VARE RIVER MP 19.84 & MP 19.96 CULVERT REPLACEMENT

PROJECT FILE NO. SHEET NO.

COVER SHEET

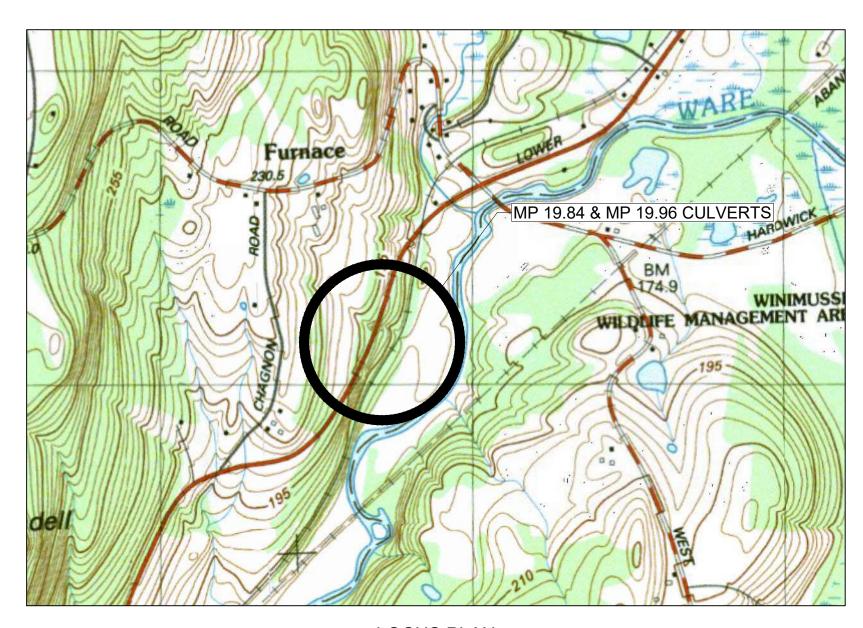
EMERGENCY REPAIRS TO CULVERTS AT WARE RIVER SECONDARY MP 19.84 & MP 19.96

GILBERTVILLE, MA

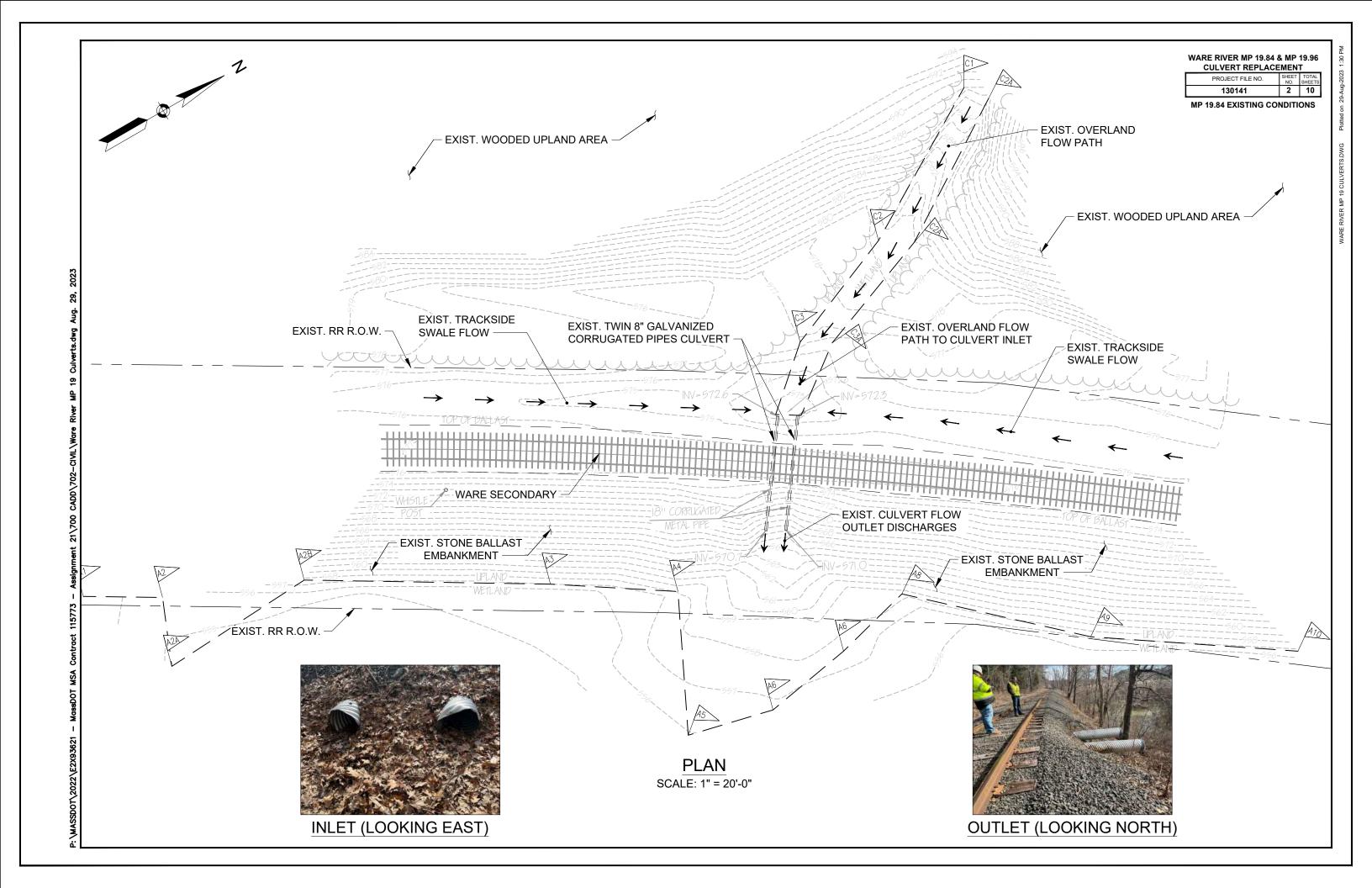
INDEX OF DRAWINGS

SHEET TITLE

- 1 COVER SHEET
- 2 MP 19.84 EXISTING CONDITIONS
- 3 MP 19.84 PROPOSED PRECAST PIPE CULVERT REPLACEMENT
- 4 MP 19.96 EXISTING CONDITIONS
- MP 19.96 PROPOSED PRECAST PIPE
- REPLACEMENT
- 6 PROPOSED MP 19.84 WINGWALL DETAILS
- 7 PROPOSED MP 19.96 WINGWALL DETAILS
- 8 MP 19.84 EROSION PROTECTION PLAN
- 9 MP 19.96 EROSION PROTECTION PLAN
- 10 EROSION PROTECTION DETAILS

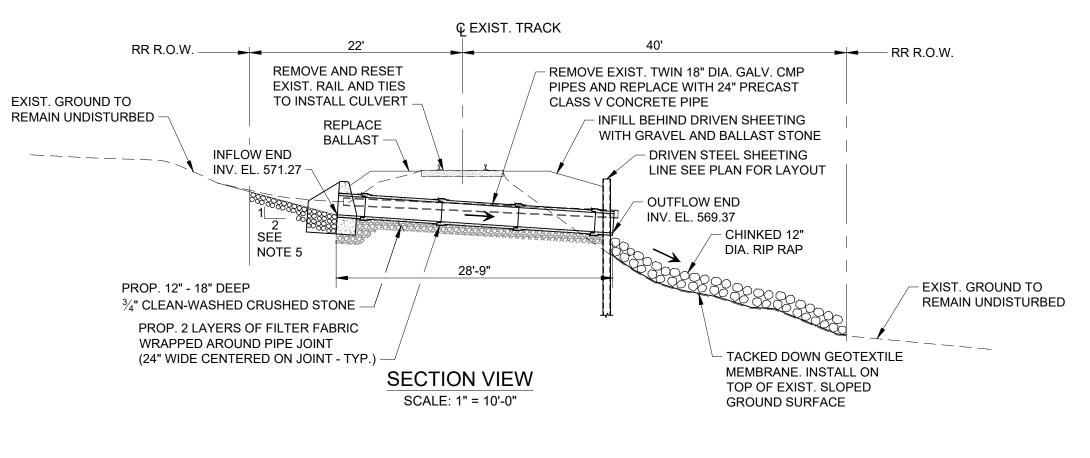


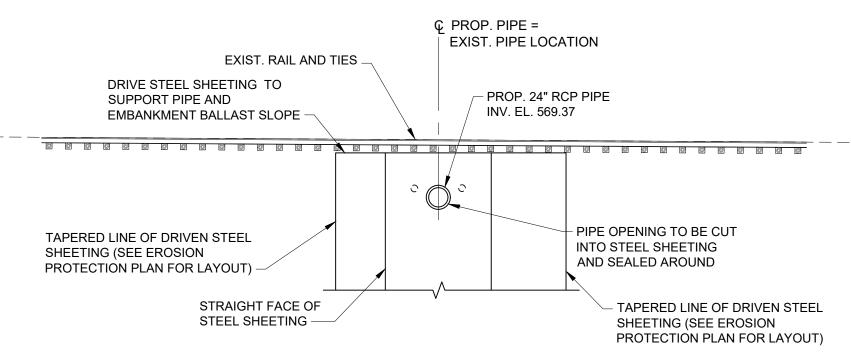
LOCUS PLAN
SCALE: 1" = 1000'





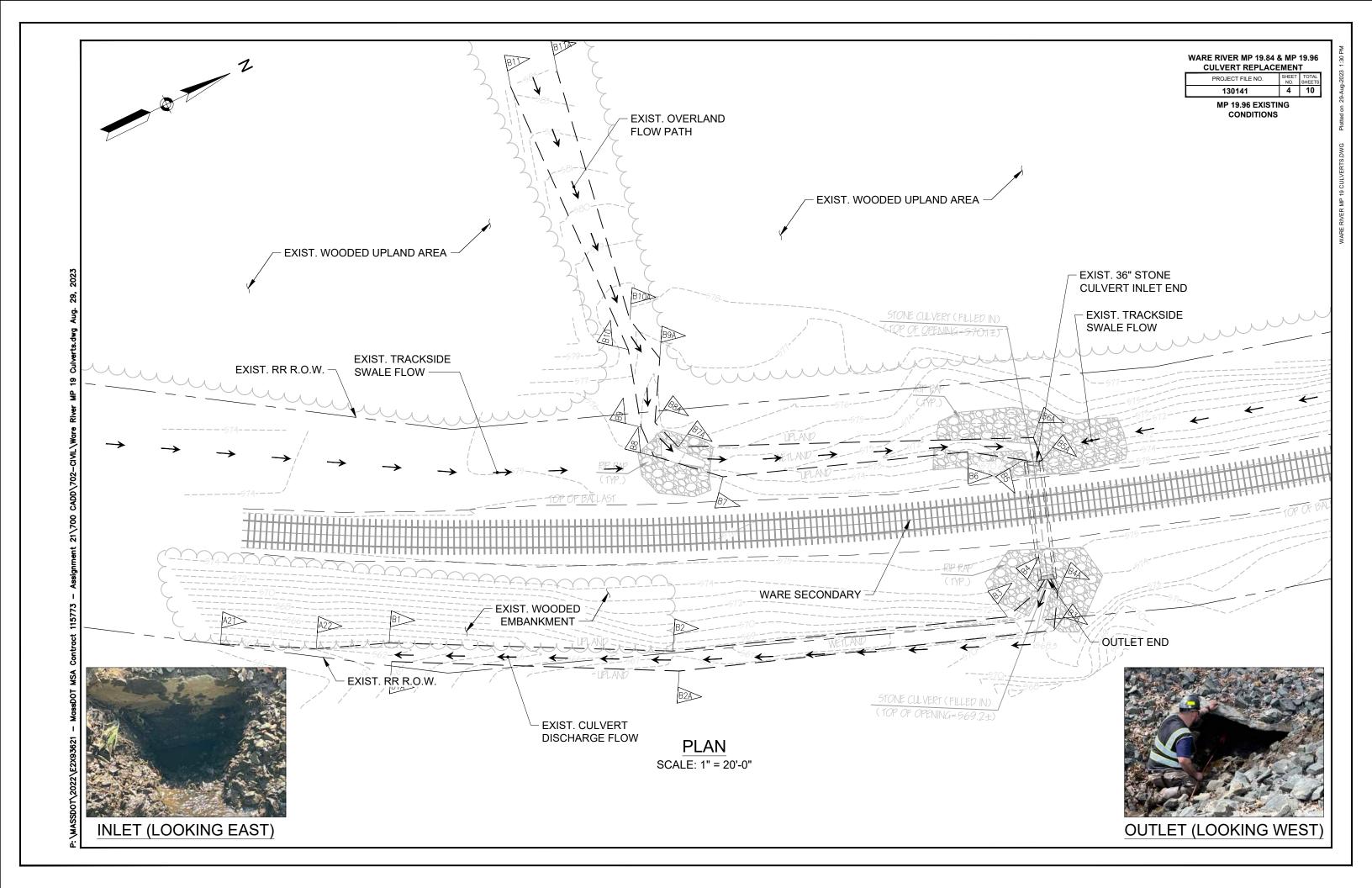
- 1. ALL CULVERT AND WINGWALL INSTALLATION WORK SHALL BE PERFORMED IN THE DRY WITH TEMPORARY COFFERDAMS, DEWATERING PUMPING, AND ALL EROSION CONTROL MEASURES IN PLACE AND MAINTAINED FOR THE DURATION OF THE WORK.
- 2. CONTRACTOR SHALL MINIMIZE ENCROACHMENT INTO THE ADJACENT WATER AND NATURAL VEGETATION TO THE GREATEST EXTENT POSSIBLE TO LIMIT SOIL AND WATER DISTURBANCE.
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- 4. ANY ADDITIONAL PROCESSED GRAVEL, CRUSHED STONE, AND STONE BALLAST DETERMINED TO BE NEEDED BY THE CONTRACTOR SHALL BE APPROVED BY MASSDOT'S ENGINEER PRIOR TO ORDERING FOR DELIVERY TO THE SITE.
- 5. CONTRACTOR SHALL PLACE AND EMBED STONE ARMOR RIP RAP ON BOTH SIDES OF THE CULVERT TO LIMITS SHOWN. STONES SHALL BE CHINKED IN TO ELIMINATE ANY DISLODGING OR SLIP-FAILING OF THE RECONSTRUCTED SLOPE.
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OUTLET END ELEVATION VIEW

