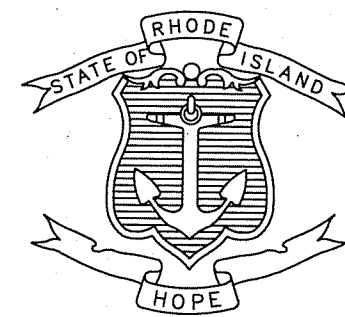


INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	STANDARD PLAN SYMBOLS & STANDARD LEGEND
3	STANDARD NOTES - 1
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5	LIST OF ABBREVIATIONS
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60-62	TEMPORARY DRAINAGE AND GRADING PLANS

STATE OF RHODE ISLAND



DEPARTMENT OF TRANSPORTATION

PLAN, PROFILE AND SECTIONS OF PROPOSED

STATE HIGHWAY

REPLACEMENT OF FARNUM PIKE
BRIDGES #044101 & #044121

PROJECT LIMITS

TOWN OF NORTH SMITHFIELD
COUNTY OF PROVIDENCE

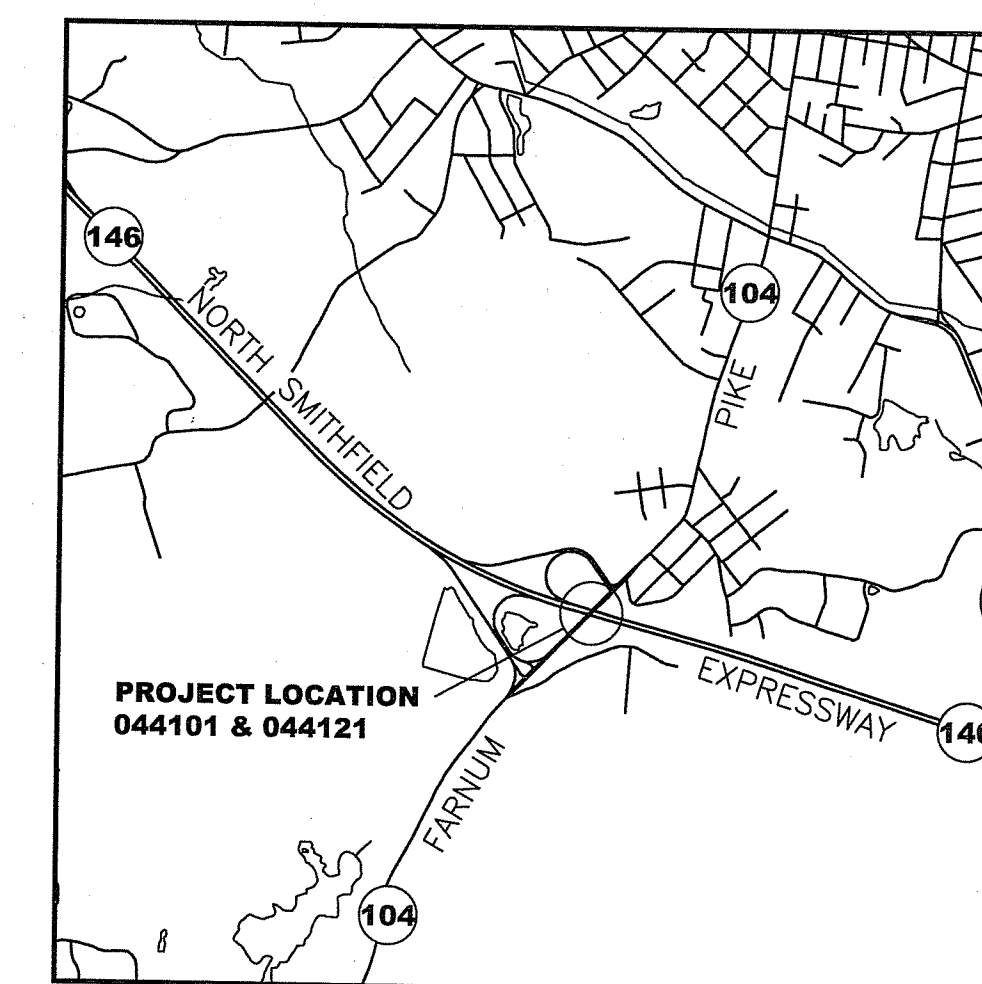
R.I. CONTRACT NO. 2018-DB-008 F.A. PROJECT NO. BRO-0441(001)

ROUTE 146 PAVEMENT STRUCTURE
1.5" DENSE FRICTION COURSE
1.5" MODIFIED CLASS 9.5 HMA
12" CLASS 19.0 HMA
12" GRAVEL BORROW SUBBASE COURSE

FARNUM PIKE (ROUTE 104) PAVEMENT STRUCTURE
1.5" MODIFIED CLASS 9.5 HMA

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0441(001)	2018	1	103

APR - 9 2020



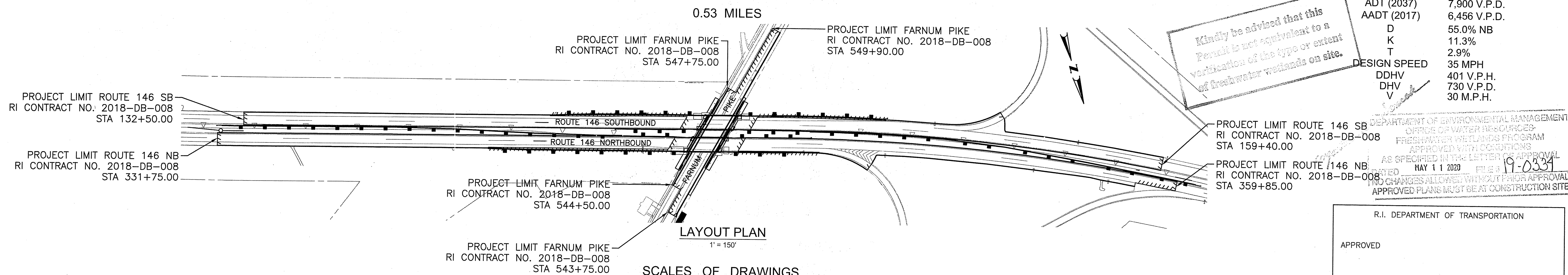
LOCATION MAP
1" = 2000'

DESIGN DESIGNATION (ROUTE 146)

ADT (2017)	43,623 V.P.D.
ADT (2037)	53,300 V.P.D.
AADT (2017)	43,623 V.P.D.
D	52.2% SB
K	8.5%
T	5%
DESIGN SPEED	65 MPH
DDHV	1,936 V.P.H.
DHV	3,708 V.P.D.
V	55 M.P.H.

DESIGN DESIGNATION (FARNUM PIKE)

ADT (2017)	6,456 V.P.D.
ADT (2037)	7,900 V.P.D.
AADT (2017)	6,456 V.P.D.
D	55.0% NB
K	11.3%
T	2.9%
DESIGN SPEED	35 MPH
DDHV	401 V.P.H.
DHV	730 V.P.D.
V	30 M.P.H.



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 11 2020 FILE # 19-0331
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

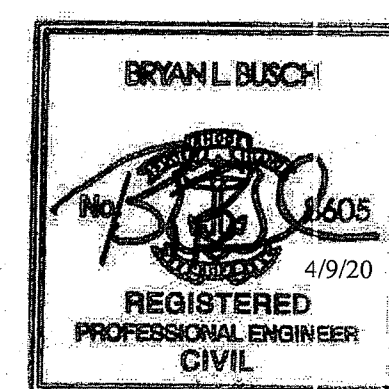
SCALES OF DRAWINGS

Plans	1 inch = 20 feet
Profiles	1 inch = 20 feet Horizontal
Profiles	1 inch = 5 feet Vertical
Cross Sections	1 inch = 4 feet Horizontal
Cross Sections	1 inch = 4 feet Vertical

BASE OF LEVELS

VERTICAL DATUM: NAVD 88

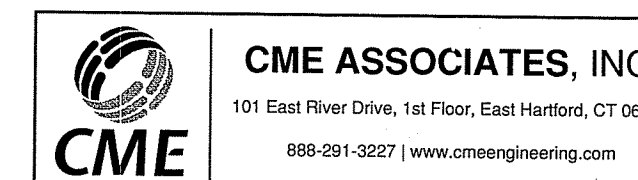
R.I. HORIZONTAL DATUM: STATE PLANE COORDINATES NAD 1983



D.E.M PERMIT
04/08/2020

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.

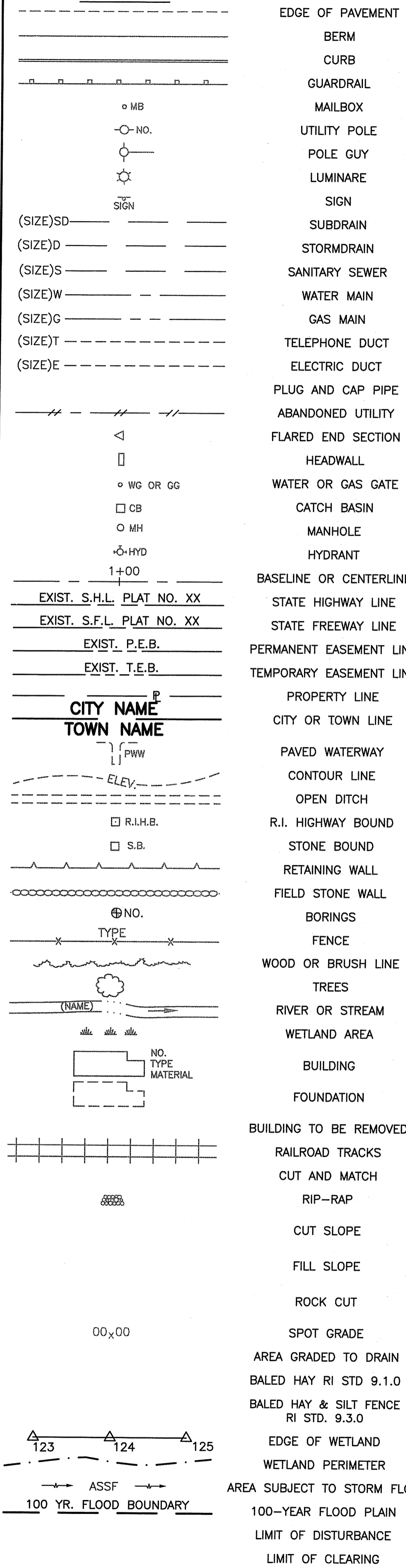


Contract Number 2018-DB-008
Number of Sheet 1
Total Sheets 103

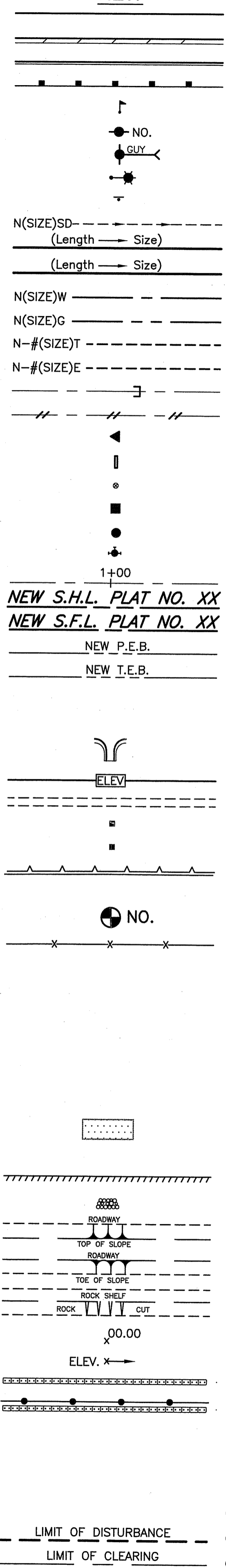
R.I. DEPARTMENT OF TRANSPORTATION	
APPROVED	
ADMINISTRATOR, PROJECT MANAGEMENT	DATE
APPROVED	
CHIEF ENGINEER OF INFRASTRUCTURE	DATE
APPROVED	
DIRECTOR	DATE
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	
DIVISION ADMINISTRATOR	DATE

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0441(001)	2018	2	32

EXISTING



NEW



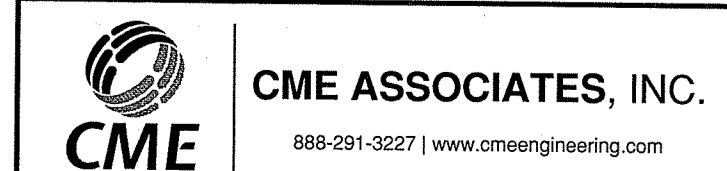
- 1.1.0 UNDERDRAIN
- 1.3.0 CONCRETE CONNECTING COLLAR
- 2.1.0 CONCRETE HEADWALLS FOR PIPE CULVERTS
- 2.2.0 STANDARD HEADWALLS FOR MULTIPLE 3'-6" TO 7'-0" PIPE CULVERTS
- 2.3.0 (DIA.) PRECAST CONCRETE FLARED END SECTION
- 3.2.0 BRICK/SOLID BLOCK 4'-0" ROUND MANHOLE
- 3.2.1 (DIA.) BRICK/SOLID BLOCK 5'-0"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

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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 11 2020
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

THIS PLAN SHALL NOT BE ALTERED

REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
1	6/07	TRB	REPLACEMENT OF BRIDGE NOS 044101 & 044121 OVER ROUTE 104 (FARNUM PIKE) NORTH SMITHFIELD, RHODE ISLAND	
			STANDARD PLAN SYMBOLS & STANDARD LEGEND	
			CHECKED BY JDL DATE 9/27/2019 SCALE NO SCALE	



FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0441(001)	2018	3	32

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:

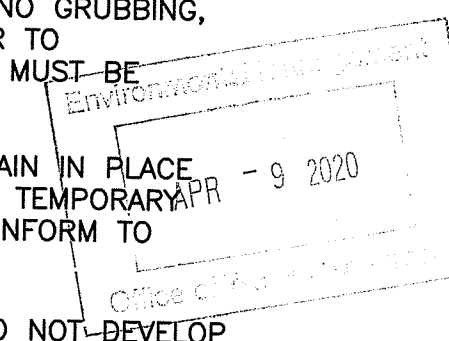
- FOR ALL PROJECTS WITH AT LEAST ONE(1) ACRE OF SOIL DISTURBANCE. R.I.D.O.T. IS REQUIRED TO DEVELOP AND ENFORCE A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ORDER TO REMAIN IN COMPLIANCE WITH THE RIDDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES. 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 SLOPES NO GREATER THAN 30% AND STOCKPILES OF ERODABLE 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 AND 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.
- R.I. STD. 9.8.0 BALED HAY INLET PROTECTION SHALL BE INSTALLED AT ALL CATCH BASINS AND INLETS WHENEVER SUBBASE IS EXPOSED, AND SHALL REMAIN IN PLACE UNTIL THE ABUTTING GROUND SURFACES ARE STABILIZED.
- WHERE BALED HAY INLET PROTECTION AND SILT FENCES ARE USED AT CATCH BASINS, THEY SHALL BE REMOVED AT THE END OF THE PROJECT OR AS DIRECTED BY THE ENGINEER IN ORDER TO PREVENT CLOGGING OF THE INLET.

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.

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
MAY 11 2020 FILE # 19-0334
DATED
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

THIS PLAN SHALL NOT BE ALTERED

REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
1	4/07	TRB	REPLACEMENT OF BRIDGE NOS 044101 & 044121 OVER ROUTE 104 (FARNUM PIKE) NORTH SMITHFIELD, RHODE ISLAND	
2	3/10	RBH		
3	4/14	MLP		
STANDARD NOTES - 1				
CHECKED BY <u>JDL</u>			DATE <u>9/27/2019</u> SCALE <u>NO SCALE</u>	



FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0441(001)	2018	4	32

LANDSCAPE NOTES:

1. 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.
2. 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.
3. ALL PLANT MATERIAL IS TO BE FIELD LOCATED BY A REPRESENTATIVE FROM THE R.I.D.O.T. LANDSCAPE ARCHITECTURE UNIT.
4. 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.
5. 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.
6. ALL TREES AND SHRUBS SHALL BE MULCHED WITH PINE BARK MULCH IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
7. ALL TREES AND/OR SHRUBS THAT ARE PLANTED AS A BED SHALL BE MULCHED AS A BED.
8. 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

1. 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

1. 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."
2. 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.
3. 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:

1. ALL SALVAGED TRAFFIC SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE R.I.D.O.T. MAINTENANCE HEADQUARTERS, 360 LINCOLN AVENUE, WARWICK, RHODE ISLAND, 02888.
2. BACK PLATES SHALL BE INSTALLED ON ALL TRAFFIC SIGNAL HEADS.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. ALL FOUNDATIONS MUST HAVE CONES OR BARRELS BOLTED TO FOUNDATION BASES UNTIL ACTUAL POLE IS INSTALLED.
10. 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.
11. 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.
12. ALL LOOP DETECTORS SHALL BE CENTERED WITHIN EACH LANE AS DELINEATED, UNLESS OTHERWISE DIMENSIONED ON PLANS.
13. ALL LOOP DETECTORS SHALL BE CUT INTO THE FINAL PAVEMENT SURFACE COURSE.
14. TRAFFIC SIGNAL CONTROLLERS SHALL BE WIRED SO THAT ANY FIRE PRE-EMPTION SHALL OVERRIDE MANUAL (PUSH BUTTON) OPERATION.
15. 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:

1. 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.
2. ALL SIGN MOUNTINGS FOR TEMPORARY AND CONSTRUCTION SIGNS SHALL BE IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
3. 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.
4. 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.
5. POLICE OFFICERS (AND NOT FLAGPERSONS) SHALL BE UTILIZED WHEN WORK WILL IMPACT SIGNALIZED INTERSECTIONS AND LIMITED ACCESS HIGHWAYS.
6. 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.
7. 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.
8. 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."
9. 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.
10. 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.
11. 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-PLANNED 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 MAY 11 2020 FILE # 19-0331
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

THIS PLAN SHALL NOT BE ALTERED

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NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
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2	11/07	TRB		
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			STANDARD NOTES - 2	
			CHECKED BY <u>JDL</u> DATE <u>9/27/2019</u> SCALE <u>NO SCALE</u>	

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LIST OF ABBREVIATIONS

A
 ABUTMENT = ABUT.
 ALTERNATE = ALT.
 ANCHOR BOLT = A.B.
 APPROVED = APPD.
 APPROXIMATE = APPROX.
 AVERAGE = AVG.

B
 BEAM = BM.
 BACK TO BACK = B TO B
 BETWEEN = BTWN
 BEARING = BRG.
 BITUMINOUS = BIT.
 BUILDING = BLDG.
 BUILDING LINE = B.L.
 BOLT CIRCLE = B.C.
 BOTTOM = BOT.

