



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

September 25, 2023

Regulatory Division
File Number: NAE-2022-02724

NH Dept. of Transportation
Attn: Andrew O'Sullivan
P.O. Box 483
Concord, NH 03302
Sent by email: Andrew.Osullivan@dot.nh.gov

Dear Mr. O'Sullivan:

The U.S. Army Corps of Engineers (USACE) has reviewed your application to permanently impact 21,131 square feet of tidal waters for the replacement of the Neil R. Underwood Bridge. This project is located in Hampton River/Hampton Harbor on NH RT 1A at Seabrook and Hampton, New Hampshire. The work is shown on the enclosed plans titled "State of New Hampshire Department of Transportation Wetland Permitting Plans Towns of Seabrook and Hampton", on 21 sheets, and dated "March 9, 2023, rev. June 21, 2023."

Based on the information that you provided to the New Hampshire Wetlands Bureau, we verify that this work is authorized under General Permit # 8 of the enclosed September 29, 2022 federal permits known as the New Hampshire General Permits (GPs). The GPs are also available at: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits>

Please review the enclosed GPs carefully, in particular the general conditions beginning on page 36, and ensure that you and all personnel performing work authorized by the GPs are fully aware of and comply with its terms and conditions. A copy of the GPs and this verification letter shall be available at the work site as required by General Condition 17. You must perform this work in compliance with the following special condition(s):

- 1: Compensatory mitigation shall consist of purchasing 0.485 credits from the State of New Hampshire Aquatic Resource Mitigation Fund (ARM FUND) for impacts to E1ULB and E2US2 resource areas in the Salmon Falls – Piscataqua Service Area. The permittee shall pay the State of New Hampshire Aquatic Resource Mitigation Fund the above credits for impacts associated with federally regulated resources. No discharge authorized by this permit may be conducted until the receipt of payment has been received from the New Hampshire Department of Environmental Services.
2. All dredge material will be placed in voids created from the removal of the bascule rest piers and will match local conditions and the placement of material shall not exceed the currently authorized depth of the Hampton Harbor Federal Navigation Project.
3. The permittee shall comply with the enclosed Memorandum of Agreement titled "Memorandum of Agreement Among New Hampshire Department of Transportation, Federal Highway Administration and the New Hampshire State Preservation Officer Regarding The Hampton Harbor Bridge Project, X-A001(026), 15904, in the Towns of Seabrook and Hampton,

NH", dated February 2, 2022. This is to avoid, minimize and/or mitigate for the adverse effect in Adverse Effect Memo, dated March 27, 2020, that the authorized work will cause at this historic property.

4. This Corps permit does not authorize you to take an endangered species, in particular the *Charadrius melodus* (Piping Plover). In order to legally take a listed species, you must have separate authorization under the ESA (e.g., an ESA Section 10 permit, or a BO under ESA Section 7 with "incidental take" provisions with which you must comply). The enclosed *USFWS* BO, dated August 13, 2021, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The *USFWS* is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

5. For compliance with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Stevens Act) Essential Fish Habitat (EFH), the following Conservations Recommendations will be adhered as a condition of this permit:

- a. Compensatory mitigation for unavoidable adverse effects to EFH and HAPC, including juvenile Atlantic cod, should be provided through the NH In-lieu Fee Program included in Special Condition 1 for the following impacts: i. Hard bottom (gravel, cobble, pebble; ~5,800 sf) and blue mussel (870 sf) habitat at the north and south ends of the bridge impacted by engineered stone (riprap) and ii. Shallow subtidal habitat (~16,500 sf) permanently impacted by improvement dredging.
- b. A time-of-year restriction (where in-water, including all dredging, trenching, and excavation work, is prohibited) for all turbidity producing activity is from March 16 - Nov. 14, to protect spawning winter flounder that migrate into sheltered areas of Hampton Harbor.

6. Your authorization under this Corps permit is conditional upon your implementation and compliance with all of the Project Design Criteria (PDC's), including justifications and/or special conditions contained in the enclosed Verification Form to NOAA's NMFW Protected Resources Division (GARFO PRD) on March 27, 2020 for all ESA-listed species, and concurred with by the FHWA GARFO NLAA Program on December 16, 2020.

7. You must complete and return the enclosed Work Start Notification Form to this office at least two weeks before the anticipated start date. You must complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work.

This authorization expires on September 29, 2027. You must commence or have under contract to commence the work authorized herein by September 29, 2027, and complete the work by September 29, 2028. If not, you must contact this office to determine the need for further authorization and we recommend you contact us *before* the work authorized herein expires. Please contact us immediately if you change the plans or construction methods for work within our jurisdiction as we must approve any changes before you undertake them. Performing work within our jurisdiction that is not specifically authorized by this determination or failing to comply with the special condition(s) provided above or all the terms and conditions of the GPs may subject you to the enforcement provisions of our regulations.

This authorization does not obviate the need to obtain other federal, state or local authorizations required by law, including those listed in the GPs. Applicants are responsible for applying for and obtaining any other approvals.

We continually strive to improve our customer service. To better serve you, we would appreciate your completing our Customer Service Survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey>.

Please contact Michael Hicks of my staff at (978) 318-8157 or michael.c.hicks@usace.army.mil if you have any questions.

Sincerely,



for Tammy R. Turley
Chief, Regulatory Division
US Army Corps of Engineers

Enclosures

cc:

Jamison S. Sikora, NH Division Environmental Program Manager, FHWA
Jamie.sikora@dot.gov

Jean Brochi, U.S. EPA, Region 1, Boston, MA; brochi.jean@epa.gov

Kaitlyn Shaw, NMFS, Gloucester, MA; kaitlyn.shaw@noaa.gov

Roosevelt Mesa, NMFS, Gloucester, MA; Roosevelt.mesa@noaa.gov

David Simmons, USFWS, New England Field Office, Concord, NH; david_simmons@fws.gov

Geno Marconi, Director of Ports and Harbors, NH G.Marconi@peasedev.org

Daniel A. Hageman, FHI Studio dhageman@fhistudio.com

Bureau of Ocean Energy Management, Mapping and Boundary Branch;
mapping.boundary.branch@boem.gov

Steve Pothier, Waterways Management Section, First Coast Guard District (dpw), Boston, MA;
steven.r.pothier@uscg.mil

Gary T. Croot, Bridge Management Specialist, USCG Gary.T.Croot@uscg.mil

Department of Defense Siting Clearinghouse, Attn: Steve Sample, 3400 Defense Pentagon,
Washington, DC, 20301; or osd.dod-siting-clearinghouse@mail.mil

Department of Commerce, NOAA; National Ocean Service, Nautical Data Branch; N/CS26,
Station 7331; 1315 East-West Highway; Silver Spring, MD 20910; or ocs.ndb@noaa.gov

Darlene Forst, NH DES; darlene.forst@des.nh.gov

Mary Ann Tilton, NHDES; maryann.tilton@des.nh.gov

Rumi Shrestha, NHDES; Rumi.Shrestha@des.nh.gov

Brandy Holmes, NHDES; Brandy.L.Holmes@des.nh.gov

Kendall L. Fioravante, NHDES; Kendall.L.Fioravante@des.nh.gov

Jennifer E. Reczek, P.E. Jennifer.E.Reczek@dot.nh.gov

Jay Diener, Seabrook-Hampton Estuaries Alliance/Town of Hampton Conservation
Commission. Vice Chair jdiener@shea4nh.org

Debra Wrobel, Town of Hampton Conservation Commission, Chair
Conservehampton@gmail.com

Mike Collin, Seabrook Conservation Commission, Chairman Jwalker@seabrooknh.org

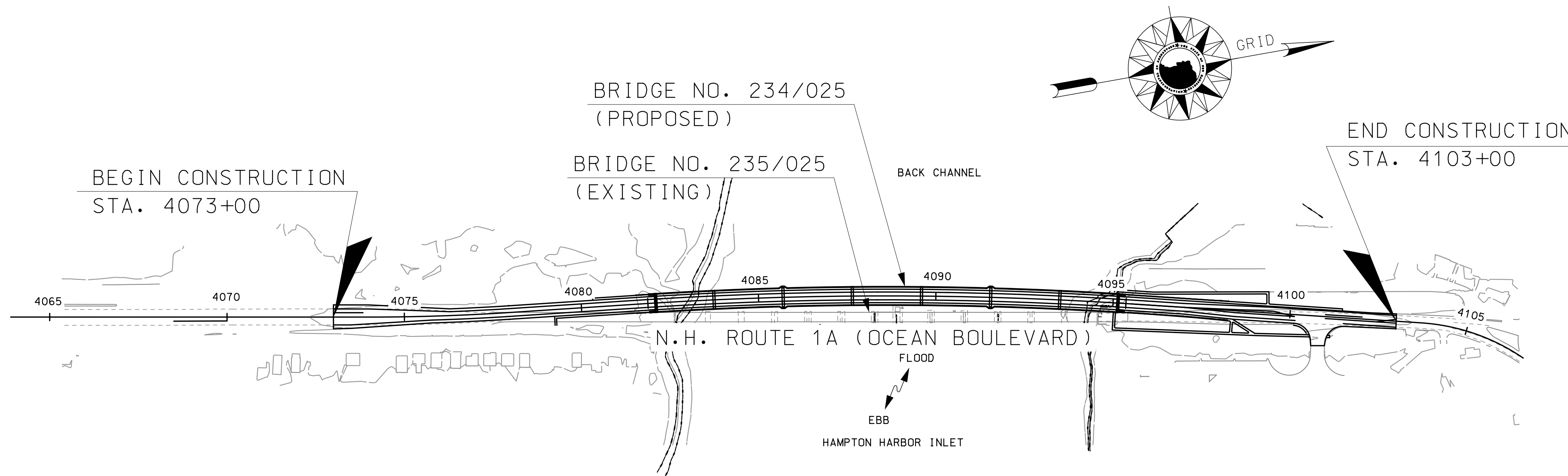
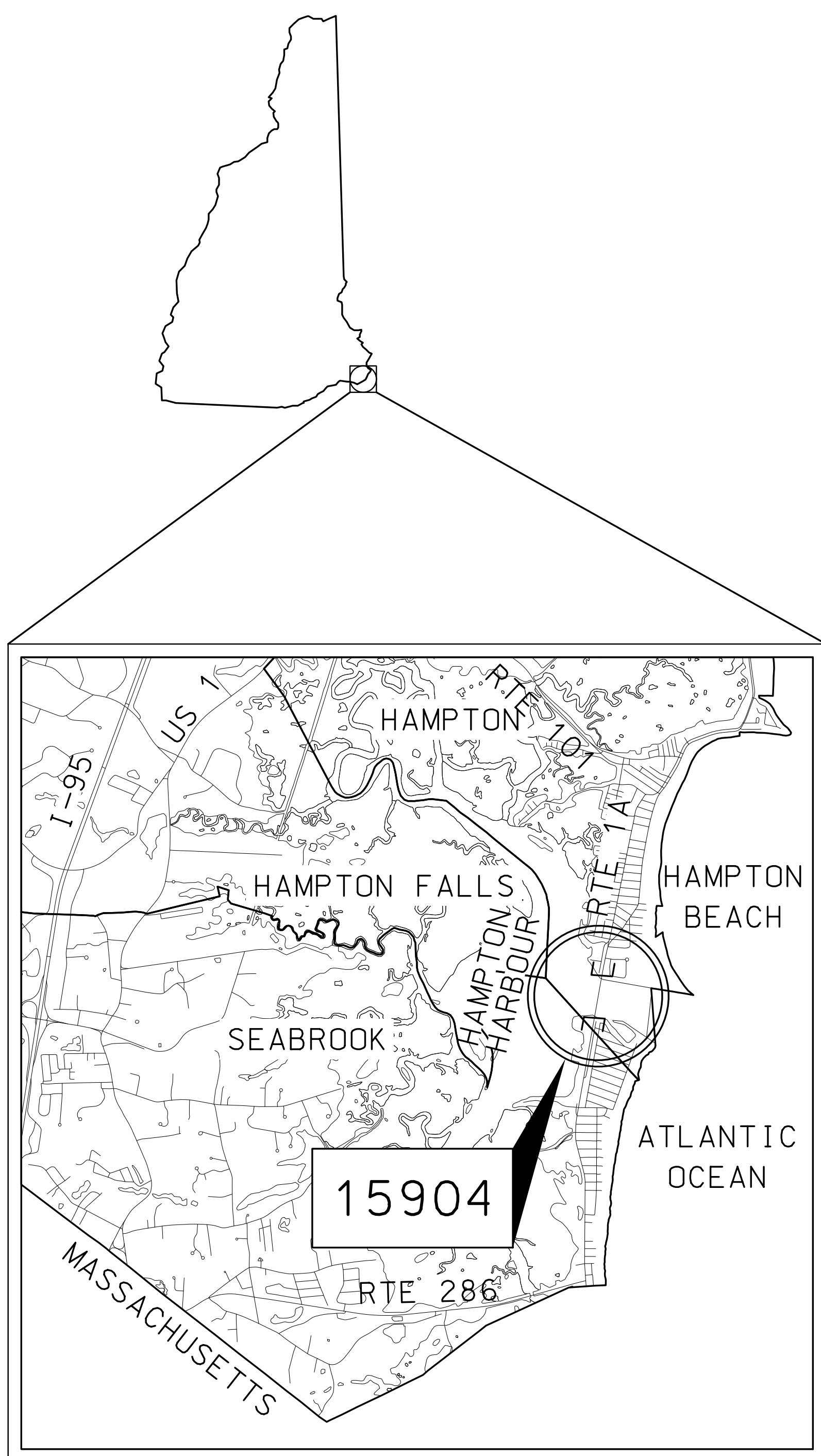
STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

WETLAND PERMITTING PLANS

FEDERAL AID PROJECT

FEDERAL PROJECT NO. X-A001(026)
N.H. PROJECT NO. 15904
NH ROUTE 1A (OCEAN BOULEVARD)

DESIGN DATA	
AVERAGE DAILY TRAFFIC 20 20	9300
AVERAGE DAILY TRAFFIC 20 42	13764
PERCENT OF TRUCKS	7%
DESIGN SPEED	40 MPH
LENGTH OF PROJECT	3000 FT.
PROJECT DATUMS	
HORIZONTAL DATUM	STATE OF NH (ZONE 2800) NAD83
VERTICAL DATUM	NAVD88
THE MLLW TO NAVD88 CORRECTION USED FOR THIS PROJECT IS 5.17 FEET. THIS CORRECTION IS REFERENCE FROM NOAA'S V-DATUM MODEL VERSION 3.9, MA/NH REGION VERSION 1.3, IN THE VICINITY OF HAMPTON HARBOR, NEW HAMPSHIRE. NAVD88 IS ABOVE MLLW; THEREFORE THE CORRECTION SHOULD BE SUBTRACTED FROM MLLW TO CONVERT TO NAVD88 (I.E. USING NAVD88 DATUM, MLLW = -5.17 FT.)	
PROJECT ELEVATIONS (NAVD88)	
MEAN LOWER LOW WATER (MLLW)	-5.17 FT.
MEAN LOW WATER (MLW)	-4.83 FT.
MEAN HIGH WATER (MHW)	3.80 FT.
HIGHEST OBSERVABLE TIDE LINE (HOTL)	6.20 FT.
100 YEAR FLOOD PLAIN (FP100)	8.00 FT.
MEAN HIGH WATER + SEA LEVEL RISE (SLR)	7.18 FT.

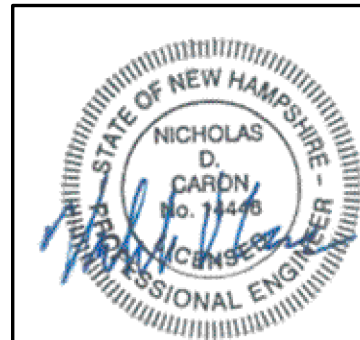
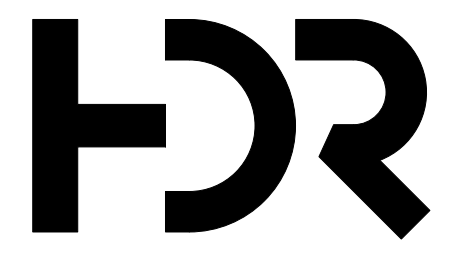


INDEX OF SHEETS

NO.	SHEET TITLE
1	TITLE SHEET
2	KEY SHEET
3-4	STANDARD SYMBOLS
5-7	EXISTING CONDITION PLANS
8-10	PROPOSED CONDITION PLANS
11-12	WETLANDS IMPACTS PLAN
13	CHANNEL EXCAVATION PLAN AND ELEVATION
14	TYPICAL CHANNEL RIPRAP PROTECTION
15	EROSION CONTROL STRATEGIES
16-18	EROSION CONTROL PLANS
19-21	MITIGATION PLANS

REVISED JUNE 21, 2023
(RFMI RESPONSE UPDATE)

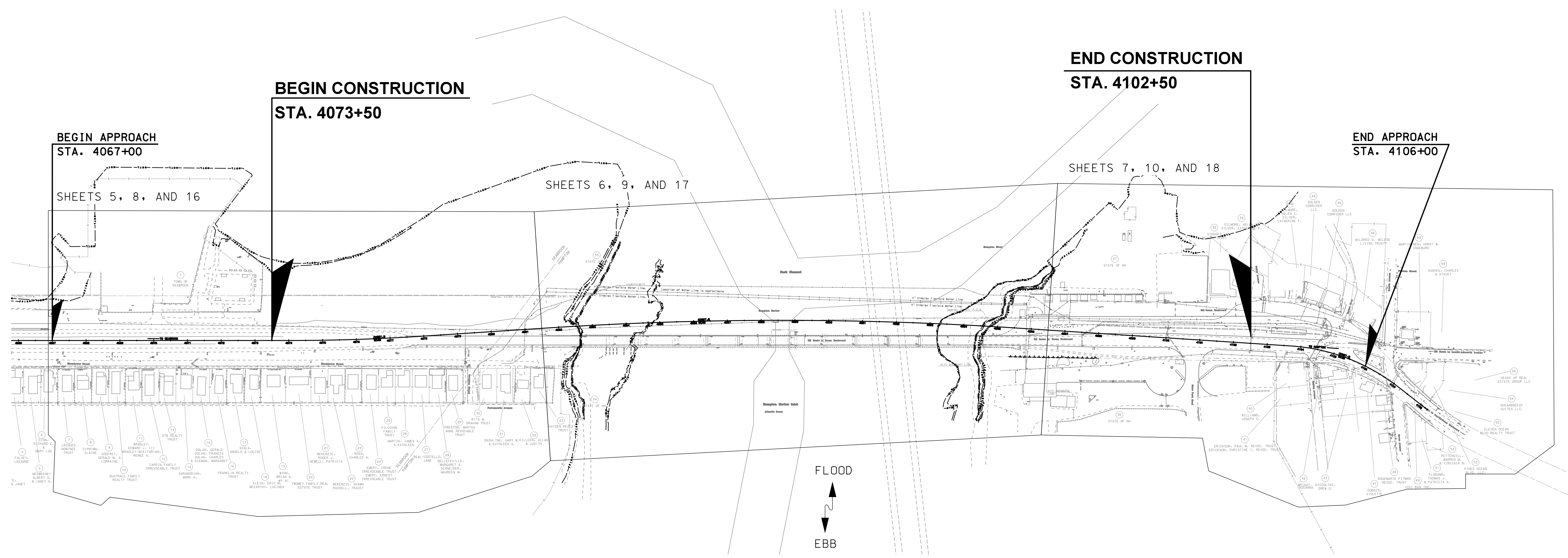
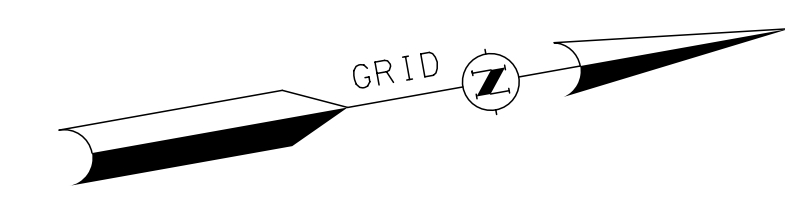
TOWNS OF SEABROOK & HAMPTON
COUNTY OF ROCKINGHAM
SCALE: 1" = 200'
MARCH 9, 2023



NHDOT THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION			
FEDERAL PROJECT NO.	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
X-A001(026)	15904	1	21

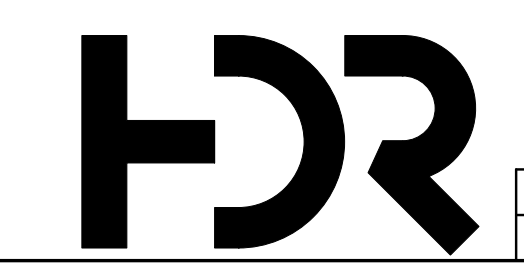
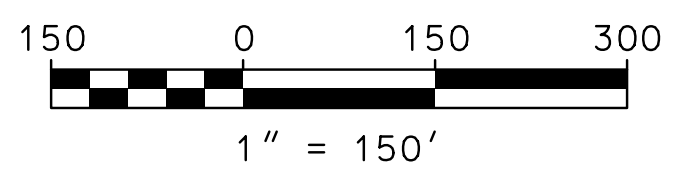
DRAWN BY LHS
CHECKED BY PJJ
DATE 08/2022
DATE 08/2022

SDR PROCESSED	NHDDT	DATE	DATE	REVISIONS AFTER PROPOSAL	DESCRIPTION
NEW DESIGN	LHS	08/2022	08/2022	STATION	
SHEET CHECKED	PUL	09/2022		STATION	
AS BUILT DETAILS				DATE	
				NUMBER	



GENERAL NOTES

- REFERENCE: HAMPTON SEABROOK BRIDGE D.S. PROJECT NO. 4827
- FIELD SURVEY PERFORMED BY S.N.F. & J.P.E. (DOUCET SURVEY) DURING MAY & JULY 2022 USING A TRIMBLE S6 TOTAL STATION WITH A TRIMBLE TSC3 DATA COLLECTOR AND A TRIMBLE DINI DIGITAL AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
- HORIZONTAL ORIENTATION BASED ON NH STATE PLANE COORDINATES NAD83/86 HOLDING DISKS 197-0450 & 197-0440.
- VERTICAL DATUM IS NAVD88 HOLDING DISKS 197-0450 (ELEVATION=20.38') AND 197-0440 (ELEVATION=20.43').
- PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE CONTOURS AT 2' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL DIMINISH THE INTEGRITY OF THE DATA, AND DOUCET SURVEY. WILL NOT BE RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.
- A MULTIBEAM BATHYMETRIC SURVEY WAS PERFORMED BY CR ENVIRONMENTAL, INC. BETWEEN MAY 16-18, 2022. A STRONG WESTERLY WIND (20 KNOTS WITH GUSTS NEAR 40 KNOTS) AND ASSOCIATED WAVES IMPEDED NAVIGATION DURING THE SURVEY AND PLANNED TRANSECT ORIENTATIONS WERE MODIFIED IN REAL TIME TO ADDRESS SAFETY CONCERNS. STATISTICAL ANALYSIS OF MULTIBEAM BATHYMETRIC DATA AT TRANSECT INTERSECTIONS SHOWS A MEAN VERTICAL UNCERTAINTY OF 0.85 FEET. A COMPLETE REPORT OF CR ENVIRONMENTAL'S WORK WILL BE PROVIDED TO THE CLIENT.
- UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVED PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.
- THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING; THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC.
- ALL UNDERGROUND UTILITIES (ELECTRIC, GAS, TEL. WATER, SEWER DRAIN SERVICES) ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.
- COORDINATES AND DISTANCES SHOWN HEREON ARE GROUND IN US SURVEY FEET. TO CONVERT THESE GROUND DISTANCES TO GRID DISTANCES, MULTIPLY BY A COMBINED FACTOR OF 1.00002910 (AS CALCULATED BY TRIMBLE BUSINESS CENTER OFFICE SOFTWARE, USING DISK 197-0450 AS THE BASE POINT). ACCORDING TO NHDOT SURVEY, THE PUBLISHED COORDINATES ON DISK 197-0450 ARE INCORRECT. THE COORDINATES THEY PROVIDED (AND WHICH WERE USED) ARE: NORTHING=144835.79, EASTING=1211947.93.
- DANIEL A. HAGEMAN, CERTIFIED WETLAND SCIENTIST NO. 275, OF FHI STUDIO, HARTFORD, CONNECTICUT, PERFORMED THE WETLAND MAPPING ON AUGUST 12, 2022 ACCORDING TO THE USACE WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE USACE WETLAND MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, U.S. ARMY CORPS OF ENGINEERS.
- PER DANIEL A. HAGEMAN (NHCWS), "THERE ARE NO INLAND WETLANDS AND NO VEGETATED TIDAL WETLANDS IN THE SURVEY AREA." FOR PERMITTING PURPOSES, THE FEDERAL AND STATE JURISDICTIONAL "HIGHEST OBSERVABLE TIDE LINE (HOTL)" WILL BE THE SURVEYED ELEVATION OF THE WATER AS SHOWN, AND AS MARKED IN THE FIELD BY MR. HAGEMAN ON AUGUST 12, 2022 AT 11:30 PM DURING THE LUNAR HIGH TIDE.



STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
KEY PLAN				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
KEY001	15904Wet_Loc	15904	2	21

GENERAL

EDGE OF PAVEMENT TRAVELED WAY			
DRIVEWAYS			(label surface type)
BUILDINGS			(label house or type of building) (building to be removed)
FOUNDATION			(label type)
LEACH FIELD			leach field
BRIDGE CROSSINGS			STREAM OVERPASS
STEPS AND WALK			(label type)
INTERMITTENT WATER COURSE			
SHORE LINE			river/stream pond (label name of water body)
POTENTIAL WET AREA SYMBOL			
BRUSH OR WOODS LINE			
TREES (PLANS)			(deciduous)(coniferous) (stump)
TREE OR STUMP (CROSS-SECTIONS)			(show station, circumference in feet & type)
HEDGE			(label type)
MONITORING WELL			mon W
WELL			W
FLAG POLE			fp

ORIGINAL GROUND (TYPICALS)	
ROCK OUTCROP	
ROCK LINE (TYPICALS & SECTIONS ONLY)	
GUARDRAIL (label type)	
JERSEY BARRIER	
CURB (LABEL TYPE)	
STONE WALL	
RETAINING WALL (LABEL TYPE)	
FENCE (LABEL TYPE)	
SIGNS	
GAS PUMP	
FUEL TANK (ABOVE GROUND)	
STORAGE TANK FILLER CAP	
SEPTIC TANK	
GRAVE	
MAILBOX	
VENT PIPE	
SATELLITE DISH ANTENNA	
PHONE	
GROUND LIGHT/LAMP POST	
BORING LOCATION	
TEST PIT	
INTERSTATE NUMBERED HIGHWAY	
UNITED STATES NUMBERED HIGHWAY	
STATE NUMBERED HIGHWAY	

SHORELAND - WETLAND

WETLAND DESIGNATION AND TYPE	
DELINEATED WETLAND	
ORDINARY HIGH WATER	
TOP OF BANK	
TOP OF BANK & ORDINARY HIGH WATER	
NORMAL HIGH WATER	
WIDTH AT BANK FULL	
PRIME WETLAND	
PRIME WETLAND 100' BUFFER	
NON-JURISDICTIONAL DRAINAGE AREA	
COWARDIN DISTINCTION LINE	
TIDAL BUFFER ZONE	
DEVELOPED TIDAL BUFFER ZONE	
HIGHEST OBSERVABLE TIDE LINE	
MEAN HIGH WATER	
MEAN LOW WATER	
VERNAL POOL	
SPECIAL AQUATIC SITE	
REFERENCE LINE	
WATER FRONT BUFFER	
NATURAL WOODLAND BUFFER	
PROTECTED SHORELAND	
INVASIVE SPECIES LABEL	
INVASIVE SPECIES	
MEAN HIGH WATER + SEA LEVEL RISE	

FLOODPLAIN / FLOODWAY

500 YEAR FLOODPLAIN BOUNDARY	
100 YEAR FLOODPLAIN BOUNDARY	
FLOODWAY	

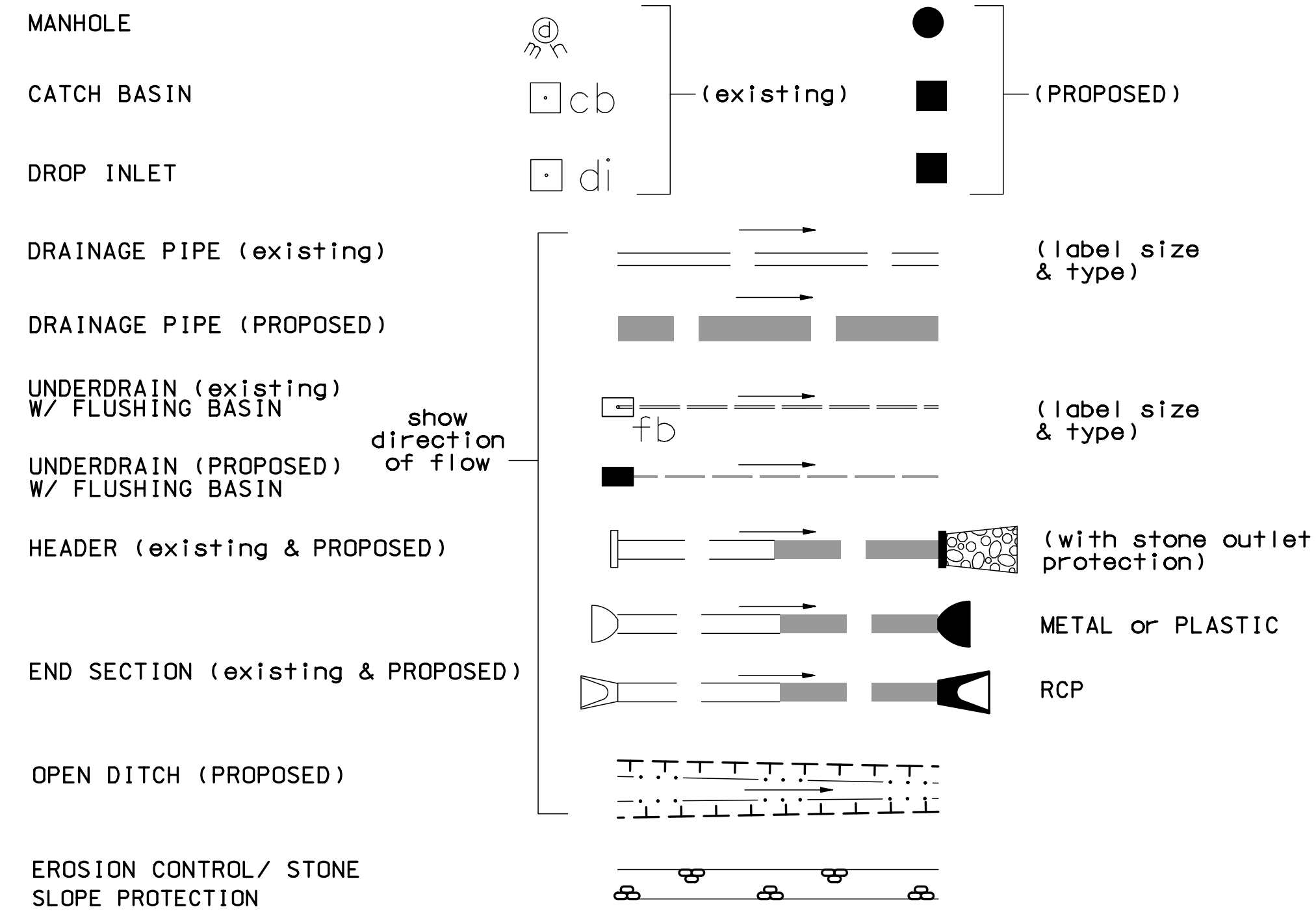
ENGINEERING

CONSTRUCTION BASELINE	
PC, PT, POT (ON CONST BASELINE)	
PI (IN CONSTRUCTION BASELINES)	
INTERSECTION OR EQUATION OF TWO LINES	
ORIGINAL GROUND LINE (PROFILES AND CROSS-SECTIONS)	
PROFILE GRADE LINE (PROFILES AND CROSS-SECTIONS)	
CLEARING LINE	
SLOPE LINE	
SLOPE LINE (FILL)	
SLOPE LINE (CUT)	
PROFILES AND CROSS SECTIONS:	
ORIGINAL GROUND ELEVATION (LEFT)	
FINISHED GRADE ELEVATION (RIGHT)	

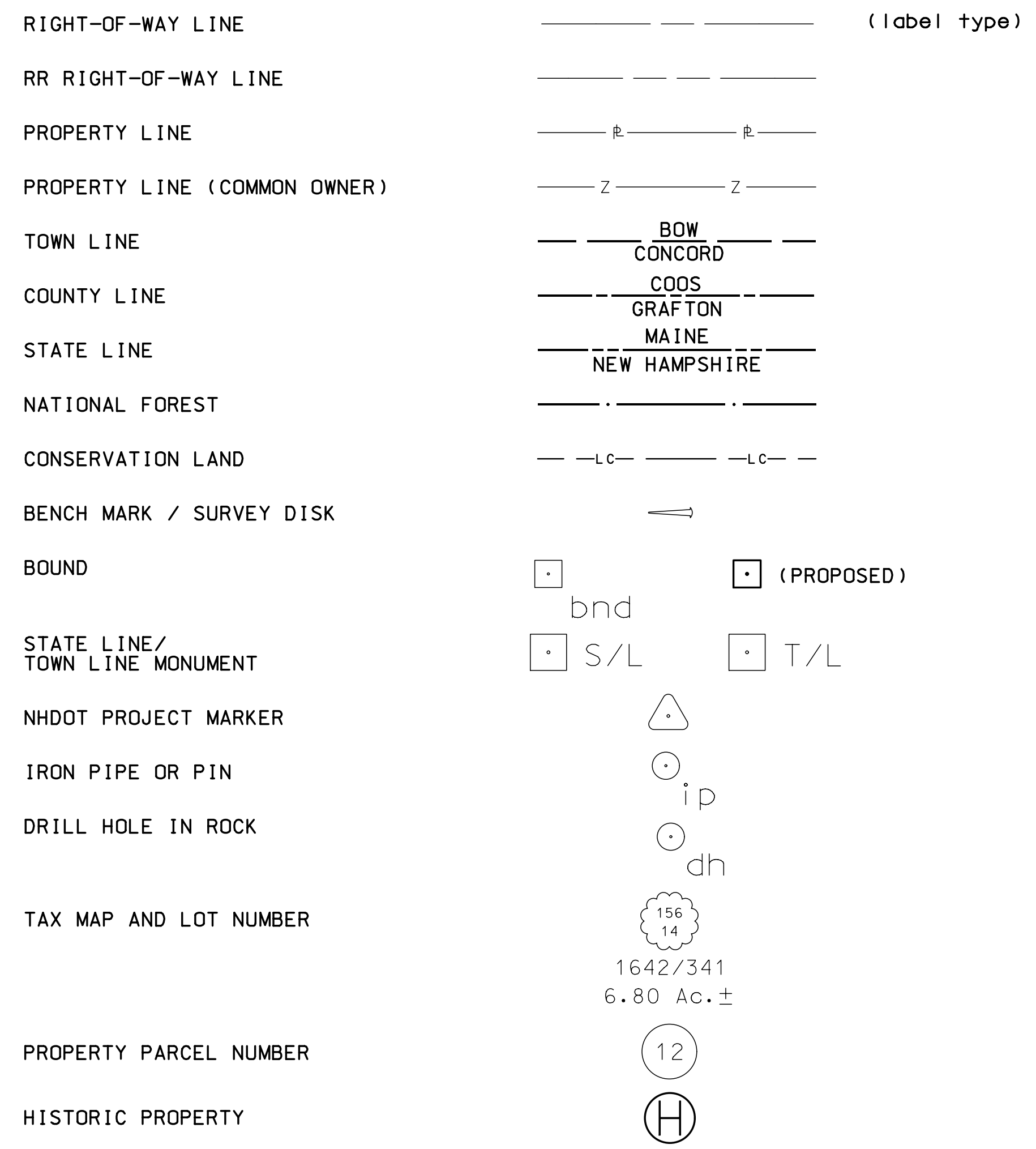
STATE OF NEW HAMPSHIRE SEABROOK-HAMPTON	
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN	
STANDARD SYMBOLS	

REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
11-21-2014	stdsyml-2	15904	3	21

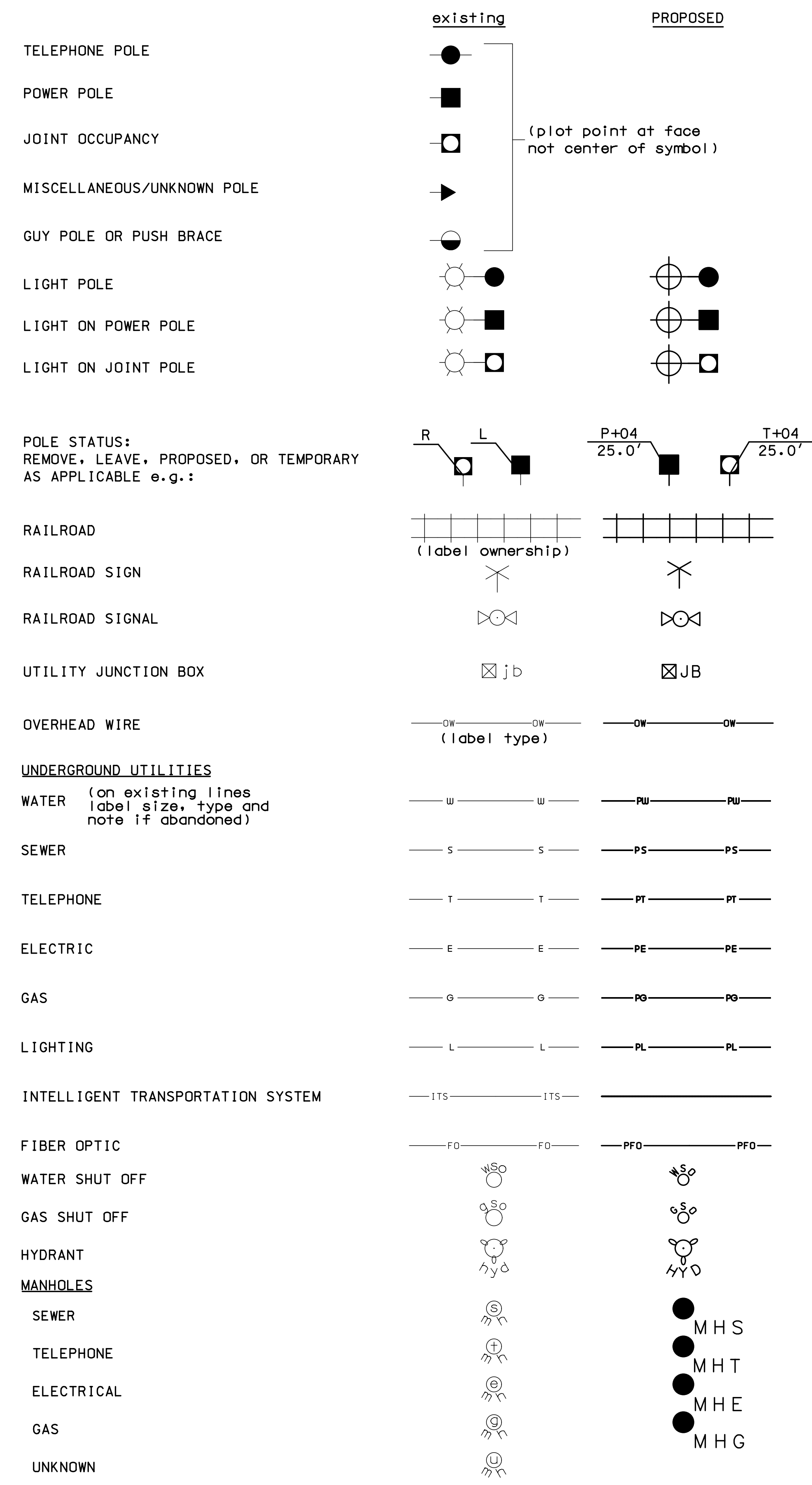
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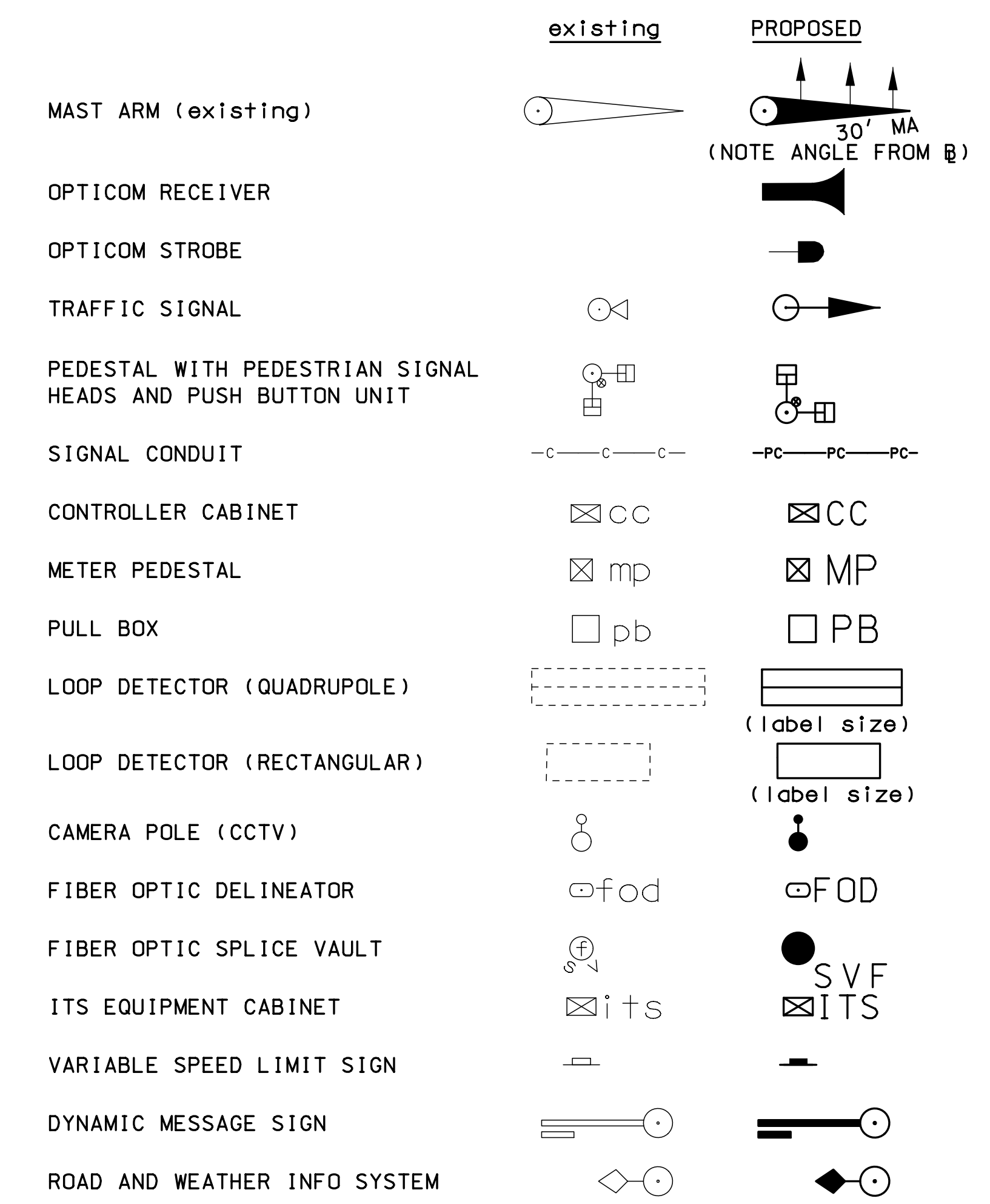
BOUNDARIES / RIGHT-OF-WAY