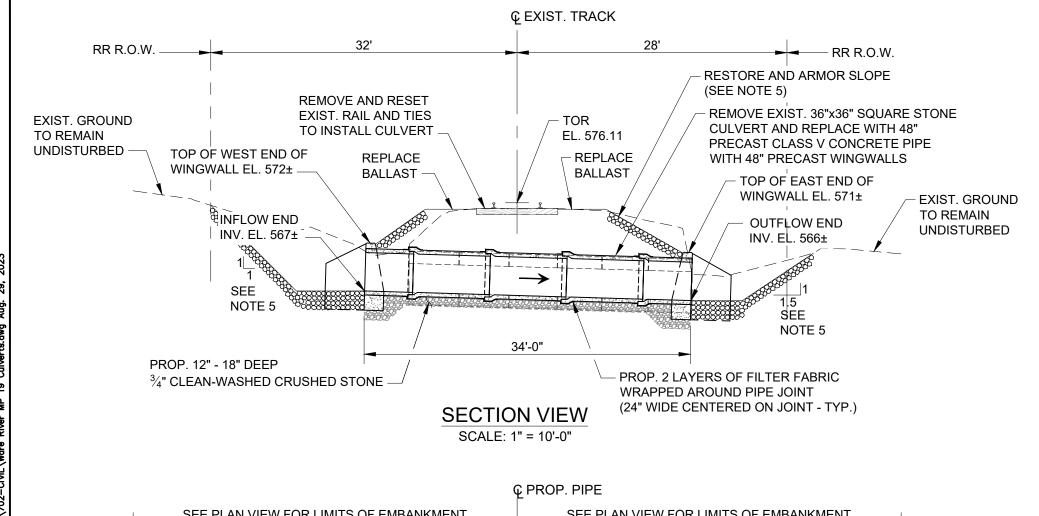
SCALE: 1" = 10'-0"

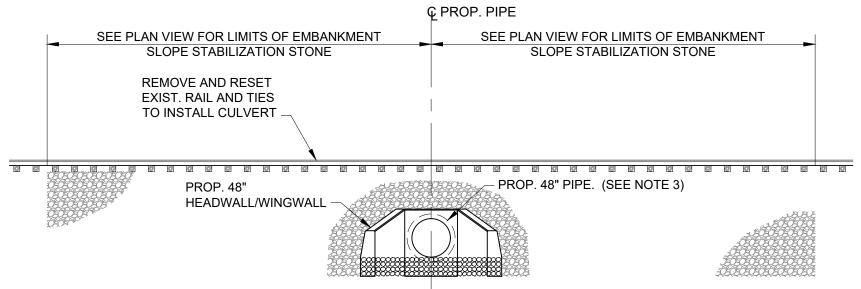


MP 19.96 PROPOSED PRECAST PIPE

NOTES:

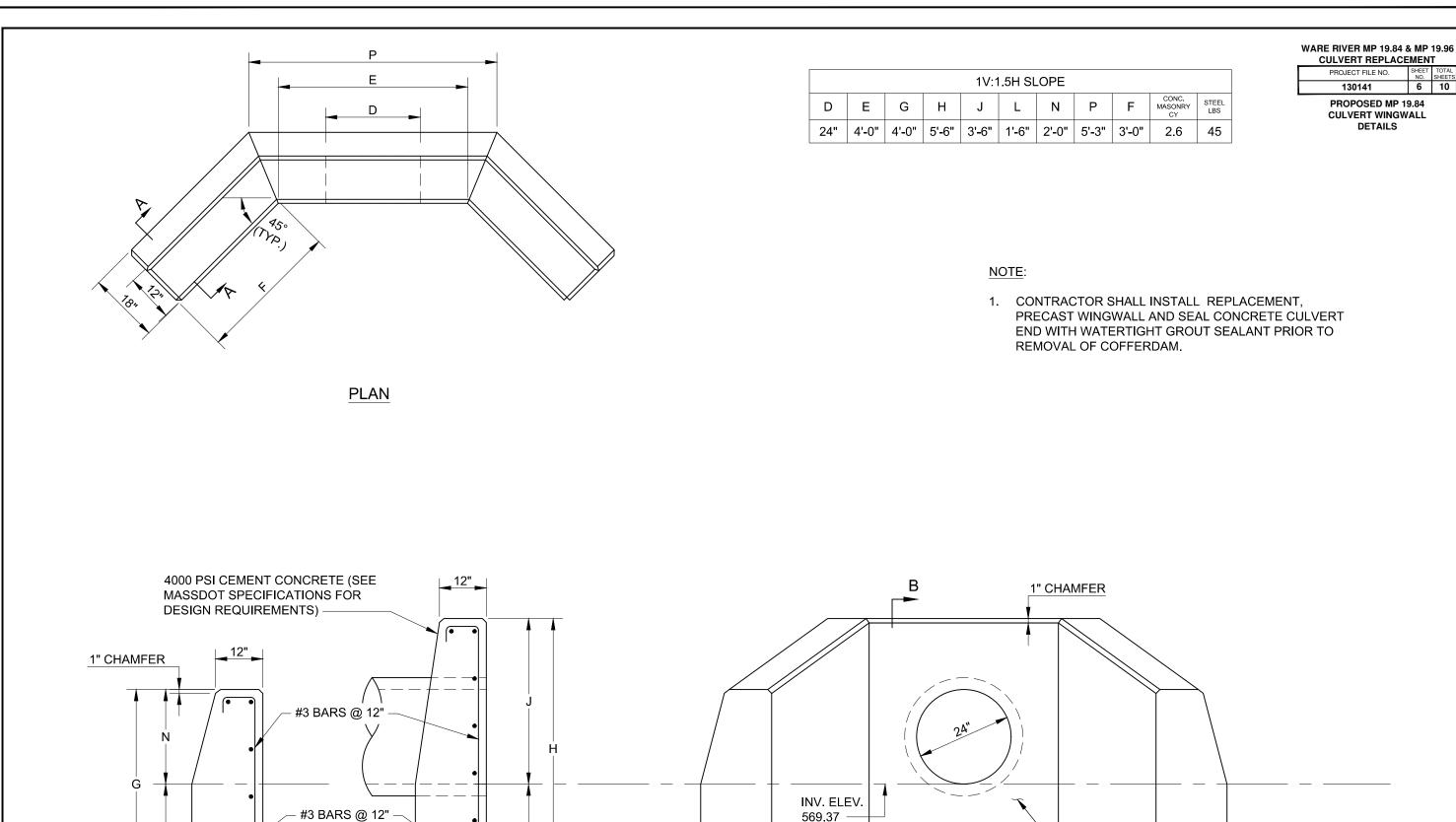
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OUTLET END ELEVATION VIEW

SCALE: 1" = 10'-0"



SEE NOTE 1

FRONT ELEVATION

2'-0"

18"

SECTION B-B

2'-0"

18"

SECTION A-A

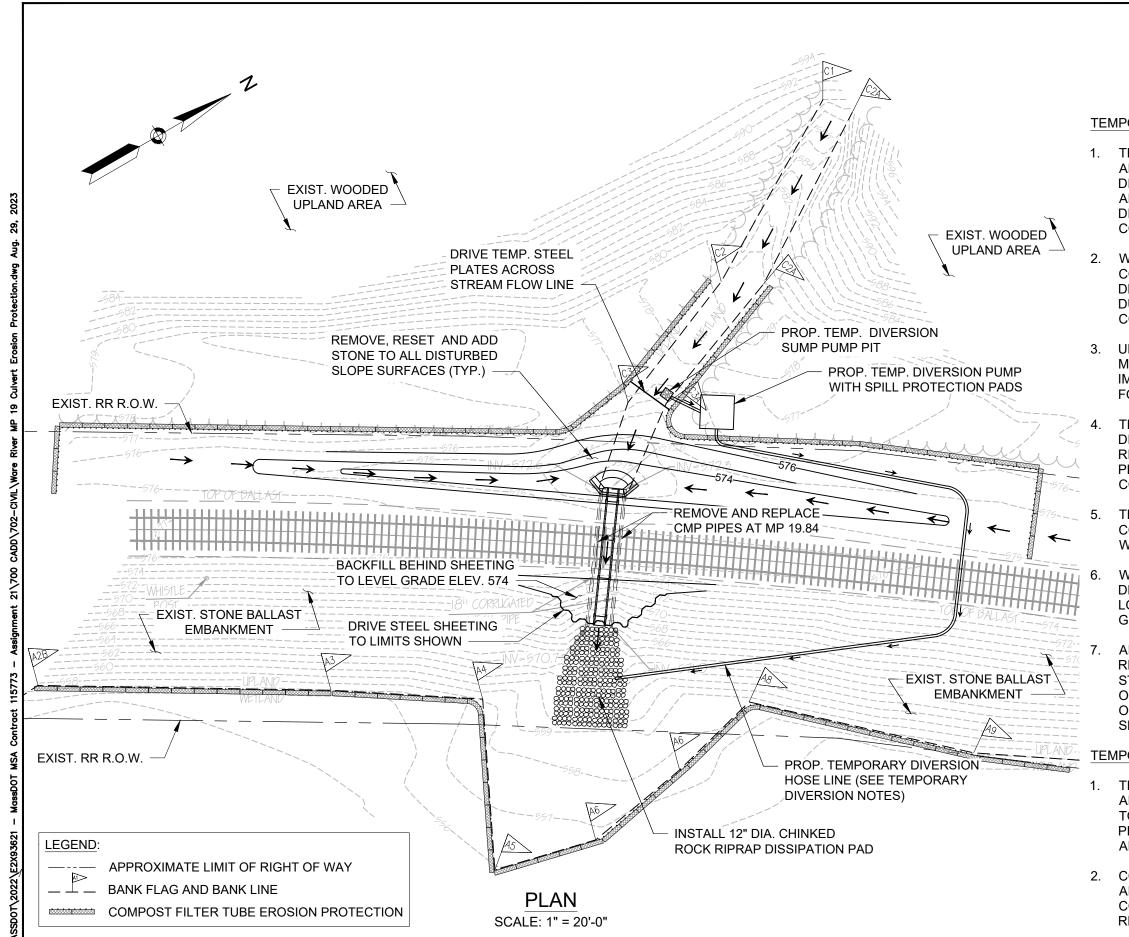
2" CLEAR (TYP.)

TEMPORARY DIVERSION NOTES:

- 1. THE CONTRACTOR SHALL DESIGN AND SUBMIT FOR APPROVAL A TEMPORARY PUMP DIVERSION SYSTEM TO DIVERT WATER FLOW AROUND CULVERT CONSTRUCTION AREA, INCLUDING REQUIRED SIZE/LOCATION OF DIVERSION PUMP, DISCHARGE PIPE SIZE, AS WELL AS CONTINGENCY PLANS IN THE EVENT OF PUMP FAILURE.
 - WATER LEVELS ARE SUBJECT TO CHANGE, THE CONTRACTOR IS RESPONSIBLE FOR MAKING DETERMINATION OF WATER LEVELS THAT WILL EXIST DURING CONSTRUCTION AND INSTALL AND REFORTIFY COFFER DAMS AS APPLICABLE.
- MEASURES THE CONTRACTOR SHALL BEGIN
 IMPLEMENTING THE DIVERSION AND DEWATERING PLAN
 FOLLOWING INSPECTION.
- I. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DISCHARGE PIPES, SUMP-HOLE, DIVERSION PUMPS AND RIP-RAP DISCHARGE SPLASH PAD PRIOR TO PLACING PIPE PLUGS, DRIVEN STEEL PLATES AND SAND BAG COFFERDAMS.
- 5. THE TEMPORARY DISCHARGE PIPE SHALL BE CONSTRUCTED OF DURABLE MATERIAL ABLE TO WITHSTAND ANTICIPATED SITE CONDITIONS.
- 6. WATER FROM THE WORK AREA SHALL BE PUMPED TO A DEWATERING CONTAINMENT AREA THE AREA SHALL BE LOCATED SUCH THAT THE WATER DRAINS BACK INTO THE GROUND AREA BELOW THE DOWNGRADIENT COFFERDAM.
- . AFTER THE CULVERT HAS BEEN REPLACED AND READY TO RECEIVE FLOW AND THE DISTURBED AREA HAS BEEN STABILIZED, THE DRIVEN STEEL SHEETS SHALL BE PULLED OUT AND "COFFERDAMS" SHALL BE REMOVED STARTING ON THE EASTERN END. THEN THE TEMPORARY DIVERSION SHALL BE REMOVED.

TEMPORARY DEWATERING NOTES:

- . THE PROP. TEMPORARY DEWATERING CONTAINMENT AREA. SIZE AND LOCATION OUTSIDE THE WETLAND AREA TO BE DETERMINED BY THE CONTRACTOR AND PRE-APPROVED BY THE ENGINEER'S DRAINAGE ENGINEER AND WETLAND SCIENTIST.
- CONTRACTOR SHALL EXCAVATE BACK THIS EMBANKMENT AREA AS REQUIRED TO INSTALL DEWATERING CONTAINMENT AREA AND RESTORE SLOPE UPON ITS REMOVAL.



WARE RIVER MP 19.84 & MP 19.96 CULVERT REPLACEMENT

2. THE TOE OF ANY SLOPE IS TO REMAIN AT LEAST ONE FOOT INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROLS WITH MATERIAL. ANY MATERIAL THAT IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR, OR ANY AGENT OF THE CONTRACTOR, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS ACCOMPLISHED, AT NO COST TO THE OWNER.

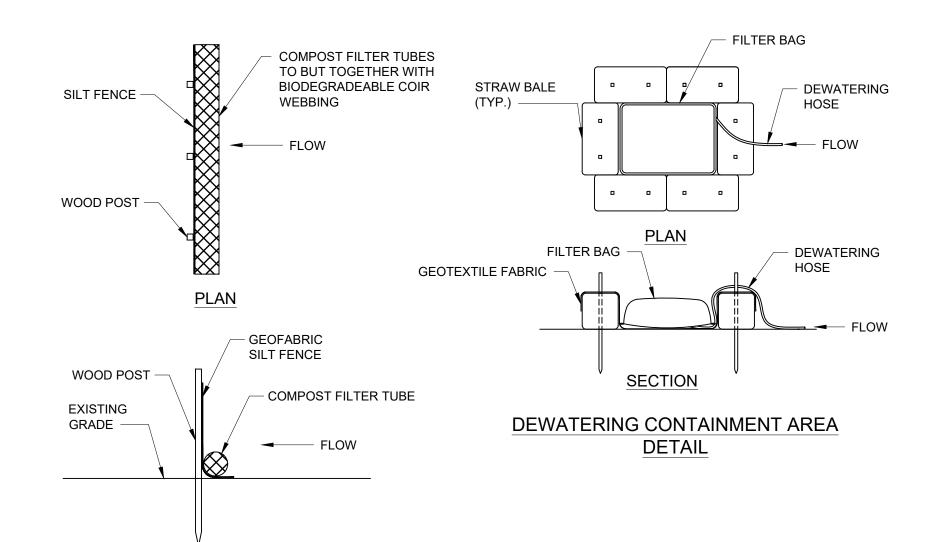
3. ADDITIONAL AND/OR REPLACEMENT EROSION CONTROLS SHALL BE INSTALLED AS CONDITIONS WARRANT, OR AS DIRECTED BY THE ENGINEER'S WETLAND SCIENTIST.

4. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT AND/OR REPLACE ALL CONTROLS AS NEEDED. MAINTENANCE WILL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS AND PERMIT CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR CARRYING OUT NECESSARY MAINTENANCE DURING ALL PHASES OF PROJECT CONSTRUCTION AND SHALL BE SUBJECT TO THE INSPECTION AND ACCEPTANCE OF THE ENGINEER.

5. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL, THROUGHOUT THE WORK AREA.

6. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AS DESCRIBED IN THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER'S WETLAND SCIENTIST.

7. DISTURBED SLOPES ALONG THE ROW EMBANKMENT WITHIN THE WORK ZONE WILL BE STABILIZED WITH LOAM AND SEED OR BALLAST AS DIRECTED BY THE ENGINEER.



