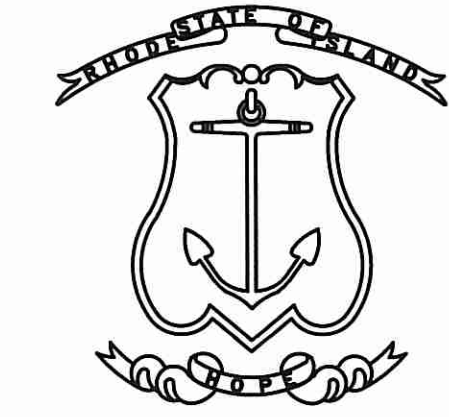


FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	STP-HSIP(099)	2022	1	19

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET AND INDEX
2	STANDARD PLAN SYMBOLS & STANDARD LEGEND
3	STANDARD NOTES NO. 1
4	STANDARD NOTES NO. 2
5	STANDARD BRIDGE NOTES NO. 1
6	STANDARD BRIDGE NOTES NO. 2
7	JOB SPECIFIC PLAN SYMBOLS LEGEND & NOTES
8	TYPICAL SECTION
9	TYPICAL DETAILS
10	GENERAL PLAN
11	PROFILE
42	TEMPORARY TRAFFIC CONTROL PLAN NO. 4
43	TEMPORARY TRAFFIC CONTROL PLAN NO. 2
14	BRIDGE GENERAL PLAN
15	BRIDGE LONGITUDINAL SECTION
16	BRIDGE TYPICAL SECTION
17	DEMOLITION PLAN
48	FOUNDATION PLAN
49	END-POST-DETAILS
20	BORING LOGS
24	CROSS-SECTIONS

STATE OF RHODE ISLAND



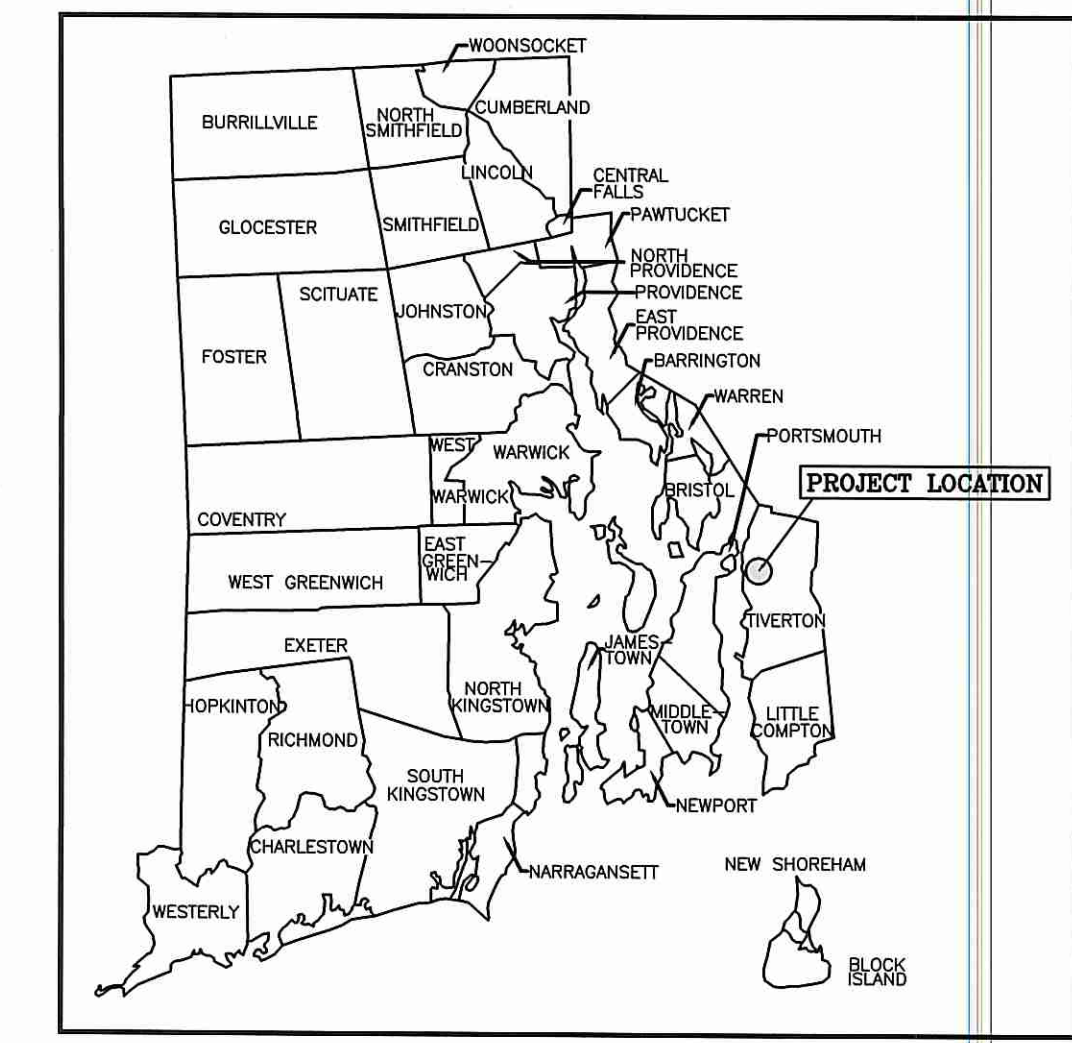
DEPARTMENT OF TRANSPORTATION
 PLAN, PROFILE AND SECTIONS OF PROPOSED
 DEPARTMENT OF PUBLIC WORKS
 REPLACEMENT OF FISH ROAD BRIDGE NO. 1242

FISH ROAD TO BULGARMARSH ROAD

TIVERTON, RHODE ISLAND
 NEWPORT COUNTY

R.I. CONTRACT NO. 2022-CB-018 F.A. PROJECT NO. XXX-XXXX(XXX)

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS
 SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED MARCH 2018, WITH ALL REVISIONS AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISIONS.



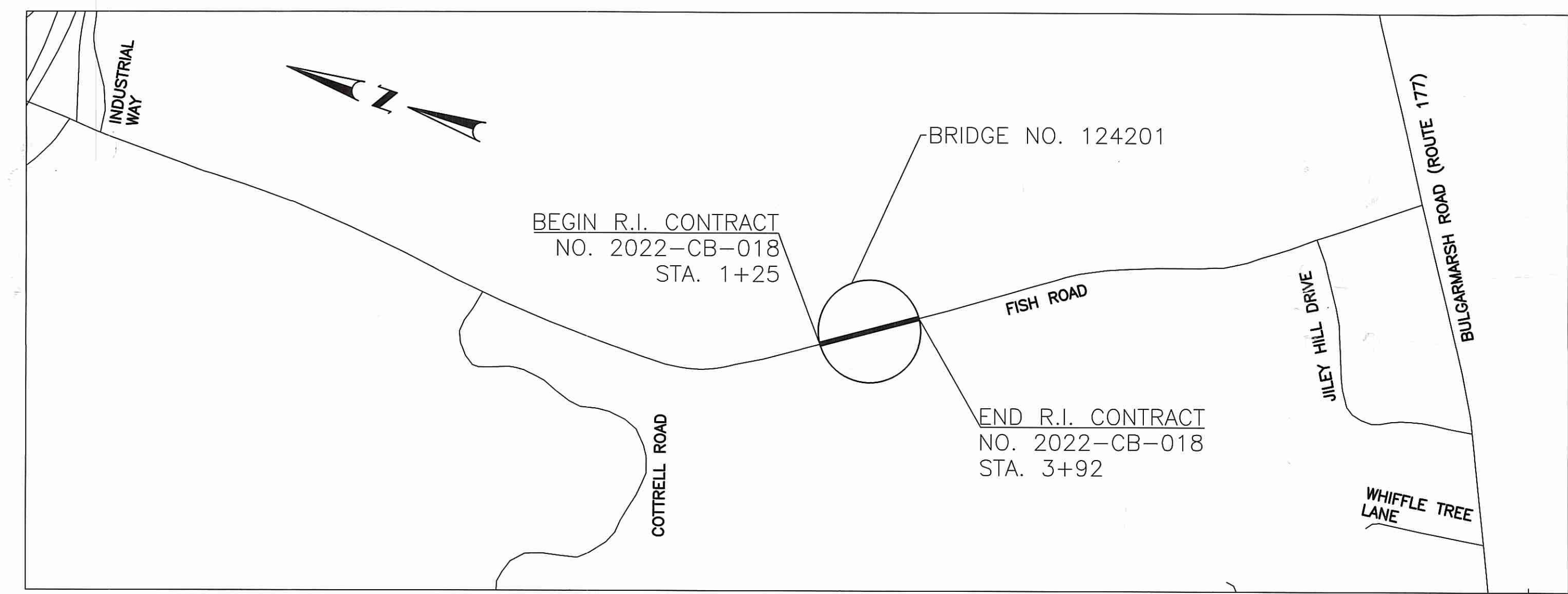
TRAFFIC DATA

AADT (2022)	9,065 V.P.D.
AADT (2042)	10,015 V.P.D.
DHV	905 V.P.H
T	9.8%

PAVEMENT STRUCTURE
 2" MODIFIED CLASS 9.5 HMA OVER
 6" CLASS 19.0 HMA - IN 2 LIFTS OVER
 12" GRAVEL BORROW

0.05 MILES

RIDEM REQUEST FOR PRELIMINARY DETERMINATION PLAN SET
 SUBMISSION DATE: 02/25/2022



LAYOUT PLAN
 1"=500'

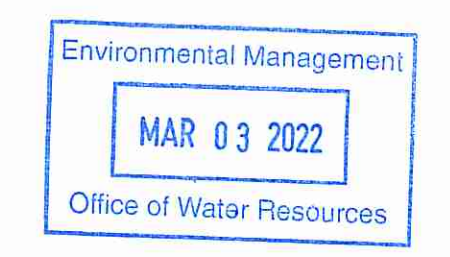
SCALES OF DRAWINGS

Plans	1 inch = 20 feet
Profiles	1 inch = 20 feet Horizontal
Profiles	1 inch = 4 feet Vertical
Cross Sections	1 inch = 4 feet Horizontal
Cross Sections	1 inch = 4 feet Vertical

BASE OF LEVELS
 NAVD 88
 NAD 83

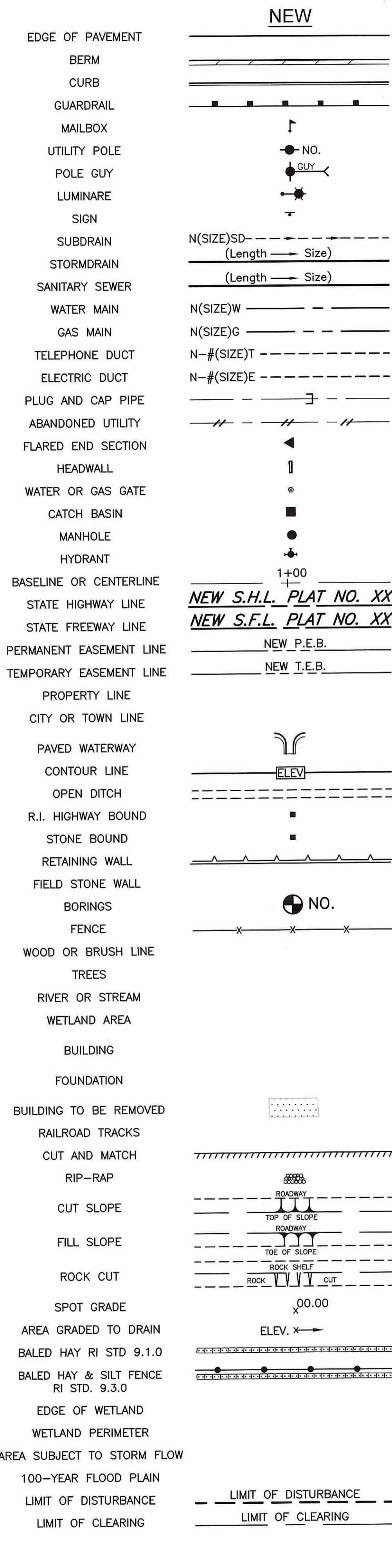
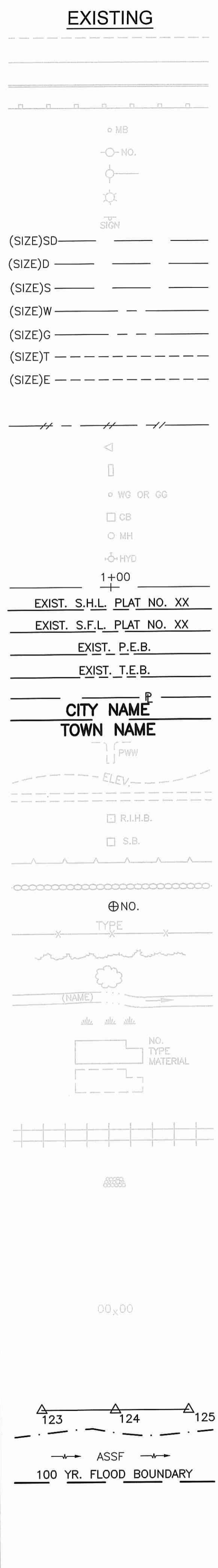


Contract Number 2022-CB-018
 Number of Sheet 1
 Total Sheets 19



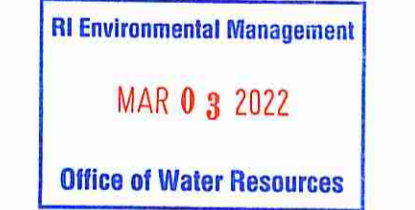
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAR 10 2022 FILE # 22-0017
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

R.I. DEPARTMENT OF TRANSPORTATION	
APPROVED	
ADMINISTRATOR OF PROJECT MANAGEMENT	DATE
APPROVED	
CHIEF ENGINEER OF INFRASTRUCTURE	DATE
APPROVED	
DIRECTOR	DATE
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	
DIVISION ADMINISTRATOR	DATE