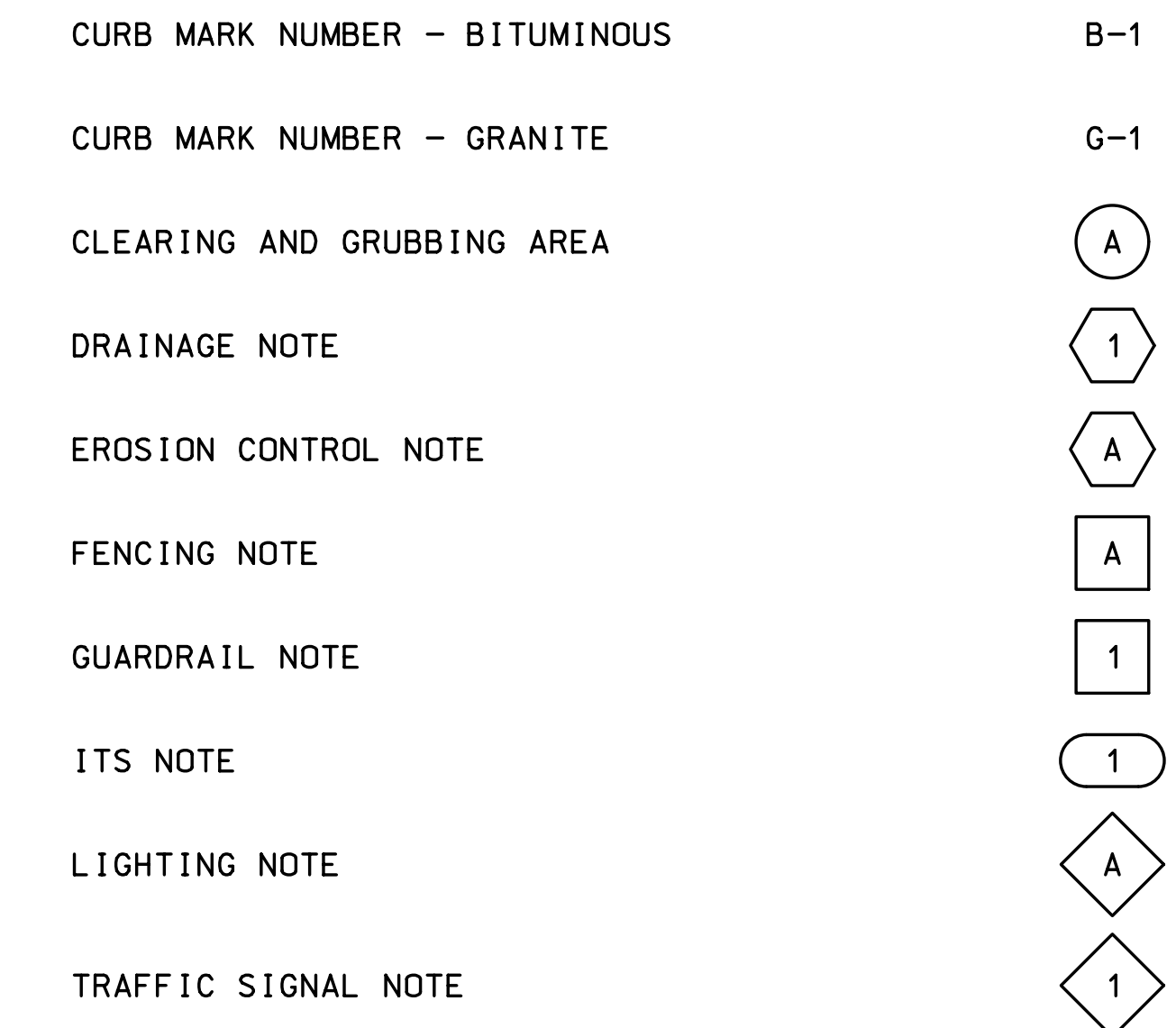
UTILITIES



TRAFFIC SIGNALS / ITS

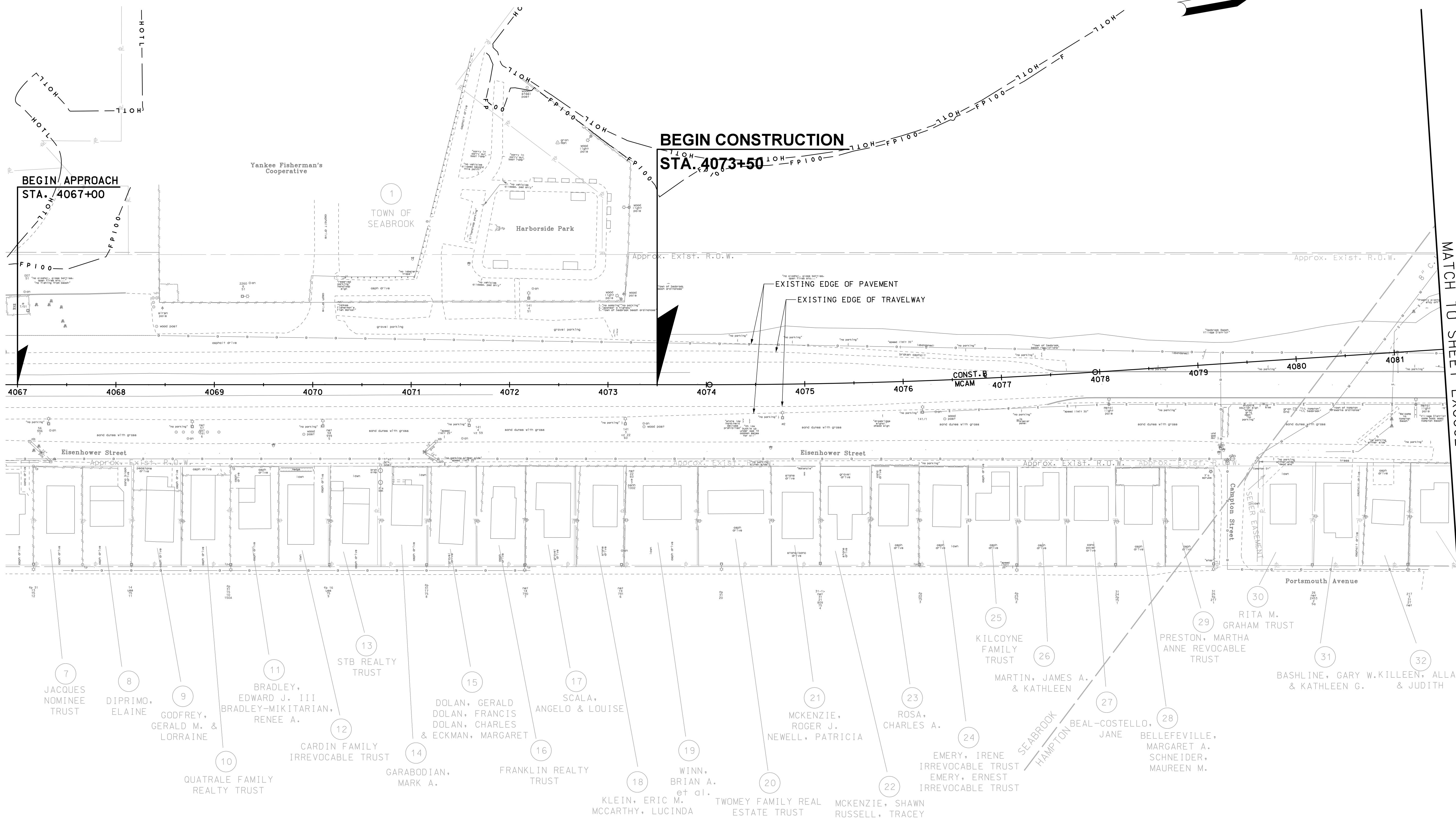
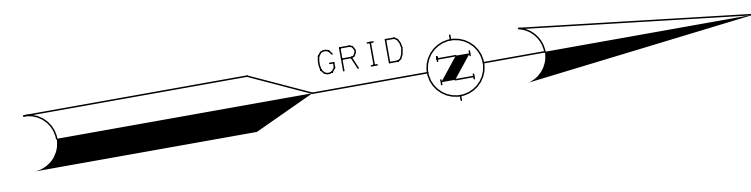


CONSTRUCTION NOTES



REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9-1-2016	stdsymbol-2	15904	4	21

SDR PROCESSED	NHDDOT	DATE	08/2022	REVISIONS AFTER PROPOSAL	STATION
NEW DESIGN	LHS	DATE	09/2022		
SHEET CHECKED	PJL	DATE			
AS BUILT DETAILS		DATE			



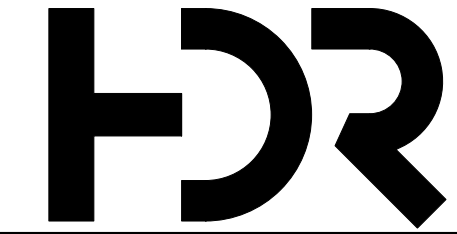
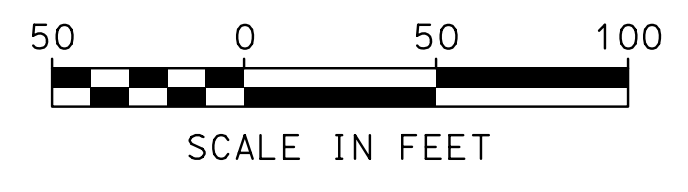
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STA. 4073+50

BEGIN APPROACH

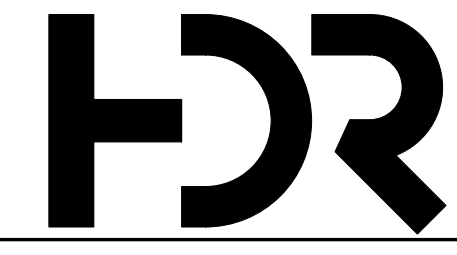
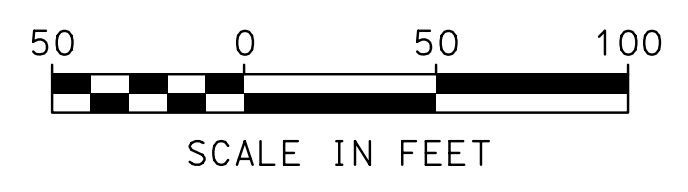
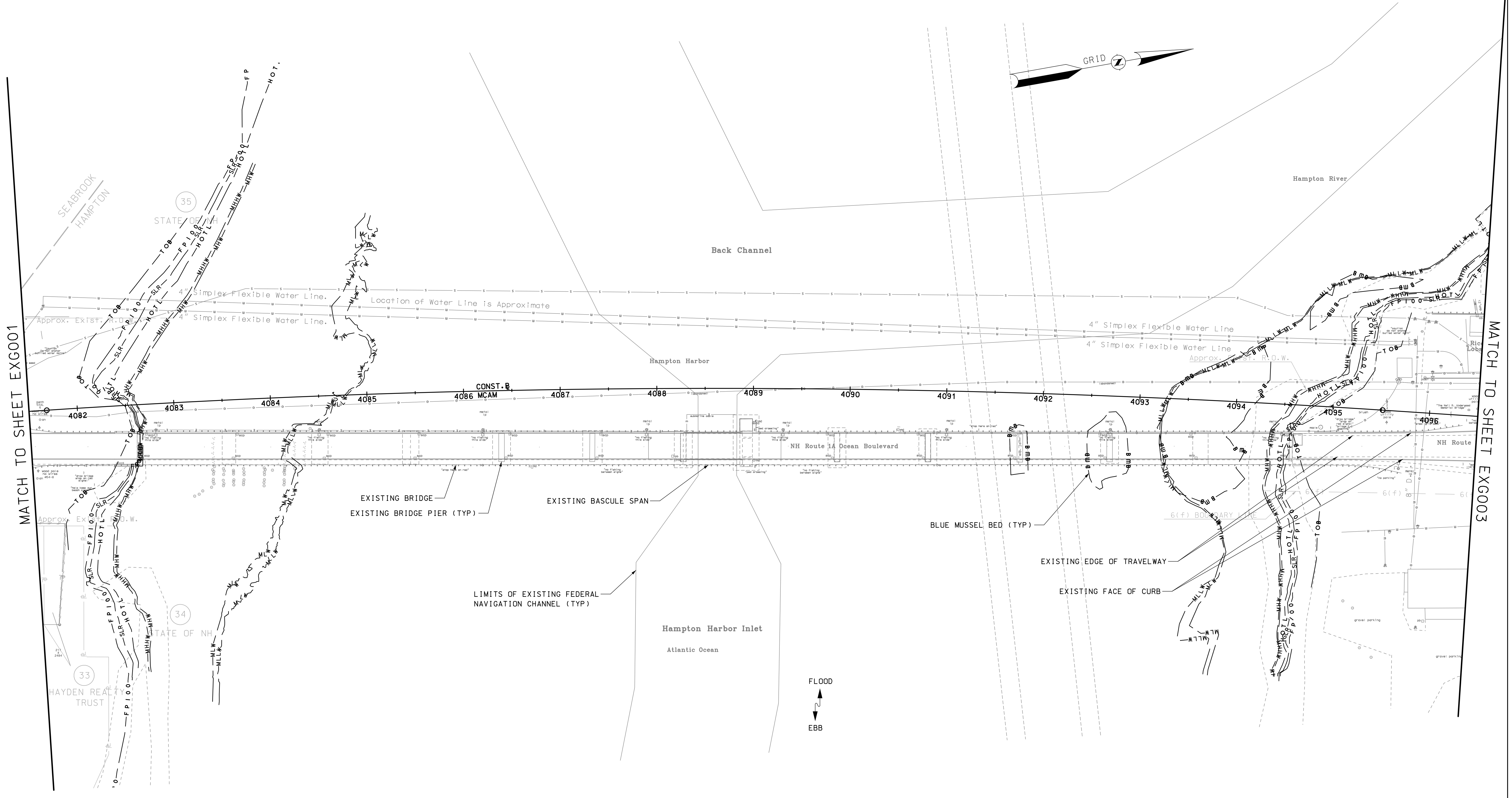
STA. 4067+00

MATCH TO SHEET EXG002



STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
EXISTING CONDITION PLANS				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
EXG001	15904wet_Exist	15904	5	21

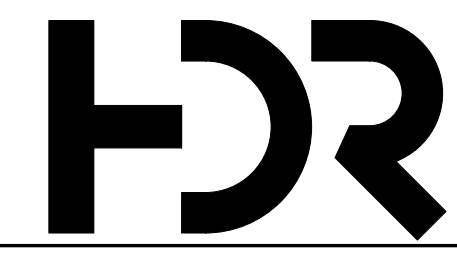
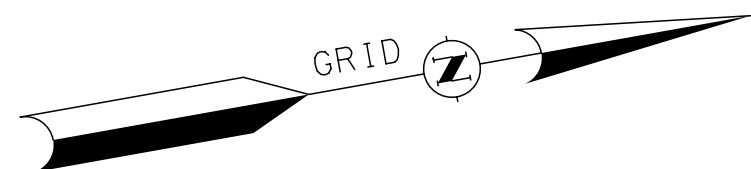
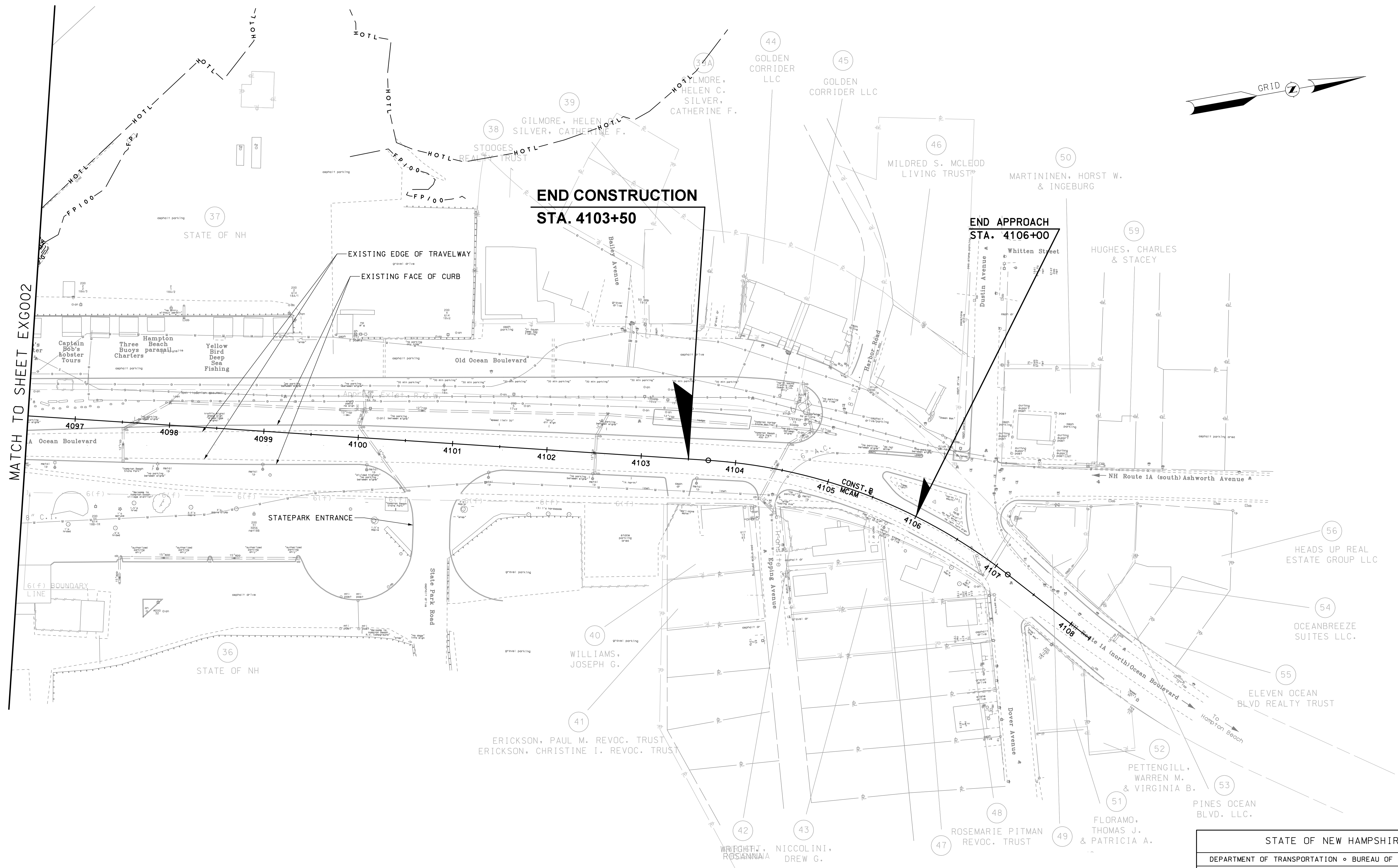
SDR PROCESSED	NHDDT	DATE	08/2022	REVISIONS AFTER PROPOSAL	STATION
NEW DESIGN	LHS	DATE	08/2022		
SHEET CHECKED	PJL	DATE	08/2022		
AS BUILT DETAILS		DATE			



STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
EXISTING CONDITION PLANS				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
EXG002	15904Wet_Exist	15904	6	21

SDR PROCESSED	NHDDT	DATE	08/2022
	LHS	DATE	09/2022
NEW DESIGN	PJL	DATE	09/2022
		DATE	
AS BUILT DETAILS			

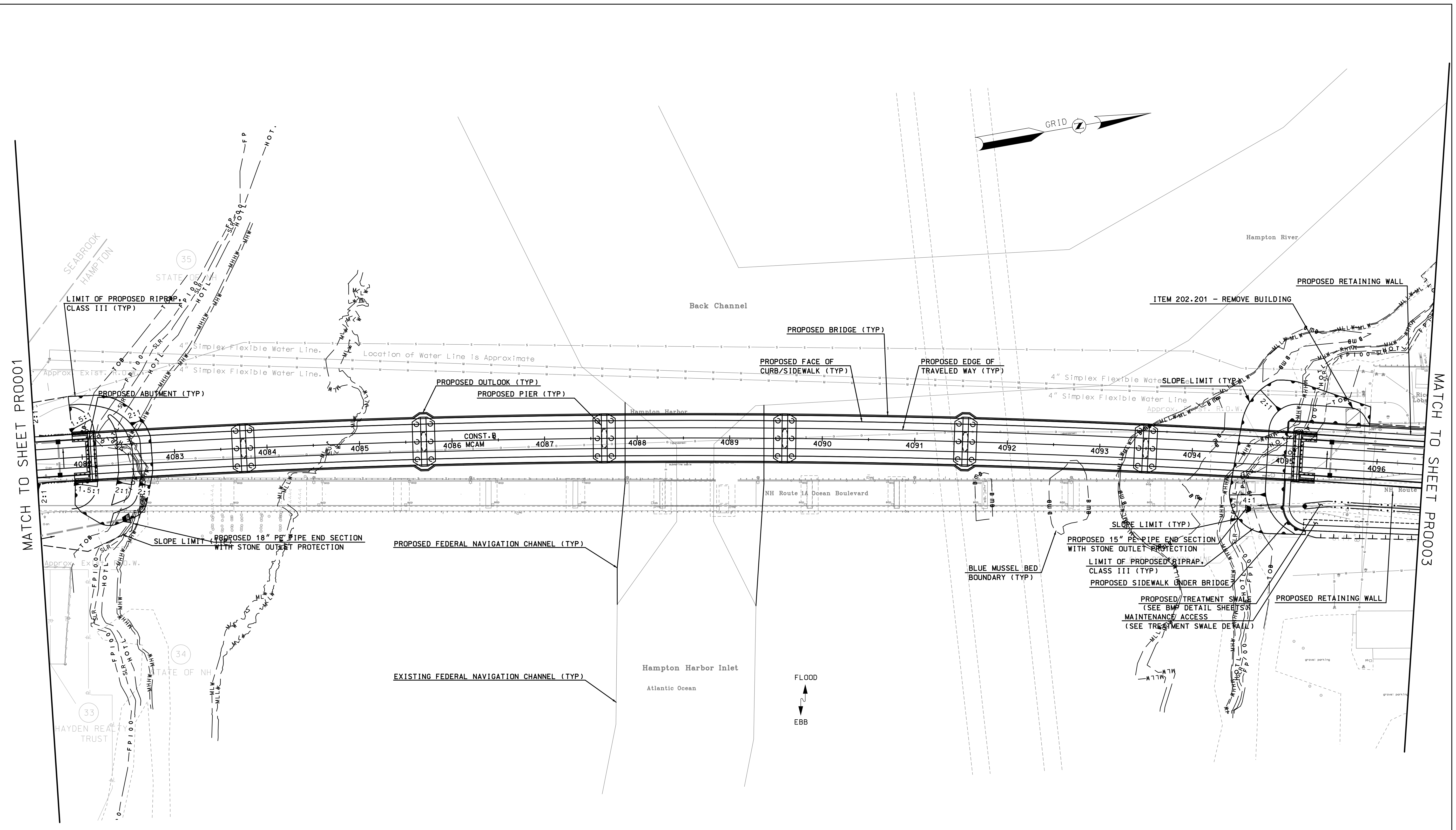
REVISIONS AFTER PROPOSAL	STATION	DESCRIPTION



STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
EXISTING CONDITION PLANS				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
EXG003	15904wet_Exist	15904	7	21

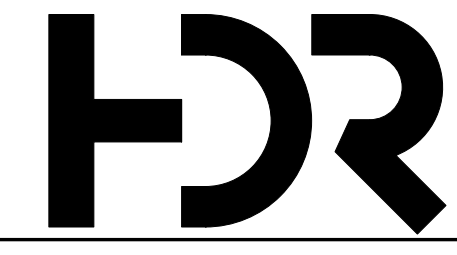
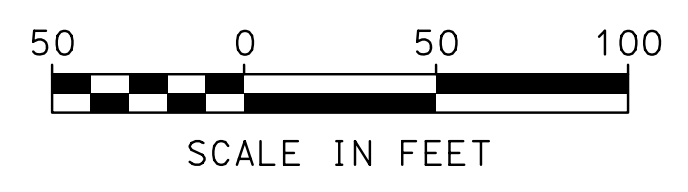
MATCH TO SHEET EXG002

SDR PROCESSED	NHDDT	DATE	08/2022
NEW DESIGN	LHS	DATE	08/2022
SHEET CHECKED	PJL	DATE	09/2022
AS BUILT DETAILS		DATE	



MATCH TO SHEET PR0001

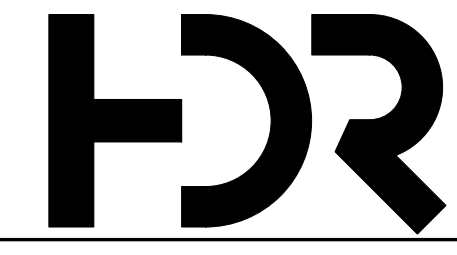
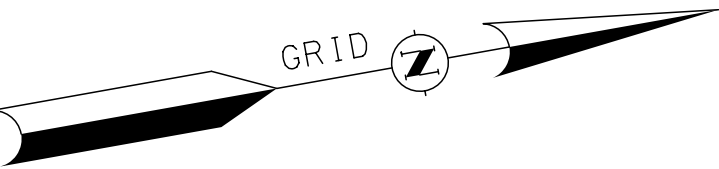
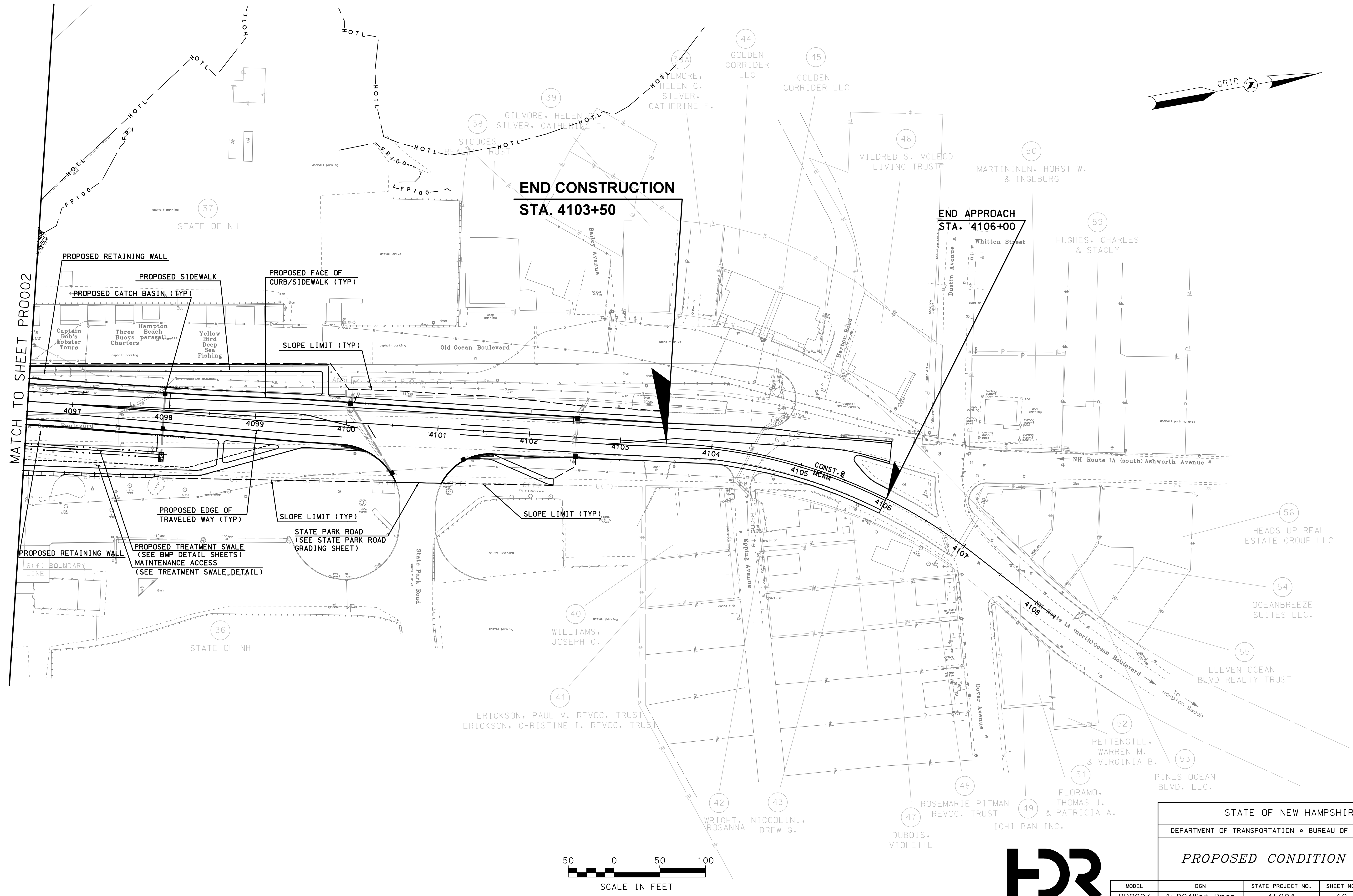
MATCH TO SHEET PR0003



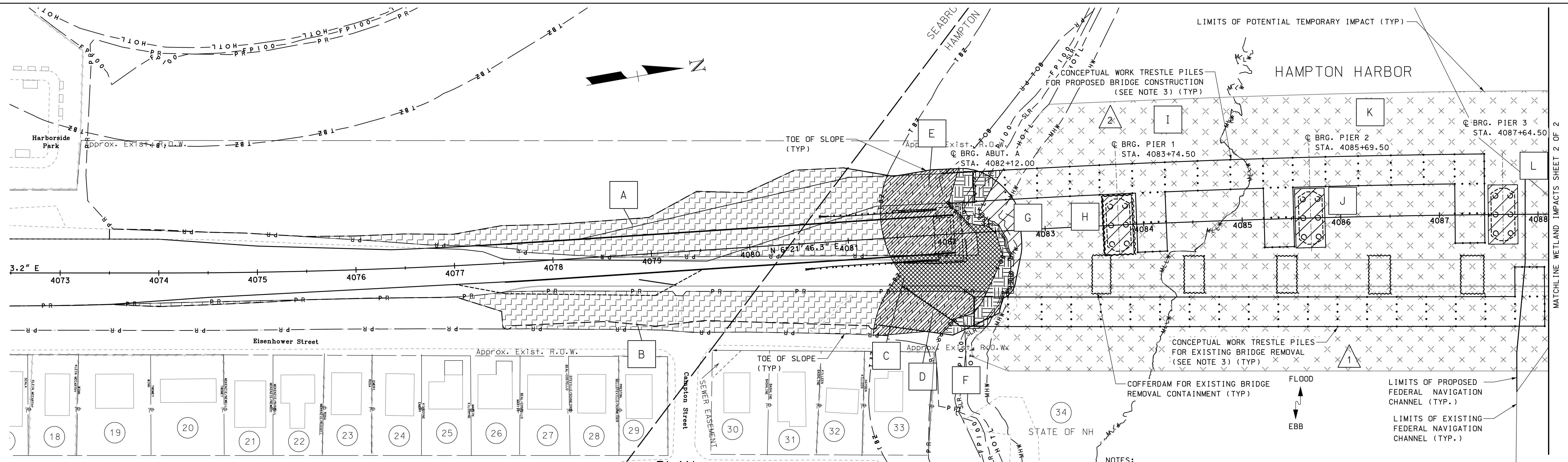
STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
PROPOSED CONDITION PLANS				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
PR0002	15904wet_Prop	15904	9	21

SDR PROCESSED	NHDDT	DATE	08/2022
NEW DESIGN	LHS	DATE	08/2022
SHEET CHECKED	PJL	DATE	09/2022
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL	DESCRIPTION
STATION	
STATION	
DATE	
NUMBER	



STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
PROPOSED CONDITION PLANS				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
PRO003	15904Wet_Prop	15904	10	21



PLAN
SCALE: 1" = 50'-0"

NOTES:

- THE LOCATIONS OF TRESTLE AND BARGE CONSTRUCTION ARE APPROXIMATE AND WILL BE DESIGNED BY CONTRACTOR. ALL TEMPORARY IMPACTS SHALL BE WITHIN THE LIMITS OF POTENTIAL TEMPORARY IMPACTS DELINEATED ON THE PLAN.
- INTERTIDAL IMPACT AREAS EXTEND FROM HTL TO MLLW. SUBTIDAL IMPACT AREAS ARE BELOW MLLW.
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- TWO EXISTING WATERLINES LIE WEST OF THE BRIDGE. THE EXPOSED LENGTH OF THE WATERLINES IN THE CHANNEL SUBJECT TO TIDAL INFLUENCE IS 700 FT. TEMPORARY RESTRAINT TO KEEP THE WATERLINES OUT OF THE WORKZONE IS NEEDED TO CONSTRUCT THE TRESTLES. TEMPORARY IMPACTS ARE ASSUMED TO BE 5 FT FOR EACH WATERLINE. (2 LINES x 700 FT x 5 FT = APPROXIMATELY 7,000 SF)
- FILL VOLUMES PRESENTED IN THE TABLE ARE MEASURED FROM THE HTL ELEVATION DOWN TO EXISTING GRADE. DREDGE VOLUMES PRESENTED IN THE TABLE ARE FROM EXISTING GRADE DOWN TO THE BOTTOM OF EXCAVATION. THE SUM OF THE VOLUMES EQUALS TO TOTAL NON-NATIVE MATERIAL PLACED WITHIN THE HTL LIMITS.

LEGEND

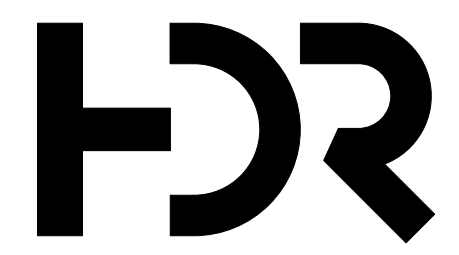
TYPE OF WETLAND IMPACT	SHADING/HATCHING
NEW HAMPSHIRE WETLANDS BUREAU & ARMY CORP OF ENGINEERS (PERMANENT WETLAND)	
TEMPORARY IMPACTS	
PERMANENT TOB IMPACTS	
PERMANENT TBZ IMPACTS - UNDEVELOPED	
PERMANENT TBZ IMPACTS - DEVELOPED	
TEMPORARY TBZ IMPACTS - DEVELOPED	
PRIORITY RESOURCE AREA - PERMANENT DUNE IMPACTS	

WETLAND CLASSIFICATION NUMBER # WETLAND IMPACT LOCATION

WETLAND IMPACT SUMMARY											
WETLAND NUMBER	WETLAND CLASSIFICATION	LOCATION	AREA IMPACTS								DESCRIPTION
			PERMANENT				TEMPORARY		RESTORATIVE		
			N.H.W.B. (NON-WETLAND)		N.H.W.B. & A.C.O.E. (WETLAND)		SF	LF	SF	LF	
		A	24002								PERMANENT IMPACTS TO SOUTHWESTERN DUNES
		B	16282								PERMANENT IMPACTS TO SOUTHEASTERN DUNES
		C	4429								SOUTH ROADWAY APPROACH (EXISTING DEVELOPED TBZ)
		D	3833								PERMANENT IMPACTS TO SE DUNES (EXISTING UNDEVELOPED TBZ)
		E	6830								SOUTH ROADWAY APPROACH (EXISTING UNDEVELOPED TBZ)
		F	3830								SOUTHERN ROADWAY APPROACH (TOB - PERMANENT)
2	E2US2 (INTERTIDAL)	G			1911						ABUTMENT A RIPRAP SLOPE IMPACT
2	E2US2 (INTERTIDAL)	H			1800						PIER 1 DRILLED SHAFTS, FOOTING, AND TREMIE SEAL
2	E2US2 (INTERTIDAL)	I					51373				SOUTHERN INTERTIDAL ENVELOPE (TRESTLE PILES - 490 SF)
1	E1UBL (SUBTIDAL)	J			1800						PIER 2 DRILLED SHAFTS AND FOOTING
1	E1UBL (SUBTIDAL)	K					246453				SUBTIDAL ENVELOPE (TRESTLE PILES AND BARGE SPUDS - 10108 SF)
1	E1UBL (SUBTIDAL)	L			1800						PIER 3 DRILLED SHAFTS AND FOOTING
1	E1UBL (SUBTIDAL)	M			813						CHANNEL EXCAVATION TO ACHIEVE FEDERAL CHANNEL DEPTH
1	E1UBL (SUBTIDAL)	N			265						CHANNEL EXCAVATION TO ACHIEVE FEDERAL CHANNEL DEPTH
1	E1UBL (SUBTIDAL)	O			2243						CHANNEL EXCAVATION TO ACHIEVE FEDERAL CHANNEL DEPTH
1	E1UBL (SUBTIDAL)	P			1800						PIER 4 DRILLED SHAFTS AND FOOTING
1	E1UBL (SUBTIDAL)	Q			1800						PIER 5 DRILLED SHAFTS AND FOOTING
1	E1UBL (SUBTIDAL)	R			238						PIER 6 DRILLED SHAFTS, FOOTING, AND TREMIE SEAL
2	E2US2 (INTERTIDAL)	S			1562						PIER 6 DRILLED SHAFTS, FOOTING, AND TREMIE SEAL
2	E2US2 (INTERTIDAL)	T			5099						ABUTMENT B RIPRAP SLOPE PLACEMENT
2	E2US2 (INTERTIDAL)	U					20357				NORTHERN INTERTIDAL ENVELOPE (TRESTLE PILES - 182 SF)
		V	3712								NORTH ROADWAY APPROACH (TOB - PERMANENT)
		W	11693								NORTH ROADWAY APPROACH (EXISTING DEVELOPED TBZ)
		X	2295								NORTH ROADWAY APPROACH (EXISTING UNDEVELOPED TBZ)
		Y					4651				NORTH ROADWAY APPROACH (EXISTING DEVELOPED TBZ)
TOTAL			76906	21131	322834						

LINEAR STREAM IMPACTS FOR MITIGATION		
PERMANENT		
BANK LEFT	BANK RIGHT	CHANNEL
LF	LF	LF
216	216	197
VOLUMES		
IMPACT	FILL (HOTL EL. TO E.G.)	DREDGE (BELOW E.G.)
G	97 CY	1013 CY
H	434 CY	714 CY
I		
J	798 CY	398 CY
K		
L	855 CY	315 CY
M		20 CY
N		15 CY
O		125 CY
P	855 CY	175 CY
Q	811 CY	219 CY
R	57 CY	63 CY
S	377 CY	416 CY
T	391 CY	2049 CY
TOTAL		
4675 CY	5522 CY	10197 CY

PERMANENT IMPACTS: 98037 SF
TEMPORARY IMPACTS: 322834 SF
TOTAL IMPACTS: 420871 SF



STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

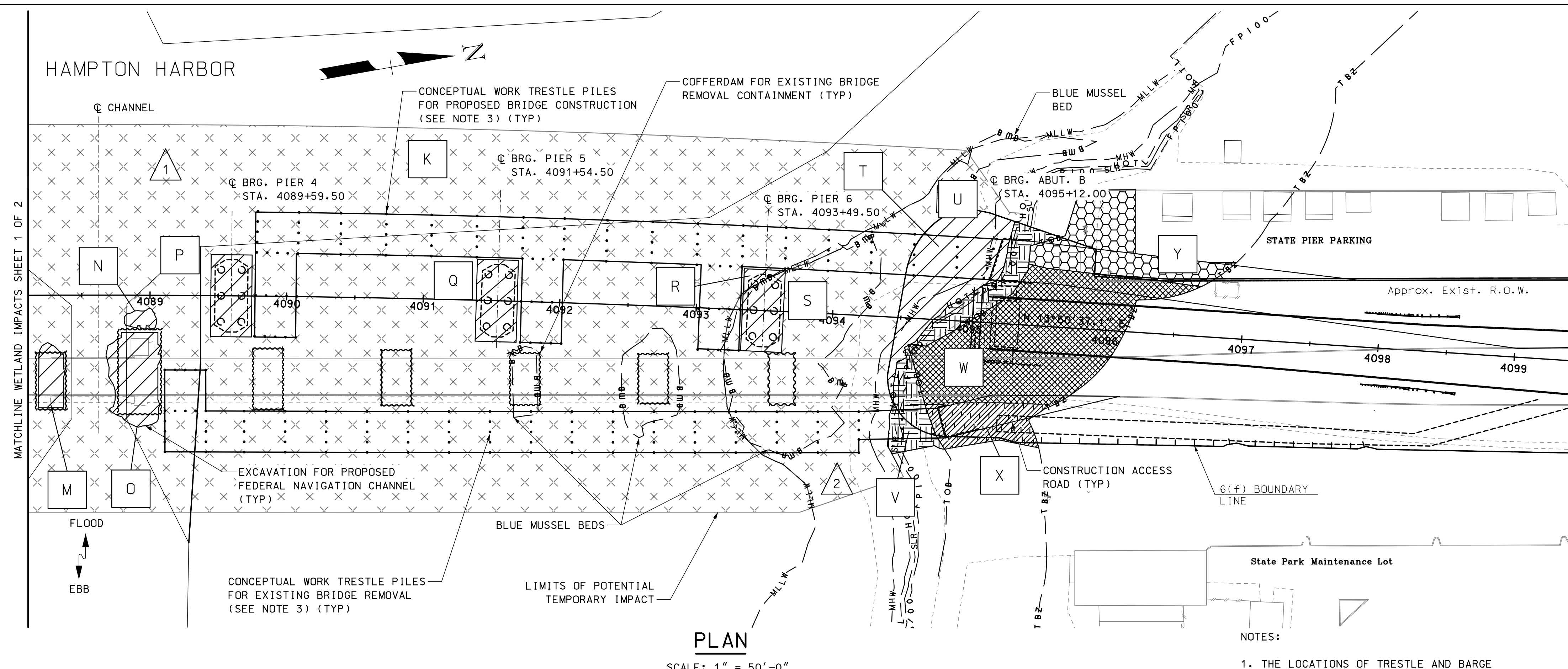
TOWN SEABROOK-HAMPTON BRIDGE NO. 234/025 STATE PROJECT 15904
LOCATION NH 1A OVER HAMPTON RIVER

WETLAND IMPACTS PLAN (SHEET 1 OF 2)

DESIGNED	LHS	08/22	CHECKED	PJL	09/22
DRAWN	LHS	08/22	CHECKED	NDC	09/22
QUANTITIES			CHECKED		
ISSUE DATE			FEDERAL PROJECT NO.		
REV. DATE			X-A001(026)	SHEET NO.	11

BRIDGE SHEET 11 OF 21
FILE NUMBER 144-1-1
TOTAL SHEETS 21

PLOT DATE	.DGN LOCATOR	SHEET SCALE
6/26/2023	15904Wet_Imp	AS NOTED



NOTES:

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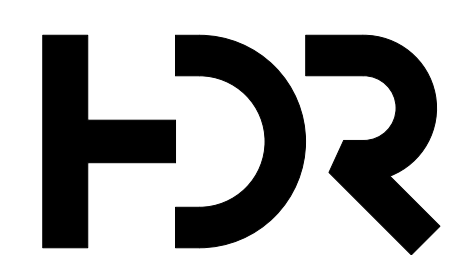
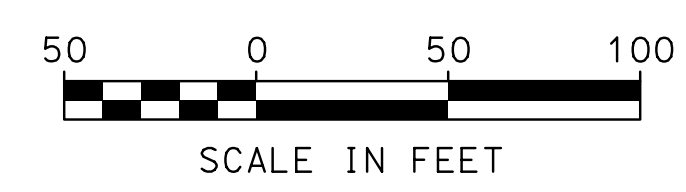
LEGEND

TYPE OF WETLAND IMPACT	SHADING/HATCHING
NEW HAMPSHIRE WETLANDS BUREAU & ARMY CORP OF ENGINEERS (PERMANENT WETLAND)	
TEMPORARY IMPACTS	
PERMANENT TOB IMPACTS	
PERMANENT TBZ IMPACTS - UNDEVELOPED	
PERMANENT TBZ IMPACTS - DEVELOPED	
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PRIORITY RESOURCE AREA - PERMANENT DUNE IMPACTS	

WETLAND NUMBER	WETLAND CLASSIFICATION	LOCATION	WETLAND IMPACT SUMMARY								DESCRIPTION
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			PERMANENT				TEMPORARY		RESTORATIVE		
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2	E2US2 (INTERTIDAL)	G			1911						ABUTMENT A RIPRAP SLOPE IMPACT
2	E2US2 (INTERTIDAL)	H			1800						PIER 1 DRILLED SHAFTS, FOOTING, AND TREMIE SEAL
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1	E1UBL (SUBTIDAL)	N			265						CHANNEL EXCAVATION TO ACHIEVE FEDERAL CHANNEL DEPTH
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1	E1UBL (SUBTIDAL)	R			238						PIER 6 DRILLED SHAFTS, FOOTING, AND TREMIE SEAL
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TOTAL			76906	21131	322834						

LINEAR STREAM IMPACTS FOR MITIGATION		
PERMANENT		
BANK LEFT	BANK RIGHT	CHANNEL
LF	LF	LF
216	216	197
VOLUMES		
IMPACT	FILL (HOTL EL. TO E.G.)	DREDGE (BELOW E.G.)
G	97 CY	1013 CY
H	434 CY	714 CY
I		
J	798 CY	398 CY
K		
L	855 CY	315 CY
M		20 CY
N		15 CY
O		125 CY
P	855 CY	175 CY
Q	811 CY	219 CY
R	57 CY	63 CY
S	377 CY	416 CY
T	391 CY	2049 CY
TOTAL		
	4675 CY	5522 CY
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PERMANENT IMPACTS: 98037 SF
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STATE OF NEW HAMPSHIRE
 DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

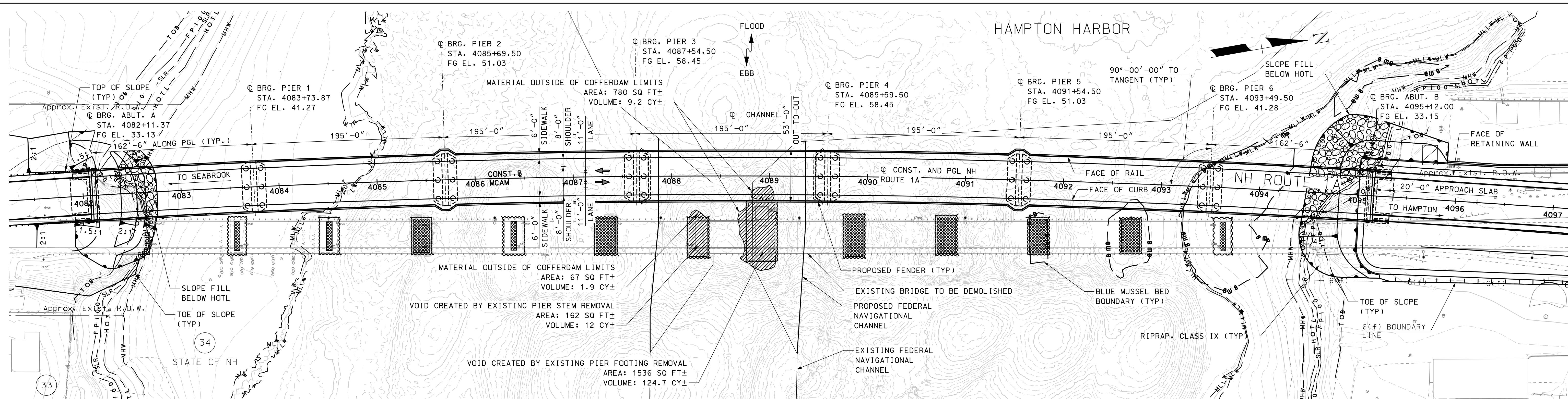
TOWN SEABROOK-HAMPTON BRIDGE NO. 234/025 STATE PROJECT 15904
 LOCATION NH 1A OVER HAMPTON RIVER

WETLAND IMPACTS PLAN (SHEET 2 OF 2)

DESIGNED	LHS	08/22	CHECKED	PJL	09/22
DRAWN	LHS	08/22	CHECKED	NDC	09/22
QUANTITIES		CHECKED			
ISSUE DATE		FEDERAL PROJECT NO.	X-A001(026)	SHEET NO.	12
REV. DATE		TOTAL SHEETS			21

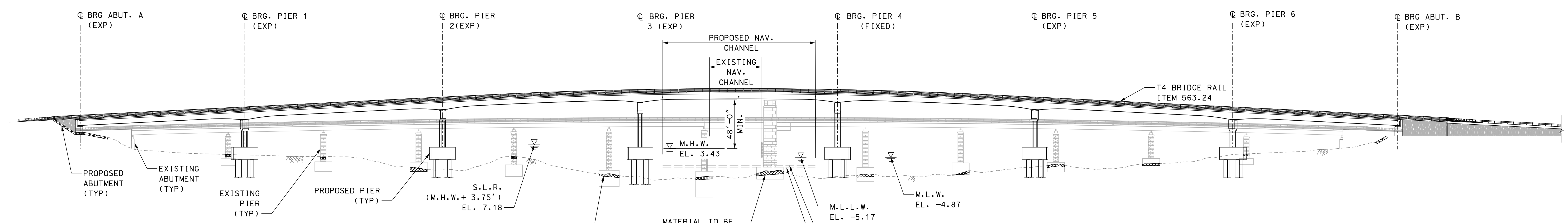
BRIDGE SHEET 12 OF 21
 FILE NUMBER 144-1-1

PLOT DATE	.DGN LOCATOR	SHEET SCALE
6/26/2023	15904Wet_Imp	AS NOTED



PLAN

SCALE: 1" = 50'-0"

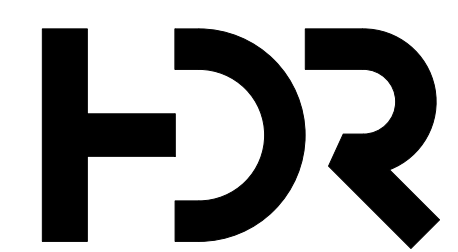
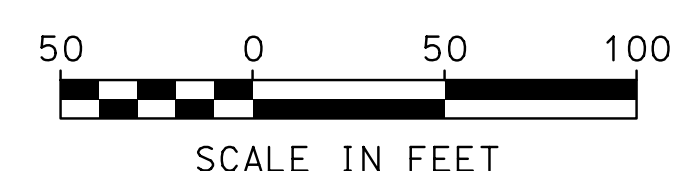


ELEVATION

SCALE: 1" = 50'-0"

NOTES:

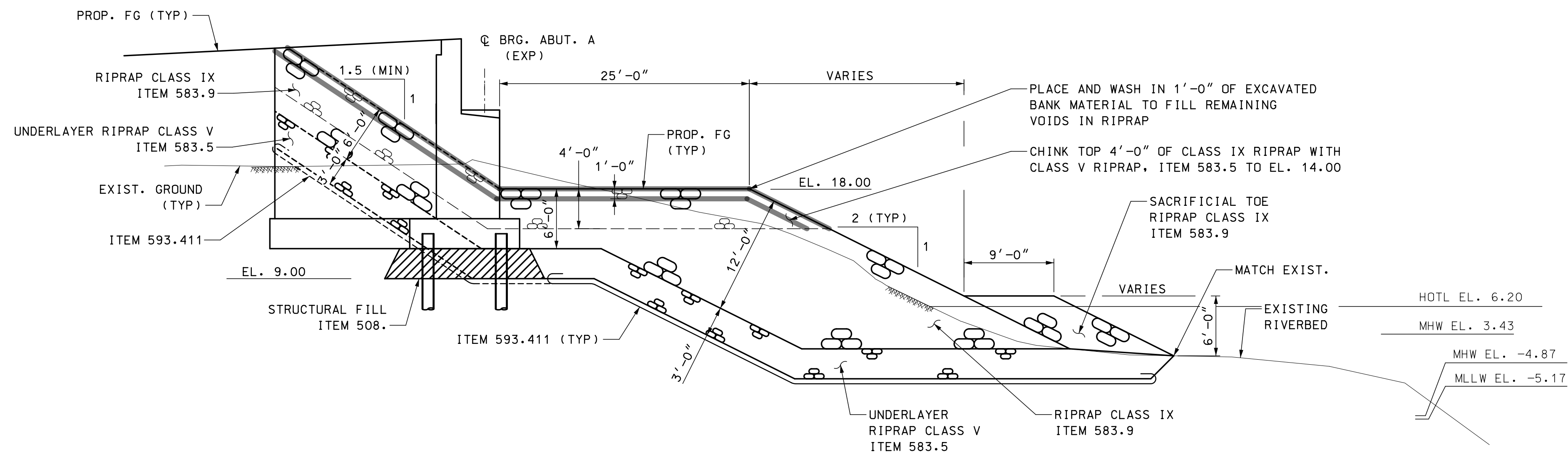
1. CONTOURS AND ELEVATIONS SHOWN ARE REPORTED ON THE NAVD88 DATUM. CHANNEL CONTOURS HAVE BEEN DEVELOPED FROM A BATHYMETRIC SURVEY COMPLETED IN JUNE 2022.
2. SEA LEVEL RISE HAS BEEN DETERMINED TO BE 3.75' FROM THE PREPARED VULNERABILITY ASSESSEMENT. THIS ELEVATION IS REPRESENTED BY THE "SLR" LINE SHOWN ON THE PLANS.
3. EXISTING BRIDGE REMOVAL LIMITS WITHIN THE FEDERAL NAVIGATION CHANNEL SHALL BE THE DEEPER OF 2' BELOW THE EXISTING RIVERBED OR ELEVATION -17.17' (2' BELOW THE OVERDREDGE LIMIT).