C
 CENTER TO CENTER = C TO C
 CENTERLINE = C
 CIRCLE = CIR.
 CLEARANCE = CL.
 COLUMN = COL.
 CONCRETE = CONC.
 CONDUIT = COND.
 CONNECTION = CONN.
 CONTRACTION = CONST.
 CONTRACTION = CONTR.
 COUNTERSINK = CSK.
 COUPLING = CPLG.
 CLASS I CONTROLLED LOW STRENGTH MATERIAL = CLSM

D
 DETAIL = DET.
 DIAGONAL = DIAG.
 DIAPHRAGM = DIAPHM.
 DIAMETER = DIA.
 DIMENSION = DIM.
 DRAWING = DWG.
 DRAIN = DR.

E
 EACH = EA.
 EACH FACE = E.F.
 ELEVATION = EL.
 EXISTING = EXIST.
 EXPANSION = EXP.

F
 FAR FACE = F.F.
 FAR SIDE = F.S.
 FABRICATE = FAB.
 FACE TO FACE = F TO F
 FLANGE = FLG.
 FLAT HEAD = F.H.
 FOOTING = FTG.
 FOUNDATION = FDN.
 FURNISH, FABRICATE & ERECT = F.F. & E.

G
 GAGE = GA.
 GALVANIZE = GALV.
 GRADE = GR.
 GRATING = GRTG.
 GROUND = GND.

H
 HEIGHT = HGT.
 HEXAGON = HEX.
 HOT MIX ASPHALT = HMA.
 HORIZONTAL = HORIZ.

I
 INCH = IN.
 INFORMATION = INFO.
 INSIDE DIAMETER = I.D.
 INVERT = INV.

J
 JOINT = JT.

L
 LENGTH = LGTH.
 LIGHTING = LTG.
 LONG = LG.
 LOAD & RESISTANCE FACTOR DESIGN = LRFD

M
 MATERIAL = MATL.
 MAXIMUM = MAX.
 MEAN HIGH WATER = M.H.W.
 MEAN SEA LEVEL = M.S.L.
 MINIMUM = MIN.
 MISCELLANEOUS = MISC.

N
 NEAR FACE = N.F.
 NEAR SIDE = N.S.
 NOT TO SCALE = N.T.S.
 NUMBER = NO.

O
 ON CENTER = O.C.
 OPENING = OPNG.
 OUTSIDE DIAMETER = O.D.
 OPTIONAL = OPT.

P
 PLATE = P.
 POINT OF VERTICAL CURVATURE = P.V.C.
 POINT OF VERTICAL TANGENCY = P.V.T.
 POLYVINYL CHLORIDE = PVC
 POINT OF TANGENCY = P.T.
 POUNDS PER SQUARE INCH = P.S.I.
 POUNDS PER SQUARE FOOT = P.S.F.

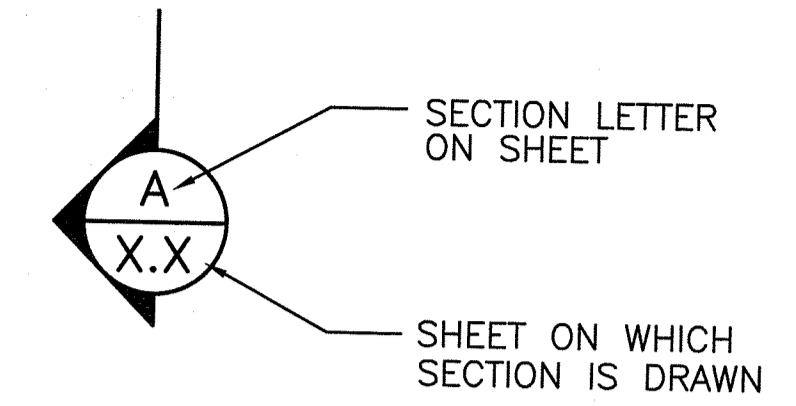
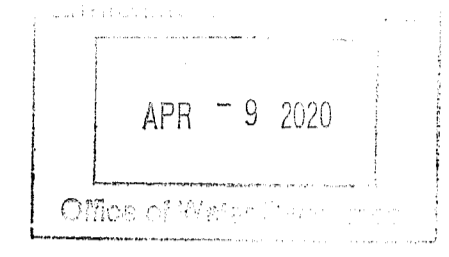
R
 RADIUS = RAD.
 RAILROAD = RR
 REQUIRED = REQD.
 REINFORCING = REINF.
 REHABILITATION = REHAB.
 REMOVE & DISPOSE = R & D

S
 SECTION = SECT.
 SCHEDULE = SCH.
 SCHEMATIC = SCHEM.
 SHEET = SH.
 SPACES = SP.
 STATION = STA.
 SYMMETRICAL = SYM.
 STAY IN PLACE = S.I.P.

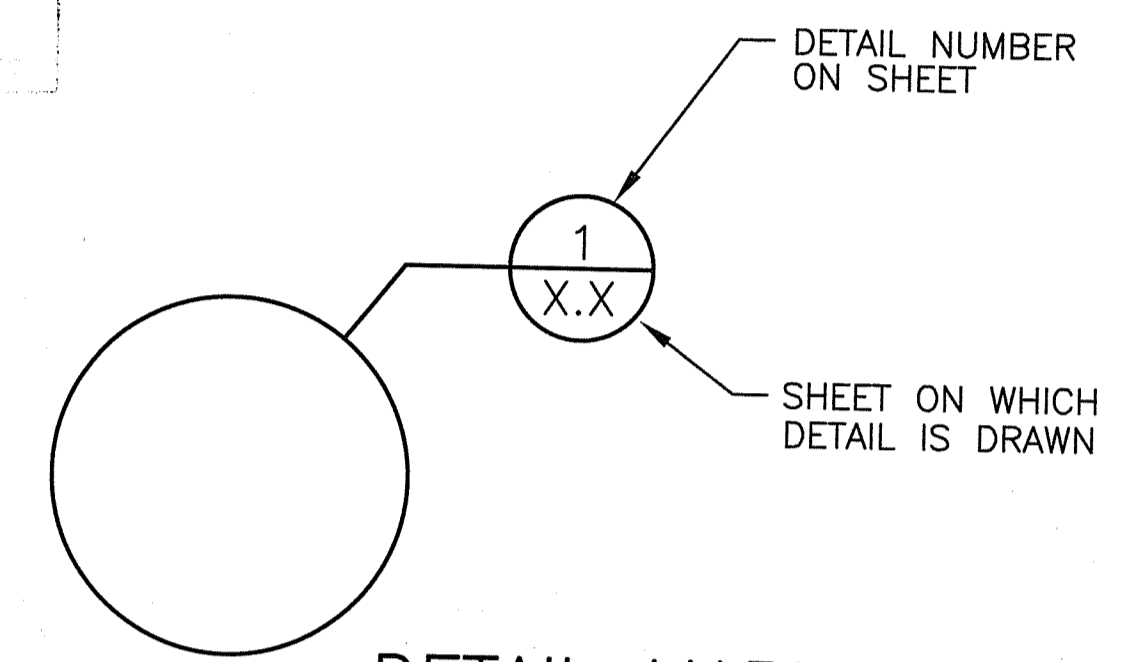
T
 TOP = T
 TYPICAL = TYP.

V
 VARIES = VAR.
 VERTICAL CURVE = V.C.
 VERTICAL = VERT.

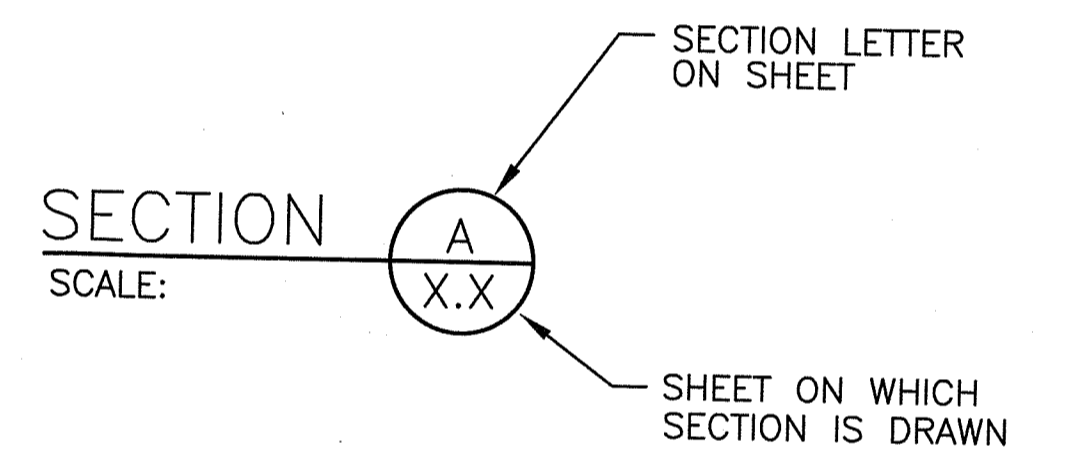
W
 WELDED WIRE FABRIC WITH WIDE FLANGE WORKING POINT = W.W.F.
 = W/
 = W
 = W.P.



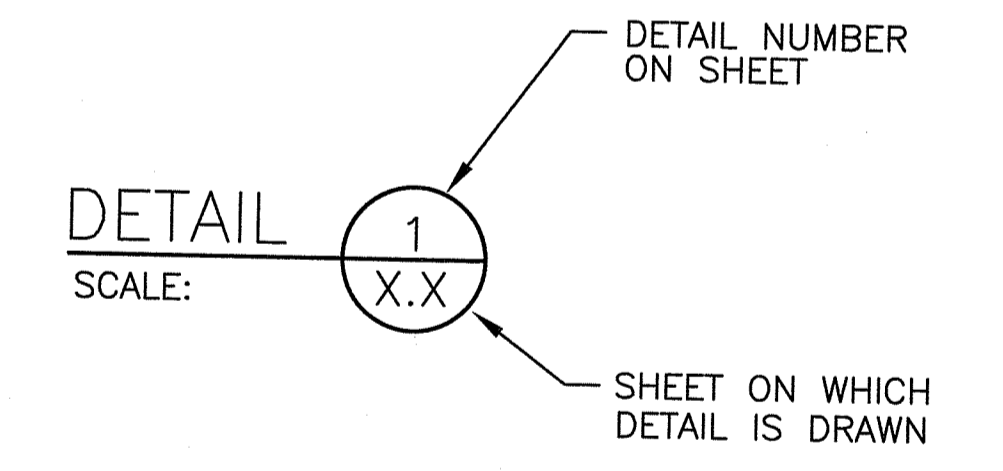
SECTION MARK



DETAIL MARK



SECTION TITLE



DETAIL TITLE

SECTION & DETAIL DESIGNATIONS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 11 2020 FILE # 19-0234
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
			REPLACEMENT OF BRIDGE NOS 044101 & 044121 OVER ROUTE 104 (FARNUM PIKE) NORTH SMITHFIELD, RHODE ISLAND	
			LIST OF ABBREVIATIONS	
			CHECKED BY <u>JDL</u> DATE <u>9/27/2019</u> SCALE <u>NO SCALE</u>	

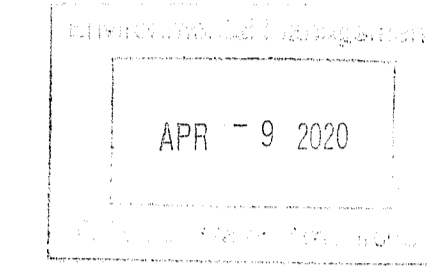
CME ASSOCIATES, INC.
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JOB SPECIFIC LEGEND

- (6WD) 6" EPOXY RESIN DOTTED (3' SKIP - 9' SPACE) PAVEMENT MARKINGS - WHITE
- (6WS) 6" EPOXY RESIN BROKEN (10' SKIP - 30' SPACE) PAVEMENT MARKINGS - WHITE
- (CBSC) CATCH BASIN SEDIMENTATION CONTROL
- (CGST) CABLE GUARDRAIL SYSTEM TERMINAL
- (CGRR) CABLE GUARDRAIL REMOVE & RESET
- (CM) CUTTING AND MATCHING ASPHALT
- (ECB) EROSION CONTROL BLANKET
- (ETR) EXISTING TO REMAIN
- (GRBA) GUARDRAIL BRIDGE ATTACHMENT (SEE GUARDRAIL TRANSITION PLAN 1-3)
- (GRHT) GUARDRAIL HEIGHT TRANSITION
- (GRM) STEEL GUARDRAIL MASH (TL-3)
- (GTEM) GUARDRAIL END TREATMENT ENERGY ABSORBING (MASH)
- (GRT) GUARDRAIL TRAILING END ANCHORAGE (MASH)
- (ISPS) INFILTRATION SWALE PLANTING SOIL AND SEED
- (IA) IMPACT ATTENUATOR
- (LRA) EPOXY RESIN LANE REDUCTION ARROW - WHITE
- (MMO-1) 1.5" MICROMILL OF EXISTING PAVEMENT
1.5" DENSE FRICTION COURSE
ASPHALT EMULSION TACK COAT BETWEEN LAYERS
- (MMO-2) 1.5" MICROMILL OF EXISTING PAVEMENT
1.5" MODIFIED CLASS 9.5 HMA
ASPHALT EMULSION TACK COAT BETWEEN LAYERS
- (P-1) 1.5" DENSE FRICTION COURSE
2.5" MODIFIED CLASS 12.5 HMA
11" CLASS 19.0 HMA
12" GRAVEL BORROW SUBBASE COURSE
ASPHALT EMULSION TACK COAT BETWEEN LAYERS
- (P-2) 2" MODIFIED CLASS 12.5 HMA
5" CLASS 19.0 HMA (PLACED IN TWO 2.5" LIFTS)
12" GRAVEL BORROW SUBBASE COURSE
ASPHALT EMULSION TACK COAT BETWEEN LAYERS
- (P-3) X" MODIFIED CLASS 9.5 HMA (MATCH EXISTING SURFACE COURSE THICKNESS)
X" CLASS 19.0 HMA (MATCH EXISTING BASE COURSE THICKNESS)
12" GRAVEL BORROW SUBBASE COURSE
ASPHALT EMULSION TACK COAT BETWEEN LAYERS
- (PM) PLACEMENT OF MILLINGS BENEATH GUARDRAIL
- (RS) RUMBLE STRIP
- (RSR) RUMBLE STRIP REMOVAL
- (SABM) SHOCK ABSORBING BARRIER MODULES
- (S-1) FULL DEPTH SAWCUT OF BITUMINOUS PAVEMENT
- (S-2) FULL DEPTH SAWCUT OF BITUMINOUS SIDEWALK/DRIVEWAY
- (SLD) SLOTTED DRAIN (SEE DRAINAGE DETAIL SHEET) (TEMPORARY)
- (TABB) TEMPORARY ANCHORED BARRIER ON BRIDGE (TL-3)
- (TBMD) TEMPORARY BARRIER MINIMUM DEFLECTION (TL-3, MASH)
- (TBTC) TEMPORARY BARRIER FOR TRAFFIC CONTROL, UNANCHORED (TL-3, MASH)
- (TBBC) THRIE-BEAM BRIDGE CONNECTION
- (TBDM) THRIE-BEAM DOUBLE FACE MASH (TL-3)
- (TBSM) THRIE-BEAM SINGLE FACE MASH (TL-3)
- (TTP) THRIE-BEAM TRANSITION PANEL
- (WQB) WATER QUALITY SWALE BERM
- (WQS) WATER QUALITY SWALE
- (24.6.3) GUARDRAIL DELINEATOR

JOB SPECIFIC GENERAL NOTES

1. CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE STANDARD SPECIFICATIONS FOR THE STATE OF RHODE ISLAND AND THE SPECIFICATIONS ACCOMPANYING THESE PLANS. IN CASE OF CONFLICT, THE SPECIAL PROVISIONS OF THE SPECIFICATIONS ACCOMPANYING THESE PLANS SHALL GOVERN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFYING AND SUPPLEMENTING THE EXISTING DRAINAGE AS REQUIRED DURING THE VARIOUS STAGES OF CONSTRUCTION TO ENSURE PROPER DRAINAGE OF THE ROADWAYS (TEMPORARY AND PERMANENT) INCLUDING WHERE EXISTING TRENCHES AND SWALES ARE COVERED BY THE TEMPORARY ROADWAYS.
3. ALL EXISTING ITEMS NOT REFERENCED FOR MODIFICATION WILL BE "EXISTING TO REMAIN" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. ALL DAMAGES TO EXISTING STATE OR PRIVATE PROPERTY CAUSED BY THE CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO RIDOT.

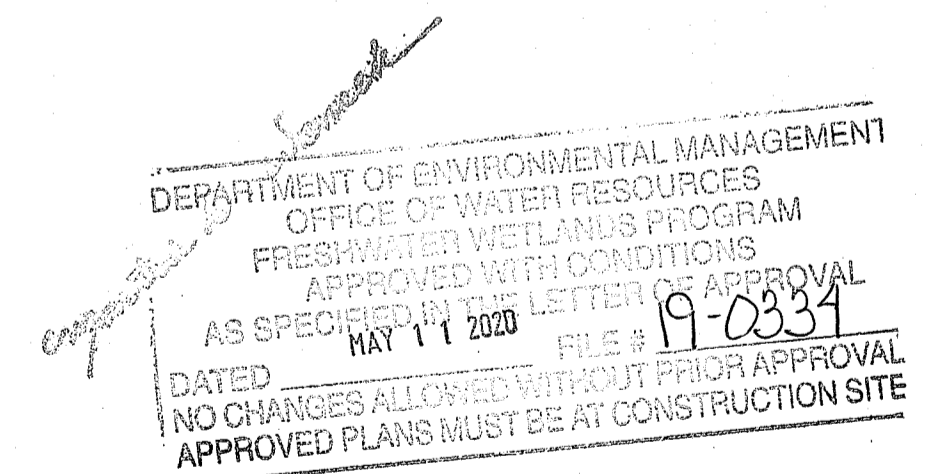


JOB SPECIFIC PAVEMENT MARKINGS NOTES

1. ALL PERMANENT MARKINGS FOR THIS PROJECT SHALL BE PLACED ON THE FINAL SURFACE COURSE NO LONGER THAN 4 WEEKS FROM COMPLETION OF THE PAVEMENT OPERATIONS.
2. THE LOCATION OF PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION, AS AMENDED.