SILT FENCE / COMPOST FILTER TUBE EROSION CONTROL BARRIER

SECTION



STONE CHECK DAM DETAIL



FY 2025-2026 CAPITAL IMPROVEMENT PROGRAM

WARE RIVER SECONDARY CULVERT REPLACEMENTS AT MP 19.84 & MP 19.96 IN GILBERTVILLE, MA

APPENDIX A

DEPARTMENT OF ARMY US ARMY CORPS OF ENGINEERS, NEW ENGLAND DISTRICT

MASSACHUSETTS GENERAL PERMIT
SELF VERIFICATION NOTIFICATION (SVN)





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ENVIRONMENTAL ESCURPTION

WATER

CONSTRUCTION MANAGEMENT

249 Vanderbilt Avenue Norwood, MA 02062 T: 781.278.3700 F: 781.278.5701 F: 781.278.5702 www.gza.com August 15, 2024 File No. 01.0174521.06

Massachusetts Department of Transportation Rail and Transit Division 10 Park Plaza Boston, MA 02116

Re: Ware River Secondary MP 19.96 Culvert Replacement Hardwick, Massachusetts 01031

To Whom It May Concern,

GZA GeoEnvironmental, Inc. (GZA) is writing to inform the Massachusetts Department of Transportation, Rail and Transit Division (MassDOT) (Applicant) of the completed notification to the U.S. Army Corps of Engineers (USACE), regarding necessary culvert replacement along the Ware River Secondary near mile post 19.96 in Hardwick, Massachusetts. According to USACE Self Verification procedures under Massachusetts General Permit, Appendix C – Self Verification (SVN), the SVN should be submitted within 30 days of the start of the USACE regulated activity, assuming the work qualifies under one or more General Permit Activities (GPs).

The signed SVN was submitted to USACE on November 22, 2023 under General Permit #23 – Linear Transportation Projects and Wetland/Stream Crossings, and #24 – Temporary Construction, Access, and Dewatering.

If you have any questions or would like more information, please do not hesitate to contact Anthony Damiano of GZA at (603) 213-2682 and Anthony.Damiano@gza.com.

Thank you in advance for your attention to this matter.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Anthony Damiano, WPIT

Project Manager

Stephen L. Lecco, AICP, CEP, PWS

tuln leur

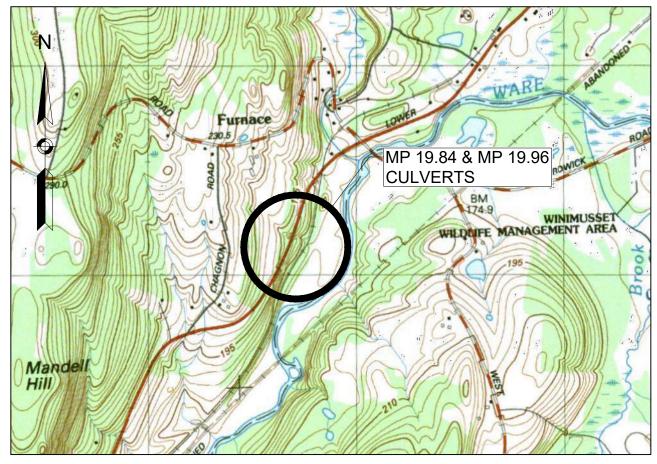
Associate Principal

Attachment: USACE Appendix C – Self Verification Form

	SE	U.S. Army Corps LF-VERIFICATIO						
Authority Principal Purpose Routine Uses Disclosure Instructions	DATA REQUIRED BY THE PRIVACY ACT OF 1974 Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act,S ection 404, 33 USC 1344; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. This information will be used in evaluating activities under Self-Verification procedures within Massachusetts. Routine uses will include: (1) Documenting compliance with the terms and conditions of the General Permit (GP) for activities that may require authorization pursuant to one or more of USACE's Regulatory authorities. (2) Records may be referred to other Federal, State, and local agencies for evaluation and enforcement purposes. Failure to fully comply and abide by the GP terms and conditions prior to commencing work and after completion project may result in formal enforcement action, up to and including monetary penalties and/or legal action, pursuant to 33 CFR Part 326. The permittee must complete ALL required sections of this document before commencing USACE-regulated activities. A copy of this completed SVN must be kept on site during construction and be made available for review by USACE and other Federal, State, & Local regulatory authorities at any time. Within 30 days of initiating project construction, the permittee shall submit the completed SVN to USACE. The SVN shall be submitted to USACE as ONE signed document that includes project plans and documentation that supports							
	each field (e.g., emails, letters, cenae-r-ma-sv@usace.army.m		• ,			ŭ	0,1	
		(ITEMS 1 THRU 3 T	O BE FILLE	ED BY USA	ACE)			
1. APPLICATION N	NO.	2. FIELD OFFICE COD	E		3. DATE RECEI	VED		
		APPLICANT AND	AGENT IN	FORMATION	ON .			
4. APPLICANT'S N First - Chalita Company- Mass		_{-ast-} Belfield		First - Kil	IT'S ADDRESS: mberly ,_ GZA GeoEn	_{Middle-} K vironmental	Last - Degutis	
E-mail Address - C	halita.belfield@dot.state.r	na.us		E-mail Address - kimberly.degutis@gza.com				
5. APPLICANT'S A Address- 10 Park				8. AGENT'S ADDRESS: Address- 249 Vanderbilt Ave				
City- Boston	State - MA Zip-	02116 Country-	USA	City- Norwood State - MA Zip- 0206 Country- US				
6. APPLICANT'S P	HONE NOs. w/AREA CODE			9. AGENTS PHONE NOs. w/AREA CODE				
a. Residence	b. Business 857.368.8957	c. Fax		a. Residence b. Business c. Fax 781.278.58				
	NA	ME, LOCATION, AND D	ESCRIPTIO	N OF PRO	OJECT SITE			
10. PROJECT NAI Ware River Sec	ME OR TITLE condary MP 19.96 Culvert	Replacement						
11. FILE NUMBER	(S) OF PREVIOUS USACE ACT	IONS ON THE SITE (if a	applicable)		E OF WATERBOD			
13. PROJECT CO	ORDINATES (in decimal degrees	;)		14. PROJECT STREET ADDRESS (if applicable)				
Latitude: ∘N	Longitude:	۰W		Address n/a				
42°20'26.22"N	72° 9'4	0.60"W		City - Hardwick State- MA Zip - 01031				
	ACTIVIT	Y TYPE, PROJECT IMPA	ACTS, AVO	IDANCE &	MINIMIZATION			
15. GENERAL PER	RMIT ACTIVITIES (CHECK ALL	THAT APPLY)	16. SUMMA	ARY OF PE	ROJECT IMPACTS	S (see instructions)		
1	11 16 16 17 17 18 18 18 19 15 12 20 1	21	Area (squ 1,154	uarefeet)	Length (linearfeet)	Volume (cubicyards) 10 / rip rap	Duration Perm	

a. Planss hall atl east contain thef o b. Alldi rect,i ndirect and secondaryi c. The size oft hei mpactar ea for ea d. Fordi schargeso f fillm aterial(§4) e. The duration ofeac hi mpact, peri f. Do activitiesw ith permanent impact g. Allaquat icr esources in the vicinit 18. AVOIDANCE & MINIMIZATION (BY)	THE BOXES BELOW,Y OU CERTIFY THESE ITEMS ARE COMPLETE) (see instructions) Illowing: Vicinity Map,P lanV iew, and TypicalC rossS ection Viewof the proposedac tivity. mpacts fromU SACEr egulated activities are shown on thepr oject plans. ach activity(acre, square feet,I inearf eet) are shown on the project plans. 04),t he volumeof fill material isi dentified on the projectpl ans. manentor temporary (Xda ys), is identified on thepr ojectpl ans. icts resulti n the lossof waters?I f so, thisi si dentified on the projectpl ans. typof the USACEr egulatedac tivities are delineated on the projectpl ans. CHECKING THE BOXES BELOW, YOU CERTIFY THESE CRITERIA ARE MET) (see instructions)
	o avoid and minimize impacts to aquatic resources. s of the U.S. has been reduced to only what is necessary to achieve the overall project purpose.
 	en taken to avoid and minimize impacts to aquatic resources through construction techniques and site access (e.g.,
Best Management Practices, Time	
d. All temporary impacts from USAC construction contours and condition	CE regulated activities will be restored upon completion of construction and the project area will be returned to pres.
СОМ	PLIANCE WITH FEDERAL REGULATIONS & SUPPLEMENTAL INFORMATION
19. DUE DILIGENCE(see instructions)	
and you must contact USACE to deter	nt compliance with the following Federal requirements. Construction may NOT begin if a PCN is/may be required, mine permitting requirements.D ocumentation that demonstrates how the activity complies with each field below shall a the instructions block. See each General Condition (GC) in the GP for how to comply with each requirement.
a. State Historic Preservation Officer	Per Appendix A, SHPO was notified and they did not respond with concerns within 30 days.
b. Massachusetts BUAR	Per Appendix A, BUAR was notified and they did not respond with concerns within 30 days.
c. Tribal Historic Preservation Officers	The Tribe(s) were notified and they didn't respond with concerns within 30 days.
d. Endangered Species Act - NOAA	The activity is not located within the ESA-listed Species Range.
e. Endangered Species Act - USFWS	The activity is not located within the ESA-listed Species Range.
f. Northern Long Eared Bat (ESA)	No effect determination reached with the Rangewide D-Key. See Instructions below.*
g. Essential Fish Habitat	The project footprint does not contain EFH (see EFH definition in the MA GP).
h. Wild & Scenic Rivers	There are no WSR's within 0.25 miles of the project area.
i. 401 Water Quality Certification 401	The activity qualifies under the general 401 WQC for the 2023 MA GPs.
	401 WQC/OOC File Number: OOC issued: 401issued:
j. Section 408 Permission	Not Required per GC 15a-f, no Federal Projects are within the project vicinity.
k. Coastal Zone	The project is not located within the coastal zone.
I. Construction Mats	Placement of construction mats complies with GC 22.
m.Time of Year Restrictions	N/A, the project is not located in a waterbody that has TOY restrictions.
n. Vernal Pools	Per GC 28, the project is not located in a vernal pool.
o. Sediment & Erosion Controls	Per GC 25, the activity uses BMPs to avoid/minimize sedimentation & erosion.
p. Stream/Wetland Crossings	The activity complies with all applicable terms in GC 31.
20. AQUACULTURE ACTIVITIES - GP	18 (see instructions)
	ation from the Massachusetts Division of Marine Fisheries was obtained prior to commencing work.
b. Coordination with the U.S. Coast 0	Guard pursuant to Private Aids to Navigation has occurred prior to commencing work.
c. If required, a MEPA Certificate wa	s obtained from the Massachusetts Environmental Protection Agency prior to commencing work. Select Option
d. The prospective permittee contact commencing work.	ed local authorities (e.g. harbormaster, select board, shellfish constable) for authorization of their facility prior to
21. ADDITIONAL INFORMATION/ATTA	CHMENTS (see instructions)
a. The project plans are enclosed ir	this SVN submittal (see block 17).
	funded through the Bipartisan Infrastructure Bill (also known as the Infrastructure Investment and Jobs Act).
	al approvals were acquired prior to starting construction in USACE jurisdiction.
d. After construction of the activity is	s completed, a complete Certificate of Compliance will be submitted to USACE.
22. IS THERE ANOTHER LEAD FEDER YES NO	RAL AGENCY:

ertify that I possess the authority to undertake th	ne work described herein or am	acting as the duly authorized agent of the applica	nt.
			- / /
Chalita Belfield	/1.16.23 DATE	1246 1/11/	11/17/23
SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE
SIGNATURES (see instructions)		/	
ereby certify that the information in this Self-Ver	ification Notification is complete	e and accurate. As the applicant or their duly autho	onized agent, I certify th
		s includes all applicable terms, general conditions,	
		ers Regulatory Program and other regulatory or ac	
		photograph site conditions. This consent to enter	
		ample, if the property is posted as "no trespassing"	this consent specifical
persedes and waives that prohibition and grants	permission to enter the proper	ty despite such posting.	. 1
		/ / hh	1.1/23
ChalitaBelfield	11.16.23		11/11/2
SIGNATURE OF APPLICANT	DATE	SIGNATURE OF ALSENT	DATE
ELLS C. Section 1001 provides that: Whoever in	any manner within the jurisdicti	on of any department or agency of the United State	s knowingly and willfull
		r makes any false, fictitious or fraudulent statemer	
		e, fictitious or fraudulent statements or entry, shall	
0,000 or imprisoned not more than five years or		2	
o,ooo or impricorrea not more and me years a			



LOCUS PLAN
SCALE: 1" = 1500'

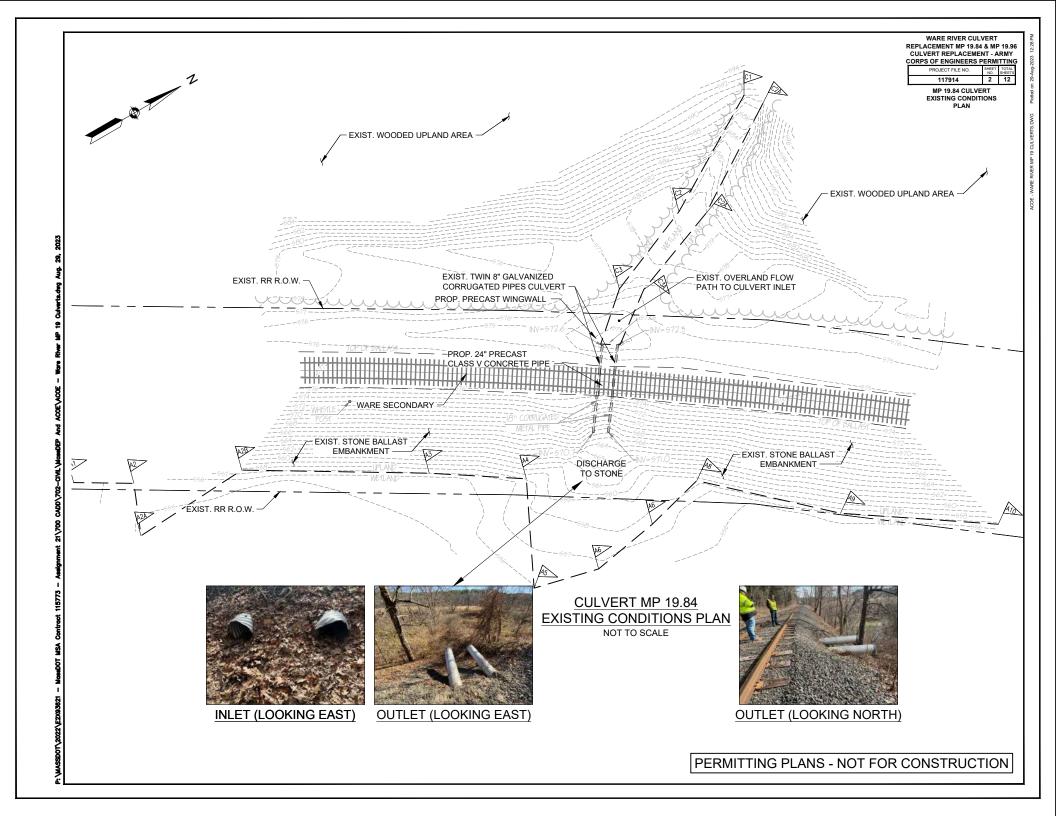
CULVERT REPLACEMENT PROJECT AT WARE RIVER SECONDARY MP 19.84 & MP 19.96 GILBERTVILLE, MA