STATE OF NEW HAMPSHIRE					
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN					
TOWN	SEABROOK-HAMPTON	BRIDGE NO.	234/025	STATE PROJECT	15904
LOCATION	NH 1A OVER HAMPTON RIVER				
CHANNEL EXCAVATION PLAN AND ELEVATION					BRIDGE SHEET
					13 OF 21
					FILE NUMBER
					144-1-1
					TOTAL SHEETS
					21

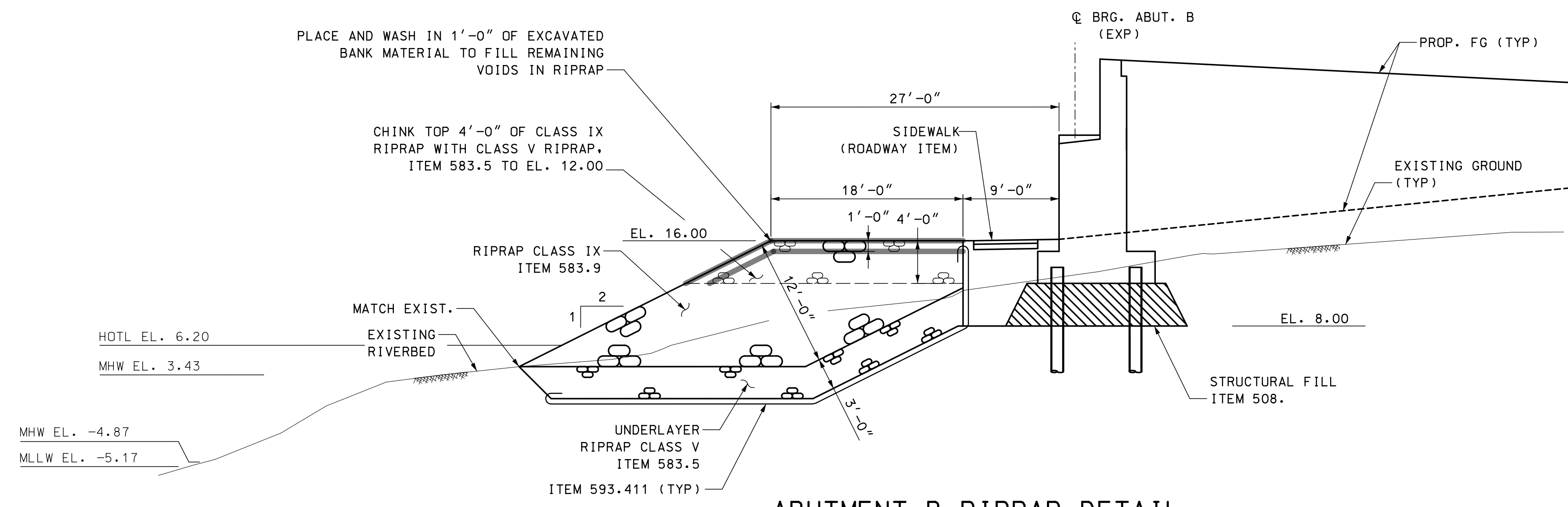
PLOT DATE	DGN LOCATOR	SHEET SCALE
6/26/2023	15904Channel_Ex	AS NOTED

ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE	X-A001(026)	13	21



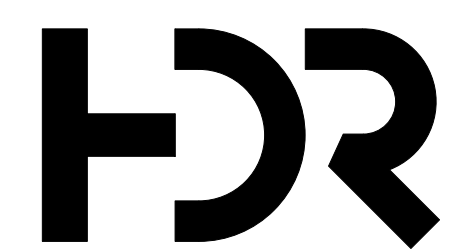
ABUTMENT A RIPRAP DETAIL

SCALE: 1/8" = 1'-0"



ABUTMENT B RIPRAP DETAIL

SCALE: 1/8" = 1'-0"



STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	SEABROOK-HAMPTON	BRIDGE NO.	234/025	STATE PROJECT	15904	BRIDGE SHEET			
LOCATION NH 1A OVER HAMPTON RIVER						14 OF 21			
TYPICAL CHANNEL RIPRAP PROTECTION									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	FILE NUMBER		
		DESIGNED	LHS	08/22	PJL	09/22	144-1-1		
		DRAWN	LHS	08/22	PJL	09/22	TOTAL SHEETS		
		QUANTITIES	CHECKED				21		
PLOT DATE	.DGN LOCATOR	SHEET SCALE		ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS		
6/26/2023	15904Channel_Ex	AS NOTED		REV. DATE	X-A001(026)	14	21		

EROSION CONTROL STRATEGIES

1. ENVIRONMENTAL COMMITMENTS:

- 1.1. THESE GUIDELINES DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH ANY CONTRACT PROVISIONS, OR APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
 - 1.2. THIS PROJECT WILL BE SUBJECT TO THE US EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER CONSTRUCTION GENERAL PERMIT AS ADMINISTERED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THIS PROJECT IS SUBJECT TO REQUIREMENTS IN THE MOST RECENT CONSTRUCTION GENERAL PERMIT (CGP).
 - 1.3. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE NHDES WETLAND PERMIT, THE US ARMY CORPS OF ENGINEERS PERMIT, WATER QUALITY CERTIFICATION AND THE SPECIAL ATTENTION ITEMS INCLUDED IN THE CONTRACT DOCUMENTS.
 - 1.4. ALL STORM WATER, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION (DECEMBER 2008) (BMP MANUAL) AVAILABLE FROM THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES (NHDES).
 - 1.5. THE CONTRACTOR SHALL COMPLY WITH RSA 485-A:17, AND ALL, PUBLISHED NHDES ALTERATION OF TERRAIN ENV-WQ 1500 REQUIREMENTS ([HTTP://DES.NH.GOV/ORGANIZATION/COMMISSIONER/LEGAL/RULES/INDEX.HTM](http://des.nh.gov/organization/commissioner/legal/rules/index.htm))
 - 1.6. THE CONTRACTOR IS DIRECTED TO REVIEW AND COMPLY WITH SECTION 107.1 OF THE CONTRACT AS IT REFERS TO SPILLAGE, AND ALSO WITH REGARDS TO EROSION, POLLUTION, AND TURBIDITY PRECAUTIONS.
- 2. STANDARD EROSION CONTROL SEQUENCING APPLICABLE TO ALL CONSTRUCTION PROJECTS:**
- 2.1. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES. PERIMETER CONTROLS AND STABILIZED CONSTRUCTION EXITS SHALL BE INSTALLED AS SHOWN IN THE BMP MANUAL AND AS DIRECTED BY THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARER.
 - 2.2. EROSION, SEDIMENTATION CONTROL MEASURES AND INFILTRATION BASINS SHALL BE CLEANED, REPLACED AND AUGMENTED AS NECESSARY TO PREVENT SEDIMENTATION BEYOND PROJECT LIMITS THROUGHOUT THE PROJECT DURATION.
 - 2.3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT AND SECTION 645 OF THE NHDOT SPECIFICATIONS FOR ROAD AND BRIDGES CONSTRUCTION.
 - 2.4. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - (A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - (B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - (C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED;
 - (D) TEMPORARY SLOPE STABILIZATION CONFORMING TO TABLE 1 HAS BEEN PROPERLY INSTALLED
 - 2.5. ALL STOCKPILES SHALL BE CONTAINED WITH A PERIMETER CONTROL. IF THE STOCKPILE IS TO REMAIN UNDISTURBED FOR MORE THAN 14 DAYS, MULCHING WILL BE REQUIRED.
 - 2.6. A WATER TRUCK SHALL BE AVAILABLE TO CONTROL EXCESSIVE DUST AT THE DIRECTION OF THE CONTRACT ADMINISTRATOR.
 - 2.7. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL REMAIN UNTIL THE AREA HAS BEEN PERMANENTLY STABILIZED.
 - 2.8. CONSTRUCTION PERFORMED ANY TIME BETWEEN NOVEMBER 30th AND MAY 1st OF ANY YEAR SHALL BE CONSIDERED WINTER CONSTRUCTION AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.
 - (A) ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15th, OR WHICH ARE DISTURBED AFTER OCTOBER 15th, SHALL BE STABILIZED IN ACCORDANCE WITH TABLE 1.
 - (B) ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15th, OR WHICH ARE DISTURBED AFTER OCTOBER 15th, SHALL BE STABILIZED TEMPORARILY WITH STONE OR IN ACCORDANCE WITH TABLE 1.
 - (C) AFTER NOVEMBER 30th INCOMPLETE ROAD SURFACES, WHERE WORK HAS STOPPED FOR THE SEASON, SHALL BE PROTECTED IN ACCORDANCE WITH TABLE 1.
 - (D) WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE PROJECT IS WITHOUT STABILIZATION AT ONE TIME, UNLESS A WINTER CONSTRUCTION PLAN HAS BEEN APPROVED BY NHDOT THAT MEETS THE REQUIREMENTS OF ENV-WQ 1505.02 AND ENV-WQ 1505.05.
 - (E) A SWPPP AMENDMENT SHALL BE SUBMITTED TO THE DEPARTMENT, FOR APPROVAL, ADDRESSING COLD WEATHER STABILIZATION (ENV-WQ 1505.05) AND INCLUDING THE REQUIREMENTS OF NO LESS THAN 30 DAYS PRIOR TO THE COMMENCEMENT OF WORK SCHEDULED AFTER NOVEMBER 30th.

GENERAL CONSTRUCTION PLANNING AND SELECTION OF STRATEGIES TO CONTROL EROSION AND SEDIMENT ON HIGHWAY CONSTRUCTION PROJECTS

3. PLAN ACTIVITIES TO ACCOUNT FOR SENSITIVE SITE CONDITIONS:
 - 3.1. CLEARLY FLAG AREAS TO BE PROTECTED IN THE FIELD AND PROVIDE CONSTRUCTION BARRIERS TO PREVENT TRAFFICKING OUTSIDE OF WORK AREAS.
 - 3.2. CONSTRUCTION SHALL BE SEQUENCED TO LIMIT THE DURATION AND AREA OF EXPOSED SOILS.
 - 3.3. PROTECT AND MAXIMIZE EXISTING NATIVE VEGETATION AND NATURAL FOREST BUFFERS BETWEEN CONSTRUCTION ACTIVITY AND SENSITIVE AREAS.
 - 3.4. WHEN WORK IS PERFORMED IN AND NEAR WATER COURSES, STREAM FLOW DIVERSION METHODS SHALL BE IMPLEMENTED PRIOR TO ANY EXCAVATION OR FILLING.
 - 3.5. WHEN WORK IS PERFORMED WITHIN 50 FEET OF SURFACE WATERS (WETLAND, OPEN WATER OR FLOWING WATER), PERIMETER CONTROL SHALL BE ENHANCED CONSISTENT WITH SECTION 2.1.2.1. OF THE 2012 NPDES CONSTRUCTION GENERAL PERMIT.
4. MINIMIZE THE AMOUNT OF EXPOSED SOIL:
 - 4.1. CONSTRUCTION SHALL BE SEQUENCED TO LIMIT THE DURATION AND AREA OF EXPOSED SOILS. MINIMIZE THE AREA OF EXPOSED SOIL AT ANY ONE TIME. PHASING SHALL BE USED TO REDUCE THE AMOUNT AND DURATION OF SOIL EXPOSED TO THE ELEMENTS AND VEHICLE TRACKING.
 - 4.2. UTILIZE TEMPORARY MULCHING OR PROVIDE ALTERNATE TEMPORARY STABILIZATION ON EXPOSED SOILS IN ACCORDANCE WITH TABLE 1.
 - 4.3. THE MAXIMUM AMOUNT OF DISTURBED EARTH SHALL NOT EXCEED A TOTAL OF 5 ACRES FROM MAY 1st THROUGH NOVEMBER 30th, OR EXCEED ONE ACRE DURING WINTER MONTHS, UNLESS THE CONTRACTOR DEMONSTRATES TO THE DEPARTMENT THAT THE ADDITIONAL AREA OF DISTURBANCE IS NECESSARY TO MEET THE CONTRACTORS CRITICAL PATH METHOD SCHEDULE (CPM), AND THE CONTRACTOR HAS ADEQUATE RESOURCES AVAILABLE TO ENSURE THAT ENVIRONMENTAL COMMITMENTS WILL BE MET.
5. CONTROL STORMWATER FLOWING ONTO AND THROUGH THE PROJECT:
 - 5.1. DIVERT OFF SITE RUNOFF OR CLEAN WATER AWAY FROM THE CONSTRUCTION ACTIVITY TO REDUCE THE VOLUME THAT NEEDS TO BE TREATED ON SITE.
 - 5.2. DIVERT STORM RUNOFF FROM UPSLOPE DRAINAGE AREAS AWAY FROM DISTURBED AREAS, SLOPES, AND AROUND ACTIVE WORK AREAS AND TO A STABILIZED OUTLET LOCATION.
 - 5.3. CONSTRUCT IMPERMEABLE BARRIERS AS NECESSARY TO COLLECT OR DIVERT CONCENTRATED FLOWS FROM WORK OR DISTURBED AREAS.
 - 5.4. STABILIZE, TO APPROPRIATE ANTICIPATED VELOCITIES, CONVEYANCE CHANNELS OR PUMPING SYSTEMS NEEDED TO CONVEY CONSTRUCTION STORMWATER TO BASINS AND DISCHARGE LOCATIONS PRIOR TO USE.
 - 5.5. DIVERT OFF-SITE WATER THROUGH THE PROJECT IN AN APPROPRIATE MANNER SO NOT TO DISTURB THE UPSTREAM OR DOWNSTREAM SOILS, VEGETATION OR HYDROLOGY BEYOND THE PERMITTED AREA.
6. PROTECT SLOPES:
 - 6.1. INTERCEPT AND DIVERT STORM RUNOFF FROM UPSLOPE DRAINAGE AREAS AWAY FROM UNPROTECTED AND NEWLY ESTABLISHED AREAS AND SLOPES TO A STABILIZED OUTLET OR CONVEYANCE.
 - 6.2. CONSIDER HOW GROUNDWATER SEEPAGE ON CUT SLOPES MAY IMPACT SLOPE STABILITY AND INCORPORATE APPROPRIATE MEASURES TO MINIMIZE EROSION.
 - 6.3. CONVEY STORMWATER DOWN THE SLOPE IN A STABILIZED CHANNEL OR SLOPE DRAIN.
 - 6.4. THE OUTER FACE OF THE FILL SLOPE SHOULD BE IN A LOOSE RUFFLED CONDITION PRIOR TO TURF ESTABLISHMENT. TOPSOIL OR HUMUS LAYERS SHALL BE TRACKED UP AND DOWN THE SLOPE, DISKED, HARROWED, DRAGGED WITH A CHAIN OR MAT, MACHINE-RAKED, OR HAND-WORKED TO PRODUCE A RUFFLED SURFACE.
7. ESTABLISH STABILIZED CONSTRUCTION EXITS:
 - 7.1. INSTALL AND MAINTAIN CONSTRUCTION EXITS, ANYWHERE TRAFFIC LEAVES A CONSTRUCTION SITE ONTO A PUBLIC RIGHT-OF-WAY.
 - 7.2. SWEEP ALL CONSTRUCTION RELATED DEBRIS AND SOIL FROM THE ADJACENT PAVED ROADWAYS AS NECESSARY.
8. PROTECT STORM DRAIN INLETS:
 - 8.1. DIVERT SEDIMENT LADEN WATER AWAY FROM INLET STRUCTURES TO THE EXTENT POSSIBLE.
 - 8.2. INSTALL SEDIMENT BARRIERS AND SEDIMENT TRAPS AT INLETS TO PREVENT SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM.
 - 8.3. CLEAN CATCH BASINS, DRAINAGE PIPES, AND CULVERTS IF SIGNIFICANT SEDIMENT IS DEPOSITED.
 - 8.4. DROP INLET SEDIMENT BARRIERS SHOULD NEVER BE USED AS THE PRIMARY MEANS OF SEDIMENT CONTROL AND SHOULD ONLY BE USED TO PROVIDE AN ADDITIONAL LEVEL OF PROTECTION TO STRUCTURES AND DOWN-GRADIENT SENSITIVE RECEPTORS.
9. SOIL STABILIZATION:
 - 9.1. WITHIN THREE DAYS OF THE LAST ACTIVITY IN AN AREA, ALL EXPOSED SOIL AREAS, WHERE CONSTRUCTION ACTIVITIES ARE COMPLETE, SHALL BE STABILIZED.
 - 9.2. IN ALL AREAS, TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED IN ACCORDANCE WITH THE STABILIZATION REQUIREMENTS (SECTION 2.2) OF THE 2012 CGP. (SEE TABLE 1 FOR GUIDANCE ON THE SELECTION OF TEMPORARY SOIL STABILIZATION MEASURES.)
 - 9.3. EROSION CONTROL SEED MIX SHALL BE SOWN IN ALL INACTIVE CONSTRUCTION AREAS THAT WILL NOT BE PERMANENTLY SEEDED WITHIN TWO WEEKS OF DISTURBANCE AND PRIOR TO SEPTEMBER 15, OF ANY GIVEN YEAR, IN ORDER TO ACHIEVE VEGETATIVE STABILIZATION PRIOR TO THE END OF THE GROWING SEASON.
 - 9.4. SOIL TACKIFIERS MAY BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND REAPPLIED AS NECESSARY TO MINIMIZE SOIL AND MULCH LOSS UNTIL PERMANENT VEGETATION IS ESTABLISHED.
10. RETAIN SEDIMENT ON-SITE AND CONTROL DEWATERING PRACTICES:
 - 10.1. TEMPORARY SEDIMENT BASINS (CGP-SECTION 2.1.3.2) OR SEDIMENT TRAPS (ENV-WQ 1506.10) SHALL BE SIZED TO RETAIN, ON SITE, THE VOLUME OF A 2-YEAR 24-HOUR STORM EVENT FOR ANY AREA OF DISTURBANCE OR 3,600 CUBIC FEET OF STORMWATER RUNOFF PER ACRE OF DISTURBANCE, WHICHEVER IS GREATER. TEMPORARY SEDIMENT BASINS USED TO TREAT STORMWATER RUNOFF FROM AREAS GREATER THAN 5-ACRES OF DISTURBANCE SHALL BE SIZED TO ALSO CONTROL STORMWATER RUNOFF FROM A 10-YEAR 24 HOUR STORM EVENT. ON-SITE RETENTION OF THE 10-YEAR 24-HOUR EVENT IS NOT REQUIRED.
 - 10.2. CONSTRUCT AND STABILIZE DEWATERING INFILTRATION BASINS PRIOR TO ANY EXCAVATION THAT MAY REQUIRE DEWATERING.
 - 10.3. TEMPORARY SEDIMENT BASINS OR TRAPS SHALL BE PLACED AND STABILIZED AT LOCATIONS WHERE CONCENTRATED FLOW (CHANNELS AND PIPES) DISCHARGE TO THE SURROUNDING ENVIRONMENT FROM AREAS OF UNSTABILIZED EARTH DISTURBING ACTIVITIES.

11. ADDITIONAL EROSION AND SEDIMENT CONTROL GENERAL PRACTICES:

- 11.1. USE TEMPORARY MULCHING, PERMANENT MULCHING, TEMPORARY VEGETATIVE COVER, AND PERMANENT VEGETATIVE COVER TO REDUCE THE NEED FOR DUST CONTROL. USE MECHANICAL SWEEPERS ON PAVED SURFACES WHERE NECESSARY TO PREVENT DUST BUILDUP. APPLY WATER, OR OTHER DUST INHIBITING AGENTS OR TACKIFIERS, AS APPROVED BY THE NHDES.
- 11.2. ALL STOCKPILES SHALL BE CONTAINED WITH TEMPORARY PERIMETER CONTROLS. INACTIVE SOIL STOCKPILES SHOULD BE PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY EROSION CONTROL SEED MIX AND MULCH, SOIL BINDER) OR COVERED WITH ANCHORED TARPS.
- 11.3. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED IN ACCORDANCE WITH SECTION 645 OF NHDOT SPECIFICATIONS, WEEKLY AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.25 IN. OF RAIN PER 24-HOUR PERIOD. EROSION AND SEDIMENT CONTROL MEASURES WILL ALSO BE INSPECTED IN ACCORDANCE WITH THE GUIDANCE MEMO FROM THE NHDES CONTAINED WITHIN THE CONTRACT PROPOSAL AND THE EPA CONSTRUCTION GENERAL PERMIT.
- 11.4. THE CONTRACTOR SHOULD UTILIZE STORM DRAIN INLET PROTECTION TO PREVENT SEDIMENT FROM ENTERING A STORM DRAINAGE SYSTEM PRIOR TO THE PERMANENT STABILIZATION OF THE CONTRIBUTING DISTURBED AREA.
- 11.5. PERMANENT STABILIZATION MEASURES WILL BE CONSTRUCTED AND MAINTAINED IN LOCATIONS AS SHOWN ON THE CONSTRUCTION PLANS TO STABILIZE AREAS. VEGETATIVE STABILIZATION SHALL NOT BE CONSIDERED PERMANENTLY STABILIZED UNTIL VEGETATIVE GROWTH COVERS AT LEAST 85% OF THE DISTURBED AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROL FOR ONE YEAR AFTER PROJECT COMPLETION.
- 11.6. CATCH BASINS: CARE SHALL BE TAKEN TO ENSURE THAT SEDIMENTS DO NOT ENTER ANY EXISTING CATCH BASINS DURING CONSTRUCTION. THE CONTRACTOR SHALL PLACE TEMPORARY STONE INLET PROTECTION OVER INLETS IN AREAS OF SOIL DISTURBANCE THAT ARE SUBJECT TO SEDIMENT CONTAMINATION.
- 11.7. TEMPORARY AND PERMANENT DITCHES SHALL BE CONSTRUCTED, STABILIZED AND MAINTAINED IN A MANNER THAT WILL MINIMIZE SCOUR. TEMPORARY AND PERMANENT DITCHES SHALL BE DIRECTED TO DRAIN TO SEDIMENT BASINS OR STORM WATER COLLECTION AREAS.
- 11.8. WINTER EXCAVATION AND EARTHWORK ACTIVITIES NEED TO BE LIMITED IN EXTENT AND DURATION, TO MINIMIZE POTENTIAL EROSION AND SEDIMENTATION IMPACTS. THE AREA OF EXPOSED SOIL SHALL BE LIMITED TO ONE ACRE, OR THAT WHICH CAN BE STABILIZED AT THE END OF EACH DAY UNLESS A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY THE DEPARTMENT.
- 11.9. CHANNEL PROTECTION MEASURES SHALL BE SUPPLEMENTED WITH PERIMETER CONTROL MEASURES WHEN THE DITCH LINES OCCUR AT THE BOTTOM OF LONG FILL SLOPES. THE PERIMETER CONTROLS SHALL BE INSTALLED ON THE FILL SLOPE TO MINIMIZE THE POTENTIAL FOR FILL SLOPE SEDIMENT DEPOSITS IN THE DITCH LINE.

BEST MANAGEMENT PRACTICES (BMP) BASED ON AMOUNT OF OPEN CONSTRUCTION AREA

12. STRATEGIES SPECIFIC TO OPEN AREAS LESS THAN 5 ACRES:
 - 12.1. THE CONTRACTOR SHALL COMPLY WITH RSA 485:A:17 AND ENV-WQ 1500; ALTERATION OF TERRAIN FOR CONSTRUCTION AND USE ALL CONVENTIONAL BMP STRATEGIES.
 - 12.2. SLOPES STEEPER THAN 3:1 WILL RECEIVE TURF ESTABLISHMENT WITH MATTING.
 - 12.3. SLOPES 3:1 OR FLATTER WILL RECEIVE TURF ESTABLISHMENT ALONE.
 - 12.4. AREAS WHERE HAUL ROADS ARE CONSTRUCTED AND STORMWATER CANNOT BE TREATED THE DEPARTMENT WILL CONSIDER INFILTRATION.
 - 12.5. FOR HAUL ROADS ADJACENT TO SENSITIVE ENVIRONMENTAL AREAS OR STEEPER THAN 5%, THE DEPARTMENT WILL CONSIDER USING EROSION STONE, CRUSHED GRAVEL, OR CRUSHED STONE BASE TO HELP MINIMIZE EROSION ISSUES.
 - 12.6. ALL AREAS THAT CAN BE STABILIZED SHALL BE STABILIZED PRIOR TO OPENING UP NEW TERRITORY.
 - 12.7. DETENTION BASINS SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE A 2 YEAR STORM EVENT.
13. STRATEGIES SPECIFIC TO OPEN AREAS BETWEEN 5 AND 10 ACRES:
 - 13.1. THE CONTRACTOR SHALL COMPLY WITH RSA 485:A:17 AND ENV-WQ 1500 ALTERATION OF TERRAIN AND SHALL USE CONVENTIONAL BMP STRATEGIES AND ALL TREATMENT OPTIONS USED FOR UNDER 5 ACRES WILL BE UTILIZED.
 - 13.2. DETENTION BASINS WILL BE CONSTRUCTED TO ACCOMMODATE THE 2-YEAR 24-HOUR STORM EVENT AND CONTROL A 10-YEAR 24-HOUR STORM EVENT.
 - 13.3. SLOPES STEEPER THAN A 3:1 WILL RECEIVE TURF ESTABLISHMENT WITH MATTING OR OTHER TEMPORARY SOIL STABILIZATION MEASURES DETAILED IN TABLE 1. THE CONTRACTOR MAY ALSO CONSIDER A SOIL BINDER IN ACCORDANCE WITH THE NHDES APPROVALS OR REGULATIONS. OTHER ALTERNATIVE MEASURES, SUCH AS BONDED FIBER MATRIXES (BFMS) OR FLEXIBLE GROWTH MEDIUMS (FGMS) MAY BE UTILIZED, IF MEETING THE NHDES APPROVALS AND REGULATIONS.
 - 13.4. SLOPES 3:1 OR FLATTER WILL RECEIVE TURF ESTABLISHMENT OR OTHER TEMPORARY SOIL STABILIZATION MEASURES DETAILED IN TABLE 1. THE CONTRACTOR MAY ALSO CONSIDER A SOIL BINDER IN ACCORDANCE WITH THE NHDES APPROVALS OR REGULATIONS.
14. STRATEGIES SPECIFIC TO OPEN AREAS OVER 10 ACRES:
 - 14.1. THE CONTRACTOR SHALL COMPLY WITH RSA 485:A:17 AND ENV-WQ 1500 ALTERATION OF TERRAIN AND SHALL USE CONVENTIONAL BMP STRATEGIES AND ALL TREATMENT OPTIONS USED FOR UNDER 5 ACRES AND BETWEEN 5 AND 10 ACRES WILL BE UTILIZED.
 - 14.2. THE DEPARTMENT ANTICIPATES THAT SOIL BINDERS WILL BE NEEDED ON ALL SLOPES STEEPER THAN 3:1, IN ORDER TO MINIMIZE EROSION AND REDUCE THE AMOUNT OF SEDIMENT IN THE STORMWATER TREATMENT BASINS.
 - 14.3. THE CONTRACTOR WILL BE REQUIRED TO HAVE AN APPROVED DESIGN IN ACCORDANCE WITH ENV-WQ 1506.12 FOR AN ACTIVE FLOCCULANT TREATMENT SYSTEM TO TREAT AND RELEASE WATER CAPTURED IN STORM WATER BASINS. THE CONTRACTOR SHALL ALSO RETAIN THE SERVICES OF AN ENVIRONMENTAL CONSULTANT WHO HAS DEMONSTRATED EXPERIENCE IN THE DESIGN OF FLOCCULANT TREATMENT SYSTEMS. THE CONSULTANT WILL ALSO BE RESPONSIBLE FOR THE IMPLEMENTATION AND MONITORING OF THE SYSTEM.

**TABLE 1
GUIDANCE ON SELECTING TEMPORARY SOIL STABILIZATION MEASURES**

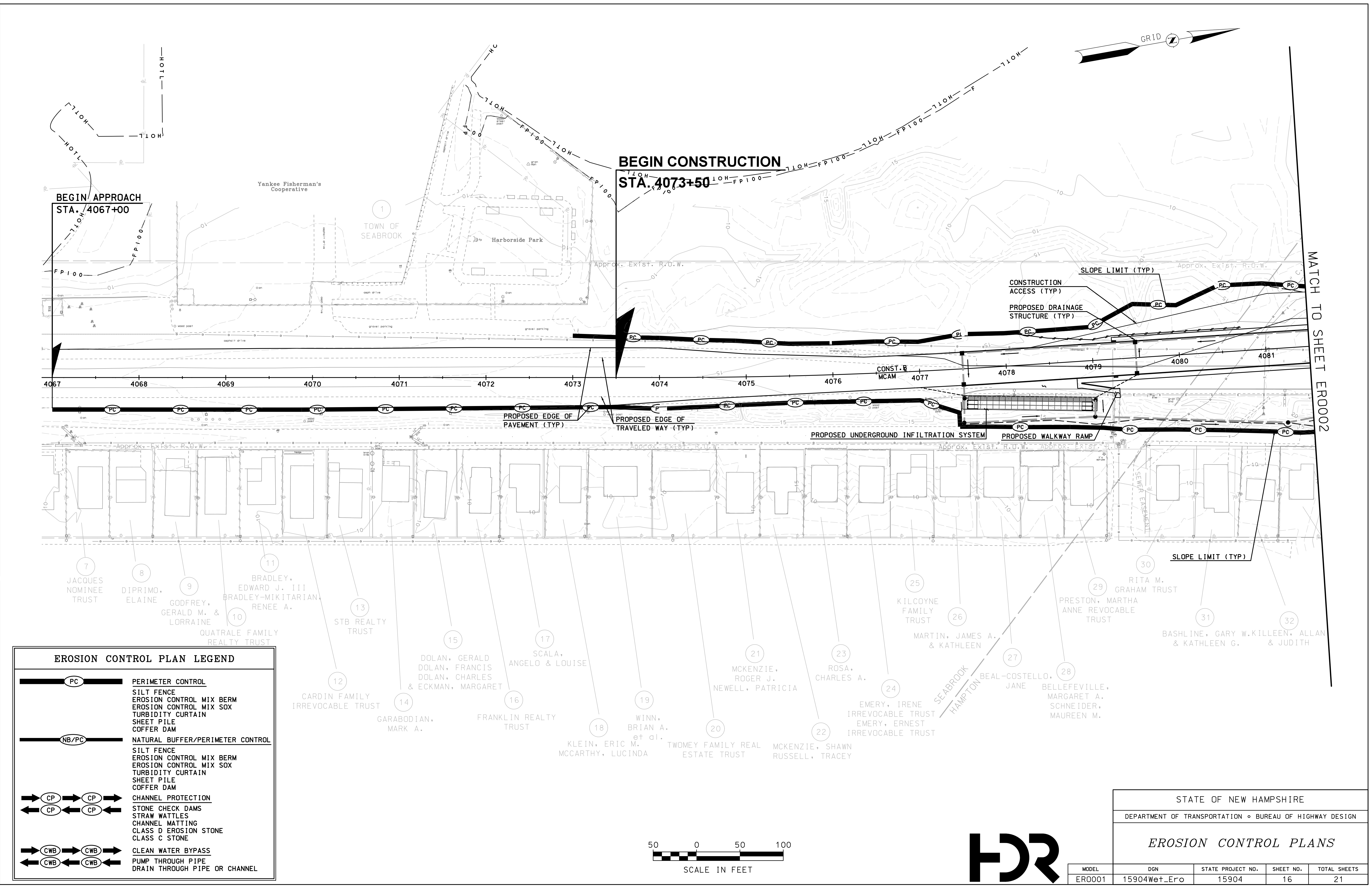
APPLICATION AREAS	DRY MULCH METHODS				HYDRAULICALLY APPLIED MULCHES ²				ROLLED EROSION CONTROL BLANKETS ³			
	HMT	WC	SG	CB	HM	SMM	BFM	FRM	SNSB	DNSB	DNCSB	DNCB
SLOPES ¹												
STEEPER THAN 2:1	NO	NO	YES	NO	NO	NO	NO	YES	NO	NO	NO	YES
2:1 SLOPE	YES ¹	YES ¹	YES	YES	NO	NO	YES	YES	NO	YES	YES	YES
3:1 SLOPE	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES	NO
4:1 SLOPE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO
WINTER STABILIZATION	4T/AC	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES
CHANNELS												
LOW FLOW CHANNELS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES
HIGH FLOW CHANNELS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

ABBREV.	STABILIZATION MEASURE	ABBREV.	STABILIZATION MEASURE	ABBREV.	STABILIZATION MEASURE
HMT	HAY MULCH & TACK	HM	HYDRAULIC MULCH	SNSB	SINGLE NET STRAW BLANKET
WC	WOOD CHIPS	SMM	STABILIZED MULCH MATRIX	DNSB	DOUBLE NET STRAW BLANKET
SG	STUMP GRINDINGS	BFM	BONDED FIBER MATRIX	DNCSB	2 NET STRAW-COCONUT BLANKET
CB	COMPOST BLANKET	FRM	FIBER REINFORCED MEDIUM	DNCB	2 NET COCONUT BLANKET

- NOTES:**
1. ALL SLOPE STABILIZATION OPTIONS ASSUME A SLOPE LENGTH ≤10 TIMES THE HORIZONTAL DISTANCE COMPONENT OF THE SLOPE, IN FEET.
 2. PRODUCTS CONTAINING POLYACRYLAMIDE (PAM) SHALL NOT BE APPLIED DIRECTLY TO OR WITHIN 100 FEET OF ANY SURFACE WATER WITHOUT PRIOR WRITTEN APPROVAL FROM THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES.
 3. ALL EROSION CONTROL BLANKETS SHALL BE MADE WITH WILDLIFE FRIENDLY BIODEGRADABLE NETTING.