JOB SPECIFIC ABBREVIATIONS

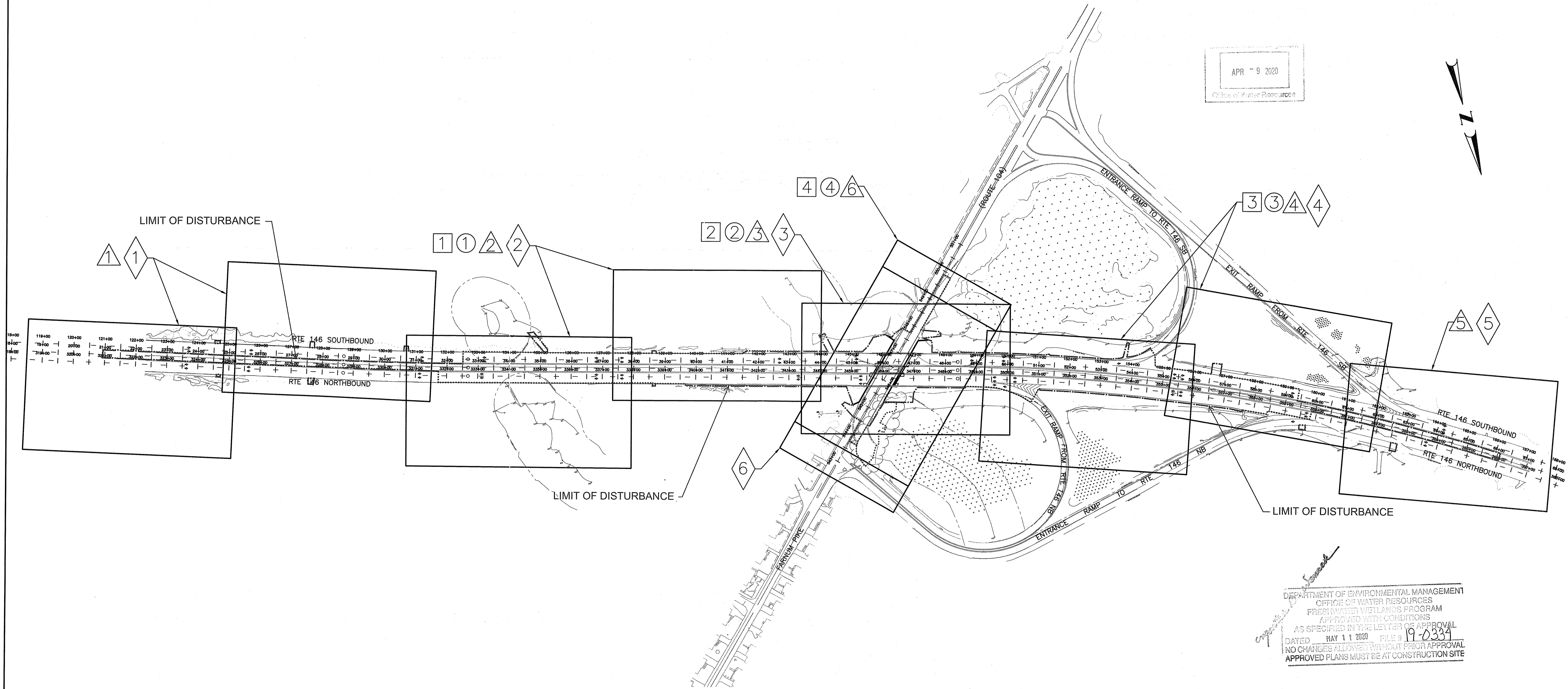
RET = RETAIN



REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION
NO.	DATE	BY	
			REPLACEMENT OF BRIDGE NOS 044101 & 044121 OVER ROUTE 104 (FARNUM PIKE) NORTH SMITHFIELD, RHODE ISLAND
			JOB SPECIFIC SYMBOLS, LEGEND & NOTES
			CHECKED BY <u>APJ</u> DATE <u>8/2/2019</u> SCALE <u>NO SCALE</u>



APR - 9 2020
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 MAY 11 2020 FILE # 19-0334
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

LEGEND

- # GENERAL PLAN
- # SIGNING & STRIPING PLAN
- # DRAINAGE PLAN
- # LOCATION PLAN



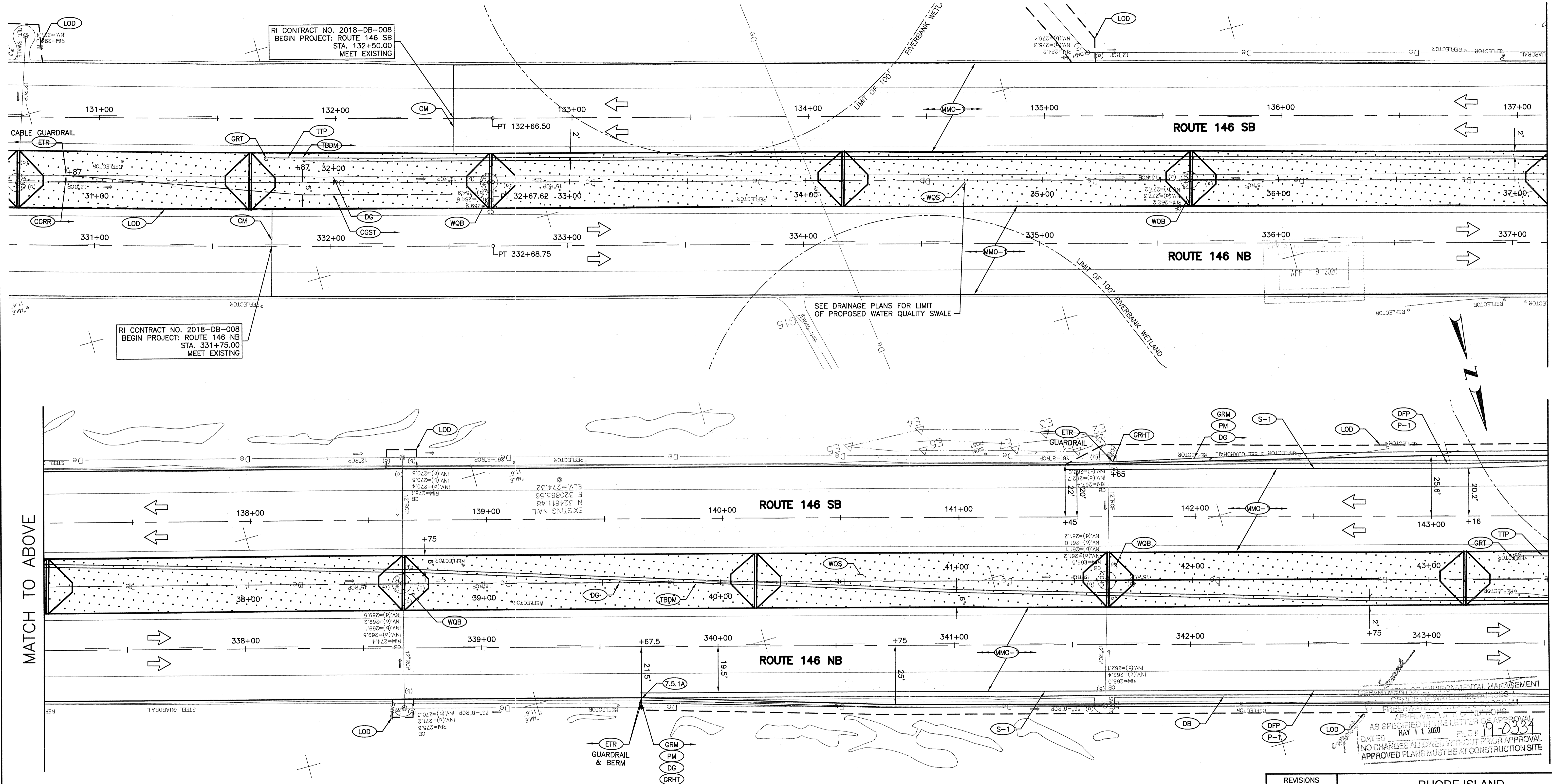
REVISIONS			NO.	DATE	BY	DESCRIPTION
NO.	DATE	BY				
1	4/8/20	NCH				

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
REPLACEMENT OF BRIDGE NOS
044101 & 044121 OVER
ROUTE 104 (FARNUM PIKE)
NORTH SMITHFIELD, RHODE ISLAND

KEY PLAN

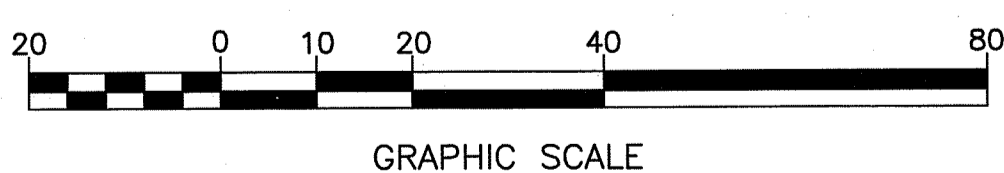
CHECKED BY JDL DATE 9/27/2019 SCALE 1"=150'

0114J_V1_007_KEY



MATCH TO BELOW
MATCH TO ABOVE
MATCH TO GENERAL PLAN 2

- NOTES:**
1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION OPERATIONS AND INSTALLATION OF PROPOSED WORK.
 2. REMOVE TEMPORARY CROSSOVER ROADWAY AND RESTORE MEDIAN AT THE END OF CONSTRUCTION. SEE DRAINAGE PLANS AND DETAILS FOR WATER QUALITY SWALE AND CHECK DAM LAYOUT AND DETAILS.
 3. CONTRACTOR TO USE PLANTABLE SOIL AND SEED ON ALL DISTURBED AREAS SEE TYP SECTIONS



NO.	REVISIONS	DATE	BY

**RHODE ISLAND
DEPARTMENT OF TRANSPORTATION**

**REPLACEMENT OF BRIDGE NOS
044101 & 044121 OVER
ROUTE 104 (FARNUM PIKE)**

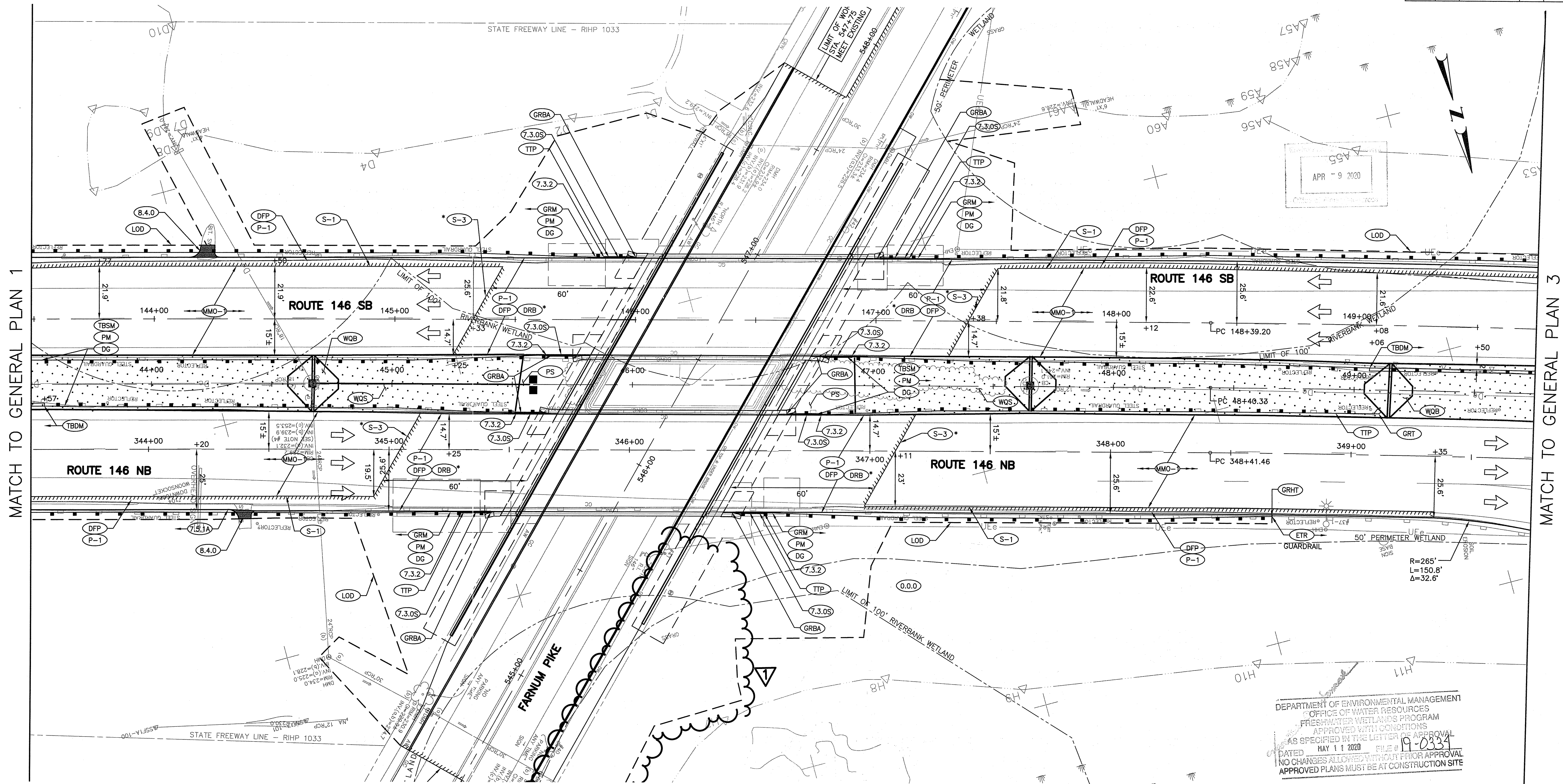
NORTH SMITHFIELD, RHODE ISLAND

GENERAL PLAN
SHEET 1 OF 4

CHECKED BY PMP DATE 3/18/2020 SCALE 1"=20'

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APPROVED WITH LETTER OF APPROVAL
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 1 1 2020 FILE # 19-0334
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



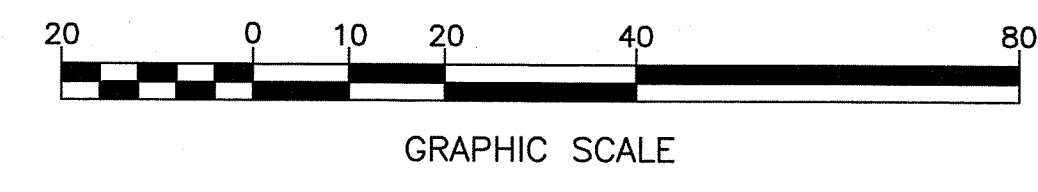
MATCH TO GENERAL PLAN 1

MATCH TO GENERAL PLAN 3

APR - 9 2020

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 11 2020 FILE # 19-0334
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

- NOTES:**
1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION OPERATIONS AND INSTALLATION OF PROPOSED WORK.
 2. REMOVE TEMPORARY CROSSOVER ROADWAY AND RESTORE MEDIAN AT THE END OF CONSTRUCTION. SEE DRAINAGE PLANS AND DETAILS FOR WATER QUALITY SWALE AND CHECK DAM LAYOUT AND DETAILS.
 3. CONTRACTOR TO USE PLANTABLE SOIL AND SEED ON ALL DISTURBED AREAS SEE TYP SECTIONS
 4. FOR WORK ON FARNUM PIKE, SEE GENERAL PLAN SHEET 4 OF 4.
- * RECORD PLANS SHOW EXISTING CONCRETE BASE WITHIN TRAVEL LANES ONLY



REVISIONS		
NO.	DATE	BY
1	4/8/20	RAC

RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
 REPLACEMENT OF BRIDGE NOS
 044101 & 044121 OVER
 ROUTE 104 (FARNUM PIKE)
 NORTH SMITHFIELD, RHODE ISLAND

GENERAL PLAN
 SHEET 2 OF 4

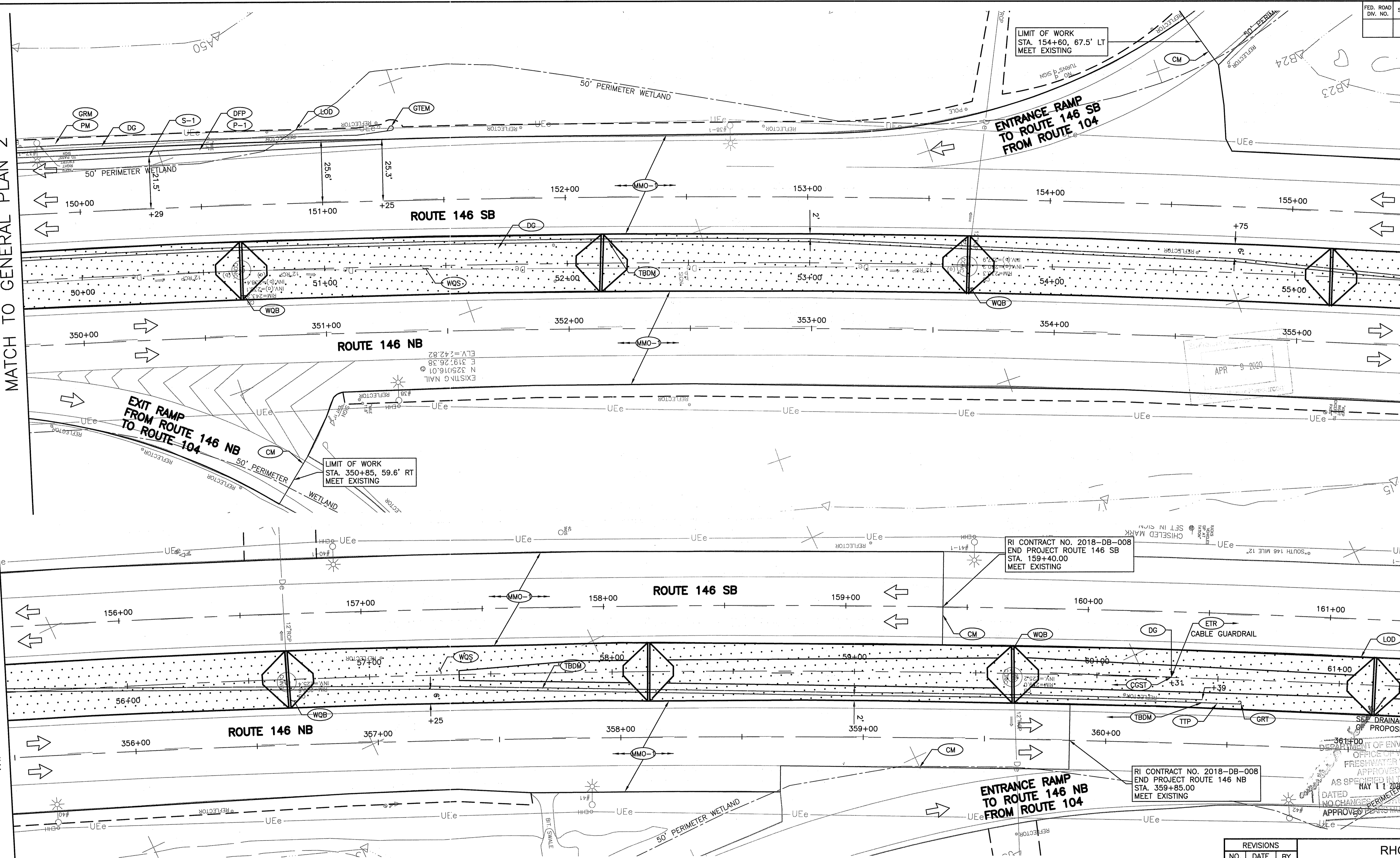
CME ASSOCIATES, INC.
 888-291-3227 | www.cmeengineering.com