1.1.0	UNDERDRAIN	7.4.2	GRANITE TRANSITION CURB (VERTICAL FACE TO SLOPE FACE)
1.3.0	CONCRETE CONNECTING COLLAR	7.5.0	BITUMINOUS CONCRETE LIP CURB
2.1.0	CONCRETE HEADWALLS FOR PIPE CULVERTS	7.5.1A	BITUMINOUS BERM (CONSTRUCTION METHOD A)
2.2.0	STANDARD HEADWALLS FOR MULTIPLE 3'-6" TO 7'-0" PIPE CULVERTS	7.5.1B	BITUMINOUS BERM (CONSTRUCTION METHOD B)
2.3.0 (DIA.)	PRECAST CONCRETE FLARED END SECTION	7.6.0	CURB SETTING DETAIL
3.2.0	BRICK/SOLID BLOCK 4'-0" ROUND MANHOLE	8.2.0	BITUMINOUS CONCRETE DITCH
3.2.1 (DIA.)	BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND MANHOLE	8.3.0	RIP-RAP DITCH
3.3.0	BRICK/SOLID BLOCK TYPE "D" SQUARE CATCH BASIN	8.4.0	PAVED WATERWAY
3.3.2	BRICK/SOLID BLOCK TYPE "F" SQUARE CATCH BASIN	9.1.0	BALED HAY EROSION CHECK
3.3.3	SOLID BLOCK FLUSH SQUARE CATCH BASIN	9.2.0	SILT FENCE DETAIL
3.4.0	BRICK/SOLID BLOCK TYPE "D" ROUND CATCH BASIN	9.3.0	BALED HAY DITCH EROSION CHECK AND SILT FENCE COMBINED
3.4.1	BRICK/SOLID BLOCK ROUND CATCH BASIN WITH GUTTER INLET	9.4.0	BALED HAY DITCH AND SWALE EROSION CHECK
3.4.2	BRICK/SOLID BLOCK TYPE "F" ROUND CATCH BASIN	9.5.0	LOG AND HAY CHECK DAM
3.4.3	BRICK/SOLID BLOCK TYPE "R" CATCH BASIN	9.7.0	DEWATERING BASIN
3.4.4	SOLID BLOCK FLUSH ROUND CATCH BASIN	9.8.0	BALED HAY CATCH BASIN INLET PROTECTION
3.4.5 (DIA.)	BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND CATCH BASIN	9.9.0	CONSTRUCTION ACCESS
3.5.0	SOLID BLOCK SHALLOW TYPE "F" SQUARE CATCH BASIN	10.1.0	WET STONE MASONRY RETAINING WALL
3.5.1 (SIZE)	SOLID BLOCK SHALLOW 5'-0" OR 6'-0" SQUARE CATCH BASIN	10.2.0	RUBBLE MASONRY WALL
3.6.0	BRICK/SOLID BLOCK DROP INLET	10.3.0	CONCRETE RETAINING WALL
3.7.0 (DIA.)	BRICK/SOLID BLOCK ROUND MANHOLE OR CATCH BASIN GREATER THAN 12'-0"	10.4.0	STONE MASONRY STEPS
4.2.0	PRECAST 4'-0" ROUND MANHOLE	14.1.0	CONCRETE HIGHWAY BOUND
4.2.1	PRECAST 5'-0" ROUND MANHOLE	15.1.0	POST AND MOUNTINGS FOR RURAL MAILBOX
4.2.2	PRECAST 6'-0" ROUND MANHOLE	15.2.0 (NO.)	POST AND MULTIPLE MOUNTINGS FOR RURAL MAILBOXES
4.3.0 (SIZE)	PRECAST 4'-0" OR 6'-0" SQUARE MANHOLE OR CATCH BASIN	18.2.0	PRECAST TYPE "A" HANDHOLE
4.4.0 (DIA.)	PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN	18.2.2	HEAVY DUTY TYPE "H" HANDHOLE
4.5.0	PRECAST CONCRETE DROP INLET	18.3.0	ALUMINUM LIGHTING STANDARDS
4.5.1	PRECAST CONCRETE DROP INLET LATERAL OUTLET	20.2.0	BI-DIRECTIONAL CONTROL DEVICE
4.5.2	PRECAST CONCRETE DROP INLET LONGITUDINAL OUTLET	24.6.1	STREET SIGN MOUNTING DETAIL
5.3.0	CATCH BASIN AND MANHOLE STEP	26.2.0	POLYETHYLENE DRUM WITH MARKINGS
5.4.0	CONCRETE COLLARS	26.3.0	PVC PLASTIC PIPE TYPE III BARRICADE
6.1.0	LIGHT-DUTY SQUARE FRAME AND ROUND COVER	31.1.0	CHAIN LINK FENCE 3'-0" TO 4'-0"
6.1.1	HEAVY DUTY SQUARE FRAME AND ROUND COVER	31.2.0	CHAIN LINK FENCE 5'-0" TO 6'-0"
6.2.0	LIGHT-DUTY ROUND FRAME AND COVER	31.2.1	CHAIN LINK FENCE 5'-0" TO 6'-0" INTERMEDIATE POST
6.2.1	HEAVY-DUTY ROUND FRAME AND COVER	31.3.0	WOVEN WIRE RIGHT-OF-WAY FENCE (STEEL POST)
6.3.0	SQUARE FRAME AND GRATE	34.1.0	TYPICAL GUARDRAIL INSTALLATION
6.3.1	SQUARE FRAME AND GRATE	34.2.0	STEEL BEAM GUARDRAIL
6.3.2	SQUARE FRAME AND GRATE (BICYCLE SAFE)	34.2.1	STEEL BEAM GUARDRAIL DETAILS
6.3.3	HIGH CAPACITY FRAME AND GRATE	34.2.2	STEEL BEAM GUARDRAIL DOUBLE FACED ASSEMBLY
6.3.4	HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE)	34.2.3	STEEL BEAM GUARDRAIL FIXTURES
6.4.0	ROUND FRAME AND GRATE	34.2.5	STEEL BEAM GUARDRAIL REFLECTORIZED TRIANGULAR DELINEATOR
7.1.0S	PRECAST CONCRETE CURB (STRAIGHT)	34.3.1	GUARDRAIL END SECTION
7.1.1	3'-0" PRECAST CONCRETE TRANSITION CURB	34.3.2	TERMINAL END SECTION (SINGLE FACE)
7.1.2	6'-0" PRECAST CONCRETE TRANSITION CURB	34.3.3	ANCHORAGE DETAILS APPROACH END SECTION
7.1.4	PRECAST 2'-0" RADIUS CORNER	34.3.4	ANCHORAGE DETAILS TRAILING END SECTION
7.1.5	PRECAST CONCRETE INLET STONE (FOR SQUARE CATCH BASIN)	34.4.0	STEEL BACKED TIMBER GUARDRAIL
7.1.6	PRECAST CONCRETE INLET STONE (FOR ROUND CATCH BASIN)	34.4.1	STEEL BACKED TIMBER GUARDRAIL TERMINAL SECTION-TYPE 1
7.1.7	PRECAST CONCRETE APRON STONE (FOR SQUARE CATCH BASIN)	40.1.0	DOUBLE-FACED PRECAST MEDIAN BARRIER
7.1.8	PRECAST CONCRETE APRON STONE (FOR ROUND CATCH BASIN)	40.2.0	SINGLE-FACED PRECAST MEDIAN BARRIER
7.2.0S	PRECAST CONCRETE SLOPED FACE CURB (STRAIGHT)	40.2.1	SINGLE-FACED PRECAST MEDIAN BARRIER
7.2.0C	PRECAST CONCRETE SLOPED FACE CURB (CIRCULAR)	40.3.0	PRECAST MEDIAN BARRIER TRANSITION UNIT
7.2.1	PRECAST CONCRETE SLOPED FACE TRANSITION CURB	40.5.0	PRECAST MEDIAN BARRIER FOR TEMPORARY TRAFFIC CONTROL
7.2.2	PRECAST CONCRETE TRANSITION CURB (VERTICAL FACE TO SLOPED FACE)	43.1.0	CEMENT CONCRETE SIDEWALK
7.2.3	GRANITE CURB (STRAIGHT)	43.2.0	BITUMINOUS CONCRETE SIDEWALK
7.3.0S	GRANITE CURB (CIRCULAR)	43.3.0	WHEELCHAIR RAMP
7.3.1	3'-0" GRANITE TRANSITION CURB	43.3.1	WHEELCHAIR RAMP FOR LIMITED RIGHT-OF-WAY AREAS
7.3.2	6'-0" GRANITE TRANSITION CURB	43.4.0	DRIVEWAY DEVELOPMENT FOR 3'-0" TRANSITION CURB
7.3.3	GRANITE WHEELCHAIR RAMP TRANSITION CURB	43.4.1	DRIVEWAY DEVELOPMENT FOR 6'-0" TRANSITION CURB
7.3.4	GRANITE 2'-0" RADIUS CORNER	43.5.0	CEMENT CONCRETE DRIVEWAYS
7.3.5	GRANITE INLET STONE (FOR SQUARE CATCH BASIN)	48.1.0	DETECTABLE WARNING SYSTEM
7.3.6	GRANITE INLET STONE (FOR ROUND CATCH BASIN)	51.1.0	TREE PROTECTION DEVICE
7.3.7	GRANITE APRON STONE (FOR SQUARE CATCH BASIN)	51.1.1	DRIP LINE TREE PROTECTION DEVICE FOR EXISTING TREES
7.3.8	GRANITE APRON STONE (FOR ROUND CATCH BASIN)	51.2.0	SHRUB PROTECTION DEVICE
7.4.0	GRANITE SLOPED FACE CURB	51.3.0	TREE WELL
7.4.1	GRANITE SLOPED FACE TRANSITION CURB	51.4.0	TREE WALL

AB	ADJUST CATCH BASIN TO GRADE	NFH	NEW FIRE HYDRANT WITH GATE VALVE
ABM	ADJUST CATCH BASIN TO MANHOLE	NIC	NOT IN THIS CONSTRUCTION CONTRACT
AC	ADJUST CURB STOP TO GRADE	NWB	FURNISH AND INSTALL NEW WATER GATE VALVE BOX
AD	ADJUST DRAINAGE MANHOLE TO GRADE	NWVB	FURNISH AND INSTALL NEW WATER GATE VALVE AND BOX
AE	ADJUST ELECTRIC MANHOLE TO GRADE	NWCB	FURNISH AND INSTALL NEW WATER CURB STOP BOX
AFC	ADJUST FRAME AND COVER TO GRADE	NWSB	FURNISH AND INSTALL NEW WATER CURB STOP AND BOX
AFG	ADJUST FRAME AND GRATE TO GRADE	PCD	PERMANENT CHECK DAM
AG	ADJUST GAS GATE BOX TO GRADE	PS	4" PLANTABLE SOIL AND SEED
AHH	ADJUST HANDHOLE TO GRADE	RCB	RECONSTRUCT TYPE "D" CATCH BASIN, TO CATCH BASIN WITH GUTTER INLET
AS	ADJUST SANITARY SEWER MANHOLE TO GRADE	RCM	R.I.D.O.T. COMMUNICATIONS MANHOLE
AT	ADJUST TELEPHONE MANHOLE TO GRADE	RHH	REMOVE, HANDLE, HAUL, TRIM, RESET CURB EDGING, STRAIGHT, CIRCULAR (ALL TYPES)
AW	ADJUST WATER GATE BOX TO GRADE	RLP	RELOCATE LAMP POST
BCD	BITUMINOUS CONCRETE DRIVEWAY 3" BITUMINOUS CONCRETE TYPE 1-2 8" GRAVEL BORROW SUBBASE COURSE	RMB	RELOCATE MAILBOX (BY OTHERS)
BPS	BUILD NEW STRUCTURE OVER EXISTING PIPE	RPM	REMOVE PAVEMENT MARKINGS
CCB	CLEAN CATCH BASIN	RRP	RIP-RAP PAD (SEE DETAIL)
CCP	CUT AND CAP PIPE WITH RESTRAINT (ALL SIZES)	RRS	REMOVE AND RELOCATE SIGN
CFP	CLEAN AND FLUSH PIPE	RUP	RELOCATE UTILITY POLE (BY OTHERS)
CG	CLEARING AND GRUBBING	SB	STONE BAFFLE
CMH	CLEAN MANHOLE	SBAE	STEEL BEAM BRIDGE CONNECTION APPROACH END (W/O NESTED RAIL)
CP (DEPTH)	COLD PLANE	SBTE	STEEL BEAM BRIDGE CONNECTION TRAILING END (W/NESTED RAIL)
CPP	CUT AND PLUG PIPE (ALL TYPES, ALL SIZES)	SD--	STRUCTURAL DISPOSITION - SEE CS PAGES OF SPECIFICATION
DB	REMOVE AND DISPOSE BITUMINOUS CURB	SF	REMOVE AND STOCKPILE FENCE
DC	REMOVE AND DISPOSE CONCRETE CURB	SGA	SPECIAL GRADED AGGREGATE
DCB	REMOVE AND DISPOSE CATCH BASIN	SGC	REMOVE AND STOCKPILE GRANITE CURB
DDI	REMOVE AND DISPOSE DROP INLET	SGR	REMOVE AND STOCKPILE GUARDRAIL
DF	REMOVE AND DISPOSE FENCE	SH	REMOVE AND STOCKPILE HYDRANT
DFC	REMOVE AND DISPOSE FRAME AND COVER	SS	REMOVE AND STOCKPILE SIGN
DFE	REMOVE AND DISPOSE FLARED END SECTION	STS	REMOVE AND STOCKPILE TRAFFIC SIGNAL SYSTEM
DFG	REMOVE AND DISPOSE FRAME AND GRATE	TB	CONCRETE THRUST BLOCK
DFH	REMOVE AND DISPOSE FIRE HYDRANT	TEP	TIE EXISTING PIPE INTO NEW STRUCTURE
DFP	REMOVE AND DISPOSE FLEXIBLE PAVEMENT	TNP	TIE NEW PIPE INTO EXISTING STRUCTURE
DG	REMOVE AND DISPOSE GUARDRAIL	TBT	THREE BEAM TRANSITION
DH	REMOVE AND DISPOSE HEADWALL	TBBC	THREE BEAM BRIDGE CONNECTION
DHB	REMOVE AND DISPOSE HIGHWAY BOUND	TT	TREE TRIMMING
DHH	REMOVE AND DISPOSE HANDHOLE	WCM	4" WOOD CHIP MULCH
DL	REMOVE AND DISPOSE LIGHT AND FOUNDATION	4DY	4" EPOXY RESIN PAVEMENT MARKINGS - DOUBLE YELLOW
DMB	REMOVE AND DISPOSE MEDIAN BARRIER	6W	6" EPOXY RESIN PAVEMENT MARKINGS - WHITE
DMH	REMOVE AND DISPOSE MANHOLE	12W	12" EPOXY RESIN PAVEMENT MARKINGS - WHITE
DMM	REMOVE AND DISPOSE MEDIAN MARKER	6WT	6" PREFORMED PATTERNED MARKING (HIGH PERFORMANCE TAPE)
DOW	REMOVE AND DISPOSE OBSERVATION WELL	4Y	4" EPOXY RESIN PAVEMENT MARKINGS - YELLOW
DP	REMOVE AND DISPOSE PIPE	6Y	6" EPOXY RESIN PAVEMENT MARKINGS - YELLOW
DPB	REMOVE AND DISPOSE PAVEMENT AND RIGID BASE	P.G.L.	PROFILE GRADE LINE
DRB	REMOVE AND DISPOSE RIGID BASE		
DS	REMOVE AND DISPOSE SIGN		
DSS	REMOVE AND DISPOSE TRAFFIC SIGNAL SYSTEM		
DSW	REMOVE AND DISPOSE SIDEWALK		
DTD	REMOVE AND DISPOSE TELEPHONE DUCT BANKS		
DUP	REMOVE AND DISPOSE UTILITY POLE		
DWW	REMOVE AND DISPOSE PAVED WATERWAY		
FF	FILTER FABRIC RIPRAP FLARED END UNDERLAYMENT		
GET	FLARED GUARDRAIL END TREATMENT		
IA	IMPACT ATTENUATOR		
IDL	IMPERVIOUS DITCH LINER		
LOD	LIMIT OF DISTURBANCE		
LOR	LIMIT OF REGRADING		
LS	4" LOAM AND SEED		



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
NDalya L. Freeman

		RHODE ISLAND DEPARTMENT OF TRANSPORTATION	DESIGNED BY: - CHECKED BY: - DATE: 2/18/2022 SHEET: 2 OF: 21	SCALE: 1"=20' 	TIVERTON	REPLACEMENT OF FISH ROAD BRIDGE NO. 1242 CONTRACT: 2022-CB-018 STANDARD PLAN SYMBOLS & STANDARD LEGEND	RHODE ISLAND					
				REVISIONS <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> <tr> <td>1</td> <td>6/07</td> <td>TRB</td> <td></td> <td></td> <td></td> </tr> </table>				NO.	DATE	BY	NO.	DATE
NO.	DATE	BY	NO.	DATE	BY							
1	6/07	TRB										

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	STP-XXXX(XXX)	2022	3	21

GENERAL NOTES:

- ANY DAMAGE TO EXISTING PAVEMENT, BRIDGES, CONDUIT, SIDEWALK, FENCES, ETC., CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
- THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIAL AS FAR AWAY AS POSSIBLE FROM THE EDGE OF THE TRAVEL LANE SO AS NOT TO CAUSE A SAFETY HAZARD, IN ACCORDANCE WITH SECTION 106.06 OF THE R.I.D.O.T. STANDARD SPECIFICATION, LATEST EDITION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXISTING CONDITIONS ARE NOT OBLITERATED BEFORE CONTROL POINTS ARE LOCATED AND CONSTRUCTION LAYOUT IS ESTABLISHED. THE CONSTRUCTION LAYOUT SHALL BE PROVIDED IN SUFFICIENT DETAIL, THEREBY ENABLING HIM TO CONSTRUCT THE PROJECT IN CONFORMITY WITH THE PLANS AND SPECIFICATIONS. SURVEY WILL BE PROVIDED BY THE CONTRACTOR. THE RESIDENT ENGINEER WILL NOT AUTHORIZE CONSTRUCTION ACTIVITIES TO BEGIN UNTIL HE IS SATISFIED THAT ALL GROUND CONTROL HAS BEEN ESTABLISHED, TIED DOWN, AND DULY RECORDED IN STANDARD FIELD BOOKS.
- ALL R.I. STD. 9.9.0 CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.
- THE FREQUENCY AND APPLICATION RATES FOR THE DUST CONTROL ITEMS WILL BE AS DIRECTED BY THE ENGINEER.
- ALL SIDEWALK AND DRIVEWAYS DESIGNATED FOR REPLACEMENT SHALL BE CUT AND MATCHED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ASPHALT EMULSION TACK COAT SHALL BE PLACED PRIOR TO PAVEMENT PLACEMENT ON THE CONCRETE BASE OR COLD PLANED PAVEMENT, AND ON ANY NEW COURSE WHICH HAS BEEN OPEN TO TRAFFIC, OR ANY NEW COURSE WHICH HAS BEEN EXPOSED FOR MORE THAN 3 DAYS, AND/OR AS DIRECTED BY THE ENGINEER. IT SHALL ALSO BE APPLIED TO VERTICAL PAVEMENT FACES BETWEEN ADJOINING PAVEMENT SECTIONS. ALL APPLICATIONS ON BOTH HORIZONTAL AND VERTICAL SURFACES SHALL BE PAID FOR UNDER THE CONTRACT UNIT BID PRICE FOR CODE 403.0300 "ASPHALT EMULSION TACK COAT."
- THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND PLACING, AT HIS OWN EXPENSE, PLANTABLE SOIL AND SEED IN AREAS WHICH ARE OUTSIDE OF THE PROJECT'S AREAS OF DISTURBANCE AND WHICH ARE IMPACTED BY CONSTRUCTION OPERATIONS INCLUDING THOSE AREAS WHERE VEHICLES, EQUIPMENT AND MATERIALS ARE STORED WITH THE PERMISSION OF THE ENGINEER.
- UNDER NO CIRCUMSTANCE WILL THE CONTRACTOR BE ALLOWED TO STOCKPILE REMOVED PAVEMENT MATERIALS WITHIN THE PROJECT LIMITS.
- CLEANING AND SWEEPING OF PAVEMENT WILL INCLUDE REMOVAL OF ALL PAVEMENT DEBRIS PRIOR TO THE PLACEMENT OF EACH BITUMINOUS PAVEMENT LIFT. ALL CLEANING AND SWEEPING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER.
- PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE APPROVED OR MODIFIED BY THE ENGINEER.
- THE COORDINATE SYSTEM, IF SHOWN, IS THE RHODE ISLAND STATE PLANE COORDINATE SYSTEM.
- PAVEMENT OPERATIONS FOR CURBED SECTIONS: IN AREAS WHERE CURBING IS SET TO FINISH LINE AND GRADE, THE CONTRACTOR WILL NOT BE REQUIRED TO UTILIZE THE SENSOR AND SKY-TYPE DEVICE FOR AUTOMATIC GRADE CONTROL, BUT WILL BE ALLOWED TO MANUALLY ADJUST THE BITUMINOUS PAVER FOR CONTROLLING GRADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ROADWAYS FREE OF DEBRIS RESULTING FROM THEIR CONSTRUCTION OPERATIONS. ALL DEBRIS SHALL BE REMOVED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.
- NO FUEL STORAGE, VEHICLE REFUELING, OR EQUIPMENT STORAGE SHALL TAKE PLACE IN DESIGNATED WETLANDS, NOR WITHIN 100' OF ANY WATER BODY. THIS REQUIREMENT SHALL NOT SUPERSEDE ANY FEDERAL, STATE OR LOCAL LAW, ORDINANCE, RULE OR REGULATION THAT APPLIES TO THE SAME, UNLESS THIS REQUIREMENT IS MORE STRINGENT THAN SAID LAW, ORDINANCE, RULE OR REGULATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT AT THE END OF FINAL PAVING OPERATIONS, FLOW TO EXISTING DRAINAGE STRUCTURES HAS BEEN REESTABLISHED AND THAT NO ISOLATED DEPRESSIONS REMAIN. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO PAVING AND COLD PLANING OPERATIONS.
- ALL EMBANKMENTS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 12" (AFTER COMPACTION) AND SHALL BE COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED. ALSO, EMBANKMENT CONSTRUCTION SHALL CONFORM TO SECTION 202.03.2 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- IF THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE, AS DESIGNATED ON THE COVERSHEET, THE CONTRACTOR IS ADVISED THAT UPON 12 (TWELVE) HOURS NOTICE THE ROADWAY SHALL BE OPEN TO EVACUEES AND EMERGENCY PERSONNEL. ANY EXTRA WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.
- THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS STATED IN THE ENVIRONMENTAL APPROVALS ISSUED FOR THE PROJECT FROM THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM), AND/OR THE ARMY CORPS OF ENGINEERS (ACOE), AND/OR THE COASTAL RESOURCES MANAGEMENT COUNCIL (CRMC). COPIES OF EACH OF THESE PERMITS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH THESE CONDITIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
- FOR ALL PROJECTS INVOLVING KNOWN SITE REMEDIATION ISSUES, THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE CONSTRUCTION RELATED PROVISIONS, CONDITIONS, AND STIPULATIONS OF ANY REMEDIAL PLANS DEVELOPED FOR THE PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH COMPLIANCE WITH THESE DOCUMENTS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
- NO UNPROTECTED CONSTRUCTED FEATURE MAY PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. HEADWALL, DRAINAGE INLET, ETC.
- THE REMAINING SECTION OR STUB OF A BREAKAWAY BASE MAY NOT PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. SIGN POSTS, LIGHT POLES, FIRE HYDRANTS, ETC.