STATE OF NEW HAMPSHIRE				
SEABROOK-HAMPTON				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
<i>EROSION CONTROL STRATEGIES</i>				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
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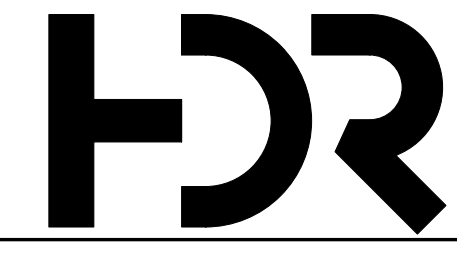
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NEW DESIGN	PUL	DATE	
SHEET CHECKED		DATE	
AS BUILT DETAILS		DATE	



EROSION CONTROL PLAN LEGEND

	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
	CLEAN WATER BYPASS PUMP THROUGH PIPE DRAIN THROUGH PIPE OR CHANNEL

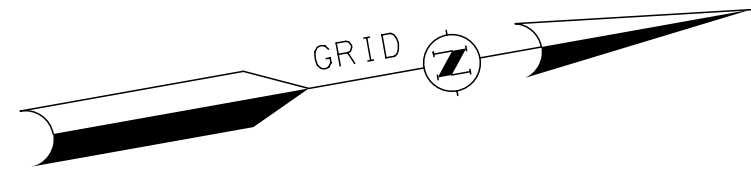
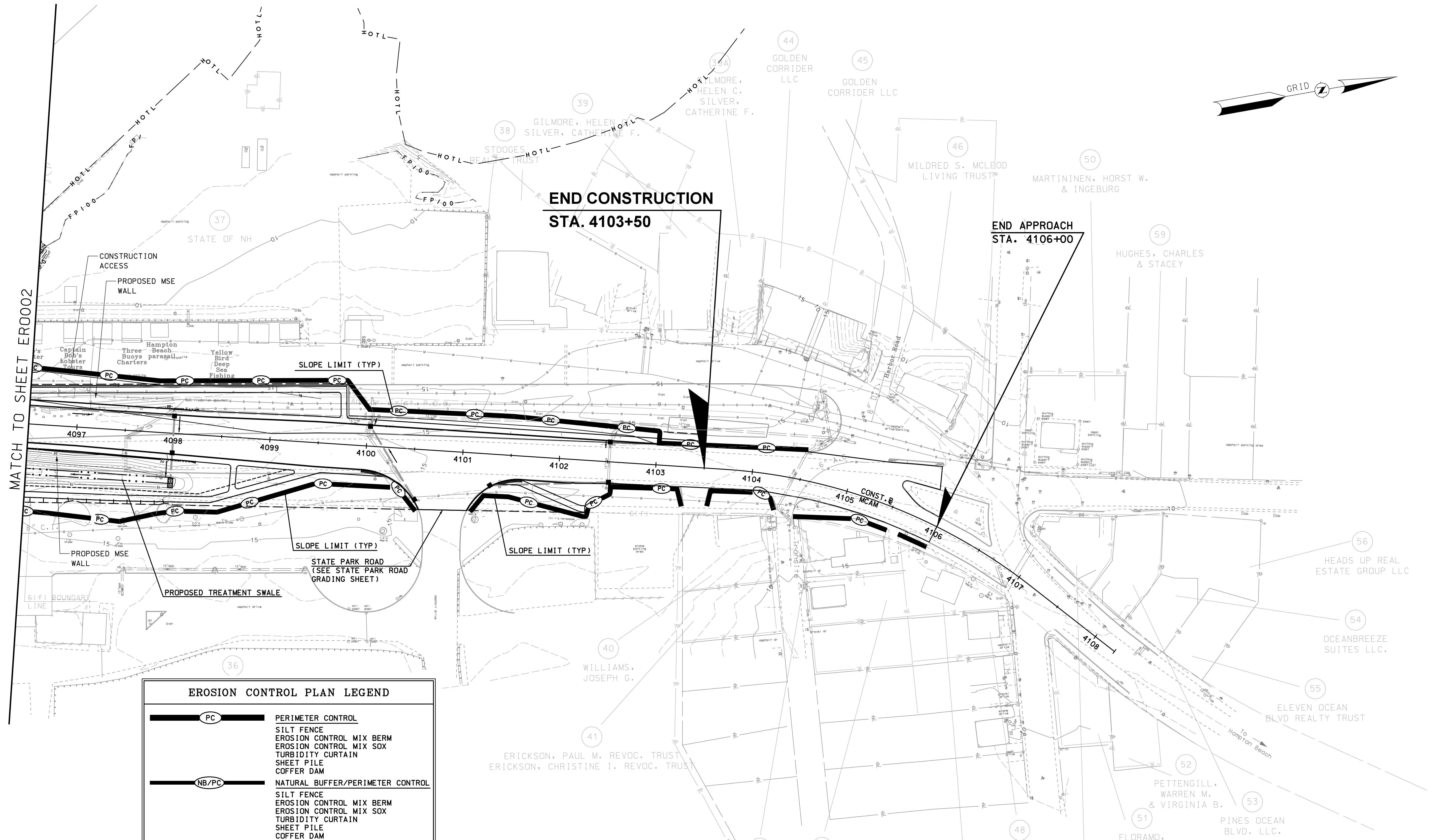
STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
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ER0001	15904Wet_Ero	15904	16	21



MATCH TO SHEET ER0002

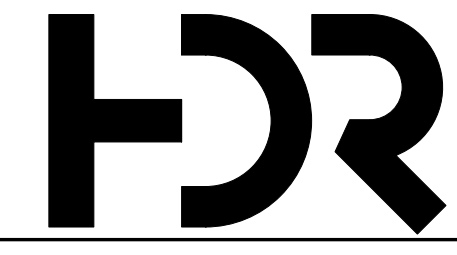
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NEW DESIGN	PUL	09/22				
SHEET CHECKED						
AS BUILT DETAILS						

REVISIONS AFTER PROPOSAL	STATION	DESCRIPTION

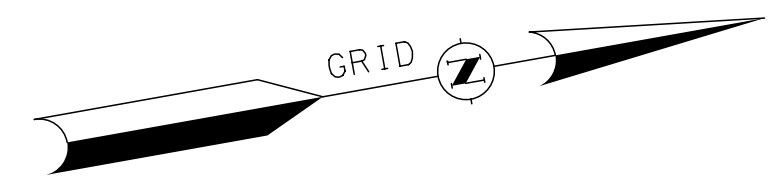


EROSION CONTROL PLAN LEGEND

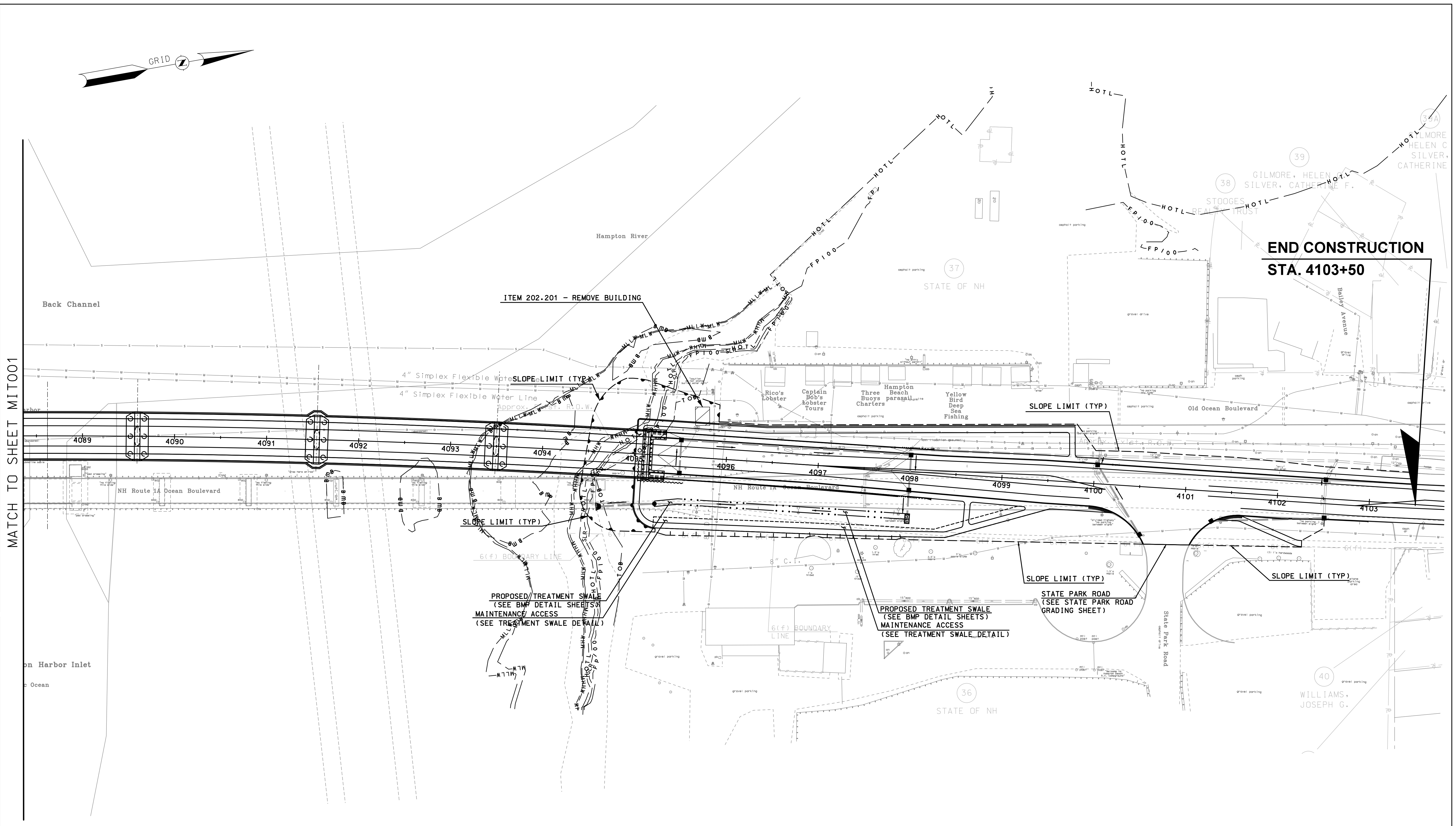
- PC** PERIMETER CONTROL
 - SILT FENCE
 - EROSION CONTROL MIX BERM
 - EROSION CONTROL MIX SOX
 - TURBIDITY CURTAIN
 - SHEET PILE
 - COFFER DAM
- NB/PC** NATURAL BUFFER/PERIMETER CONTROL
 - SILT FENCE
 - EROSION CONTROL MIX BERM
 - EROSION CONTROL MIX SOX
 - TURBIDITY CURTAIN
 - SHEET PILE
 - COFFER DAM
- CP** CHANNEL PROTECTION
 - STONE CHECK DAMS
 - STRAW WATTLES
 - CHANNEL MATTING
 - CLASS D EROSION STONE
 - CLASS C STONE
- CWB** CLEAN WATER BYPASS
 - PUMP THROUGH PIPE
 - DRAIN THROUGH PIPE OR CHANNEL



STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
EROSION CONTROL PLANS				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
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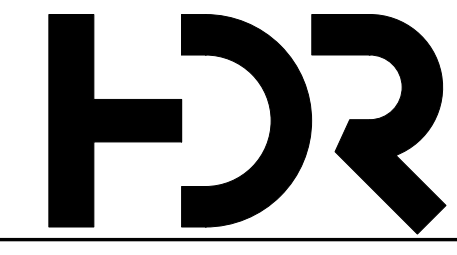
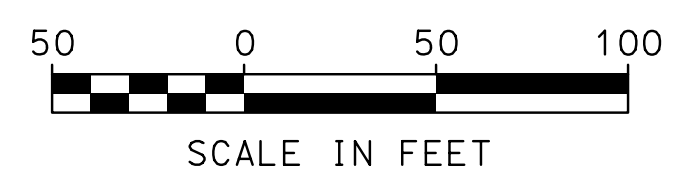


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SHEET CHECKED		DATE	
AS BUILT DETAILS		DATE	



MATCH TO SHEET MIT001

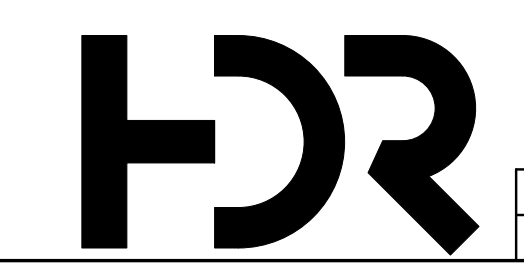
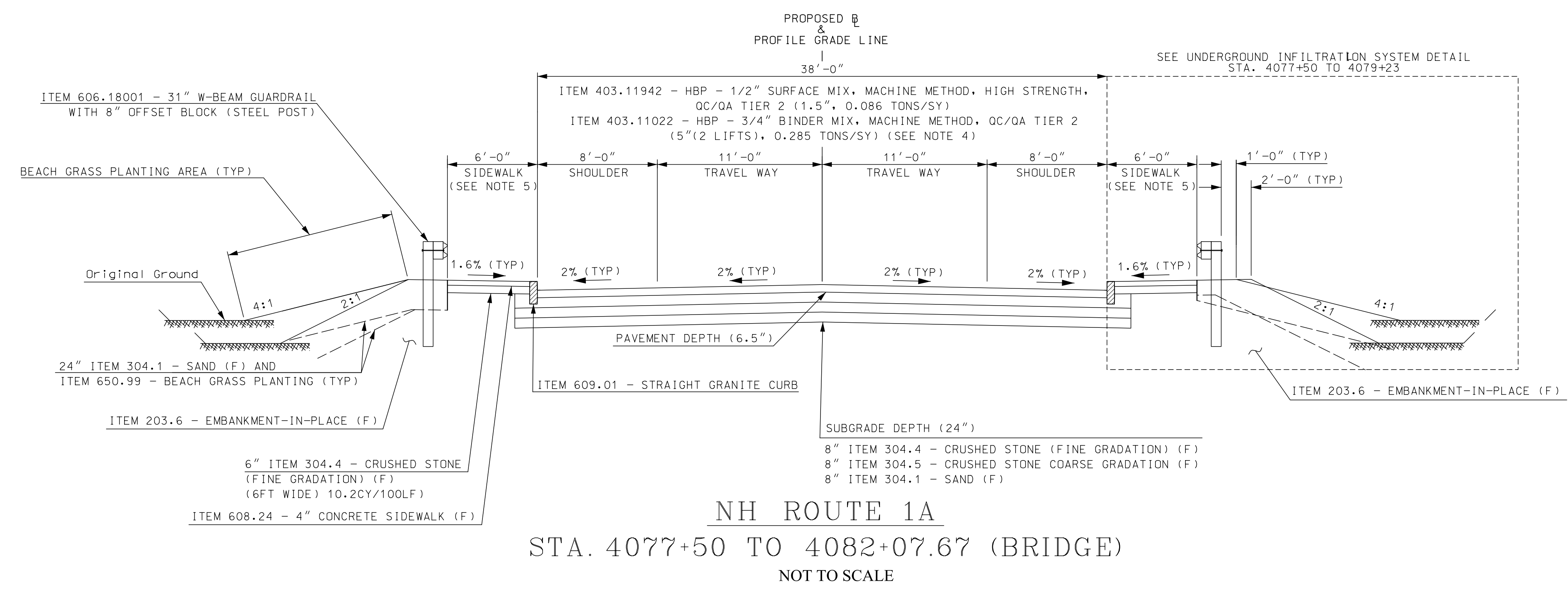
**END CONSTRUCTION
STA. 4103+50**



STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
MITIGATION PLANS				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
MIT002	15904wet_Mitign	15904	20	21

SDR PROCESSED	NHDDT	DATE	-
NEW DESIGN		DATE	
SHEET CHECKED		DATE	
AS BUILT DETAILS		DATE	

REVISIONS AFTER PROPOSAL	STATION	STATION	DATE	NUMBER	DESCRIPTION



STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
MITIGATION PLANS				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
MIT003	15904Wet_Mitign	15904	21	21

**Department of the Army General Permits
for the State of New Hampshire**

The New England District of the U.S. Army Corps of Engineers (USACE) hereby issues twenty-three (23) regional general permits (GPs) for activities subject to USACE jurisdiction in waters of the United States (U.S.), including navigable waters within the State of New Hampshire, adjacent ocean waters to the seaward limit of the outer continental shelf, and tribal lands. These GPs are issued in accordance with USACE regulations at 33 CFR 320-332 [see 33 CFR 325.5 (c)(1)]. These GPs will provide protection to the aquatic environment and the public interest while effectively authorizing activities that have no more than minimal individual and cumulative adverse environmental impacts.

For activities regulated by both New Hampshire Department of Environmental Services (NHDES) and within USACE jurisdiction, USACE will regulate those activities according to the terms and conditions of these GPs to minimize duplication between New Hampshire's regulatory programs and the USACE Regulatory Program. However, for activities not regulated by NHDES within USACE jurisdiction, USACE will use these GPs to regulate the activities provided they meet the terms and conditions of these GPs.

This document contains the following sections:

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Section II Review Categories & Application Procedures	3-9
Section III New Hampshire General Permits	10-35
Section IV General Conditions	36-50
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Appendix C Essential Fish Habitat Waters for Atlantic Salmon	64

In issuing these GPs, the Federal Government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest; (c) damages to persons, property or to other permitted or unpermitted activities or structures caused by the activity authorized by any of the GPs; (d) design or construction deficiencies associated with the permitted work; or (e) damage claims associated with any future modification, suspension or revocation of these permits.

Tammy R. Turley

September 29, 2022

Tammy R. Turley
Chief, Regulatory Division

Date

SECTION I. STATUTORY AUTHORITIES & REGULATED ACTIVITIES

1. Work Requiring USACE Authorization

a. Section 10: Work and structures that are located in, over, under or that affect navigable waters of the United States (U.S.) (see 33 CFR 328). The USACE regulates these activities under Section 10 of the Rivers and Harbors Act of 1899 (see 33 CFR 322).

b. Section 404: The discharge of dredged or fill material into waters of the U.S. The USACE regulates these activities under Section 404 of the Clean Water Act. The term “discharge of dredged or fill material” also includes certain discharges resulting from excavation. Applicants should contact USACE to determine if a particular excavation discharge occurring within waters of the U.S., is a regulated activity. Discharges not requiring permits, are any discharge of dredged or fill material that may result from normal farming, silviculture, ranching activities, maintenance of currently serviceable structures, construction and maintenance of farm and stock ponds, or irrigation ditches, construction of temporary sediment basins, and construction or maintenance of farm, forest roads or temporary roads for the movement of mining equipment is not prohibited by or otherwise subject to regulation under Section 404 (except as specified in paragraphs (b) and (c) of 33 CFR 323.4).

For additional information on the limits of USACE jurisdiction, please see:

https://www.nae.usace.army.mil/Portals/74/docs/regulatory/JurisdictionalLimits/JurisdictionalLimits_Brochure.pdf.

2. Authority to issue General Permits

In accordance with 33 USC 1344(e), “in carrying out his functions relating to the discharge of dredged or fill material under this section, the Secretary may, after notice and opportunity for public hearing, issue general permits on a State, regional, or nationwide basis for any category of activities involving discharges of dredged or fill material if the Secretary determines that the activities in such category are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will only have minimal cumulative adverse effect on the environment.”

3. Related Laws

33 CFR 320.3 includes a list of related laws including, but not limited to, Section 408 of the Rivers and Harbors Act of 1899, Section 401 of the Clean Water Act, Section 402 of the Clean Water Act, Section 307(c) of the Coastal Zone Management Act of 1972, Section 106 of the National Historic Preservation Act of 1966, Section 7 of the Endangered Species Act, the Fish and Wildlife Coordination Act of 1956, the Magnuson-Stevens Fishery Conservation and Management Act, Section 302 of the Marine Protection, Research and Sanctuaries Act of 1972, and Section 7(a) of the Wild and Scenic Rivers Act.

SECTION II. REVIEW CATEGORIES & APPLICATION PROCEDURES

For activities to qualify under these GPs, they must meet the terms and eligibility criteria of one or more of the GPs (Section III) and all general conditions (GCs) (Section IV) of the GP. Applicants should first review the GPs to see if a project is eligible under one or more of the GPs within this document. Any activity not specifically listed may still be eligible for authorization under these GPs; applicants are advised to contact USACE for specific eligibility determination.

The USACE will review activities according to the State of New Hampshire classification of Self-Verification (SV) (Minimum) and Pre-construction Notification (PCN) (Minor/Major) per the State of New Hampshire Wetland Administrative Rules Env-Wt 100 – 1000. The USACE review thresholds are typically the same as the State’s but may differ according to the activity (see table below). For activity specific thresholds and Section 10 requirements reference Section III.

Section 404 Thresholds for SV (Minimum) & PCN (Minor & Major) ¹		
	NHDES	USACE
Non-tidal Wetlands		
SV (Minimum)	< 3,000 square feet (SF)	< 3,000 SF
PCN (Minor)	≥3,000 SF to <10,000 SF	≥3,000 SF to <3 acres
PCN (Major)	>10,000 SF	≥3,000 SF to <3 acres
Tidal Wetlands		
SV (Minimum)	No new fill	<100 SF
PCN (Minor)	No new fill	< 1 acre
PCN (Major)	New fill	< 1 acre
Watercourses/Waterways		
SV (Minimum)	< 50 linear feet (LF)	< 100 LF
PCN (Minor)	≥50 LF to <200 LF	≥100 LF to <500 LF
PCN (Major)	≥200 LF	≥100 LF to <500 LF

There are exceptions to these thresholds based on activity type which can be found in the GPs listed in Section III. Additionally, NHDES requires all projects in Priority Resource Areas (PRAs) to be reviewed as a Major unless there is a NHDES project exemption.

Proposed projects with aquatic resource impacts greater than 1 acre shall include additional information to support a minimal impact determination. Additional information will include a functional assessment for aquatic resources within the project area, on and off-site analysis, and the checklist provided in Appendix B, Section 6. Based on the information provided, USACE will determine whether the proposed project will qualify under this GP. If a minimal impact determination cannot be made, then an individual permit review will be required.

¹ Under the NHDES administrative rules, *Env-Wt 407.03 Jurisdictional Area Size Thresholds* specifies the classifications for Minimum, Minor and Major, which may be further modified by *Env-Wt 903 Stream Crossings: Classifications and Applications*, and *Env-Wt 600 Coastal Lands and Tidal Waters/Wetlands*. Additionally, NHDES regulates both bed and bank for streams while USACE only regulates below the OHWM.

Notwithstanding compliance with the terms and GCs in these GPs, USACE retains discretionary authority to require either a PCN (Minor/Major) review or an individual permit review for any project, including a higher-level review for an SV(Minimum), based on concerns for the aquatic environment or for any of the other public interest factors found in 33 CFR 320.4(a). This authority is invoked on a case-by-case basis whenever USACE determines that the potential impacts of the proposal warrant either a PCN (Minor/Major) review or an individual permit review based on the concerns stated above. This authority may be invoked for projects with cumulative environmental impacts that are more than minimal, or if there is a special resource or concern associated with a particular project. Whenever USACE notifies an applicant that an individual permit review is required, authorization under these GPs is voided, and no work may be conducted in waters of the U.S. until USACE issues the required authorization or until USACE notifies the applicant that further review has demonstrated that the work may proceed under these GPs.

1. State Approvals

a. The following state Water Quality Certification (WQC) and the Coastal Zone Management Act (CZMA) Federal Consistency Concurrence approvals must be obtained prior to the commencement of work in USACE jurisdiction (see GC 1) for USACE GP authorizations to be valid. Applicants are responsible for applying for and obtaining any of the other required State and or local approvals such as the NH Shoreland Water Quality Protection Act (SWQPA).

i. Water Quality Certification under Section 401 of the Federal Clean Water Act (CWA) (33 USC 1341). The CWA requires applicants to obtain a WQC or waiver from the state water pollution control agency (NHDES, Watershed Management Bureau) for any GP that may result in a discharge during construction or operation of the activity. State jurisdiction for impacts to wetlands extends back to 1967 for tidal waters and 1969 for non-tidal waters. An applicant proposing to impact historic fill areas should meet with NHDES prior to plan development to ensure that the wetland plan captures state regulated resources. The NHDES has granted WQC #2022-404P-001 (WQC #2022-404P-001) for the activities authorized in these GPs provided that the Applicant complies with the conditions in this document and obtains and compiles with all other applicable permits and approvals, which could include, but are not limited to, permits issued by the NHDES Wetlands Bureau and the NHDES Alteration of Terrain Bureau. Under condition E-3 of the WQC #2022-404P-001, proposed GP activities shall be coordinated with NHDES. If NHDES recommends that additional conditions, modifications, or monitoring of a proposed activity are necessary, NHDES may include additional conditions in their other NHDES permits, when applicable to the activity authorized by law. NHDES may request that the Corps include certain special conditions in the applicable GP authorizations. If NHDES believes that an individual WQC is necessary, they may request that USACE use its discretionary authority pursuant to 33 CFR 325.2(e)(2); which would require the applicant obtain an individual permit and individual WQC. USACE will independently evaluate any requested conditions or use of discretionary authority (if received before a decision is rendered) and determine whether these will be required to ensure the project will result in no more than minimal individual or cumulative adverse effects on the aquatic environment or be contrary to the public interest.

ii. Coastal Zone Management Act Federal Consistency Concurrence pursuant to Section 307 of the CZMA of 1972, as amended. The NHDES administers the NH Coastal Program (NHCP). The NHCP has determined that any project in the NH Coastal Zone that

is authorized under the SV (Minimum) or PCN (Minor/Major) categories of these GPs is consistent with the NHCP and does not require additional CZMA Federal consistency review. The landward boundary of the state's coastal zone encompasses the jurisdictional borders of the 17 coastal municipalities subject to tidal influence. The seaward boundary of the state's coastal zone extends three nautical miles offshore.

2. Procedures For How to Apply/Obtain Self-Verification (SV) (Minimum)

SV (Minimum) may proceed after receiving NHDES Wetlands Bureau authorization unless the applicant receives written notification from USACE within 30 days of the NHDES authorization. If the project is eligible for an SV (Minimum), the applicant must ensure the project is in full compliance with the terms and GCs of the applicable GP's. If any of the terms or GCs are not met, your project must be reviewed under the PCN (Minor/Major) procedures or individual permit procedures described within this document. These GPs do not replace or change the activities exempt from USACE regulation or USACE individual permit review process.

a. Eligible SV Activities:

- Are subject to USACE jurisdiction [see GC 2];
- Meet the GCs of this document and any applicable GP;
- Meet the definitions of a State of New Hampshire SV (Minimum); this may include Utility Line Notifications, Culvert Repair-Replacement Permit-by-Notification (PBN) & Wetlands PBN;
- Qualifies for one or more of the GPs within this document; and
- Receive approval from the NHDES Wetlands Bureau and all other applicable Federal and State agencies, may proceed upon authorization from the NHDES Wetlands Bureau if they meet SV (Minimum) conditions unless notification is received from USACE requiring further review or additional information.

Minimal impact work which meets the terms and conditions found within these GPs, under SV (Minimum), eliminates the need to apply separately to USACE for most minor, non-controversial work in New Hampshire when that work is authorized by NHDES.

b. Abbreviated Application Procedures for Self-Verification (SV) (Minimum)

An application to USACE is not required but the applicant must submit the information in Appendix B, which includes the USACE Section 404 Checklist, in the NHDES Wetlands Bureau application. For convenience, Appendix B is also attached to the NHDES Wetlands Bureau applications and Permit by Notification forms. The USACE will review this information for all projects to assess direct, indirect, secondary, and cumulative impacts. The USACE will decide if the project:

- i. As proposed will have no more than minimal environmental impacts, which means the project may then proceed upon authorization from the NHDES Wetlands Bureau without waiting for USACE confirmation; or
- ii. Will receive a higher-level review, if there are concerns for the aquatic environment and/or, any other factor of the public interest. If a higher-level review is

required, USACE will notify the NHDES Wetlands Bureau and the applicant. The USACE will then notify the applicant of their project status and request any additional information that may be required.

Applicants seeking SV (Minimum) authorizations are not relieved of their obligation to comply with the GCs and other Federal laws such as the National Historic Preservation Act (GC 14), the Endangered Species Act (GC 10) the Wild and Scenic Rivers Act (GC 13), and Essential Fish Habitat (GC 11).

3. Procedures for How to Apply/Obtain Pre-Construction Notification (PCN) (Minor and Major)

For activities that are not eligible for SV (Minimum) or when it is stated that a PCN (Minor/Major) is required, an application to and written authorization from NHDES and USACE is required. No work requiring a PCN may proceed until written authorization from USACE has been received.

a. Eligible PCN Activities:

- Are subject to USACE jurisdiction;
- Meet the GCs of one or more of the GPs in this document;
- Meet the definitions of a NHDES PCN (Minor/Major);
- Meet the definition of SV (Minimum) but have been determined by USACE to have concern for the aquatic environment, any other factor of the public interest, or for any potential secondary impacts;
- Evaluated through the USACE Interagency Review Process;
- Meet the minimal impact determination if impacts to aquatic resources are greater than 1 acre (Appendix B);
- Receive approval from the NHDES Wetlands Bureau and all other applicable State agencies; and
- Receive all other required Federal and State approvals.

b. Application Procedures Pre-Construction Notification (PCN) (Minor and Major)

For projects qualifying as a PCN (Minor/Major), the applicant shall submit the NHDES wetland application package to the NHDES Wetlands Bureau. Once NHDES permits are finalized, NHDES will deliver a weekly Decision Report to USACE listing the prior week's finalized permits, to include the State permit number, narrative, and applicant/agent contact information. Alternatively, the applicant may submit an application directly to USACE concurrently with their NDHES application. Digital submissions are encouraged and preferred and can be submitted directly to USACE staff or at cenae-r-nh@usace.army.mil. If the digital file application is too large for an electronic email attachment, the applicant or agent may also send a request to the email address above for a secure file transfer protocol (FTP) link. If a hard copy or large-scale drawings are required for the evaluation, USACE staff will notify the applicant or agent directly. Where applications are time sensitive, applicants are encouraged to submit them simultaneously with NHDES and USACE.

Information required for a complete application can be found in Appendix B, which is also an addendum to the NHDES Wetland Bureau application. If a project is exempt from the

State process, an application for work within USACE jurisdiction shall be sent directly to USACE for review and authorization. Applicants must submit all project revisions and modifications to both agencies.

All applicants requiring a USACE authorization shall submit a Request for Project Review (RPR) Form to the NH State Historic Preservation Officer (SHPO) at the NH Division of Historical Resources (DHR) to be reviewed for the presence of historic and/or archaeological resources within the proposed permit area. The applicant must submit with their application to the NHDES Wetlands Bureau, a copy of their cover letter to and/or comments received from the SHPO concerning their project. Any correspondence from the DHR to the applicant or their consultant shall be forwarded to USACE with their state NHDES file number. The SHPO will notify USACE if there are State concerns on historic resources within 30 days of submission of notification (33 CFR Appendix C 325.3). The RPR Form submission to the DHR is not required by USACE if the project is not within USACE permit area or another Federal action agency has previously satisfied the consultation requirements of Section 106 of the National Historic Preservation Act.

The USACE will notify the applicant within thirty (30) days from the NHDES Wetlands Bureau decision if the project is authorized under one or more of the GPs, if additional information is needed, or if an individual permit review is required.

c. Interagency Review Procedures

The USACE, Federal resource agencies, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS), National Park Service (NPS), Aquinnah Wampanoag Tribe, and the NHDES Wetlands Bureau will comprise the interagency review team (IRT) should they decide to participate. The USACE will review all PCN (Minor/Major) applications with the IRT on a monthly basis. The USACE and the Federal resource agencies at the branch chief or equivalent level may agree on certain activities that do not require coordination or may substitute a different review process. The USACE may determine on its own, or in consultation with the IRT within ten (10) business days of the review, if applications for PCN (Minor/Major) work:

- i. Are eligible under these GPs as proposed;
- ii. Require additional information;
- iii. Will require avoidance, minimization, construction sequencing, project modification, mitigation, or other special conditions to avoid or minimize adverse environmental impacts and protect the aquatic environment to be eligible for authorization under these GPs;
- iv. Are ineligible under the terms and/or conditions of these GPs; or
- v. Require individual permit review regardless of whether the terms and GCs of these GPs are met, based on concerns for the aquatic environment or any other factor of the public interest (see GC 4 Discretionary Authority).

The USACE will contact the applicant if there are concerns. For additional information requests, USACE will copy the NHDES Wetlands Bureau administrator and assigned NHDES reviewer along with the Federal resource agency making the request. If the applicant is unable to resolve the concerns or modify the project, USACE may determine that a project is ineligible under these GPs and invoke its discretionary authority and require the applicant to apply for an individual permit. A project may regain eligibility under one or

more of these GPs if the applicant subsequently addresses all the concerns raised to USACE satisfaction.

All New Hampshire Department of Transportation (NHDOT) projects will be reviewed at a monthly Natural Resources Meeting that includes the applicant, NHDOT, NHDES, USACE, Federal Highway Administration (FHWA), EPA, NMFS, and USFWS. Additionally, these projects may also be reviewed at a monthly Cultural Resource Meeting if there are concerns regarding any historic and/or archaeological resources with the SHPO.

The applicant must wait for written authorization from USACE before the start of construction. To proceed with a PCN (Minor/Major) without a USACE written authorization is a violation of these GPs, and the terms and conditions of this document. The applicant may be subjected to an enforcement action by the EPA and/or USACE.

4. Construction of Solid Fill Structures and Fills Along the Coastline or Baseline from Which the Territorial Sea is Measured. All are considered Pre-Construction Notification (PCN) (Major)

Projects with construction of solid fill structures or discharge of fill that may extend beyond the coastline or the baseline from which the territorial sea is measured (i.e., mean low water), must be coordinated with the Bureau of Ocean Energy Management (BOEM), Outer Continental Shelf (OCS) Survey Group, pursuant to the Submerged Lands Act (43 USC 1301-1315, 33 CFR 320.4(f)). The USACE will forward project information to BOEM for their review. The BOEM will coordinate their determination with the Department of the Interior (DOI) Solicitor's Office. The DOI will have ten (10) business days from the date BOEM received the project information to determine if the baseline will be affected. If USACE is not notified within the ten (10) day period, it will assume a "no effect" determination. If the solicitor's notification to USACE is verbal, it must be followed with a written confirmation within ten (10) business days of the date of the verbal notification. This procedure will be eliminated if the State provides a written waiver of interest in any increase in submerged lands caused by a change in the baseline resulting from solid fill structures or fills authorized under these GPs.

5. Individual Permit

Projects that are not eligible for these GPs require an IP (33 CFR 325.5 (b)). Proposed work in this category will require a separate Federal application for an individual permit from USACE (33 CFR 325.1). In addition, USACE retains discretionary authority on a case-by-case basis to elevate GP-eligible activities to an IP based on concerns for the aquatic environment or any other factor of the public interest (33 CFR 320.4 (a)). Applicants are required to submit the appropriate application materials directly to USACE as early as possible to expedite the permit review process. General information and application forms can be obtained at our web site or calling our office at (978) 318-8338. Individual 401 WQC and/or CZMA Federal consistency concurrence from the appropriate NH agencies are required before USACE can issue an individual permit. Filing an individual permit application does not relieve the applicant from their obligation to obtain all required Federal, State and/or local approvals.

6. Emergency Procedures 33 CFR 325.2(e)(4): Pre-Construction Notification (PCN) (Minor/ Major)

An “emergency” is a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures.

In accordance with NHDES administrative rules, applicants may request, and NHDES may authorize, work within jurisdiction when there is an emergency situation (as defined above) if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process an application under standard procedures and the event causing the emergency occurred within the previous five days. Emergency work shall be limited to that which is necessary to stabilize and secure the situation. Additional work needed for final repairs shall not be completed until approval is obtained through the appropriate, non-emergency process. Emergency work is subject to the same terms and conditions of these GPs as non-emergency work, and similarly, is subject to the terms and conditions of this document; otherwise, an IP is required. Contact NHDES and USACE in the event of an emergency situation.

The work proponent shall submit a description of all work performed during an emergency to USACE, except for those projects classified SV (Minimum), in lieu of a permit application. Applications as required under NHDES administrative rules shall be submitted for any permanent repairs, restoration, or other activities proposed to be conducted after the emergency has ended. The USACE will review emergency work and confirm any additional Federal authorizations or mitigation required during real-time review and/or through an after-the-fact permit process. Emergency authorizations shall be limited to stabilization of the site and/ or mitigation of an immediate threat.

SECTION III. NEW HAMPSHIRE GENERAL PERMITS

1. Aids to Navigation and Temporary Recreation Structures
2. Repair or Maintenance of Existing Currently Serviceable, Authorized or Grandfathered Structures/Fills, Removal of Structures
3. Moorings
4. Pile-Supported Structures and Floats, Including Boat Lifts/Hoists and Other Miscellaneous Structures and Work
5. Boat Ramps and Marine Railways
6. Utility Line Activities
7. Dredging, Transport & Disposal of Dredged Material, Beach Nourishment, Rock Removal, and Rock Relocation
8. U.S. Coast Guard Approved Bridges and Causeways
9. Shoreline and Bank Stabilization Projects
10. Aquatic Habitat Restoration, Establishment, & Enhancement Activities
11. Fish & Wildlife Harvesting, Enhancement and Attraction Devices and Activities
12. Oil Spill and Hazardous Material Cleanup
13. Cleanup of Hazardous and Toxic Waste
14. Scientific Measurement Devices
15. Survey Activities
16. Energy Generation, Renewable Energy Generation and Hydropower Facilities
17. New/Expanded Residential & Commercial Developments & Recreation Facilities
18. Aquaculture Projects and Fisheries
19. Mining Activities
20. Living Shorelines
21. Agricultural Activities
22. Repair or Maintenance of Existing Currently Serviceable, Authorized or Grandfathered Dams
23. Wetland, Stream, River, and Brook Crossings

GP 1. AIDS TO NAVIGATION AND TEMPORARY RECREATIONAL STRUCTURES (Section 10; tidal and navigable waters of the U.S.) The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard (see 33 CFR, chapter I, subchapter C, part 66) and temporary buoys, markers, small floating docks, and similar structures placed for recreational use during specific events such as firework displays, water skiing competitions, and boat races or seasonal use.

Not authorized under GP 1: Permanent and temporary fill to ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, and areas containing shellfish.

Note: These activities in non-navigable inland waters do not require USACE authorization.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>1. Temporary buoys, markers, floats, etc. for recreational use during specific events, provided:</p> <ul style="list-style-type: none"> • They are in place for no more than 30 days and are removed within 15 days after use is discontinued. • Moorings, buoys, and floats are not located over submerged aquatic vegetation (SAV). • Float stops, cable connections, or other devices must be used to provide ≥ 2-foot clearance between the bottom of the float and the substrate during all tides. • Not located within Federal navigation projects (FNPs) and their associated buffer zones. <p>2. Structures, buoys, floats, and other devices placed within anchorage or fleeting areas to facilitate moorage of vessels where such areas have been established for that purpose by the U.S. Coast Guard provided placement is outside of EFH, SAV, or areas containing shellfish. If placement outside of SAV isn't possible, proper/eco-friendly moorings must be used so cable connections don't rest on the bottom; and</p> <p>For 1 and 2 above to be SV Eligible, authorization by the local harbormaster and/or the Pease Development Authority, Division of Ports and Harbors, (http://www.portofnh.org) is required.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Work in tidal SAS or EFH habitat including SAV, intertidal areas, or natural rocky habitats. 	<p>Work not eligible for SV (Minimum)</p> <p>Aids to navigation or temporary markers, floats, etc. that are not to be removed within 30 days.</p> <p>Aids to navigation or temporary markers, floats, structures, etc. that are within a USACE FNP.</p> <p>Moorings, buoys, and floats located over SAV must use proper/eco-friendly connections that don't rest on the bottom; and</p> <p>< 1 acre of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p>

GP 2. REPAIR OR MAINTENANCE OF EXISTING CURRENTLY SERVICEABLE, AUTHORIZED OR GRANDFATHERED STRUCTURES/FILLS, REMOVAL OF STRUCTURES (Section 10 & 404; tidal and non-tidal waters of the U.S.) Repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 (activities occurring before certain dates), provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. Includes removal of structures and fill.

Not authorized under GP 2: (a) Permanent and temporary fill in ≥ 3 acres of non-tidal waters and/or wetlands; or (b) Permanent and temporary fill in tidal waters ≥ 1 acre, ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, or areas containing shellfish.

Notes: (1) Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2). (2) Grandfathered dates for USACE purposes only: a) Work performed and structures installed before December 18, 1968 (Section 10); and b) Fill placed before July 25, 1975 (section 404). (3) The State's maintenance provisions differ from USACE and may require written authorization from the State, even though it's not required from USACE. For example, the state does not grandfather wetland fill. The state also defines "abandoned" and "grandfathered structure," while USACE does not.

Self-Verification (Minimum)	Pre-Construction Notification (Minor / Major)
<p>Tidal Waters (Sections 10 & 404)</p> <p>Repair, replacement in-kind, or maintenance of existing, currently serviceable, authorized structures or fills:</p> <ul style="list-style-type: none"> • In compliance with the terms and conditions of the original authorization. • No substantial expansion or change in use. • Must be rebuilt in same footprint; however, minor deviations in structure design are allowed. • The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire, or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. • Removal of previously authorized structures. • No new fill and/or piles in tidal waters. • Work to previously approved tide gates with a USACE-approved operation and maintenance plan and tide gates not affecting the hydraulic regime. <p>Non-Tidal Waters (Sections 10 & 404)</p> <p>Repair/maintenance of existing, currently serviceable, authorized fills, including maintenance of existing flood control facilities, with an expansion or a change in use < 3000 SF.</p> <p>Replacement of non-serviceable authorized fills < 3000 SF.</p> <p>Removal of previously authorized structures.</p> <p>Culvert replacements that are eligible under the NHDES Culvert Maintainer Program.</p>	<p>Work not eligible for SV (Minimum)</p> <p>Tidal Waters (Sections 10 & 404)</p> <p>Repair/maintenance of currently serviceable authorized fills with expansion or a change in use < 1 acre.</p> <p>Replacement of non-serviceable authorized fills, including expansion or a change in use < 1 acre.</p> <p>Repair/maintenance of currently serviceable authorized structures w/expansion where the structure (existing + expansion) qualifies as a Minor/Major Impact.</p> <p>Replacement of non-serviceable authorized structures w/expansion where the structure (existing + expansion) qualifies as a Minor/Major Impact.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Non-Tidal Waters (Sections 10 & 404)</p> <p>Repair/maintenance of existing, currently- serviceable, authorized fills, with an expansion or a change in use < 3 acres.</p> <p>Replacement of non-serviceable authorized fills < 3 acres.</p>

GP 3. MOORINGS (Section 10; navigable waters of the U.S.) Private, non-commercial, non-rental, single-boat moorings & temporary moorings or moorings to facilitate construction or dredging, minor relocation of previously authorized moorings and mooring field expansions, boundary reconfigurations or modifications of previously authorized mooring fields and maintenance and replacement of moorings.

Not authorized under GP 3: Moorings within Federal navigation channels. Moored floats, lobster cars, rafts, and similar float structures.

Notes: (1) The buffer zone is equal to 3 times the authorized depth of that Federal navigation channel and Federal anchorage. (2) Boating facilities provide for a fee, rent, or sell mooring space. These facilities include but are not limited to marinas, yacht clubs, boat clubs, boat yards, town facilities, dockominiums, etc.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Private, non-commercial, non-rental, single-boat moorings, and temporary moorings to facilitate construction or dredging, provided:</p> <ul style="list-style-type: none"> • Conservation moorings are used so connections do not rest on the bottom during any tide. • Private moorings authorized by the local harbormaster and/or the Pease Development Authority, Division of Ports and Harbors (www.portofnh.org). • Not associated with a boating facility. • Moorings not located within FNPs and their associated buffer zones. • No interference with navigation. • No new or relocated moorings in tidal SAS or EFH habitat including SAV, intertidal areas, or natural rocky habitats. 	<p>Work not eligible for SV (Minimum)</p> <p>Moorings located such that they and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits of a Federal navigation channel or Federal anchorage.</p> <p>Moorings associated with an existing boating facility.</p> <p>New, expansions or boundary reconfigurations of mooring fields: a) within tidal SAS or intertidal or b) >1 acre.</p> <p>Moorings located within a Federal anchorage and its associated buffer zone.</p> <p>Private moorings without local harbormaster and/or Pease Development Authority, Division of Ports and Harbors (www.portofnh.org), approval.</p> <p>Note: Locating new individual moorings in tidal SAS (including) should be avoided to the maximum extent practicable. If SAS cannot be avoided, plans should show elastic mooring systems that prevent mooring cable connections from resting or dragging on the bottom substrate at all tides or helical anchors, or equivalent SAS protection systems, where practicable.</p>

GP 4. PILE-SUPPORTED STRUCTURES AND FLOATS, INCLUDING BOAT LIFTS/HOISTS AND OTHER MISCELLANEOUS STRUCTURES AND WORK (Sections 10 & 404; navigable waters of the U.S.) New, expansions, reconfigurations, or modifications of structures for navigational access in waters of the U.S. including but not limited to temporary/seasonal or permanent pile and crib-supported piers, floats, stairs, shore out hauls, and boat and float lifts/ways. Floats may include lobster cars, work floats, moored floats, swim floats, and shellfish upweller floats.

Not authorized under GP 4: (a) Excavation projects; (b) Structures within Federal navigation channels or Federal anchorages; (c) Structures associated with a new boating facility; or (d) Permanent and temporary fill to ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, and areas containing shellfish.

Notes: (1) Boating facilities are facilities that provide for a fee, rent, or sell mooring space, such as marinas, yacht clubs, boat clubs, boat yards, town facilities, dockminiums, etc. (2) Pile supported structures with no discharges of dredged or fill material are not regulated by USACE in non-navigable waters. (3) DES measures all structures attached to shore starting at the highest observed tide line (HOTL).

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal and Non-Tidal Navigable Waters (Section 10)</p> <p>No allowances for new pile-supported structures, floats, or fill.</p> <p>Reconfiguring previously authorized structures within an existing boating facility provided those structures do not extend beyond the existing perimeter of the facility.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Work in tidal SAS or EFH habitat including SAV, intertidal areas, or natural rocky habitats. 	<p>Work not eligible for SV (Minimum)</p> <p>Tidal and Non-Tidal Navigable Waters (Sections 10 & 404)</p> <p>New pile supported structures within an existing boating facility, provided those structures do not extend beyond the existing footprint of the facility, and new private structures and floats.</p> <p>Recommendations for new private structures and floats:</p> <ul style="list-style-type: none"> • Maximum overall length of a pier, ramp and float shall not exceed 200 linear feet. • Pile-supported structures for navigational access to the waterway < 900 SF with attached floats < 400 SF. • Pile-supported structures are < 6' wide and have at least a 1:1 height: width ratio. • 1.5:1 over saltmarsh and 2:1 over SAV • Float stops, chains, or other devices must be used to provide ≥ 2.0-foot clearance between the bottom of the float and the substrate during all tides. • Pile-supported structures & floats are not located within 25' of SAV and moored vessels are not positioned over SAS. • No structure extends across > 25% of the waterway width at mean low water (MLW). • Not located within the buffer zone of the horizontal limits of an FNP. • Free floating (not attached to shore) bottom-anchored floats < 400 SF. <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Fill < 400 SF waterward of the ordinary high-water mark (OHW) or high tide line (HTL) facilitating the construction of structures.</p>

GP 5. BOAT RAMPS AND MARINE RAILWAYS (Sections 10 & 404; tidal and non-tidal waters of the U.S.) Temporary or permanent discharges of dredged or fill material, excavation, and other work in waters of the U.S. required for the construction of temporary or permanent boat ramps and marine railways.

Not authorized under GP 5: (a) Permanent and temporary fill in ≥ 3 acres of non-tidal waters and/or wetlands; (b) Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, or areas containing shellfish; or (c) Dredging in navigable waters of the U.S.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal Waters (Section 10 & 404)</p> <p>No new or previously unauthorized fills.</p> <p>Non-Tidal Waters (Sections 10 & 404)</p> <p>< 3,000 SF of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Dams, dikes, or activities involving water diversions. • Work in EFH habitat and riffle and pool complexes. • Work on USACE properties & USACE-controlled easements. <p>In-water work is conducted “in-the-dry” (See GC 19 & 20).</p>	<p>Work not eligible for SV (Minimum)</p> <p>Tidal Waters (Section 10)</p> <p>< 1 acre of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Non-Tidal Waters (Section 404)</p> <p>< 3 acres of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p>

GP 6. UTILITY LINE ACTIVITIES (Sections 10 & 404; tidal and non-tidal waters of the U.S.)

Activities required for: (a) The construction, maintenance, relocation, repair, & removal of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for utility lines. This GP includes but is not limited to utility lines such as electric, water, oil, sewer, gas or cable; (b) The construction, maintenance or expansion of utility line substation and other appurtenant facilities associated with an electric line, gas line or other utility line in non-tidal waters; and (c) The construction and maintenance of foundations for overhead utility line towers, poles, and anchors provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where practicable, considering system reliability and other factors. Activities including excavation, bedding and backfill, outfall and intake structures, and associated facilities within USACE jurisdiction. This GP authorizes the construction of access roads to facilitate construction of the above activities provided the activity, in combination with all other activities are included in one single and complete project, does not cause the permanent fill of ≥ 3 acres of non-tidal or ≥ 1 acre of tidal waters of the U.S. Impacts resulting from mechanized pushing, dragging or other similar activities that redeposit excavated soil material shall be figured into the area limit determination.

Not authorized under GP 6: (a) Permanent and temporary fill in ≥ 3 acres of non-tidal waters and/or wetlands; (b) Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS or ≥ 100 SF SAV and areas containing shellfish; (c) Blasting; (d) Storage of equipment in wetlands; or (e) New tide gates.

Note: The Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire is to be followed for any utility project.

https://www.nh.gov/nhdf/documents/new_final_utility_bmp_manual_3_8_19.pdf

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal and Non-Tidal Navigable Waters (Sections 10 & 404)</p> <p>No fill in tidal or navigable waters.</p> <p>Removal of previously authorized structures.</p> <p>Non-Tidal, Non-Navigable Waters (Section 404)</p> <p>< 3,000 SF of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Dams, dikes, or activities involving water diversions. • Work in EFH habitat and riffle and pool complexes. • Work on USACE properties & USACE-controlled easements. <p>Removal of previously authorized structures.</p>	<p>Work not eligible for SV (Minimum).</p> <p>Tidal and Non-Tidal Navigable Waters (Section 10 & 404)</p> <p>< 1 acre of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Overhead utility lines constructed over Section 10 waters and submarine utility lines that are routed in or under such waters. Utility lines consisting of aerial electric power transmission lines crossing navigable waters of the U.S. must comply with the applicable minimum clearances specified in 33 CFR 322.5 (i).</p> <p>New outfalls or intake structures.</p> <p>Non-Tidal, Non-Navigable Waters (Section 404)</p> <p>Installation of new, permanent culvert crossings of perennial streams.</p> <p>< 3 acres of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p>

GP 7. DREDGING (Section 10; navigable waters of the U.S.), TRANSPORT & DISPOSAL OF DREDGED MATERIAL (Sections 10 & 404; tidal waters of the U.S.), BEACH NOURISHMENT (Sections 10 & 404; tidal and non-tidal waters of the U.S.), ROCK REMOVAL (Section 10, navigable waters of the U.S.), and ROCK RELOCATION (Sections 10 & 404; tidal and non-tidal waters of the U.S) New, maintenance, or improvement dredging, including: a) Disposal of dredged material at a confined aquatic disposal, beach nourishment, near shore, designated open water or ocean water disposal site, provided USACE finds the dredged material to be suitable for such disposal; (b) Beach nourishment not associated with dredging; (c) Rock removal and relocation for navigation.