CHECKED BY JDL DATE 9/27/2019 SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
RI	BRO-0441(001)	2019	18	103	

MATCH TO GENERAL PLAN 2

MATCH TO BELOW



MATCH TO ABOVE

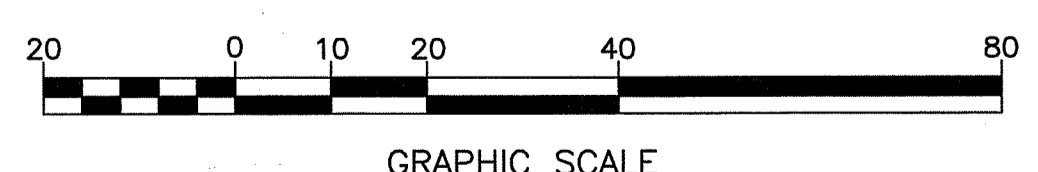
RI CONTRACT NO. 2018-DB-008
END PROJECT ROUTE 146 SB
STA. 159+40.00
MEET EXISTING

RI CONTRACT NO. 2018-DB-008
END PROJECT ROUTE 146 NB
STA. 359+85.00
MEET EXISTING

APR 9 2020

SEEP DRAINAGE PLANS FOR LIMIT OF PROPOSED WATER QUALITY SWALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH PERMITS APPROVAL
AS SPECIFIED IN PERMITS APPROVAL
MAY 11 2020 FILE # 19-0331
DATED NO CHANGES PERMITTED WITHOUT PRIOR APPROVAL
APPROVED PERMITS MUST BE AT CONSTRUCTION SITE



- NOTES:**
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION OPERATIONS AND INSTALLATION OF PROPOSED WORK.
 - REMOVE TEMPORARY CROSSOVER ROADWAY AND RESTORE MEDIAN AT THE END OF CONSTRUCTION. SEE DRAINAGE PLANS AND DETAILS FOR WATER QUALITY SWALE AND CHECK DAM LAYOUT AND DETAILS.
 - CONTRACTOR TO USE PLANTABLE SOIL AND SEED ON ALL DISTURBED AREAS SEE TYP SECTIONS

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

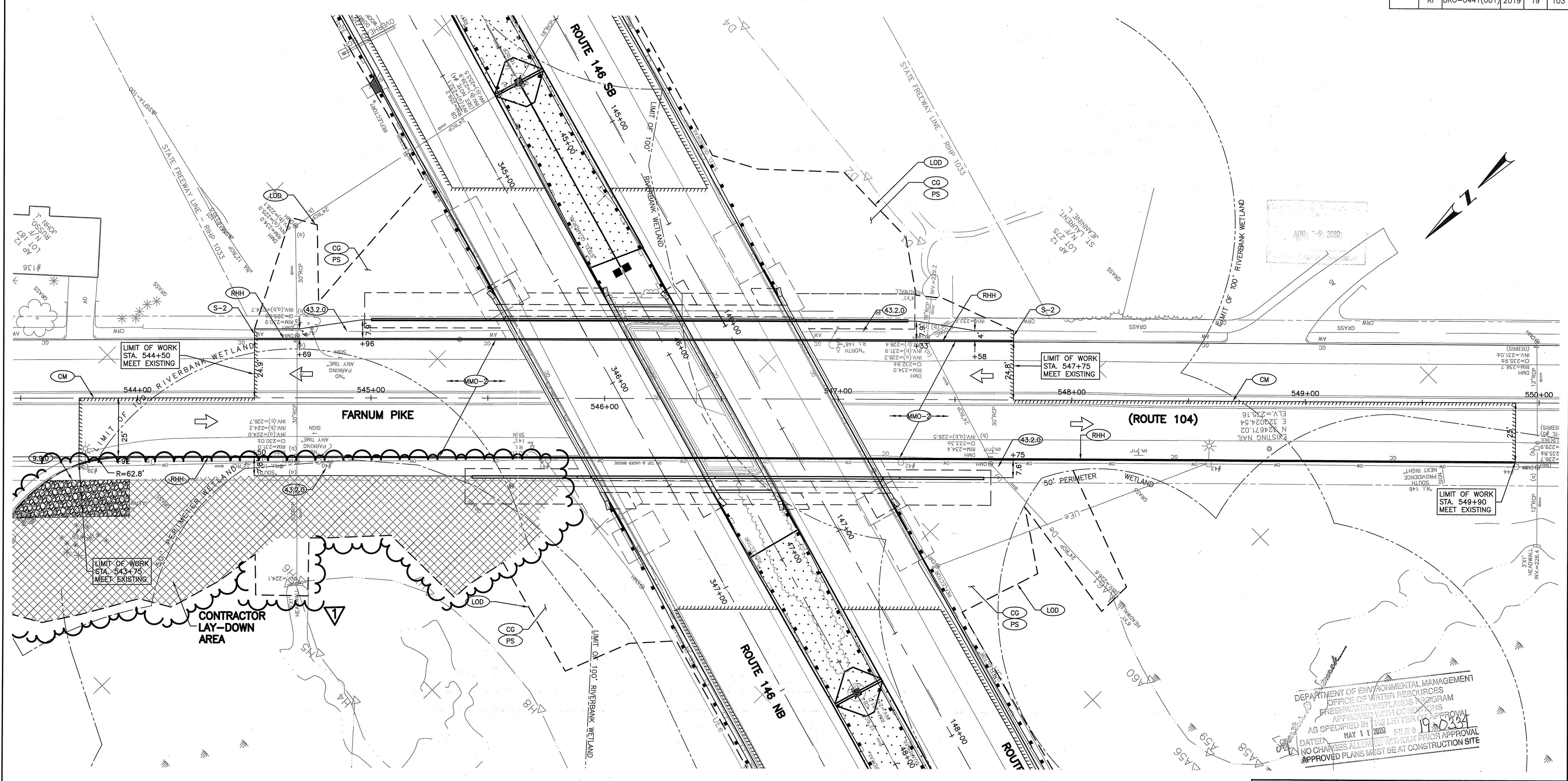
**REPLACEMENT OF BRIDGE NOS
044101 & 044121 OVER
ROUTE 104 (FARNUM PIKE)**

NORTH SMITHFIELD, RHODE ISLAND

GENERAL PLAN
SHEET 3 OF 4

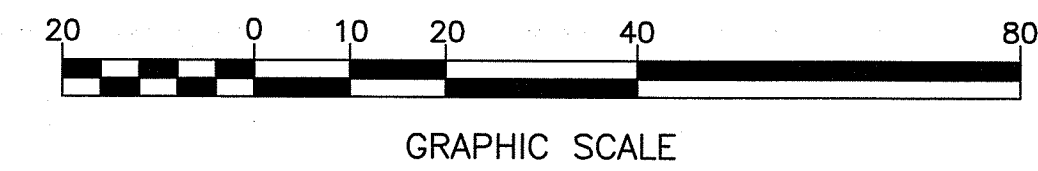
CHECKED BY PMP DATE 3/18/2020 SCALE 1"=20'

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 11 2020 FILE # 19-0334
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

- NOTES:
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 2. REMOVE TEMPORARY CROSSOVER ROADWAY AND RESTORE MEDIAN AT THE END OF CONSTRUCTION. SEE DRAINAGE PLANS AND DETAILS FOR WATER QUALITY SWALE AND CHECK DAM LAYOUT AND DETAILS.
 3. CONTRACTOR TO USE PLANTABLE SOIL AND SEED ON ALL DISTURBED AREAS SEE TYP SECTIONS



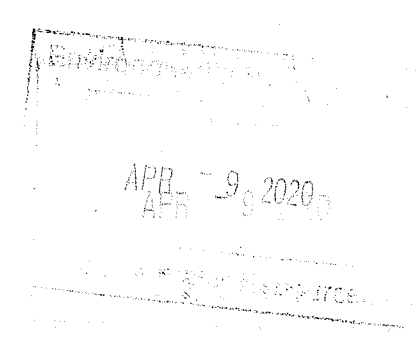
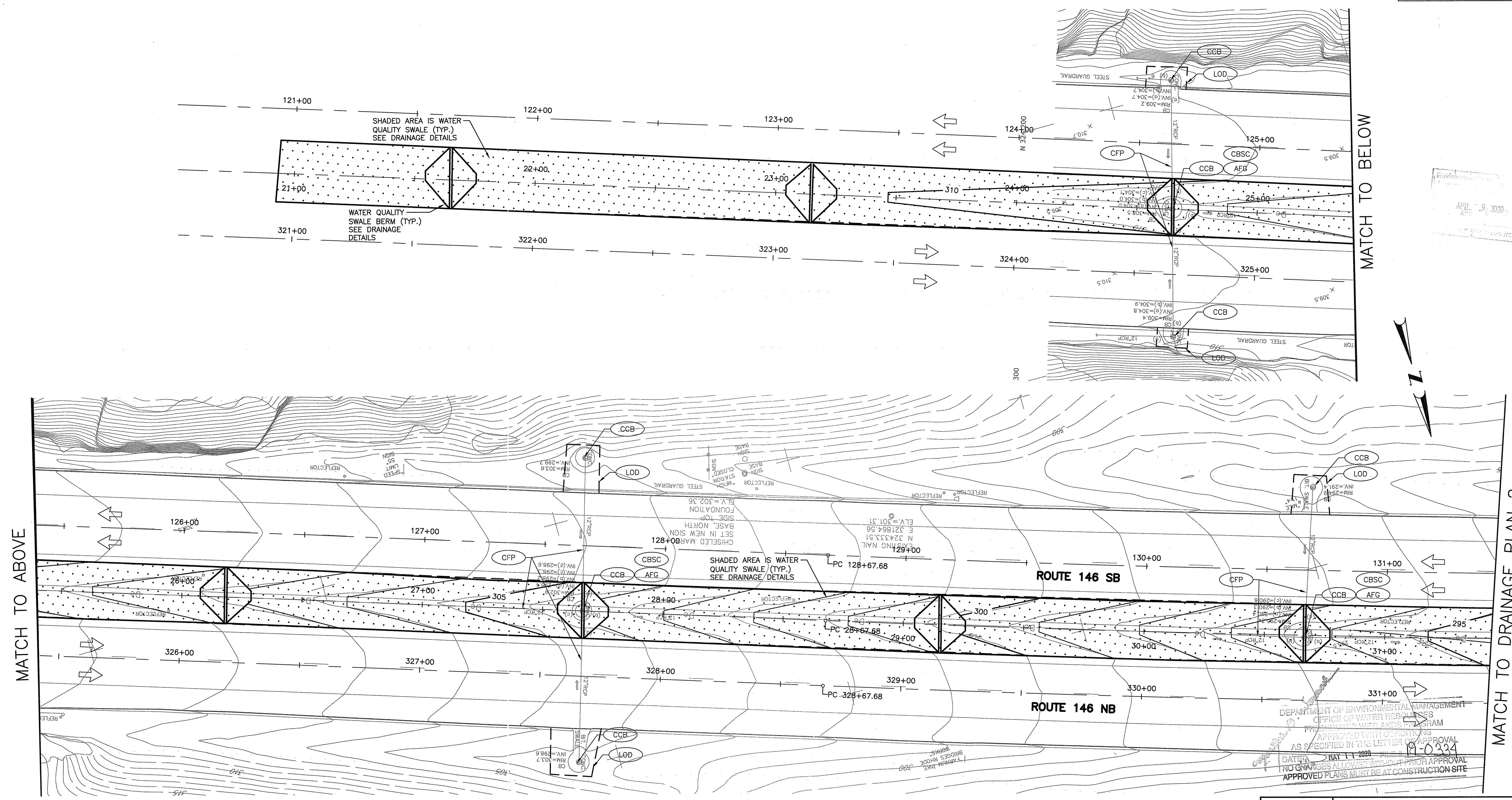
NO.	DATE	BY
1	4/8/20	RAC

RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
 REPLACEMENT OF BRIDGE NOS
 044101 & 044121 OVER
 ROUTE 104 (FARNUM PIKE)
 NORTH SMITHFIELD, RHODE ISLAND

GENERAL PLAN
 SHEET 4 OF 4

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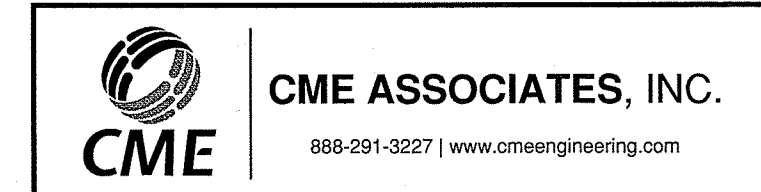
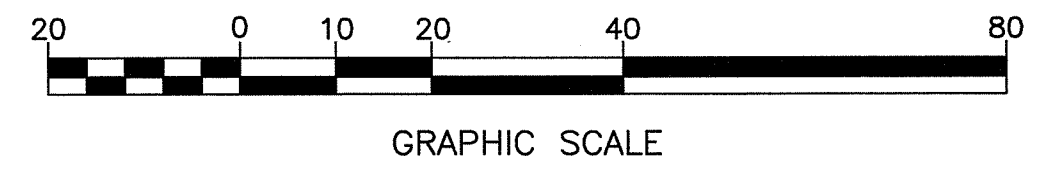
CHECKED BY JDL DATE 9/27/2019 SCALE 1"=20'



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 PERMITTING AND COMPLIANCE DIVISION
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATE: MAY 11, 2020
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
 REPLACEMENT OF BRIDGE NOS
 044101 & 044121 OVER
 ROUTE 104 (FARNUM PIKE)
 NORTH SMITHFIELD, RHODE ISLAND
 DRAINAGE PLAN
 SHEET 1 OF 7
 CHECKED BY: PMP DATE: 3/18/2020 SCALE: 1"=20'



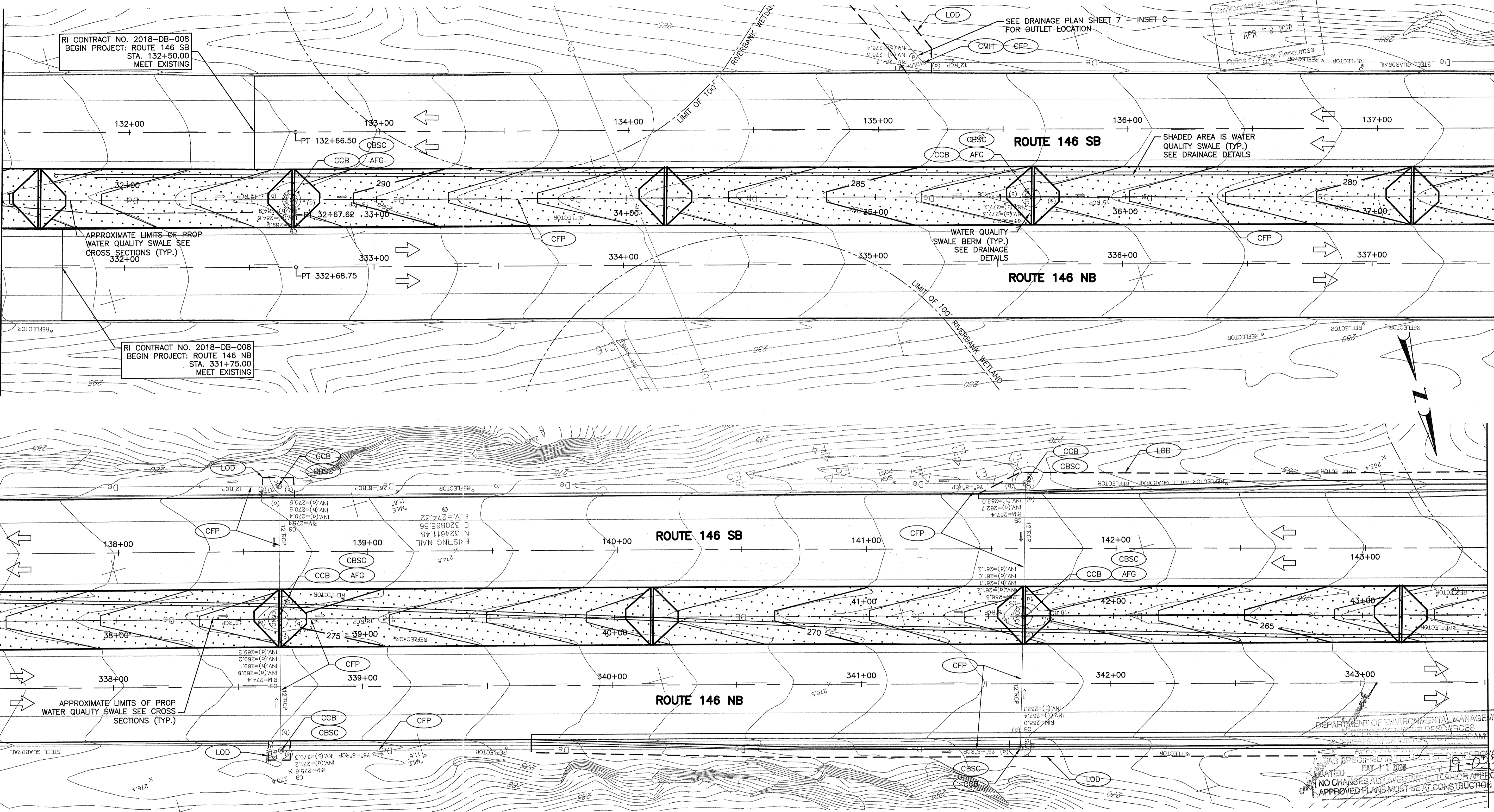
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0441(001)	2019	23	103

MATCH TO DRAINAGE PLAN 1

MATCH TO BELOW

MATCH TO ABOVE

MATCH TO DRAINAGE PLAN 3



RI CONTRACT NO. 2018-DB-008
 BEGIN PROJECT: ROUTE 146 SB
 STA. 132+50.00
 MEET EXISTING

RI CONTRACT NO. 2018-DB-008
 BEGIN PROJECT: ROUTE 146 NB
 STA. 331+75.00
 MEET EXISTING

APPROXIMATE LIMITS OF PROP
 WATER QUALITY SWALE SEE
 CROSS SECTIONS (TYP.)
 332+00

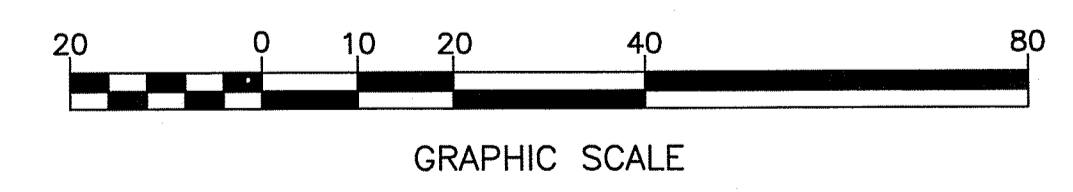
APPROXIMATE LIMITS OF PROP
 WATER QUALITY SWALE SEE CROSS
 SECTIONS (TYP.)