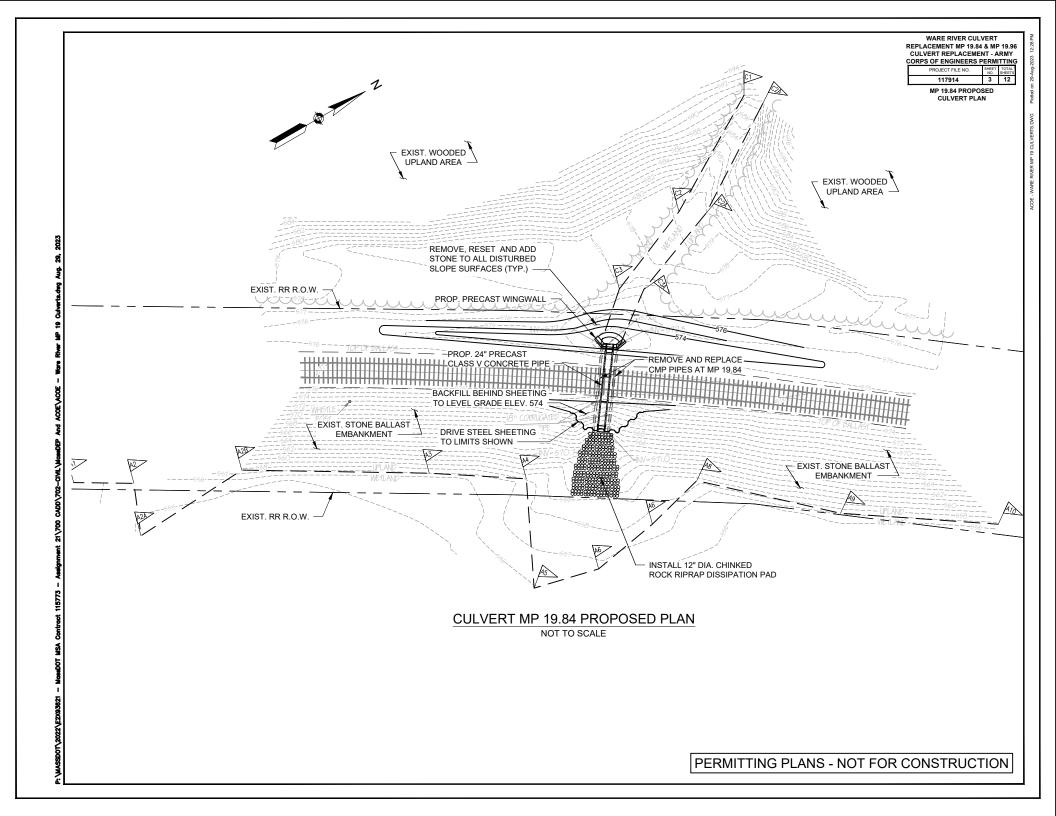
401 WATER QUALITY CERTIFICATE / 404 ARMY CORPS OF ENGINEERS PERMITTIING PLANS

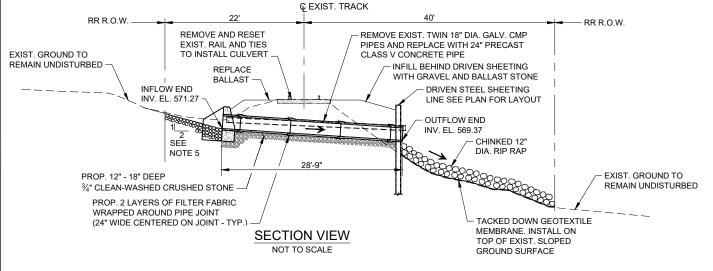
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION RAIL AND TRANSIT DIVISION

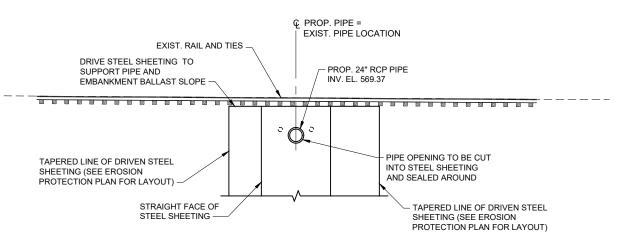
SEPTEMBER 2023

PERMITTING PLANS - NOT FOR CONSTRUCTION







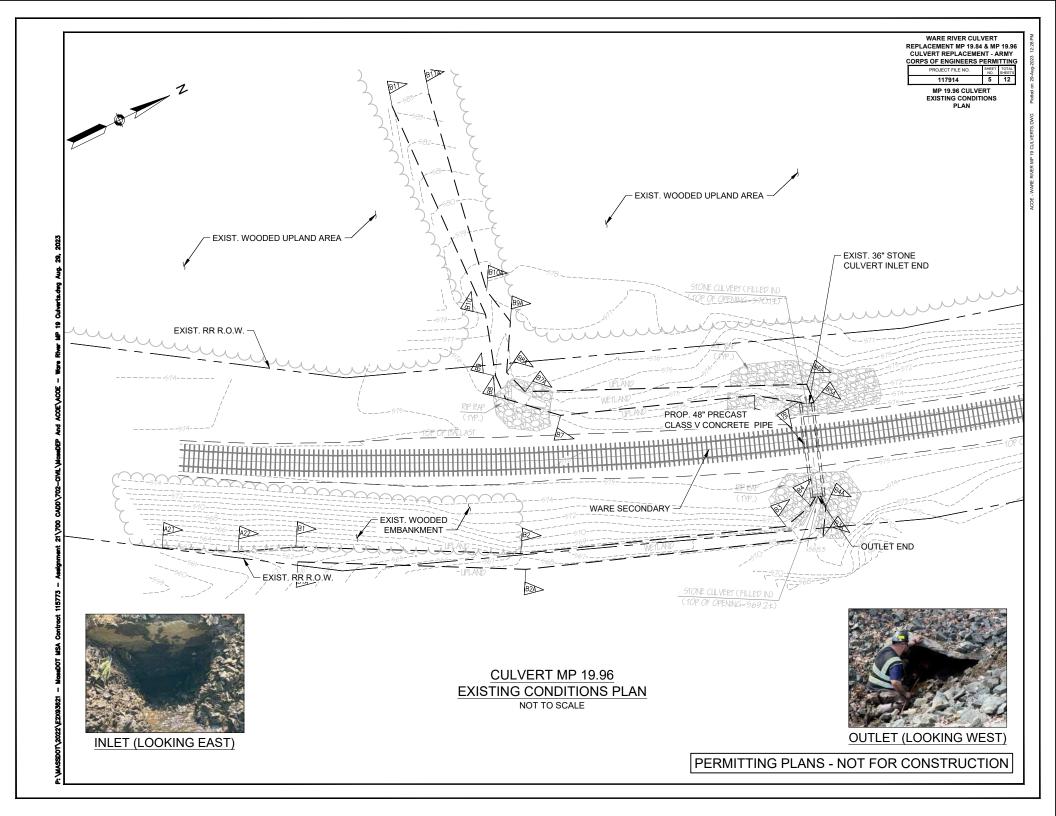


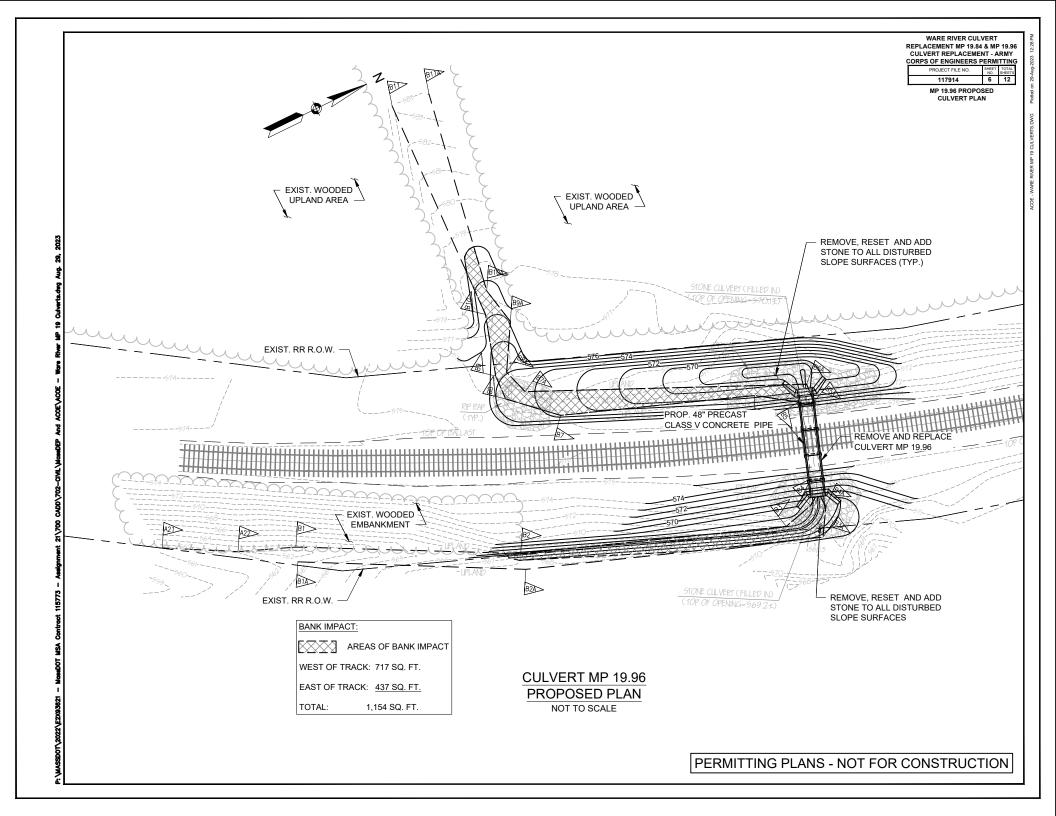
OUTLET END ELEVATION VIEW

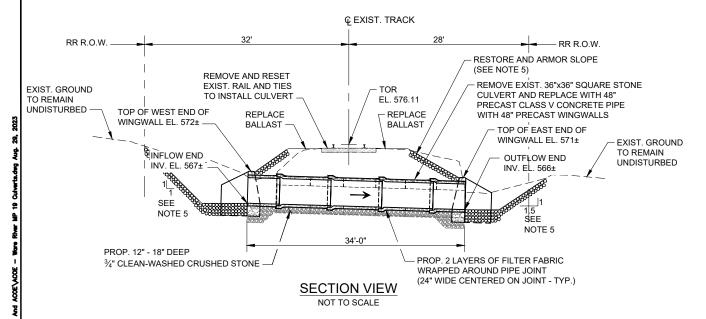
NOT TO SCALE

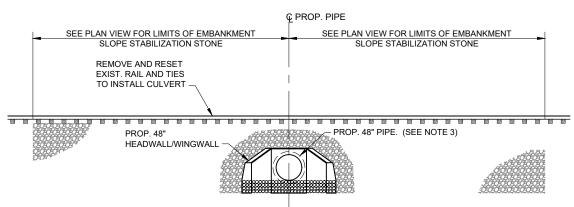
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NOT TO SCALE

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WARE RIVER CULVERT
REPLACEMENT MP 19.84 & MP 19.96
CULVERT REPLACEMENT - ARMY
CORPS OF ENGINEERS PORTITING

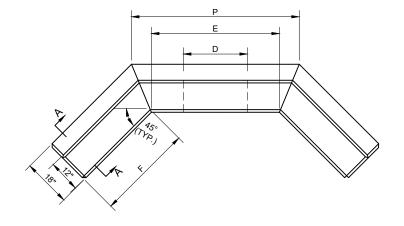
O O. E.IO.IIIEEIIO		
PROJECT FILE NO.	SHEET NO.	TOTAL
117914	8	12

PROPOSED MP 19.84 CULVERT WINGWALL DETAILS

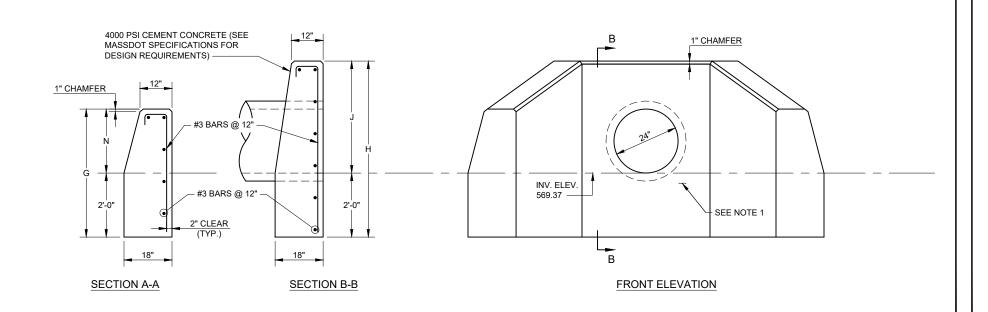
	1V:1.5H SLOPE										
D	E	G	Н	J	L	N	Р	F	CONC. MASONRY CY	STEEL LBS	
24"	4'-0"	4'-0"	5'-6"	3'-6"	1'-6"	2'-0"	5'-3"	3'-0"	2.6	45	

NOTE:

 CONTRACTOR SHALL INSTALL REPLACEMENT, PRECAST WINGWALL AND SEAL CONCRETE CULVERT END WITH WATERTIGHT GROUT SEALANT PRIOR TO REMOVAL OF COFFERDAM.



PLAN



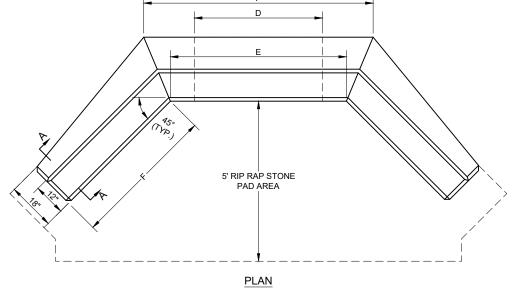
PERMITTING PLANS - NOT FOR CONSTRUCTION

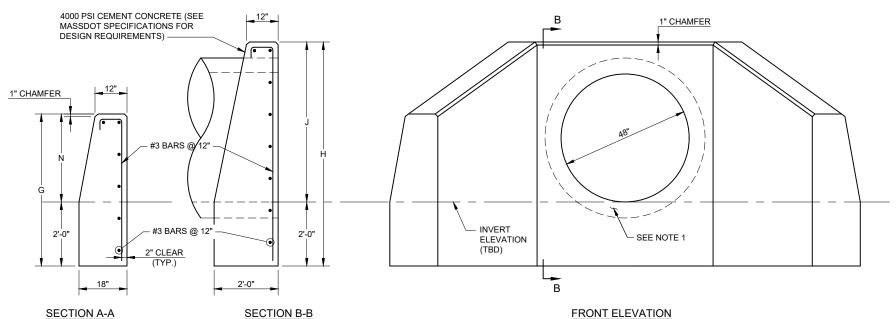
117914	9	12
PROPOSED MP 19.96 W	INGW	/ALI
DEDI ACEMENT DE	TAILS	

	1V:1.5H SLOPE									
D	D E G H J L N P F CONC. STEEL LBS CHASONRY LBS									
48"	5'-6"	4'-9"	7'-0"	5'-0"	2'-0"	2'-9"	7'-2"	4'-6"	5.19	65

NOTE:

CONTRACTOR SHALL INSTALL REPLACEMENT,
 PRECAST WINGWALL AND SEAL CONCRETE CULVERT
 END WITH WATERTIGHT GROUT SEALANT PRIOR TO
 REMOVAL OF COFFERDAM.





