

# INDEX

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STATE OF RHODE ISLAND



## DEPARTMENT OF TRANSPORTATION

### PLAN, PROFILE AND SECTIONS OF PROPOSED STATE HIGHWAY

# CUMBERLAND AREA BRIDGE NOS. 752 & 753 HIGHWAY PLANS

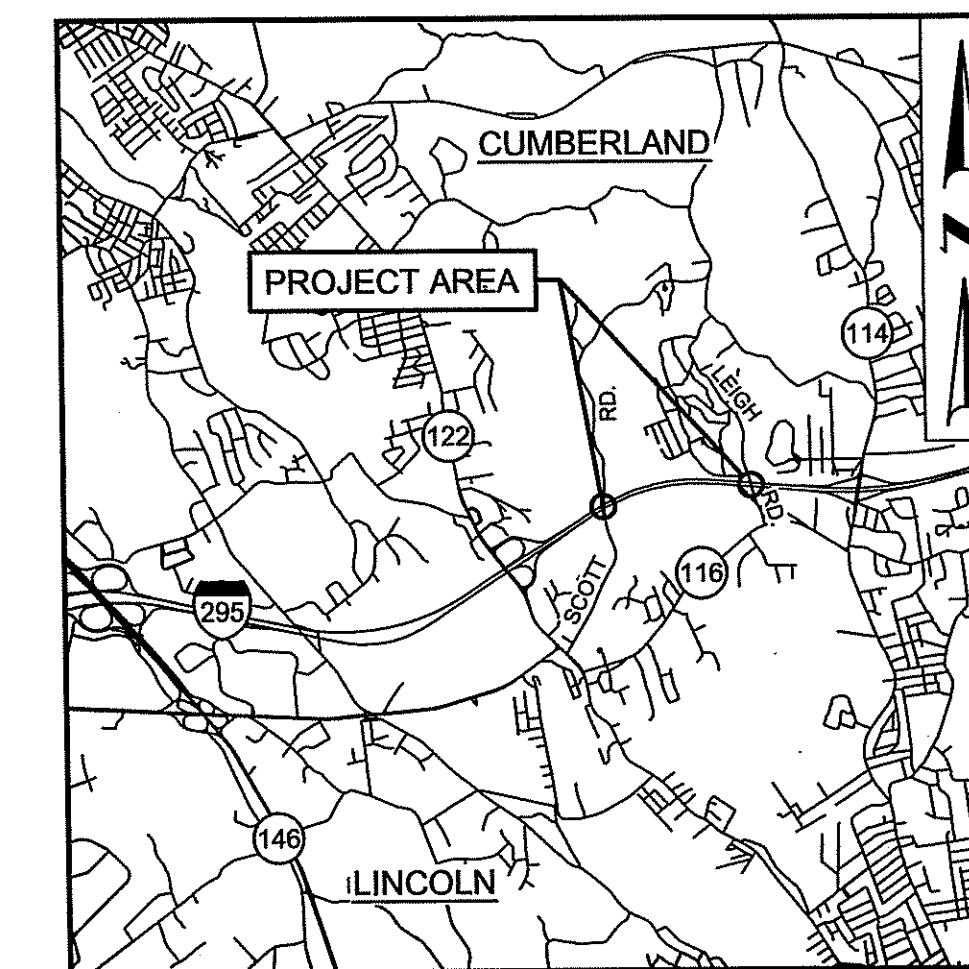
INTERSTATE 295 FROM SCOTT ROAD TO LEIGH ROAD

TOWN OF CUMBERLAND  
COUNTY OF PROVIDENCE

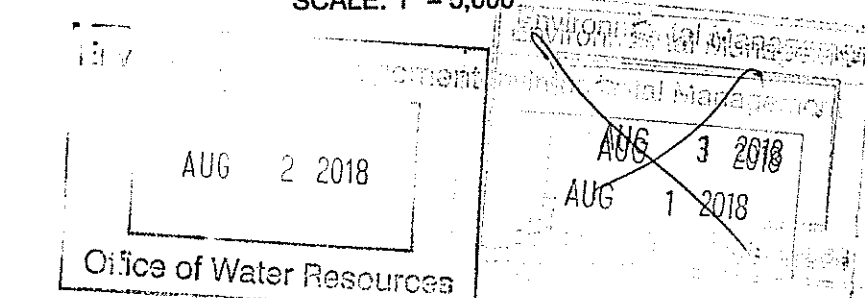
R.I. CONTRACT NO. 2017-DB-018 F.A. PROJECT NO. N/A

#### PAVEMENT STRUCTURE

- 1.5 INCHES DENSE FRICTION COURSE
- 2.5 INCHES CLASS 12.5 HMA MODIFIED
- 11 INCHES CLASS 19.0 HMA
- 12 INCHES GRAVEL BORROW SUBBASE



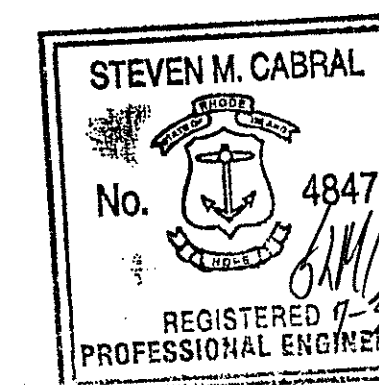
LOCATION MAP  
SCALE: 1" = 5,000'



#### DESIGN DESIGNATION (I-295)

AADT (2017)	55,475 V.P.D.
AADT (2037)	67,690 V.P.D.
D	50/50
K	10%
T	4%
DDHV	2,774 V.P.H.
DHV	5,548 V.P.H.
DESIGN SPEED	70 M.P.H.