SEE DRAINAGE PLAN SHEET 7 - INSET C
 FOR OUTLET LOCATION

SHADED AREA IS WATER
 QUALITY SWALE (TYP.)
 SEE DRAINAGE DETAILS

WATER QUALITY
 SWALE BERM (TYP.)
 SEE DRAINAGE
 DETAILS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 DEPARTMENT OF TRANSPORTATION
 APPROVED FOR CONSTRUCTION
 MAY 1 2020
 NO CHANGES TO THESE APPROVED PLANS MUST BE AT CONSTRUCTION SITE



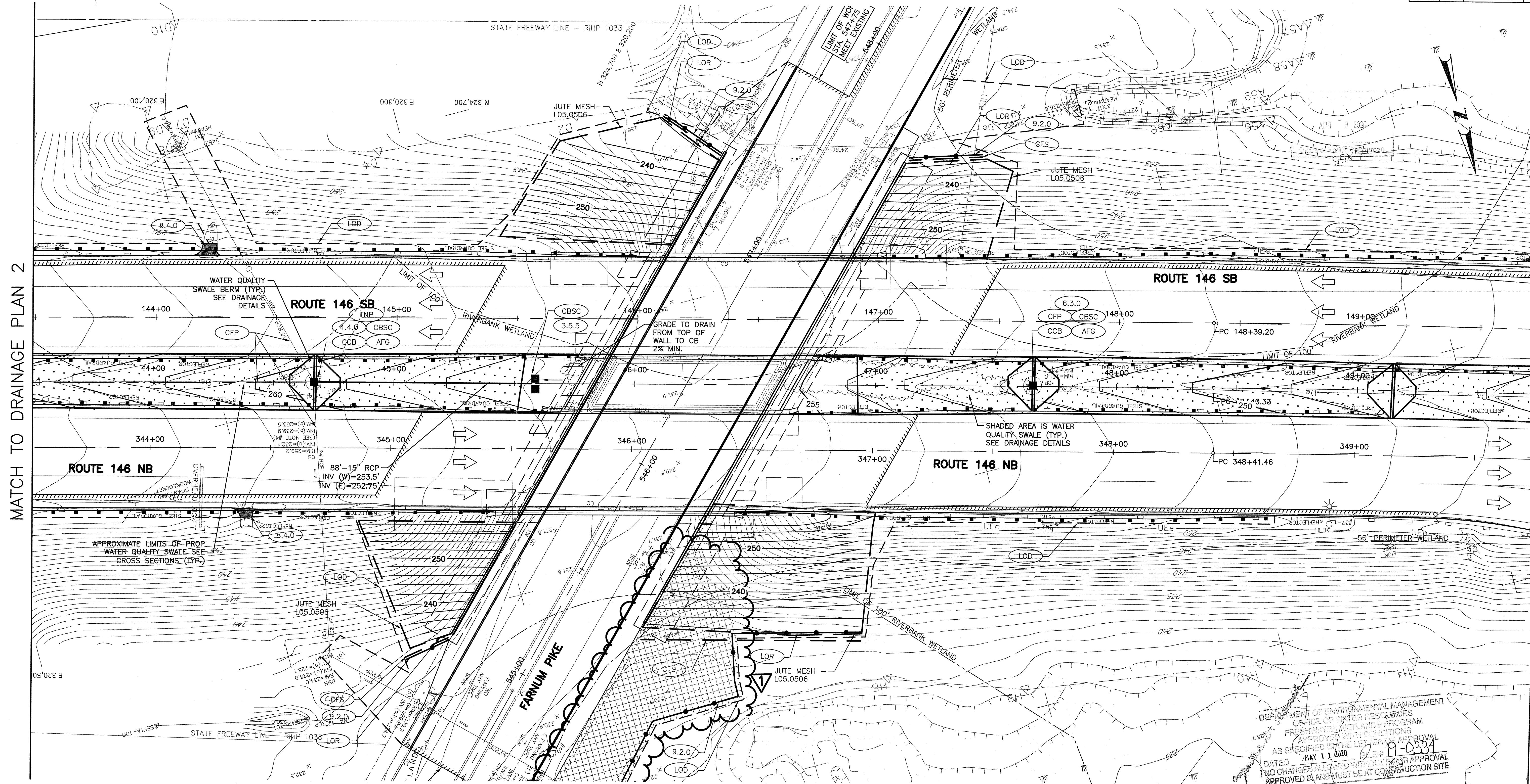
REVISIONS	NO.	DATE	BY

RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
 REPLACEMENT OF BRIDGE NOS
 044101 & 044121 OVER
 ROUTE 104 (FARNUM PIKE)
 NORTH SMITHFIELD, RHODE ISLAND

DRAINAGE PLAN
 SHEET 2 OF 7

CHECKED BY PMP DATE 3/18/2020 SCALE 1"=20'

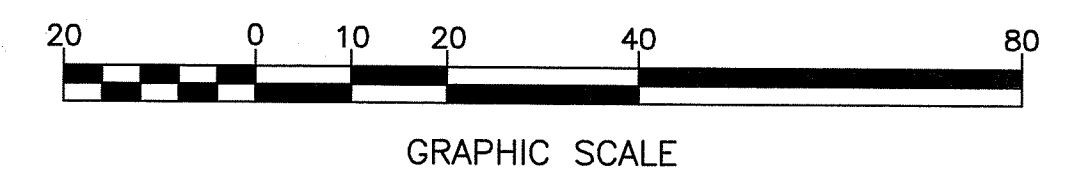
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MATCH TO DRAINAGE PLAN 2

MATCH TO DRAINAGE PLAN 4

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 11, 2020
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NO.	DATE	BY
1	4/8/20	RAC

RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
 REPLACEMENT OF BRIDGE NOS
 044101 & 044121 OVER
 ROUTE 104 (FARNUM PIKE)
 NORTH SMITHFIELD, RHODE ISLAND

DRAINAGE PLAN
 SHEET 3 OF 7
 CHECKED BY JDL DATE 9/27/2019 SCALE 1"=20'

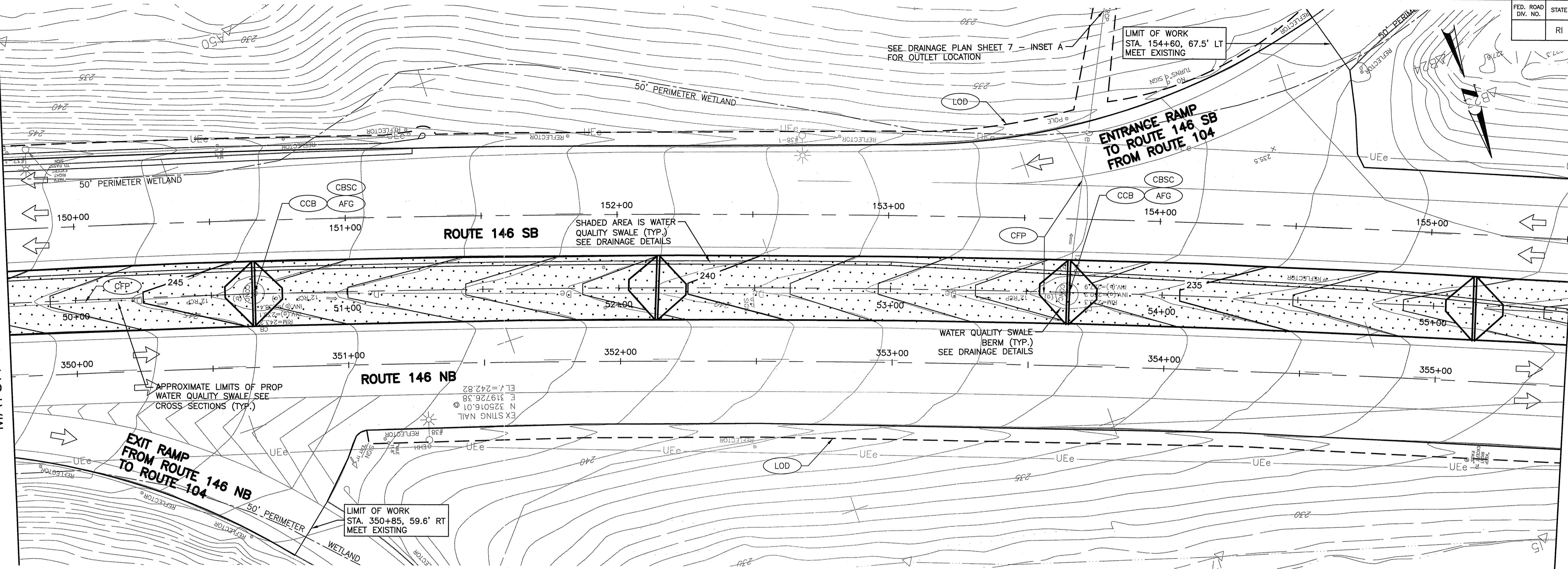


FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0441(001)	2019	25	103

MATCH TO DRAINAGE PLAN 3

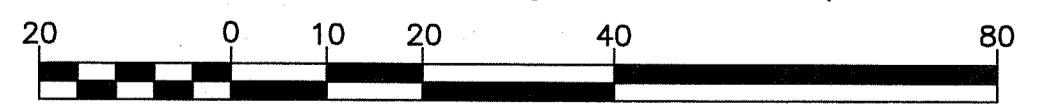
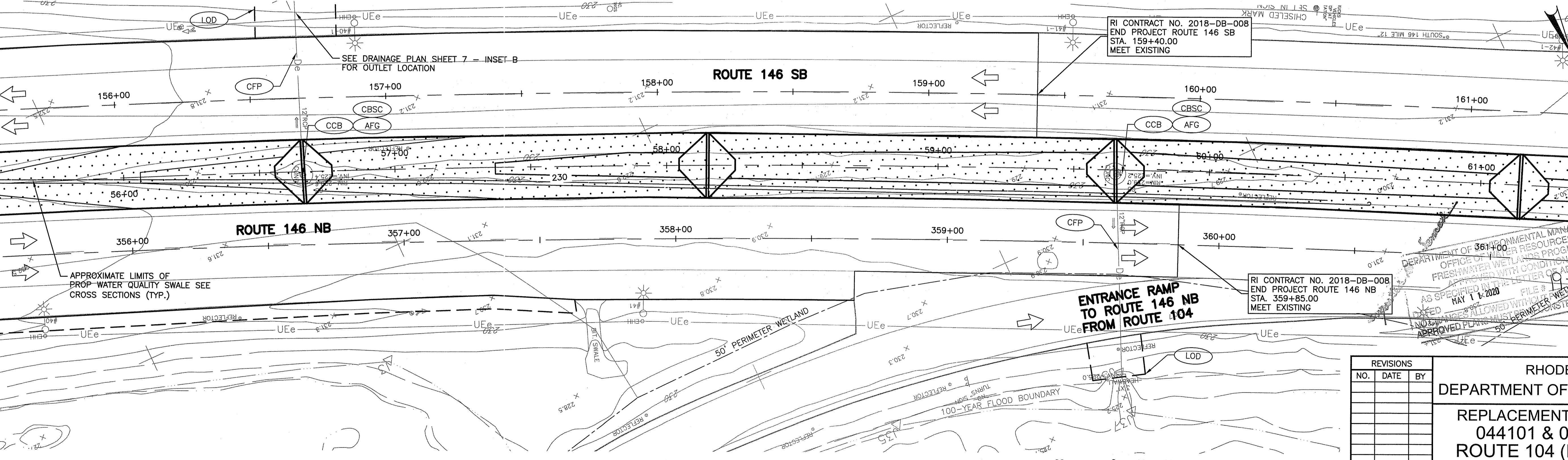
MATCH TO BELOW

APP 9 2020



MATCH TO ABOVE

MATCH TO DRAINAGE PLAN 5



GRAPHIC SCALE

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REVISIONS		
NO.	DATE	BY

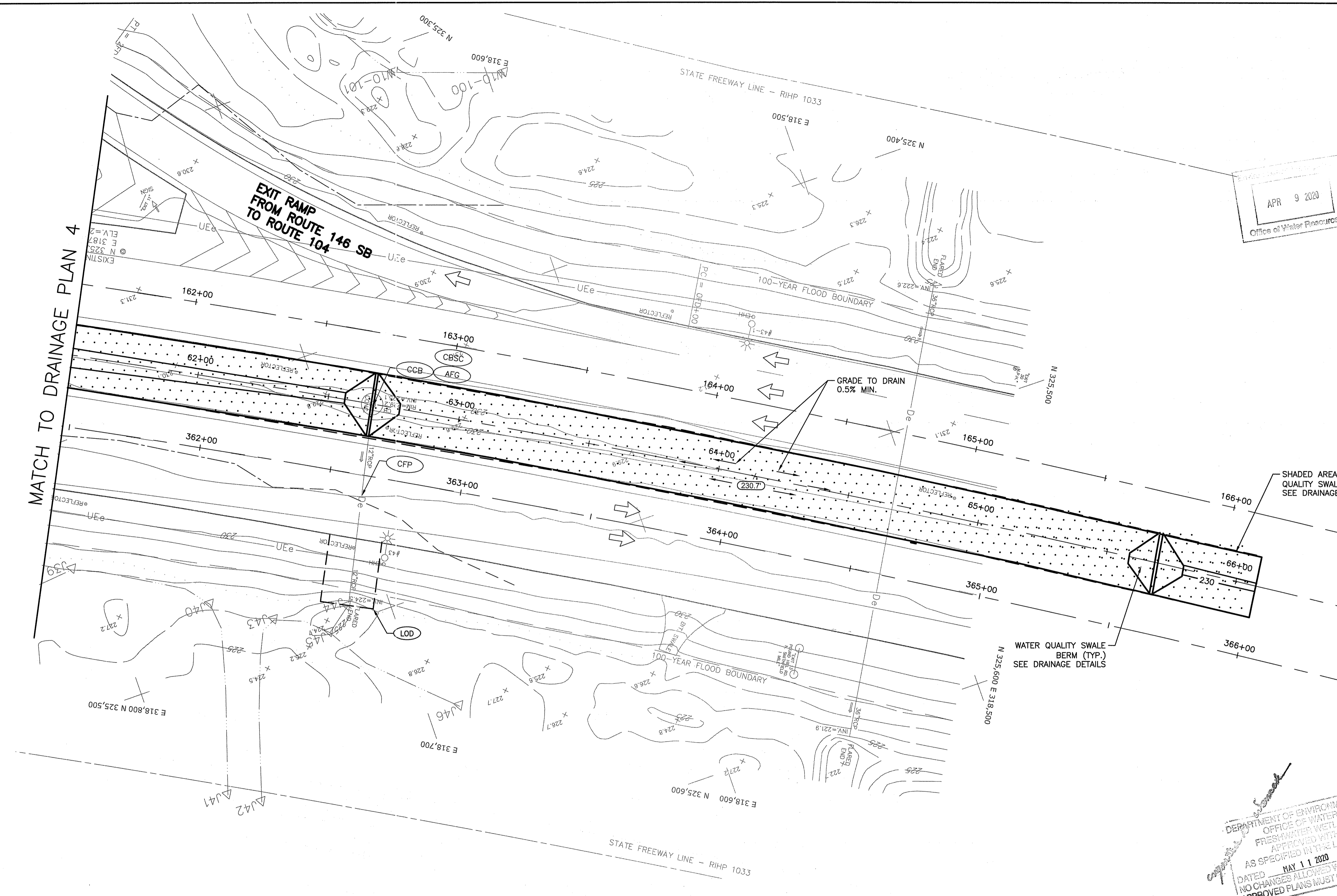
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
REPLACEMENT OF BRIDGE NOS
044101 & 044121 OVER
ROUTE 104 (FARNUM PIKE)
NORTH SMITHFIELD, RHODE ISLAND

DRAINAGE PLAN
SHEET 4 OF 7

CHECKED BY PMP DATE 3/18/2020 SCALE 1"=20'

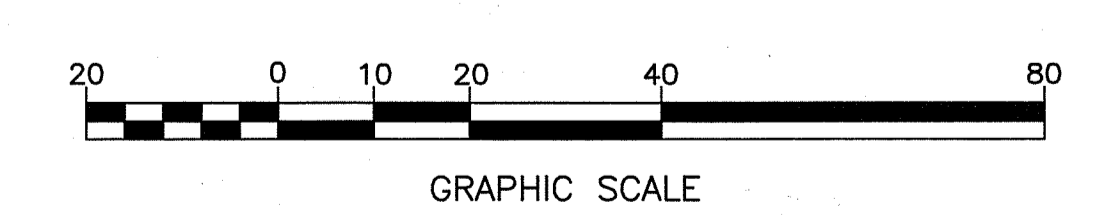
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0441(001)	2019	26	103

APR 9 2020
Office of Water Resources



MATCH TO DRAINAGE PLAN 4

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
FILE # 19-0334
DATED MAY 11 2020
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPLACEMENT OF BRIDGE NOS
044101 & 044121 OVER
ROUTE 104 (FARNUM PIKE)
NORTH SMITHFIELD, RHODE ISLAND