PERMITTING PLANS - NOT FOR CONSTRUCTION

TEMPORARY DIVERSION NOTES: 1. THE CONTRACTOR SHALL DESIGN AND SUBMIT FOR EXIST. WOODED UPLAND AREA APPROVAL A TEMPORARY PUMP DIVERSION SYSTEM TO DIVERT WATER FLOW AROUND CULVERT CONSTRUCTION AREA, INCLUDING REQUIRED SIZE/LOCATION OF EXIST. WOODED UPLAND AREA DIVERSION PUMP, DISCHARGE PIPE SIZE, AS WELL AS DRIVE TEMP, STEEL CONTINGENCY PLANS IN THE EVENT OF PUMP FAILURE. PLATES ACROSS STREAM FLOW LINE WATER LEVELS ARE SUBJECT TO CHANGE, THE CONTRACTOR IS RESPONSIBLE FOR MAKING DETERMINATION OF WATER LEVELS THAT WILL EXIST PROP. TEMP. DIVERSION DURING CONSTRUCTION AND INSTALL AND REFORTIFY REMOVE, RESET AND ADD SUMP PUMP PIT COFFER DAMS AS APPLICABLE. STONE TO ALL DISTURBED PROP. TEMP. DIVERSION PUMP SLOPE SURFACES (TYP.) UPON INSTALLATION OF ALL SEDIMENT CONTROL WITH SPILL PROTECTION PADS MEASURES THE CONTRACTOR SHALL BEGIN EXIST. RR R.O.W. IMPLEMENTING THE DIVERSION AND DEWATERING PLAN FOLLOWING INSPECTION. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DISCHARGE PIPES, SUMP-HOLE, DIVERSION PUMPS AND RIP-RAP DISCHARGE SPLASH PAD PRIOR TO PLACING PIPE PLUGS, DRIVEN STEEL PLATES AND SAND BAG REMOVE AND REPLACE COFFERDAMS. CMP PIPES AT MP 19.84 THE TEMPORARY DISCHARGE PIPE SHALL BE CONSTRUCTED OF DURABLE MATERIAL ABLE TO BACKFILL BEHIND SHEETING WITHSTAND ANTICIPATED SITE CONDITIONS. TO LEVEL GRADE ELEV. 574 WATER FROM THE WORK AREA SHALL BE PUMPED TO A EXIST. STONE BALLAST DEWATERING CONTAINMENT AREA THE AREA SHALL BE DRIVE STEEL SHEETING EMBANKMENT LOCATED SUCH THAT THE WATER DRAINS BACK INTO THE TO LIMITS SHOWN GROUND AREA BELOW THE DOWNGRADIENT COFFERDAM. AFTER THE CULVERT HAS BEEN REPLACED AND READY TO EXIST. STONE BALLAST RECEIVE FLOW AND THE DISTURBED AREA HAS BEEN **EMBANKMENT** STABILIZED, THE DRIVEN STEEL SHEETS SHALL BE PULLED OUT AND "COFFERDAMS" SHALL BE REMOVED STARTING ON THE EASTERN END. THEN THE TEMPORARY DIVERSION SHALL BE REMOVED. EXIST. RR R.O.W. PROP. TEMPORARY DIVERSION HOSE LINE (SEE TEMPORARY TEMPORARY DEWATERING NOTES: DIVERSION NOTES) 1. THE PROP. TEMPORARY DEWATERING CONTAINMENT AREA. SIZE AND LOCATION OUTSIDE THE WETLAND AREA INSTALL 12" DIA. CHINKED TO BE DETERMINED BY THE CONTRACTOR AND **ROCK RIPRAP DISSIPATION PAD** PRE-APPROVED BY THE ENGINEER'S DRAINAGE ENGINEER AND WETLAND SCIENTIST.

PLAN

NOT TO SCALE

LEGEND:

APPROXIMATE LIMIT OF RIGHT OF WAY

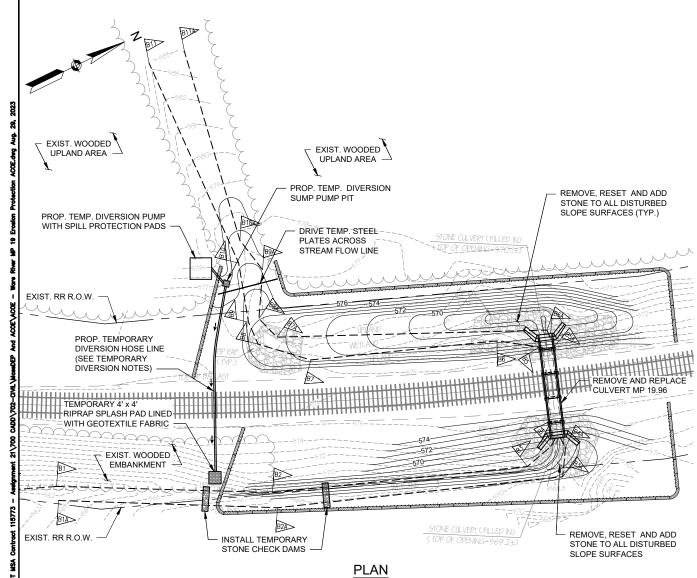
BANK FLAG AND BANK LINE

COMPOST FILTER TUBE EROSION PROTECTION

PERMITTING PLANS - NOT FOR CONSTRUCTION

REMOVAL.

PLAN



NOT TO SCALE

TEMPORARY DIVERSION NOTES:

- THE CONTRACTOR SHALL DESIGN AND SUBMIT FOR APPROVAL A TEMPORARY PUMP DIVERSION SYSTEM TO DIVERT WATER FLOW AROUND CULVERT CONSTRUCTION AREA, INCLUDING REQUIRED SIZE/LOCATION OF DIVERSION PUMP, DISCHARGE PIPE SIZE, AS WELL AS CONTINGENCY PLANS IN THE EVENT OF PUMP FAILURE.
- 2. WATER LEVELS ARE SUBJECT TO CHANGE, THE CONTRACTOR IS RESPONSIBLE FOR MAKING DETERMINATION OF WATER LEVELS THAT WILL EXIST DURING CONSTRUCTION AND INSTALL AND REFORTIFY COFFER DAMS AS APPLICABLE.
- UPON INSTALLATION OF ALL SEDIMENT CONTROL MEASURES THE CONTRACTOR SHALL BEGIN IMPLEMENTING THE DIVERSION AND DEWATERING PLAN FOLLOWING INSPECTION.
- THE CONTRACTOR SHALL INSTALL THE TEMPORARY DISCHARGE PIPES, SUMP-HOLE, DIVERSION PUMPS AND RIP-RAP DISCHARGE SPLASH PAD PRIOR TO PLACING PIPE PLUGS, DRIVEN STEEL PLATES AND SAND BAG COFFERDAMS.
- THE TEMPORARY DISCHARGE PIPE SHALL BE CONSTRUCTED OF DURABLE MATERIAL ABLE TO WITHSTAND ANTICIPATED SITE CONDITIONS.
- WATER FROM THE WORK AREA SHALL BE PUMPED TO A DEWATERING CONTAINMENT AREA THE AREA SHALL BE LOCATED SUCH THAT THE WATER DRAINS BACK INTO THE GROUND AREA BELOW THE DOWNGRADIENT COFFERDAM.
- 7. AFTER THE CULVERT HAS BEEN REPLACED AND READY TO RECEIVE FLOW AND THE DISTURBED AREA HAS BEEN STABILIZED, THE DRIVEN STEEL SHEETS SHALL BE PULLED OUT AND "COFFERDAMS" SHALL BE REMOVED STARTING ON THE EASTERN END. THEN THE TEMPORARY DIVERSION SHALL BE REMOVED.

TEMPORARY DEWATERING NOTES:

- THE PROP. TEMPORARY DEWATERING CONTAINMENT AREA. SIZE AND LOCATION OUTSIDE THE WETLAND AREA TO BE DETERMINED BY THE CONTRACTOR AND PRE-APPROVED BY THE ENGINEER'S DRAINAGE ENGINEER AND WETLAND SCIENTIST.
- CONTRACTOR SHALL EXCAVATE BACK THIS EMBANKMENT AREA AS REQUIRED TO INSTALL DEWATERING CONTAINMENT AREA AND RESTORE SLOPE UPON ITS REMOVAL.

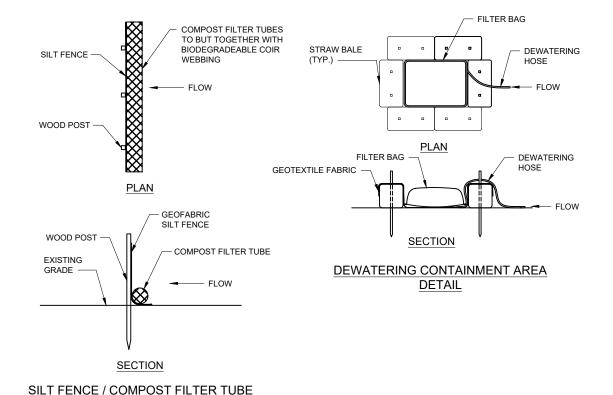
LEGEND

--- APPROXIMATE LIMIT OF RIGHT OF WAY

COMPOST FILTER TUBE EROSION PROTECTION

PERMITTING PLANS - NOT FOR CONSTRUCTION

EROSION PROTECTION DETAILS AND NOTES





EROSION CONTROL BARRIER

EROSION CONTROL NOTES:

- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT FOR ACCEPTANCE A GENERAL WORK SCHEDULE, CONSTRUCTION SEQUENCE AND PLAN WHICH INDICATES PLANNED IMPLEMENTATION OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES. THIS PLAN SHALL INCLUDE PROPOSED METHODS OF SOILS MANAGEMENT AND LEGAL OFFSITE DISPOSAL OF WASTE MATERIALS.
- 2. THE TOE OF ANY SLOPE IS TO REMAIN AT LEAST ONE FOOT INSIDE OF ALL EROSION CONTROLS, UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROLS WITH MATERIAL. ANY MATERIAL THAT IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR, OR ANY AGENT OF THE CONTRACTOR, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS ACCOMPLISHED, AT NO COST TO THE OWNER.
- ADDITIONAL AND/OR REPLACEMENT EROSION CONTROLS SHALL BE INSTALLED AS CONDITIONS WARRANT, OR AS DIRECTED BY THE ENGINEER'S WETLAND SCIENTIST.
- 4. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT AND/OR REPLACE ALL CONTROLS AS NEEDED. MAINTENANCE WILL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS AND PERMIT CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR CARRYING OUT NECESSARY MAINTENANCE DURING ALL PHASES OF PROJECT CONSTRUCTION AND SHALL BE SUBJECT TO THE INSPECTION AND ACCEPTANCE OF THE ENGINEER.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL, THROUGHOUT THE WORK
- SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AS DESCRIBED IN THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER'S WETLAND SCIENTIST.
- 7. DISTURBED SLOPES ALONG THE ROW EMBANKMENT WITHIN THE WORK ZONE WILL BE STABILIZED WITH LOAM AND SEED OR BALLAST AS DIRECTED BY THE ENGINEER.



FY 2025-2026 CAPITAL IMPROVEMENT PROGRAM

WARE RIVER SECONDARY CULVERT REPLACEMENTS AT MP 19.84 & MP 19.96 IN GILBERTVILLE, MA

APPENDIX B

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (MASSDEP)

SECTION 401 FOR

WATER QUALITY CERTIFICATION (WQC)





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Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Maura T. Healey Governor

Kimberely Driscoll Lieutenant Governor Rebecca L. Tepper Secretary

> Bonnie Heiple Commissioner

June 21, 2024

ISSUED ELECTRONICALLY ONLY

Chalita Belfield
Massachusetts Depart of Transportation
Rail and Transit Division
10 Park Plaza, Room 4160
Boston, Massachusetts 02116
Chalita.Belfield@mass.gov

Re: WATER QUALITY CERTIFICATION

Application for: BRP WW 10

MINOR FILL AND EXCAVATION PROJECT

Culvert Replacement at Ware River Secondary MP 19.96

Unnamed tributary to Ware River

Hardwick, Massachusetts

USACOE Application Number: n/a MassDEP Wetlands File Number: n/a

Authorization Number: WW10-0000092

Dear Chalita Belfield:

The Massachusetts Department of Environmental Protection (hereinafter the Department) has completed its Technical Review of the permit application for the project listed above. In accordance with the provisions of Massachusetts General Laws, Chapter 21, Sections 26 through and including 53 and the Regulations promulgated thereunder at 314 CMR 9.00, and its subpart at 314 CMR 9.09(1)(c); and Section 401 of the federal Clean Water Act as amended (33 USC §1251 et seq.), it has been determined that there is reasonable assurance this railroad culvert replacement will be conducted in a manner which will not violate applicable Surface Water Quality Standards at 314 CMR 4.00 Massachusetts Surface Water Quality Standards as implemented and supplemented, without limitation at 314 CMR 9.00; and other applicable requirements of state law.

Findings:

The Department received a complete Application on December 22, 2023. The Department subsequently conducted its administrative and technical review.

- The <u>Activity</u> (as defined at 314 CMR 9.02) described within the Water Quality Certification application and supplemental information (hereinafter the "application") will result in the <u>Discharge of Dredged or Fill Material</u> (hereinafter "Discharge") into and within <u>Waters of the United States within the Commonwealth</u> (hereinafter "WUSWC") and Waters of the Commonwealth (hereafter CW) [each as defined at 314 CMR 9.02] at the Project Locus described below;
- The application involves a portion of the Massachusetts Department of Transportation (MassDOT) railroad right-of-way located approximately 1,600 feet south of the intersection with Lower Road (Route 32) within the Town of Hardwick, Massachusetts (hereinafter the "Project Locus");
- The Project Locus contains and includes WUSWC which have been determined to meet the jurisdictional definition of Land Under Water (LUW) [as defined at 314 CMR 9.02];
- The Department hereby approves the following site plan(s) and documents as the "plan(s) of record":
 - "Massachusetts Department of Transportation Rail and Transit Division Culvert Replacement at Ware River Secondary MP 19.84 & MP 19.96 in the Town of Gilbertville, MA 401 Water Quality Certificate Permitting Plans", Dated April 10, 2024;
- The boundary of Land Under Water on the parcel in question is demarcated at the <u>High Water Mark</u> [as defined at 314 CMR 9.02], via flags B1 through and including B9 and flags B1A through and including B8A, as shown on the plan(s) of record;
- The area of Activity (314 CMR 9.02 Activity) constitute the "Project Site";
- The Department has determined that the project, as shown on the plan(s) of record and further described in supplemental information, is the "least environmentally damaging practicable alternative", and therefore meets the criteria at 314 CMR 9.06(1);
- The project, as approved in this Water Quality Certification, will result in the permanent Discharge into: 1,154 square feet of Land Under Water;
- Per the authority of the Department at 314 CMR 9.09(1)(d), the Department has determined that the proposed project maintains water quality within Land Under Water on the Site, and adequately minimizes damage to the Aquatic Ecosystem [as defined at 314 CMR 9.02] therein associated, through application of the mitigation proposed, and as conditioned by this Water Quality Certification;
- The Department has determined that proposed Activities will occur, at least in part, within WUSWC that is also designated <u>Rare Species Habitat</u> (as defined at 314 CMR 9.02); however, the Applicant has not consulted with the Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife (NHESP-DFW) regarding this project. In accordance with the Department's responsibilities and authority at 314 CMR 9.06(2), no Activity shall occur until NHESP-DFW has issued a written determination that the proposed Activities will not have any adverse effect on Rare Species Habitat.
- The Department has determined that the proposed crossing of a non-tidal stream shown on the plan(s) of record complies with 314 CMR 9.06(2)(b)1. and 4., as it meets the applicable provisions of the <u>Massachusetts River and Stream Crossing Standards</u> (as defined at 314 CMR 9.02).
- The Ware River (from the dam at South Barre to the confluence with the Quaboag River) and its associated tributaries and Bordering and Isolated Vegetated Wetlands are

classified in the Massachusetts Surface Water Quality Standards (314 CMR 4.00) as Class B, Warm Waters. As such, they are protected by the antidegradation provisions specified in 314 CMR 4.04(1). The antidegradation provisions are implemented and supplemented, without limitation, by 314 CMR 9.00, per 314 CMR 9.01(3). Therefore, appropriate care and diligence shall be taken by the permittee to assure that the proposed activity will be conducted in a manner that will avoid violations of these Standards.