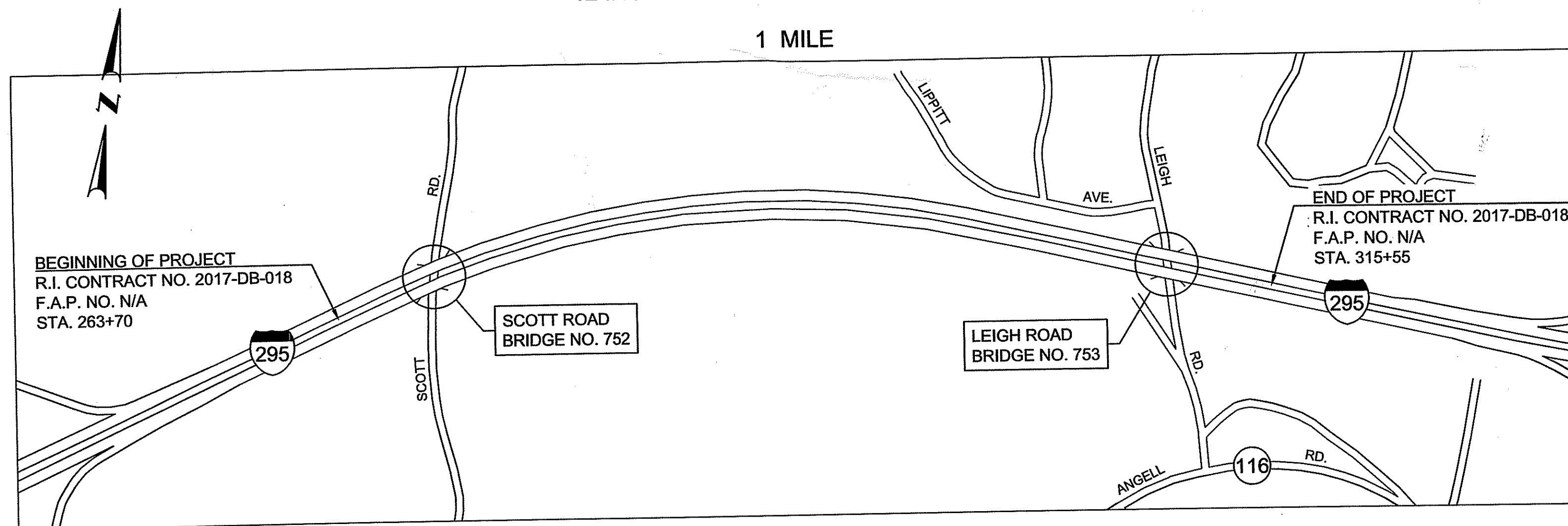
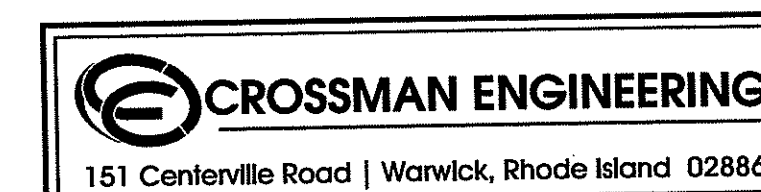
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED OCT 15 2018 FILE # 13-0205  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



### RIDEM SUBMISSION JULY 2018

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

Contract Number 2017-DB-018  
Number of Sheet 1  
Total Sheets 42



LAYOUT PLAN  
SCALE: 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 (2011) (2010.00)

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS  
SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED 2013, 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, 1996 EDITION, WITH ALL REVISIONS.



FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			3	42

**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:**

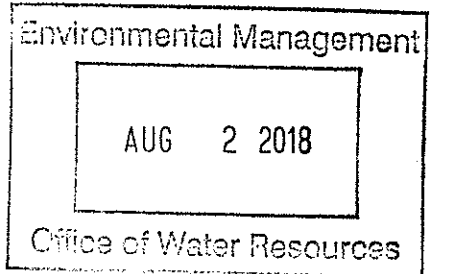
- FOR ALL PROJECTS WITH AT LEAST ONE(1) ACRE OF SOIL DISTURBANCE. R.I.D.O.T. IS REQUIRED TO DEVELOP AND ENFORCE A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ORDER TO REMAIN IN COMPLIANCE WITH THE RIDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES. 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 UNDISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEED 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 ERODABLE MATERIAL SHALL ALSO BE SEED 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.
- 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.

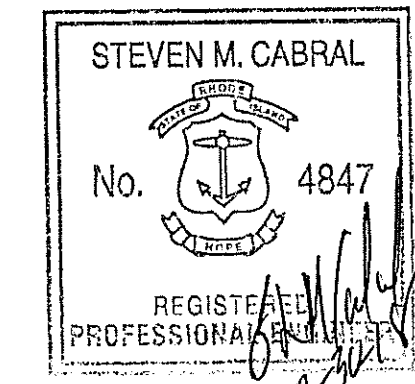
**UTILITY NOTES:**

- 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.



180265  
OCT 15 2018  
APPROVED  
D. Womack

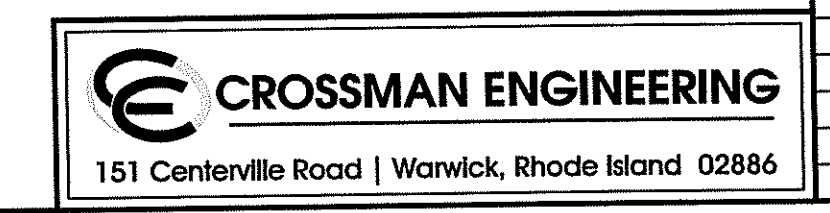
**THIS PLAN SHALL NOT BE ALTERED**



NO.	DATE	BY
1	4/07	TRB
2	3/10	RBH
3	4/14	MLP

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
**REPLACEMENT OF CUMBERLAND I-295 CORRIDOR BRIDGES**  
CUMBERLAND RHODE ISLAND

**STANDARD NOTES - 1**



CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE NO SCALE

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			4	42

**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:**

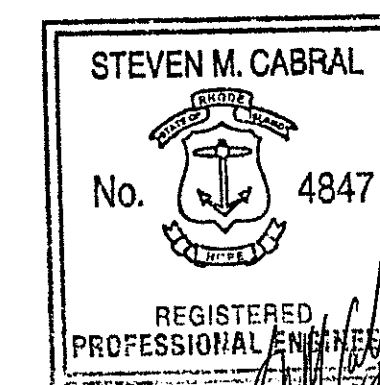
- ALL SALVAGED TRAFFIC SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE R.I.D.O.T. MAINTENANCE HEADQUARTERS, 360 LINCOLN AVENUE, WARWICK, RHODE ISLAND, 02888.
- BACK PLATES SHALL BE INSTALLED ON ALL TRAFFIC SIGNAL HEADS.
- THE CONTRACTOR SHALL SUPPLY AND INSTALL ON THE UPPER LEFT HAND CORNER OF THE BACK OF 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-PLANED AND NEW ROADWAY SURFACES THAT WILL BE OPENED TO TRAFFIC AT THE END OF THE SHIFT.