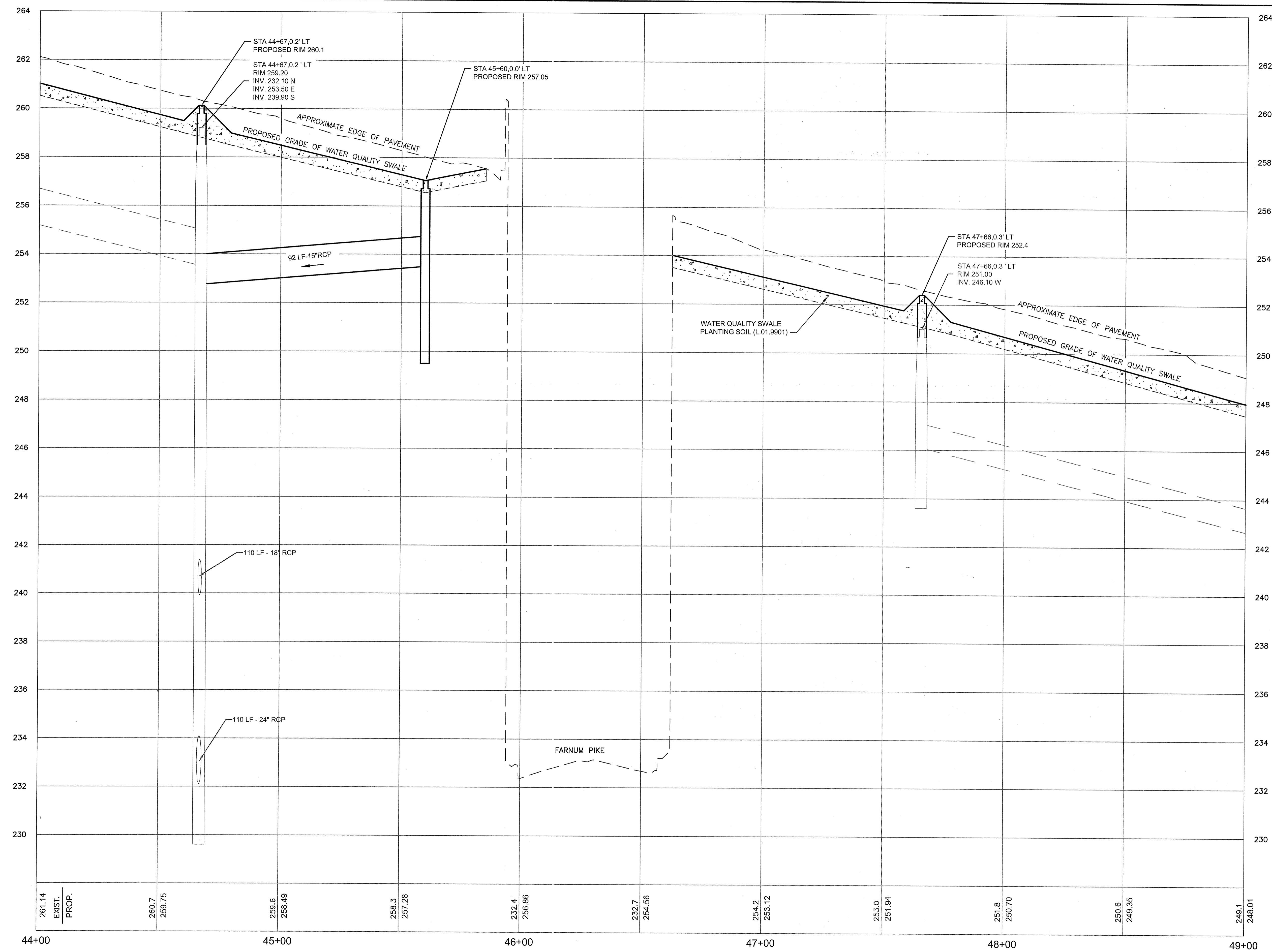
DRAINAGE PLAN
SHEET 5 OF 7

CHECKED BY **PMP** DATE **3/18/2020** SCALE **1"=20'**

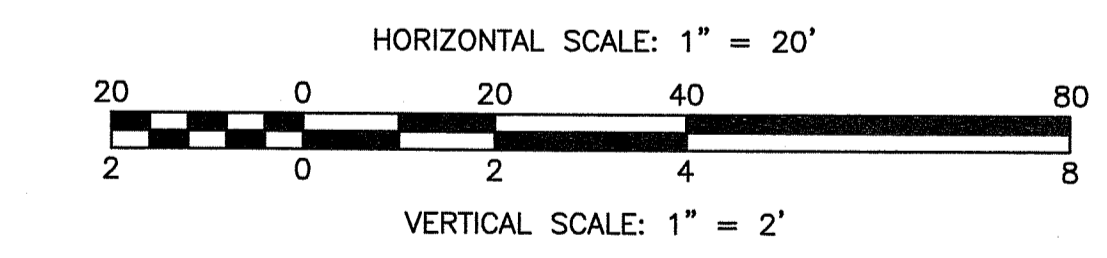
CME ASSOCIATES, INC.
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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0441(001)	2019	33	103

APR 9 2020



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 11 2020 FILE # 19-0234
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



261.14	260.7	259.75	259.6	258.49	258.3	257.28	232.4	256.86	232.7	254.56	254.2	253.12	253.0	251.94	251.8	250.70	250.6	249.35	249.1
EXIST.																			
PROP.																			

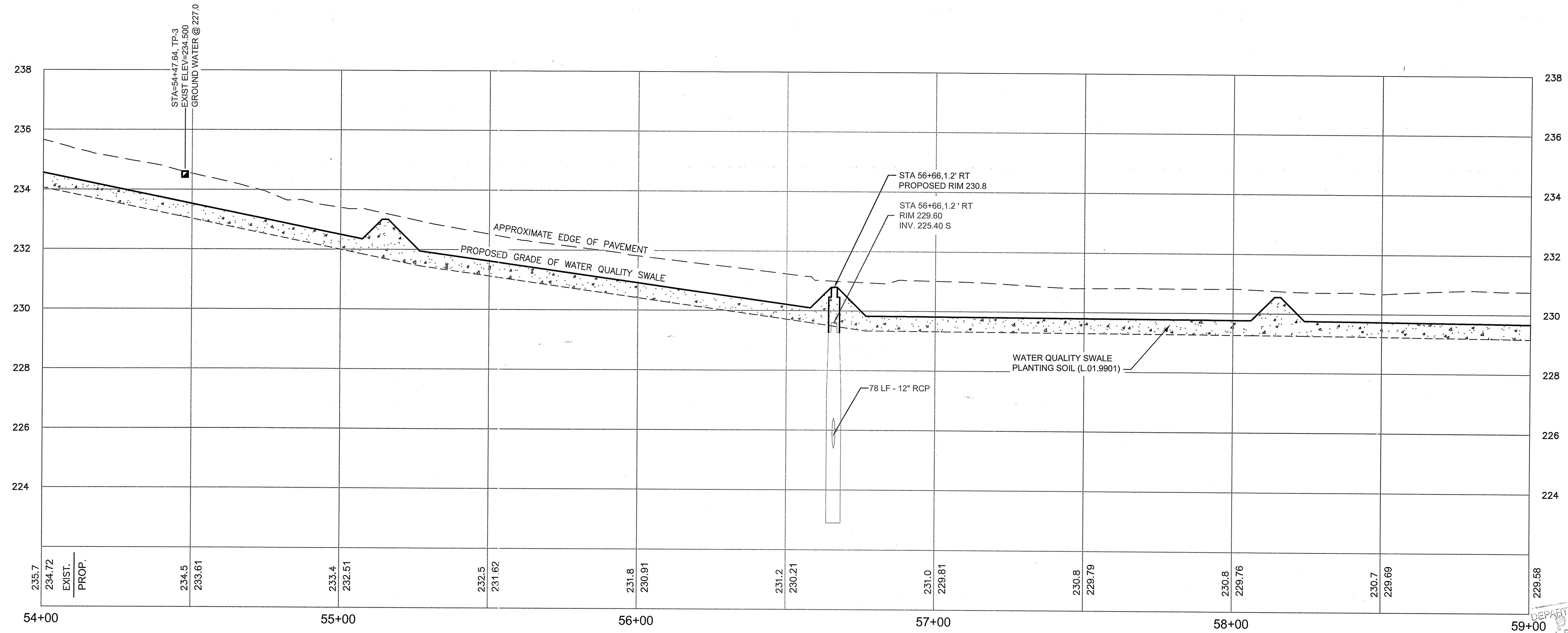
ROUTE 146 CENTERLINE
 SWALE PROFILE
 STA. 44+00 TO STA. 49+00



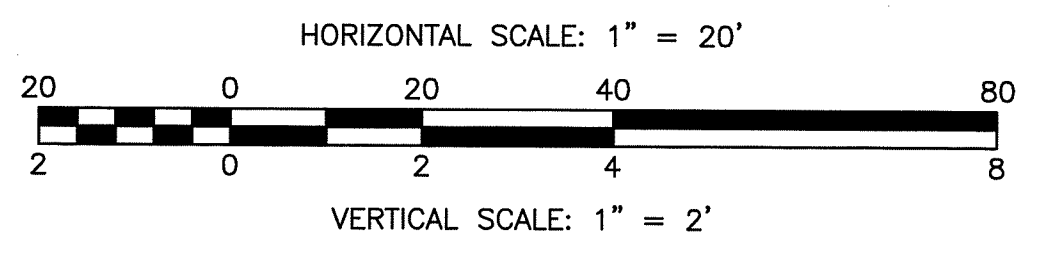
REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
NO.	DATE	BY		
			REPLACEMENT OF BRIDGE NOS 044101 & 044121 OVER ROUTE 104 (FARNUM PIKE) NORTH SMITHFIELD, RHODE ISLAND	
			WATER QUALITY SWALE PROFILE	
			SHEET 5 OF 8	
			CHECKED BY PMP DATE 3/18/2020 SCALE AS NOTED	

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0441(001)	2019	35	103

APR 9 2020



ROUTE 146 CENTERLINE
SWALE PROFILE
STA. 54+00 TO STA. 59+00



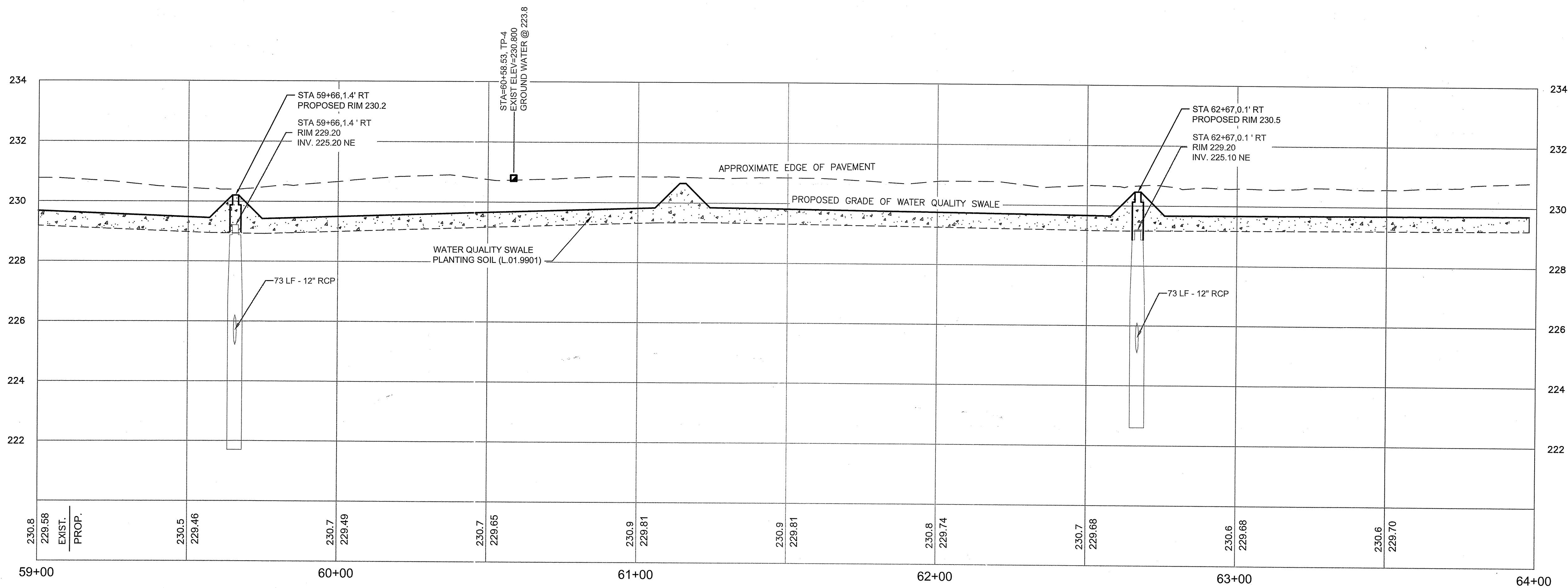
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 11 2020 FILE # 19-0331
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

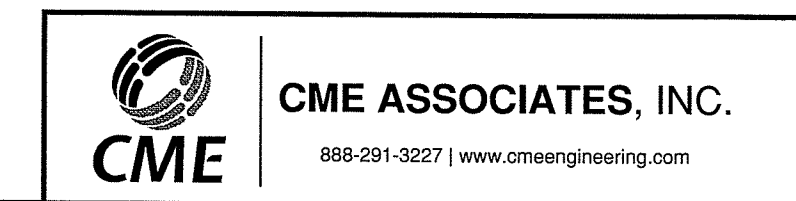
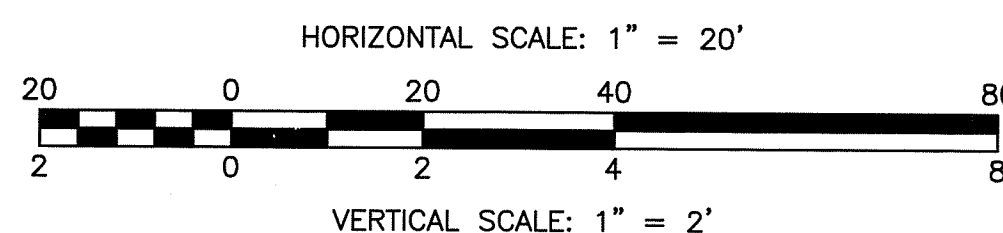
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
REPLACEMENT OF BRIDGE NOS
044101 & 044121 OVER
ROUTE 104 (FARNUM PIKE)
NORTH SMITHFIELD, RHODE ISLAND
WATER QUALITY
SWALE PROFILE
SHEET 7 OF 8
CHECKED BY PMP DATE 3/18/2020 SCALE AS NOTED

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APR 9 2020
Office of Water Resources



ROUTE 146 CENTERLINE
SWALE PROFILE
STA. 59+00 TO STA. 64+00



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTERS OF APPROVAL
DATED MAY 11 2020 FILE # 19-0334
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