DRAINAGE AND EROSION CONTROL NOTES:

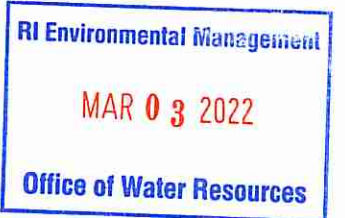
- FOR ALL PROJECTS WITH AT LEAST ONE(1) ACRE OF SOIL DISTURBANCE. R.I.D.O.T. IS REQUIRED TO DEVELOP AND ENFORCE A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ORDER TO REMAIN IN COMPLIANCE WITH THE RIDPES GENERAL PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS OF THE GENERAL PERMIT AND THE SITE SPECIFIC SWPPP FOR THIS PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH ADHERENCE TO THE SWPPP SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
- NO UNDISTURBED AREAS SHALL BE CLEARED OF EXISTING VEGETATION AFTER OCTOBER 15 OF ANY CALENDAR YEAR OR DURING ANY PERIOD OF FULL OR LIMITED WINTER SHUTDOWN. ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEEDED OR PROTECTED BY THAT DATE. ANY SUCH AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION, AS DETERMINED BY THE RESIDENT ENGINEER OR ENVIRONMENTAL INSPECTOR, BY NOVEMBER 15 OF ANY CALENDAR YEAR, MUST BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATTING OR HAY MULCH, IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15 THROUGH APRIL 15, CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THAT DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE RESTABILIZED WITHIN 5 WORKING DAYS. ANY WORK TO CORRECT PROBLEMS RESULTING FROM FAILURE TO COMPLY WITH THIS PROVISION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THERE WILL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 2 WEEKS OF FINAL GRADING.
- STOCKPILES OF MATERIAL SHALL NOT BE LOCATED WITHIN REGULATED WETLANDS OR BUFFER ZONE AREAS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES OF ERODIBLE MATERIAL SHALL ALSO BE SEEDED AND RINGED WITH R.I. STD. 9.1.0 TO STABILIZE.
- IF THE PLANS INCLUDE SPECIFIC AREAS FOR PLACEMENT OF CONSTRUCTION DEWATERING BASINS AND/OR EQUIPMENT AND MATERIALS STORAGE AND STOCKPILING, AND IF THE CONTRACTOR ELECTS TO UTILIZE ANY OTHER AREAS FOR THESE PURPOSES, THIS SHALL BE APPROVED BY THE ENGINEER ONLY AFTER OBTAINING ANY NECESSARY PERMITS AND/OR PERMIT MODIFICATIONS FROM THE APPROPRIATE REGULATORY AUTHORITY(IES). ANY PERMITTING REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE ACCOMPLISHED AT NO COST TO THE STATE. THE ENGINEER WILL COORDINATE SUBMISSION OF ANY REQUIRED PERMIT APPLICATION MATERIALS WITH THE R.I.D.O.T. OFFICE OF ENVIRONMENTAL PROGRAMS.
- JUTE MESH SHALL BE USED TO STABILIZE PLANTABLE SOIL AND/OR LOAM IN ALL DITCHES, ON ALL SLOPES ADJACENT TO WETLANDS AND WETLAND PERIMETERS, AND ON ALL SLOPES WITHIN WATER QUALITY BASINS. JUTE MESH IN DITCHES SHALL EXTEND TO AN ELEVATION 2 FEET ABOVE THE BOTTOM OF THE DITCH.
- SEEDING ON ALL SLOPES 3 TO 1 OR STEEPER SHALL CONSIST OF THE FOLLOWING APPLICATIONS UNLESS CHANGED IN THE CONTRACT.
 - SEEDING TYPE I.
 - ADHESIVE MULCH STABILIZER
- UNVEGETATED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR PERIODS IN EXCESS OF 2 WEEKS OR THROUGH THE INACTIVE WINTER SEASON.
- PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING PIPES AND/OR STRUCTURES WHICH ARE TO BE CONNECTED. ANY VARIATION FOUND FROM THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION. WORK CAN COMMENCE ONLY UPON THE ENGINEER'S AUTHORIZATION.
- ALL DRAINAGE AND UTILITY STRUCTURES WITHIN THE PAVED ROADWAY SHALL BE ADJUSTED TO GRADE WITH THE SURROUNDING PAVEMENT PRIOR TO THE WINTER SHUTDOWN.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL THROUGHOUT THE WORK AREA.
- CATCH BASIN RIM GRADES NOTED ON PLANS ARE DEPRESSED 0.1' LOWER THAN THE GUTTER GRADE. RIM ELEVATIONS SHOWN ARE FINAL GRADES. THE CONTRACTOR SHALL PLACE FRAMES AND GRATES 0.1' BELOW THE GRADE CONSTRUCTED IN THIS CONTRACT OR AS DIRECTED BY THE ENGINEER.
- PROVISIONS FOR CLEARING TO ACCESS OUTFALLS DURING THE CLEANING AND FLUSHING OF THE CLOSED DRAINAGE SYSTEM SHALL BE KEPT TO A MINIMUM.
 - ANY VEGETATIVE CLEARING SHALL BE LIMITED TO BRUSH AND TREES LESS THAN 3" DIAMETER.
 - NO HEAVY EQUIPMENT MAY ENCROACH UPON VEGETATED PERIMETER OR RIVERBANK WETLANDS AS WELL AS BIOLOGICAL WETLANDS.
- THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL DEVICES FOR OUTLET PROTECTION PRIOR TO CLEANING AND FLUSHING STORM WATER DRAINAGE. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL FLUSHED SEDIMENTS ARE REMOVED. AT ALL OUTFALL LOCATIONS WHERE PIPES ARE TO BE CLEANED AND FLUSHED, OUTLET PROTECTION (R.I. STD. 9.1.0 OR 9.3.0) SHALL BE INSTALLED TO TRAP SEDIMENTS. THESE SEDIMENTS SHALL THEN BE REMOVED AND DISPOSED OF LEGALLY BEFORE THE OUTLET PROTECTION DEVICES ARE REMOVED. IF OUTLET PROTECTION AT THE OUTFALL IS NOT FEASIBLE, THEN THE OUTLET PIPE OF THE LAST DRAINAGE STRUCTURE TO BE CLEANED SHALL BE PLUGGED TO CAPTURE ALL MATERIALS FLUSHED FROM PIPES. AFTER THE MATERIALS ARE REMOVED FROM THE DRAINAGE STRUCTURE, THE OUTLET SHALL BE UNPLUGGED TO RESUME NORMAL FUNCTIONING.
- SILT SACKS OR ANY OTHER RIDEM APPROVED INLET PROTECTION SHALL BE INSTALLED AT ALL CATCH BASINS AND INLETS WHENEVER SUBBASE IS EXPOSED, AND SHALL REMAIN IN PLACE UNTIL THE ADJUTING GROUND SURFACES ARE STABILIZED.
- IN ORDER TO PREVENT CLOGGING IN THE ROADWAY AND SEDIMENT INTRUSION INTO THE DRAINAGE SYSTEM, ALL INLET PROTECTION DEVICES SHALL BE CLEANED OR REPLACED REGULARLY UNTIL THE CONTRIBUTING AREA HAS BEEN STABILIZED. THE INLET PROTECTION DEVICES MAY BE REMOVED AT THE END OF THE PROJECT OR AS DIRECTED BY THE RESIDENT ENGINEER.

DRAINAGE AND EROSION CONTROL NOTES (CONTINUED):

- DETENTION AND RETENTION BASINS MAY BE ROUGH GRADED AND STABILIZED WITH VEGETATION AND/OR OTHER EROSION CONTROL MEASURES AS REQUIRED BY THE ENGINEER PRIOR TO USE AS TEMPORARY SEDIMENTATION BASINS DURING PROJECT CONSTRUCTION. FINAL BASIN CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL SOURCES OF SEDIMENT HAVE BEEN ELIMINATED, FINAL ROADSIDE VEGETATION IS ESTABLISHED AND USE OF TEMPORARY BASINS IS NO LONGER REQUIRED AS DIRECTED BY THE ENGINEER. ANY ISSUES RELATING TO EROSION AND/OR SEDIMENT TRANSPORT INTO WETLAND AREAS RESULTING FROM SUCH USE OF SEDIMENTATION BASINS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY CORRECTIVE ACTION REQUIRED TO RESOLVE SUCH ISSUES SHALL BE COMPLETED BY THE CONTRACTOR.
- THE TOE OF ANY FILL SLOPE IS TO REMAIN AT LEAST 1' INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROL MEASURES 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.
- PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THOSE AREAS INDICATED ON THE PLANS. CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS, HOWEVER NO GRUBBING, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO INSTALLATION. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS.
- ALL HAY BALES, SILT FENCE OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. TEMPORARY SEED WILL CONFORM TO R.I.D.O.T. STANDARD TEMPORARY SEED MIX.
- THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE STATE.
- THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE SPECIFIED IN SUBSECTION L.02.03 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- ADDITIONAL EROSION CONTROLS, SHALL BE INSTALLED AS DIRECTED BY THE RESIDENT ENGINEER. THESE ADDITIONAL ITEMS WILL BE PAID AT THE UNIT PRICE FOR THAT BID ITEM.
- CONCRETE WASHOUT DISCHARGED INTO DRAINAGE SYSTEMS IS PROHIBITED. THE CONTRACTOR MUST PROVIDE A CONCRETE WASHOUT AREA.

UTILITY NOTES:

- EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE NOT SHOWN. CONTRACTOR IS TO ASSUME SERVICES ARE PRESENT TO ALL BUILDINGS.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE AND UTILITIES BOTH UNDERGROUND AND OVERHEAD BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH CHAPTER 39-1.2 OF THE R.I. GENERAL LAWS ENTITLED "EXCAVATION NEAR UNDERGROUND UTILITY FACILITIES", WITH AMENDMENTS EFFECTIVE AS OF NOVEMBER 1, 2009 AND, WHEN NECESSARY, BY CONTACTING THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY APPLICABLE CITY, TOWN, STATE OR FEDERAL AGENCY. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE DIG SAFE PROGRAM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES AND ENSURE THAT ALL UTILITIES HAVE BEEN MARKED PRIOR TO COMMENCING THEIR WORK. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANY, SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE STATE.
- ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CAPPED.
- EXISTING WATER SERVICES SHALL BE RECONNECTED TO THE NEW WATER MAINS.
- UTILITY SERVICE CONNECTIONS SHALL BE MAINTAINED TO ALL EXISTING FACILITIES TO REMAIN.
- FIRE HYDRANTS SHALL NOT BE REMOVED FROM SERVICE WITHOUT WRITTEN AUTHORIZATION FROM THE FIRE DEPARTMENT OR THE WATER AUTHORITY.
- ALL NEW WATER LINES SHALL BE DISINFECTED TO THE SATISFACTION OF THE WATER AUTHORITY IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL UTILITY POLE RELATED WORK SHALL BE BY OTHERS.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAR 10 2022 FILE # 22-0037
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Andrew L. Freeman

<p>GREEN INTERNATIONAL AFFILIATES, INC. Civil and Structural Engineers</p>	<p>RHODE ISLAND DEPARTMENT OF TRANSPORTATION</p>	DESIGNED BY: - CHECKED BY: DATE: 2/18/2022 SHEET: 3 OF: 21	SCALE: 1"=20' 	<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> <th colspan="2">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>NO.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS		REVISIONS		NO.	DATE	NO.	DATE					TIVERTON REPLACEMENT OF FISH ROAD BRIDGE NO. 1242 CONTRACT: 2022-CB-018 RHODE ISLAND STANDARD NOTES NO. 1
		REVISIONS		REVISIONS													
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2605H_V1_003_STDNOTES0 Sheet 3 of 14																	

LANDSCAPE NOTES:

- ALL PLANT MATERIAL MUST BE TAGGED AT THE NURSERY (A RECOGNIZED GROWER OF PLANT MATERIAL) IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION. ALL PLANT MATERIAL MUST BE NURSERY GROWN; NO PLANTATION GROWN PLANT MATERIAL WILL BE ACCEPTED.
- ALL PLANT SUBSTITUTIONS AND/OR CHANGES IN PLANT LOCATION MUST BE APPROVED IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- ALL PLANT MATERIAL IS TO BE FIELD LOCATED BY A REPRESENTATIVE FROM THE R.I.D.O.T. LANDSCAPE ARCHITECTURE UNIT.
- A R.I.D.O.T. LANDSCAPE REPRESENTATIVE MUST BE ON SITE TO APPROVE ALL TRIMMING AND CLEARING NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
- ANY TOPSOIL USED AS PLANTABLE SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS, AND SHALL CONFORM TO SECTION M.18 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- ALL TREES AND SHRUBS SHALL BE MULCHED WITH PINE BARK MULCH IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- ALL TREES AND/OR SHRUBS THAT ARE PLANTED AS A BED SHALL BE MULCHED AS A BED.
- PROVIDE A MINIMUM 6"-8" BRANCHING STANDARD ON ALL TREES INSTALLED ADJACENT TO SIDEWALKS AND/OR PEDESTRIAN ACCESS AREAS.

STRUCTURAL NOTES FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS:

GENERAL

- ALL SUPPORT DESIGNS AND ASSOCIATED SHOP DRAWING REVIEWS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION, OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (THE "SPECIFICATIONS"), INCLUDING THE LATEST INTERIM SPECIFICATIONS, EXCEPT AS MODIFIED HEREIN.

CONSTRUCTION DRAWINGS AND DETAILS

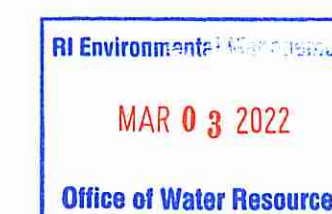
- THE FOLLOWING NOTES SHALL BE INCLUDED ON ALL PLANS AND/OR SHOP DRAWINGS IN REFERENCE TO ANCHOR BOLTS:
 - "PRETENSIONING OF ALL ANCHOR NUTS IS REQUIRED, AND SHALL BE ACCOMPLISHED BY TIGHTENING TO 1/6TH TURN BEYOND THE SNUG-TIGHT POSITION."
 - "THE MAXIMUM CLEARANCE BETWEEN THE BOTTOM OF THE LEVELING NUTS AND THE TOP OF THE CONCRETE IS CRITICAL AND SHALL NOT EXCEED THE AMOUNT SPECIFIED ON THIS DRAWING."
- THE USE OF GROUT UNDER BASE PLATES SHALL GENERALLY NOT BE PERMITTED. IF SPECIFIC CONDITIONS WARRANT ITS USE, THE GROUT SHALL NOT BE CONSIDERED LOAD CARRYING; LOADS SHALL BE DIRECTLY SUPPORTED BY THE ANCHOR BOLTS. ADEQUATE DRAINAGE SHALL BE PROVIDED.
- THE DAMPENING EFFECTS OF VIBRATION MITIGATION DEVICES SHALL NOT BE CONSIDERED IN THE DESIGN OF STRUCTURAL SUPPORTS FOR SIGNS AND TRAFFIC SIGNALS. IF THE CONTRACTOR CHOOSES TO USE THESE DEVICES FOR WARRANTY PURPOSES, THE TYPE OF DEVICES PROPOSED SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO FABRICATION OF SUPPORTS.