Not authorized under GP 7: (a) New dredging where the primary purpose is sand mining for beach nourishment; (b) Beach scraping; (c) Rock removal and relocation for navigation $\geq 1/2$ acre; (d) Blasting; or (e) Permanent and temporary fill in ≥ 1000 SF in tidal SAS or ≥ 100 SF SAV and areas containing shellfish.

Note: Improvement is dredging to deeper depths in areas previously dredged after being authorized by USACE. Maintenance dredging includes areas and depths previously dredged after being authorized by USACE.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal and Non-Tidal Navigable Waters (Sections 10 & 404)</p> <p>No tidal dredging except for maintenance of intakes/outfalls by divers with suction equipment.</p> <p>Provided:</p> <ul style="list-style-type: none"> • Proper siltation controls are used • No expansion of footprint • No dredging in or within a distance three times the authorized depth of a Federal Navigation Channel. • Dredging occurs between Nov 15 - Mar 15. • No impacts to in tidal SAS or EFH habitat including SAV, intertidal areas, or natural rocky habitats. • No impacts to areas containing shellfish. • No dredging in designated or proposed critical habitat for endangered species. • Upland disposal. <p>For non-tidal Federally designated navigable waters, maintenance dredging of any area < 3,000 SF. This includes return water from upland contained disposal area.</p> <p>Non-Tidal Waters (Section 404)</p> <p>Activities with < 3000 SF of permanent and/or temporary inland waterway and wetland fill, and associated secondary impacts, provided no stream channelization, relocation, or loss of streambed including impoundments or discharges of tailings into streams.</p>	<p>Work not eligible for SV (Minimum)</p> <p>Tidal and Non-Tidal Navigable Waters (Sections 10 & 404)</p> <p>For tidal waters, maintenance dredging and new dredging < 20,000 SF (may be mechanical or hydraulic dredging).</p> <p>Provided:</p> <ul style="list-style-type: none"> • Dredging & disposal operation limited to Nov 15-Mar 15. • No impacts to tidal SAS including SAV or areas containing shellfish. • Disposal includes: <ol style="list-style-type: none"> 1. Upland disposal; 2. Near shore disposal or beach nourishment of any size provided the primary purpose of the dredging is navigation; or 3. Open water & confined aquatic disposal cells (CAD cells), if USACE, in consultation with Federal and State agencies, finds the material suitable. <p>For non-tidal Federally designated navigable waters, maintenance dredging of any area $\geq 3,000$ SF or new dredging of any area. Includes return water from upland contained disposal area.</p> <p>Non-Tidal Waters (Section 404)</p> <p>< 3 acres of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>Note: The USACE may waive or adjust the time of year requirement on a case-by-case basis after consultation with the NHDES and NH Fish and Game.</p>

GP 8. U.S. COAST GUARD APPROVED BRIDGES AND CAUSEWAYS (Sections 10 & 404; navigable waters of the U.S.) Discharges of dredged or fill material incidental to the construction and modification of bridges across navigable waters of the U.S., including cofferdams abutments, foundation seals, piers, approach fills, and temporary construction and access fills provided the USCG authorizes the construction of the bridge structure under Section 9 of the Rivers and Harbors Act of 1899 or other applicable laws in tidal Section 10 and 404 navigable waters. A USCG Authorization Act Exemption or a STURRA (144h) exemption do not constitute USCG authorization.

Not authorized under GP 8: (a) Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, or areas containing shellfish; or (b) Permanent and temporary fill in ≥ 3 acres in non-tidal waters.

Notes: (1) GP 8 is not applicable to bridges over inland waters or wetlands that are not tidally influenced or regulated as navigable under Section 10. (2) See eligibility criteria for GPs 2 & 23 for projects that are not subject to USCG regulations.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal & Navigable Waters (Sections 10 & 404)</p> <p>No work in tidal wetlands and waters.</p> <p>< 3,000 SF of temporary and/or permanent fill, excavation, and/or secondary impacts to non-tidal waterways and/or wetlands.</p> <p>Stream crossings conform with the NH Stream Crossing Guidelines and this document's GCs.</p> <ul style="list-style-type: none"> • In-stream work limited to Jul 15 - Oct 1. • Culverts at waterbody crossings preserve hydraulic capacity, at its present level, between the waters on either side of the road. <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Open trench excavation in flowing waters. • Work in tidal SAS or EFH habitat including SAV, intertidal areas, or natural rocky habitats. • Work on USACE properties & USACE-controlled. • Easements. • Causeways and approach fills. 	<p>Work not eligible for SV (Minimum)</p> <p>Tidal and Navigable Waters (Sections 10 & 404)</p> <p>Causeways and approach fills.</p> <p>< 1 acre of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Note: USACE may waive or adjust the time of year requirement on a case-by-case basis after consultation with the NHDES and NH Fish and Game for tidal and non-tidal waters (Section 10 & 404).</p>

GP 9. SHORELINE AND BANK STABILIZATION PROJECTS (Sections 10 & 404; tidal and non-tidal waters of the U.S.) Bank stabilization activities necessary for erosion protection along the banks of lakes, ponds, streams, estuarine and ocean waters, and any other open waters. Includes, but is not limited to breakwaters, bulkheads, seawalls, riprap, revetments/slope protection and similar structures as well as vegetative planting, soil bioengineering or alternative techniques that are a combination of the two specifically for the purpose of shoreline protection.

Not authorized under GP 9: (a) Non-tidal & tidal bank stabilization projects ≥ 500 LF in total length including both stream banks; (b) Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS or ≥ 100 SF SAV and areas containing shellfish; (c) Stream channelization or relocation activities; (d) Breakwaters, groins, and jetties; or (e) Living shoreline projects.

Note: Soft stabilization measures such as bioengineered fiber roll revetments or equivalent, should be used whenever practicable.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal Waters (Sections 10 & 404)</p> <p>No activities are eligible for SV.</p> <p>Non-Tidal Waters (Sections 10 & 404)</p> <p>Non-tidal bank stabilization < 100 LF and ≤ 1 CY of fill per linear foot waterward of OHWM and no fill within the streambed beyond the toe of slope of the stream bank.</p> <p>No vertical stone structures or embankments angled steeper than 1H:1V in non-tidal streams or 1V:3H in lakes/ponds. (Slope ratio: H = horizontal distance; V= vertical distance)</p> <p>No new bulkheads.</p> <p>Provided:</p> <ul style="list-style-type: none"> • No open trench excavation in flowing waters. • In-stream work limited to Jul 15 - Oct 1. • No work in EFH habitat and riffle and pool complexes. • Only rough-faced stone or roll revetments allowed. • No work on USACE properties & USACE-controlled easements. 	<p>Work not eligible for SV (Minimum).</p> <p>Tidal Waters (Sections 10 & 404)</p> <p>Shoreline and bank stabilization < 500 LF (total length including both stream banks).</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>$< 1/2$ acre of tidal EFH.</p> <p>Non-Tidal Waters (Sections 10 & 404)</p> <p>Shoreline and bank stabilization < 500 LF (total length including both stream banks).</p> <p>The slope of the structure is steeper than 1V:3H in lakes/ponds; and 1V:1H in non-tidal streams.</p> <p>Non-tidal bank stabilization ≥ 100 LF or ≥ 1 CY per linear foot below OHW and no fill within the streambed beyond the toe of slope of the stream bank.</p> <p>Provide a temporary or permanent buffer strip (streamside area where protection promotes growth and sustenance of woody vegetation) along the project length to prove for vegetation stability.</p>

GP 10. AQUATIC HABITAT RESTORATION, ESTABLISHMENT & ENHANCEMENT ACTIVITIES

(Sections 10 & 404; tidal and non-tidal waters of the U.S.) Activities in waters of the U.S. associated with the restoration, enhancement and establishment of non-tidal and tidal wetlands and riparian areas, including invasive, non-native or nuisance species control; the restoration and enhancement of non-tidal streams and other non-tidal open waters; the relocation of non-tidal waters, including non-tidal streams & associated wetlands for reestablishment of a natural stream morphology and reconnection of the floodplain; the restoration and enhancement of shellfish, finfish and wildlife; and the rehabilitation or enhancement of tidal streams, tidal wetlands and tidal open waters; provided those activities result in net increases in aquatic resource functions and services.

Not authorized under GP 10: (a) Artificial reefs or stream channelization activities; or (b) New tide gates.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal Waters (Sections 10 & 404)</p> <p>Pro-active salt marsh restoration impacts ≤ 3,000 SF for the purposes of restoring subsiding marsh surfaces and dieback areas.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • New ditching to eliminate mosquito breeding habitat. • Fill for purposes of converting marsh to upland. • Placement of seed shellfish, spatted shell or cultch for the restoration or enhancement of existing, publicly managed, non-commercial recreational areas containing shellfish. • Work in tidal SAS or EFH habitat including SAV, intertidal areas, or natural rocky habitat. <p>Non-Tidal Waters (Section 404)</p> <p>Fill area ≤3,000 SF of inland waterway and/or wetland fill (permanent and temporary) provided the activity is supported in writing by a local, state, or non-USACE Federal environmental resource management agency.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Dams, dikes, or activities involving water diversions. • Work in EFH habitat and riffle and pool complexes. • Work on USACE properties & USACE-controlled easements. • Conversions of wetlands to open water. • Stream channelization. 	<p>Work not eligible for SV (Minimum)</p> <p>Tidal Waters (Sections 10)</p> <p>Projects with proactive restoration (tidal SAS, anadromous fish runs, areas containing shellfish, etc.) as a primary purpose with fill > 3,000 SF.</p> <p>Placement of seed shellfish, spatted shell or cultch for the restoration or enhancement of existing, publicly managed, non-commercial recreational areas containing shellfish.</p> <p>Tidal and Non-Tidal Waters (Sections 10 & 404)</p> <p>Aquatic habitat restoration, establishment, and enhancement of tidal wetlands and riparian areas provided those activities are proactive and result in net increases in aquatic resource functions and services as decided by USACE.</p> <p>Integrated Marsh Management for combined wetland enhancement and mosquito control.</p> <p>Dam removals.</p> <p>Non-Tidal Waters (Section 404)</p> <p>Pond or lake reestablishment or restoration.</p> <p>Water impoundments.</p> <p>Projects with proactive restoration as a primary purpose with impacts of any size.</p> <p>Projects may be subject to monitoring for a minimum of 5 years in accordance with an approved restoration plan. The first year of monitoring will be the first year that the site has been through a full growing period after completion of construction and planting.</p>

GP 11. FISH & WILDLIFE HARVESTING, ENHANCEMENT AND ATTRACTION DEVICES AND ACTIVITIES (Sections 10 & 404; tidal and non-tidal waters of the U.S.) Activities in waters of the U.S. associated with fish and wildlife harvesting devices including pound nets, crab traps, crab dredging, eel pots, lobster traps, duck blinds, and clam and oyster digging, fish aggregating devices, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). Impoundments and semi-impoundments of waters of the U.S. for the culture and holding of motile species such as lobster.

Not authorized under GP 11: (a) Artificial reefs; (b) Devices and activities in Federal navigation channels; (c) Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, or areas containing shellfish; (d) Shellfish dredging, either mechanical or hydraulic in tidal SAS; (e) New, or expansions of, impoundments and semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster with an impounded area $> \frac{1}{2}$ acre; or (f) New fish weirs with an impoundment area $\geq \frac{1}{2}$ acre.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal and Non-Tidal Waters (Section 10 & 404)</p> <p>Activities associated with fish and wildlife harvesting devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, duck blinds, clam and oyster digging, shellfish seeding, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). Provided there is no hazard to navigation.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Impoundments or semi-impoundment of water, fish aggregating devices, or small fish attraction devices. • Devices or work in tidal SAS or EFH habitat including SAV, intertidal areas, or natural rocky habitats. • Devices and activities located in Federal Anchorage Projects. 	<p>Work not eligible for SV (Minimum)</p> <p>Tidal and Non-Tidal Waters (Section 10 & 404)</p> <p>Impoundments or semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster and new fish weirs with an impounded area $\leq \frac{1}{2}$-acre, fish aggregating devices, or small fish attraction devices.</p> <p>Devices and activities located in tidal SAS, including salt marsh and SAV.</p> <p>Devices and activities located in Federal anchorages.</p> <p>< 1 acre of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p>

GP 12. OIL SPILL AND HAZARDOUS MATERIAL CLEANUP (Sections 10 & 404; tidal and non-tidal waters of the U.S.) (a) Activities conducted in response to a discharge or release of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) including containment, cleanup, and mitigation efforts, provided that the activities are done under either: (i) The Spill Control & Countermeasure Plan required by 40 CFR 112.3; (ii) The direction or oversight of the Federal on-site coordinator designated by 40 CFR 300; or (iii) Any approved existing State, regional or local contingency plan provided that the Regional Response Team concurs with the proposed response efforts or does not object to the response effort. (b) Activities required for the cleanup of oil releases in waters of the U.S. from electrical equipment that are governed by EPA’s polychlorinated biphenyl (PCB) spill response regulations at 40 CFR 761. (c) Booms placed in tidal waters. (d) Use of temporary structures & fills for spill response training exercises. SAS must be restored in place to pre-impact elevations.

Not authorized under GP 12: Permanent structures or impacts.

Self-Verification (Minimum)	Pre-Construction Notification (Minor / Major)
<p>Tidal and Non-Tidal Waters (Sections 10 & 404)</p> <p>Activities that are conducted in accordance with (a) or (b) above, provided SAS are restored in place to pre-impact elevations.</p> <p>Booms placed in navigable waters for oil and hazardous substance containment, absorption, and prevention, provided they are removed upon completion of the cleanup.</p> <p>No spill response training exercises requiring structures or fill in tidal waters.</p> <p>< 3,000 SF of temporary and/or permanent fill, excavation, and/or secondary impacts to non-tidal waterways and/or wetlands.</p> <p>Note: For the above activities in tidal waters, the applicant must contact USACE at (978) 318-8338 before or immediately after the above-described work commences to allow USACE to address the effects under the Federal Endangered Species Act. This does not apply to clean booms used for spill prevention, or properly contained and cleaned non-emergency oil or hazardous substance discharges.</p>	<p>Work not eligible for SV (Minimum)</p> <p>Tidal and Non-Tidal Waters (Sections 10 & 404)</p> <p>Fill in tidal waters.</p> <p>Temporary structures or impacts for spill response training exercises.</p> <p>The activity is planned or scheduled, not an emergency response, and will not cause turbidity or sediment resuspension or deposition, within USACE jurisdiction.</p> <p>≥ 3,000 SF of temporary and/or permanent fill, excavation, and/or secondary impacts to non-tidal waterways and/or wetlands.</p> <p>Note: Specific activities with impacts of any area or cubic yardage required affecting the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority may be reviewed as a Minor/Major Impact project. SAS and areas containing shellfish must be restored in place. USACE may waive this requirement on a case-by-case basis in consultation with the NHDES.</p>

GP 13. CLEANUP OF HAZARDOUS AND TOXIC WASTE (Sections 10 & 404; tidal and non-tidal waters of the U.S.) Specific activities required to affect the containment, stabilization, or removal of hazardous or toxic waste materials, including court ordered remedial action plans or related settlements, which are performed, ordered, or sponsored by a government agency with established legal or regulatory authority.

Not authorized under GP 13: (a) Establishment of new disposal sites; (b) Expansion of existing sites used for the disposal of hazardous or toxic waste; or (c) Dredging in tidal waters.

Note: Activities undertaken entirely on a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site by authority of CERCLA as approved or required by EPA, are not required to obtain permits under Section 404 of the CWA or Section 10 of the Rivers and Harbors Act.

Self-Verification (Minimum)

Pre-Construction Notification (Minor/Major)

Tidal and Non-Tidal Waters (Sections 10 & 404)

Booms placed in navigable waters for containment, absorption, and prevention, provided they are removed upon completion of the cleanup. The applicant must contact USACE at (978) 318-8338 before or as soon as possible after the work commences so USACE can address the effects under the Federal Endangered Species Act. This does not apply to clean booms used for spill prevention.

< 3,000 SF of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts, provided:

- SAS must be restored in place and at pre-impact elevation to maximum extent practicable.
- No stream channelization, relocation or loss of streambed including impoundments.

Tidal and Non-Tidal Waters (Sections 10 & 404)

Work not eligible for SV (Minimum)

The activity occurs in tidal waters.

Work in navigable waters of the U.S. other than booms placed for hazardous and toxic waste containment, absorption, and prevention.

≥ 3,000 SF of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.

Note: Specific activities with impacts of any area or cubic yardage required affecting the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority may be reviewed as a Minor/Major Impact project. SAS and areas containing shellfish must be restored in place. USACE may waive this requirement on a case-by-case basis in consultation with the NHDES.

GP 14. SCIENTIFIC MEASUREMENT DEVICES (Sections 10 & 404; tidal and non-tidal waters of the U.S.) Scientific devices for measuring and recording scientific data, such as staff gauges, tide and current gauges, meteorological stations, water recording and biological observation devices, water quality testing and improvement devices, and similar structures. Also eligible are small temporary weirs and flumes constructed primarily to record water quantity and velocity. Upon completion of the use of the device to measure and record scientific data, the measuring device and any other structures or fills associated with that device (e.g., foundations, anchors, buoys, lines, etc.) must be removed to the maximum extent practicable.

Not authorized under GP 14: (a) Permanent and temporary fill in ≥ 3 acres in non-tidal waters and wetlands; or (b) Permanent and temporary fill in ≥ 1 acre in tidal waters ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, or areas containing shellfish.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal and Non-Tidal Waters (Sections 10 & 404)</p> <p>Permanent or temporary impacts are < 100 SF in tidal waters.</p> <p>Temporary, non-biological sampling devices in waters of the U.S. that do not restrict or concentrate movement of aquatic organisms and will not adversely affect the course, condition, or capacity of a waterway for navigation.</p> <p>Scientific measurement devices, and small weirs and flumes constructed primarily to record water quantity and velocity provided the discharge of fill is limited to 25 cubic yards.</p> <p>Non-Tidal Waters (Section 404)</p> <p>Permanent or temporary fill are $< 3,000$ SF in non-tidal waters and wetlands.</p>	<p>Work not eligible for SV (Minimum)</p> <p>Tidal Waters (Section 10)</p> <p>< 1 acre of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Biological sampling devices, weirs, or flumes.</p> <p>Tidal and Non-Tidal Waters (Section 10 & 404)</p> <p>Permanent devices in tidal and non-tidal waters.</p> <p>Non-Tidal Waters (Section 404)</p> <p>< 3 acres of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p>

GP 15. SURVEY ACTIVITIES (Sections 10 & 404; tidal and non-tidal waters of the U.S.) Survey activities such as soil borings, core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory type bore holes, exploratory trenching (mechanical land clearing of the upper soil profile to expose bedrock or substrate for the purpose of mapping or sampling the exposed material) and historic resources surveys.

Not authorized under GP 15: (a) Permanent and temporary fill in ≥ 3 acres of non-tidal waters and/or wetlands, or (b) Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS, or ≥ 100 SF in SAV, or areas containing shellfish.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal Waters (Sections 10 & 404)</p> <p>No permanent structures or drilling and discharge of excavated material from test wells for oil and gas exploration allowed.</p> <p>No fill in tidal wetlands and waters.</p> <p>No seismic exploratory operations in tidal waters.</p> <p>Temporary structures < 1000 SF removed when survey is concluded.</p> <p>Sampling plots, resource surveys, soil borings, and core sampling.</p> <p>Non-Tidal Waters (Section 404)</p> <p>< 3,000 SF of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts, provided:</p> <ul style="list-style-type: none"> • Exploratory trenches are restored in accordance with GC 23. • No discharge of excavated material from test wells for oil and gas exploration (the plugging of such wells is authorized). 	<p>Work not eligible for SV (Minimum)</p> <p>Tidal Waters (Section 10)</p> <p>< 1 acre of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Seismic exploratory operations occur in tidal waters.</p> <p>Non-Tidal Waters (Section 404)</p> <p>< 3 acres of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p>

GP 16. ENERGY GENERATION, RENEWABLE ENERGY GENERATION AND HYDROPOWER FACILITIES

(Sections 10 & 404; tidal and non-tidal waters of the U.S.) Structures and work in navigable waters of the U.S. and discharges of dredged or fill material into tidal and non-tidal waters of the U.S. for the construction, expansion, modification or removal of: (a) Land-based energy generation & renewable energy pilot & production facilities, including attendant features; (b) Water-based energy generation, wind or hydrokinetic renewable energy generation pilot & production projects and their attendant features; and (c) Discharges of dredged or fill material associated with hydropower projects. Attendant features may include, but are not limited to, land-based collection and distribution facilities, control facilities, and parking lots. For each single and complete project in (b) above, no more than 10 generation units (e.g., wind turbines or hydrokinetic devices) are authorized in navigable waters of the U.S. Upon completion of the pilot project, the generation units, transmission lines, and other structures or fills associated with the pilot project must be removed to the maximum extent practicable.

Not authorized under GP 16: Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, or areas containing shellfish containing shellfish.

Note: For the purposes of this GP, the term “pilot project” means an experimental project where the renewable energy generation units will be monitored to collect information on their performance and environmental effects at the project site.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal and Non-Tidal Navigable Waters (Sections 10 & 404)</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Dams, dikes, or activities involving water diversions. • Work in tidal SAS or EFH habitat including SAV, intertidal areas, or natural rocky habitats. • Work in tidal waters or navigable waters of the U.S. • Production facilities. <p>Non-Tidal Waters (Section 404)</p> <p>< 3,000 SF of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts, provided:</p> <ul style="list-style-type: none"> • No stream channelization, relocation, or loss of streambed including impoundments. • No new water-based facilities. <p>Does not authorize discharges into non-tidal wetlands adjacent to tidal waters.</p>	<p>Work not eligible for SV (Minimum)</p> <p>Tidal and Non-Tidal Navigable Waters (Section 10)</p> <p>< 1 acre of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>No new impoundments.</p> <p>Non-Tidal Waters (Section 404)</p> <p>< 3 acres of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>Mechanical clearing of areas within USACE jurisdiction without grubbing or other soil disturbance ≥ 3 acres as a secondary impact may still be eligible for PCN at the discretion of USACE.</p>

GP 17. NEW/EXPANDED RESIDENTIAL & COMMERCIAL DEVELOPMENTS & RECREATIONAL FACILITIES (Sections 10 and 404, navigable waters of the US) Discharges of dredged or fill material for the construction or expansion of developments and/or recreational facilities. Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation.

Not authorized under GP 17: (a) Permanent and temporary fill in ≥ 3 acres in non-tidal waters and wetlands; (b) Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, or areas containing shellfish; (c) Subsurface sewerage disposal systems in waters of the U.S.; or (d) New roadway and driveway crossings in non-tidal waters and/or wetlands.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal Waters (Sections 10 & 404)</p> <p>No activities are eligible for SV.</p> <p>Non-Tidal Waters (Sections 10 & 404)</p> <p>< 3,000 SF of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts. Fill area includes all temporary and permanent fill, and regulated excavation discharges (except for incidental fallback).</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Dams, dikes, stream channelization, stream relocation, loss of streambed or activities involving water diversions. • Work EFH habitat and riffle and pool complexes. • Work on USACE properties & USACE-controlled easements. • Stormwater treatment or detention systems. 	<p>Tidal Waters (Sections 10 & 404)</p> <p>< 1 acre of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Conversions of previously authorized pile-supported buildings over navigable waters to residences, offices, or other non-water dependent uses require a PCN. Floating house boats or businesses on floats require a PCN.</p> <p>Non-Tidal Waters (Sections 10 & 404)</p> <p>Work not eligible for SV (Minimum)</p> <p>< 3 acres of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p>

GP 18. AQUACULTURE PROJECTS AND FISHERIES (Sections 10 and 404, navigable waters of the US) No shellfish dredging, including mechanical or hydraulic in tidal SAS, including SAV, no placement of cultch in beds of SAV. Depth of cultch or spatbed shell limited to the minimum necessary for full coverage of the framed bed bottom & must not result in visible degradation of habitat for other aquatic resources. All structures must be marked in conformance with applicable NH State and or U.S. Coast Guard Aids to Navigation.

Not authorized under GP 18: Permanent and temporary fill in tidal SAS ≥ 1000 SF, ≥ 100 SF SAV, or areas containing shellfish.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/ Major)
<p>Tidal Waters (Section 10)</p> <p>Suspended cages or nets located wholly below and within the footprint of an existing authorized fixed or floating structure provided there is a vertical clearance of at least 2 feet between the bottom of the gear and the sea floor at MLW.</p> <p>Shellfish and marine algae installations < 1000 SF in area provided:</p> <ul style="list-style-type: none"> • No enclosures or impoundments. • Not located in or within a distance of three times the authorized depth of a Federal. Navigation Project. • Not located in or impinge upon the value of any National Lands or Federal Properties. • No work in tidal SAS or EFH habitat including SAV, intertidal areas, or natural rocky habitats. • No structures, cages, gear, or shell hash located in/within 25 feet of SAV. • All gear, except for mooring tackle, when not in use on the site is stored in an upland location above the mean high water line (MHW) and not on wetlands (including salt marsh). • Culture only indigenous species. • Have a copy of their signed and approved NH State application and NH Fish and Game license number. • Documentation that the applicant has coordinated with the U.S. Coast Guard specifically regarding USCG Private Aids to Navigation standards. • Documentation that they contacted their local harbormaster and/or the Pease Development Authority, Division of Ports and Harbors (www.portofnh.org) for authorization of their facility. <p>Non-Tidal Waters (Section 404)</p> <p>In the case of proposed aquaculture operations occupying bottom substrate (Section 404), USACE and/or NHDES may require additional review.</p>	<p>Work not eligible for SV (Minimum)</p> <p>Tidal Waters (Section 10)</p> <p>Vertical drop longlines for the culture of shellfish or other marine organisms, such as kelp and seaweed.</p> <p>Cages, trays, racks, netting or other structures on the ocean bottom or floating on the water surface for the rearing or depuration of cultured shellfish.</p> <p>Research, educational or experimental aquaculture gear for indigenous species that exceed >1,000 SF.</p> <p>Activities that involve a change from authorized gear for bottom culture to floating or suspended gear.</p> <p>Tidal & Non-Tidal Waters (Sections 10 & 404)</p> <p>Installation of intake and discharge structures for a land-based hatchery.</p>

GP 19. MINING ACTIVITIES (Sections 10 & 404; non-tidal waters of the U.S.) Discharges of dredged or fill material into non-tidal waters and wetlands for mining activities.

Not authorized under GP 19: (a) Permanent and temporary fill \geq 3 acres of non-tidal waters and/or wetlands; or (b) No permanent and temporary impacts in tidal waters.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>< 3,000 SF of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Dams, dikes, or activities involving water diversions. • Work in EFH habitat and riffle and pool complexes. • Activities in streams. • Work on USACE properties & USACE-controlled easements. • Stream channelization, relocation or loss of streambed including impoundments, or discharge of tailings into streams. 	<p>Work not eligible for SV (Minimum)</p> <p>< 3 acres of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>Activities in streams including stream channelization, relocation or loss of streambed including impoundments, or discharge of tailings into streams.</p>

GP 20. LIVING SHORELINE PROJECTS (Sections 10 & 404; tidal waters of the U.S.) Construction and maintenance of living shorelines to stabilize banks and shores in coastal waters. A living shoreline shall have a footprint that is made up of mostly native material. It shall incorporate vegetation or other living, natural “soft” elements alone or in combination with some type of harder shoreline structure (e.g., rock sills) for added protection and stability. Living shorelines should maintain the natural continuity of the land-water interface and retain or enhance shoreline ecological processes. Living shorelines must have a substantial biological component.

Not authorized under GP 20: (a) Living shoreline projects \geq 500 LF in total length; (b) Permanent and temporary fill \geq 1 acre in tidal waters; (c) Breakwaters, groins, and jetties; (d) Permanent and temporary fill to tidal SAV; (e) Beach nourishment; or (f) Land reclamation activities.

Note: In waters outside of coastal water nature-based bank stabilization techniques such as bioengineering and vegetative stabilization may be authorized under GP 9. This GP also authorizes maintenance and repair activities, including any minor deviations necessary to address changing environmental conditions. NHDES resources and references used to guide living shoreline work can be found here: <https://www.nhcaw.org/wp-content/uploads/2022/05/Living-Shorelines-Resources-References.pdf>.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>Tidal Waters (Sections 10 & 404)</p> <p>Repair, replacement in-kind, or maintenance of existing and authorized structure or fill provided:</p> <ul style="list-style-type: none"> • In compliance with the terms and conditions of the original authorization. • No expansion. • Maintenance and repair must be in the same footprint. • The repair, rehabilitation or replacement of living shorelines destroyed by or damaged by storms, floods, fire, or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of date of their destruction. • No new fill in tidal waters. 	<p>Tidal Waters (Sections 10 & 404)</p> <p>< 1 acre of temporary and/or permanent fill, excavation, and/or secondary impacts to waterways and/or wetlands.</p> <p>< 1/2 acre of tidal EFH.</p> <p>Structures and fill area, including sand fills, sills, breakwaters, or reefs cannot extend into the waterbody more than 30 feet from MHW.</p> <p>Coir logs, coir mats, stone, native oyster shell, native wood debris, and other structural materials must be adequately anchored, or be of sufficient weight, or installed in a manner that prevents relocation in most wave action or water flow conditions, except for extremely severe storms.</p> <p>Projects shall be maintained monitored for a minimum of 5 years in accordance with an approved restoration plan. The first year of monitoring will be the first year that the site has been through a full growing period after completion of construction and planting.</p>

GP 21. AGRICULTURAL ACTIVITIES (Sections 10 & 404; non-tidal waters of the U.S.) Discharges of dredged or fill material in non-tidal waters of the U.S. for agricultural activities with impact to non-tidal waters and wetlands such as pads for barn/greenhouse, mechanized land clearing, land leveling and installation of drainage tiles for irrigation. Also, includes the relocation or modification of existing, serviceable drainage ditches in wetlands and farm ponds not meeting the exemption found in 33 CFR 323.4.

Not authorized under GP 21: (a) Aquaculture fishponds in waters of the U.S; or (b) Permanent and/or temporary fill in tidal waters of the U.S.

Note: Some discharges for agricultural activities may qualify for an exemption under Section 404(f)(1) of the Clean Water Act (see 33 CFR 323.4). GP 21 is intended to cover those agricultural discharges that do not qualify for agricultural exemption and/or are subject to the recapture provision under section 404(f)(2) of the Act.

Self-Verification (Minimum)	Pre-Construction Notification (Minor/Major)
<p>< 3,000 SF of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Dams, dikes, stream channelization, stream relocation, loss of streambed or activities involving water diversions. • Work in EFH habitat and riffle and pool complexes. • Work on USACE properties & USACE-controlled easements. • Construction of farm ponds in perennial streams. 	<p>Work not eligible for SV (Minimum)</p> <p>Work that does not qualify for exemption under Section 404(f) of the Clean Water Act.</p> <p>< 3 acres of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>New drainage ditches in wetlands that involve side casting within non-tidal wetlands.</p> <p>Stream channelization, relocation, impoundments, loss of streambed or farm ponds in streams.</p>

GP 22. REPAIR OR MAINTENANCE OF EXISTING, CURRENTLY SERVICEABLE, AUTHORIZED OR GRANDFATHERED DAMS (Sections 10 & 404; tidal and non-tidal waters of the U.S.) Repair, rehabilitation, or replacement of any previously authorized, currently serviceable dam. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized.

Not authorized by GP 22: Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, or areas containing shellfish.

Notes: (1) Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2). (2) The State's maintenance provisions differ from USACE and may require written authorization from the State, even though it's not required from USACE. For example, the State does not grandfather wetland fill.

Self-Verification (Minimum)	Pre-Construction Notification (Minor / Major)
<p>Tidal & Non-Tidal Waters (Sections 10 & 404)</p> <p>Repair, replacement in-kind, or maintenance of existing, currently serviceable, authorized dams provided:</p> <ul style="list-style-type: none"> • In compliance with the terms and conditions of original authorization. • No substantial expansion or change in use. • Must be rebuilt in same footprint, however minor deviations in structure design allowed. • The repair, rehabilitation, or replacement of those dams destroyed or damaged by storms, floods, or other discrete events is authorized, provided the repair, rehabilitation, or replacement has commenced, or is under contract to commence, within two years of the date of their destruction or damage. <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Work in EFH habitat, tidal SAS including SAV, intertidal habitats or natural rocky tidal habitats. • Work in areas containing shellfish. <p>Non-Tidal Waters (Section 404)</p> <p>Repair/maintenance of existing, currently serviceable, authorized dams with an expansion or a change in use < 3000 SF provided:</p> <ul style="list-style-type: none"> • In compliance with the terms and conditions of the original authorization. • Must be rebuilt in same footprint, however minor deviations in structure design allowed. 	<p>Work not eligible for SV (Minimum)</p> <p>Tidal Waters (Sections 10 & 404)</p> <p>Repair/maintenance of currently serviceable authorized dams with expansion or a change in use < 1 acre.</p> <p>Repair/maintenance of currently serviceable authorized dams' w/expansion where the structure (existing + expansion) qualifies as a PCN (Minor/Major) Impact.</p> <p>Replacement of non-serviceable authorized dams' w/expansion where the structure (existing + expansion) qualifies as a PCN (Minor/Major) Impact.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Dam and flood control or levee repairs that will alter water levels or flood elevations.</p> <p>Discharges of more than de minimis quantities of accumulated bottom sediments from or through a dam.</p> <p>Non-Tidal Waters (Section 404)</p> <p>Repair/maintenance of existing, currently serviceable, authorized dams, with an expansion or a change in use < 3 acres.</p> <p>Replacement of non-serviceable authorized dams < 3 acres.</p>

GP 23. WETLAND, STREAM, RIVER & BROOK CROSSINGS (Sections 10 & 404; tidal and non-tidal waters of the U.S.) Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., driveways, roads, highways, bridges, railways, trails, airport runways, pipelines, and taxiways) and attendant features, provided that work is performed in accordance with New Hampshire Stream Crossing Best Management Practices to the maximum extent practicable.

Not authorized under GP 23: (a) Permanent and temporary fill in ≥ 3 acres of non-tidal waters and/or wetland; or (b) Permanent and temporary fill in ≥ 1 acre in tidal waters, ≥ 1000 SF in tidal SAS, ≥ 100 SF SAV, or areas containing shellfish.

Self-Verification (Minimum)	Pre-Construction Notification (Minor / Major)
<p>Tidal Waters (Section 10 & 404)</p> <p>No work in tidal waters</p> <p>Non-Tidal Waters (Sections 10 & 404)</p> <p>$< 3,000$ SF of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>Stream crossings conform with the NH Stream Crossing Guidelines and GCs of this document. This includes but is not limited to GC 26 & 31.</p> <p>Existing crossings (e.g., culverts, elliptical or arch pipes, etc.) are not modified by (a) decreasing the diameter of the crossing or (b) changing the friction coefficient, such as through slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), culvert relining or invert lining.</p> <p>Not Eligible for SV (Minimum):</p> <ul style="list-style-type: none"> • Open trench excavation in flowing waters. • Work in EFH habitat and riffle and pool complexes. • Work on USACE properties & USACE-controlled easements. 	<p>Work not eligible for SV (Minimum)</p> <p>Tidal Waters (Section 10)</p> <p>< 1 acre of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p> <p>Permanent or temporary fill in tidal SAS < 1000 SF.</p> <p>Permanent or temporary fill in SAV < 100 SF.</p> <p>Non-Tidal Waters (Section 404)</p> <p>< 3 of permanent and/or temporary waterway and/or wetland fill and associated secondary impacts.</p>

SECTION IV. GENERAL PERMIT CONDITIONS

An activity is authorized under the GPs only if that activity and the applicant satisfy all the applicable GP's terms and following GCs.

1. Other Permits. Applicants must obtain other Federal, State, or local authorizations required by law. Applicants are responsible for applying for and obtaining all required State or local approvals. Work that is not regulated by the State, but is subject to USACE jurisdiction, may still be eligible for these GPs.

2. Federal Jurisdictional Boundaries.

a. Applicability of these GPs shall be evaluated with reference to federal jurisdictional boundaries (e.g., MHW, high tide line, OHWM, and wetland boundary). Activities shall be evaluated with reference to "waters of the U.S." under the Clean Water Act (33 CFR 328) and "navigable waters of the U.S." under Section 10 of the Rivers and Harbors Act of 1899 (33 CFR 329). Applicants are responsible for ensuring that the boundaries used satisfy the Federal criteria defined at 33 CFR 328-329. These sections prescribe the policy, practice, and procedures to be used in determining the extent of USACE jurisdiction. Note: Waters of the U.S. includes all waters pursuant to

33 CFR 328.3(a), and adjacent wetlands as that term is defined in 33 CFR 328.3(c).

b. Applicants shall identify on project plans all aquatic resources including wetlands, other SAS including vegetated shallows (or SAV) and mudflats, and other waters, such as lakes and ponds, perennial and intermittent streams, and vernal pools on the project site. They are all presumed to be waters of the U.S. unless an approved jurisdictional determination has been obtained from USACE that determines otherwise. Wetlands shall be delineated in accordance with the Corps of Engineers Wetlands Delineation Manual and the most recent Northcentral/Northeast Regional Supplement. For activities located on Essential Fish Habitat (GC 11), applicant shall also identify on project plans natural rocky habitats and shellfish areas to satisfy the Magnuson-Stevens Fishery Conservation and Management Act.

3. Single and Complete Projects.

a. The term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. These GPs shall not be used for piecemeal work and shall be applied to single and complete projects.

b. For non-linear projects, a single and complete project must have independent utility. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed, even if the other phases were not built, can be considered a single and complete project with independent utility.

c. Unless USACE determines the activity has independent utility, all components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be treated together as constituting one single and complete project.

d. For linear projects such as power lines or pipelines with multiple crossings, a "single and complete project" is all crossings of a single water of the U.S. (i.e., single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate

and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately. If any crossing requires a PCN (Minor/Major) review or an individual permit review, then the entire linear project shall be reviewed as one project as a PCN (Minor/Major) or the individual permit procedures.

4. Use of Multiple General Permits. When a single and complete project requires the use of multiple GPs, the project review category, SV (Minimum), PCN (Minor/Major) or individual permit will be determined by adding the impacts to wetland and/or waters of the U.S. for each applicable GP together. The project review thresholds for each category SV (Minimum), PCN (Minor/Major), and individual permit) are specified on page 3.

5. Discharge of Pollutants. All activities involving any discharge into waters of the U.S. authorized under these GPs shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 U.S.C. 1251), and applicable state and local laws. If applicable water quality standards, limitations, etc., are revised or modified during the term of this permit, the authorized work shall be modified to conform with these standards within six months from the effective date of such revision or modification, or within a longer period of time deemed reasonable by the District Engineer in consultation with the Regional Administrator of the EPA. Unless monitoring data indicates otherwise, applicants may presume that their activity complies with state water quality standards provided they are in compliance with the Section 401 WQC (Applicable only to the Section 404 activity).

6. Environmental Functions and Values. The applicant shall make every reasonable effort to carry out the construction or operation of the work authorized herein in a manner that minimizes any adverse impacts on existing fish, wildlife, and the environmental functions to the extent practicable. The applicant will discourage the establishment or spread of plant species identified as non-native invasive species by any federal or state agency.

7. Mitigation (Avoidance, Minimization, and Compensatory Mitigation).

- a. Activities shall be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the U.S. to the maximum extent practicable to ensure that adverse effects to the aquatic environment are no more than minimal.
- b. Compensatory mitigation for unavoidable impacts to waters of the U.S., including direct, indirect, secondary, and temporal loss, will generally be required for permanent impacts that exceed the SV (Minimum) limits, and may be required for temporary impacts, to offset unavoidable impacts which remain after all appropriate and practicable avoidance and minimization has been achieved and to ensure that the adverse effects to the aquatic environment are no more than minimal. Proactive restoration projects or temporary impact work with no secondary effects may generally be excluded from this requirement.
- c. Mitigation proposals shall follow the guidelines found in the Compensatory Mitigation for Losses of Aquatic Resources; Final Rule April 10, 2008; 33 CFR 332. Applicants may purchase mitigation credits in-lieu of applicant-responsible mitigation as compensation for unavoidable impacts to waters of the U.S. in the State of New Hampshire may utilize the New Hampshire In-Lieu Fee Program.

d. Compensatory mitigation at a minimum one-for-one will be required for all wetland losses >5,000 SF of non-tidal wetlands, impacts to tidal wetlands, stream work >200 linear FT, and other circumstances, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. Information is provided at <https://www.nae.usace.army.mil/Missions/Regulatory/Mitigation/>.

8. Minimal Direct, Indirect, Secondary and Cumulative Effects. To be eligible and subsequently authorized by these GPs, an activity shall result in no more than minimal individual and cumulative effects on the aquatic environment as determined by USACE in accordance with the criteria listed within these GPs and GCs. This may require project modifications involving avoidance, minimization, or compensatory mitigation for unavoidable impacts to ensure that the net adverse effects of an activity are no more than minimal.

9. Water Quality and Coastal Zone Management.

a. Applicants shall satisfy any conditions imposed by the State of New Hampshire and EPA, where applicable, in their Clean Water Act Section 401 Water Quality Certification (WQC) for these GPs, or in any Individual Section 401 WQC. See Section V. for state-specific contact information and to determine if any action is required to obtain a 401 WQC. USACE may require additional water quality management measures to ensure that the authorized activity does not cause or contribute to a violation of water quality standards. All projects authorized by these GPs shall be designed, constructed, and operated to minimize or eliminate the discharge of pollutants.

b. Applicants shall satisfy any additional conditions imposed by the State of New Hampshire in their CZMA of 1972 consistency concurrences for these GPs, or in any Individual CZM consistency concurrences. USACE may require additional measures to ensure that the authorized activity is consistent with state CZM requirements.

10. Federal Threatened and Endangered Species.

a. No activity is authorized under any GP which:

i. Is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species;

ii. “May affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed;

iii. Is “likely to adversely affect” a listed species or critical habitat unless Section 7 consultation has been completed by USACE or another lead action agency in coordination with USACE; or

iv. Violates the ESA.

b. All applicants shall attach to their SV or PCN an Official Species List obtained from the USFWS’s Information for Planning and Consultation (IPAC) found at:

<https://ecos.fws.gov/ipac/> and provide the email address of the person who generated the list.

c. For proposed activities in tidal waters, applicants should also refer to the National Oceanic and Atmospheric Administration (NOAA) Fisheries’ Section 7 Mapper for federally-listed species found at: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-species-critical-habitat-information-maps-greater>.

d. Non-federal permittees must submit a PCN if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, **or** if the activity is located in designated critical habitat and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized.

An activity may remain eligible for SV if the only listed species affected is the northern long-eared bat (*Myotis septentrionalis*), and the activity:

- i. Will not remove trees ≥ 3 inches dbh at any time of the year; or ≤ 10 trees ≥ 3 inches dbh between November 1 – March 31;
 - ii. Is not within the “buffer” of a NLEB hibernacula or maternity roost tree; and
 - iii. Does not involve work on bridges or existing riprap associated with dams; or only after Section 7 consultation has been completed by USACE under the 4(d) Rule Streamlined Consultation.
- e. Federal agencies shall follow their own procedures for complying with the requirements of the ESA while ensuring that USACE and any other federal action agencies are included in the consultation process.
- f. Non-federal representatives designated by USACE to conduct informal consultation or prepare a biological assessment shall follow the requirements in the designation document(s) and the ESA. Non-federal representatives shall also provide USACE with the appropriate documentation to demonstrate compliance with those requirements. USACE will review the documentation and determine whether it is sufficient to address ESA compliance for the GP activity, or whether additional ESA consultation is necessary.
- g. The requirements to comply with Section 7 of the ESA may be satisfied by a Programmatic Agreement (PA) or Programmatic Consultation (PC) with USACE, the New England District, or another federal agency.

11. Essential Fish Habitat (EFH).

- a. Temporary or permanent adverse effects to EFH, SAV, tidal SAS, intertidal habitats, and natural rocky habitats are not SV eligible.
- b. PCN activities in tidal waters and rivers and streams listed in Appendix C, including all tributaries to the extent that they are currently or were historically accessible for salmon migration, will be reviewed for the potential to adversely affect EFH (activities meeting SV criteria have been determined to result in no more than minimal adverse effects to EFH and therefore need no additional review). All projects that have an adverse effect to EFH will be subject to programmatic consultation conservation recommendations.
- c. For all activities, all tidal SAS, natural rocky habitats, and areas containing shellfish in the project area must be delineated in the field, remotely or using online tools, as appropriate, and identified on the project plans. A vegetated shallow survey or SAV survey, is required for activities within 100 feet of currently or historically mapped eelgrass beds if the area has not been surveyed in the last 3 years. Information on the historical or current presence of eelgrass can be determined with <https://www.northeastoceandata.org/updated-map-of-eelgrass-meadows-and-new-map-of-historical-eelgrass-areas/>. The USACE may waive this requirement on a case-by-case basis after coordination with NMFS has been conducted. For areas containing shellfish, projects proposed to fill or dredge in NH Fish and Game designated areas used for recreation harvest (open or closed), whether directly or indirectly, do not qualify *for* authorization under these GPs and applicants must submit an individual permit application. Applicants must ensure that all projects proposed in or

adjacent to any areas containing shellfish identified on these maps are designed to avoid and minimize adverse effects. Maps of designated areas containing shellfish used for recreation harvest are located at: <https://www4.des.state.nh.us/CoastalAtlas/Atlas.html>.

d. Applicants may be required to describe and identify potential adverse effects to EFH and should refer to NOAA Fisheries' EFH Mapper found at:

<http://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper>.

e. The requirements to comply with the Magnuson-Stevens Fishery Conservation and Management Act may be satisfied by a programmatic agreement (PA) or programmatic consultation (PC) between USACE or another federal agency and NMFS.