Water Quality Certification Conditions for Authorization Number WW10-0000092

Therefore, based on information currently in the record, the Department **grants a Water Quality Certification** (hereinafter "Certification") for this project subject to the following conditions necessary to maintain water quality, to minimize impact to WUSWC, and to ensure compliance with appropriate state law:

Administrative and Procedural Conditions

- 1. This Certification does not relieve the permittee or any other person or party of the necessity of complying with all other applicable federal, state, or municipal statutes, ordinances, bylaws, or regulations, including those administered by the US Army Corps of Engineers. Activities, as defined at 314 CMR 9.02 Activity, conducted in accord with this Certification may only begin following the twenty-one (21) calendar day appeal period, as specified at 314 CMR 9.09(1)(e) and 314 CMR 9.10(2), and once all other required permits and licenses have been received. The permittee shall comply with all the Conditions of the "Department of the Army General Permits, Commonwealth of Massachusetts" (US Army Corps of Engineers, effective on June 2, 2023 (available from the US Army Corps of Engineers, New England District, Regulatory Division at www.nae.usace.army.mil). The General Permits Conditions therein hereby form a part of, and are inseparable from, this Certification.
- 2. This Certification does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of property rights.
- 3. The permittee, property owner, all successors and assigns in interest or control of the property subject to this Certification and any contractor or other person performing work conditioned by this Certification shall adhere to all applicable procedural and technical Conditions of this Certification. All work upon or within WUSWC allowed per this Certification shall be accomplished by reference to the plan(s) of record, and to the Conditions of this Certification. In the event of any conflict between the Conditions of this Certification and the plans of record, the Conditions of this Certification shall prevail.
- 4. The permittee shall arrange to procure and submit a good resolution electronic copy of the plans of record (as referenced above) by close-of-business on July 31, 2024. Upon review and acceptance of these plans of record by the Department, the permittee will affix a prominent "Approved by MassDEP on Month, Date 2024" label upon each sheet, and shall electronically resubmit the plans to the Department. A copy shall be retained by the Department, and a copy shall be retained by the permittee and the general contractor (or equivalent) and made available on appropriately sized paper when requested. Thereafter, all

- work conducted per this Certification shall fully and completely comply with these plans of record.
- 5. No less than 5 business days prior to the initiation of activities permitted by this Certification, the permittee shall arrange for a videoconference to be held with the Department's Western Region Wetlands Program. It shall be the responsibility of the permittee to propose a platform for this videoconference, with whatever security protocols they may require; and to ensure that their representative(s) (if any), as well as the general contractor, all appointed compliance monitors and environmental consultants required within this Certification (if any), and all other pertinent firms or persons, are in attendance. The permittee shall also ensure that all plans of record, contracts, and other pertinent documents are made available and viewable at this videoconference. No activities otherwise permitted by this Certification may proceed until this videoconference has been held.
- 6. The permittee shall notify the Department at least 48 hours prior to the commencement of construction that construction activities will commence.
- 7. Should contractors not be able to build according to the plan(s) of record (or any sheet, detail, schematic, or collar note therein) approved in this Certification, because said plans do not to accurately reflect site conditions (or standard construction methodologies, or practical construction considerations), the Department maintains the right to require an immediate cessation of work, in whole or in part. Should the Department, at its sole discretion, require such cessation, it shall do so in writing to the permittee, and such notice shall require adequate interim erosion and sedimentation controls and the submittal of proposed plan revisions that address the inadequacies, and result in the same or reduced Discharges to WUSWC as approved in the plan(s) of record. Activities shall not recommence until written approval to proceed has been issued by the Department.
- 8. The contractor(s) employed to execute earth-moving, vegetation removal, demolition, and/or motorized vehicle operation activities on the property subject to this Certification must be provided a copy of this Certification prior to the commencement of any such activities. Said contractor(s) may be held responsible with the permittee and property owner for violations by the contractor, and may be subject to penalties authorized by law and/or regulation for those violations.
- 9. This Certification specifically prohibits any <u>Activity</u> (as defined at 314 CMR 9.02) within or upon any WUSWC not specifically authorized by this Certification. Any failure to abide by the Conditions of this Certification that results in or contributes to a Discharge into WUSWC and CW constitutes a violation of this Certification. The permittee, property owner, and/or Contractor(s), may be subject to penalties authorized by law and/or regulation for those violations
- 10. As this project has been determined to meet the definition of <u>Single and Complete Project</u> at 314 CMR 9.02, the amount of proposed Discharge within WUSWC permitted by this Certification shall not be exceeded, regardless of future project modifications or any proposed modifications under Condition #11 of this Certification. This prohibition does not expire.
- 11. The Department shall be notified in writing of any proposed changes in construction methodology or design necessary to complete this project. Any proposed modifications involving additional Discharge are strictly prohibited. Proposed reduction of Discharge may be submitted under this Condition. Based upon submittals under this Condition, the

- Department will determine whether any proposed changes will require an "Amendment" to this Certification per the Department's authority at 314 CMR 9.09(2).
- 12. Failure to comply with this Certification is grounds for enforcement, including but not limited to civil and criminal penalties, under MGL c. 21, § 42; 314 CMR 9.00; MGL c. 21A, § 16; 310 CMR 5.00; or other possible actions/penalties as authorized by the General Laws of the Commonwealth of Massachusetts.
- 13. Department staff shall have the right to enter and inspect the property subject to this Certification at reasonable hours to evaluate compliance with the Conditions of this Certification.
- 14. This Water Quality Certification expires on June 1, 2028, unless the US Army Corps of Engineers, New England District, Regulatory Division specifically authorizes a different expiration date in writing in a Pre-Construction Notification <u>Authorization</u> or <u>Individual Permit</u> issued under § 404 of the federal Clean Water Act and the "Department of the Army General Permits, Commonwealth of Massachusetts" (US Army Corps of Engineers, effective June 2, 2023) issued thereunder.

Site Stabilization Conditions

- 15. This Certification prohibits the discharge of any amount of untreated sediment-laden stormwater at any time from within or adjacent to the Project Site to any WUSWC outside the demarcated limit-of-work, as shown on the plan(s) of record. This prohibition applies regardless of any structural or nonstructural stormwater best management practices otherwise required by this Certification or any other regulatory authority; and despite any singular precipitation event, climactic pattern, or related phenomena. Discharges of sediment-laden stormwater in violation of this Condition would constitute a violation of this Certification, and may result in enforcement actions taken by the Department, or other regulatory agencies as appropriate.
- 16. Prior to commencement of any work on the Site, adequate erosion and sedimentation control measures shall be implemented, including any necessary controls not specifically referenced in the plan(s) of record, and they shall be maintained in effect throughout the entire project, and until the Site has become stabilized with an adequate vegetative or landscaping cover. Structural failure of the erosion and sedimentation controls required by this Certification, and subsequent discharge of untreated stormwater to WUSWC, would constitute a violation of this Certification, and could result in enforcement actions taken by the Department.
- 17. Prior to the commencement of any earth-moving activity, a double-staked weed-free straw bale barrier (end to end) shall be placed along the limit of activity between all disturbed areas and WUSWC not subject to Discharge, regardless of what is shown on the plan(s) of record. Each bale shall be properly bound with at least two (2) lengths of twine or wire, and shall be entrenched to an excavated depth of at least four (4) inches, but no greater than six (6) inches. Excavated spoils from entrenching shall be deposited on the up-gradient side of the barrier. Bales shall be tightly butted against each other. A geotextile siltation fence shall be placed on the down-gradient side of the aforementioned straw bale barrier, and shall be entrenched in a like manner such that the base of the fabric lies below grade extending at least six (6) inches away from the fence. This fence shall be located no further than twelve (12) inches from the down-gradient side of the straw bale barrier. These erosion and sedimentation controls shall be constructed and installed per this Condition, and shall be

- maintained in proper functioning condition until all disturbed areas have been stabilized, or until the Department has determined that the control measures are no longer necessary.
- 18. Prior to the initiation of any activities otherwise permitted in this Certification the permittee shall insure that a "Construction Sequencing Plan" appropriate to project and site conditions is submitted to the Department and approved in writing by the Department. Such a plan shall minimally follow the US Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) "Construction Sequencing" Best Management Practice at https://www.epa.gov/system/files/documents/2021-11/bmp-construction-sequencing.pdf . In addition, at no time shall greater than ½ acre of land be disturbed or in a state of disturbance in any catchment at the site without the express written permission of the Department.

Compliance Monitoring Conditions

- 19. At least 10 days prior to the videoconference referenced in Condition #5, the permittee shall nominate a Primary Compliance Monitor in writing, who shall be subject to approval by the Department. The nominated primary compliance monitor shall have adequate and relevant education, training, and/or experience necessary to understand and perform the duties described herein, and the Department reserves the right to accept nominees based upon its review of such education, training, and/or experience, as documented in resumes submitted to the Department. The approved primary compliance monitor shall personally observe all "construction activity" at all times within all WUSWC and/or CW permitted by this Certification and subject to it; and are responsible for carrying out all relevant monitoring activities specified within this Certificate. Failure of the compliance Monitor to adequately perform the required duties in the opinion of the Department shall be grounds for revoking the approval of the Compliance Monitor.
- 20. The permittee may also nominate Alternative Compliance Monitor(s). The nominated Alternative compliance monitor(s) shall be nominated and subject to the same approval and conditions as the primary compliance monitor. The Alternative Compliance Monitor(s) may perform the duties of the Primary Compliance Monitor in the event the Primary Compliance Monitor is unavailable. However, the Alternative Compliance Monitor(s) may not serve as the Primary Compliance Monitor without the express written approval of the MassDEP. In all cases, the Primary Compliance Monitor is responsible for ensuring the duties of any Alternative Compliance Monitor are adequately performed.
- 21. For purposes of this Certification, "construction activities" are all activities (as defined at 314 CMR 9.02 <u>Activity</u>). These Activities include:
 - a. mechanized vegetation removal and grubbing/land clearing;
 - b. the placement and the extraction of the proposed cofferdam;
 - c. placement of any material into standing water within WUSWC;
 - d. placement of fill within WUSWC and/or CW;
 - e. the extraction of temporary fill from any WUSWC;
 - f. The removal and placement of any material or substance for purposes of mitigation which is required in this Certification

The compliance monitor(s) are not required to be present for any work:

- g. taking place within the area dewatered by the proposed temporary cofferdam;
- 22. In addition to the above, the compliance monitor(s) shall conduct a thorough inspection of the site within 24 hours of any rainfall which equals or exceeds 0.5 inches within 24 hours (as measured from the nearest applicable station on the NOAA "Daily Summaries Map", see https://www.ncei.noaa.gov/maps/daily-summaries/) or at least once every calendar week during active construction in the absence of a threshold rainfall event as outlined above.
- 23. While performing their inspection the primary compliance monitor shall confirm that all relevant Conditions of this Certification are being complied with. The compliance monitor(s) shall sufficiently document any and all observed conditions of the site as well as any noncompliance with any of the Conditions of this Certification. The compliance monitor(s) shall submit such electronic documentation at least once per week during active construction to: mary.grover@mass.gov. This electronic documentation shall be in the form of a concise written report which adequately describes the activities and/or conditions and cites the Condition(s) which have been violated (if appropriate), and shall always be accompanied by the submittal of digital photographs, which shall clearly and adequately show the nature and extent of activities and/or conditions and support the written report.
- 24. In the event non-compliant activities or events have or are occurring, the electronic documentation shall be submitted when the non-compliant activity or event is first noted by the compliance monitor. If, in unusual circumstances, this is not physically possible, then the compliance monitor shall submit electronic documentation within no more than four (4) hours of the initial observance of the noncompliant activity and/or condition. Within this same time period, the compliance monitor shall also report the noncompliant activities and/or conditions via telephone to each of the following Department staff: Mary Grover at 617-352-9918.
- 25. Failure of any compliance monitor to fulfill these duties in compliance with the Conditions of this Certificate is grounds for an enforcement action against the permittee. The permittee, its employees, agents, successors, and assigns shall not impede the compliance monitor(s) in the performance of their duties under this Certification. Any change in staffing of the compliance monitor(s) must be approved by the Department.

Prohibitions and Mitigation for Activities in Land Under Water

25. Activities below the High Water Mark [as defined at 314 CMR 9.02] and within Land Under Water associated with the unnamed tributary to the Ware River, shall take place between July 1st and September 30th of any given year unless otherwise approved by the Department in writing. Work within Land Under Water may continue after September 30th only if the area of proposed work is hydrologically isolated through mechanical means from surface water after June 30th but before October 1st of that year, as confirmed and approved through Condition #11 of this Certification. Any proposed modification under Condition #11 of this Certification not conforming to this Condition of the Certification shall only occur after a written request has been submitted to the Department. The request shall specify the exact position and extent of any proposed in-stream work not in conformance with the above time-of-year (TOY) window; and shall detail why such work must take place outside the specified time period and any additional erosion and sedimentation controls necessary as a result of

- such proposed work. The Department reserves the right to deny any such request if a practicable alternative exists, as determined solely by the Department.
- 33. The use of geotextiles below the High Water Mark [as defined at 314 CMR 9.02] and within Land Under Water associated with the unnamed tributary to the Ware River is prohibited.
- 35. The permittee shall maintain the proposed embedded culvert in working order at all times. Failure to maintain said culvert such that the culvert no longer functions as designed; or no longer discharges surface water downstream to other jurisdictional WUSWC (as defined at 314 CMR 9.02) shall not constitute any change to the legal or regulatory status of any jurisdictional WUSWC, either upstream or downstream of said culvert as determined by this Certification. Upon the expiration of this Certification, all jurisdictional WUSWC shall be determined as if the culvert were still properly functioning as required by this Condition. This Condition is ongoing and does not end upon the completion of this project or the expiration of this Certification.