TRAFFIC SIGNAL NOTES:

- ALL SALVAGED TRAFFIC SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE R.I.D.O.T. MAINTENANCE HEADQUARTERS, 360 LINCOLN AVENUE, WARWICK, RHODE ISLAND, 02888.
- BACK PLATES SHALL BE INSTALLED ON ALL TRAFFIC SIGNAL HEADS.
- THE CONTRACTOR SHALL SUPPLY AND INSTALL ON THE UPPER LEFT HAND CORNER OF THE BACK OF THE CONTROLLER CABINET DOOR A LAMINATED INTERSECTION GRAPHIC AND TABLE DEPICTING THE TRAFFIC DETECTOR RELAY CHANNEL ASSIGNMENTS. THE DIAGRAM SHALL BE A GRAPHIC OF THE INDIVIDUAL INTERSECTION ORIENTED SIMILAR TO THE PLANS SHOWING THE LOCATIONS OF EACH OF THE LOOP DETECTORS. THE DIAGRAM SHALL, AT A MINIMUM, INCLUDE DETECTOR NUMBERS, STREET NAME LABELS, NORTH ARROW, AND CONTROLLER CABINET LOCATION. THE ASSIGNMENT INFORMATION SHALL BE INCLUDED IN A TABLE WHICH SHALL INCLUDE, AT A MINIMUM, THE APPROACH NAME, DETECTOR NUMBER, TERMINAL NUMBER, DETECTOR RACK SLOT NUMBER, RELAY NUMBER, RELAY CHANNEL NUMBER, AND PHASE ASSOCIATED WITH EACH DETECTOR.
- TRAFFIC CONTROLLER CABINETS, UNLESS OTHERWISE NOTED, SHALL BE NEMA TS2 TYPE 1 CABINET SIZE 6 ("P" TYPE) WITH NOMINAL DIMENSIONS OF 52"Hx44"Wx24"D.
- ALL DELAY AND EXTENSION TIMES, AS CALLED FOR ON THE PLANS, FOR PROPOSED LOOP DETECTORS SHALL BE PROGRAMMED IN THE TRAFFIC SIGNAL CONTROLLER AND NOT THE DETECTOR RELAY.
- A BARE GROUND WIRE SHALL BE PLACED IN ALL PVC CONDUITS AND SHALL BE BONDED TO GROUND RODS IN ACCORDANCE WITH SECTION T.03 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- THE FINAL POSITION OF SIGNAL HEADS, PEDESTRIAN PUSHBUTTONS, DETECTORS, AND STOP LINE AND CROSSWALK PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD ACCORDING TO ACTUAL INTERSECTION CHARACTERISTICS.
- A 2' MINIMUM BUFFER SHALL BE PROVIDED BETWEEN THE CURB AND ALL LATERAL OBSTRUCTIONS (INCLUDING ALL SIGNAL POLES AND TRAFFIC/PEDESTRIAN SIGNAL HEADS) TO PROVIDE ADEQUATE CLEARANCE FOR TURNING VEHICLES.
- ALL FOUNDATIONS MUST HAVE CONES OR BARRELS BOLTED TO FOUNDATION BASES UNTIL ACTUAL POLE IS INSTALLED.
- WHEN PLACING TRAFFIC SIGNAL HANDHOLES OR CONDUIT IN EXISTING PORTLAND CEMENT CONCRETE SIDEWALKS, THE ENTIRE SIDEWALK SQUARE OF CONCRETE SHALL BE REPLACED IN ACCORDANCE WITH R.I. STD. 43.1.0. NO PATCHES WILL BE ALLOWED.
- ALL PEDESTRIAN PUSHBUTTONS SHALL BE COMPLIANT WITH "THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES" (ADAAG) AND SHALL INCLUDE A PRESSURE-ACTIVATED (NON-MOVING) BUTTON. SIGNS APPLICABLE TO PUSHBUTTON ACTUATION SHALL BE INSTALLED SUCH THAT THE CROSSING ASSIGNED TO EACH BUTTON IS CLEARLY INDICATED. IF SITE CONDITIONS DO NOT ALLOW PEDESTRIAN PUSHBUTTONS TO BE INSTALLED WHERE CALLED FOR ON THE PLANS, THE R.I.D.O.T. TRAFFIC ENGINEERING UNIT SHALL BE CONSULTED WITH THROUGH AN R.F.I. PRIOR TO INSTALLING THE PUSHBUTTONS. THE FINAL PLACEMENT OF ALL PEDESTRIAN PUSHBUTTONS SHALL BE IN ACCORDANCE WITH ADAAG AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- ALL LOOP DETECTORS SHALL BE CENTERED WITHIN EACH LANE AS DELINEATED, UNLESS OTHERWISE DIMENSIONED ON PLANS.
- ALL LOOP DETECTORS SHALL BE CUT INTO THE FINAL PAVEMENT SURFACE COURSE.
- TRAFFIC SIGNAL CONTROLLERS SHALL BE WIRED SO THAT ANY FIRE PRE-EMPTION SHALL OVERRIDE MANUAL (PUSH BUTTON) OPERATION.
- THE CONTRACTOR SHALL WORK CONTINUOUSLY TO RESTORE TRAFFIC SIGNAL OPERATION TO ITS INTENDED PURPOSE WHEN REPLACING THE TRAFFIC SIGNAL EQUIPMENT. A POLICE DETAIL IS REQUIRED TO DIRECT TRAFFIC AT THE INTERSECTION AT ALL TIMES WHEN THE TRAFFIC SIGNAL IS INOPERATIVE. AT NO TIME SHALL THE CONTRACTOR LEAVE THE SITE BEFORE RESTORING FULL TRAFFIC OPERATIONS.

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

- ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS, CHANNELIZING DEVICES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- ALL SIGN MOUNTINGS FOR TEMPORARY AND CONSTRUCTION SIGNS SHALL BE IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- THE CONTRACTOR SHALL COVER ALL EXISTING AND/OR TEMPORARY SIGNS THAT ARE NOT RELEVANT TO THE TRAFFIC CONTROL REQUIRED DURING ANY PARTICULAR STAGE OF THE CONTRACT.
- ADVANCE FLAGPERSON SIGNS (W20-7A) SHALL BE USED IN ADVANCE OF ANY POINT AT WHICH A FLAGPERSON OR A POLICE OFFICER HAS BEEN STATIONED TO CONTROL TRAFFIC. WHEN NEEDED, AN APPROPRIATE DISTANCE MESSAGE MAY BE DISPLAYED ON A SUPPLEMENTAL PLATE (24"x18") BELOW THE FLAGPERSON SYMBOL SIGN. THE SIGN SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE FLAGPERSON IS NOT AT THE STATION.
- POLICE OFFICERS (AND NOT FLAGPERSONS) SHALL BE UTILIZED WHEN WORK WILL IMPACT SIGNALIZED INTERSECTIONS AND LIMITED ACCESS HIGHWAYS.
- POLYETHYLENE DRUMS SHALL BE UTILIZED AS A CHANNELIZING DEVICE WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT. CONES SHALL BE UTILIZED WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY BROKEN DOWN AT THE END OF THE WORKDAY.
- ARROW PANELS SHALL BE SET IN THE FLASHING FOUR CORNERS CAUTION MODE UNLESS UTILIZED FOR A MERGING TAPER. ARROW PANELS SET IN THE FLASHING ARROW MODE SHALL NOT BE UTILIZED FOR LANE SHIFTS.
- TEMPORARY CONSTRUCTION SIGNS AND OTHER WORKZONE TRAFFIC CONTROL DEVICES THAT ARE DAMAGED OR REQUIRE RELOCATION SHALL BE REPLACED AND / OR RELOCATED UNDER THE PAY ITEM FOR "MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION."
- THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED ON THE TRAVEL LANES OR SHOULDERS. THEY MAY BE PARKED WITHIN THE STATE RIGHT-OF-WAY ONLY IN AREAS 30' BEYOND THE OUTSIDE EDGE OF THE TRAVEL LANES AND/OR IN AREAS APPROVED BY THE ENGINEER.
- TEMPORARY CONSTRUCTION SIGNS AND OTHER TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC, AND SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER APPROPRIATE.
- THE INTENDED VEHICLE PATHS THROUGH EACH WORK ZONE SHALL BE CLEARLY MARKED AT ALL TIMES. WATERBORNE PAVEMENT MARKINGS SHALL BE INSTALLED BEFORE THE END OF THE WORK SHIFT ON ALL COLD-PLAINED AND NEW ROADWAY SURFACES THAT WILL BE OPENED TO TRAFFIC AT THE END OF THE SHIFT.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 10 2022 FILE # 22-0077
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

GENERAL NOTES

- ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
 - THE 2018 EDITION OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
 - THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, NINTH EDITION, 2020, INCLUDING THE LATEST INTERIM REVISIONS.
 - THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
- DIMENSIONS, STATIONS, AND ELEVATIONS ARE SHOWN TO THE NEAREST ONE-HUNDREDTH OF A FOOT OR ONE-EIGHTH OF AN INCH.
- ALL ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 NAVD 88.
- COORDINATES USED ON THESE PLANS ARE BASED ON THE STATEWIDE COORDINATE SYSTEM, THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
- FOR BENCH MARKS AND TIES SEE HIGHWAY LOCATION PLANS.
- ANGLES ARE SHOWN TO THE NEAREST SECOND.
- ALL FOOTINGS SHALL BE APPROVED BY THE ENGINEER AS TO DIMENSIONS, ELEVATIONS, AND SUITABILITY OF FOUNDATION MATERIAL BEFORE THE PLACING OF CONCRETE.
- ALL WORKING POINTS ARE SHOWN AT THE INSIDE FACE OF THE FRAME LEGS, UNLESS OTHERWISE NOTED.
- ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
- IF THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE AS DESIGNATED ON THE COVER SHEET, THE CONTRACTOR IS ADVISED THAT, UPON 12 (TWELVE) HOURS NOTICE, THE ROADWAY SHALL BE OPEN TO EVACUEES AND EMERGENCY PERSONNEL. ANY EXTRA WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.
- THE EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND WERE LOCATED USING THE BEST AVAILABLE INFORMATION. NO BUILDING SERVICE CONNECTIONS (ELECTRIC, TELEPHONE, GAS, WATER, SANITARY AND OTHERS) ARE SHOWN. THE CONTRACTOR IS TO ASSUME THAT SERVICES TO ALL BUILDINGS ARE PRESENT.
- BOTH FEDERAL AND STATE LAW (RI. GENERAL LAW 39-1.2) REQUIRE NOTIFICATION OF APPROPRIATE UTILITY COMPANIES BEFORE DIGGING, TRENCHING, BLASTING, DEMOLISHING, BORING, BACK FILLING, GRADING, LANDSCAPING, OR OTHER EARTH MOVING OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES (INCLUDING THROUGH THE "DIG SAFE" PROGRAM) TO ENSURE THAT ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "DIG SAFE" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANIES, SHALL BE REPAIRED OR REPLACED (AS DEEMED APPROPRIATE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY) AT NO ADDITIONAL COST TO THE STATE.

DESIGN DATA

- DESIGN SPECIFICATIONS**
 - THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, NINTH EDITION, 2020, INCLUDING ALL INTERIM REVISIONS TO DATE.
 - THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL 2007 EDITION INCLUDING ALL REVISIONS TO DATE.
 - ALL OTHER APPLICABLE DESIGN SPECIFICATIONS ARE REFERENCED IN SECTION 1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED 2007.
 - THE 2018 REVISION OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
 - IN CASE OF CONFLICT, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL SHALL GOVERN.
- LOAD MODIFIERS**

THE LOAD MODIFIERS FOR THIS PROJECT ARE AS FOLLOWS:

 - THE LOAD MODIFIER FOR DUCTILITY SHALL BE TAKEN AS 1.0 FOR ALL LIMIT STATES.
 - THE LOAD MODIFIER FOR REDUNDANCY SHALL BE TAKEN AS 1.0 FOR ALL LIMIT STATES.
 - THE LOAD MODIFIER FOR OPERATIONAL IMPORTANCE SHALL BE TAKEN AS 1.05 FOR THE STRENGTH LIMIT STATE AND 1.0 FOR ALL OTHER LIMIT STATES.
- LOAD FACTORS**

ALL LOAD FACTORS SHALL BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT AS MODIFIED IN THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL (SPECIFIED BELOW).

 - THE LOAD FACTOR FOR TEMPERATURE GRADIENT SHALL BE TAKEN AS 0.0 AT THE STRENGTH AND EXTREME LIMIT STATES, 1.0 AT SERVICE WHEN LIVE LOAD IS NOT CONSIDERED AND 0.5 AT SERVICE WHEN LIVE LOAD IS CONSIDERED.
 - THE LOAD FACTOR FOR LIVE LOAD FOR THE EXTREME EVENT I SHALL BE TAKEN AS ZERO.
 - THE LOAD FACTOR FOR DEAD LOAD FOR THE EXTREME EVENT I AND EXTREME EVENT II SHALL BE TAKEN AS 1.0
 - THE LOAD FACTOR FOR SETTLEMENT FOR ALL LIMIT STATES SHALL BE TAKEN AS 1.0
- LIVE LOADS**
 - THE DESIGN VEHICULAR LIVE LOAD SHALL BE THE HL-93 DESIGNATION ADJUSTED FOR DYNAMIC LOAD ALLOWANCE AND MULTIPLE PRESENCE FACTOR.
- FOUNDATION DESIGN DATA**

SPREAD FOOTINGS:

THE FACTORED BEARING RESISTANCE FOR THE VARIOUS TYPES OF BEARING MATERIAL ARE AS FOLLOWS:

LOCATION	TYPE OF BEARING MATERIAL	FACTORED BEARING RESISTANCE (KSF)	
		STRENGTH LIMIT STATES	EXTREME LIMIT STATES
TBD	*	*	*
*	*	*	*

6. WIND LOADING DESIGN DATA

THE WIND LOADING DESIGN SHALL BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL, AND AS MODIFIED HEREIN.

- EXCEPT DURING CONSTRUCTION, THE DESIGN WIND PRESSURE IS BASED ON A DESIGN WIND SPEED OF 120 MPH.
- THE DESIGN WIND PRESSURES DURING CONSTRUCTION SHALL BE AS SPECIFIED UNDER THE NOTES TITLED "GENERAL NOTES REGARDING TEMPORARY CONSTRUCTION CONDITIONS".

7. TRAFFIC DATA

AADT (2022)	9,065 V.P.D.
AADT (2042)	10,015 V.P.D.
DHV	905 V.P.H.
PERCENT TRUCK TRAFFIC	9.8%

TRAFFIC COUNT DATA WAS COLLECTED WHILE A 3-TON WEIGHT LIMIT RESTRICTION WAS IN PLACE AT THE EXISTING BRIDGE.

8. HYDRAULIC DATA

DRAINAGE AREA	2.38 SQUARE MILES
HYDRAULIC OPENING	36.30 SQUARE FEET
HIGH WATER ELEVATION	100 YEAR - 141.92 (NAVD 88)
DESIGN VELOCITIES	100 YEAR - 8.33 FEET PER SECOND

SCOUR WAS NOT EVALUATED.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE

RI Environmental Management
MAR 03 2022
Office of Water Resources

Nancy L. Freeman

9. SEISMIC DESIGN DATA

- THE SEISMIC ANALYSIS AND DESIGN SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL.
- SEISMIC EFFECTS ON BURIED STRUCTURES NEED NOT BE CONSIDERED, EXCEPT WHEN THEY MAY BE SUBJECT TO UNSTABLE GROUND MOTIONS, SUCH AS LIQUEFACTION OR LARGE GROUND DEFORMATIONS DUE TO VERY SOFT GROUND PER SECTION 3.6.1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL.

10. UTILITY NOTES

COORDINATION WITH THE OVERHEAD UTILITY OWNERS SHOULD BE PERFORMED BY THE CONTRACTOR TO ENSURE ALL CRANE ACTIVITIES WILL NOT IMPACT THEIR SERVICE. RELOCATION OF UTILITY POLES IS NOT ALLOWED FOR THIS PROJECT.

MATERIALS

REINFORCING STEEL:

- AASHTO DESIGNATION M 31, GRADE 60, GALVANIZED

CONCRETE STRENGTHS:

- CLASS HP 3/4" f_c=5,000 PSI
RIGID FRAME, BRIDGE RAIL, AND END POSTS.

- CLASS XX 3/4" f_c=4,000 PSI

FOOTINGS

FOUNDATIONS

- GEOTECHNICAL DATA REPORT, INCLUDING BORING LOGS, CAN BE FOUND IN THE APPENDIX OF THE CONTRACT SPECIFICATIONS.