12. National Lands. Activities that impinge upon the value of any National Lands or Federal Properties including but not limited to a National Wildlife Refuge, National Forest, National Marine Sanctuary, or any area administered by the National Park Service, USFWS U.S. Forest Service are not eligible for SV (Minimum) and require either a PCN (Minor/Major) or individual permit.

13. Wild and Scenic Rivers.

a. The following activities in designated rivers of the National Wild and Scenic River (WSR) System, or in a river designated by Congress as a "study river" for possible inclusion in the system, require a PCN unless the appropriate Federal agency with direct management responsibility for such river has determined in writing to the applicant that the proposed work will not adversely affect the WSR designation or study status:

- i. Activities that occur in WSR segments, in and 0.25 miles upstream or downstream of WSR segments, or in tributaries within 0.25 miles of WSR segments;
- ii. Activities that occur in wetlands within 0.25 miles of WSR segments;
- iii. Activities that have the potential to alter free-flowing characteristics in WSR segments.

b. As of August 18, 2022, affected rivers in New Hampshire include: Wildcat Brook from its headwaters (Little Wildcat Brook, Bog Brook, and Great Brook) to the confluence with the Ellis River (administered by the U.S. Forest Service, White Mountain National Forest); the Lamprey River from the former Bunker Pond Dam in Epping to the confluence with the Piscassic River (administered by the National Park Service, Interior Region 1); and the Nissitissit River from its headwaters in Brookline, NH to the Massachusetts-New Hampshire border (administered by the National Park Service, Interior Region 1).

14. Historic Properties.

a. No undertaking authorized by these GPs shall cause effects (defined in 33 CFR 325 Appendix C and 36 CFR 800) on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unknown historic properties within the permit area, unless USACE or another Federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act (NHPA). Many historic properties are not listed on the National Register of Historic Places and may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with USACE and the SHPO and/or

b. Historic Preservation Officer (THPO). The SHPO, THPO and the National Register of Historic Places can assist with locating information on:

- i. Previously identified historic properties; and
- ii. Areas with potential for the presence of historic resources, which may require

- identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with USACE and the SHPO and/or THPO(s).
- c. For activities eligible for SV (Minimum) projects, applicants must ensure and document that the activity will not cause effects as stated in 16(a).
 - d. Applicants must submit a PCN (Minor/Major) application to USACE as soon as possible if the authorized activity may cause effects as stated in 16(a) to ensure that USACE is aware of any potential effects of the proposed activity on any historic property to ensure all Section 106 requirements are met.
 - e. All SV (Minimum) and PCN (Minor/Major) impact projects shall:
 - i. Show notification to the SHPO (including your NHDES file number) for their identification of historic properties,
 - ii. State which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties, and
 - iii. Include any available documentation from the SHPO indicating that there are or are not historic properties affected.
 - f. If the applicant discovers any previously unknown historic, cultural, or archeological remains and artifacts while accomplishing the activity authorized by this permit, the applicant must immediately notify the District Engineer of what was found and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination is complete. The District Engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
 - g. Federal agencies should follow their own procedures for complying with the requirements of Section 106 NHPA. Along with the application, Federal applicants shall provide USACE with the appropriate documentation to demonstrate compliance with those requirements.
 - h. Federal and non-federal applicants should coordinate with USACE before conducting any onsite archeological work (reconnaissance, surveys, recovery, etc.) requested by the SHPO or the THPO, as USACE will determine the permit area for the consideration of historic properties based on 33 CFR 325 Appendix C. This is to ensure that work done is in accordance with USACE requirements.

15. USACE Property and Federal Projects.

- a. USACE projects and property can be found at: <https://www.nae.usace.army.mil/Missions/Civil-Works/>.
- b. In addition to any authorization under one or more of these GPs, applicants must contact the USACE Real Estate Division at (978) 318-8585 for work occurring on or potentially affecting USACE properties and/or USACE-controlled easements to initiate reviews and determine what real estate instruments are necessary to perform work. Applicants may not commence work on USACE properties and/or USACE-controlled easements until they have received any required USACE real estate documents evidencing site-specific permission to work.
- c. Any proposed temporary or permanent modification or use of a Federal project (including but not limited to a levee, dike, floodwall, channel, anchorage, breakwater, seawall, bulkhead, jetty, wharf, pier or other work built but not necessarily owned by the United States), or any use which could obstruct or impair the usefulness of the Federal project in any manner, and/or would involve changes to the authorized Federal project's scope, purpose, and/or functioning, is not eligible for an SV(Minimum) and will also require

review and approval by USACE pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408) (Section 408).

d. A PCN is required for all work in, over, under, or within a distance of three times the authorized depth of a USACE FNP and may also require permission under Section 408.

e. Any structure or work that extends closer than a distance of three times the project's authorized depth to the horizontal limits of any FNP shall be subject to removal at the owner's expense prior to any future USACE dredging or the performance of periodic hydrographic surveys.

f. Where a Section 408 permission is required, written verification for the PCN will not be issued prior to the decision on the Section 408 permission request.

16. Navigation.

a. No activity may cause more than a minimal adverse effect on navigation.

b. Any safety lights and signals prescribed by the U.S. Coast Guard, must be installed, and maintained at the applicant's expense on authorized facilities in navigable waters of the U.S.

c. Any structure or work that extends closer to the horizontal limits of any USACE FNP than a distance of three times the project's authorized depth shall be subject to removal at the owner's expense prior to any future USACE dredging or the performance of periodic hydrographic surveys. This is applicable to SV (Minimum) and PCN (Minor/Major).

d. There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein, and no attempt shall be made by the applicant to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein.

e. The applicant understands and agrees that if future U.S. operations require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the applicant will be required, upon due notice from USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

f. A PCN is required for all work in, over or under an FNP or its buffer zone unless otherwise indicated in Appendix A as the work may also require a Section 408 permit.

g. Where a Section 408 permission is applicable, written verification for the PCN will not be issued prior to the decision on the Section 408 permission request.

17. Permit/Authorization Letter On-Site. For PCN (Minor/Major) projects, the applicant shall ensure that a copy of these GPs and the accompanying authorization letter are at the work site (and the project office) whenever work is being performed, and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and sub-contracts for work that affects areas of USACE jurisdiction at the site of the work authorized by these GPs. This shall be achieved by including the entire permit authorization in the specifications for work. The term "entire permit authorization" means these GPs, including GCs and the authorization letter (including its drawings, plans, appendices, and other attachments), and any permit modifications. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization shall be included in the contract or sub-contract as a change order.

Although the applicant may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire authorization letter, and no contract or sub-contract shall require or allow unauthorized work in areas of USACE jurisdiction.

18. Storage of Seasonal Structures. Coastal structures such as pier sections, floats, etc., that are removed from the waterway for a portion of the year (often referred to as seasonal structures) shall be stored in an upland location, located above MHW and not in tidal wetlands. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is seaward of MHW. This is intended to prevent structures from being stored on the marsh substrate and the substrate seaward of MHW.

19. Pile Driving and Pile Removal in Navigable Waters.

a. Derelict, degraded or abandoned piles and sheet piles in navigable waters of the U.S., except for those inside existing work footprints for piers, must be completely removed, cut and/or driven to 3 feet below the substrate to prevent interference with navigation, and existing creosote piles that are affected by project activities shall be completely removed if practicable. In areas of fine-grained substrates, piles must be removed by the direct, vibratory or clamshell pull method to minimize sedimentation and turbidity impacts and prevent interference with navigation from cut piles. Removed piles shall be disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate, or mudflats.

b. A PCN is required for the installation of structures with jetting techniques.

c. A PCN is required for the installation of >12 inch-diameter piles or steel piles in tidal waters unless they are installed in the dry. If they are not installed in the dry, installation of these piles must use a soft start each day of pile driving, building up power slowly from a low energy start-up over a period of 20-40 minutes to provide adequate time for fish and marine mammals to leave the vicinity. The buildup of power should occur in uniform stages to provide a constant increase in output. Bubble curtains can be used to reduce sound pressure levels during vibratory or impact hammer pile driving.

20. Time-of-Year Work Windows/Restrictions. In-water work shall be conducted during the following TOY work windows (work allowed) under SV and any in-water work proposed during the following TOY restrictions (no work) shall be received under PCN (and shall contain written justification for deviation from the work allowed windows). The term “in-water work” does not include conditions where the work site is “in-the-dry” (e.g., intertidal areas exposed at low tide). The term does not include work contained in a cofferdam so long as the cofferdam was installed and subsequently removed within the work allowed window.

	TOY Restriction (No work)	TOY Work Window (Work allowed)
Non-tidal waters	October 1 st - July 5 th	July 5 th – October 1 st
Tidal waters	March 15 th - November 15 th	November 15 th – March 15 th

Alternate work windows proposed under a PCN will generally be coordinated with the USFWS, NMFS, and NH Fish and Game and resulting written verifications may include species-specific work allowed windows.

21. Heavy Equipment in Wetlands.

a. Operating heavy equipment (drill rigs, fixed cranes, etc.) within wetlands shall be minimized, and such equipment shall not be stored, maintained, or repaired in wetlands, to the maximum extent practicable. Where construction requires heavy equipment operation in wetlands, the equipment shall:

- i. Have low ground pressure (typically <4 psi);
- ii. Be placed on swamp/construction/timber mats (herein referred to as “construction mats” or “mats”) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation; or
- iii. Be operated on adequately dry or frozen wetlands such that shear pressure does not cause subsidence of the wetlands immediately beneath the equipment and upheaval of adjacent wetlands. Construction mats are to be placed in the wetland from the upland or from equipment positioned on mats if working within a wetland. Dragging construction mats into position is prohibited. Other support structures that are capable of safely supporting equipment may be used with written USACE authorization. Similarly, the applicant may request written authorization from USACE to waive use of mats during frozen or dry conditions. An adequate supply of spill containment equipment shall be maintained on site. At a minimum, construction mats should be managed in accordance with the following construction mat best management practices:

1. Mats should be in good condition to ensure proper installation, use and removal.
2. Where feasible, place mats in a location that would minimize the amount needed for the wetlands crossing.
3. To prevent the spread of invasive plant species construction mats are to be thoroughly cleaned before re-use.
4. Minimize impacts to wetland areas during installation, use, and removal.
5. Install adequate erosion & sediment controls at approaches to mats to promote a smooth transition to, and minimize sediment tracking onto, mats.
6. In most cases, mats should be placed along the travel area so that the individual boards are resting perpendicular to the direction of traffic. No gaps should exist between mats. Place mats far enough on either side of the resource area to rest on firm ground.
7. Provide standard construction mat BMP details to work crews.

b. Construction equipment such as barges in tidal waters shall provide clearance above the substrate to avoid impacts to SAS during all tides.

22. Temporary Fill.

a. Construction mats of any area are authorized as SV in non-tidal waters to conduct activities provided mats are removed as soon as the work is completed and in place for no longer than one growing season. The growing season is from May 1 to October 1 for the purposes of these GPs. A PCN will be required if the mats are in for more than one growing season. USACE retains the authority to make the determination that construction mats count toward the threshold after evaluating site-specific and activity-specific circumstances.

b. Temporary construction mats in tidal SAS or >1000 SF in tidal waters require a PCN.

c. Temporary fill, construction mats and corduroy roads shall be entirely removed as soon as they are no longer needed to construct the authorized work. Temporary fill shall be replaced in its original location or disposed of at an upland site and suitably contained to prevent its subsequent erosion into waters of the U.S.

d. All temporary fill and disturbed soils shall be stabilized to prevent its eroding into waters of the U.S. where it is not authorized. Work shall include phased or staged development to ensure only areas under active development are exposed and to allow for stabilization

practices as soon as practicable. Temporary fill must be placed in a manner that will prevent it from being eroded by expected high flows.

e. Unconfined temporary impact authorized for discharge into waters of the U.S. shall consist of material that minimizes impacts to water quality (e.g., washed stone, stone, etc.).

f. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Materials shall be placed in a location and manner that does not adversely impact surface or subsurface water flow into or out of the wetland. Temporary fill authorized for discharge into wetlands shall be placed on geotextile fabric or other appropriate material laid on the pre-construction wetland grade where practicable to minimize impacts and to facilitate restoration to the original grade. Construction mats are excluded from this requirement. A PCN is required for construction mats and corduroy roads that involve underlying fill.

g. Construction debris nor deteriorated materials shall not be located in waters of the U.S.

23. Restoration of Wetland Areas.

a. Upon completion of construction, all disturbed wetland areas shall be stabilized with a wetland seed mix containing only plant species native to New England and shall not contain any species listed in the “Invasive and Other Unacceptable Plant Species” Appendix K in the New England District “Compensatory Mitigation Standard Operating Procedures” found at <https://www.nae.usace.army.mil/Missions/Regulatory/Mitigation.aspx>.

b. The introduction or spread of invasive plant species in disturbed areas shall be controlled. If swamp or Construction mats are to be used, they shall be thoroughly cleaned before re-use.

c. In areas of authorized temporary disturbance, if trees are cut, they shall be cut at or above ground level and not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.

d. Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation, which under no circumstances shall be higher than the pre-construction elevation. Original condition means careful protection and/or removal of existing soil and vegetation, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized.

24. Bank Stabilization.

a. Projects involving construction or reconstruction/maintenance of bank stabilization structures within USACE jurisdiction should be designed to minimize environmental effects, effects to neighboring properties, scour, etc. to the maximum extent practicable. Where possible, bank stabilization projects shall optimize the natural function of the shoreline, including self-sustaining stability to attenuate flood flows, fishery, wildlife habitat and water quality protection, while protecting upland infrastructure from storm events that can cause erosion as well as impacts to public and private property.

b. Applicants must use the least intrusive method to stabilize the bank, follow the details in NHDES administrative rules and the following sequential minimization process: diversion of water, vegetative stabilization, stone-sloped surfaces, and walls. Vertical bulkheads should only be used in situations where reflected wave energy can be tolerated. This generally eliminates bodies of water where the reflected wave energy may interfere with or impact

harbors, marinas, or other developed shore areas. A revetment is sloped and is typically employed to absorb the direct impact of waves more effectively than a vertical seawall. It typically has a less adverse effect on the beach in front of it, abutting properties and wildlife.

25. Soil Erosion and Sediment Controls.

- a. Appropriate soil erosion and sediment controls² (hereinafter referred to as “controls”) must be installed prior to earth disturbance and maintained in effective operating condition during construction. Biodegradable wildlife friendly erosion controls should be used whenever practicable. Activities in streams (rivers, streams, brooks, etc.) and tidal waters that are capable of producing sedimentation or turbidity should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. A PCN is required for an activity that causes greater than minimal sedimentation or turbidity in streams or tidal waters.
- b. No dewatering shall occur with direct discharge to waters or wetlands without coverage of an EPA Construction General Permit. Excess water in isolated work areas shall be pumped or directed to a sedimentation basin, tank or other dewatering structures in an upland area adequately separated from waters or wetlands. Suspended solids shall be removed prior to discharge back into waters or wetlands from these dewatering structures. All discharge points back into waters and wetlands shall use appropriate energy dissipaters and erosion and sedimentation control BMPs.
- c. Temporary controls shall be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized at the earliest practicable date. Sediment and debris collected by these devices shall be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland. Controls may be left in place if they are biodegradable and flows and aquatic life movements are not disrupted.

26. Aquatic Life Movements and Management of Water Flows.

- a. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity’s primary purpose is to impound water. Unless otherwise stated, activities permanently impounding water in a stream require a PCN to ensure impacts to aquatic life species are avoided and minimized. All permanent and temporary crossings of waterbodies and wetlands shall be:
 - i. Suitably spanned, bridged, culverted, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species; and
 - ii. Properly aligned and constructed to prevent bank erosion or streambed scour both adjacent to and inside the crossing.
- b. To avoid adverse impacts on aquatic organisms, the low flow channel/thalweg shall remain unobstructed during periods of low flow, except when necessary to perform the authorized work.

² Appropriate soil erosion, sediment and turbidity controls include cofferdams, bypass pumping around barriers immediately up and downstream of the work footprint (i.e., dam and pump), installation of sediment control barriers (i.e., silt fence, vegetated filter strips, geotextile silt fences, filter tubes, erosion control mixes, hay bales or other devices) downhill of all exposed areas, stream fords, retention of existing vegetated buffers, application of temporary mulching during construction, phased construction, and permanent seeding and stabilization, etc.

- c. For work in tidal waters, in-stream controls (e.g., cofferdams) should be installed in such a way as to not obstruct fish passage.
- d. Riprap and other stream bed materials shall be installed in a manner that avoids organism entrapment in rock voids or water displaced to subterranean flow with crushed stone and riprap.
- e. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity shall not restrict or impede the passage of normal or high flows unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- f. Activities that temporarily or permanently adversely impact upstream or downstream flood conditions require a PC.

27. Spawning, Breeding, and Migratory Areas.

- a. Jurisdictional activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities in jurisdictional waters that provide value as fish migratory areas, fish and shellfish spawning or nursery areas, or amphibian and migratory bird breeding areas, during spawning or breeding seasons shall be avoided and minimized to the maximum extent practicable.
- b. Jurisdictional activities in waters of the U.S. that provide value as breeding areas for migratory birds must be avoided to the maximum extent practicable. The applicant is responsible for obtaining any “take” permits required under the USFWS’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The applicant should contact the appropriate local office of the USFWS to determine if such “take” permits are required for a particular activity. Information on spawning habitat for species managed under the Magnuson-Stevens Fishery Conservation and Management Act (i.e., EFH for spawning adults) can be obtained from the NMFS website at: <https://www.fisheries.noaa.gov/region/new-england-mid-atlantic#habitat>.

28. Vernal Pools.

- a. A PCN is required if a discharge of dredged or fill material is proposed within a vernal pool depression located within waters of the U.S.
- b. On projects requiring a PCN, vernal pools must be identified on the plan showing aquatic resource delineations
- c. Adverse impacts to vernal pools should be avoided and minimized to the maximum extent practicable.

29. Invasive Species.

- a. The introduction, spread or the increased risk of invasion of invasive plant or animal species on the project site, into new or disturbed areas, or areas adjacent to the project site caused by the site work shall be avoided. Hence, swamp and construction mats shall be thoroughly cleaned before reuse.
- b. Unless otherwise directed by USACE, all applications for PCN inland projects proposing fill in USACE jurisdiction shall include an Invasive Species Control Plan. Additional

information can be found at: <https://www.nae.usace.army.mil/Missions/Regulatory/Invasive-Species/>, <https://extension.unh.edu/natural-resources/forests-trees/invasivespecies>, and <https://www.nrcs.usda.gov/wps/portal/nrcs/main/nh/technical/ecoscience/invasive/>.

30. Fills Within 100-Year Floodplains. The activity shall comply with applicable Federal Emergency Management Agency (FEMA) approved, State of New Hampshire or local floodplain management requirements. Applicants should contact FEMA and/or the State of New Hampshire regarding floodplain management requirements.

31. Stream Work and Crossings, and Wetland Crossings.

a. All temporary and permanent crossings of waterbodies and wetlands shall be suitably culverted, bridged, or otherwise designed to withstand and to prevent the restriction of high flows, to maintain existing low flows, and not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.

b. All temporary and permanent crossings of rivers, streams, brooks, etc. (hereafter referred to as “streams”) shall conform to the “New Hampshire Stream Crossing Guidelines” located at: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/New-Hampshire-General-Permit/>. The USACE shall review projects under the PCN (Minor/Major) impact or IP review procedures if conforming to the Guidelines is impractical. The Guidelines typically require bridge spans, open bottom arches, or embedded culverts. Bridge spans are generally preferred.

c. The requirements to comply with the Guidelines in order to proceed as SV (Minimum) as stated in (c) above does not apply to constructed drainage systems designed primarily for the conveyance of storm water or irrigation. Also, non-tidal drainage and irrigation ditches excavated on dry land are not Federally regulated.

d. Only maintenance or replacement of serviceable crossings with an exact replica crossing (no change in size, character, and scope) in the same footprint with no expansion or change in use/circumstances is considered as a maintenance project. Maintenance meeting these criteria are exempt from USACE regulation. Any deviation deems the crossing as “new”, potentially requiring a new USACE authorization.

Note: The State of New Hampshire’s maintenance provisions differ from USACE and will likely require reporting to and written authorization from the State.

e. Road crossings at wetland and waterbody crossings shall be installed in such a manner as to preserve hydraulic capacity, sediment transport, and organism passage at its present level, between the wetlands on either side of the road. The applicant shall take necessary measures to correct any wetland damage resulting from deficiencies in hydraulic capacity, sediment transport and organism passage.

f. Activities involving open trench excavation in flowing waters require a PCN (Minor/Major). Work should not occur in flowing waters (requires using management techniques such as temporary flume pipes, culverts, cofferdams, etc.). Normal flows should be maintained within the stream boundary’s confines when practicable. Projects utilizing these management techniques must meet the other SV (Minimum) requirements and all the applicable GP terms and GCs.

g. Construction equipment crossing or accessing streams without using temporary bridges, spans, Construction mats, culverts or cofferdams are not eligible as an SV (Minimum). (Note: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine applicability of these GPs.

h. Projects which meet the definition of an SV (Minimum), in-stream (e.g., rivers, streams, brooks, etc.) construction work shall be conducted only during the low flow period of

July 5th – October 1st in any year. Projects conducted outside of that time period are ineligible as an SV (Minimum) and shall be reviewed pursuant to PCN (Minor/Major) procedures, regardless of the waterway and wetland fill and/or impact area. Any work that impacts upstream or downstream flooding or wetlands must be reviewed under the PCN (Minor/Major) procedures.

32. Inspections. The applicant shall allow USACE to make periodic inspections at any time deemed necessary to ensure that the work is being or has been performed in accordance with the terms and conditions of this permit. To facilitate these inspections, the applicant shall complete and return the Compliance Certification Form when it is provided with a verification letter. The USACE may also require post-construction engineering drawings for completed work, and post-dredging survey drawings for any dredging work.

33. Maintenance. The applicant shall maintain the activity authorized by these GPs in good condition and in conformance with the terms and conditions of this permit. This does not include maintenance of dredging projects. Maintenance dredging is subject to the review thresholds in GP #7 as well as any conditions included in a written USACE authorization. Maintenance dredging includes only those areas and depths previously authorized and dredged. Some maintenance activities may not be subject to federal regulation under Section 404 in accordance with 33 CFR 323.4(a) (2).

34. Property Rights. Per 33 CFR 320.4 (g)(6), these GPs do not convey any property rights, either in real estate or material, or any exclusive privileges, nor do they authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

35. Transfer of GP Verifications. When the work authorized by these GPs is still in existence at the time the property is transferred, the terms and conditions of these GPs, including any special conditions, will continue to be binding on the entity or individual who received the GP authorizations, as well as the new owner(s) of the property. If the applicant sells the property associated with a GP authorization, the applicant may transfer the GP authorization to the new owner by submitting a letter to USACE to validate the transfer. A copy of the GP authorization letter must be attached to the letter, and the letter must include the following statement: "The terms and conditions of these general permits, including any special conditions, will continue to be binding on the new owner(s) of the property." This letter shall be signed by both the seller and new property owner(s).

36. Modification, Suspension, and Revocation. These GPs and any individual authorization issued thereof may be either modified, suspended, or revoked in whole or in part pursuant to the policies and procedures of 33 CFR 325.7; and any such action shall not be the basis for any claim for damages against the U.S.

37. Special Conditions. The USACE may impose other special conditions on a project authorized pursuant to these GPs that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all conditions of the authorization, including special conditions, constitutes a permit violation and may subject the applicant to criminal, civil, or administrative penalties or restoration.

38. False or Incomplete Information. If USACE makes a determination regarding the eligibility of a project under these GPs, and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the applicant, the authorization will not be valid, and the U.S. Government may institute appropriate legal proceedings.

39. Abandonment. If the applicant decides to abandon the activity authorized under these GPs, unless such abandonment is merely the transfer of property to a third party, he/she may be required to restore the area to the satisfaction of USACE.

40. Enforcement cases. These GPs do not apply to any existing or proposed activity in USACE jurisdiction associated with an on-going USACE or EPA enforcement action, until such time as the enforcement action is resolved or USACE or EPA determines that the activity may proceed independently without compromising the enforcement action.

41. Previously Authorized Activities.

a. Completed projects that received prior authorization from USACE (SV or PCN), shall remain authorized in accordance with the original terms and conditions of those authorizations, including their terms, GCs, and any special conditions provided in a written verification.

b. Activities authorized pursuant to 33 CFR 330.3 (activities occurring before certain dates) are not affected by these GPs.

42. Duration of Authorization.

a. These GPs expire five years from the date issued as listed at the top of the cover sheet. Activities authorized by these GPs that have either commenced (i.e., are under construction) or are under contract to commence in reliance upon this authorization will have an additional year from the expiration date to complete the work. The applicant must be able to document to USACE's satisfaction that the project was under construction or under contract by the expiration date of these GPs. If work is not completed within the one-year extended timeframe, the applicant must contact USACE. The USACE may issue a new authorization provided the project meets the terms and conditions of the NH GPs in effect at the time.

b. Activities authorized under these GPs will remain authorized until the GPs expire, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 325.2(e)(2). Activities completed under the SV (Minimum) or PCN (Minor/Major) authorizations of these GPs will continue to be authorized after their expiration date.

**SECTION V. FEDERAL & STATE AGENCY CONTACTS &
ORGANIZATIONAL WEBSITES**

FEDERAL AGENCY CONTACTS

U.S. Army Corps of Engineers
New England District, Regulatory Branch C
696 Virginia Road
Concord, MA 01742-2751
(800) 343-4789, (978) 318-8335 (978) 318-8303 (fax)

U.S. Environmental Protection Agency
Region 1, Wetlands Protection Section, Water Division
5 Post Office Square
Mail Code OEP06-3
Boston, MA 02109-3912
(617) 918-1536

U.S. Fish and Wildlife Service
70 Commercial Street
Suite 300
Concord, NH 02813
(603) 223-2541

National Park Service North Atlantic Region
15 State Street
Boston, Massachusetts 02109
(617) 223-5191

National Marine Fisheries Service
Greater Atlantic Regional Fisheries Office
Habitat Conservation Division
55 Great Republic Drive
Gloucester, MA 01930
(978) 281-9102 or 9130

NOAA Restoration Center
55 Great Republic Drive
Gloucester, Massachusetts 01930
(978) 281 9313

Natural Resources Conservation Service
Federal Building
2 Madbury Road
Durham, NH 03824-2043
(603) 868-7581

STATE OF NEW HAMPSHIRE CONTACTS

NHDES Wetlands Bureau
29 Hazen Drive
Concord, NH 03302
(603) 271-2147, (603) 271-6588 (fax)

NHDES Dam Bureau
29 Hazen Drive
Concord, NH 03302
(603) 271-3406, (603) 271-6120 (fax)

New Hampshire Coastal Program
222 International Drive, Suite 175
Portsmouth, NH 03801
(603) 559-1500, (603) 559-1510 (fax)

NH Division of Historical Resources
State Historic Preservation Office
19 Pillsbury Street Concord, NH 03301-3570
(603) 271-3483

Natural Heritage Bureau (State Endangered Species)
172 Pembroke Road
P.O. Box 1856
Concord, NH 03302
(603) 271-2215, x323

NH Fish and Game Department (State Endangered Species)
Non-Game Endangered Wildlife Program
11 Hazen Drive
Concord, NH 03302-0095
(603) 271-3421

Pease Development Authority, Division of Ports and Harbors
555 Market Street
Portsmouth, NH 03801
(603) 436-8500

ORGANIZATIONAL WEBSITES

U.S Army Corps of Engineers New England District:

- <https://www.nae.usace.army.mil/Missions/Regulatory.aspx>
- <http://www.nae.usace.army.mil/Portals/74/docs/regulatory/JurisdictionalLimits/JurisdictionalLimitsBrochure.pdf>

SAV Guidance: [https://www.nae.usace.army.mil/portals/74/docs/regulatory/JurisdictionalLimits/Submerged Aquatic Vegetation Survey Guidance\(11-Aug-2016\).pdf](https://www.nae.usace.army.mil/portals/74/docs/regulatory/JurisdictionalLimits/SubmergedAquaticVegetationSurveyGuidance(11-Aug-2016).pdf)

Environmental Protection Agency: www.epa.gov/owow/wetlands

National Marine Fisheries Service, Northeast Region: www.greateratlantic.fisheries.noaa.gov/habitat

National Marine Fisheries Service, National Headquarters: <https://www.fisheries.noaa.gov/contact/national-headquarters>

U.S. Fish and Wildlife Service: www.fws.gov

National Park Service: www.nps.gov/rivers/index.html

NH DES Wetlands Bureau: <https://www.des.nh.gov/water/wetlands>

NH Wetlands Rules: <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/wetlands-project-specific-info.pdf>

NH Fish and Game: www.wildlife.state.nh.us

Coastal NH – Marine Resources: www.wildlife.state.nh.us/marine

NH Coastal Program: <https://www.des.nh.gov/water/coastal-waters>

NH Division of Historical Resources: www.nh.gov/nhdhr

NH GIS: www.granit.unh.edu

NH Water Quality Certification Program: <https://www.des.nh.gov/water/rivers-and-lakes/water-quality-certification>

NH Coastal Viewer: <https://www.nhcoastalviewer.org/>

NMFS Habitat Conservation Division (EFH): <https://www.fisheries.noaa.gov/new-england-mid-atlantic/habitat-conservation/essential-fish-habitat-consultations-greater-atlantic-region>

Natural Heritage Bureau (NHB): <https://www.nh.gov/nhdf/>

NHB DataCheck Tool (rare species information): https://www2.des.state.nh.us/nhb_datacheck/

Pease Development Authority, Division of Ports and Harbors: <http://www.portofnh.org>

Appendix A
New Hampshire General Permits
Definitions / Terminology

Areas Containing Shellfish: Areas containing shellfish (open or closed) used for recreation harvest as designated by the NH Fish and Game Department. Maps of these areas containing shellfish are located at:

https://www4.des.state.nh.us/CoastalAtlas/Shellfish_Map.html

Boating Facilities: Facilities that provide for a fee, rent, or sell mooring space, such as marinas, yacht clubs, boat clubs, boat yards, town facilities, dockominiums, etc.

Compensatory Mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved. Must comply with the applicable provisions of 33 CFR 332. See also the New England District Compensatory Mitigation Guidance at <http://www.nae.usace.army.mil/Missions/Regulatory/Mitigation.aspx>

Construction Mats: Construction, swamp, and timber mats (herein referred to as “construction mats”) are generic terms used to describe structures that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. They are comprised of sheets or mats made from variety of materials in various sizes. A timber mat consists of large timbers bolted or cabled together. Corduroy roads, which are not considered construction mats, are cut tress and/or saplings with the crowns and branches removed, and the trunks lined up next to one another. Corduroy roads are typically installed as permanent structures. Like construction mats, they are considered as fill whether they are installed temporarily or permanently.

Cumulative Impacts: The impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct Impacts: Effect caused by the proposed action and occurring at the same time and place. (40 CFR 1508.7)

Dredged Material & Discharge of Dredged Material: These are defined at 33 CFR 323.2 (c) and (d). The term dredged material means material that is excavated or dredged from waters of the U.S.

Enhancement: The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s) but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area (33 CFR 332.2).

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions (33 CFR 332.2).

Federal Navigation Projects (FNPs): These areas are maintained by USACE; authorized, constructed and maintained on the premise that they will be accessible and available to all on equal terms; and are comprised of USACE Federal anchorages, Federal navigation channels and Federal turning basins. Information, including the limits, is provided at <http://www.nae.usace.army.mil/Missions/Navigation.aspx>

FNP Buffer Zone: The buffer zone of a USACE FNP is equal to three times the authorized depth of the FNP.

Floodplain: Shall mean the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year. (Executive Order 11988)

Height:Width Ratio: The height of structures shall at all points be equal to or exceed the width of the deck. For the purpose of this definition, height shall be measured from the marsh substrate to the bottom of the longitudinal support beam.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds (33 CFR 328).

Historic Resources: Any prehistoric or historic district site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Incidental Fallback: Incidental fallback is the redeposit of small volumes of dredged material that is incidental to excavation activity in waters of the United States when such material falls back to substantially the same place as the initial removal. (33 CFR 323.2(d)(2)(ii))

Independent Utility: A test to determine what constitutes a single and complete non-linear project in the USACE Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility 86 F.R. 2876 (January 13, 2021).

Indirect Impacts (NEPA): Effects which are caused by the action that are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR 1508.8).

Individual Permit: A Department of the Army authorization that is issued following a case-by-case evaluation of a specific structure or work in accordance with the procedures of 33 CFR 322, or a specific project involving the proposed discharge(s) in accordance with the procedures of 33 CFR 323, and in accordance with the procedures of 33 CFR 325 and a

determination that the proposed discharge is in the public interest pursuant to 33 CFR 320.

Living Shoreline: A term used to describe a combination of mostly naturally derived materials including plants, shell and rock or manufactured rock-like surfaces that are used along a shoreline exhibiting erosion to dissipate wave energy and to collect naturally deposited sediment.

Maintenance: Maintenance does not include any modification that changes the character, scope, or size of the original fill design.

Maintenance Dredging: Includes areas and depths previously dredged and authorized by USACE. Proof of authorization is required. Maintenance dredging typically refers to the routine removal of accumulated sediment from channel beds to maintain the design depths of navigation channels, harbors, marinas, boat launches and port facilities. Maintenance dredging is conducted regularly for navigational purposes (typically at least every ten years) and does not include any expansion of the previously dredged area or depth. The USACE may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS, shellfish, etc. **New Dredging:** Includes dredging proposed in previously un-dredged areas and/or in areas exceeding previously authorized dimensions (deeper or wider than previously authorized) excluding normal over dredge.

Mechanized Land Clearing: Land clearing activities using mechanized equipment such as backhoes or bulldozers with sheer blades, rakes or discs constitute point source discharges and are subject to section 404 jurisdiction when they take place in wetlands or waters of the U.S (Regulatory Guidance Letter 90-05).

Natural Rocky Habitats: Intertidal and subtidal substrates of pebble-gravel, cobble, boulder, or rock ledge and outcrops. Manufactured stone (e.g., cur or engineered riprap) is not considered a natural rocky habitat. Natural rocky habitats are either found as pavement (consolidated pebble-gravel, cobble, or boulder areas) or as a mixture with fines (i.e., clay and sand) and other substrates. Rocky habitats as EFH are defined as follows: (1) All pebble-gravel, cobble, or boulder pavements; (2) Pebble-gravel mixed with fines: mixed substrate of pebble-gravel and fines where pebble-gravel is an evident component of the substrate (either through visual observation or within sediment samples). Sediment samples with a content of 10% or more of pebble-gravel in the top layer (6-12 inches) should be delineated; (3) Scattered cobble, scattered boulder, scattered cobble/boulder: mixed substrate of cobble and/or boulder and other substrates. The aerial extent of cobbles and/or boulders should be delineated; and (4) All rock ledge outcrops: area should be delineated along the edge of the ledge/outcrop (as defined by NMFS Habitat and Ecosystems Services Branch, Gloucester, MA).

Navigable Waters: Waters subject to Section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR 329 and identify waters where permits are required for work or structures pursuant to Section 9 and 10 of the Rivers and Harbors Act of 1899. They are generally defined as those waters that are subject to the ebb and flow of the tide and/or are presently used or have been used in the past or may be susceptible for use to transport interstate or foreign commerce (33 CFR 329.4). Non-tidal navigable waters in NH include the Merrimack River from the Massachusetts/New Hampshire state line to Concord, NH, Lake Umbagog within the State of NH, and the Connecticut River to Pittsburg, NH.

Ordinary High Water Mark (OHWM): A line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (33 CFR 328.3 (e)).

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project proposes.

Pre-Construction Notification (PCN): A request submitted by the project proponent to USACE for confirmation that a particular activity is authorized by any of these GPs. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of these GPs. A PCN may be voluntarily submitted in cases where PCN is not required, and the project proponent wants confirmation that the activity is authorized under one or more of the GPs.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. The term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms, Preservation does not result in a gain of aquatic resource area or functions (33 CFR 332.2).

Priority Resource Area: Defined by NHDES as a jurisdictional area that (a) has documented occurrences of protected species or habitat; (b) is a bog; (c) is a floodplain wetland contiguous to a tier 3 or higher watercourse; (d) is a designated prime wetlands or a duly established 100-foot buffer; (e) is a sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone; or (f) is any combination of (a) through (e), above.

Reconfiguration Zone: A USACE authorized area in which applicants may rearrange pile-supported structures and floats without additional authorizations. A reconfiguration zone does not grant exclusive privileges to an area or an increase in structure or float area.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area (33 CFR 332.2).

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function but does not result in a gain in aquatic resource area (33 CFR 332.2).

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in an aquatic resource area restoration is divided into two categories: reestablishment and rehabilitation (33 CFR 332.2).

Secondary Effects: These are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final Section 404 action is taken by permitting authorities. Some examples of secondary effects on an aquatic ecosystem are a) aquatic areas drained, flooded, fragmented, or mechanically cleared, b) fluctuating water levels in an impoundment and downstream associated with the operation of a dam, c) septic tank leaching and surface runoff from residential or commercial developments on fill, and d) leachate and runoff from a sanitary landfill located in waters of the U.S. See 40 CFR 230.11(h).

Special Aquatic Sites (SAS): These include inland and saltmarsh wetlands, mud flats, vegetated shallows (SAV), sanctuaries and refuges, coral reefs, and riffle and pool complexes. These are defined at 40 CFR 230.3 and listed in 40 CFR 230 Subpart E.

Tide gate: Structures such as duckbills, flap gates, manual and self-regulating tide gates, etc. that regulate or prevent upstream tidal flows.

Temporal loss: The time lag between the losses of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site(s) (33 CFR 332.2).

Terms: The “terms” of the NHGP are the limitations and provisions included in the description of the GP activity itself.

Vegetated Shallows: Permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as eelgrass and widgeon grass (*Rupia maritima*) in marine systems (doesn't include salt marsh) as well as several freshwater species in rivers and lakes. Note: These areas are also commonly referred to as submerged aquatic vegetation (SAV).

Waters of the United States: Waters of the United States are defined in 33 CFR 328.3. These waters include more than navigable waters of the U.S. and are the waters where permits are required for the discharge of dredged or fill material pursuant to Section 404 of the Clean Water Act. Waters of the U.S. include jurisdiction wetlands.



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**Appendix B
New Hampshire General Permits
Required Information and USACE Section 404 Checklist**

Required Information

In order for USACE to properly evaluate your application, applicants must submit the following information for all projects along with the NHDES Wetlands Bureau application or permit notification forms. Some projects may require more information. Check with USACE at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the NHDES Wetlands Bureau application and Permit by Notification forms.

- NHDES Wetlands Permit Application.
- Request for Project Review Form by the NH DHR: <https://www.nh.gov/nhdhr/review/rpr.htm>.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible plans no larger than 11"x17" with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show MLW and MHW elevations. Show the HTL elevations when fill is involved. In other waters, show the OHW elevation.
- On each plan, show the following for the project:
 - Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. In coastal waters this may be mean higher high water (MHHW), MHW, MLW, mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983 - 2001.
 - Horizontal state plane coordinates in U.S. survey feet based on the Traverse Mercator Grid system for the State of New Hampshire (Zone 2800) NAD 83.
 - Project limits with existing and proposed conditions.
 - Limits of any FNP in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the FNP.
 - Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the OHW in inland waters and below the HTL in coastal waters.
 - Delineation of all waterways and wetlands on the project site.
- Use Federal delineation methods and include USACE wetland delineation data sheets (GC 2).
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact USACE for guidance.



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USACE Section 404 Checklist

1. Attach any explanations to this checklist. Lack of information could delay a USACE permit determination.
2. All references to “work” include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See GC 3 for information on single and complete projects.
4. Contact USACE at (978) 318-8832 with any questions.
5. The information requested below is generally required in the NHDES Wetland Application. See page 61 for NHDES references and Admin Rules as they relate to the information below.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See the following to determine if there is an impaired water in the vicinity of your work area. * https://nhdes-surface-water-quality-assessment-site-nhdes.hub.arcgis.com/ https://www.des.nh.gov/water/rivers-and-lakes/water-quality-assessment https://www4.des.state.nh.us/onestopdatamapper/onestopmapper.aspx		
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?		
2.2 Are there proposed impacts to tidal SAS, prime wetlands, or priority resource areas? Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at https://www4.des.state.nh.us/NHB-DataCheck/ .		
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?		
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		
2.5 The overall project site is more than 40 acres?		
2.6 What is the area of the previously filled wetlands?		
2.7 What is the area of the proposed fill in wetlands?		
2.8 What % of the overall project sire will be previously and proposed filled wetlands?		
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: https://www4.des.state.nh.us/NHB-DataCheck/ . USFWS IPAC website: https://ipac.ecosphere.fws.gov/		

3.2 Would work occur in any area identified as either “Highest Ranked Habitat in N.H.” or “Highest Ranked Habitat in Ecological Region”? (These areas are colored magenta and green, respectively, on NH Fish and Game’s map, “2010 Highest Ranked Wildlife Habitat by Ecological Condition.”) Map information can be found at: <ul style="list-style-type: none"> • PDF: https://wildlife.state.nh.us/wildlife/wap-high-rank.html. • Data Mapper: www.granit.unh.edu. • GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html. 		
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		
3.5 Are stream crossings designed in accordance with the GC 31?		
4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?		
5. Historic/Archaeological Resources		
For a minimum, minor or major impact project - a copy of the RPR Form (www.nh.gov/nhdhr/review) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 37 GC 14(d) of the GP document**		
6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact)	Yes	No
Projects with greater than 1 acre of permanent impact must include the following: <ul style="list-style-type: none"> • Functional assessment for aquatic resources in the project area. • On and off-site alternative analysis. • Provide additional information and description for how the below criteria are met. 		
6.1 Will there be complete loss of aquatic resources on site?		
6.2 Have the impacts to the aquatic resources been avoided and minimized to the greatest extent practicable?		
6.3 Will all aquatic resource function be lost?		
6.4 Does the aquatic resource (s) have regional significance (watershed or ecoregion)?		
6.5 Is there an on-site alternative with less impact?		
6.6 Is there an off-site alternative with less impact?		
6.7 Will there be a loss to a resource dependent species?		
6.8 Are indirect impacts greater than 1 acre within and adjacent to the project area?		
6.9 Does the proposed mitigation replace aquatic resource function for direct, indirect, and cumulative impacts?		

*Although this checklist utilizes state information, its submittal to USACE is a federal requirement.

** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.



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Required Information and USACE Section 404 Checklist**

NHDES Rule Citations

Appendix B Requirements	NHDES Citation	NHDES Resource, Form & BMP
1. Impaired Waters		
1.1	See Env-Wt 307.03 Protection of Water Quality Required & Env-Wt 306.05 a) 7	https://nhdes-surface-water-quality-assessment-site-nhdes.hub.arcgis.com/ https://www.des.nh.gov/water/rivers-and-lakes/water-quality-assessment https://www4.des.state.nh.us/onestopdatamapper/onestopmapper.aspx
2. Wetlands		
2.1	N/A	N/A
2.2	Env 307.06; Env- Wt 311.01(a)(b) (c)	NH Online Forms System - Coastal Resource Worksheet. Version 2.0 Wetlands Permitting: Protected Species and Habitat (nh.gov) Wetlands Permitting: Priority Resource Area (nh.gov) https://www4.des.state.nh.us/NHB-DataCheck/ .
2.3	Env-Wt 313.03(b)(3); Env-Wt 313.03(b)(4)(7); Env-Wt 307.06	See Chapter 7, Stream & Wetland Crossings: Wetlands Best Management Practice Techniques for Avoidance and Minimiz Wetlands-BMP-Manual-2019.pdf (neiwppcc.org) (& Env-Wt 900 for Stream Crossings)
2.4	Env-Wt 604.02 (Tidal buffer zone); Env-Wt 704 (prime buffers)	
2.5	N/A	N/A
2.6	N/A	N/A
2.7	Env-Wt 311.04(g)	Standard application Section 11- NH Online Forms System - Standard Dredge and Fill Wetlands Permit Application . Version 3.5
2.8	N/A	N/A
3. Wildlife		
3.1	Env-Wt 103.69 "Protected species or habitat"; Env-Wt 307.06, 311.01	NHB DataCheck Tool: https://www4.des.state.nh.us/NHB-DataCheck/ . Wetlands Permitting: Protected Species and Habitat (nh.gov) Wetlands Permitting: Priority Resource Area (nh.gov)
3.2	Env-Wt 311.02; 313.03(b)(2), (4), (7)(16); Env-Wt 313.03(b)(6) & See Env-Wt 808.19(g), Env-Wt 808.20	Wetlands Permitting: Protected Species and Habitat (nh.gov) Wetlands Permitting: Priority Resource Area (nh.gov)
3.3	N/A	N/A
3.4	NA	N/A
3.5	(Env-Wt 900) Microsoft Word - Env-Wt 900 as of 10-2020.docx (nh.gov)	New Hampshire Stream Crossing Guidelines (nh.gov) (2009 UNH) NH Online Forms System - Wetland Permit Application Stream Crossing Worksheet. Version 1.8 Stream Crossing Design (nh.gov) : https://www.nh.gov/dot/org/projectdevelopment/environment/units/program-management/documents/RR_V.9_FINAL_3-14-19.pdf Best Management Practices for Routine Roadway Maintenance Activities in New Hampshire. 2019. New Hampshire Department of Transportation.
4. Flooding/Floodplain Values		
4.1	Env-Wt 311.05; Env-Wt 103.66 517.03(b); 517.06(a)(6);	Wetlands Permitting: Priority Resource Area (nh.gov) NH Online Forms System - Coastal Resource Worksheet. Version 2.0 New Hampshire Coastal Flood Risk Summary NH Department of

	527.02(e); 527.04(d); Env-Wt 600 Env-Wt 900	Environmental Services (cited in Env-Wt 603.05) NH Online Forms System - Wetland Permit Application Stream Crossing Worksheet. Version 1.8 hydraulic-vulnerability-handout.pdf (nh.gov)
4.2	Env-Wt 527.02 & 527.04 & 313.04 & Env-Wt 800; Wt 605.03 & 605.04	Yes, for permanent impacts to a PRA, impacts from public highway projects, & those projects where flood storage functions are lost when the mitigation threshold is reached. Wetlands Mitigation NH Department of Environmental Services
5. Historical/Archeological Resources		
5.0	Env-Wt 311.02(f)(6)	
6. Minimal Impact Determination		
6.0	F/V assessment: (Env-Wt 311.10); Env-Wt 603.04 (Coastal Functional Assessment) Alternatives: (Env-Wt 311.07(b)(2))	NH Online Forms System - Wetlands Functional Assessment Worksheet. Version 1.3 NH Online Forms System - Coastal Resource Worksheet. Version 2.0
6.1		Wetlands Permitting: Avoidance, Minimization, and Mitigation (nh.gov)
6.2	Env-Wt 102.12 ("Avoidance"), Env-Wt 102.13 ("Avoidance, minimization, mitigation"), Env-Wt 102.14 ("Avoid and minimize"), Env-Wt 311.01, Env-Wt 313.03 ("Avoidance & Minimization") Env-Wt 311.07	See <i>Wetlands Best Management Practice Techniques for Avoidance and Minimization</i> - Wetlands-BMP-Manual-2019.pdf (neiwppc.org) referenced in Env-Wt 313.03(a); A/M written narrative (NH Online Forms System - Avoidance and Minimization Written Narrative. Version 2.0); Avoidance and Minimization Checklist: NH Online Forms System - Avoidance and Minimization Checklist. Version 3.1
6.3	Env-Wt 311.10, 603.04	See Functional Assessment worksheets above
6.4	Env-Wt 311.02, Env-Wt 312.04. Env-Wt 306.05, 307.06, 311.01	See Protected Species or Habitat (including exemplary natural communities)
6.5	Env-Wt 311.01, Env-Wt 311.07, Env-Wt 311.10 & 313.01 c1)	See Avoidance & Minimization cites above & BMPs
6.6	(Env-Wt 313.01c) (1) & Env-Wt 311.07(b)(2))	
6.7	Env-Wt 311.10, Env-Wt 103.69, Env-307.06, see Avoidance & minimization cites	NH Online Forms System - Wetlands Functional Assessment Worksheet. Version 1.3 ; Wetlands Permitting: Priority Resource Area (nh.gov) NH Online Forms System - Coastal Resource Worksheet. Version 2.0
6.8	Env-Wt 102.05 (Water quality BMPs)	Practices to minimize or prevent direct or indirect discharge of sediment or other pollutants into surface waters and wetlands, listed in Env-Wt 307
6.9	Env-Wt 800	

**Appendix C
New Hampshire General Permits
EFH Rivers for Atlantic Salmon**

MERRIMACK RIVER AND TRIBUTARIES

Allen Brook	Baker Brook	Bennett Brook
Bow Bog Brook	Bow Brook	Bowman Brook
Bradleys Island	Brickyard Brook	Browns Brook
Bryant Brook	Burnham Brook	Cate Brook
Chandler Brook	Chase Brook	Cohas Brook
Cold Brook	Contoocook River	Cross Brook
Dalton Brook	Giles Pond - Salmon Brook	Glines Brook
Hayward Brook	Horseshoe Island	Horseshoe Pond - Naticook Brook
Knox Brook	Little Cohas Brook	Messer Brook
Millstone Brook	Nashua River	Needle Shop Brook
Nesenkeag Brook	Pemigewasset River	Penacook Lake
Piscataquog River	Pointer Club Brook	Punch Brook
Ray Brook	Riddle Brook	Sawmill Brook
Second Brook	Shaw Brook	Soucook River
Souhegan River	South Branch River	Stirrup Iron Brook
Suncook River	Tannery Brook	Turkey River
Watts Brook	Weeks Brook	Woods Brook

SACO RIVER AND TRIBUTARIES

Albany Brook	Artist Brook	Avalanche Brook
Bartlett Brook	Bearcamp River	Beech River
Bemis Brook	Conway Lake	Davis Brook
E.Branch Saco River	Echo Lake	Ellis River
Flume Cascade	Kearsarge Brook	Kendron Brook
Lucy Brook	Mason Brook	Meadow Brook
Mountain Brook	Nancy Brook	Ossipee River
Razor Brook	Rocky Branch	Sawyer River
Sleeper Brook	Swift River	Willey Brook

COCHECO RIVER & LAMPREY RIVER

Note: Rivers and Tributaries that are bolded are specifically included as rivers that are contained in various State and Federal anadromous fish restoration programs and should be the primary focus for Atlantic salmon protections.

**MEMORANDUM OF AGREEMENT
AMONG NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION,
FEDERAL HIGHWAY ADMINISTRATION,
AND THE
NEW HAMPSHIRE STATE HISTORIC PRESERVATION OFFICER
REGARDING THE HAMPTON HARBOR BRIDGE PROJECT, X-A001(026), 15904,
IN THE TOWNS OF SEABROOK AND HAMPTON, NH**

WHEREAS, the Federal Highway Administration (FHWA) plans to provide funds for the New Hampshire Department of Transportation (NHDOT) to replace the Neil R. Underwood Memorial Bridge over the Hampton Harbor Inlet in the towns of Seabrook and Hampton, New Hampshire (undertaking); and

WHEREAS, the undertaking consists of the replacement of the existing bascule bridge that carries NH 1A over the Hampton Harbor Inlet (Bridge No. 235/025) with a new high-level fixed structure on an alignment located to the west of the existing bridge; and

WHEREAS, FHWA has defined the undertaking's area of potential effects (APE) as properties north of the bridge along Ashworth Avenue; portions of the Hampton Beach State Park and adjacent residential streets; properties adjacent to Ocean Boulevard south of bridge; properties along River Street; and properties west across Hampton Harbor in both Seabrook and Hampton, NH (see Attachment A); and

WHEREAS, FHWA has determined that the undertaking will have an adverse effect on the Neil R. Underwood Memorial Bridge (NHDOT Bridge No. 235/025) which is eligible for listing in the National Register of Historic Places as an individual resource, and has consulted with the NHDOT and the New Hampshire State Historic Preservation Officer (SHPO) pursuant to 36 C.F.R. part 800, of the regulations implementing Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108); and

WHEREAS, FHWA has consulted with Kitty Henderson (Historic Bridge Foundation), Gary Bashline (resident), Kate Bashline (resident), and James Metcalf (Hampton Heritage Commission) regarding the effects of the undertaking on historic properties; and

WHEREAS, NHDOT has reached out to the Hampton Historical Society and has received input on the proposed mitigation; and

WHEREAS, NHDOT and FHWA committed to the long-term maintenance and preservation of the Neil R. Underwood Memorial Bridge in the 1994 MOA for the replacement of the Alexander Scammell Bridge over the Bellamy River in Dover, NH; and

WHEREAS, NHDOT and FHWA also committed to the long-term maintenance and preservation of the NH 1B Bridge over Little Harbor in the 1994 MOA for the replacement of the Alexander Scammell Bridge over the Bellamy River in Dover, NH; and

WHEREAS, NHDOT and FHWA have undertaken extensive maintenance of the Neil R. Underwood Memorial Bridge since the preparation of the 1994 MOA; and

WHEREAS, the deteriorated condition of the Neil R. Underwood Memorial Bridge now makes rehabilitation and long-term maintenance of the bridge infeasible; and

WHEREAS, there was no consulting party participation in the 1994 consultation for the replacement of the Alexander Scammell Bridge because this category of public participation didn't exist at the time; and

WHEREAS, in accordance with Stipulation V of the Scammell MOA, FHWA and NH SHPO solicited comments from the Advisory Council on Historic Preservation (ACHP) on how to address the stipulations in the Scammell MOA pursuant to 36 CFR Part 800.6(b); and

WHEREAS, ACHP has allowed that FHWA can proceed with a new Section 106 consultation for this activity given the passage of time and an updated purpose and need statement; and

WHEREAS, through consultation, FHWA, NHDOT and NH SHPO have identified new stipulations as noted below; and

WHEREAS, if the future rehabilitation or replacement of the NH 1B Bridge over Little Harbor results in an adverse effect under Section 106, additional stipulations will be identified for that project, and a separate MOA will be prepared; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation, and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

NOW, THEREFORE, FHWA, NHDOT and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA/NHDOT shall ensure that the following measures are carried out:

- I. NHDOT will provide a Mitigation Coordinator to oversee and manage the implementation of the mitigation measures identified below. The Mitigation Coordinator will be familiar with Section 106 requirements and have at least two years project management experience.
- II. NHDOT will market the bridge for re-use in compliance with 23 USC Section 144. Marketing will occur for a period of thirty (30) days and will include advertising on the NHDOT website. Ownership transfer for the re-use of the bridge will require the use of restrictive preservation and maintenance covenants lasting for ten (10) years to ensure the

long-term protection of the character-defining features of the bridge. The award will be based on the applicant's plan for moving the historic bridge and the future use, which most satisfactorily meets the Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings." If there are no offers or proposals for use of the bridge by the end of the 30-day period, final bid and construction documents will be completed to specify demolition and disposal of the bridge.

- III. NHDOT will ensure that up to twenty (20) digital photos are taken of key features of the Neil R. Underwood Memorial Bridge by a 36 CFR 61-qualified architectural historian. These will include general views of all sides; detail views of significant features, including the traffic deck support system (if accessible); and abutment and approach details. The photos will be offered to the Town of Hampton's Lane Memorial Library and to the Hampton Historical Society as an addendum to the Individual Inventory Form, digitally (as TIFFs at 3000 x 4000 ppi) and in archival hard copy format (8"x10" printed at 300 dpi). They will also be submitted to NHDHR on continuation sheets to be appended to the Individual Inventory Form.
- IV. NHDOT will develop a kiosk with up to three (3) interpretive panels. The first panel will be devoted to the history and significance of the Neil R. Underwood Memorial Bridge, and its relation to other bascule bridges in the state. The second panel will focus on why the bridge was constructed, and the role it played in the history of the towns of Hampton and Seabrook, including the growth of tourism and the advent of the trolley. The third panel will describe how the bascule bridge functions and its mechanical components. The panels will include text, historic photographs of the bridge, and photographs of current conditions. NHDOT will determine if a weblink or QR code can be incorporated within the kiosk to link to additional information. The kiosk location will be determined during final design, however, it is anticipated it will be placed within NHDOT right-of-way north of the existing bridge and just south of State Park Road, near the existing Hampton Beach State Park sign and the sidewalk on the east side of Ocean Boulevard. The brass Neil R. Underwood Memorial Bridge plaque currently located on the bridge's operator house will be cleaned and displayed alongside the kiosk. The NHDOT will consult with DNCR-DPR on the final placement of the kiosk.
 - a. The content of the panels will be prepared by a 36 CFR 61-qualified architectural historian. The NH SHPO and the Hampton Heritage Commission will be provided an opportunity to review one (1) draft of the panels' content and layout with a review period of thirty (30) days. Upon approval of the panels, they will be fabricated and their installation will be coordinated with the bridge construction schedule.
 - b. If the Hampton Heritage Commission provides a template to NHDOT for the layout of the interpretive panels by June 1, 2022, NHDOT will use the template when designing the panels for the kiosk.
- V. NHDOT will prepare a mock-up of the layout for a new single-page webpage for the Hampton Historical Society's website related to the Neil R. Underwood Bridge and other historic bascule bridges in New Hampshire. The mock-up will include photos and introductory text describing the history of the bridge and key features. It will also introduce

and link to historical information compiled through the course of the project. This historical information may include, but is not limited to, the Individual Inventory Form for the bridge, contextual information from the Phase 1A Archaeological Assessment Survey, Historic Movable Bridge of New Hampshire, and digital copies of the kiosk panel layouts. Previous research material could also be augmented by additional images, including those that show the landforms over time. The materials will be provided to the Hampton Historical Society by NHDOT to post to their site. The Hampton Historical Society's webmaster will be responsible for creating the new tab within their website and maintaining the information. All material and text will be prepared by a 36 CFR 61-qualified architectural historian.

- a. The Hampton Historical Society and the NH SHPO will be provided the opportunity to review the mock-up with a review period of thirty (30) days. Upon approval of the website mock-up, NHDOT will provide the documentation to the Hampton Historical Society to upload and manage.
- VI. NHDOT, through the Mitigation Coordinator, will support the production of three (3), three-to-seven-minute videos on various aspects of bascule bridges. The first video will address the bascule bridge function and its mechanical components, focusing on three locations: the Neil R. Underwood Memorial Bridge, the NH 1B Bridge over Little Harbor, and the Alexander Scammell Bridge. The second video will place these three bridges into the context of the history of the Seacoast, including the watershed; early history; natural, economic, and social development; and maritime uses. The final video will focus exclusively on the Neil R. Underwood Memorial Bridge, its history and significance within the Towns of Hampton and Seabrook. The video content may include current and historical still images, video from the three bridge locations and surroundings, and short interviews. Any new video footage will be taken by a professional videographer. DVDs of these videos will be provided to NHDHR for their records.
- a. A Storyboard for each video will be developed by a 36 CFR 61-qualified architectural historian working in cooperation with a graphic designer/videographer. The video content will be drawn from current and historic maps and photos, documentation collected and/or prepared throughout the life of the project, interviews, and other video footage taken by a professional videographer to provide a cohesive product.
 - b. NHDOT will host one 90-minute formal public opening event to include a screening of the videos and a question-and-answer session facilitated by a 36 CFR 61-qualified architectural historian. The event will be planned and facilitated by NHDOT with the potential for panel discussion. The location, timing, and venue (in-person or virtual) will be determined by NHDOT during the event planning. NHDOT will partner with the NH Preservation Alliance to publicize the event.
 - c. NHDOT will post the videos online and make them available for broadcast on interested television and social media channels including:

- i. Public access Hampton Channel 22 and other opportunities for televised broadcast
 - ii. YouTube (potentially including the NHDHR, New Hampshire Humanities, and New Hampshire Preservation Alliance Channels)
 - iii. NH historical society websites (Hampton Historical Society, New Castle Historical Society, with others upon request by the society)
 - iv. NHDHR website
- d. NHDOT will develop a distribution plan and an information packet for other interested organizations to reference and follow in order for them to host an independent screening event and/or promote the videos. The information packet will include guidance on hosting an event related to these videos. The distribution plan will identify organizations that will be notified of the availability of the information packet. The Mitigation Coordinator will be available to answer questions and provide direction for one year following the initial public viewing.

VII. DURATION

This MOA will expire if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, FHWA may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation XIII below.

VIII. POST-REVIEW DISCOVERIES

If previously unidentified archaeological resources are discovered during project construction that may be affected by the undertaking, NHDOT shall notify the signatories of the discovery and cease all work at that location until NHDOT and SHPO have been consulted and a process agreed upon.

IX. MONITORING AND REPORTING

Each year following the execution of this MOA until it expires, is terminated or stipulations completed, NHDOT shall provide all parties to this MOA a summary report detailing work undertaken pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in FHWA's efforts to carry out the terms of this MOA.

X. DISPUTE RESOLUTION

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FHWA shall consult with such party to resolve the objection. If the FHWA determines that such objection cannot be resolved, FHWA will:

- a. Forward all documentation relevant to the dispute, including FHWA's proposed resolution, to the ACHP. The ACHP shall provide FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. FHWA will then proceed

according to its final decision.

- b. If the ACHP does not provide its advice regarding the dispute within the thirty (30)-day time period, FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.
- c. FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

XI. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

XII. TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation XIII, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, FHWA must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. FHWA shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by FHWA, NHDOT and NH SHPO and implementation of its terms evidence that FHWA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

SIGNATORIES

FEDERAL HIGHWAY ADMINISTRATION

By: LEIGH I LEVINE Digitally signed by LEIGH I LEVINE
Date: 2022.02.03 14:34:24 -05'00' Date: _____
for - Patrick A. Bauer
NH Division Administrator

NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

By:  Date: 1/26/2022
Nadine Miller
Deputy State Historic Preservation Officer

NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

By:  Date: 2/2/2022
Peter Stamnas
Director of Project Development

INVITED SIGNATORIES

THE HAMPTON HISTORICAL SOCIETY

By: Lori Cotter

Lori Cotter
President

Date: Nov. 8, 2021



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial St, Suite 300
Concord, NH 03301-5087
<http://www.fws.gov/newengland>



August 13, 2021

Jamison S. Sikora
Federal Highway Administration
53 Pleasant Street, Suite 2200
Concord, NH 03301

Re: NHDOT Project # 15904, NH Route 1A Bridge over Hampton Harbor
TAILS: 05E1NE00-2021-F-0724

Dear Mr. Sikora:

This document transmits the U.S. Fish and Wildlife Service's (Service) **biological opinion (Opinion)** based on our review of the Federal Highway Administration's (FHWA) proposed construction of a new bridge conveying NH Route 1A (Neil Underwood Memorial) over Hampton Harbor in Seabrook and Hampton, New Hampshire (Project), and its effects on the federally threatened piping plover (*Charadrius melodus*). We received your request to initiate formal consultation on December 9, 2020. Your request and our response are made in accordance with section 7 of the Endangered Species Act (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). The FHWA is the lead Federal agency for the Project and is consulting with the Service on behalf of the U.S. Army Corps of Engineers and the Environmental Protection Agency, the additional Federal agencies with approval or permitting authorities for the Project.

This Opinion is based on (1) information provided in the December 9, 2020, letter to initiate formal consultation; (2) the FHWA's January 2021 Biological Assessment (BA); (3) the FHWA's March 9, 2021 letter providing supplemental information regarding project-associated dredging; and (4) electronic correspondence, telephone conversations, meetings, and other sources of information. Pertinent sections of the BA will be incorporated by reference. The consultation history is located in Appendix A. A complete administrative record of this consultation can be made available at the New England Field Office in Concord, New Hampshire.

- As part of the January 21, 2021, BA, the FHWA requested the Service concur with the FHWA's determination that the Project may affect, but is not likely to adversely affect, the federally endangered roseate tern (*Sterna dougallii dougallii*) and threatened rufa red knot (*Calidris canutus rufa*). Detailed information about the species and species' occurrence in the project area are incorporated by reference from the BA. Small numbers of roseate terns occur in the project area from May through September as transient individuals traveling to forage in Hampton Harbor and Hampton Harbor inlet, loafing during the breeding season, and/or staging during pre-migration on sand flats of Hampton

Harbor and Seabrook Beach (eBird.org, accessed February 2, 2021). Small numbers of red knots primarily forage on sand and mud flats nearby the project area in Hampton Harbor, the Hampton Inlet, and sand flats adjacent to the north and south jetties of the Hampton Inlet (eBird.org, accessed February 10, 2021).

We concur with your determination, because either the level of effects is insignificant and/or the likelihood of adverse effects occurring is discountable. We base our concurrence on the following:

- Loafing roseate terns have not been documented in the project action area and are not anticipated to occur in the project area due to the noise from routine traffic crossing the bridge. Loafing areas are generally away from human activity.
- The Project may temporarily impact roseate terns if they move away from the project area while foraging due to disturbance from construction activity. The temporary loss of access to foraging habitat is insignificant relative to the available foraging habitat in Hampton Harbor and Hampton Inlet.
- There are no documented occurrences of red knots foraging in the project action area, most likely due to lack of accessible foraging habitat.
- The project area is far enough from suitable habitat that construction activity associated with the Project would not disturb foraging or roosting red knots. We anticipate that impacts to transient individuals passing through the project action area from disturbance, lights, and/or vibrations would be negligible.

BIOLOGICAL OPINION

DESCRIPTION OF PROPOSED ACTION

As defined in the ESA section 7 regulations at 50 CFR 402.02, “action” means “all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas.” The following is a summary of the proposed action. A detailed description can be found on pages 8 through 11 of the BA.

The proposed action is the construction of a new 1,300-foot structural steel bridge approximately 75 feet west of the existing bridge. The bridge will have two 11-foot travel lanes, with 8-foot shoulders and 6-foot sidewalks on each side. The bridge abutments on either side will have U-shaped reinforced concrete wingwalls supported on steel bearing piles vibrated to resistance then driven to final position. Riprap will extend from the face of the abutment and wingwalls to below the high tide line, a 250-foot retaining wall will be installed northwest of the bridge, and a 230-foot retaining wall installed northeast of the bridge. A drainage collection and conveyance system will route drainage discharges through new treatment swales at the northern and southern approaches before flowing into Hampton Harbor. Stormwater flow on the southern approach will be similar to existing conditions, with sheet flow off of the pavement and onto vegetated embankments where buffer areas will treat the stormwater.

Four existing utility lines—two water, one sewer, and one gas—are currently buried below the harbor bed and will be temporarily relocated to the west of the anticipated construction trestle and placed on top of the bed in the navigational channel. Final relocation sites have not been determined.

Approximately 5,000 square feet of channel bottom will be dredged to allow for a consistent 150-foot channel width through the proposed bridge as afforded by the longer bridge spans of the fixed bridge design. Several options are being considered for the disposal of the dredge material, including: (1) re-using the material within the existing channel to fill in holes left by removal of the existing bridge piers; (2) disposal in an approved upland location on or off site; (3) disposal in a nearshore dredge material disposal site, or (4) disposal to augment piping plover habitat in coordination with the New Hampshire Fish and Game Department (NHFG). None of the first 3 options for disposal would affect the piping plover or other listed species. The fourth option would have beneficial effects and would not adversely affect the species. Therefore, we do not consider dredge disposal further in this Opinion.

Construction of the new bridge and demolition of the existing bridge would occur over 36 months and begin in the fall of 2023. Construction would occur in three phases:

1. Phase 1 – access road and work trestle construction, sheet pile cofferdam construction, pile caps, drilled shafts, and pier construction within the cofferdams, and initiation of roadway approaches and abutments construction.
2. Phase 2 – construction of the superstructure, including erection of the central bridge spans and partial construction of the southernmost and northernmost spans. North and south roadway approaches will be completed, and removal of western trestles and cofferdams would be initiated within the in-water window of November 15 to March 15.
3. Phase 3 – roadway traffic will be shifted to the partially completed bridge and roadway approaches, remaining portions of the superstructure at the northernmost and southernmost spans completed, a bridge pier protection fender system will be installed, and the navigational channel dredged to widen the existing channel from 40 feet to 150 feet. The western and eastern trestles, superstructure and substructure of the existing bridge, and existing pier piles will be removed. New roadways will be completed and disturbed areas stabilized.

Only in-water work, including dredging, has a time-of-year restriction of November 15 through March 15. Onshore work may occur at any time as conditions allow throughout the year. The equipment types used in each phase are described on page 11 of the BA.

Conservation Measures

The FHWA would implement conservation measures to avoid and minimize adverse effects to piping plovers prior to and during construction. The measures, fully described on page 46 of the BA, are incorporated by reference and summarized below:

1. Information will be provided to construction workers on the potential presence of piping plovers in the work area.
2. Silt fencing or other protective fencing will be erected around suitable plover habitat within the construction zone to prevent nest establishment and piping plover chicks (if present) from accessing construction area.
3. The contractor will ensure the construction zone is maintained free of trash to avoid attracting predators.
4. Speed limits on construction vessels will be required to prevent boat wake from eroding the beach or impacting foraging plovers and chicks.
5. Light shielding during construction will be implemented to avoid disturbing breeding piping plovers.
6. Slope stabilization measures adjacent to the bridge and roadway on the southwest side of the roadway will be designed and implemented to prevent erosion.
7. During the plover breeding season (April 1 to August 30), slow starts when driving cases for drilled shafts will be implemented to avoid disturbing or flushing plovers when present.
8. Dredge spoil will be used to enhance plover nesting habitat if feasible.
9. Stone chinking within the riprap on the south abutment will be used to prevent void spaces from attracting rodents and other potential predators.

ACTION AREA

The action area is defined (50 CFR 402.02) as "...all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." The Service has determined that the action area for this Project consists of the bridge reconstruction footprint and the buffer areas as described and mapped on pages 6 and 7 of the BA. Specifically, the action area includes: a 600-foot buffer to the east side of the bridge footprint to include potential noise impacts from the Project; a 660-foot buffer to the west of the bridge; and docks at the Yankee Fisherman's Co-op, Eastman's Docks, the Hampton State Pier, and the Hampton Marina that may be used for construction staging. The action area contains suitable nesting and foraging habitat for piping plovers at Hampton-Seabrook Dunes State Wildlife Management Area (Hampton-Seabrook Dunes WMA) west of the Route 1A bridge and limited foraging habitat east of the bridge, in the town of Seabrook. Piping plover nesting and foraging habitat does not occur within the action area in the town of Hampton.

STATUS OF THE SPECIES

Per ESA section 7 regulations (50 CFR 402.14(g)(2)), it is the Service's responsibility to "evaluate the current status of the listed species or critical habitat." The Service listed the Atlantic Coast breeding population of the piping plover as threatened on January 10, 1986 (50 FR 50726). Critical habitat in the breeding range of the Atlantic Coast population has not been designated. A complete species description, life history, population dynamics, threats, and conservation needs can be found in the Atlantic Coast Population Revised Recovery Plan (USFWS 1996), the 2009 5-year review (USFWS 2009), the 2020 5-year review (USFWS 2020c), and the Species Profile for Piping Plover (<https://ecos.fws.gov/ecp/species/6039>, accessed March 16, 2021). Continuing threats to Atlantic Coast piping plovers in the breeding portion of their range identified in the 1996 revised recovery plan include habitat loss and degradation, disturbance by humans and pets, increased predation, and oil spills (USFWS 1996). The 2020 5-year review updated information regarding these threats, as well as potential threats of climate change and wind turbine generators (USFWS 2020c). We considered the information in these documents in the evaluation of this project, and they are incorporated by reference into this Opinion. Information provided below describes the current status of the species. We also summarize information about threats most pertinent to the nature and duration of effects of the proposed action (e.g., breeding site fidelity and dispersal, recreation, predation).

To assess the current status of the species, it is helpful to understand the species' conservation needs. The Service frequently describes conservation needs via the conservation principles collectively known as the three Rs: resiliency,¹ redundancy,² and representation³ (Shaffer et al. 2002; Wolf et al. 2015; Smith et al. 2018). The Service can then apply the appropriate regulatory framework and standards to these principals to address a variety of ESA-related decisions (e.g., listing status, recovery criteria, jeopardy and adverse modification analysis). For section 7(a)(2) purposes, the 3 Rs can be translated into the reproduction, numbers, and distribution (RND) of a species.

Recovery criteria and strategy

The objective of the 1996 Atlantic Coast Population Revised Recovery Plan is to assure the long-term viability of the Atlantic Coast piping plover population in the wild, thereby allowing removal of this population from the Federal List of Endangered and Threatened Wildlife and Plants (50 CFR 17.11 and 17.12). The Atlantic Coast piping plover population may be considered for delisting when the following recovery criteria, established in the recovery plan, have been met:

¹ Resiliency is the ability of species/populations to withstand stochastic events, which is measured in metrics such as numbers or growth rates.

² Redundancy is the ability of a species to withstand catastrophic events, which is measured in metrics such as number of populations and their distribution.

³ Representation is the variation/ability of a species to adapt to changing conditions, which may include behavioral, morphological, genetics, or other variation.

- increase and maintain for 5 years a total of 2,000 breeding pairs, distributed among four recovery units;

Recovery Unit	Minimum Subpopulation
Atlantic (Eastern Canada)	400 pairs
New England	625 pairs
New York-New Jersey	575 pairs
Southern (DE-MD-VA-NC)	400 pairs

- verify the adequacy of a 2,000-pair population of piping plovers to maintain heterozygosity and allelic diversity over the long term;
- achieve a 5-year average productivity of 1.5 fledged chicks per pair in each of the four recovery units described in criterion 1, based on data from sites that collectively support at least 90 percent of the recovery unit's population;
- institute long-term agreements to assure protection and management sufficient to maintain the population targets and average productivity in each recovery unit; and
- ensure long-term maintenance of wintering habitat, sufficient in quantity, quality, and distribution to maintain survival rates for a 2,000-pair population.

The subpopulation abundance and distribution targets will ensure representation, redundancy, and resiliency for Atlantic Coast piping plovers in their breeding range (USFWS 2020c). Maintaining geographically well-distributed populations across the four recovery units serves to conserve representation of genetic diversity and adaptations to variable environmental selective pressures as evidenced by the population's genetic structure, variable habitat requirements, differences in vital rates, and morphometric differences (USFWS 2020c). The ability of piping plovers in each recovery unit to rebound from events that depress unit-wide productivity or survival and to colonize newly formed or improved habitat (e.g., after storms or artificial habitat enhancement projects) depends on within-unit redundancy that is measured via progress towards abundance targets. Distribution of robust numbers of breeding pairs across the four recovery units will also provide Atlantic Coast piping plovers with a buffer against stressors (e.g., weather, habitat degradation, disturbance) in their migration and wintering range that may depress survival rates (USFWS 2020c).

Population trends since listing under the ESA

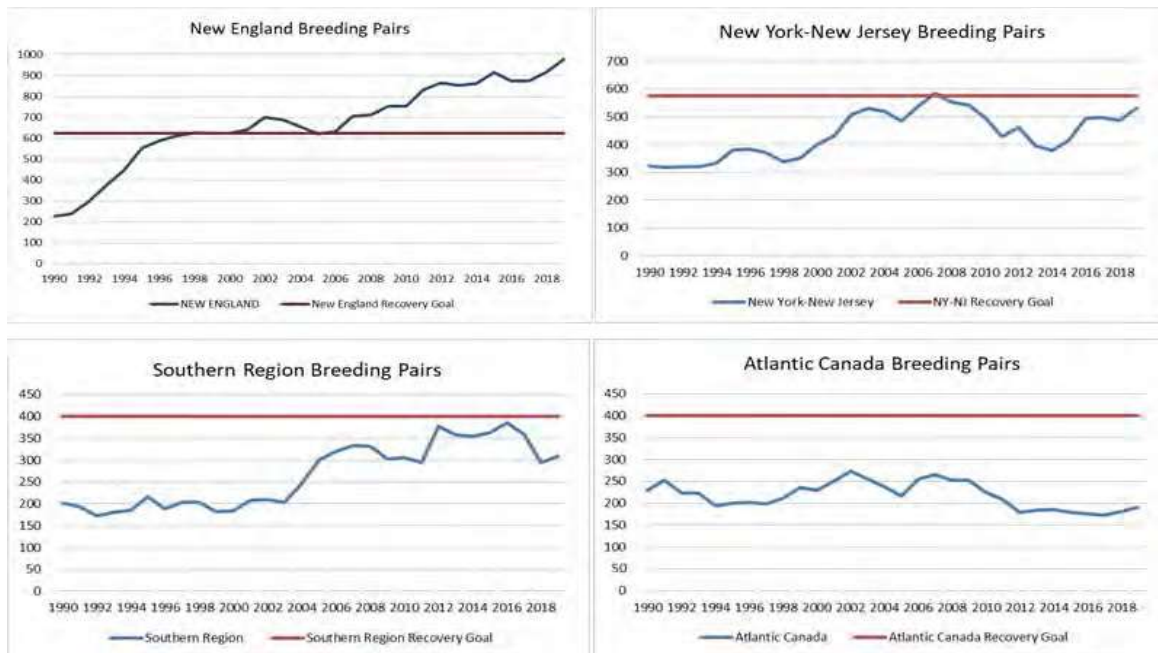
Abundance of Atlantic Coast piping plovers is reported as numbers of breeding pairs (i.e., adult pairs that exhibited sustained (> 2 weeks) territorial or courtship behavior at a site or were observed with nests or unfledged chicks (USFWS 1996)). Annual estimates of breeding pairs of Atlantic Coast piping plovers are based on multiple surveys of almost all breeding habitat, including many currently unoccupied sites. The Service produces annual updates for rangewide abundance and productivity estimates for the Atlantic Coast piping plover. The most current comprehensive update including data through 2018 and final data for 2019 can be found at the Service's Atlantic Coast piping plover website: <https://www.fws.gov/northeast/pipingplover/pdf/Abundance->

[Productivity-2018-Update_final-with-tables.pdf](#) and <https://www.fws.gov/northeast/pipingplover/pdf/2019-Update-Final.pdf> (accessed March 31, 2021).

Substantial population growth, from approximately 790 pairs in 1986 to an estimated 2,008 pairs in 2019, has decreased the Atlantic Coast piping plover’s vulnerability to extinction since ESA listing, although only the New England recovery unit has been able to reach and sustain its abundance target. Discounting apparent increases in New York, New Jersey, and North Carolina between 1986 and 1989, which likely were due in part to increased census effort (USFWS 1996), the population doubled between 1989 and 2019, reaching the recovery criterion of a population of 2,000 pairs for the first time since the species was listed.

The security of the Atlantic Coast piping plover is fundamentally dependent on an even distribution of population growth to maintain a sparsely-distributed species with strict biological requirements in the face of environmental variation, buffer it against catastrophes, and conserve adaptive capacity. The New England recovery unit, in which the Seashore is located, has exceeded its subpopulation target for many more than the requisite 5 years, but the numbers of breeding pairs in the other three recovery unit populations remain below targets established in recovery criterion 1 (USFWS 2019; USFWS 2020d) (figure 1).

Figure 1. Abundance of Atlantic Coast piping plover breeding pairs by recovery unit, 1990 – 2019.



Productivity remains an important, albeit partial, predictor of trends in future abundance of piping plovers. Furthermore, because small populations may be vulnerable to extirpation due to variability in productivity and survival rates, productivity needed to assure a secure population (that can withstand, for example, catastrophic and stochastic events) may be higher than the rate sufficient for a stationary population. As abundance increases, the productivity rates required for demographic stability and security are likely to converge. Although the Service continues to monitor plover productivity rates and assess their implications for recovery, abundance of breeding pairs has become a more informative indicator of decreased extinction risk in the New England recovery unit than the annual productivity rate.

Thirty years of population growth, although unsteady in large sections of the range, evidences the general efficacy of the ongoing Atlantic Coast piping plover recovery program. However, all of the major threats (habitat loss and degradation, predation, human disturbance) identified in the 1986 ESA listing and 1996 revised recovery plan remain persistent and pervasive (USFWS 2020c). Two threats, climate change (especially sea level rise) and wind turbines, identified in the 2009 5-year review (USFWS 2009) and discussed in detail in the 2020 5-year review (USFWS 2020c), are likely to affect Atlantic Coast piping plovers throughout their annual cycle. Some aspects of climate change remain uncertain, but ongoing acceleration of sea level rise is well-documented. Further increases in sea level rise rates are foreseeable with a high degree of certainty, and effects of sea level rise on Atlantic Coast piping plovers and their habitat will be partially determined by coastal management activities.

Although threats from wind turbine generators are foreseeable, their magnitude remains poorly understood. Currently, the Bureau of Ocean Energy Management (BOEM) has assumed that approximately 22 gigawatts of Atlantic offshore wind development within the North Atlantic Outer Continental Shelf lease area are reasonably foreseeable to occur along the East Coast from New Hampshire to North Carolina. The potential wind energy development includes 17 active wind energy lease areas that could construct about 2,000 wind turbines over a 10-year period. (BOEM 2020). Although some information has become available that will help assess effects of future proposed projects, collision risk for plovers migrating through offshore wind energy projects remains largely unknown.

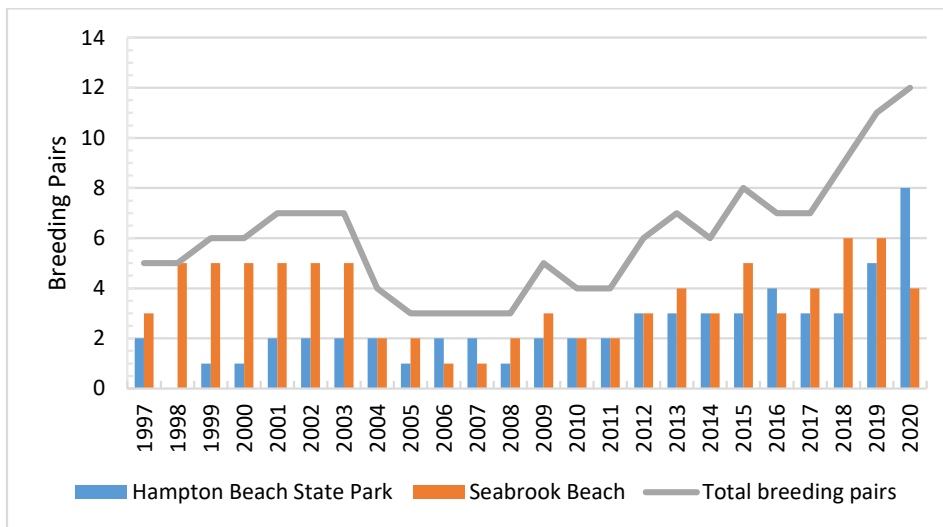
Population trends in New Hampshire

At the time the species was listed in 1986, piping plovers were not known to breed in New Hampshire. Individual piping plovers had been reported from Seabrook and Hampton beaches throughout the 1980s and early 1990s; however, breeding piping plovers were first recorded in the State by the NHFG in 1997 (5 pairs) (NHFG 2020a; NHFG 2020b; eBird.org, accessed April 16, 2021). Currently, piping plovers in New Hampshire are limited to Seabrook Beach (approximately 1.4 miles long), Hampton Beach State Park (approximately 1.4 miles long), and Hampton-Seabrook Dunes WMA (approximately 0.14 miles long). These are the only areas of the coast with sufficient suitable habitat to support breeding piping plovers.

Since 1997, the number of breeding pairs ranged from 3 to 12 pairs and demonstrated an increasing trend in abundance since 2008 (figure 1) (NHFG 2020b; NHFG 2020c). The increase in New Hampshire's plover population is likely due to a combination of generally high productivity and immigration from Massachusetts and Maine, as populations in those States also increased over the last decade. Seabrook Beach⁴ generally has more breeding plovers than Hampton Beach State Park (figure 1).

Despite high variability in productivity between years, productivity for New Hampshire averaged 1.3 chicks fledged per breeding pair of piping plovers, slightly above the 1.2 chicks fledged per breeding pair needed to maintain a stable population. Seabrook Beach (including the Hampton-Seabrook Dunes WMA) generally has higher productivity than pairs nesting at Hampton Beach (figure 2).

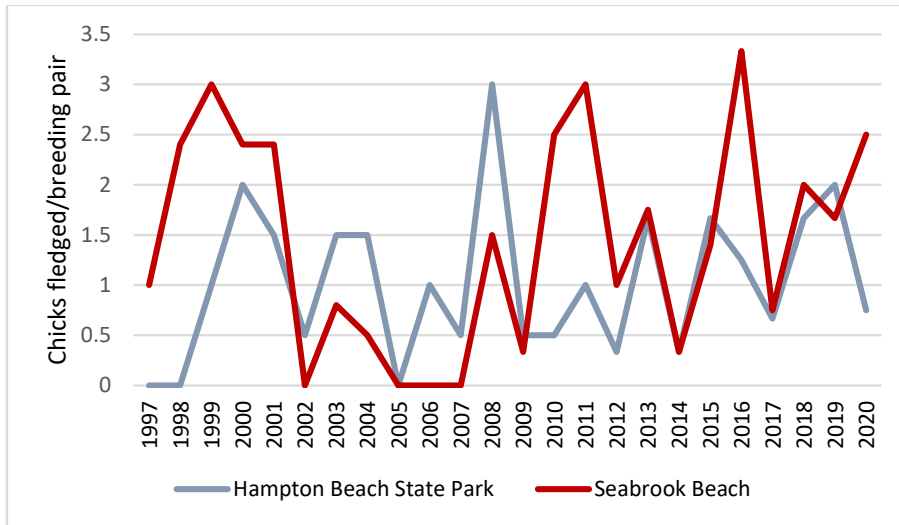
Figure 1. Piping plover abundance in New Hampshire (1997 to 2020).



In addition to climate change and the development of offshore wind energy projects, the following factors may also affect piping plover productivity and abundance rangewide and in New Hampshire.

⁴ Includes the single pair nesting in the Hampton-Seabrook Dunes WMA in NHFG annual plover reports.

Figure 2. Annual productivity for Hampton Beach State Park and Seabrook Beach 1997 to 2020.



Breeding site fidelity and dispersal

Adult piping plovers generally demonstrate nest site fidelity, returning to the same breeding beach or a nearby beach in consecutive years. First-time Atlantic Coast breeders are more likely to disperse from their natal sites, but their fidelity to their natal region is very high.

Although long-distance movements between natal and breeding sites (and even between breeding years) have been documented, they are rare. On the Atlantic Coast, almost all observations of inter-year movements of birds have been within the same or adjacent states. Extensive efforts to re-sight more than 1,400 Atlantic Coast piping plovers color-banded in Virginia, Maryland, Massachusetts, and five Eastern Canadian provinces between 1985 and 2003 resulted in only four records of plovers breeding outside the recovery unit in which they were banded ($n=86$, range=0.01 – 217.33 kilometers) (Rioux *et al.* 2011). Studies in New York, Massachusetts, Maryland, Virginia, and Canada documented that, in general, adults returned to their original nesting beaches or beaches nearby, and males demonstrated greater site fidelity than females (USFWS 2020c). More recent studies provide quantitative estimates of dispersal distances depending on the previous year's hatching failure (greater likelihood of dispersal) or success (likely to return to the vicinity of the breeding beach) (USFWS 2020c).

Genetic evidence is consistent with observed dispersal patterns. Miller *et al.* (2010) found strong genetic structure, supported by significant correlations between genetic and geographic distances in both mitochondrial and microsatellite data sets for Atlantic Coast piping plovers. Atlantic birds showed evidence of isolation-by-distance patterns, indicating that dispersal, when it occurs, is generally associated with movement to relatively proximal breeding territories.

In summary, piping plovers demonstrate high fidelity to their natal and breeding regions. Established males make smaller inter-annual movements than females, and first-time breeders disperse more than adults. Notwithstanding rare long-distance movements, population growth and stability are heavily dependent on survival and productivity of local populations (USFWS 2020c).

Threats from beach recreation

Threats to piping plovers from human beach users were cited in the final listing rule and described in detail in the 1996 revised Atlantic Coast recovery plan. Threats to breeding piping plovers from both motorized and non-motorized beach recreation activities are relatively well understood, and recommended management options are described in the Federal guidelines for avoiding adverse effects on piping plovers (Federal guidelines; USFWS 1994). Newer threats include the increasing popularity of “extreme sports,” such as kite-buggies and surf kites (also called “kite boards”), which accidentally land in and near breeding habitat.

Sufficiency of restrictions on dogs in piping plover nesting areas and consistency of enforcement are continuing concerns of biologists monitoring Atlantic Coast piping plovers. Literature on closely related beach-nesting plover species provides additional evidence of adverse effects on breeding activities from both leashed and unleashed dogs (USFWS 2020c).

Management activities to protect habitat, nests, and unfledged chicks from impacts of pedestrian recreation include symbolic fencing of courtship and nesting habitat, leashing or prohibition of pets during the breeding season, buffers between breeding piping plovers and fireworks, informational and interpretive signing, public education, and law enforcement patrols. On sites where ORVs are allowed to operate during the breeding season, protection requires additional closures of the lower beach and intertidal zone during periods when unfledged chicks are present. These management activities are predicated on frequent monitoring of individual breeding pairs during territory establishment and courtship, nesting, and chick-rearing periods (USFWS 2020c). Effectiveness of management measures to avoid or reduce threats is contingent on skilled monitoring and timely employment and enforcement of adequate buffers to protect piping plover courtship, nesting, and brood-rearing. All of these labor-intensive actions require continued implementation to counter threats that are present every year.

Threats from predation

The final listing rule identified predation by pets, feral dogs and cats, skunks, and raccoons as threats on the plover’s Atlantic Coast range. The 1996 revised recovery plan provides a more thorough discussion of predation threats, and recommends specific tasks to be implemented in an integrated approach to predator management that employ a full range of management techniques.

Research and reports indicate that predation poses a continuing (and perhaps intensifying) threat to Atlantic Coast piping plovers (USFWS 2020c). Although predator numbers are undiminished

or increasing, effectiveness of predator exclosures⁵ has declined (USFWS 2020c). As effectiveness of exclosures has declined, managers have increased selective predator removal activities at many sites throughout the U.S. Atlantic Coast range (USFWS 2020c). Recent predator removal efforts focused on mammalian predators such as fox, skunks, and coyotes, and avian predators, primarily gulls and crows. Targeted predator management is annually implemented on select Massachusetts beaches because the Massachusetts Division of Fisheries and Wildlife Habitat Conservation Plan For Piping Plover (MADFW 2016) (HCP) requires predator management as the only method of mitigating impacts from activities authorized under the HCP.

Predation is a widespread and continuing threat to breeding Atlantic Coast piping plovers. Implementation of conservation measures for addressing predation threats is time-consuming and costly. Although site-specific predator pressures vary from year to year, predator management is a recurring need in the recovery of piping plovers.

Summary

Thirty-five years of intensive recovery efforts have reduced the near-term extinction risk of the Atlantic Coast piping plover by increasing the population and managing the continuing threats. However, the Atlantic Coast piping plover remains vulnerable to low numbers in three of its four recovery units. Furthermore, the factors that led to the piping plover's 1986 listing remain operative across its Atlantic breeding range, including in New England, and many of these threats have increased. Interruption of labor-intensive efforts to manage these threats would quickly lead to steep population declines.

ENVIRONMENTAL BASELINE

In accordance with 50 CFR 402.02, the environmental baseline refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, state, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of state or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline.

⁵ Exclosures are wire cages placed around nests to exclude predators. They were a key management tool in the early years of the recovery program.