Compliance with Natural Heritage and Endangered Species Program

36. In accordance with the Department's responsibilities and authority at 314 CMR 9.06(2), no work shall occur until Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife (NHESP-MassDFW) has issued a written determination that the proposed Activities will not have any adverse effect on Rare Species Habitat. If NHESP-MassDFW issues a no adverse effect determination, the permittee shall fully comply with all requirements specified within the "adverse effect determination."

Appeal Rights

Certain persons shall have a right to request an adjudicatory hearing concerning certifications by the Department when an application is required:

- a. The applicant or property owner;
- b. Any person aggrieved by this certification who has submitted written comments during the public comment period;
- c. Any ten (10) citizens of the Commonwealth pursuant to MGL c. 30A where a group member has submitted written comments during the public comment period; or
- d. Any governmental body or private organization with a mandate to protect the environment that has submitted written comments during the public comment period.

Any person aggrieved, any ten (10) citizens of the Commonwealth, or a governmental body or private organization with a mandate to protect the environment may appeal without having submitted written comments during the public comment period only when the claim is based on new substantive issues arising from material changes to the scope or impact of the activity and not apparent at the time of public notice. To request an adjudicatory hearing pursuant to MGL c. 30A, § 10, a Notice of Claim to an Adjudicatory Hearing must be made in writing, provided that the request is made by certified mail or hand delivery to the Department, with the appropriate

filing fee specified within 310 CMR 4.10 along with a Departmental Action Fee Transmittal Form within twenty-one (21) days from the date of issuance of this Certificate, and addressed to:

Massachusetts Department of Environmental Protection Case Administrator One Winter Street, 2nd Floor Boston, MA 02108

A copy of the request shall at the same time be sent by certified mail or hand delivery to the issuing office of the Wetlands and Waterways Program at:

Massachusetts Department of Environmental Protection Springfield State Office Building 436 Dwight Street Springfield, MA 01103

A Notice of Claim for Adjudicatory Hearing shall comply with the Department's Rules for Adjudicatory Proceedings, 310 CMR 1.01(6), and shall contain the following information pursuant to 310 CMR 4.10(3):

- a. The §401 Certification Authorization Number and DEP Wetlands Protection Act File Number;
- b. The complete name of the applicant and address of the project;
- c. The complete name, address, and facsimile and telephone numbers of the party filing the request, and, if represented by counsel or other representative, the name, facsimile and telephone numbers, and address of the attorney;
- d. If claiming to be a party aggrieved, the specific facts that demonstrate that the party satisfies the definition of "aggrieved person" found at 314 CMR 9.02;
- e. A clear and concise statement that an adjudicatory hearing is being requested;
- f. A clear and concise statement of (1) the facts which are grounds for the proceedings, (2) the objections to this Certificate, including specifically the manner in which it is alleged to be inconsistent with the Department's Water Quality Regulations, 314 CMR 9.00, and (3) the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written Certification; and
- g. A statement that a copy of the request has been sent by certified mail or hand delivery to the applicant, the owner (if different from the applicant), the conservation commission of the city or town where the activity will occur, the Massachusetts Department of Conservation and Recreation (when the Certificate concerns projects in Areas of Critical Environmental Concern), the public or private water supplier where the project is located (when the certificate concerns projects in Outstanding Resource Waters), and any other entity with responsibility for the resource where the project is located.

The hearing request along with a Departmental Action Fee Transmittal Form and a valid check or money order payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

Commonwealth of Massachusetts Department of Environmental Protection Commonwealth Master Lockbox Post Office Box 4062 Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority. The Department may waive the adjudicatory-hearing filing fee pursuant to 310 CMR 4.06(2) for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

If you have further questions regarding this Certification, please contact Mary Grover at 617-352-9918.

Sincerely,

Michael Methyth

Michael McHugh Chief, Division of Wetlands and Waterways

ISSUED ELECTRONICALLY ONLY

ec: Hardwick Conservation Commission conservation@townofhardwick.com

Anthony Damiano GZA Anthony.Damiano@gza.com

Paul Maniccia, Supervisor
Regulatory Division, Permits and Enforcement Branch A
United States Department of the Army
New England District, Corps of Engineers
Paul.M.Maniccia@usace.army.mil

Water Quality Certification for Authorization Number WW10-0000092

Timothy McGuire, Endangered Species Review Biologist
Natural Heritage and Endangered Species Program of the
Massachusetts Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581
Timothy.McGuire2@mass.gov

WARE RIVER MP 19.84 & MP 19.96 CULVERT REPLACEMENT PERMITTING PLANS

PROJECT FILE NO. SHEET NO. SHEETS 117914 1 11

COVER SHEET

CULVERT REPLACEMENT AT WARE RIVER SECONDARY MP 19.84 & MP 19.96

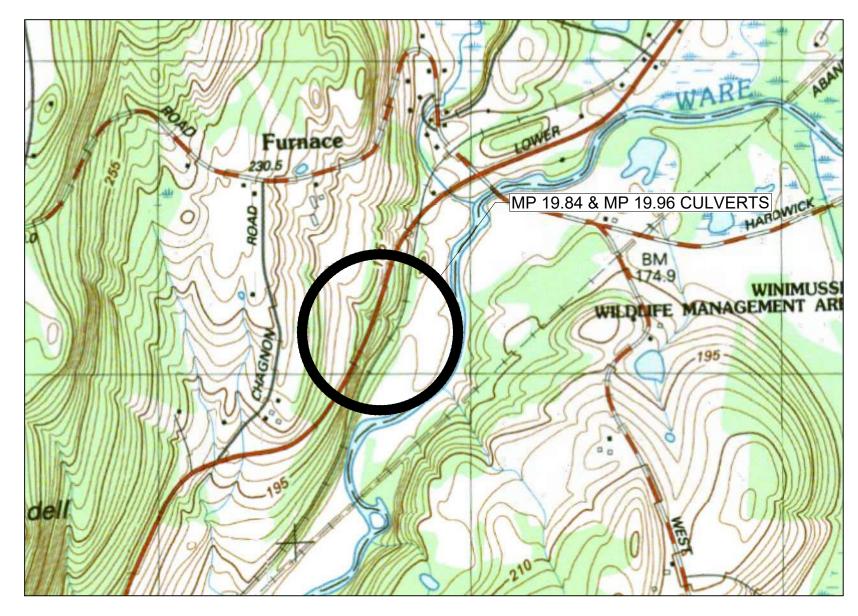
GILBERTVILLE, MA

401 WATER QUALITY CERTIFICATE PERMITTING PLANS

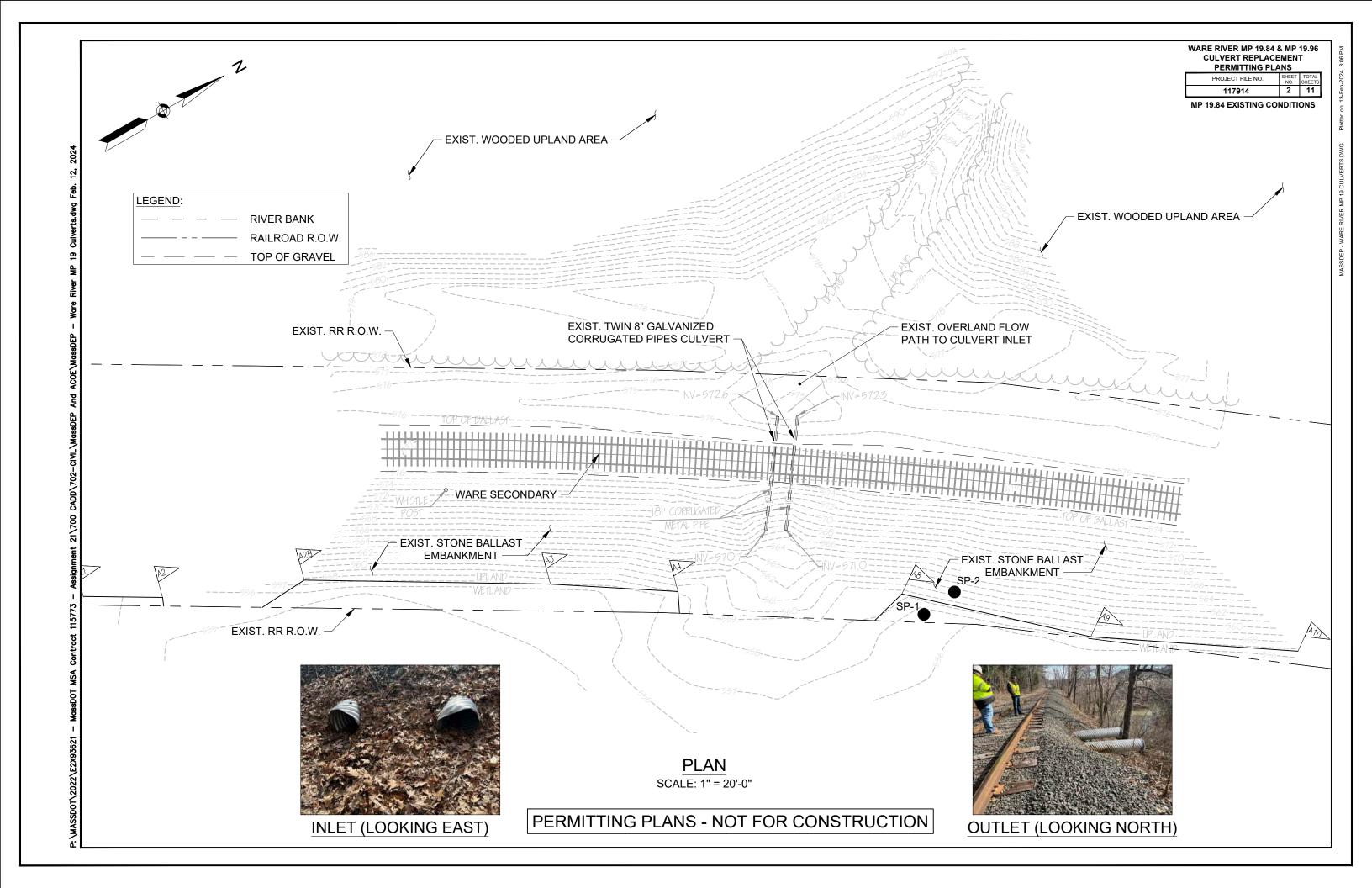
INDEX OF DRAWINGS

SHEET TITLE

- 1 COVER SHEET
- 2 MP 19.84 EXISTING CONDITIONS
- 3 MP 19.84 PROPOSED PRECAST PIPE CULVERT REPLACEMENT
- 4 MP 19.96 EXISTING CONDITIONS
- MP 19.96 PROPOSED PRECAST PIPE
- REPLACEMENT
- 6 PROPOSED MP 19.84 WINGWALL DETAILS
- 7 PROPOSED MP 19.96 WINGWALL DETAILS
- 8 MP 19.84 EROSION PROTECTION PLAN
- 9 MP 19.96 EROSION PROTECTION PLAN
- 10 EROSION PROTECTION DETAILS
- 11 EROSION CONTROL AND PLANTING NOTES

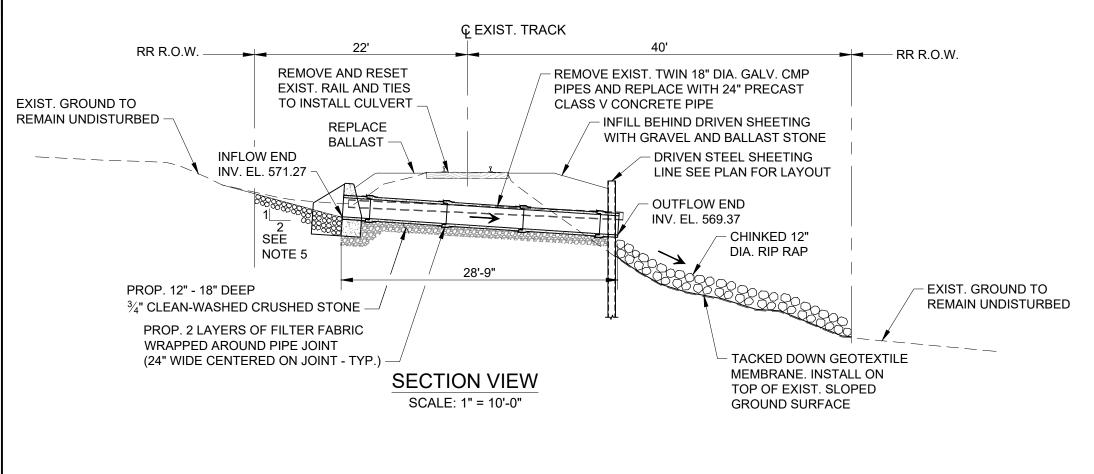


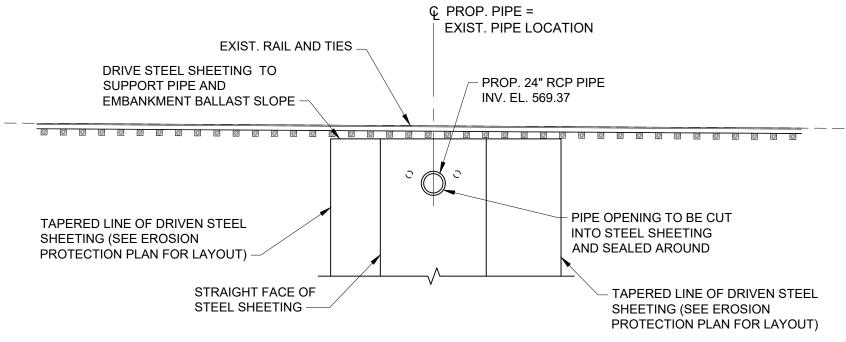
LOCUS PLAN
SCALE: 1" = 1000'