PRECAST CONCRETE NOTES

- THE FABRICATION OF ALL PRECAST ELEMENTS SHALL BE IN ACCORDANCE WITH SECTION 809 "PRECAST/PRESTRESSED CONCRETE MASONRY" OF THE RI STANDARD SPECIFICATIONS.
- ANY PRECAST MANUFACTURING PLANT FURNISHING PRECAST BRIDGE MEMBERS MUST BE CERTIFIED BY THE PRECAST PRESTRESSED CONCRETE INSTITUTE PLANT CERTIFICATION PROGRAM. THE CERTIFICATION SHALL BE AS A MINIMUM IN THE B3 CATEGORY. THE MANUFACTURER SHALL SUBMIT PROOF OF CERTIFICATION PRIOR TO THE START OF PRODUCTION.
- LIFTING DEVICES ARE THE RESPONSIBILITY OF THE PRECASTER.
- ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/8" UNLESS OTHERWISE NOTED.
- ANY STRUCTURAL MEMBERS DAMAGED DURING FABRICATION, SHIPPING OR ERECTION, SUCH THAT THEIR STRUCTURAL INTEGRITY IS COMPROMISED, SHALL BE REJECTED AND REPLACED AT THE CONTRACTOR'S OWN EXPENSE. THE ENGINEER SHALL BE THE SOLE JUDGE IN DETERMINING THE STRUCTURAL INTEGRITY OF DAMAGED MEMBERS. ANY DAMAGE THAT IS NOT STRUCTURAL IN NATURE SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE STATE.
- DURING HANDLING, THE MEMBERS MUST BE PICKED UP ONLY BY MEANS OF APPROVED LIFTING DEVICES AT THEIR APPROVED SUPPORT POINTS.
- DIMENSIONAL TOLERANCES SHALL NOT EXCEED THOSE RECOMMENDED IN THE LATEST EDITION OF THE PCI "MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF PRECAST AND PRESTRESSED CONCRETE PRODUCTS".
- THE DETAILS OF ALL INSERTS, ANCHORS, AND ANY OTHER ITEMS REQUIRED TO BE CAST INTO THE PRECAST UNITS (WEATHER DETAILED ON THE CONTRACT DRAWINGS OR PROVIDED FOR THE CONTRACTOR'S CONVENIENCE) SHALL BE SHOWN ON THE SHOP DRAWINGS. PRECAST UNITS SHALL NOT BE FIRED OR DRILLED INTO FOR ATTACHMENT PURPOSES. ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
- NON-SHRINK GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 11,000 PSI AFTER 28 DAYS AS DETERMINED BY TESTING UNDER ASTM DESIGNATION C-109 AND SHALL NOT EXHIBIT ANY MEASURABLE DECREASE IN VOLUME AFTER CURING. THE CONTRACTOR SHALL STRICTLY FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. NO TRAFFIC OR EQUIPMENT SHALL BE PERMITTED ON THE STRUCTURE UNTIL THE GROUT HAS CURED FOR AT LEAST 72 HOURS. GROUTING SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND THE DETAILS SHOWN. THE GROUT SHALL BE ON THE RIDOT APPROVED MATERIAL LIST.

CONCRETE NOTES

- CLASSES OF CONCRETE SHALL BE HIGH PERFORMANCE CLASS H AND, CLASS XX, AS DESCRIBED IN THE RI STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. REFER TO THE "MATERIAL" NOTES FOR CLASSES OF CONCRETE SPECIFIED FOR VARIOUS COMPONENTS.
- THE CONTRACTOR MAY, AT THE APPROVAL OF THE ENGINEER, PROPOSE THE USE OF SELF-CONSOLIDATING CONCRETE FOR ANY CLASS OF CONCRETE ON THIS PROJECT. SECTION 606 "SELF CONSOLIDATING CONCRETE (SCC)", CONTAINS THE REQUIREMENTS FOR MODIFYING ALL CLASSES OF CONCRETE MIX DESIGN FOR SELF-CONSOLIDATING APPLICATIONS.
- ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED.
- ALL REINFORCING STEEL SHALL BE GALVANIZED. ALL WIRE TIES AND MISCELLANEOUS HARDWARE USED FOR PLACEMENT OF GALVANIZED REINFORCING SHALL ALSO BE GALVANIZED. GALVANIZED COATING FOR REINFORCING STEEL SHALL CONFORM TO ASTM A767 CLASS 1.
- ALL CRITICAL LAP SPLICES SHALL BE AS SHOWN ON THE PLANS. ALL SPLICES NOT SHOWN ON THE PLANS SHALL BE LAPPED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR CLASS C LAP SPLICES.
- UNLESS OTHERWISE INDICATED ON THE PLANS, ALL MAIN REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO EARTH (FOOTINGS AND PRECAST RIGID FRAME) 3"

ALL OTHER BARS 2"

COVER TO TIES AND STIRRUPS MAY BE 0.5 INCH LESS THAN THE ABOVE VALUES SPECIFIED FOR MAIN REINFORCING, BUT IN NO CASE LESS THAN 1.5 INCHES.

- HORIZONTAL CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON PLANS WILL NOT BE PERMITTED WITHOUT A WRITTEN REQUEST BY THE CONTRACTOR AND PRIOR AUTHORIZATION BY THE ENGINEER.
- UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CONCRETE SURFACES VISIBLE IN ELEVATION TO ONE FOOT BELOW FINAL GROUND LINE, SHALL RECEIVE A CONCRETE SURFACE RUBBED FINISH IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.
- THE ENTIRE TOPSIDE AND VERTICAL SURFACES OF THE BRIDGE RAIL AND END POSTS SHALL BE PROVIDED WITH A FILM-FORMING SEALER (M12.03.1) CONCRETE SURFACE TREATMENT-PROTECTIVE COATING IN ACCORDANCE WITH SECTION 820 OF THE RI STANDARD SPECIFICATIONS.
- ALL EXPOSED EDGES AND REENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM ¼" CHAMFER.
- ALL JOINT SEALANT SHALL BE POLYURETHANE, POLYURETHANE ELASTOMERIC, OR SILICONE SEALANT AS DESIGNATED ON THE PLANS. THE COLOR OF THE JOINT SEALANT, WHERE EXPOSED, SHALL BE NEUTRAL (LIGHT GRAY OR TAN). THE COLOR OF THE SEALANT, WHERE NOT EXPOSED, WILL BE AT THE DISCRETION OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATIONS DURING CONSTRUCTION UNTIL SUCH TIME WHEN THE SURFACES ARE APPROVED AND ACCEPTED. ANY CONCRETE STAINS OR DISCOLORATIONS OCCURRING PRIOR TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
- UNLESS OTHERWISE NOTED ON THE PLANS, JOINT FILLER IS TO BE A PREFORMED, NON-EXPANSIVE, NON-EXTRUDING TYPE IN ACCORDANCE WITH SECTION M.02.11.1 OF THE RI STANDARD SPECIFICATIONS.
- UNLESS OTHERWISE INDICATED ON THE PLANS, ALL FORMS SHALL BE OF THE REMOVABLE TYPE THAT WILL PRODUCE THE DIMENSIONS SHOWN ON THE PLANS.
- IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS, ALL METAL TIES, NON-METALLIC TIES OR ANCHORAGES WHICH ARE REQUIRED FOR CONCRETE FORMWORK SHALL BE SO CONSTRUCTED THAT THEY CAN BE REMOVED TO AT LEAST ONE INCH BELOW THE EXPOSED SURFACE OF THE CONCRETE WITHOUT CAUSING DAMAGE TO THE CONCRETE SURFACE. SNAP TIES MAY BE USED ONLY IF APPROVED BY THE ENGINEER. IF THE CONTRACTOR PROPOSES TO USE THEM, A CATALOG CUT AND OTHER NECESSARY INFORMATION MUST BE SUBMITTED TO THE ENGINEER TO DEMONSTRATE THAT THE TIES WILL SNAP-OFF FAR ENOUGH INTO THE CONCRETE TO ALLOW FOR PROPER PATCHING. SNAP TIES MUST PROVIDE ADEQUATE STRENGTH TO SUPPORT THE FORMS. ALL CAVITIES SHALL BE FILLED WITH AN APPROVED CEMENT MORTAR MEETING THE REQUIREMENTS OF ASTM C 928.
- ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING.
- GALVANIZED REINFORCING BARS SHALL BE SECURELY TIED TO PREVENT DISLOCATION. TIES USED FOR THE GALVANIZED REINFORCING STEEL SHALL ALSO BE GALVANIZED.

- THE DETAILS OF ALL INSERTS, ANCHORS, AND ANY OTHER ITEMS REQUIRED TO BE CAST INTO THE PRECAST PRESTRESSED UNITS (WHETHER DETAILED ON THE CONTRACT DRAWINGS OR PROVIDED FOR THE CONTRACTOR'S CONVENIENCE) SHALL BE SHOWN ON THE SHOP DRAWINGS. PRECAST UNITS SHALL NOT BE FIRED OR DRILLED INTO FOR ATTACHMENT PURPOSES. ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
- THE NON-SHRINK GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 10,000 PSI AFTER 28 DAYS AS DETERMINED BY TESTING UNDER ASTM DESIGNATION C-109 AND SHALL NOT EXHIBIT ANY MEASURABLE DECREASE IN VOLUME AFTER CURING. THE CONTRACTOR SHALL STRICTLY FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. GROUTING SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAILS SHOWN. THE GROUT SHALL BE ON THE RIDOT APPROVED MATERIAL LIST.
- HANDHELD VIBRATORS SHALL BE EQUIPPED WITH RUBBER TIPPED HEADS.

GENERAL NOTES REGARDING TEMPORARY CONSTRUCTION CONDITIONS:

- DESIGN WIND PRESSURES FOR CONSTRUCTION:
MINIMUM WIND PRESSURES TO BE USED BY THE CONTRACTOR FOR DESIGN DURING THE CONSTRUCTION CONTRACT (WITH THE EXCEPTION OF SIGNS) SHALL BE FROM THE FOLLOWING TABLE:

HEIGHT ABOVE GROUND	WIND PRESSURE (PSF)
UP TO 17'	33
OVER 17' AND UP TO 33'	37
OVER 33' AND UP TO 50'	41
OVER 50' AND UP TO 75'	44
OVER 75' AND UP TO 100'	47

TABLE NOTES:

- APPLICATION OF THE TABULAR PRESSURE:
 - BRIDGE COMPONENTS DURING CONSTRUCTION, PRIOR TO THE INSTALLATION OF THE PERMANENT BRACING SYSTEMS, NOT INCLUDING CRANE LIFTING.
 - FALSE WORK, SHORING, AND SCAFFOLDING AS DEFINED IN FHWA "GUIDE DESIGN SPECIFICATION FOR BRIDGE TEMPORARY WORKS", EXCLUDING 3-DIMENSIONAL LATTICED OR TRUSSED FRAMES OR TOWERS;
 - TEMPORARY SHIELDING.

WIND PRESSURES FOR ALL OTHER STRUCTURES SHALL BE CALCULATED BASED ON ASCE "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION", SEI/ASCE 37-02 (ALL REFERENCES TO THE ASCE 7 IN THE SEI/ASCE 37-02 PUBLICATION, SHALL BE THE LATEST REVISION OF ASCE 7). THE EXPOSURE CATEGORY SHALL BE C.

- ERECTION OF BRIDGE COMPONENTS:

FOR THE ERECTION OF STRUCTURES, THE FOLLOWING SHALL APPLY:

- THE CONTRACTOR SHALL SUBMIT AN ERECTION PLAN THAT PROVIDES COMPLETE DETAILS OF THE PROCESS INCLUDING, BUT NOT LIMITED TO, TEMPORARY SUPPORTS, SCHEDULING AND OPERATION SEQUENCING, CRANE PLACEMENT, AND ASSUMED LOADS AND CALCULATED STRESSES DURING VARYING STAGES OF LIFTING. THIS APPLIES TO STRUCTURES OF ANY KIND. THE CAPACITY OF THE CRANE AND ALL LIFTING AND CONNECTING DEVICES SHALL BE ADEQUATE FOR 125 PERCENT (150 PERCENT OVER AMTRAK) OF THE TOTAL PICK LOAD INCLUDING SPREADERS, RIGGING, HOOKS, AND ALL OTHER MATERIALS. THIS FACTOR OF SAFETY SHALL BE IN ADDITION TO ALL MANUFACTURERS' PUBLISHED FACTORS OF SAFETY.
- A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF RHODE ISLAND, WILL BE REQUIRED TO STAMP THE CONTRACTOR'S ERECTION PLAN.
- THE CONTRACTOR'S PROFESSIONAL ENGINEER WILL BE REQUIRED TO INSPECT AND PROVIDE WRITTEN APPROVAL OF INSTALLATION, PRIOR TO ALLOWING VEHICLES OR PEDESTRIANS ON OR BELOW THE STRUCTURE. THE PROFESSIONAL ENGINEER MUST ALSO STAMP ALL CHANGES TO THE CONTRACTOR'S ERECTION PLAN. ADDITIONALLY, ALL PROPOSED CHANGES MUST BE SUBMITTED TO RIDOT FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION.
- A MANDATORY PRE-ERECTION CONFERENCE WILL BE HELD AT LEAST TWO WEEKS PRIOR TO THE START OF THE RIGID FRAME INSTALLATION TO DISCUSS THE PLAN AND PROCEDURES, WORK SCHEDULES, CONTINGENCY PLANS, SAFETY REQUIREMENTS AND TRAFFIC CONTROL. THE CONTRACTOR'S PROFESSIONAL ENGINEER AND ERECTION SUBCONTRACTOR WILL BE REQUIRED TO ATTEND THIS MEETING, AS WILL THE RIDOT RESIDENT ENGINEER, THE DESIGN PROJECT ENGINEER AND THE DESIGN CONSULTANT. BASED UPON DISCUSSIONS AT THIS MEETING AND A REVIEW OF THE CONTRACTOR'S ERECTION PLAN, RIDOT MAY ORDER THE CONTRACTOR TO MODIFY AND RESUBMIT THE ERECTION PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

- ERECTION OF BRIDGE COMPONENTS (CONTINUED):

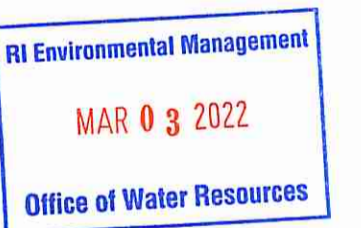
FOR THE ERECTION OF STRUCTURES, THE FOLLOWING SHALL APPLY:

- THE CONTRACTOR WILL BE REQUIRED TO PERFORM DAILY INSPECTIONS OF THE ERECTED RIGID FRAMES UNTIL THE WEARING SURFACE IS COMPLETED.
- THE COST OF PREPARING AND STAMPING THE ERECTION PLAN, COMPUTATIONS, AND REPORTS, RESPONDING TO RIDOT'S COMMENTS AND MAKING THE NECESSARY REVISIONS, AND ATTENDANCE AT MEETINGS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SUPERSTRUCTURE PAY ITEM, BE IT CONCRETE, STEEL OR TIMBER.

SHOP DRAWING SUBMITTALS

- THE FOLLOWING LIST OF BRIDGE ITEMS OF WORK FOR WHICH SHOP DRAWINGS AND/OR OTHER SUBMITTALS ARE REQUIRED IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THIS LIST INCLUDES ONLY THE MAJOR ITEMS OF BRIDGE WORK; IT DOES NOT ITEMIZE ALL SUBMITTALS REQUIRED BY THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR TIMELY SUBMISSION OF ALL SHOP DRAWINGS AND OTHER DOCUMENTS REQUIRED BY THE CONTRACT. NO EXTRA PAYMENT WILL BE MADE, NOR ANY EXTENSION BE MADE TO THE CONTRACT COMPLETION DATE FOR MAKING REQUIRED SUBMITTALS.
- DEMOLITION OF THE EXISTING BRIDGE INCLUDING DETAILED SEQUENCE OF WORK
- DEBRIS PROTECTION SYSTEM FOR DEMOLITION
- DEWATERING PLAN
- CONCRETE MIX DESIGNS
- REINFORCING STEEL, SPLICERS AND INSERTS
- PRECAST FOOTINGS
- PRECAST RIGID FRAME
- ERECTION PROCEDURES
- TEMPORARY STEEL TRAFFIC PLATE DETAILS
- BRIDGE NAME/SEAL TABLETS
- TEMPORARY EARTH RETAINING SYSTEMS
- MATERIAL CUT SHEETS
- TEMPORARY TRAFFIC CONTROL BARRIER
- FLOATING TURBIDITY BARRIER

NECESSARY SUBMITTALS MAY NOT BE LIMITED TO THE ABOVE LIST AND MAY REQUIRE OTHER SUBMITTALS AT THE RESIDENT ENGINEER'S REQUEST FOR: SHOP DRAWINGS, CERTIFICATE OF COMPLIANCE, PRODUCT INFORMATION, CATALOG CUTS, TEST DATA, OR OTHER



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Nancy L. Freeman



RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:	ML	SCALE: 1"=20'	
CHECKED BY:	MAC	GRAPHIC SCALE	
DATE:	2/18/2022		
SHEET:	6	REVISIONS	REVISIONS
		NO. DATE BY	NO. DATE BY
OF:	21		

TIVERTON

REPLACEMENT OF
FISH ROAD BRIDGE NO. 1242
CONTRACT: 2022-CB-018

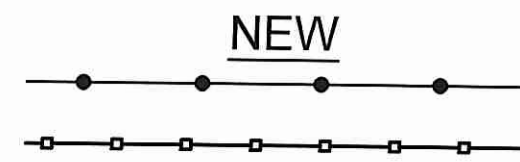
RHODE ISLAND

STANDARD BRIDGE NOTES NO. 2

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOT SHEETS
	RI	STP-XXXX(XXX)	2022	7	2

EXISTING

COMPOST FILTER SOCK
FLOATING TURBIDITY BARRIER



JOB SPECIFIC LEGEND:

- (34.1.0M) GUARDRAIL INSTALLATION - MODIFIED (31" HEIGHT)
- (34.2.0M) STEEL BEAM GUARDRAIL - MODIFIED (MASH)
- (A) FULL DEPTH RECONSTRUCTION
2" CLASS 9.5 MODIFIED HMA OVER
6" CLASS 19.0 HMA - IN 2 LIFTS OVER
12" GRAVEL BORROW SUBBASE COURSE
- (ETEA) GUARDRAIL END TREATMENT - ENERGY ABSORBING TERMINAL MODIFIED (MASH TL-3)
- (EPGT) TRANSITION TO BRIDGE RAIL (FACE OF CURB)(MASSDOT STD 400.3.6)
- (FS) COMPOST FILTER SOCK - 12" DIAMETER
- (GRRP) GUARDRAIL WITH REINFORCED POST SPACING
- (MM) MICRO MILLING, 2" DEPTH
- (PO) MODIFIED CLASS 9.5 HMA - 2"
- (TB) FLOATING TURBIDITY BARRIER