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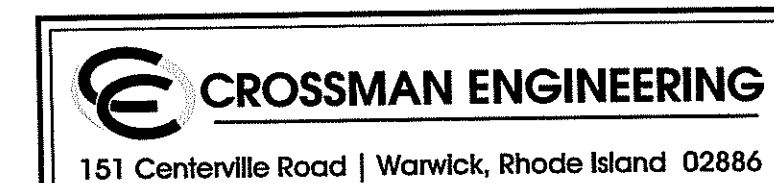
**THIS PLAN SHALL NOT BE ALTERED**



REVISIONS		
NO.	DATE	BY
1	4/07	TRB
2	11/07	TRB
3	3/10	RBH

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND

STANDARD NOTES - 2



CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE NO SCALE

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			5	42

**JOB SPECIFIC GENERAL NOTES**

1. FRESHWATER WETLANDS WERE DELINEATED BY APPLIED BIO-SYSTEMS, INC. ON MARCH 28, 2018 IN ACCORDANCE WITH RIDEM RULES AND REGULATIONS GOVERNING ENFORCEMENT OF THE FRESH WATER WETLANDS ACT AND FIELD SURVEYED BY BRYANT ASSOCIATES, INC. ON JUNE 22, 2018.

**JOB SPECIFIC LEGEND**

- (AFC) ADJUST FRAME AND COVER TO GRADE (BY OTHERS)
- (BCD) BITUMINOUS CONCRETE DRIVEWAY  
3" CLASS 9.5 HMA  
8" GRAVEL BORROW SUBBASE COURSE
- (CFS) COMPOST FILTER SOCK 12 INCH DIAMETER
- (DUP) REMOVE AND DISPOSE UTILITY POLE (BY OTHERS)
- (ETEA) GUARDRAIL END TREATMENT - ENERGY ABSORBING TERMINAL, TL4
- (ISCD) INLET SEDIMENT CONTROL DEVICE
- (NUP) NEW UTILITY POLE (BY OTHERS)
- (PCD-S) PERMANENT CHECK DAM - STONE
- (PMM) PAVEMENT MILLINGS MULCH
- (PT-1) PAVEMENT TRANSITION - COLD PLANE TO EXISTING
- (PT-2) PAVEMENT TRANSITION - FULL DEPTH TO COLD PLANE
- (RS) SHOULDER RUMBLE STRIP
- (S-1) FULL DEPTH SAWCUT OF BITUMINOUS PAVEMENT
- (S-2) CUTTING AND MATCHING ASPHALT
- (SPM) SLOTTED PAVEMENT MARKER, ONE-WAY (WHITE)
- (TIA) TEMPORARY IMPACT ATTENUATOR
- (WQS) WATER QUALITY SWALE
- (6WSS) 6" EPOXY RESIN PAVEMENT MARKINGS (SKIP STRIPE) - WHITE

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**PAVEMENT STRUCTURE LEGEND**

- (A) 1 1/2" DENSE FRICTION COURSE
- (B) 2 1/2" BITUMINOUS CONCRETE SURFACE COURSE - CLASS 12.5 HMA-MODIFIED (I-295)
- (B) 2" BITUMINOUS CONCRETE SURFACE COURSE - CLASS 12.5 HMA-MODIFIED (SCOTT RD AND LEIGH RD)
- (C) 1 1/2" BITUMINOUS CONCRETE BASE COURSE - CLASS 19.0 HMA
- (D) 1 1/2" GRAVEL BORROW SUBBASE COURSE
- (E) VARIES BITUMINOUS CONCRETE LEVELING COURSE - CLASS 4.75 HMA
- (CP) 1 1/2" REMOVE BITUMINOUS PAVEMENT BY MICRO-MILLING

REVISIONS  
OCT 15 2018  
180205  
APPROVED FOR CONSTRUCTION

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

REVISIONS		
NO.	DATE	BY

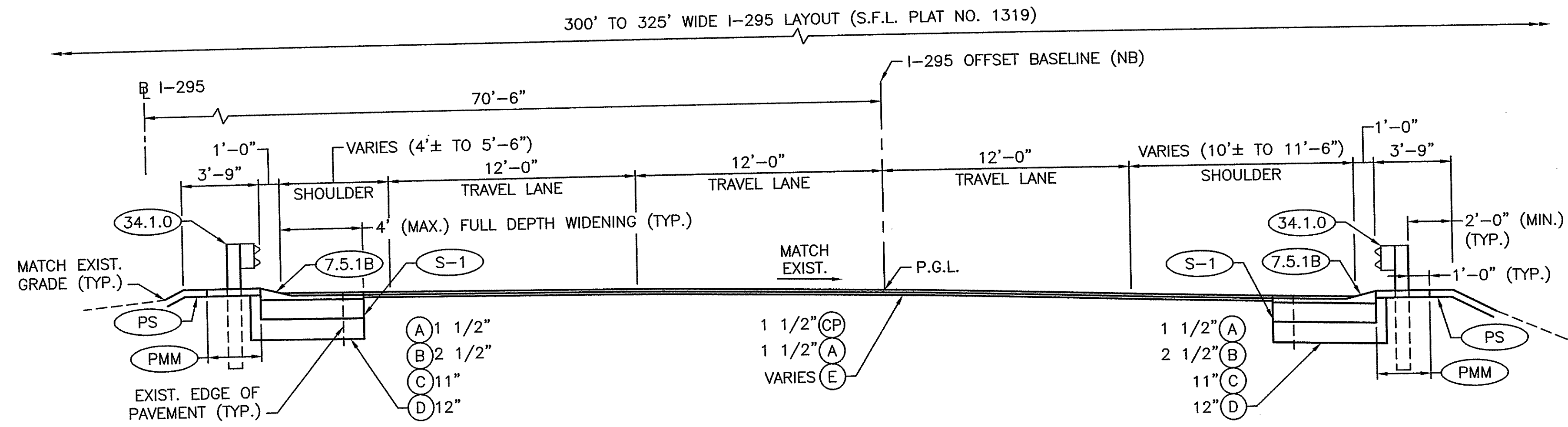
**RHODE ISLAND DEPARTMENT OF TRANSPORTATION**