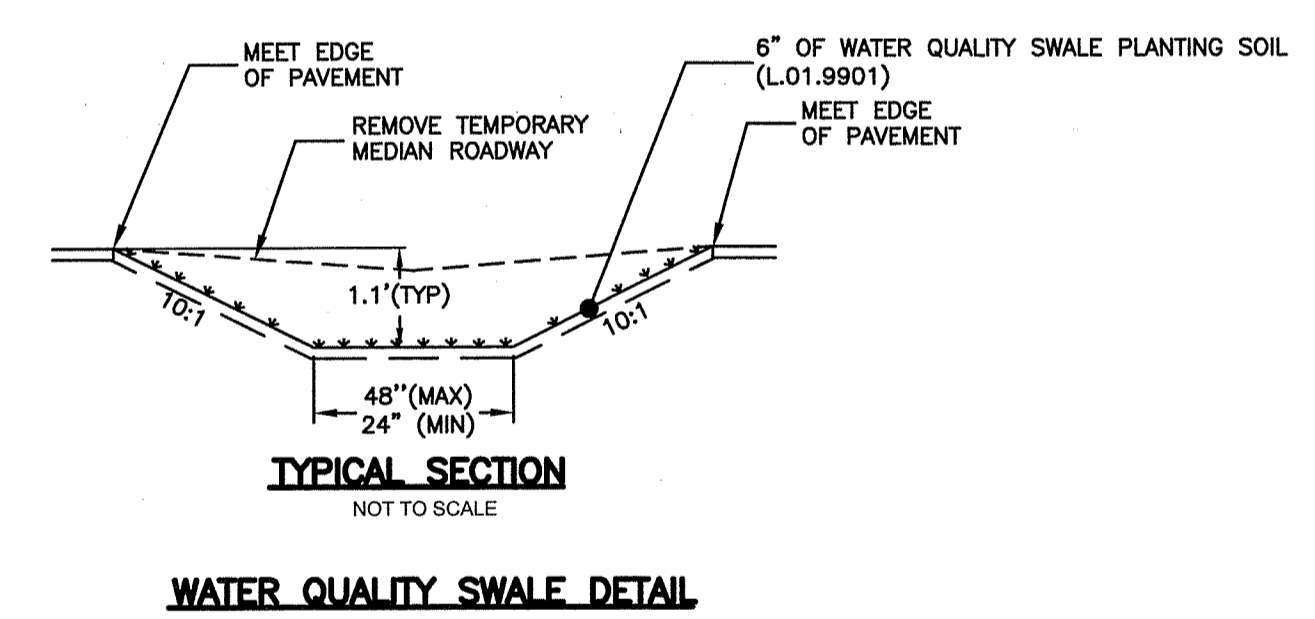
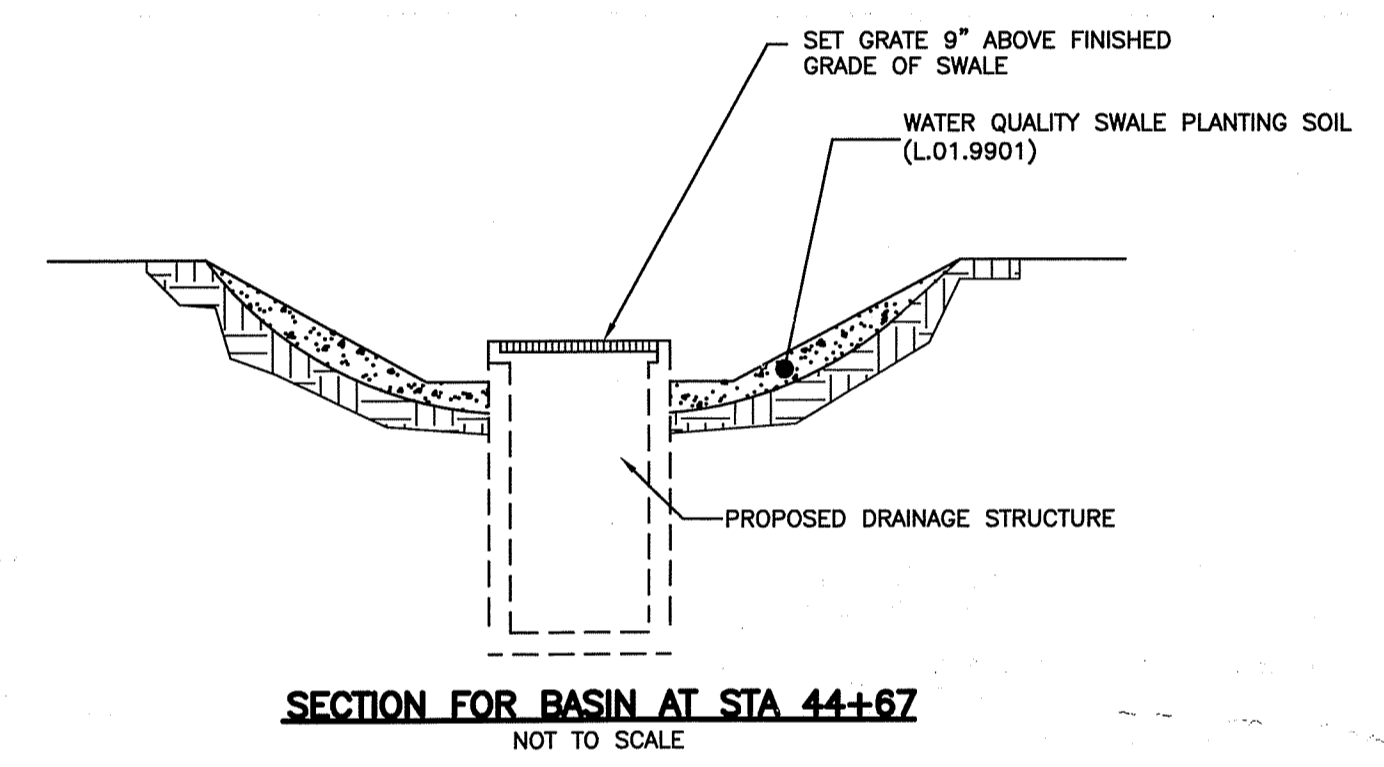
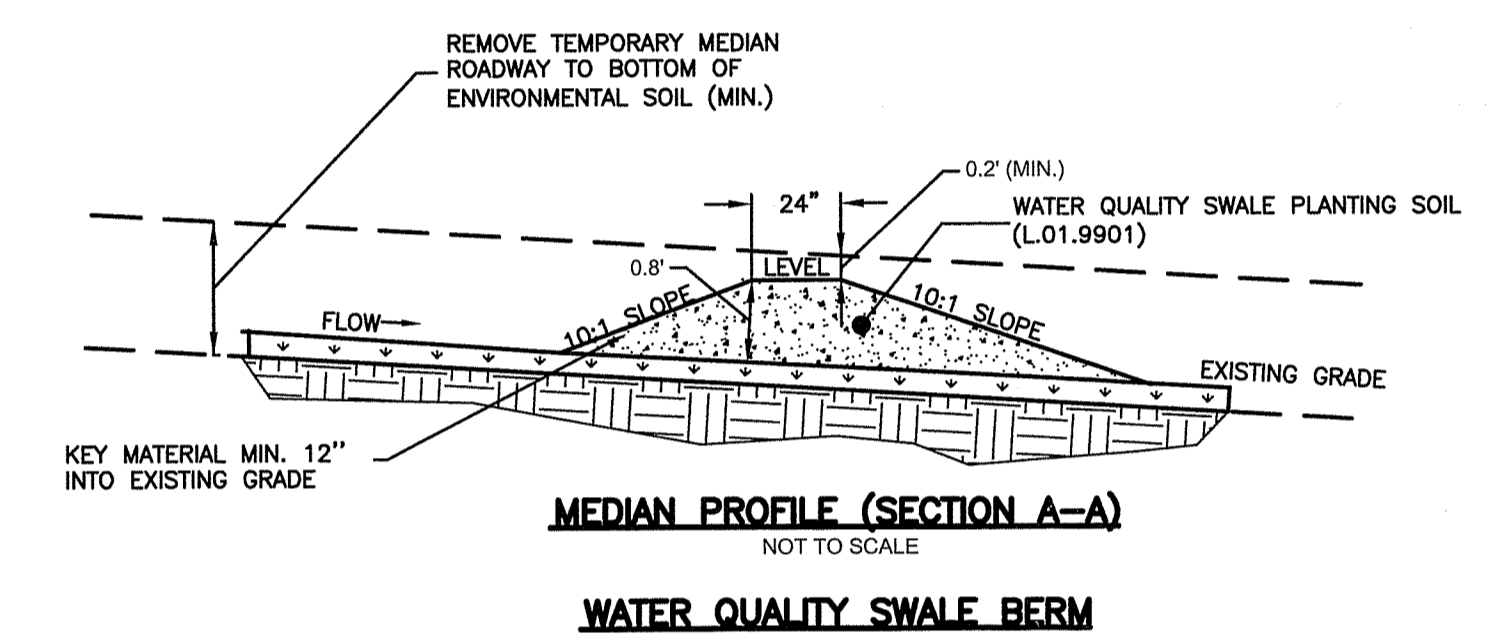
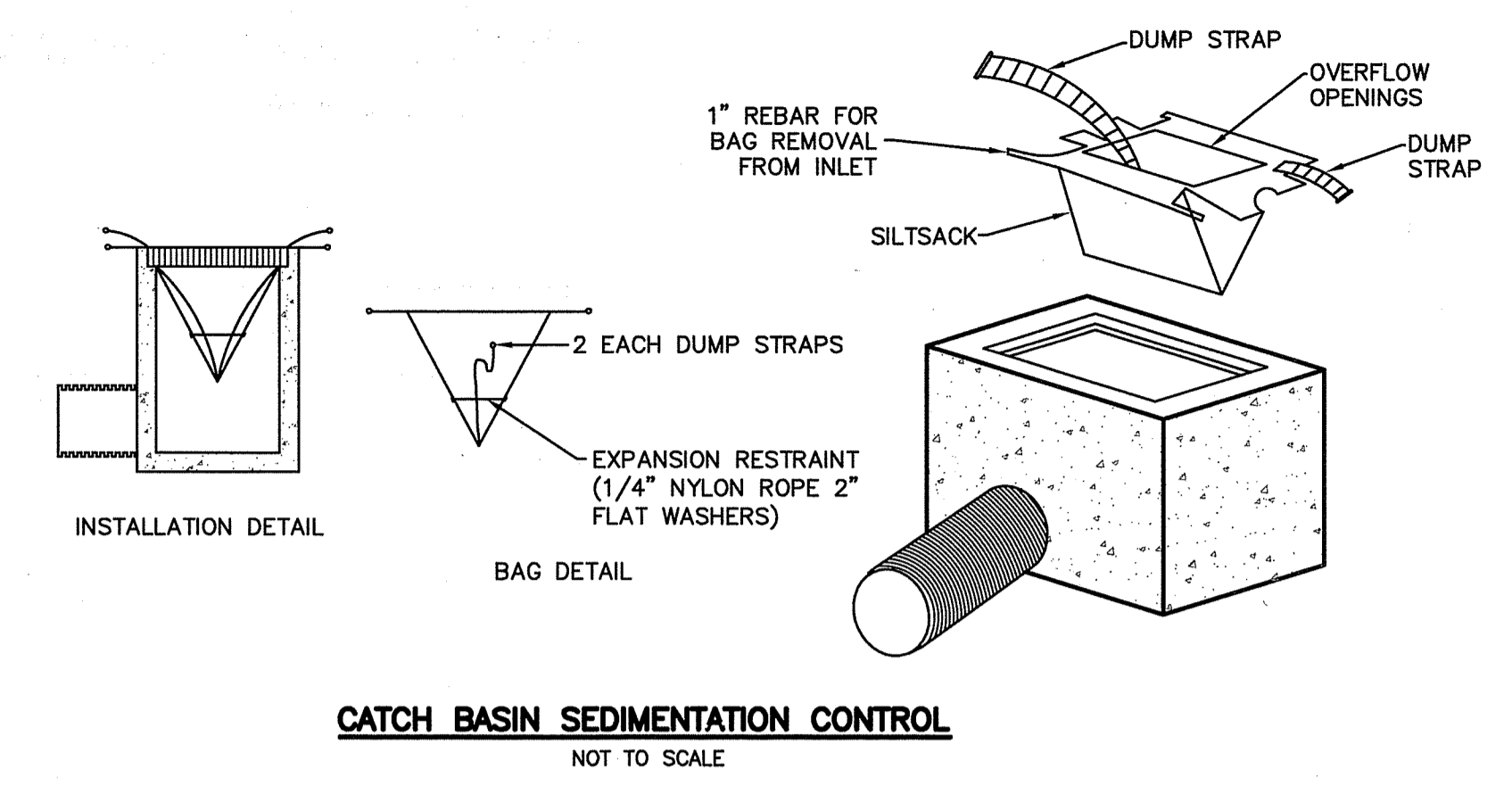
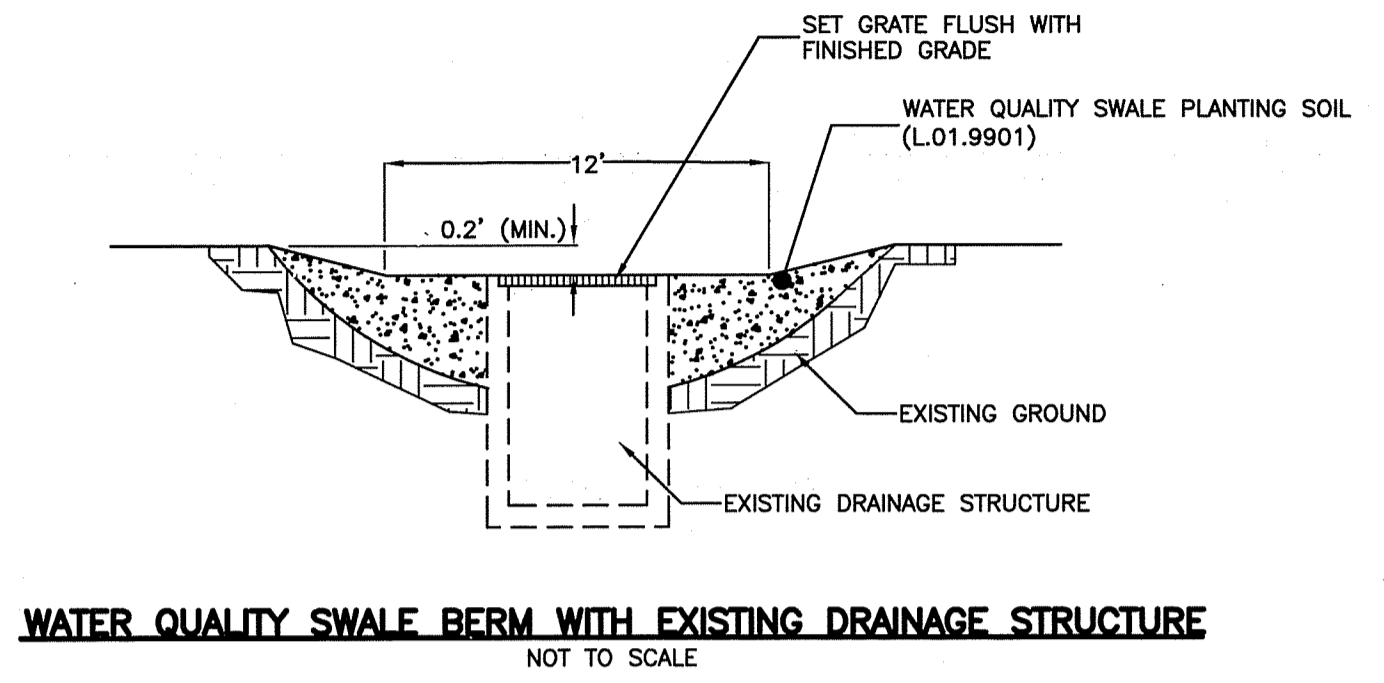
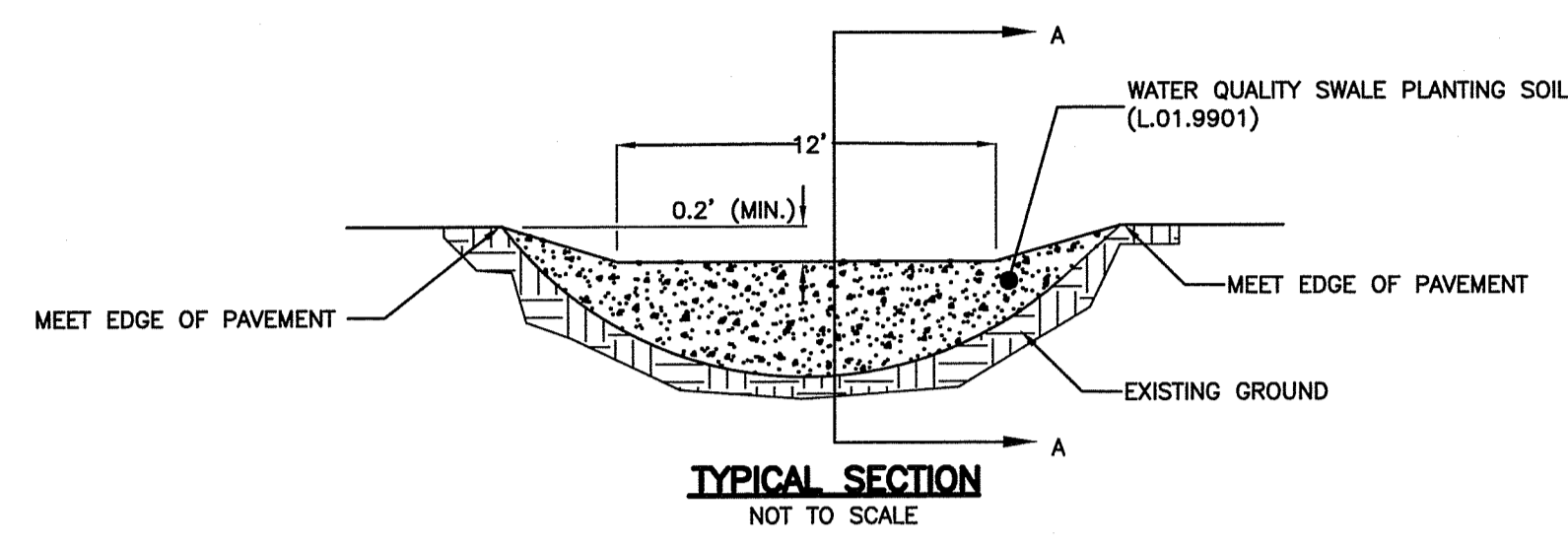
REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

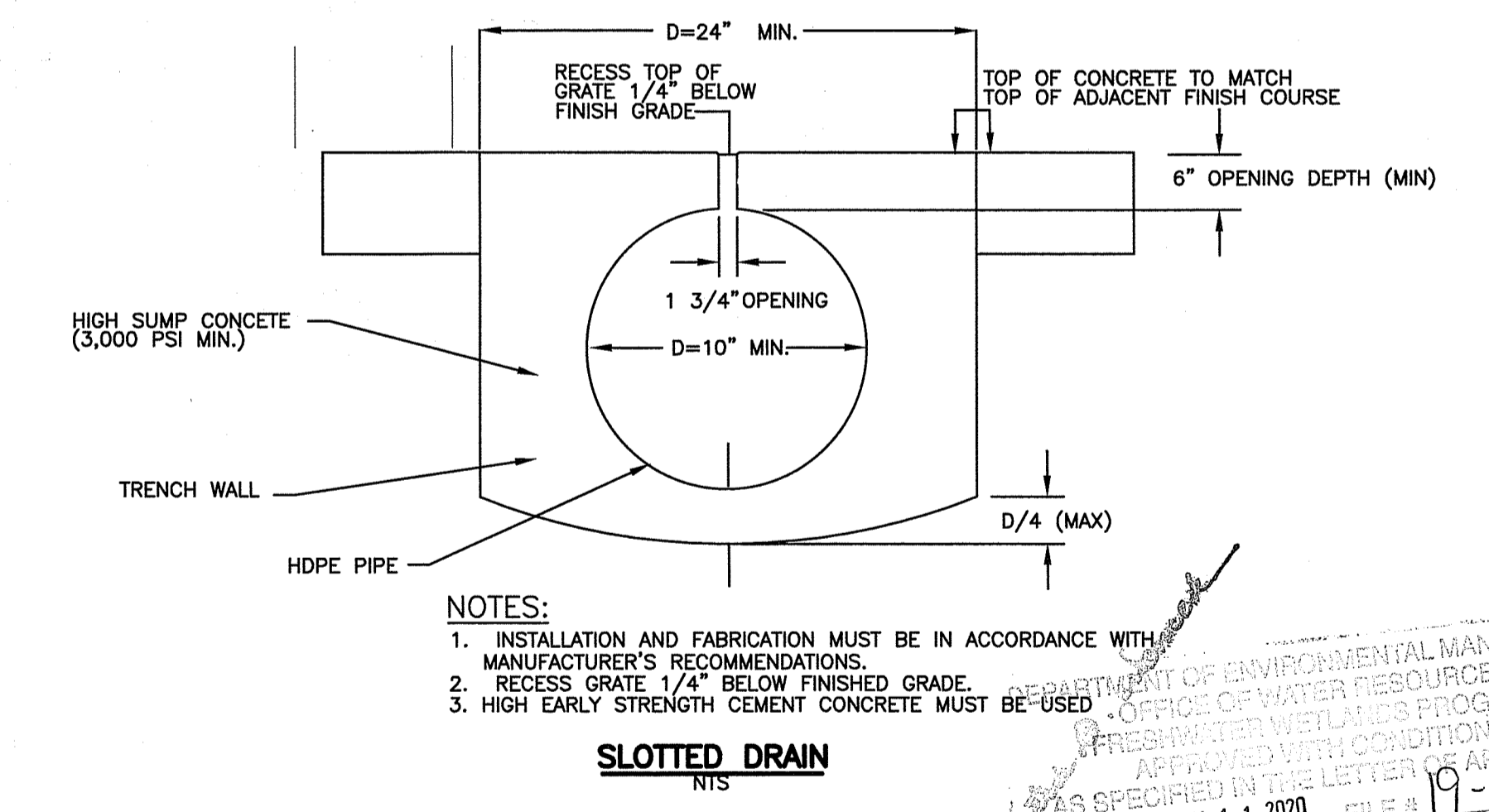
REPLACEMENT OF BRIDGE NOS
044101 & 044121 OVER
ROUTE 104 (FARNUM PIKE)
NORTH SMITHFIELD, RHODE ISLAND