Status of the Species within the Action Area

One pair of piping plovers nested west of the bridge within the action area at Hampton-Seabrook Wildlife Management Area (WMA) during 7 of the last 11 years. No pairs nested within the action area in 2020 (table 1). Piping plovers nested 3 of the last 4 years less than 500 feet west of the existing bridge. No plovers have ever nested on the Hampton side of the action area as there is no suitable habitat.

Productivity of the single pair within the action area at Hampton-Seabrook Dunes WMA is also highly variable, ranging from zero chicks fledged to four chicks fledged per pair (table 1). Average productivity for this location was 2.14 chicks fledged per breeding pair.

Table 1. Hampton-Seabrook Dunes WMA abundance and productivity 2010 to 2020 (NHFG 2020c).

Year	# Nesting Pairs	# Chicks Fledged	Productivity
2010	0	N/A	N/A
2011	0	N/A	N/A
2012	0	N/A	N/A
2013	1	4	4
2014	1	1	1
2015	1	3	3
2016	1	4	4
2017	1	0	0
2018	1	3	3
2019	1	0	0
2020	0	N/A	N/A

Within the action area, the nesting habitat at Hampton-Seabrook Dunes WMA is State-owned and not heavily visited, primarily by pedestrians walking the shoreline. Consistent predation by feral cats, fox, and avian predators, including crows and gulls, affects productivity at all New Hampshire beaches. Unleashed dogs are also a threat to plovers, particularly flightless chicks and can be pervasive at Hampton Beach State Park and Seabrook Beach, but less so at Hampton-Seabrook WMA. The NHFG implements the Federal guidelines on all beaches. In addition to monitoring and managing plover beaches under the Federal guidelines, the NHFG implements predator management and conducts piping plover outreach to beach visitors.

EFFECTS OF THE ACTION

Regulatory Background

In accordance with 50 CFR 402.02, effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action

if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (see § 402.17).

The Service established additional requirements for making the determination of reasonably certain to occur, which must be followed after October 28, 2019, the effective date of new regulations under 50 CFR 402. After determining that the “activity is reasonably certain to occur,” based on clear and substantial information,⁶ using the best scientific and commercial data available, there must be another conclusion that the consequences of that activity (but not part of the proposed action or activities reviewed under cumulative effects) are reasonably certain to occur. In this context, conclusion of reasonably certain to occur must be based on clear and substantial information, using the best scientific and commercial data available after consideration of three factors in 402.17(b)(1-3).

There is no intent that the 2019 regulatory changes alter how we will analyze the effects of a proposed action or the scope of effects. We will continue to review all relevant effects of a proposed action as we have in past decades, but the Service determined it was not necessary to attach labels to various types of effects through regulatory text. That is, we intend to capture all of those effects (now “consequences”) previously listed in the regulatory definition of effects of the action—direct, indirect, and the effects from interrelated and interdependent activities—in the new definition. These effects are captured in the new regulatory definition by the term “all consequences” to listed species and critical habitat.

The test for determining effects includes the consequences resulting from actions previously referred to as “interrelated or interdependent” activities. In order for consequences of other activities caused by the proposed action, but not part of the proposed action, to be considered effects of the action, both those activities and the consequences of those activities must satisfy the two-part test: they would not occur but for the proposed action and are reasonably certain to occur. As a result, when we discuss effects or effects of the action throughout the Opinion, we are referring only to those effects that satisfy the two-part test. Requiring evaluation of all consequences caused by the proposed action allows the Service to focus on the impact of the proposed action to the listed species and critical habitat, while being less concerned about parsing what label to apply to each consequence.

⁶ By clear and substantial, we mean that there must be a firm basis to support a conclusion that a consequence of an action is reasonably certain to occur. This term is not intended to require a certain numerical amount of data; rather, it is simply to illustrate that the determination of a consequence to be reasonably certain to occur must be based on solid information. This added term also does not mean the nature of the information must support that a consequence is guaranteed to occur, but must have a degree of certitude.

Effects of the Action

The BA described potential effects from the Project in detail (pages 31 to 43 and incorporated by reference). Table 2 summarizes potential effects from project components.

Table 2. Summary of potential stressors and effects to piping plovers.

Project Component	Stressor	Exposure	Response
Bridge construction and relocation	Loss of nesting habitat (approximately 0.42 acre)	Yes	Relocation to less suitable habitat or near another plover's territory, delayed nesting.
Vibration - construction	Disturbance during foraging	Not likely	Vibrations limited to a very small foraging area near existing bridge and proposed bridge. Not optimal foraging habitat and not near potential nesting habitat. Effects of disturbance to foraging adults so small as to not be measurable. Optimal foraging habitat not affected.
Noise - construction	Construction equipment exceeding ambient noise level.	Yes	Disturbance, preventing plovers from foraging in areas affected by increased noise levels. Sudden onset of increased noise might cause startle reaction, interrupting courtship or feeding.
Noise - dredging	Noise from dredge within 600 feet	Not likely	Noise from dredge would slightly increase average ambient levels by 1 to 2 decibels (dBA). Effects of disturbance to foraging adults so small as to not be measurable.
Noise – new bridge	Noise from vehicle traffic crossing new bridge	Not likely	Noise level not anticipated to exceed traffic noise at existing bridge.
Shadow – new bridge	Shading adjacent plover nesting habitat	Yes	May reduce available nesting habitat because of extended daytime shadows.
Construction vehicles	Precluding access to potential nesting habitat and chick mortality	Not likely	A small area of beach will be made unavailable for nesting. If beach accretion occurs, additional nesting habitat may be available, reducing the impact of a temporary loss of habitat from fencing and construction. Chicks may run into construction zone and be injured or killed by vehicles in the construction zone. Barriers installed around the active construction zone will preclude chicks from entering the construction area.
Lights – night work, new bridge	Disturbance to foraging plovers	Not likely	Limited duration (one week), will occur outside of plover breeding season. Lighting of the new bridge will be similar to that of the existing bridge.

We anticipate adverse effects from the Project would be limited to approximately 0.42-acre loss of suitable nesting habitat and a lesser amount of foraging habitat, and disturbance to territorial, courting, and/or foraging piping plovers from construction noise. The proposed Project may result in the reduction of some or all productivity for one pair of piping plovers at the Hampton-Seabrook

Dunes WMA when construction activity occurs at the south end of the bridge. We do not anticipate adverse effects to foraging plovers nesting on Seabrook Beach, because they may only sporadically forage in the project area. Foraging plovers are occasionally observed east of the bridge and rarely west of the bridge when there is no nesting pair at the Hampton-Seabrook Dunes WMA.

Adverse effects could result when breeding pairs and their territories, nests, and/or broods are disturbed by construction, particularly noise. Should plovers be startled while on the nest and leave, eggs repeatedly exposed on hot days may overheat, killing the embryos (Bergstrom 1991). Excessive cooling may kill embryos or delay their development, thus delaying hatching dates. Chicks and adults may be disturbed during foraging, primarily impacting chicks as they may experience a slower growth rate, prolonged time to fledging, or mortality. However, some disturbance will be ameliorated by the conservation measure requiring a slow start for drilling activities to reduce the likelihood of startling plovers. The disturbance impacts from noise would last only as long as Project construction and occur only during the years when construction is focused at the southern end of the Project. Because the area of suitable habitat that would be affected by noise is small, we expect no more than one pair would occupy this habitat and experience noise effects from the Project.

There is limited suitable nesting habitat at the Hampton-Seabrook Dunes WMA. The permanent reduction of approximately 0.42 acre of suitable habitat could preclude piping plovers from nesting west of the bridge in years when stochastic events (e.g., erosion) cause a significant reduction in available nesting habitat. Adult piping plovers generally return to the same nesting beach, or a nearby beach (see Status of the Species for discussion on dispersal). If less suitable habitat is available for establishing territories and nests, plovers may be forced to seek out different breeding habitat, possibly increasing energetic demands. This is the case especially for birds arriving later in the breeding season as they seek new nesting options farther from their traditional breeding areas. Plovers forced from their traditional nesting locations may encounter later territory establishment and nesting than previous years when sufficient habitat was available. If the piping plover population in a region approaches the available habitat's carrying capacity, some adults that are displaced may not breed at all and potential new recruits may not find territories. Therefore, we expect the reduction in suitable habitat to force one nesting pair to relocate when the overall nesting habitat is reduced due to stochastic events. If the breeding pair cannot nest at Hampton-Seabrook Dunes WMA, the pair may relocate closer to another occupied territory, causing an increase in agonistic behavior between pairs, delayed nesting of either pair, or competition for resources, especially once chicks have hatched and adults are defending their broods.

Effects on the New England recovery unit and the Atlantic Coast population

In 2019 (the last year plovers nested west of the bridge), 11 pairs of piping plovers nested in New Hampshire with an average productivity of 1.8 chicks fledged per piping plover pair. Given that plovers generally return to the same nesting beach or a nearby beach, and there is available unoccupied habitat at Seabrook Beach and potentially Hampton Beach, we do not anticipate that the Hampton-Seabrook Dunes WMA pair of plovers would abandon the State completely. For

example, no pairs nested at Hampton-Seabrook Dunes WMA due to severe erosion of the nesting habitat in 2020, yet the State documented the most plover breeding pairs (12) since 1997, when breeding plovers were first observed.

We anticipate that at most, there may be a 50 percent reduction in productivity for one pair of piping plovers during the Project's construction. The reduction in productivity would not significantly affect the New Hampshire population, because of the short duration of noise effects from the Project and minimal loss of habitat.

Attainment and maintenance of population abundance targets for the four recovery units provide resiliency, redundancy, and representation that are fundamental to the overall security of the Atlantic Coast piping plover population. Based on data through 2019, the New England population has attained (or been within three pairs of) its abundance goal for 18 years, and it currently exceeds its goal by 69 percent. Given that the breeding plovers affected by project activities would not be lost to the New England population, the New England recovery unit would not be measurably affected by the proposed action. Moreover, we do not anticipate the proposed loss of productivity for up to one pair of piping plovers to cause a reduction in the abundance of New England piping plovers.

We anticipate that the loss of a small area of breeding habitat and loss of productivity for one pair of piping plovers in New Hampshire as a result of the Project would have an insignificant effect on the New Hampshire and New England piping plover populations. Any effect on the Atlantic Coast population would not be measurable.

CUMULATIVE EFFECTS

Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area (50 CFR 402.02). We expect historical recreation activities such as walking, jogging, and/or sunbathing will continue at Hampton-Seabrook Dunes WMA. In general, when these activities occur in close proximity to piping plover nesting, it can result in increased disturbance to nesting adults, disruption in foraging, and increased time spent on vigilance or defensive behaviors. However, while plovers may be affected by these recreational activities, the NHFG manages the beach according to the Guidelines, which precludes adverse effects on plovers. We expect these activities to occur at similar levels as in the past, and therefore do not anticipate a change from baseline conditions in the action area or substantial additive effects to the proposed action.

JEOPARDY ANALYSIS

Section 7(a)(2) of the ESA requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat.

Jeopardy Analysis Framework

“Jeopardize the continued existence of” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR 402.02). In accordance with policy and regulation, the jeopardy analysis in this Opinion relies on four components: (1) Status of the Species, which evaluates the piping plover rangewide condition, the factors responsible for that condition, and its survival and recovery needs; (2) Environmental Baseline, which evaluates the status of the piping plover in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the piping plover; (3) Effects of the Action, which determines impacts of the proposed action; and (4) Cumulative Effects, which evaluates the effects of future, non-Federal activities in the action area on the piping plover. The jeopardy analysis in this Opinion emphasizes the rangewide survival and recovery needs of the listed species and the role of the action area in providing for those needs. It is within this context that we evaluate the significance of the proposed Federal action, taken together with cumulative effects, for purposes of making the jeopardy determination (see 50 CFR 402.14(g)).

In this section, we add the effects of the action and the cumulative effects to the status of the species and critical habitat and to the environmental baseline to formulate our Opinion as to whether the proposed action is likely to appreciably: (1) reduce the likelihood of both the survival and recovery of a listed species in the wild by reducing the RND of that species; or (2) appreciably diminish the value of critical habitat for both the survival and recovery of a listed species.

Per the Service’s consultation handbook (USFWS and NMFS 1998), survival is defined as “the species’ persistence as listed or as a recovery unit, beyond the conditions leading to its endangerment, with sufficient resilience to allow for the potential recovery from endangerment. Said another way, survival is the condition in which a species continues to exist into the future while retaining the potential for recovery. This condition is characterized by a species with a sufficient population, represented by all necessary age classes, genetic heterogeneity, and number of sexually mature individuals producing viable offspring, which exists in an environment providing all requirements for completion of the species’ entire life cycle, including reproduction, sustenance, and shelter.”

Per the Service’s consultation handbook (USFWS and NMFS 1998), recovery is defined as “improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the ESA.” The “criteria set out in Section 4(a)(1)” means determining when a species no longer meets the definition of an “endangered species” or a “threatened species” because of any of the following factors:

- (A) present or threatened destruction, modification, or curtailment of habitat or range;
- (B) overutilization for commercial, recreational, scientific, or educational purposes;

- (C) disease or predation;
- (D) inadequate existing regulatory mechanisms; and
- (E) other natural or manmade factors affecting the species' continued existence.

An endangered species is “in danger of extinction throughout all or a significant portion of its range” (see ESA Section 3(6)). A threatened species is “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range” (see ESA Section 3(20)).

To conduct this analysis, we begin by assessing whether there are effects to any individuals of the species of interest (as discussed in the effects analysis section above). If all effects are insignificant, discountable, or wholly beneficial, no further consultation is required. In other words, if we conclude that individuals are not likely to experience reductions in reproductive success or survival likelihood, fitness consequences for the species rangewide would not be expected as well. In this case, the agency has ensured that their action is not likely to jeopardize the continued existence of the species and our analysis is completed. Conversely, if we are unable to show that individuals are unlikely to experience reductions in their reproductive success or survival likelihood, we are required to assess how those effects are or are not anticipated to result in an appreciable reduction in the likelihood of both the survival and recovery of the species. We do not assess appreciable reduction of reproduction, numbers or distribution at an individual level because we do not assess appreciable reduction of survival and recovery at an individual level.

Because many species are composed of multiple populations and there may be meaningful differences in those populations (e.g., genetics, morphology, size) to the overall species survival and recovery, it is a logical intermediate step to evaluate the effects of impacts to individuals on the population(s) they are associated with. If our analyses indicate that reductions in the fitness of the population(s) are not likely to occur, there can be no appreciable reductions in reproduction, numbers, or distribution at a species level and we conclude that the agency has ensured that their action is not likely to jeopardize the continued existence of the species. If there are reductions in the fitness of the population(s) impacted, we then assess whether those changes affect the overall species survival and recovery rangewide based on the importance of the population(s) for species level representation, resiliency and redundancy, the level of impact, and the status of the species.

CONCLUSION

As discussed in the “Effects of the Action” section, the primary consequence of the Project is the 50 percent reduction in productivity for one pair of piping plovers attempting to breed at the Hampton-Seabrook Dunes WMA. The jeopardy analysis in this Opinion assesses whether the proposed action reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both survival and recovery of the Atlantic Coast piping plover by reducing the species' reproduction, numbers, or distribution in the wild.

The action area for this consultation is located in the New England recovery unit. This and three other recovery units were defined in the final recovery plan for this species (USFWS 1996). Recovery units are special units of a listed entity that are geographically or otherwise identifiable and are essential to the recovery of the entire listed entity. Therefore, we start by considering the effects of the proposed action on the piping plover population in New Hampshire. We then consider those effects in the context of the current status of piping plovers in the New England recovery unit and the environmental baseline in the action area, taking into account any cumulative effects. Finally, we determine whether implementation of the proposed action is likely to appreciably reduce the likelihood of both the survival and recovery of the species in the wild.

In formulating this Opinion, we consider the following points discussed earlier in this document:

1. Although a small amount of nesting habitat may be permanently altered, there is sufficient available, unoccupied habitat at nearby Seabrook Beach such that the single pair that usually nests at the Hampton-Seabrook Dunes WMA is unlikely to abandon the area.
2. There is uncertainty that plovers will attempt to nest at Hampton-Seabrook Dunes WMA in the near future because of limited nesting habitat caused by beach erosion.
3. Impacts on foraging habitat are so small as to not be measurable.
4. Conservation measures, including slow starts to drilling, maintaining a clean work environment to discourage predators, and shielded lighting, will reduce the impacts of disturbance to foraging or nesting piping plovers during construction.
5. Protective fencing erected around suitable plover habitat within the project construction zone will preclude nest establishment and piping plover chicks (if present) from accessing the construction area.
6. The predicted reduction in productivity as a result of noise would be limited to 3 years, the anticipated construction duration of the Project.
7. The proposed action will not significantly affect the numbers and distribution of nesting pairs of piping plovers in New Hampshire.
8. We do not anticipate cumulative effects at levels different from baseline conditions.
9. The proposed action will take place in the New England recovery unit, where the piping plover population has exceeded (or been within three pairs of) its 625-pair abundance goal since 1998, reaching 1,058 pairs in 2020 (A. Hecht, U.S. Fish and Wildlife Service, pers. comm. 2020), 69 percent above the recovery unit goal.

After reviewing the status of the species, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, we find that the proposed action is not reasonably expected to reduce appreciably the likelihood of both survival and recovery of piping plovers in the New England recovery unit by reducing their reproduction, numbers, or distribution in the wild. Our analysis indicates that the effects of the covered activities are likely to be minimal and site-specific. Further, the proposed action would have no measurable affect (either negative or positive) on the numbers or distribution of piping plovers in the other recovery units. Therefore,

we conclude that the proposed action is not likely to jeopardize the continued existence of the Atlantic Coast piping plover population as a whole.

INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and Federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without a special exemption. Take is defined in section 3 of the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering (50 CFR § 17.3). Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA, provided that such taking is in compliance with the terms and conditions of this incidental take statement (ITS).

The measures described below are nondiscretionary and must be undertaken by the FHWA for the exemption in section 7(o)(2) to apply. The FHWA has a continuing duty to regulate the activity covered by this ITS. If the FHWA fails to assume and implement the terms and conditions, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the FHWA must report the progress of the action and its impact on the species to the Service as specified in the ITS [50 CFR 402.14(i)(3)].

AMOUNT OR EXTENT OF TAKE ANTICIPATED

We expect the proposed action would cause take of one pair of piping plovers via harassment and harm, and that the take will result in a 50 percent reduction in productivity for the life of the Project and then subsequent years when stochastic events further reduce available habitat in Hampton-Seabrook Dunes WMA. Take via harassment may occur when noise from nearby construction creates the likelihood of injury to such an extent as to significantly disrupt normal breeding, feeding, and roosting behaviors. Disturbance to nesting plovers may lead to reduced nest attendance by incubating adults if noise or construction activity causes plovers to repeatedly leave the nest. Plover eggs produced by one pair may be killed as a result of cooling, overheating, or predation due to nest abandonment. In a worst-case scenario, take would result in zero productivity for the pair of plovers at Hampton-Seabrook Dunes WMA.

Harm would occur as a reduction in available nesting habitat, which may disrupt normal behavior, including territory establishment, territory abandonment if the plover pair relocates, and a delay or extension of their breeding period if forced to relocate farther away from their preferred nesting habitat or near the territory of another breeding pair.

These take mechanisms may result in sublethal effects to piping plover adults and chicks, and sublethal or lethal effects to eggs. The anticipated impact to piping plovers is a 50 percent reduction in productivity for one breeding pair that attempts to nest at the Hampton-Seabrook Dunes WMA or would have nested there had sufficient habitat been available.

REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take of piping plovers at Hampton-Seabrook Dunes WMA:

1. the FHWA must use suitable dredge material to enhance piping plover habitat at Hampton-Seabrook Dunes WMA, if feasible;
2. avoid and minimize take of the piping plover to the extent practicable; and
3. monitor breeding piping plovers at Hampton-Seabrook Dunes WMA during construction of the bridge.

TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the ESA, the FHWA must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary.

1. Coordinate disposal of suitable dredged material with the NHFG to determine the best location for piping plover nesting habitat enhancement.
2. Coordinate installation of fencing around the active construction area at the south end of the bridge with the NHFG to preclude plovers from nesting in the area and chicks from entering the construction zone.
3. Starting 7 days prior to construction activities or March 24, whichever comes first, a qualified monitor should survey the Hampton-Seabrook Dunes WMA daily for plover presence in April and May. If plovers are absent, monitoring may be discontinued after June 15.
4. If a pair of plovers nests at Hampton-Seabrook Dunes WMA, continue daily monitoring to document response to construction activities and productivity until fledging has been verified.
5. The FHWA must employ qualified individuals to monitor piping plovers. Individuals trained and/or approved by NHFG do not need additional approval from the Service. Alternatively, the FHWA can request Service approval of an individual's qualifications to monitor piping plovers. Requests for approval should be sent to newengland@fws.gov and arrive at least 30

days before the activities would occur. Requests should include a resume or other explanation of the individual's qualifications and experience with the piping plover. Experience with a species similar to the piping plover may substitute for direct experience with the piping plover.

MONITORING AND REPORTING REQUIREMENTS

The FHWA shall provide the New England Field Office an annual report by December 31 for the duration of the Project construction describing:

1. the number of nesting piping plover pairs present at Hampton-Seabrook Dunes WMA;
2. productivity of piping plovers nesting at Hampton-Seabrook Dunes WMA;
3. the fate of the nest(s) and/or brood(s) at Hampton-Seabrook Dunes WMA;
4. predator activity noted in the construction zone; and
5. the conservation measures implemented to avoid or minimize adverse impacts.

The contact for these reporting requirements is:

Audrey Mayer
Field Supervisor
New England Field Office
U.S. Fish and Wildlife Service
70 Commercial Street, Suite 300
Concord, NH 03301
Telephone number: 603-496-5181

Care must be taken in handling any dead specimens of listed species to preserve biological material in the best possible state. In conjunction with the preservation of any dead specimens, the finder has the responsibility to ensure that evidence intrinsic to determining the cause of death of the specimen is not unnecessarily disturbed. The finding of dead specimens does not imply enforcement proceedings pursuant to the ESA. The reporting of dead specimens is required to enable the Service to determine if take is reached or exceeded and to ensure that the terms and conditions are appropriate and effective. Upon locating a dead specimen, notify the Service's New England District Office of Law Enforcement at 617-889-6616 and the New England Field Office at 603-223-2541.

REINITIATION NOTICE

This concludes formal consultation on the proposed action. As provided in 50 CFR 402.16, reinitiation of consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of taking specified in the ITS is exceeded; (2) new information reveals effects of the action that may affect

Jamison Sikora
August 13, 2021

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listed species or critical habitat in a manner or to an extent not considered in this Opinion; (3) the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this Opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, the exemption issued pursuant to section 7(o)(2) may have lapsed and any further take could be a violation of section 4(d) or 9. Consequently, we recommend that any operations causing such take cease pending reinitiation.

If you have any questions regarding this Opinion, please contact Ms. Susi von Oettingen of this office at 603-227-6418, or by e-mail at susi_vonoettingen@fws.gov.

Sincerely yours,

**AUDREY
MAYER**

Audrey Mayer
Supervisor
New England Field Office

Digitally signed by
AUDREY MAYER
Date: 2021.08.13 08:03:50
-04'00'

Attachment
Appendix A

cc: Reading file
Jamie Sikora/FHWA via email jamie.sikora@dot.gov
Marc Laurin/NHDOT via email marc.laurin@dot.nh.gov
Jennifer Reczek/NHDOT via email Jennifer.E.Reczek@dot.nh.gov
Robert Juliano/NHDOT via email Robert.A.Juliano@dot.nh.gov
Brendan Clifford/NHFG via email Brendan.J.Clifford@wildlife.nh.gov
Mike Marchand/NHFG via email michael.n.marchand@wildlife.nh.gov
ES: SvonOettingen:jd:8-13-21:603-227-6418

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Appendix A

CONSULTATION HISTORY

March 11, 2019 – Electronic transmission to NEFO from Fitzgerald and Halliday (consultants) providing background information for the proposed bridge project.

March 21, 2019 – Meeting with NHDOT, FHWA, NEFO and consultants to discuss proposed project and potential Federal- and State-listed species that may be affected by the construction of a new bridge.

December 18, 2019 – Meeting with FHWA, NHDOT, NHFG, NEFO, and consultants to discuss formal consultation on the project.

February 12, 2020 – NEFO electronic transmission to NHDOT and FHWA with information relevant to potential disturbance to piping plovers from construction activities.

April through July 2020 – Electronic transmissions between NEFO, NHFG, and NHDOT, providing information and plover data for BA.

December 9, 2020 – NEFO received the request to initiate formal consultation from the FHWA via electronic transmission.

December 16, 2020 – Virtual meeting with FHWA, NEFO, NH State agencies, and consultants to discuss the proposed project.

January 13, 2021 – NEFO received updated information about the size and location of the project action area from NHDOT via electronic transmission.

January 21, 2021 – NEFO received additional information regarding the FHWA determination of not likely to adversely affect roseate terns and rufa red knots, and an updated BA via electronic transmission.

January 25, 2021 – NEFO acknowledgement of receipt to initiate formal consultation with FHWA.

February 19, 2021 – Electronic transmission between FHWA, NHFG, and NEFO clarifying dredge material disposition and Federal agency lead.

March 9, 2021 – FHWA supplemental letter describing the estimated quantity of dredge material and options for disposal provided in an electronic transmission to NEFO.

Appendix A. Verification Form (updated March 27, 2020)

Federal Highway Administration (FHWA) or the applicable state Department of Transportation (DOT) shall submit a signed version of this completed form, together with any project plans, maps, supporting analyses, etc., to NOAA’s National Marine Fisheries Service (NMFS), Greater Atlantic Regional Fisheries Office, Protected Resources Division (GARFO PRD) at nmfs.gar.esa.section7@noaa.gov with “FHWA GARFO NLAA Program: [Project Title or Number]” in the subject line. **Note:** project design contractors and/or consultants may assist in preparing the form, but only FHWA/DOT staff shall sign off on it on the final page.

Project Activity Type (check all that apply to the entire action):

- 1. Bridge repair, demolition, or replacement project
- 2. Culvert repair or replacement project
- 3. Dock, pier, or waterway access project (includes construction, demolition, and repairs)
- 4. Slope stabilization project

Transportation Project Information

Name of Project:	Seabrook-Hampton 15904, Neil R. Underwood Bridge		
Reinitiation (Yes/No):	No		
State DOT/Program:	New Hampshire Department of Transportation		
DOT ID Code:	X-A001(026)		
Contact Person:	Marc Laurin		
Phone:	(603) 271-4044	Email:	marc.g.laurin@dot.nh.gov
Project Latitude (e.g., 42.625884):	42.895882		
Project Longitude (e.g., -70.646114):	-70.816542		
Maximum Water Depth (m)	8.5		
Anticipated Project Start Date:	Summer 2023	Anticipated Project End Date:	Summer 2026
City/Town:	Hampton/Seabrook, NH	Water body:	Hampton Harbor
Project/Action Description and Purpose:	<p>The New Hampshire Department of Transportation (NHDOT) is currently undertaking the preliminary design for the replacement of the Neil R. Underwood Bridge which carries NH Route 1A over Hampton Harbor. Constructed in 1949, it is one of two remaining bascule bridges in the State of New Hampshire. A Rehabilitation Study was completed in 2019, followed by a Type, Size and Location Study (TS&L) in March 2020 which recommended Replacement with a Fixed Bridge as the Preferred Alternative. The purpose of the project is to provide a safe, reliable, and structurally sound crossing over the Hampton Harbor Inlet, while also improving mobility for the traveling public. The project is necessary because the existing bridge is structurally deficient and functionally obsolete.</p> <p>The project would construct a new fixed structural steel bridge comprised of seven spans supported on six piers and two abutments approximately 75 feet west of the existing bridge, which would be demolished once the new bridge was complete. At its peak, the deck of the new fixed bridge would be approximately 30 feet higher than that of the existing bascule bridge. A new drainage collection and conveyance system would replace the existing scuppers on the bridge in order to eliminate direct discharge into the harbor. The federal channel under the bridge would be widened through dredging from 40 feet to 150 feet. Each bridge pier would rest on six drilled shafts, installed behind temporary cofferdams. In-water work for the relocation of utilities, placement of cofferdams, dredging, and installation of the temporary trestles would occur between November 15th and March 15th. (Please</p>		

ESA-listed species and/or critical habitats in the action area (Check all that apply)

<input checked="" type="checkbox"/>	Atlantic sturgeon (all DPSs)	<input checked="" type="checkbox"/>	Kemp's ridley sea turtle
<input type="checkbox"/>	Atlantic sturgeon critical habitat Indicate which DPS (GOM, NYB, Chesapeake Bay DPSs): <input type="text" value="Select DPS"/>	<input checked="" type="checkbox"/>	Loggerhead sea turtle (Northwest Atlantic DPS)
<input checked="" type="checkbox"/>	Shortnose sturgeon	<input checked="" type="checkbox"/>	Leatherback sea turtle
<input type="checkbox"/>	Atlantic salmon (GOM DPS)	<input type="checkbox"/>	North Atlantic right whale
<input type="checkbox"/>	Atlantic salmon critical habitat (GOM DPS)	<input type="checkbox"/>	North Atlantic right whale critical habitat
<input checked="" type="checkbox"/>	Green sea turtle (North Atlantic DPS)	<input type="checkbox"/>	Fin whale

* Please consult GARFO PRD's ESA Section 7 Mapper for ESA-listed species and critical habitat information for your action area at: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-species-critical-habitat-information-maps-greater>.

The following stressors are applicable to the action:

- Underwater Noise
- Impingement/Entrainment and Entanglement
- Water Quality/Turbidity
- Habitat Alteration
- Vessel Traffic

Impacts Table

Habitat Alteration		
	Permanent (acres)	Temporary (acres)
Sand (saline)	0.40	3.49
Silt/Mud/Clay (saline)		
Hard bottom (saline)	0.17	3.24
Submerged Aquatic Vegetation (SAV) (saline)		
Sand (freshwater)		
Silt/Mud/Clay (freshwater)		
Hard bottom (freshwater)		
Submerged Aquatic Vegetation (SAV) (freshwater)		
Total amount of habitat alteration	0.57	
In-water Construction Impacts		
	Amount in meters	
Width of water body in action area (m)	244.0	
Stressor category that extends furthest distance into water body (e.g.; underwater noise, turbidity plume)	underwater noise	
Maximum extent of stressor into the water body (m)	88.0	

Project Design Criteria (PDC) Checklist

FHWA/DOT shall incorporate all general PDCs and all applicable PDCs in the appropriate stressor categories. For any PDCs that are not incorporated, additional justification is required for a project to be eligible for the NLAA Program. FHWA/DOT shall check the corresponding box for each PDC that is, or will be, incorporated into the project or indicate if not applicable.

GENERAL PDCs			
Yes	N/A	PDC #	PDC Description
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.	Ensure all operators, employees, and contractors are aware of all FHWA environmental commitments, including these PDC, when working in areas where ESA-listed species may be present or in critical habitat.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2.	No portion of the proposed action will individually or cumulatively have an adverse effect on ESA-listed species or critical habitat.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3.	No portion of the proposed action that may affect the GOM DPS of Atlantic salmon will occur in the tidally influenced portion of rivers/streams where their presence is possible from <u>April 10 through November 7</u> . The range of the GOM DPS only occurs in Maine. Note: If the project will occur within the geographic range of the GOM DPS Atlantic salmon but their presence is not expected following the best available commercial scientific data, the work window does not need to be applied. Please attach best available information (i.e. local fisheries biologist correspondence).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4.	No portion of the proposed action that may affect shortnose or Atlantic sturgeon will occur in areas identified as spawning grounds as follows: i. Gulf of Maine: Apr 1-Aug 31 ii. Southern New England/New York Bight: Mar 15-Aug 31 iii. Chesapeake Bay: Mar 15-Jul 1 and Sep 15-Nov 1 Note: If river specific information exists that provides better or more refined time of year information, those dates may be substituted with NMFS approval.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	5.	No portion of the proposed action that may affect shortnose or Atlantic sturgeon will occur in areas identified as overwintering grounds where dense aggregations are known to occur as follows: i. Gulf of Maine: Oct 15-Apr 30 ii. Southern New England/New York Bight: Nov 1-Mar 15 iii. Chesapeake Bay: Nov 1-Mar 15 Note: If river specific information exists that provides better or more refined time of year information, those dates may be substituted with NMFS approval.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6.	Within designated critical habitat for Atlantic sturgeon, no work will affect hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand) (PBF 1).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.	Work will result in no or only temporary/short-term changes in water temperature, water flow, salinity, or dissolved oxygen levels.

Yes	N/A	PDC #	PDC Description
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.	If ESA-listed species are (a) likely to pass through the action area at the time of year when project activities occur; and/or (b) the project will create an obstruction to passage when in-water work is completed, then a zone of passage (~50% of water body) with appropriate habitat for ESA-listed species (e.g., depth, water velocity, etc.) must be maintained (i.e., physical or biological stressors such as turbidity and sound pressure must not create barrier to passage).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	9.	The project will not adversely impact any submerged aquatic vegetation (SAV) or oyster reefs.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	10.	No blasting or use of explosives will occur.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11.	No in-water work on large dams or tide gates (small dam and tide gate repairs may be permitted with prior review and approval from NMFS).

UNDERWATER NOISE PDCs			
Yes	N/A	PDC #	PDC Description
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12.	<p>If pile driving is occurring during a time of year when ESA-listed species may be present, and the anticipated noise is above the behavioral noise threshold, a “soft start” is required to allow animals an opportunity to leave the project vicinity before sound pressure levels increase. <i>In addition to using a soft start at the beginning of the work day for pile driving, one must also be used at any time following cessation of pile driving for a period of 30 minutes or longer.</i></p> <p><u>For impact pile driving:</u> pile driving will commence with an initial set of three strikes by the hammer at 40% energy, followed by a one minute wait period, then two subsequent three-strike sets at 40% energy, with one-minute waiting periods, before initiating continuous impact driving.</p> <p><u>For vibratory pile installation:</u> pile driving will be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This sequence of 15 seconds of reduced energy driving, one-minute waiting period will be repeated two additional times, followed immediately by pile-driving at full rate and energy.</p>

Yes	N/A	PDC #	PDC Description
<input type="checkbox"/>	<input type="checkbox"/>	13.	<p>If the project includes non-timber piles*, please attach your calculation to this verification form showing that the noise is below the injury thresholds of ESA-listed species in the action area. The GARFO Acoustic Tool can be used as a source, should you not have other information: https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-consultation-technical-guidance-greater-atlantic.</p> <p>*Effects from timber and steel sheet piles were analyzed in the NLAA programmatic consultation, so no additional information is necessary.</p>
<input type="checkbox"/>	<input type="checkbox"/>	14.	Any new pile-supported structure must involve the installation of no more than 50 piles (below MHW).

Pile material (e.g., steel pipe, concrete)	Pile diameter/width (inches)	Number of piles	Installation method (e.g., impact hammer, vibratory start and then impact hammer to depth, drilling)
steel pipe	12	450	impact hammer
steel pipe	72	36	initial vibratory hammer; then impact hammer

IMPINGEMENT/ENTRAINMENT AND ENTANGLEMENT PDCs			
Yes	N/A	PDC #	PDC Description
<input checked="" type="checkbox"/>	<input type="checkbox"/>	15.	<p>If excavating or dredging, only mechanical buckets, hydraulic cutterheads, or low volume hopper dredges (e.g., CURRITUCK, ≤300 cubic yard maximum bin capacity) may be used.</p> <p>Note: We consider excavating a smaller scale form of mechanical dredging.</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	16.	<p>No new excavation or dredging in Atlantic sturgeon or salmon critical habitat (excavation in a prior construction footprint or maintenance dredging is permitted, but still must meet all other PDCs). New excavation or dredging outside Atlantic sturgeon or salmon critical habitat is limited to one-time events (e.g., burying a cable or utility line) and minor (≤2 acres) expansions of areas already subject to prior excavation or maintenance dredging. Locating a replacement bridge within 250 feet (centerline to centerline) of an existing bridge and excavation of sediment around bridge piers are considered work in a previous construction footprint.</p> <p>Note: We consider excavating a smaller scale form of mechanical dredging.</p>

Yes	N/A	PDC #	PDC Description
<input checked="" type="checkbox"/>	<input type="checkbox"/>	17.	Temporary intakes related to construction are prohibited in sturgeon and salmon spawning, rearing, or overwintering habitat during the time of year windows identified in General PDCs 3-5. If utilized outside those areas and times of year and in an area with anticipated sturgeon and salmon presence, temporary intakes must be equipped with 2-millimeter wedge wire mesh screening and must not have greater than 0.5 feet per second intake velocities, to prevent impingement or entrainment of juvenile and early life stages of these species.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	18.	Work behind cofferdams, turbidity curtains, or other instruments that prevent access of animals to the project area is required when ESA-listed species are likely to be present (if presence is limited to rare, transient individuals, access control measures are not necessary). Once constructed, work inside a cofferdam at any time of year may be permitted with NMFS approval, provided the cofferdam is installed/removed outside the time-restricted period.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	19.	No new permanent surface water withdrawal, water intakes, or water diversions.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	20.	Turbidity control measures, including cofferdams, must be designed to not entangle or entrap ESA-listed species.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	21.	Any in-water lines, ropes, or chains must be made of materials and installed in a manner to minimize or avoid the risk of entanglement by using thick, heavy, and taut lines that do not loop or entangle. Lines can be enclosed in a rigid sleeve.

WATER QUALITY/TURBIDITY PDCs			
Yes	N/A	PDC #	PDC Description
<input type="checkbox"/>	<input checked="" type="checkbox"/>	22.	In-water offshore disposal may only occur at designated disposal sites that have already been the subject of ESA section 7 consultation with NMFS and where a valid consultation is in place.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	23.	Any temporary discharges must meet state water quality standards (e.g., no discharges of substances in concentrations that may cause acute or chronic adverse reactions, as defined by EPA water quality standards criteria).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	24.	Only repair, upgrades, relocations, and improvements of existing discharge pipes or replacement in-kind are allowed; no new construction of untreated discharges.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	25.	Work behind cofferdams, turbidity curtains, or other instruments to control turbidity is required when operationally feasible and ESA-listed species are likely to be present (if presence is limited to rare, transient individuals, turbidity control methods are not necessary).

HABITAT ALTERATION PDCs			
Yes	N/A	PDC #	PDC Description
<input checked="" type="checkbox"/>	<input type="checkbox"/>	26.	Minimize all new waterward encroachment and permanent fill.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	27.	In Atlantic salmon critical habitat, stream simulation design with a minimum span of 1.2 bankfull width will be used in areas with minimal tidal influence. In tidal areas, a design that allows for unimpeded flow will be used (no delay in water entering or exiting the area upstream of the crossing).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	28.	In Atlantic salmon critical habitat, no culvert end extensions, invert line culvert rehabilitation, or slipline culvert rehabilitation may occur.

VESSEL TRAFFIC PDCs			
Yes	N/A	PDC #	PDC Description
<input checked="" type="checkbox"/>	<input type="checkbox"/>	29.	Maintain project (i.e., construction) vessels operating within the action area to speed limits below 10 knots and dredge vessels to speeds of 4 knots maximum, while dredging.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	30.	Maintain a 1,500-foot buffer between project (i.e., construction) vessels and ESA-listed whales and a 300-foot buffer between project vessels and sea turtles. This also applies to dredge vessels.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	31.	The number of project (construction) vessels must be limited to the greatest extent possible, as appropriate to size and scale of project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	32.	The project must not result in the permanent net increase of commercial vessels.

Justification for NLAA Determination if not Incorporating All PDC

If the project is not in compliance with all of the general and stressor-based PDCs, but you can provide justification and/or special conditions to demonstrate why the project still meets the NLAA determination and is consistent with the aggregate effects considered in the programmatic consultation, you may still certify your project through the NLAA program using this verification form. Please identify which PDCs your project does not meet (e.g., PDC 9, PDC 15, PDC 22, etc.) and provide your rationale and justification for why the project is still eligible for the verification form. Project modifications must not result in different effects not already considered.

To demonstrate that the project is still NLAA, you must explain why the effects on ESA-listed species or critical habitat are **insignificant** (i.e., too small to be meaningfully measured or detected) or **discountable** (i.e., extremely unlikely to occur). **Please use this language in your justification.**

PDC#	Justification
13	<p>While underwater noise has the potential to occur throughout the three-year construction period, the highest underwater noise is expected to be from pile driving activities during the first and third years of construction. The installation of the piles for the temporary work trestles and the sheet piling coffer dams for the pier work would be undertaken between November 15th and March 15th. Once the sheet pile coffer dams are in place, then pile driving of the 36 drilled shaft casings could take place within these coffer dams during any time of the year. The 124 micropiles for the abutments could potentially be installed via an impact pile driver during any time of the year since they are land-based.</p> <p>Due to the habitat preferences and migratory tendencies of the subject ESA species, in-water construction would not coincide with the potential occurrence times of the ESA species of concern. Since</p>
14	<p>The project would involve the installation of 36 new permanent piles, sheet piling to contain the pier construction areas (six pier locations), and approximately 450 temporary 12-inch steel piles to support the temporary work trestles during construction, all of which would be installed during the in-water work window between November 15th and March 15th. Due to the proposed construction schedule and complexity of the work activities associated with the bridge construction, the temporary sheet piles and trestle piles may potentially need to be removed outside of the in-water work window.</p> <p>Since the majority of in-water work would take place within the in-water work window, with the potential exception of temporary pile removal, and since ESA-listed species presence in the Action Area is expected to be extremely rare and limited to transient individuals opportunistically foraging, potential</p>

FHWA/DOT Verification of Determination (To be filled out by FHWA/DOT staff only)

By submitting this Verification Form, FHWA, or the state DOT as FHWA's designated non-federal representative, indicates that they determined that the proposed activity described above is not likely to adversely affect (NLAA) ESA-listed species or designated critical habitat under NMFS jurisdiction in accordance with the Program, and all effects (direct, indirect, interrelated, and interdependent) are either insignificant (so small they cannot meaningfully be measured, detected, or evaluated) or discountable (extremely unlikely to occur).

<input type="checkbox"/>	In accordance with the FHWA GARFO NLAA Program, we have determined that the action complies with all applicable PDCs and is not likely to adversely affect listed species.	
<input checked="" type="checkbox"/>	In accordance with the FHWA GARFO NLAA Program, we have determined that the action is not likely to adversely affect listed species per the justifications and/or special conditions provided above.	
FHWA/DOT Signature:		Date:
Marc G. Laurin Digitally signed by Marc G. Laurin Date: 2020.12.11 11:33:41 -05'00'		12/09/2020

By providing your determination and signature, you are certifying that to the best of your knowledge the information provided in this form is accurate and based upon the best available scientific information. This form must be filled out and signed by FHWA or state DOT staff, as an officially designated non-federal representative.

GARFO PRD Concurrence (To be filled out by GARFO PRD)

After receiving the Verification Form, GARFO PRD will contact FHWA/DOT with any concerns and indicate whether GARFO PRD concurs with FHWA/DOT's determination.

<input type="checkbox"/>	In accordance with the FHWA GARFO NLAA Program, GARFO PRD concurs with FHWA/DOT's determination that the action complies with all applicable PDCs and is not likely to adversely affect listed species or critical habitat.	
<input checked="" type="checkbox"/>	In accordance with the FHWA GARFO NLAA Program, GARFO PRD concurs with FHWA/DOT's determination that the action is not likely to adversely affect listed species or critical habitat per the justifications and/or special conditions provided above.	
<input type="checkbox"/>	GARFO PRD does not concur with FHWA/DOT's determination that the action complies with the applicable PDCs (with or without justifications), and recommends an individual Section 7 consultation to be completed independent from the FHWA GARFO NLAA Program.	
GARFO PRD Signature:		Date:
MESA GUTIERREZ.ROOSEVELT.AN DRES.1586982881 Digitally signed by MESA GUTIERREZ.ROOSEVELT.ANDRES.158 6982881 Date: 2020.12.16 16:13:05 -05'00'		12/16/2020



US Army Corps of Engineers®
New England District

WORK-START NOTIFICATION FORM
(Minimum Notice: Two weeks before work begins)

EMAIL TO: Michael Hicks michael.c.hicks@usace.army.mil
and cenae-r@usace.army.mil; or

MAIL TO: Michael Hicks
Regulatory Division
U.S. Army Corps of Engineers, New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

Corps of Engineers Permit No. NAE-2022-02724 was issued to the New Hampshire Department of Transportation. This work is located in the Hampton River/Hampton Harbor on NH RT 1A at Seabrook and Hampton, New Hampshire and authorized the placement of 21,131 square feet of permanent fill in tidal waters associated with the replacement of the Neil R. Underwood Bridge between Seabrook and Hampton, New Hampshire.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

Phone & email: () _____ () _____

Proposed Work Dates: **Start:** _____ **Finish:** _____

Permittee/Agent Signature: _____ **Date:** _____

Printed Name: _____ **Title:** _____

Date Permit Issued: _____ **Date Permit Expires:** _____

FOR USE BY THE CORPS OF ENGINEERS

PM: _____ **Submittals Required:** _____

Inspection Recommendation: _____



**US Army Corps
of Engineers**®
New England District

COMPLIANCE CERTIFICATION FORM
(Minimum Notice: Permittee must sign and return notification
within one month of the completion of work.)

Permit Number: NAE-2022-02724

Project Manager: Michael Hicks

Name of Permittee: New Hampshire Department of Transportation

Permit Issuance Date: See Authorization Letter

Please sign this certification and return it to our office upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

* E-MAIL TO: cenae-r@usace.army.mil; or *
* * * * *
* MAIL TO: Permits and Enforcement Branch C *
* U.S. Army Corps of Engineers, New England District *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Printed Name

Date of Work Completion

() _____
Telephone Number

() _____
Telephone Number