GENERAL NOTES - GUARDRAIL:

1. ALL GUARDRAIL INSTALLED WITHIN THIS PROJECT SHALL CONFORM TO THE STANDARDS DETAILED IN RIDOT TAC-0386 (REVISED) DATED DECEMBER 14, 2021
2. ALL DIMENSIONS OF STANDARD GUARDRAIL COMPONENTS, INCLUDING PANELS, POSTS, OFFSET BLOCKS, BOLTS, NUTS, WASHERS AND HOLES, ARE BASED UPON ENGLISH UNIT CONVERSIONS OF THE AASHTO-AGC JOINT COMMITTEE TASK FORCE 13 REPORT: A GUIDE TO STANDARDIZING HIGHWAY BARRIER HARDWARE (HTTP://WWW.AASHTO13.ORG/BARRIER-HARDWARE.PHP.)
3. APPROVAL BY THE ENGINEER IS REQUIRED WHERE A DIFFERING GUARDRAIL CONFIGURATION IS REQUIRED FOR CONSTRUCTABILITY BEYOND THE OPTIONS SHOWN IN THESE STANDARDS OR THE PLANS.
4. USE 12'-6" NOMINAL LENGTH PANELS UNLESS OTHERWISE INDICATED IN THESE STANDARDS OR THE PLANS.
5. ALL LAP SPLICES SHALL BE MIDSPAN UNLESS OTHERWISE SHOWN.
6. LAP SPLICES SHALL BE CONSTRUCTED WITH THE SPLICE RIDGE ORIENTED DOWNSTREAM OF THE FINAL DIRECTION OF TRAFFIC IN THE NEAREST TRAVEL LANE.
7. STANDARD POSTS SHALL BE STEEL OR TIMBER, UNLESS OTHERWISE INDICATED IN THE PLANS, FABRICATED TO THE DIMENSIONS SHOWN ON POST AND OFFSET BLOCK DETAILS. POSTS OF A SINGLE MATERIAL TYPE SHALL BE USED THROUGHOUT AN ENTIRE RUN OF GUARDRAIL; EXCEPTIONS ARE ALLOWED ONLY WHEN SPECIFIC MATERIAL TYPES ARE REQUIRED FOR TRANSITIONS, END TREATMENTS, AND/OR ANCHORAGES.
8. OFFSET BLOCKS, WHERE REQUIRED, SHALL BE TIMBER AND FABRICATED TO THE NOMINAL DIMENSIONS SHOWN ON POST AND OFFSET BLOCK DETAILS. PLASTIC OR COMPOSITE OFFSET BLOCKS OF THE SAME NOMINAL DIMENSIONS THAT ARE LISTED ON THE QUALIFIED CONSTRUCTION MATERIALS LIST MAY BE SUBSTITUTED. OFFSET BLOCKS OF A SINGLE MATERIAL TYPE SHALL BE USED THROUGHOUT AN ENTIRE RUN OF GUARDRAIL; EXCEPTIONS ARE ALLOWED ONLY WHEN SPECIFIC MATERIAL TYPES ARE REQUIRED FOR TRANSITIONS, END TREATMENTS, AND/OR ANCHORAGES.
9. MILLINGS, WHERE CALLED, SHALL CONFORM TO SECTION 213 OF THE RI STANDARD SPECIFICATIONS.
10. MILLINGS SHALL NOT BE INSTALLED IN AREAS ADJACENT TO BODIES OF WATER.
11. GUARDRAIL DELINEATORS, CONFORMING TO SECTION 901 SHALL BE INSTALLED AT 25' INTERVALS WITHIN 100' OF END TREATMENT OR TRAILING ANCHORAGE AND AT 100' INTERVALS IN ALL OTHER AREAS UNLESS OTHERWISE SHOWN IN THE PLANS.
12. MINIMAL OFFSET DISTANCE FROM FACE OF W-BEAM PANEL TO A FIXED (NON-BREAKAWAY) OBJECT SHALL BE 60' FOR TL-3.
13. THE CONTRACTOR SHALL NOTE THAT THE REQUIRED INSTALLATION OF REFLECTORIZED DELINEATORS ON ALL GUARDRAIL AND GUARDRAIL END TREATMENTS SHALL BE INCIDENTAL TO THE COST OF THE GUARDRAIL ITEM. NO SEPARATE PAYMENT WILL BE MADE FOR THE REFLECTORIZED DELINEATORS. DELINEATION STICKERS ARE ALSO REQUIRED ON ALL APPROACH END SECTIONS, AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE GUARDRAIL END TREATMENT.
14. WHERE EXISTING GUARDRAIL POSTS ARE REMOVED AND NO NEW GUARDRAIL IS INSTALLED, THE POST HOLES SHALL BE FILLED WITH COMMON BORROW. PLANTABLE SOIL AND SEED SHALL BE SPREAD ACROSS THE FILLED HOLES. THIS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE REMOVAL OF THE EXISTING GUARDRAIL.
15. THERE WILL BE NO DIRECT PAYMENT FOR ANY HARDWARE, UNLESS OTHERWISE NOTED, REQUIRED TO PROPERLY COMPLETE THE INSTALLATION OF GUARDRAIL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, STANDARD DETAILS, OR SPECIAL DETAILS CONTAINED IN THE CONTRACT. HARDWARE SHALL INCLUDE, BUT IS NOT LIMITED TO, ALL NUTS, BOLTS, AND WASHERS.
16. THE CONTRACTOR SHALL UTILIZE UNANCHORED PRECAST CONCRETE BARRIER (RI STD. 40.5.0) AND A NARROW CONDITION IMPACT ATTENUATOR TO PROTECT ANY GUARDRAIL BLUNT ENDS DURING NON WORKING HOURS UNTIL ALL GUARDRAIL CONNECTIONS HAVE BEEN MADE AND ALL GUARDRAIL END TREATMENTS HAVE BEEN INSTALLED.
17. ALL GUARDRAIL MATERIALS SHALL CONFORM TO SECTION M.08 OF THE RI STANDARD SPECIFICATIONS, UNLESS OTHERWISE INDICATED.

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Office of Water Resources

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 1, 2022 FILE # 22-0077
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

GREEN INTERNATIONAL AFFILIATES, INC.
Civil and Structural Engineers



DESIGNED BY: KG
CHECKED BY: EA
DATE: 2/18/2022
SHEET: 7
OF: 21

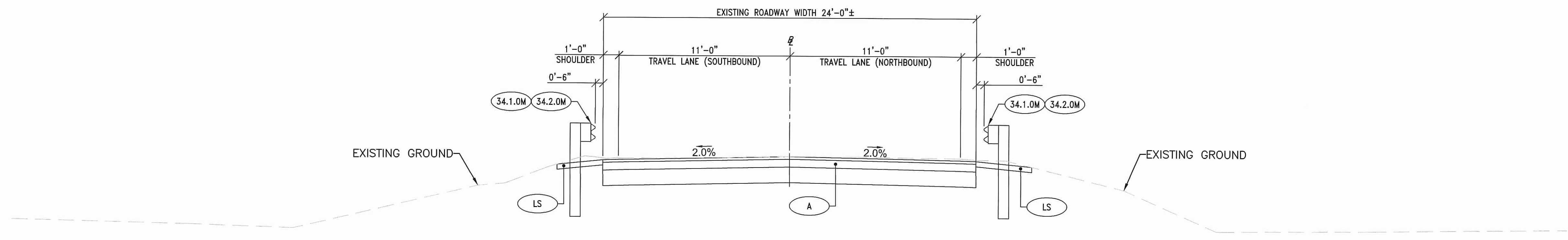
SCALE: 1"=20'

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

TIVERTON
REPLACEMENT OF
FISH ROAD BRIDGE NO. 1242
CONTRACT: 2022-CB-018
JOB SPECIFIC, PLAN SYMBOLS,
LEGEND & NOTES

PAVEMENT NOTES:

- (A) FULL DEPTH RECONSTRUCTION:
 2" CLASS 9.5 MODIFIED HMA OVER
 6" CLASS 19.0 HMA - IN 2 LIFTS OVER
 12" GRAVEL BORROW SUBBASE COURSE
 ASPHALT EMULSION TACK COAT BETWEEN PAVEMENT LAYERS

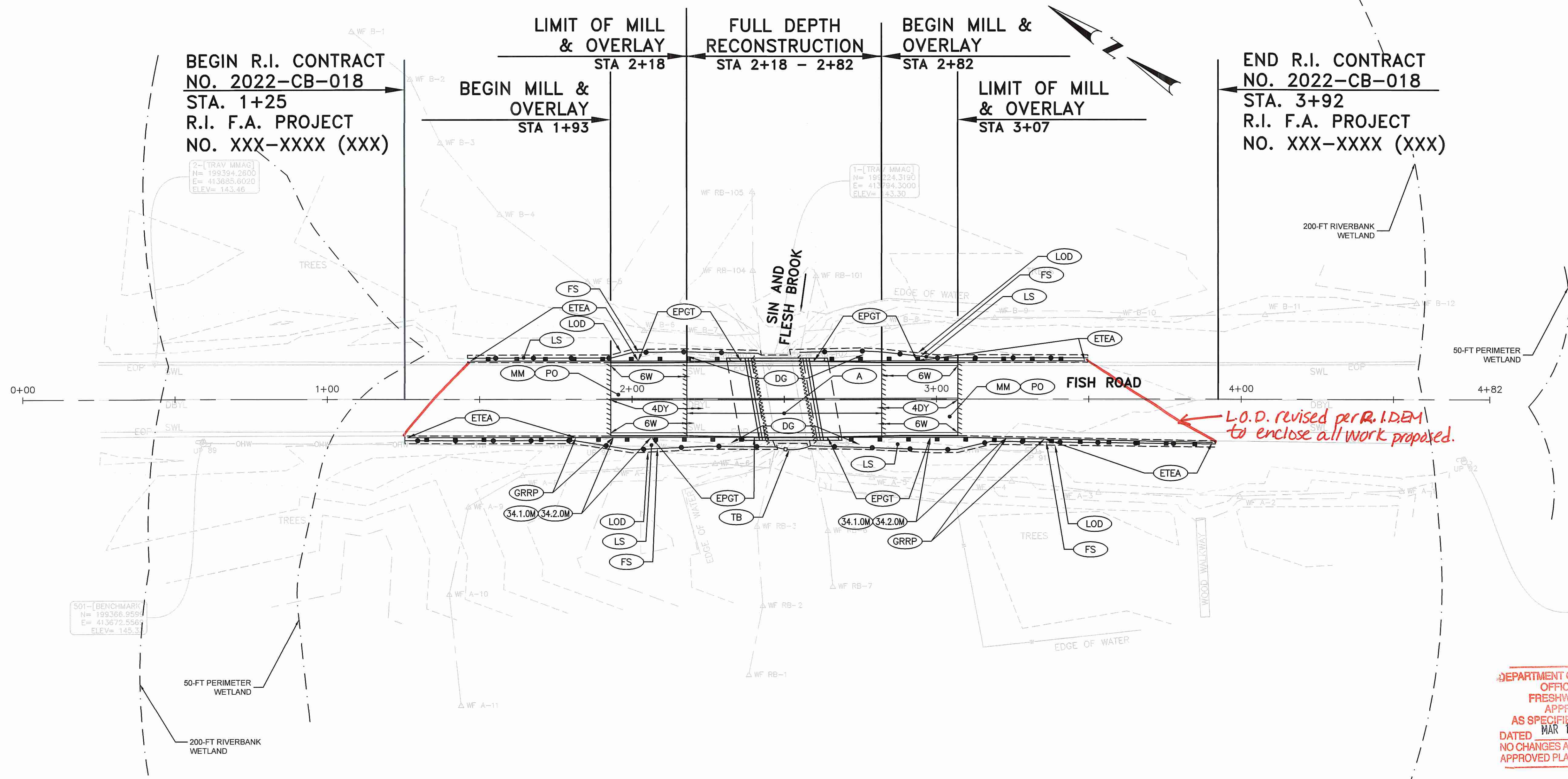


FISH ROAD - TYPICAL SECTION
 STA 2+18 - 2+82
 SCALE: 1"=4'

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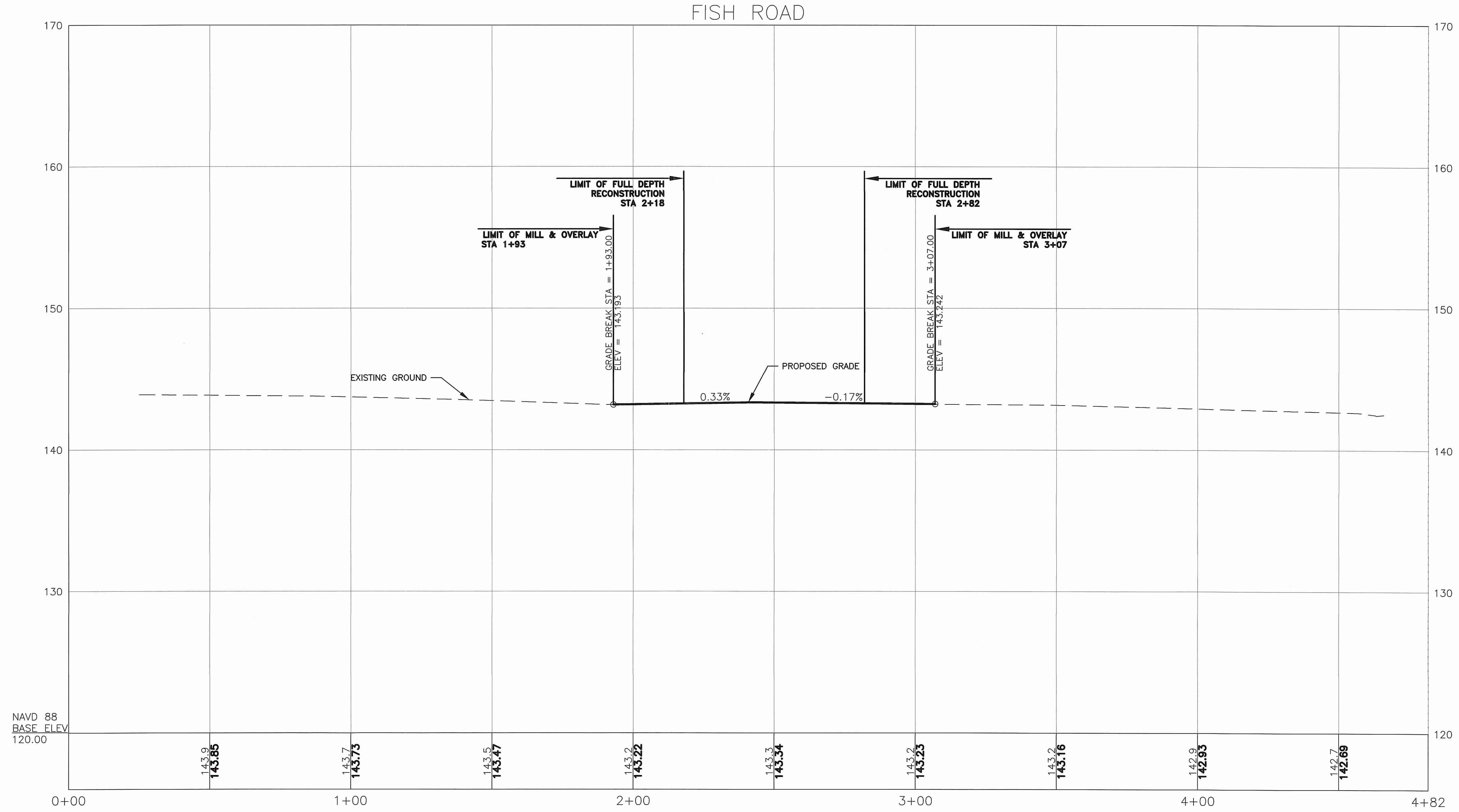


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<p>GREEN INTERNATIONAL AFFILIATES, INC. Civil and Structural Engineers</p>	<p>RHODE ISLAND DEPARTMENT OF TRANSPORTATION</p>	DESIGNED BY: KG CHECKED BY: EA DATE: 2/18/2022 SHEET: 10 OF: 21	SCALE: 1"=20' 	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	BY	NO.	DATE	BY							REPLACEMENT OF FISH ROAD BRIDGE NO. 1242 CONTRACT: 2022-CB-018 GENERAL PLAN
		NO.	DATE	BY	NO.	DATE	BY										
		TIVERTON RHODE ISLAND		2605H_V1_010_GENER Sheet 9 of 14													



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Civil and Structural Engineers

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DEPARTMENT OF TRANSPORTATION