WATER QUALITY
SWALE PROFILE
SHEET 8 OF 8

CHECKED BY PMP DATE 3/18/2020 SCALE AS NOTED



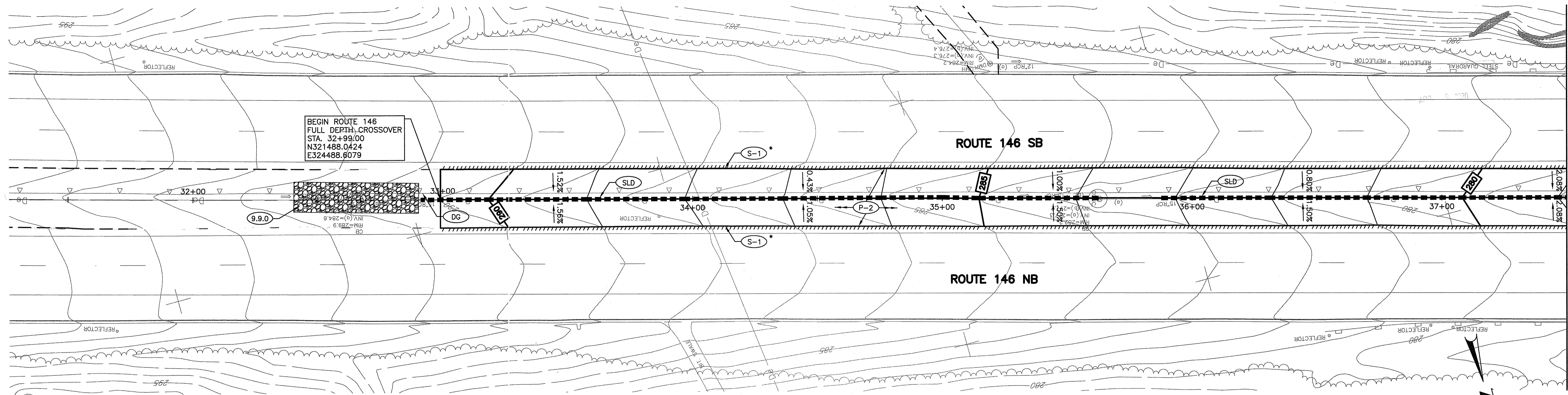
NOTE: NO STONES LARGER THAN 3 INCHES SHALL BE ALLOWED WITHIN THE COMPACTED WATER QUALITY SWALE BERM. CONSTRUCTION SHALL NOT TAKE PLACE DURING COLD PERIODS WHERE TEMPERATURES ARE CONSISTENTLY LOWER THAN 40 DEGREES FAHRENHEIT. COMPACT TO 95% OPTIMUM DENSITY MATERIAL PER 301.03.2



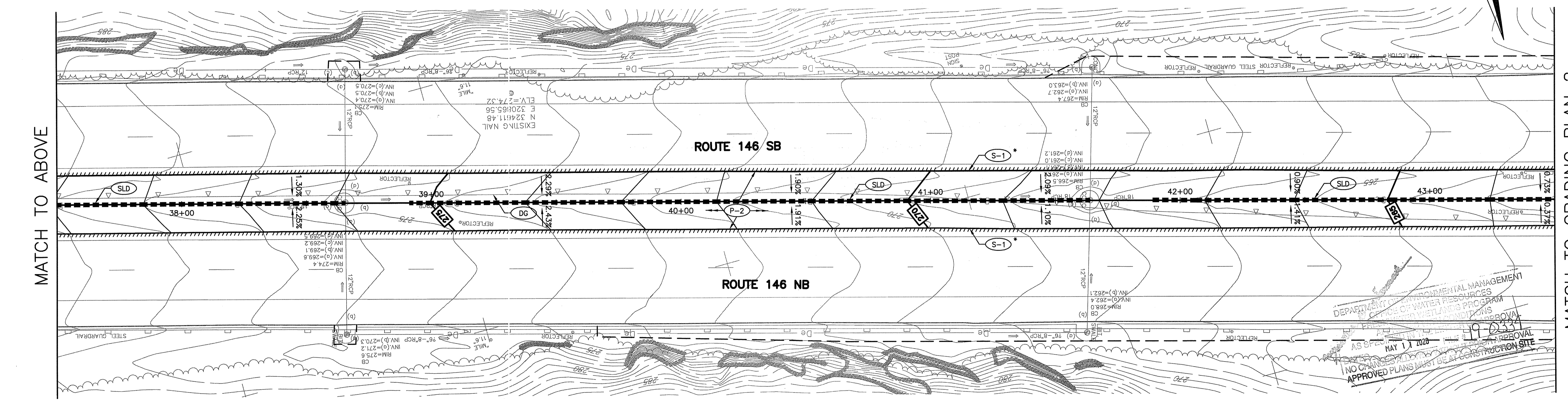
NOTES:
 1. INSTALLATION AND FABRICATION MUST BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 2. RECESS GRATE 1/4" BELOW FINISHED GRADE.
 3. HIGH EARLY STRENGTH CEMENT CONCRETE MUST BE USED.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WILDLIFE PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 FILE # 19-0334
 MAY 11 2020
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION REPLACEMENT OF BRIDGE NOS 044101 & 044121 OVER ROUTE 104 (FARNUM PIKE) NORTH SMITHFIELD, RHODE ISLAND DRAINAGE DETAILS SHEET 1 OF 1	
NO.	DATE	BY		



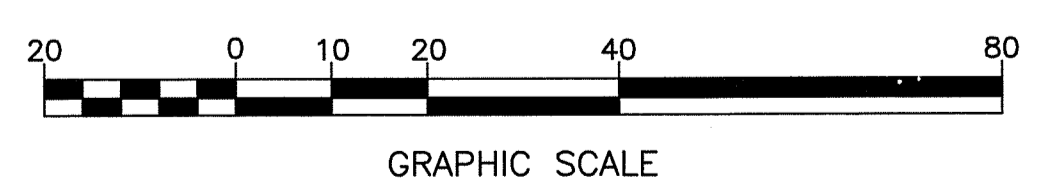
MATCH TO BELOW



MATCH TO ABOVE

MATCH TO GRADING PLAN 2

- SEE TEMPORARY PAVED MEDIAN PROFILE FOR BASELINE ELEVATIONS.
 - EXISTING CATCH BASINS WITHIN MEDIAN TO REMAIN PROTECTED AND BELOW GRADE DURING TEMPORARY PAVED MEDIAN CONDITION.
- * SAWCUT EDGE OF EXISTING PAVEMENT AS NEEDED TO PROVIDE A CLEAN UNIFORM EDGE TO PAVE AGAINST. MATCH EXISTING PAVEMENT SURFACE WITH TEMPORARY MEDIAN PAVEMENT



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 DIVISION OF WATER RESOURCES
 PERMITTING PROGRAM
 AS SPECIFIED BY PERMIT NO. 19-0334
 NO CHANGES TO THE PERMIT APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
 DATE: 3/18/2020

REVISIONS		
NO.	DATE	BY

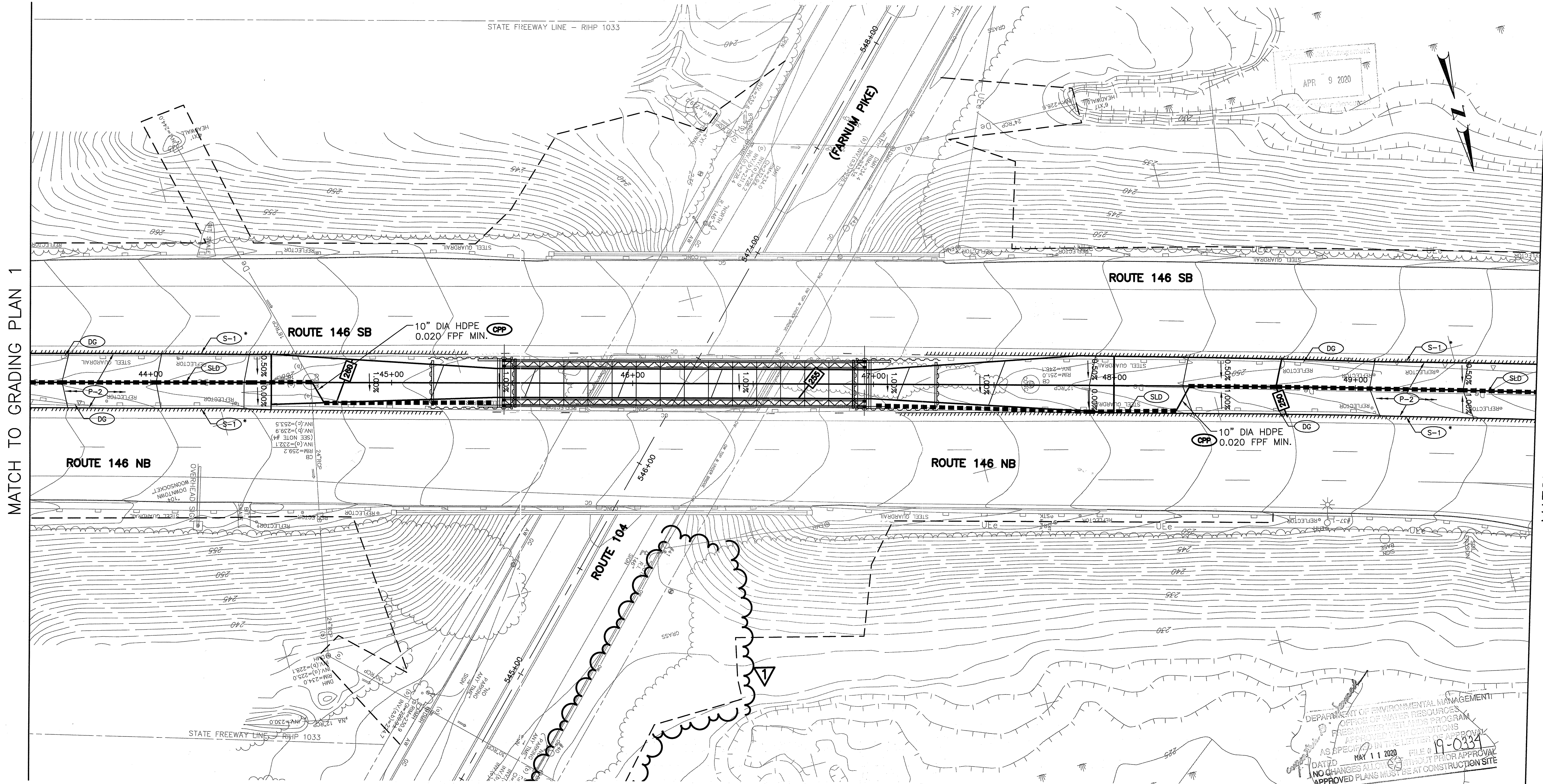
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPLACEMENT OF BRIDGE NOS 044101 & 044121 OVER ROUTE 104 (FARNUM PIKE)
 NORTH SMITHFIELD, RHODE ISLAND

TEMPORARY DRAINAGE & GRADING PLAN
 SHEET 1 OF 3

CHECKED BY PMP DATE 3/18/2020 SCALE 1"=20'

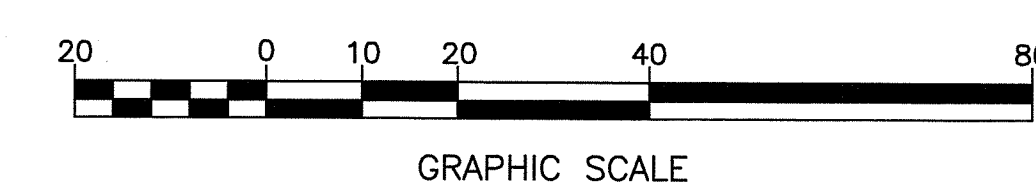
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MATCH TO GRADING PLAN 1

MATCH TO GRADING PLAN 3

- SEE TEMPORARY PAVED MEDIAN PROFILE FOR BASELINE ELEVATIONS.
 - EXISTING CATCH BASINS WITHIN MEDIAN TO REMAIN PROTECTED AND BELOW GRADE DURING TEMPORARY PAVED MEDIAN CONDITION.
- * SAWCUT EDGE OF EXISTING PAVEMENT AS NEEDED TO PROVIDE A CLEAN UNIFORM EDGE TO PAVE AGAINST. MATCH EXISTING PAVEMENT SURFACE WITH TEMPORARY MEDIAN PAVEMENT



REVISIONS		
NO.	DATE	BY
1	4/8/20	RAC

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

**REPLACEMENT OF BRIDGE NOS
044101 & 044121 OVER
ROUTE 104 (FARNUM PIKE)**

NORTH SMITHFIELD, RHODE ISLAND

**TEMPORARY DRAINAGE &
GRADING PLAN**

SHEET 2 OF 3

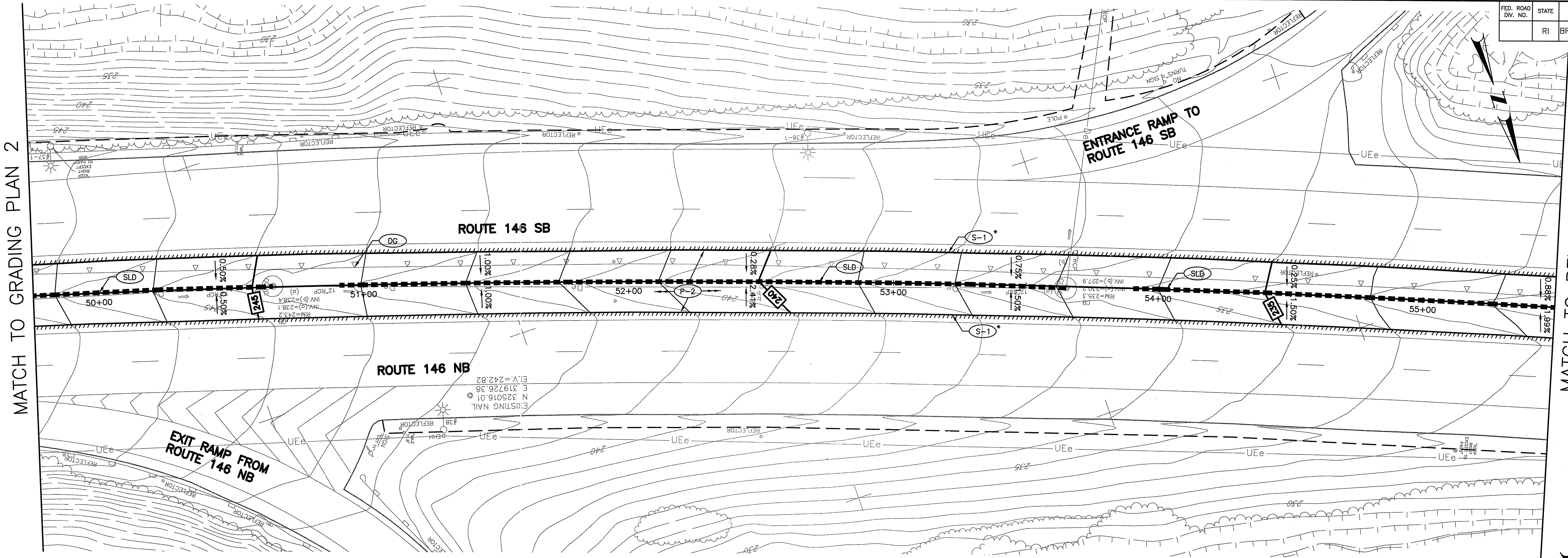
CHECKED BY JDL DATE 9/27/2019 SCALE 1"=20'

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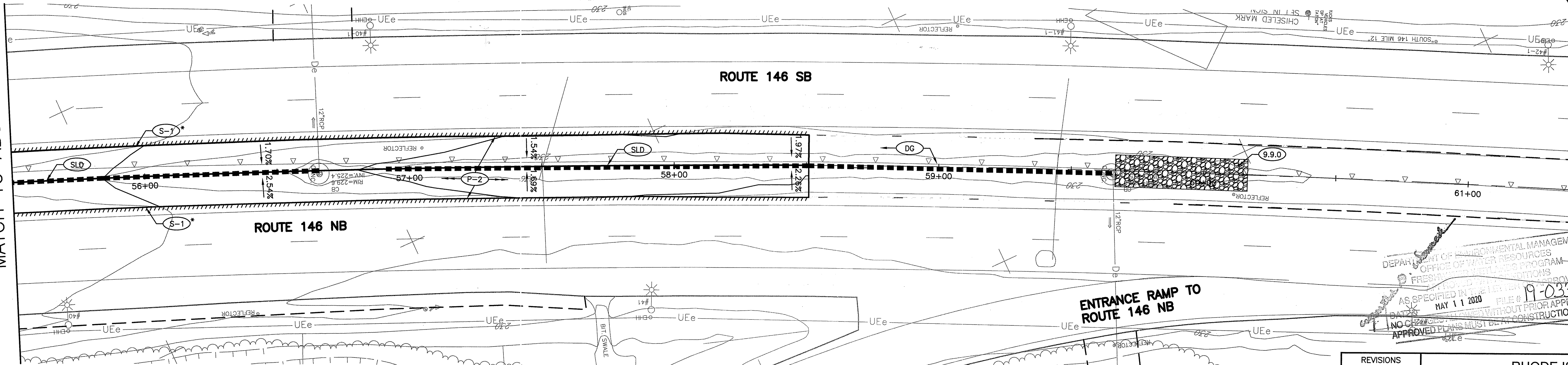
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 11 2020 FILE # 19-0334
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

MATCH TO GRADING PLAN 2

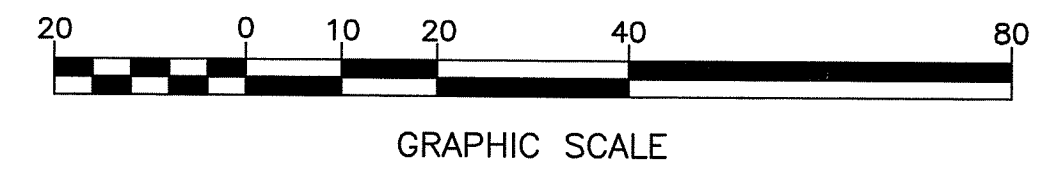
MATCH TO BELOW



MATCH TO ABOVE



- SEE TEMPORARY PAVED MEDIAN PROFILE FOR BASELINE ELEVATIONS.
 - EXISTING CATCH BASINS WITHIN MEDIAN TO REMAIN PROTECTED AND BELOW GRADE DURING TEMPORARY PAVED MEDIAN CONDITION.
- * SAWCUT EDGE OF EXISTING PAVEMENT AS NEEDED TO PROVIDE A CLEAN UNIFORM EDGE TO PAVE AGAINST. MATCH EXISTING PAVEMENT SURFACE WITH TEMPORARY MEDIAN PAVEMENT



REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

**REPLACEMENT OF BRIDGE NOS
044101 & 044121 OVER
ROUTE 104 (FARNUM PIKE)**

NORTH SMITHFIELD, RHODE ISLAND

**TEMPORARY DRAINAGE &
GRADING PLAN**

SHEET 3 OF 3

CHECKED BY PMP DATE 3/18/2020 SCALE 1"=20'

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WILDLIFE PROGRAM
PROTECTED WILDLIFE HABITAT APPROVAL
AS SPECIFIED IN THE LETTER OF APPROVAL
MAY 11 2020 FILE # 19-0334
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE