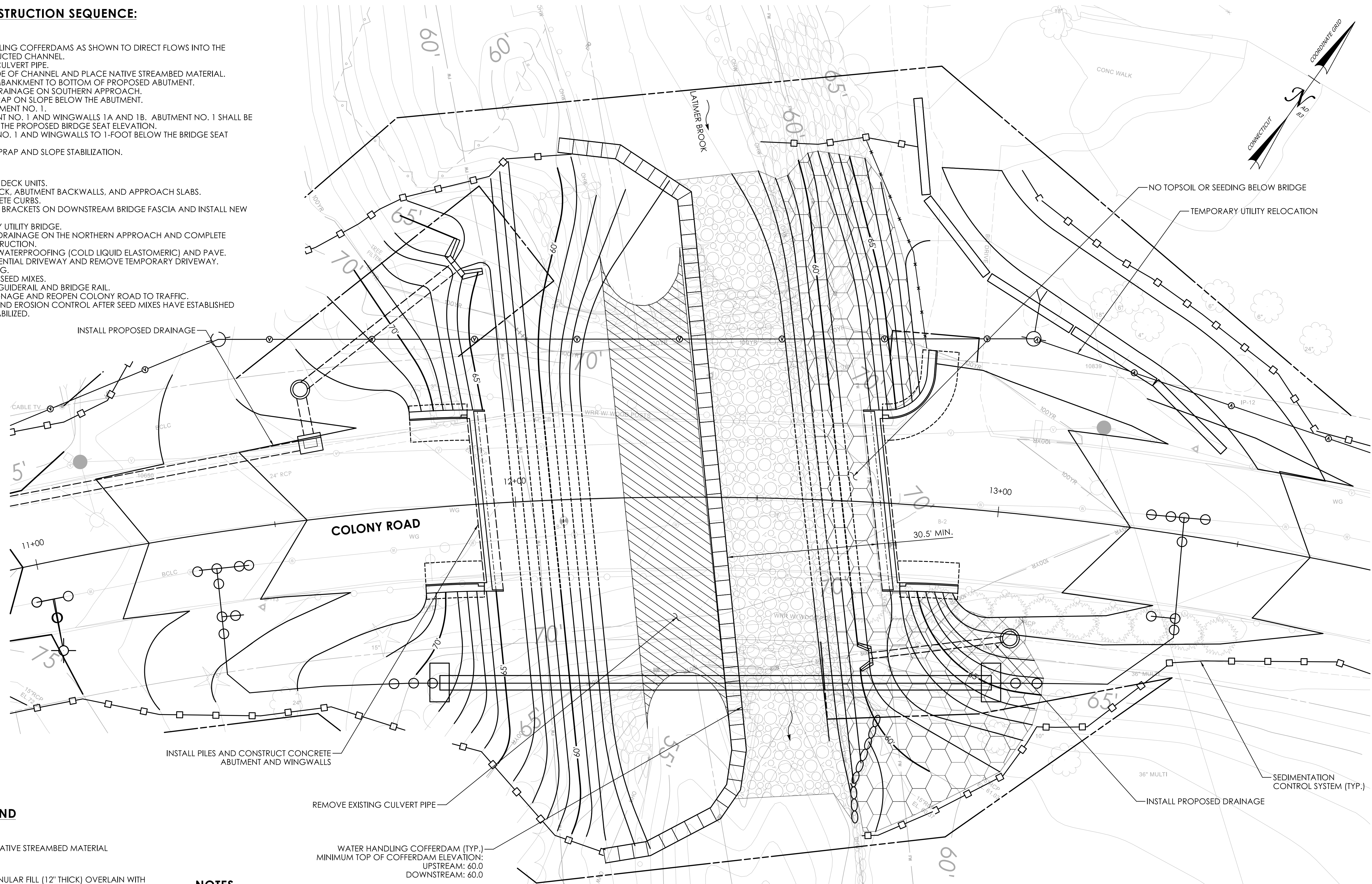
DRAWING TITLE:
STAGING AND WATER HANDLING PLAN

PROJECT NO.:
0044-0161
DRAWING NO.:
PMT-06
SHEET NO.:
06

SUGGESTED CONSTRUCTION SEQUENCE:

- STAGE 3**
1. INSTALL WATER HANDLING COFFERDAMS AS SHOWN TO DIRECT FLOWS INTO THE PREVIOUSLY CONSTRUCTED CHANNEL.
 2. REMOVE SOUTHERN CULVERT PIPE.
 3. GRADE SOUTHERN SIDE OF CHANNEL AND PLACE NATIVE STREAMBED MATERIAL.
 4. GRADE SOUTHERN EMBANKMENT TO BOTTOM OF PROPOSED ABUTMENT.
 5. INSTALL PROPOSED DRAINAGE ON SOUTHERN APPROACH.
 6. PLACE MODIFIED RIPRAP ON SLOPE BELOW THE ABUTMENT.
 7. INSTALL PILES AT ABUTMENT NO. 1.
 8. CONSTRUCT ABUTMENT NO. 1 AND WINGWALLS 1A AND 1B. ABUTMENT NO. 1 SHALL BE CONSTRUCTED UP TO THE PROPOSED BIRDGE SEAT ELEVATION.
 9. BACKFILL ABUTMENT NO. 1 AND WINGWALLS TO 1-FOOT BELOW THE BRIDGE SEAT ELEVATION.
 10. PLACE REMAINING RIPRAP AND SLOPE STABILIZATION.

- STAGE 4**
1. INSTALL PRESTRESSED DECK UNITS.
 2. POUR CONCRETE DECK, ABUTMENT BACKWALLS, AND APPROACH SLABS.
 3. CONSTRUCT CONCRETE CURBS.
 4. INSTALL WATER MAIN BRACKETS ON DOWNSTREAM BRIDGE FASCIA AND INSTALL NEW WATER MAIN.
 5. REMOVE TEMPORARY UTILITY BRIDGE.
 6. INSTALL REMAINING DRAINAGE ON THE NORTHERN APPROACH AND COMPLETE ROADWAY RECONSTRUCTION.
 7. INSTALL MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC) AND PAVE.
 8. RECONSTRUCT RESIDENTIAL DRIVEWAY AND REMOVE TEMPORARY DRIVEWAY.
 9. FINALIZE SITE GRADING.
 10. PLACE TOPSOIL AND SEED MIXES.
 11. INSTALL APPROACH GUIDERAIL AND BRIDGE RAIL.
 12. REMOVE DETOUR SIGNAGE AND REOPEN COLONY ROAD TO TRAFFIC.
 13. REMOVE SEDIMENT AND EROSION CONTROL AFTER SEED MIXES HAVE ESTABLISHED AND THE SITE HAS STABILIZED.



LEGEND

- 12" NATIVE STREAMBED MATERIAL
- GRANULAR FILL (12" THICK) OVERLAIN WITH STANDARD RIPRAP (36" THICK) WITH TOPSOIL AND CONSERVATION SEEDING FOR SLOPES
- TOPSOIL, EROSION CONTROL MATTING & CONSERVATION SEEDING FOR SLOPES

NOTES

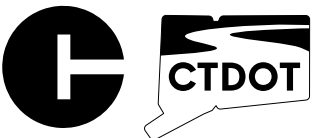
1. 12" NATIVE STREAMBED MATERIAL SHALL BE PLACED OVER THE RIPRAP UP TO ORDINARY HIGH WATER (EL. 58.0). SEE DETAIL ON SHEET PMT-05.
2. 12" NATIVE STREAMBED MATERIAL SHALL BE WASHED IN OVER THE 4' WILDLIFE SHEL IN FRONT OF EACH ABUTMENT.
3. NO TOPSOIL OR SEEDING IS REQUIRED BELOW THE BRIDGE.

STAGE 3
SCALE: 1" = 10'-0"

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: SEPTEMBER 29, 2025

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:	
DESIGNER/DRAFTER:	CHECKED BY:



CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PROJECT TITLE:
**REPLACEMENT OF BRIDGE NO. 05623 COLONY ROAD
OVER LATIMER BROOK**

TOWN(S):
EAST LYME

DRAWING TITLE:
**STAGING AND WATER
HANDLING PLAN**

PROJECT NO.:
0044-0161

DRAWING NO.:
PMT-07
SHEET NO.:
07