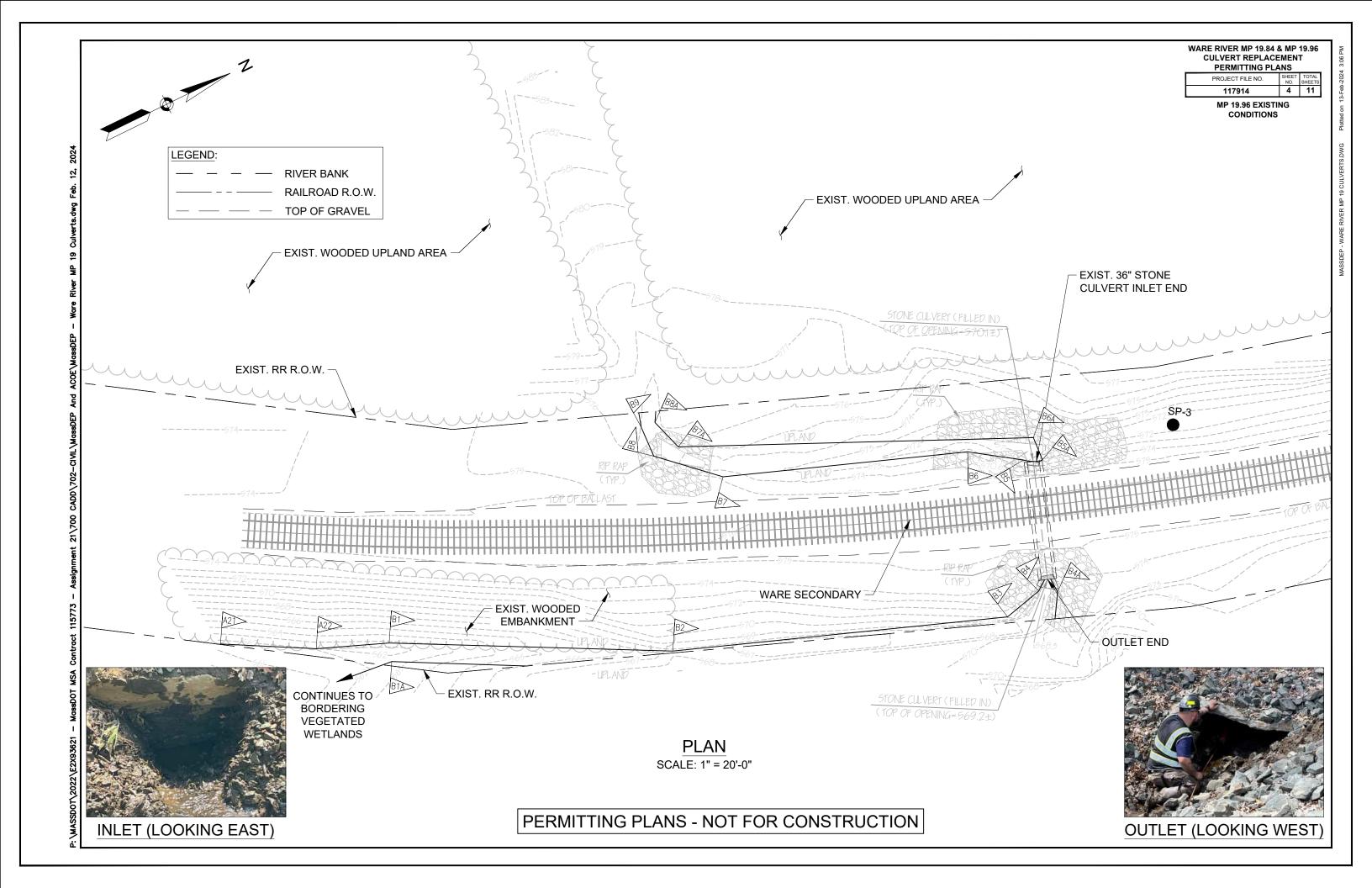
- 1. ALL CULVERT AND WINGWALL INSTALLATION WORK SHALL BE PERFORMED IN THE DRY WITH TEMPORARY COFFERDAMS, DEWATERING PUMPING, AND ALL EROSION CONTROL MEASURES IN PLACE AND MAINTAINED FOR THE DURATION OF THE WORK.
- 2. CONTRACTOR SHALL MINIMIZE ENCROACHMENT INTO THE ADJACENT WATER AND NATURAL VEGETATION TO THE GREATEST EXTENT POSSIBLE TO LIMIT SOIL AND WATER DISTURBANCE.
- 3. CONTRACTOR SHALL REMOVE AND TEMPORARILY STOCKPILE EMBANKMENT SLOPE SOILS AND SURFACE BALLAST TO BE RESET TO MATCH EXISTING CONDITION FOLLOWING CULVERT INSTALLATION WORK AT THE DIRECTION OF THE ENGINEER ONLY.
- I. ANY ADDITIONAL PROCESSED GRAVEL, CRUSHED STONE, AND STONE BALLAST DETERMINED TO BE NEEDED BY THE CONTRACTOR SHALL BE APPROVED BY MASSDOT'S ENGINEER PRIOR TO ORDERING FOR DELIVERY TO THE SITE.
- 5. CONTRACTOR SHALL PLACE AND EMBED STONE ARMOR RIP RAP ON BOTH SIDES OF THE CULVERT TO LIMITS SHOWN. STONES SHALL BE CHINKED IN TO ELIMINATE ANY DISLODGING OR SLIP-FAILING OF THE RECONSTRUCTED SLOPE.
- ALL EMBANKMENT FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED TWELVE (12) INCHES IN LAYERED DEPTH FOLLOWING COMPACTION. SUBSEQUENT LAYERS SHALL ONLY THEN PLACED AND COMPACTED AFTER THE PREVIOUS LOWER FILL LAYER IS FULLY COMPACTED IN PLACE.





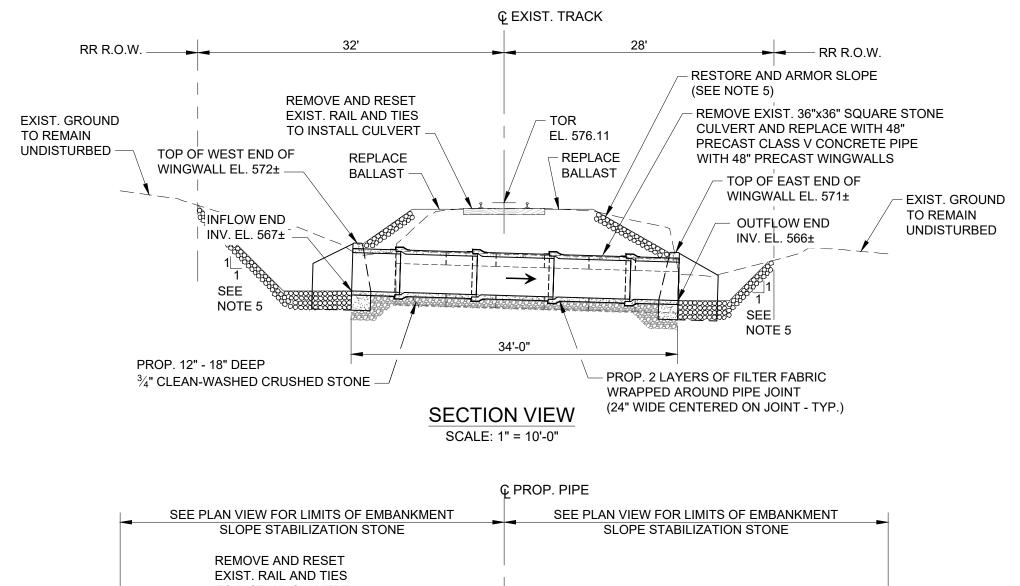
OUTLET END ELEVATION VIEW

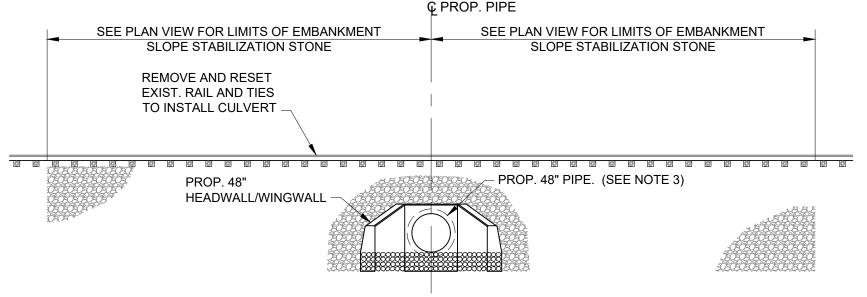
SCALE: 1" = 10'-0"



NOTES:

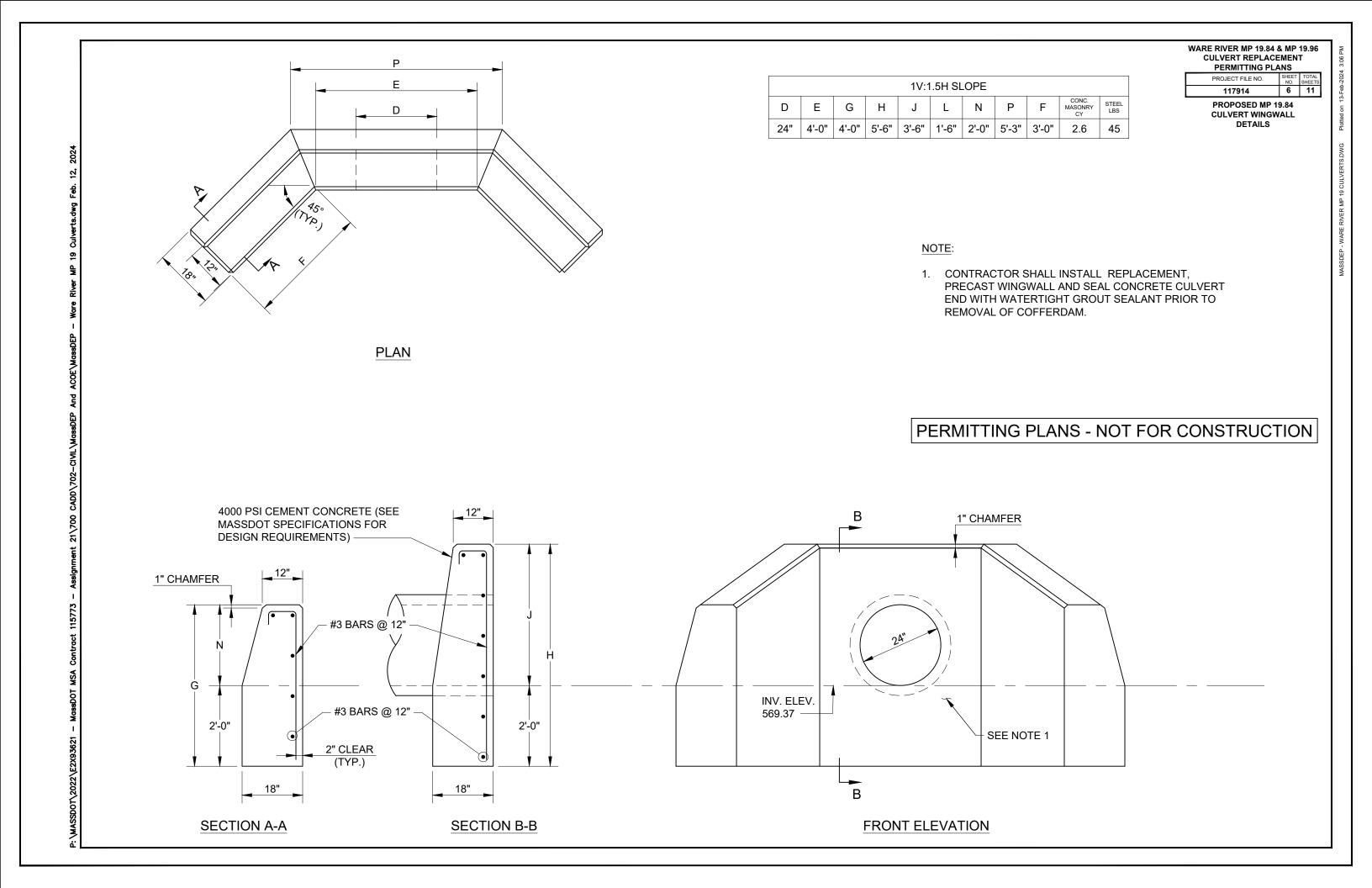
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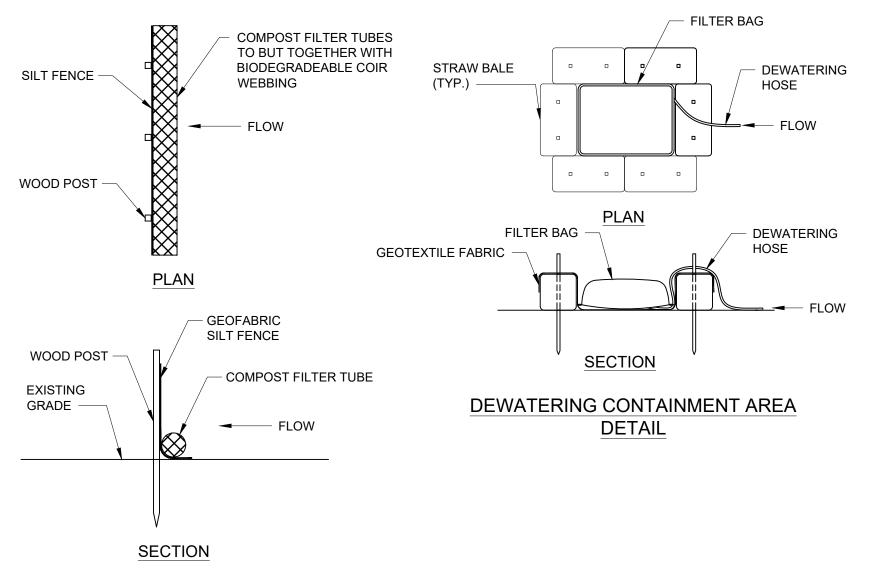
OUTLET END ELEVATION VIEW

SCALE: 1" = 10'-0"



EROSION CONTROL NOTES:

- 1. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT FOR ACCEPTANCE A GENERAL WORK SCHEDULE, CONSTRUCTION SEQUENCE AND PLAN WHICH INDICATES PLANNED IMPLEMENTATION OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES. THIS PLAN SHALL INCLUDE PROPOSED METHODS OF SOILS MANAGEMENT AND LEGAL OFFSITE DISPOSAL OF WASTE MATERIALS.
- 2. THE TOE OF ANY SLOPE IS TO REMAIN AT LEAST ONE FOOT INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROLS WITH MATERIAL. ANY MATERIAL THAT IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR, OR ANY AGENT OF THE CONTRACTOR, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS ACCOMPLISHED, AT NO COST TO THE OWNER.
- 3. ADDITIONAL AND/OR REPLACEMENT EROSION CONTROLS SHALL BE INSTALLED AS CONDITIONS WARRANT, OR AS DIRECTED BY THE ENGINEER'S WETLAND SCIENTIST.
- 4. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT AND/OR REPLACE ALL CONTROLS AS NEEDED. MAINTENANCE WILL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS AND PERMIT CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR CARRYING OUT NECESSARY MAINTENANCE DURING ALL PHASES OF PROJECT CONSTRUCTION AND SHALL BE SUBJECT TO THE INSPECTION AND ACCEPTANCE OF THE ENGINEER.
- 5. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL, THROUGHOUT THE WORK AREA.
- 6. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AS DESCRIBED IN THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER'S WETLAND SCIENTIST.
- 7. DISTURBED SLOPES ALONG THE ROW EMBANKMENT WITHIN THE WORK ZONE WILL BE STABILIZED WITH LOAM AND NATIVE SEED OR BALLAST AS DIRECTED BY THE ENGINEER.



SILT FENCE / COMPOST FILTER TUBE EROSION CONTROL BARRIER



STONE CHECK DAM DETAIL

- 1. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT FOR ACCEPTANCE A GENERAL WORK SCHEDULE, CONSTRUCTION SEQUENCE AND PLAN WHICH INDICATES PLANNED IMPLEMENTATION OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES. THIS PLAN SHALL INCLUDE PROPOSED METHODS OF SOILS MANAGEMENT AND LEGAL OFFSITE DISPOSAL OF WASTE MATERIALS.
- FOR EROSION CONTROL INSTALLATION REQUIREMENTS, REFER TO SHEET 10.
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WARE RIVER MP 19.84 & MP 19.96 CULVERT REPLACEMENT PERMITTING PLANS

PROJECT FILE NO. SHEET NO. SHEET NO. 117914 11 11

EROSION CONTROL PLANTING NOTES