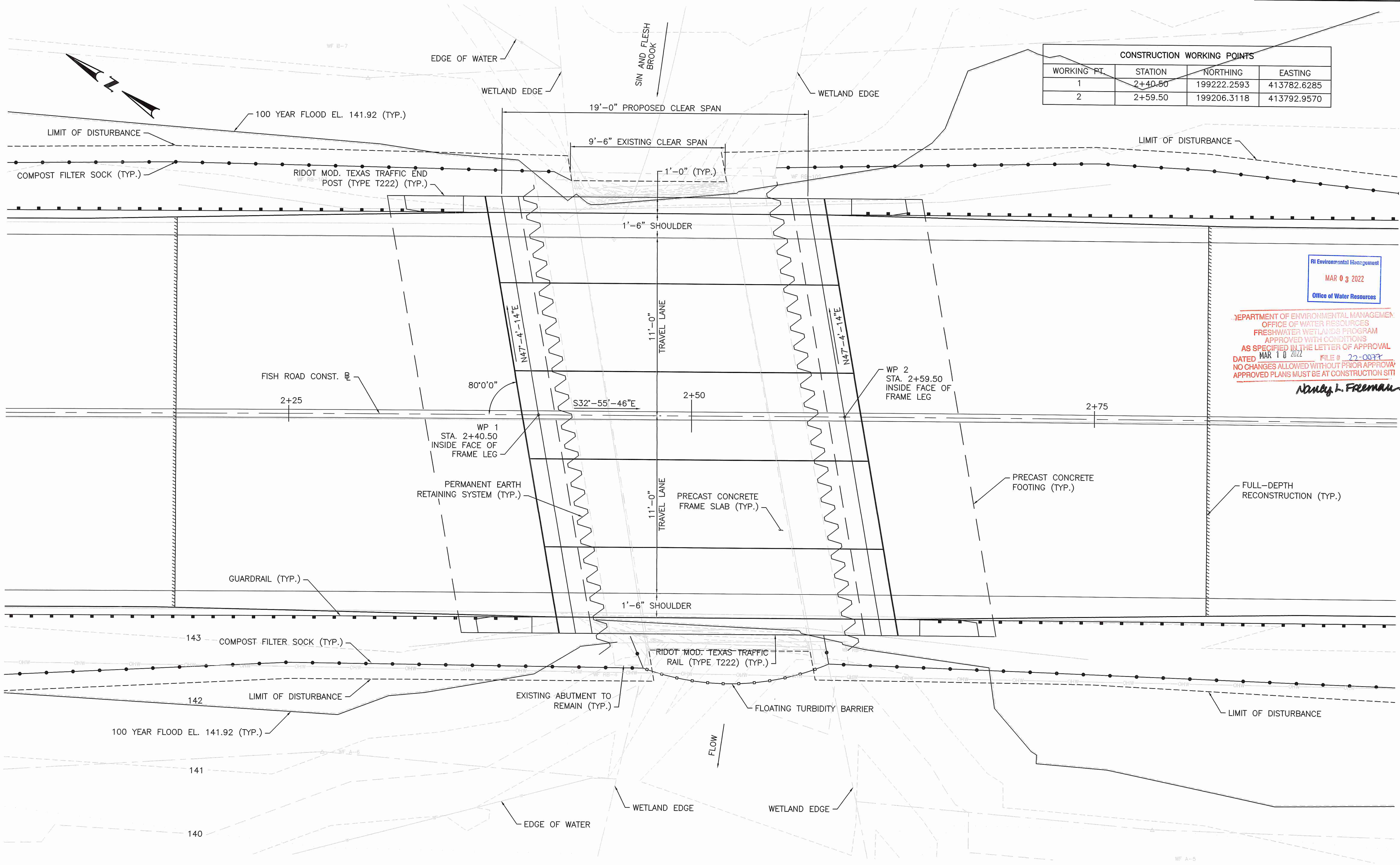
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 DATE: 2/18/2022
 SHEET: 11
 OF: 21

SCALE: 1"=20'

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

TIVERTON
 REPLACEMENT OF
 FISH ROAD BRIDGE NO. 1242
 CONTRACT: 2022-CB-018
 RHODE ISLAND
PROFILE

CONSTRUCTION WORKING POINTS			
WORKING PT.	STATION	NORTHING	EASTING
1	2+40.50	199222.2593	413782.6285
2	2+59.50	199206.3118	413792.9570



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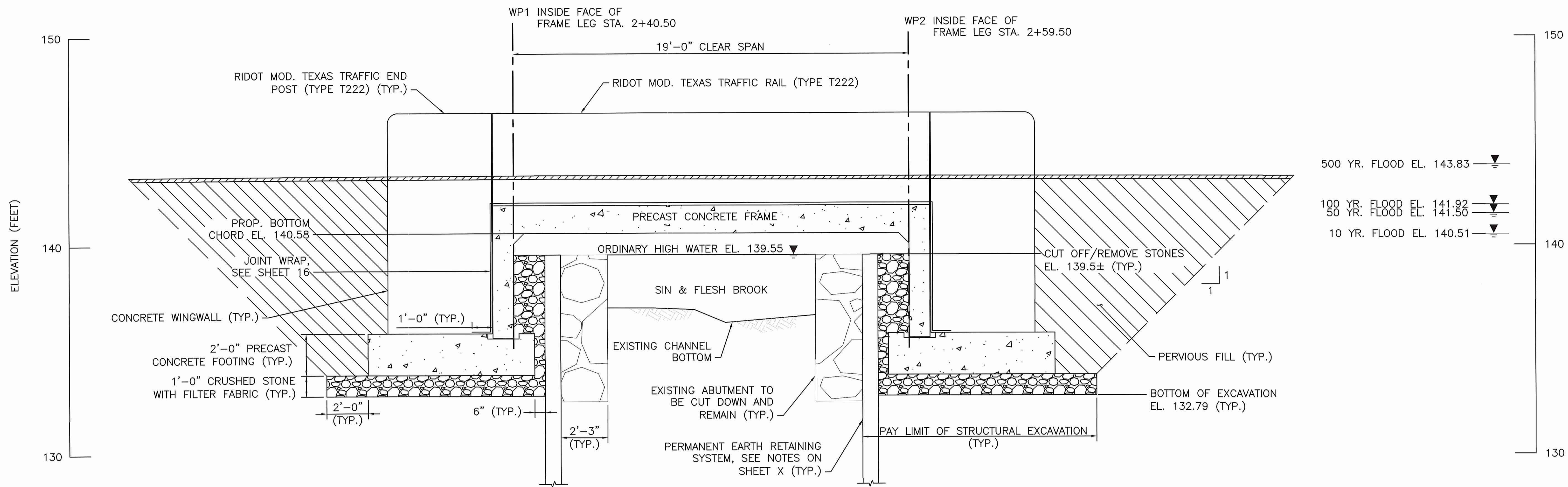
RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION

DESIGNED BY: ML, AD
 CHECKED BY: MAC
 DATE: 2/18/2022
 SHEET: 14
 OF: 21

SCALE: 1"=20'

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

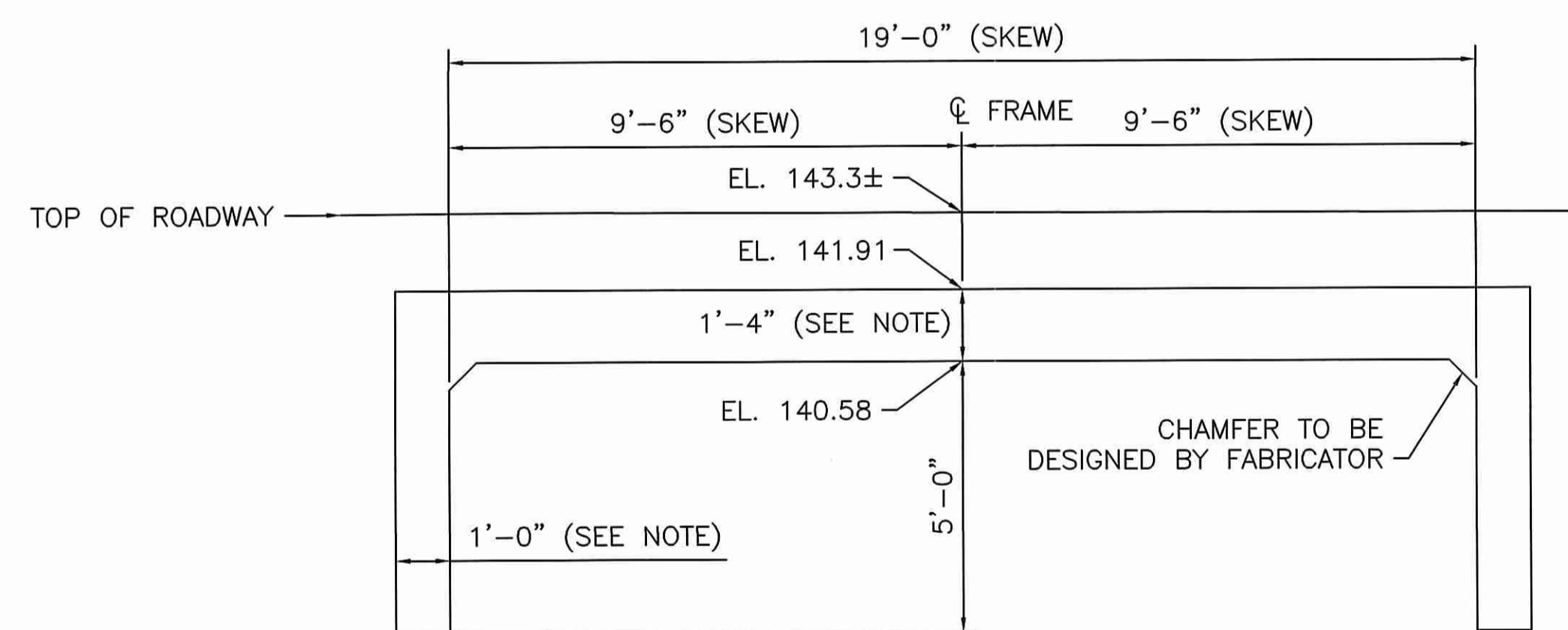
TIVERTON
 REPLACEMENT OF
 FISH ROAD BRIDGE NO. 1242
 CONTRACT: 2022-CB-018
 BRIDGE GENERAL PLAN
 RHODE ISLAND



LONGITUDINAL SECTION
SCALE: 3/8"=1'-0"

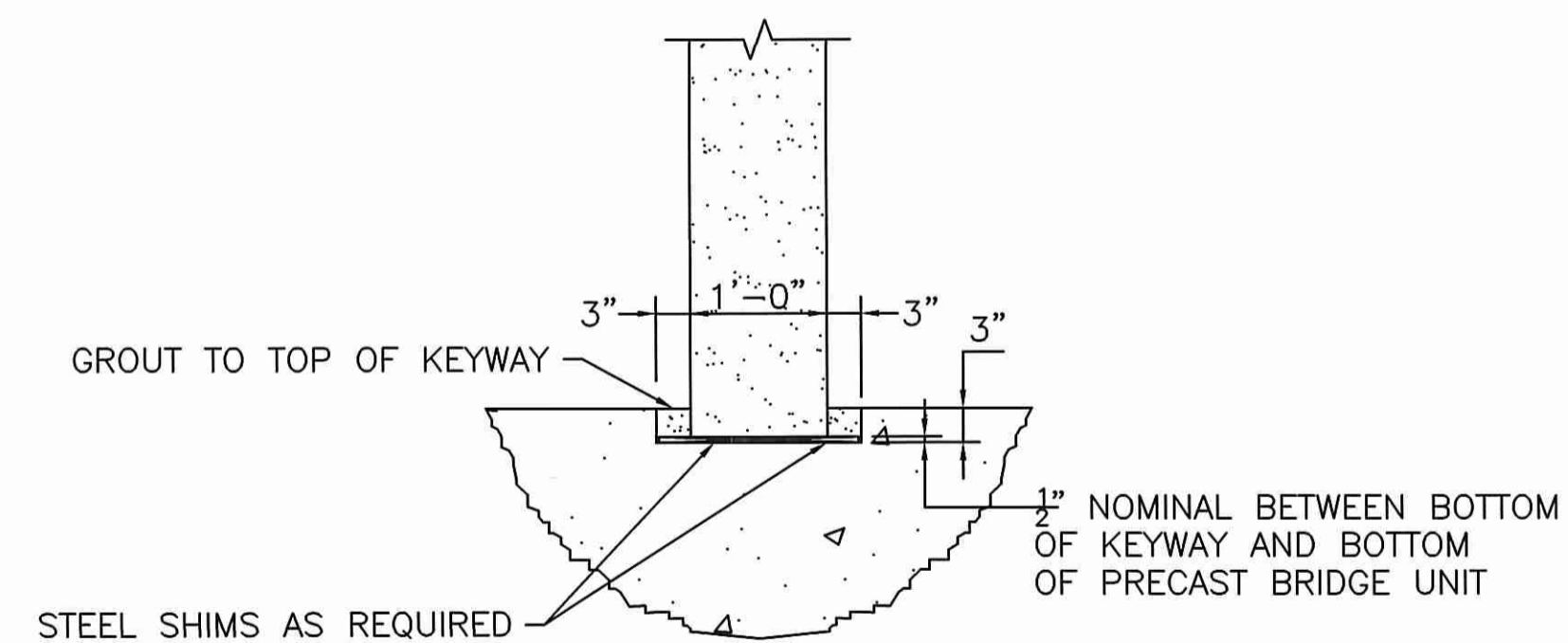
NOTES:

1. PERVIOUS FILL SHALL MEET THE REQUIREMENTS IN SECTION M.01.03 OF THE RIDOT STANDARD SPECIFICATION.
2. CRUSHED STONE SHALL MEET THE REQUIREMENTS IN SECTION M.01.04 OF THE RIDOT STANDARD SPECIFICATION.



NOTE:
DIMENSIONS TO BE ADJUSTED AS NEEDED BASED ON FABRICATOR'S DESIGN, BUT IN NO CASE SHOULD LOWER CHORD BE LOWER THAN SHOWN.

TYPICAL FRAME SECTION
SCALE: 3/8"=1'-0"



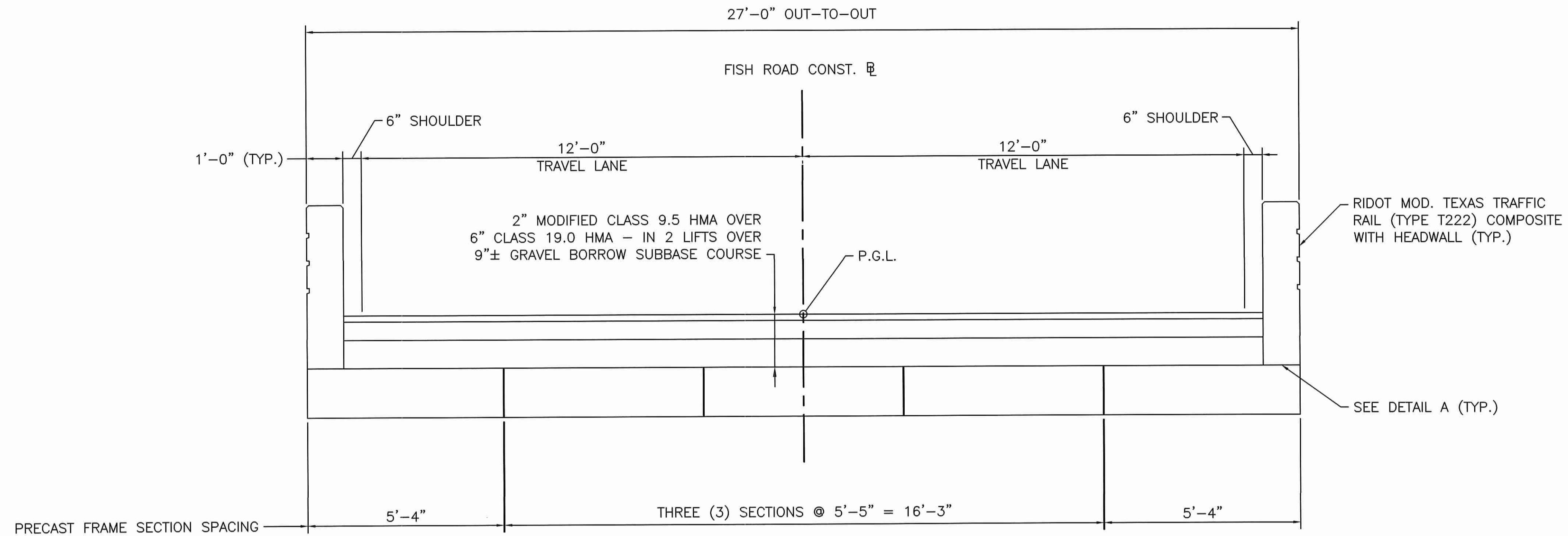
NOTE:
FILL ENTIRE KEYWAY INCLUDING 1/2" NOMINAL VOID BETWEEN BOTTOM OF KEYWAY AND BOTTOM OF PRECAST BRIDGE UNIT LEG WITH GROUT.

TYPICAL BRIDGE UNIT GROUT DETAIL
SCALE: 3/4"=1'-0"

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MAR 03 2022
Office of Water Resources

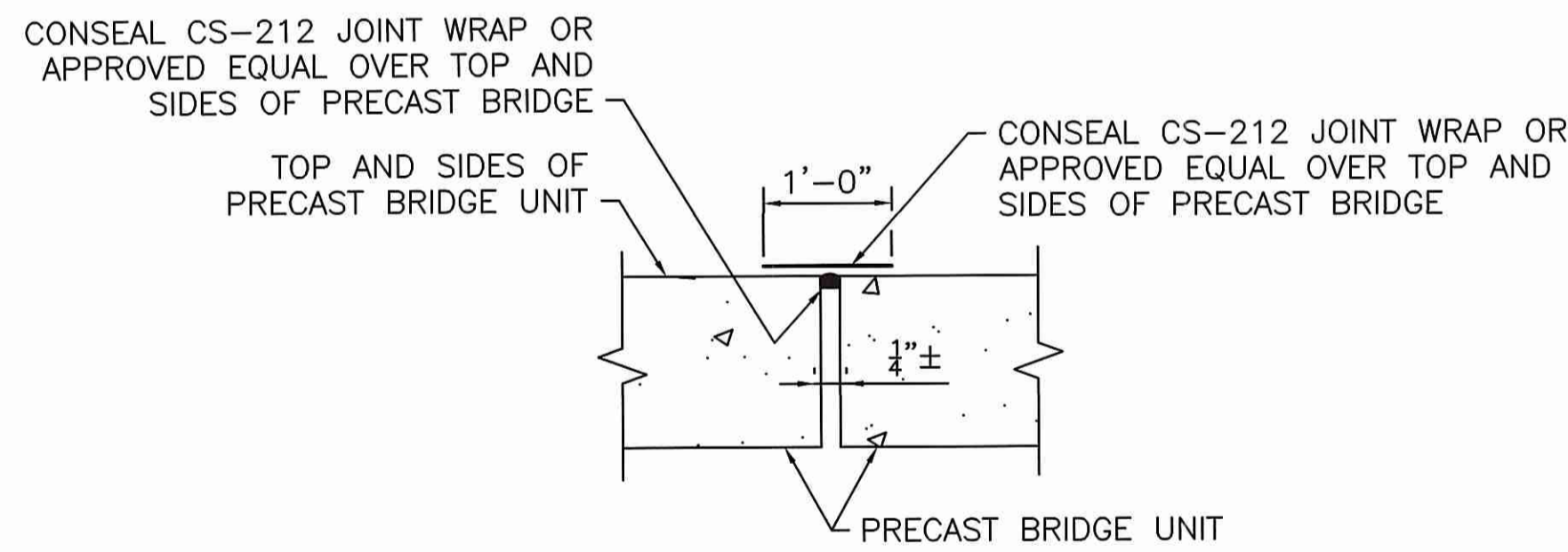
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Anthony J. Freeman



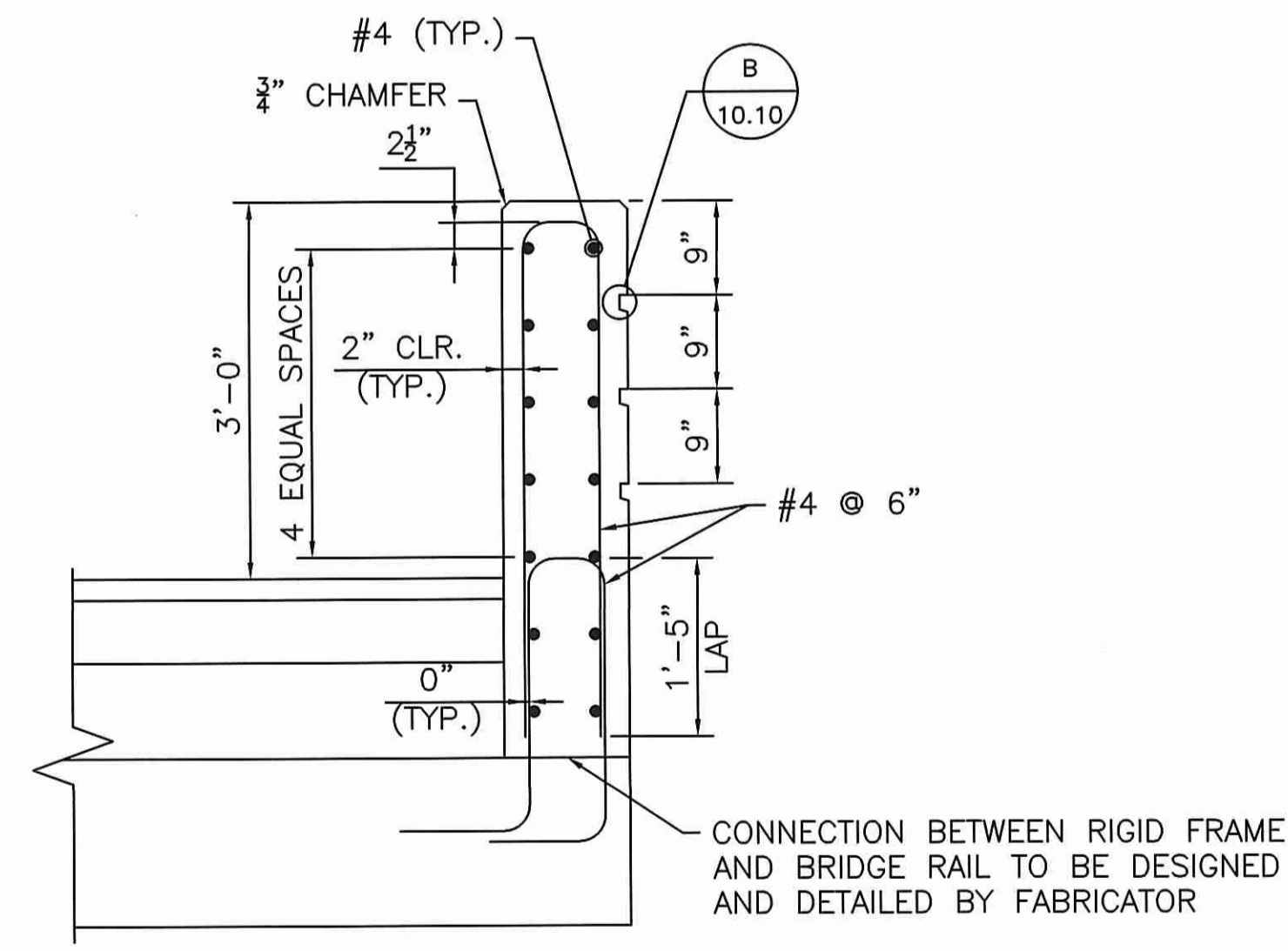
TYPICAL BRIDGE SECTION
SCALE: 1/2"=1'-0"

NOTE:
EXTERIOR AND FIRST INTERIOR PRECAST BRIDGE SECTIONS ARE TO BE BOLTED TOGETHER.

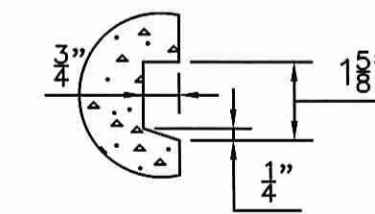


- NOTES:
1. REQUIREMENT FOR A SHEAR KEY SHALL BE DETERMINED BY THE PRECAST DESIGNER.
 2. CONCRETE SURFACE IN VICINITY OF JOINT WRAP AND SEAL SHALL BE PRIMED WITH MEL-PRIME N.E. OR APPROVED EQUAL.
 3. ALL JOINT MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

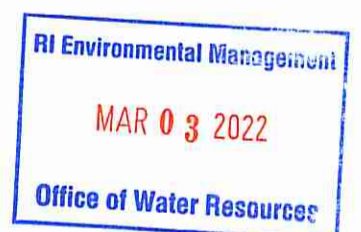
TYPICAL FRAME JOINT
SCALE: 3/4"=1'-0"



TYPICAL BRIDGE RAIL SECTION DETAIL
SCALE: 3/4"=1'-0"

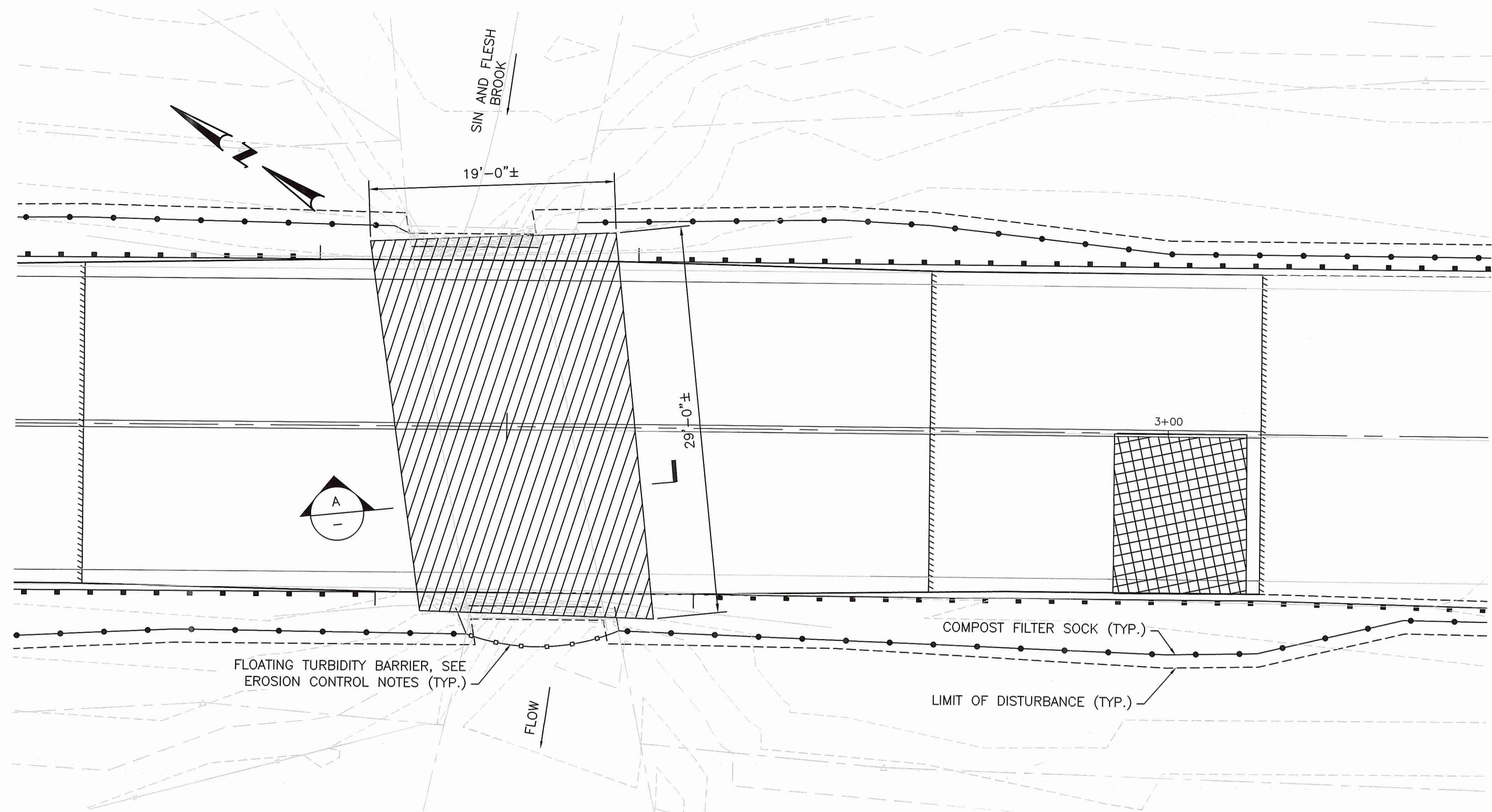


DETAIL A
SCALE 3/4"=1'-0"



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APPROXIMATE QUANTITIES:

- CONCRETE BRIDGE DECK 9 CY
- CONCRETE APPROACH SLABS 9 CY
- CONCRETE HEADWALLS 1 CY
- CONCRETE ABUTMENT STEMS 5 CY
- DRY-LAID STONE ABUTMENT STEMS 3 CY

TOTAL 27 CY

REMOVE AND DISPOSE GUARDRAIL AND POSTS 110 LF

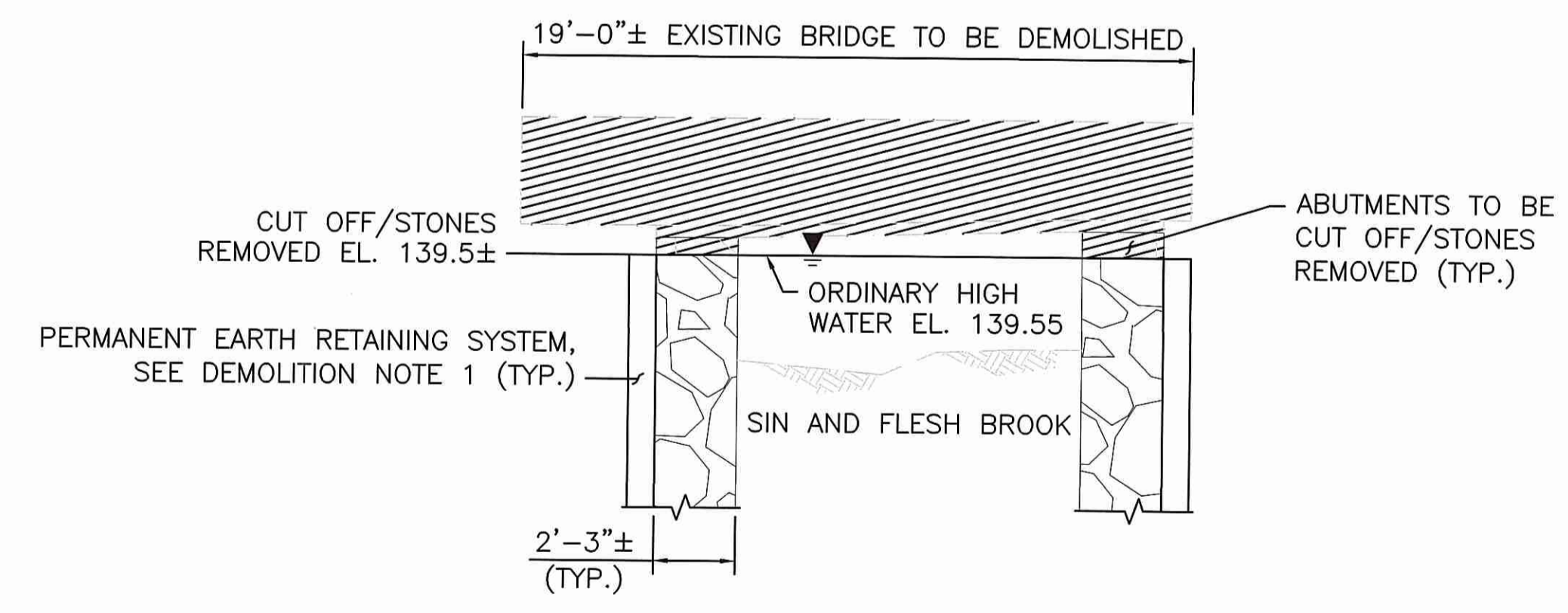
THESE QUANTITIES ARE APPROXIMATE ONLY AND THE STATE ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. NO ADDITIONAL PAYMENT WILL BE MADE FOR VARIATION IN THE QUANTITIES SHOWN.



DEMOLITION PLAN
SCALE: 3/16"=1'-0"

- LEGEND:**
- DEMOLITION AREA
 - AREA FOR DEWATERING (SEE NOTES)

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SECTION A
SCALE: 1/4"=1'-0"

DEMOLITION NOTES:

- PRIOR TO ANY DEMOLITION ACTIVITIES THE CONTRACTOR SHALL HAVE PERFORMED THE FOLLOWING TASKS IN ACCORDANCE WITH SPECIAL PROVISIONS AND RECEIVED APPROVAL FROM THE ENGINEER:
 - PERMANENT EARTH RETAINING SYSTEM SHOP DRAWINGS IN ACCORDANCE WITH ITEM CODE 805.9901.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCING WORK.
- REMOVAL AND DISPOSAL OF THE EXISTING BRIDGE SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
- THE EXISTING DRY-LAID STONE AND CONCRETE ABUTMENTS SHALL BE REMOVED/CUT DOWN TO THE ELEVATIONS SHOWN ON THE PLANS AND LEFT IN PLACE AS A SCOUR COUNTERMEASURE.
- CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION TO PREVENT ANY DEBRIS FROM FALLING INTO THE WATER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM CODE 803.9901 "REMOVE AND DISPOSE PORTIONS OF EXISTING BRIDGE". ANY MATERIAL THAT INADVERTENTLY FALLS INTO THE CHANNEL SHALL BE REMOVED BY THE CONTRACTOR BY HAND. NO ADDITIONAL COMPENSATION FOR REMOVAL OF MATERIAL SHALL BE MADE. CONSTRUCTION EQUIPMENT IS NOT ALLOWED TO MAKE CONTACT WITH THE CHANNEL BOTTOM.

DEWATERING NOTES:

- INSTALL DEWATERING SYSTEMS IN ACCORDANCE WITH SECTION 208 OF THE RI STANDARD SPECIFICATION.
- PROVIDE ADDITIONAL SAND BAGS AS REQUIRED TO FILL SPACE BETWEEN ADJACENT BARRIERS.
- OPERATE SYSTEM CONTINUOUSLY UNTIL STRUCTURES HAVE BEEN CONSTRUCTED AND FILL MATERIAL HAS BEEN PLACED OR UNTIL DEWATERING IS NO LONGER REQUIRED.
- MONITOR DEWATERING SYSTEM CONTINUOUSLY.
- PROTECT AND MAINTAIN TEMPORARY EROSION AND SEDIMENTATION CONTROL DURING DEWATERING OPERATIONS.
- PROVIDE STANDBY EQUIPMENT ON SITE, INSTALLED AND AVAILABLE FOR IMMEDIATE OPERATION, TO MAINTAIN DEWATERING ON A CONTINUOUS BASIS SHOULD ANY PART OF THE SYSTEM BECOMES INADEQUATE OR FAILS.

EROSION CONTROL NOTES:

- A FLOATING TURBIDITY BARRIER MUST BE INSTALLED DOWNSTREAM OF DEMOLITION IN ACCORDANCE WITH ITEM CODE 206.9901.
- COMPOST FILTER SOCKS WILL BE INSTALLED TO PROVIDE APPROPRIATE EROSION CONTROLS FOR THE FLOW OUT OF THE DEWATERING AREA AND SURROUNDING UPLAND AREAS WITHIN THE LIMIT OF DISTURBANCE.

SCALE: 1"=20'

REVISIONS					
NO.	DATE	BY	NO.	DATE	BY