**REPLACEMENT OF CUMBERLAND I-295 CORRIDOR BRIDGES**  
CUMBERLAND RHODE ISLAND

**JOB SPECIFIC SYMBOLS, LEGEND & NOTES**

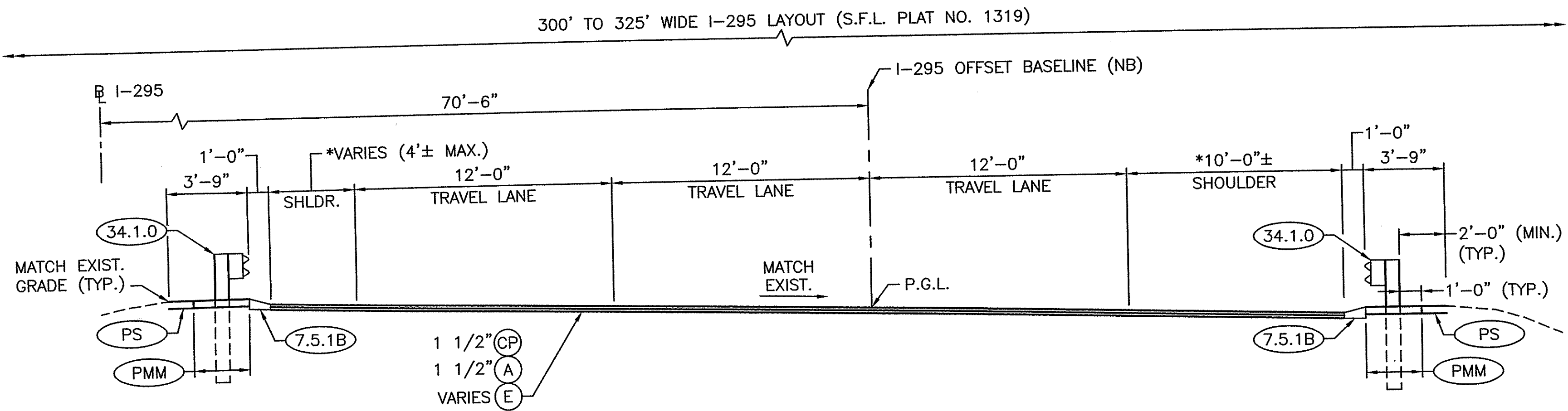
**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

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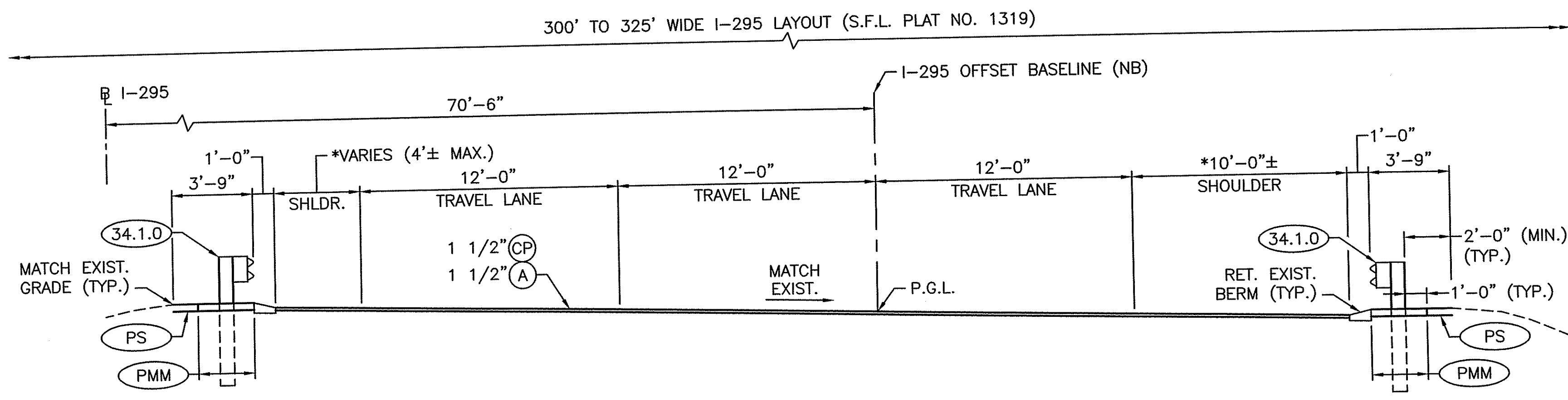
**TYPICAL ROADWAY SECTION - I-295 NB  
(SCOTT RD. APPROACH)**

I-295 OFFSET BASELINE (NB)  
LEFT STA. 268+50 TO 268+74 AND 270+40 TO 270+60  
RIGHT STA. 268+25 TO 268+45 AND 270+16 TO 270+31



**TYPICAL ROADWAY SECTION - I-295 NB  
(SCOTT RD. APPROACH)**

I-295 OFFSET BASELINE (NB)  
LEFT STA. 267+00 TO 268+50 AND 270+60 TO 272+00  
RIGHT STA. 267+00 TO 268+25 AND 270+31 TO 272+00



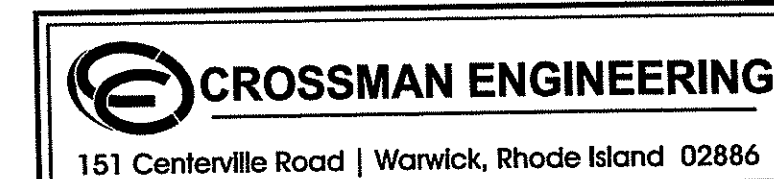
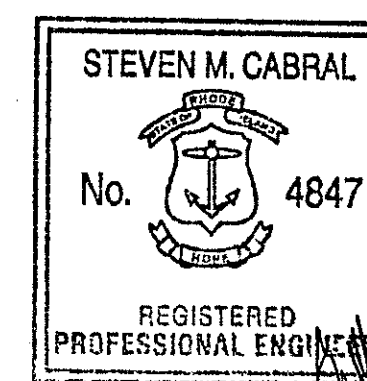
**TYPICAL ROADWAY SECTION - I-295 NB  
(SCOTT RD. APPROACH)**

I-295 OFFSET BASELINE (NB)  
263+70 TO 267+00 AND 272+00 TO 276+75

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**NOTES:**

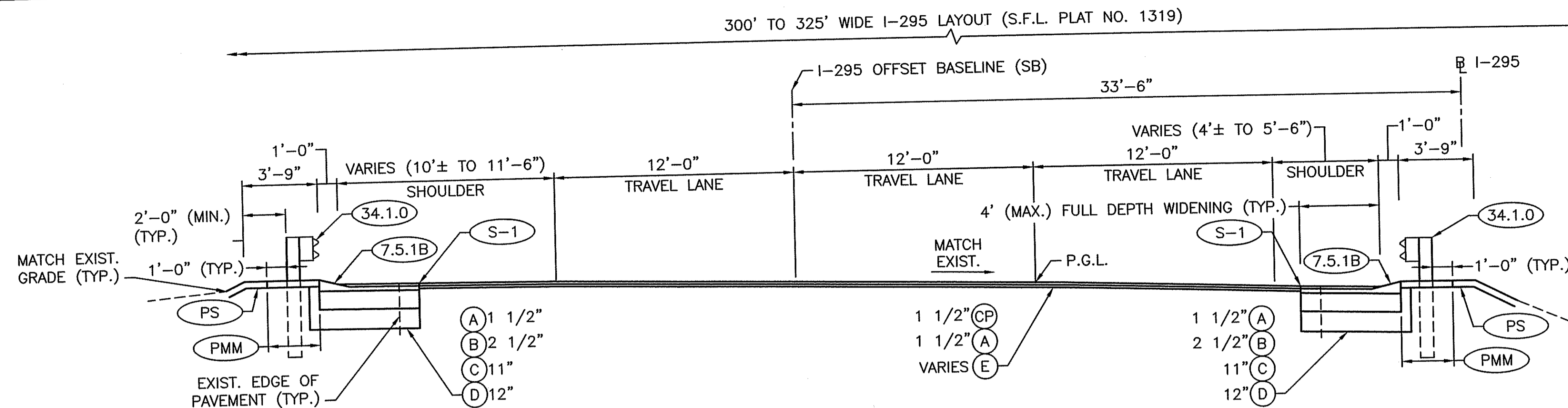
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REVISIONS		
NO.	DATE	BY

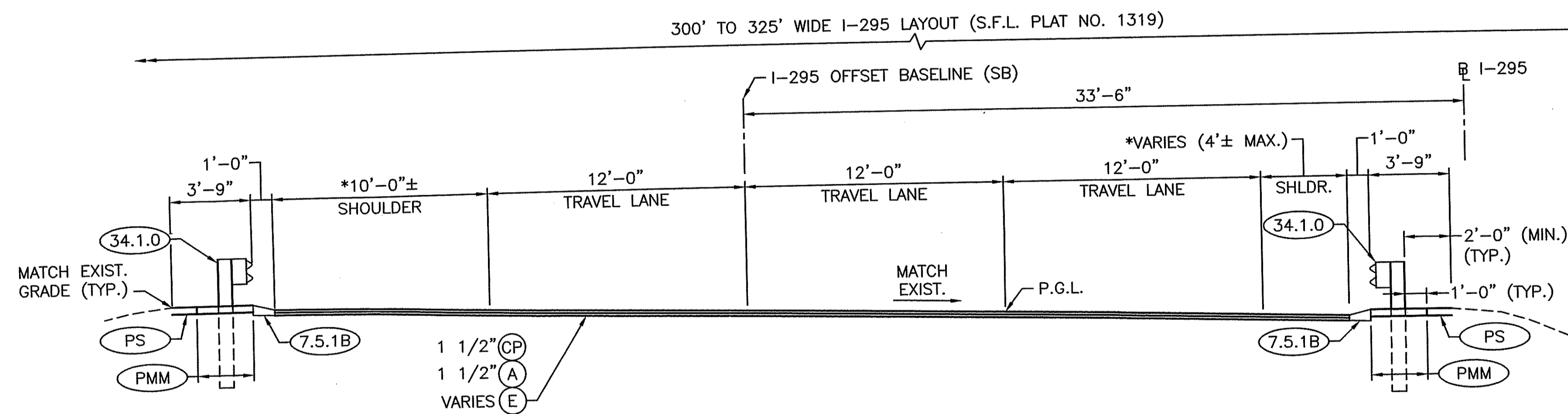
RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
TYPICAL SECTIONS NO. 1

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=4'



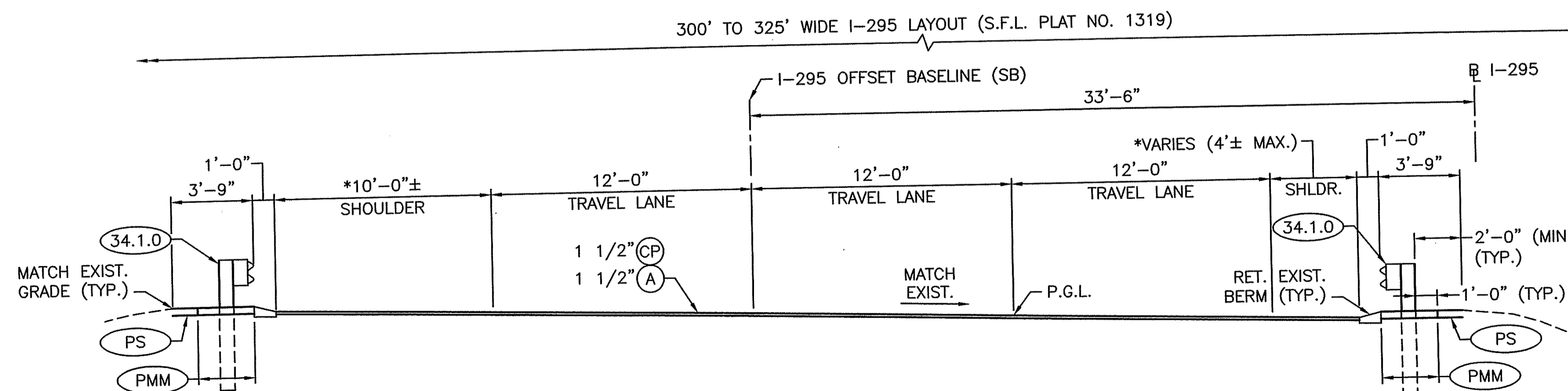
**TYPICAL ROADWAY SECTION - I-295 SB  
(SCOTT RD. APPROACH)**

I-295 OFFSET BASELINE (SB)  
LEFT STA. 268+50 TO 268+74 AND 270+99 TO 271+21  
RIGHT STA. 268+77 TO 268+98 AND 270+73 TO 270+89



**TYPICAL ROADWAY SECTION - I-295 SB  
(SCOTT RD. APPROACH)**

I-295 OFFSET BASELINE (SB)  
LEFT STA. 267+00 TO 269+12 AND 271+21 TO 272+00  
RIGHT STA. 267+00 TO 268+77 AND 270+89 TO 272+00



**TYPICAL ROADWAY SECTION - I-295 SB  
(SCOTT RD. APPROACH)**

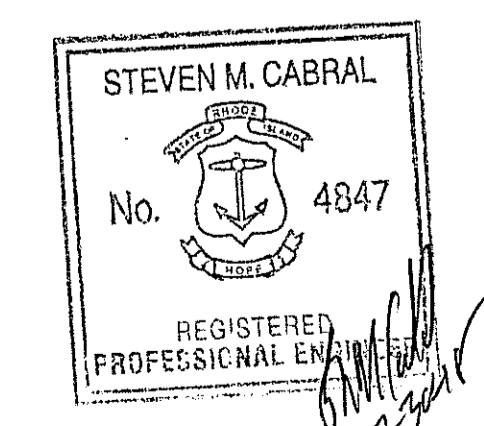
I-295 OFFSET BASELINE (SB)  
265+05 TO 267+00 AND 272+00 TO 276+75

**NOTES:**

\* - MATCH EXISTING WIDTH.

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DATE: OCT 15 2018  
NO CHANGES APPROVED  
STEVEN M. CABRAL  
180208

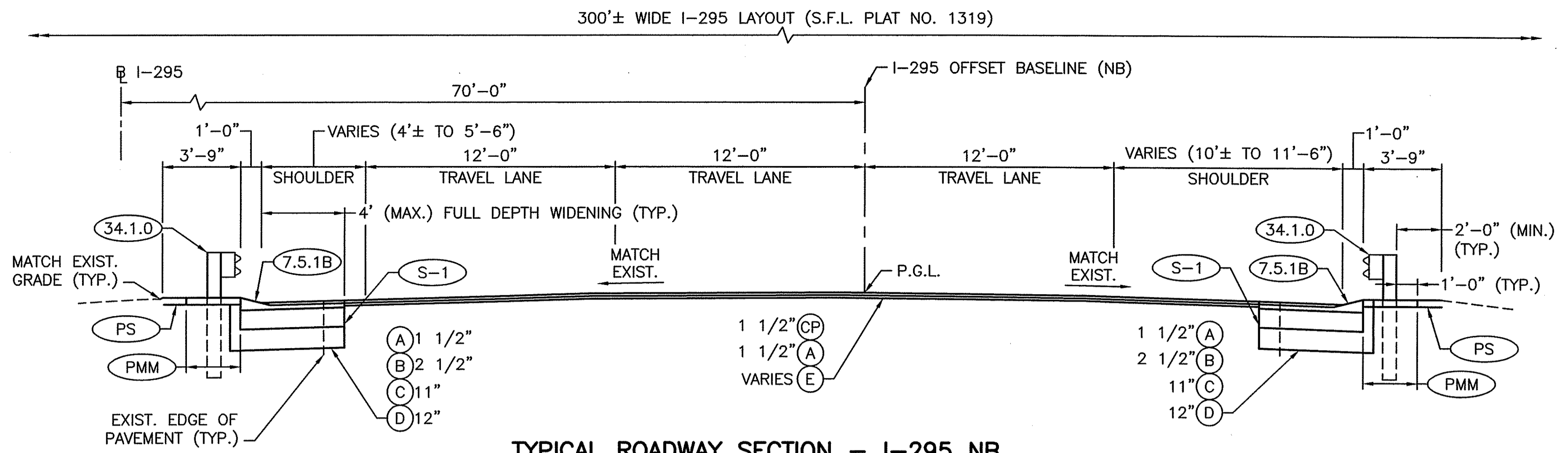


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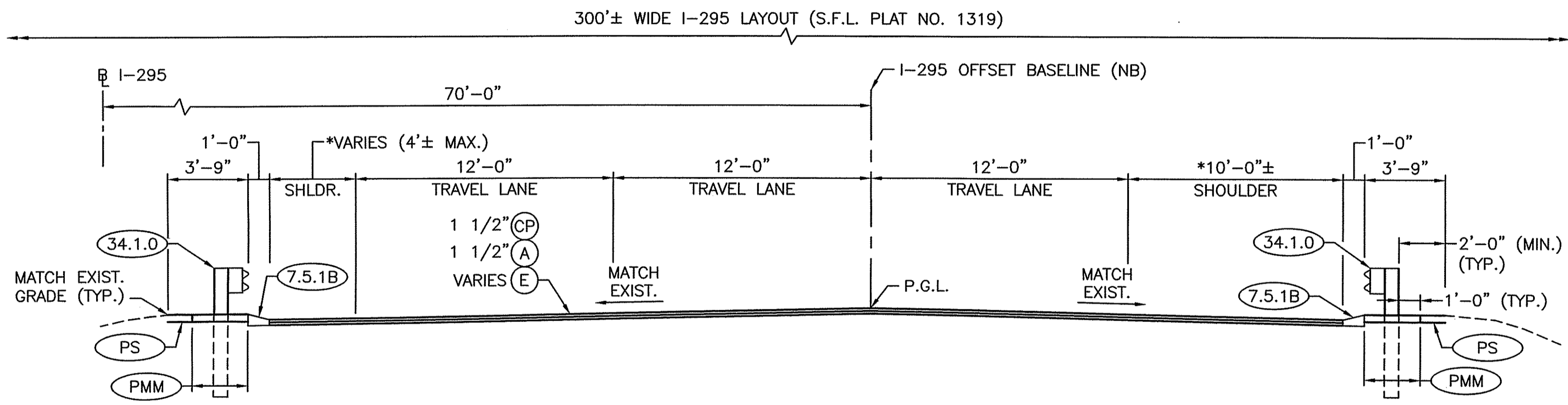
REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
TYPICAL SECTIONS NO. 2

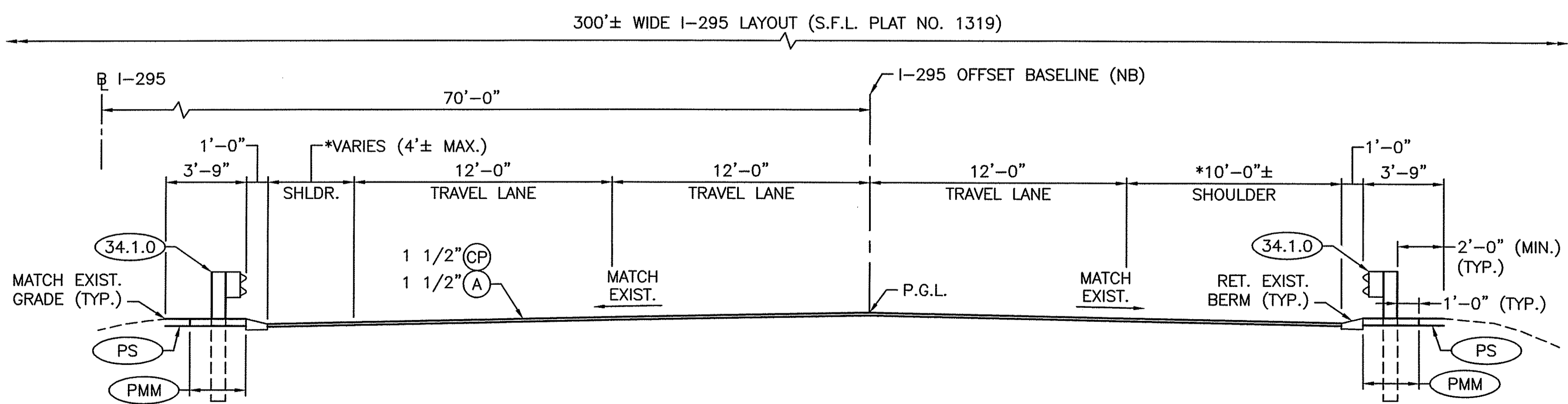
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**TYPICAL ROADWAY SECTION - I-295 NB  
(LEIGH RD. APPROACH)**  
I-295 OFFSET BASELINE (NB)  
LEFT STA. 308+95 TO 309+17 AND 310+75 TO 310+97  
RIGHT STA. 309+09 TO 309+33 AND 310+94 TO 311+16



**TYPICAL ROADWAY SECTION - I-295 NB  
(LEIGH RD. APPROACH)**  
I-295 OFFSET BASELINE (NB)  
LEFT STA. 307+50 TO 308+95 AND 310+97 TO 312+50  
RIGHT STA. 307+50 TO 309+09 AND 311+16 TO 312+50



**TYPICAL ROADWAY SECTION - I-295 NB  
(LEIGH RD. APPROACH)**  
I-295 OFFSET BASELINE (NB)  
303+40 TO 307+50 AND 312+50 TO 315+00

**NOTES:**  
\* - MATCH EXISTING WIDTH.

Environmental Management  
AUG 2 2018  
Office of Water Resources

APPROVED  
DATE: OCT 15 2018  
APPROVED  
*Signature*

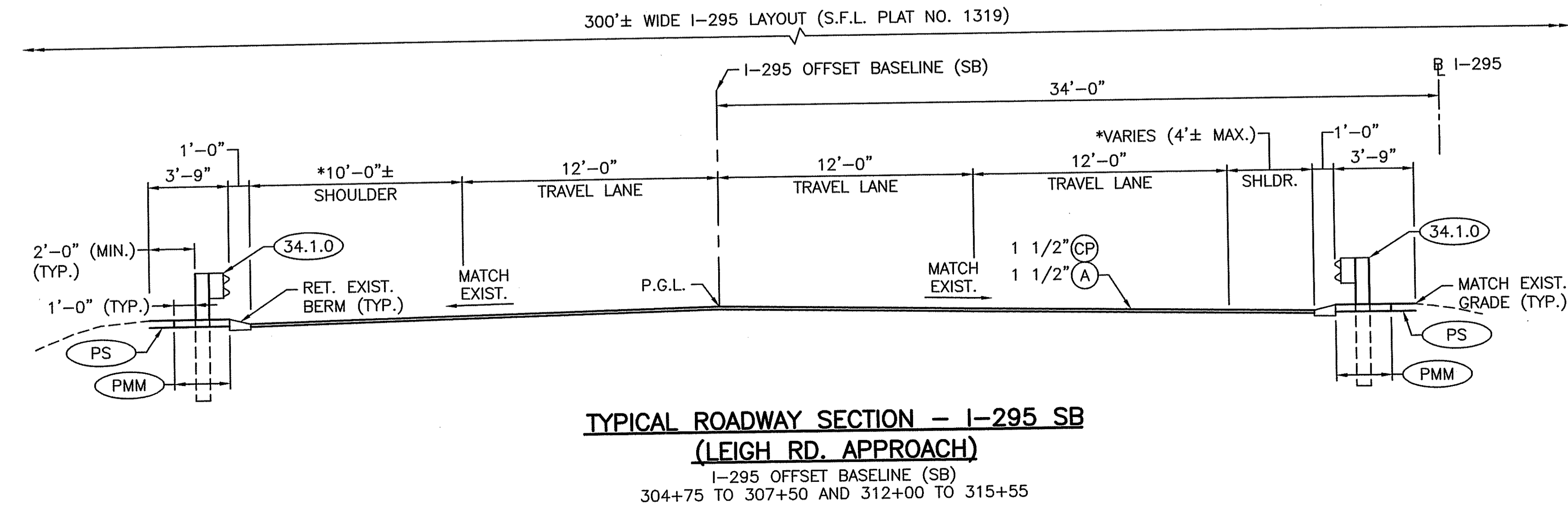
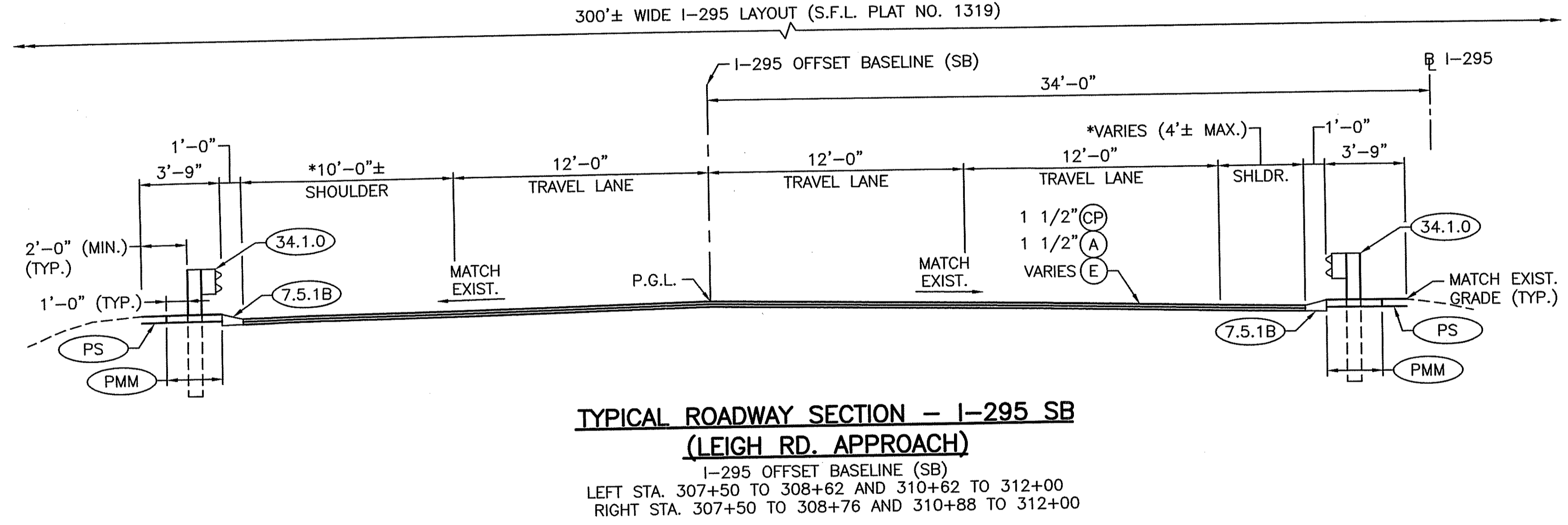
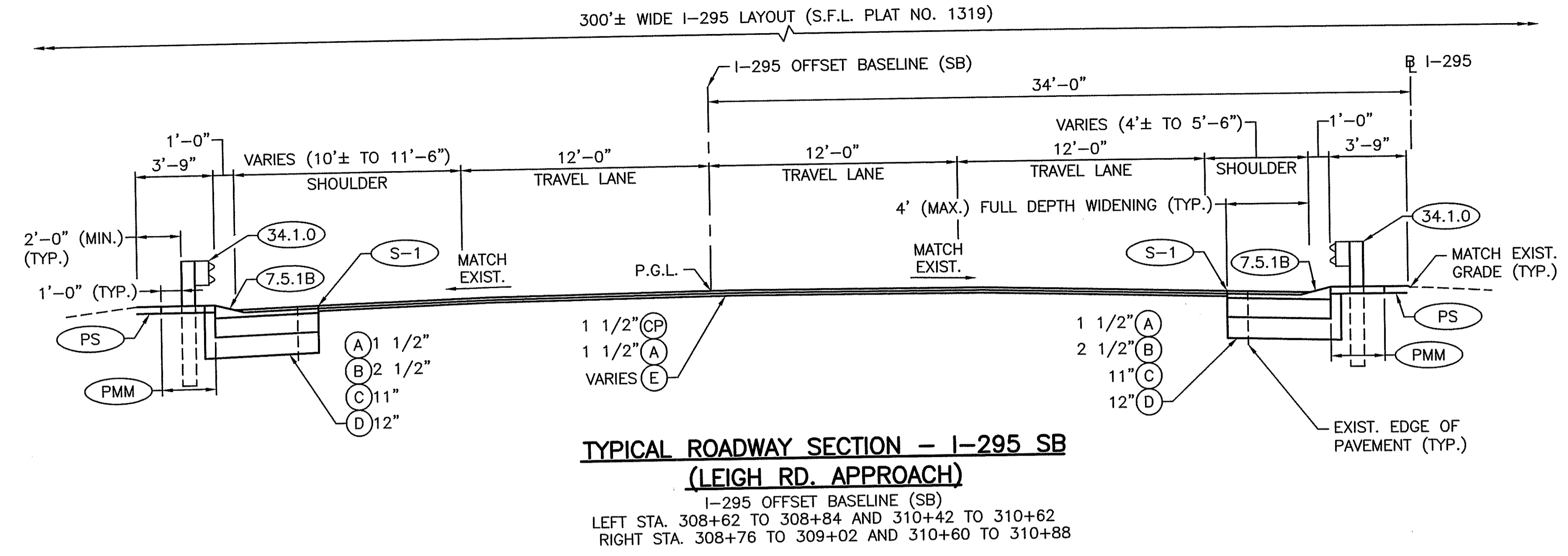
STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

REVISIONS		
NO.	DATE	BY

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RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
**TYPICAL SECTIONS NO. 3**  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=4'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			9	42



**NOTES:**

\* - MATCH EXISTING WIDTH.

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Office of Water Resources

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

REVISIONS	NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES

CUMBERLAND RHODE ISLAND

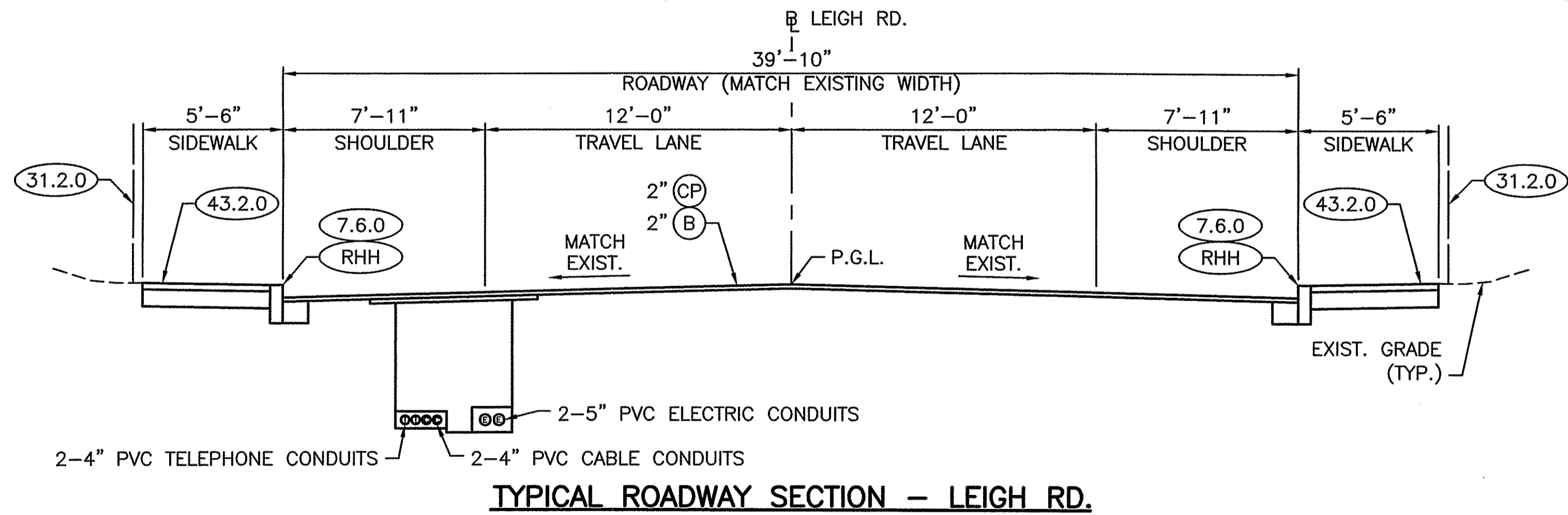
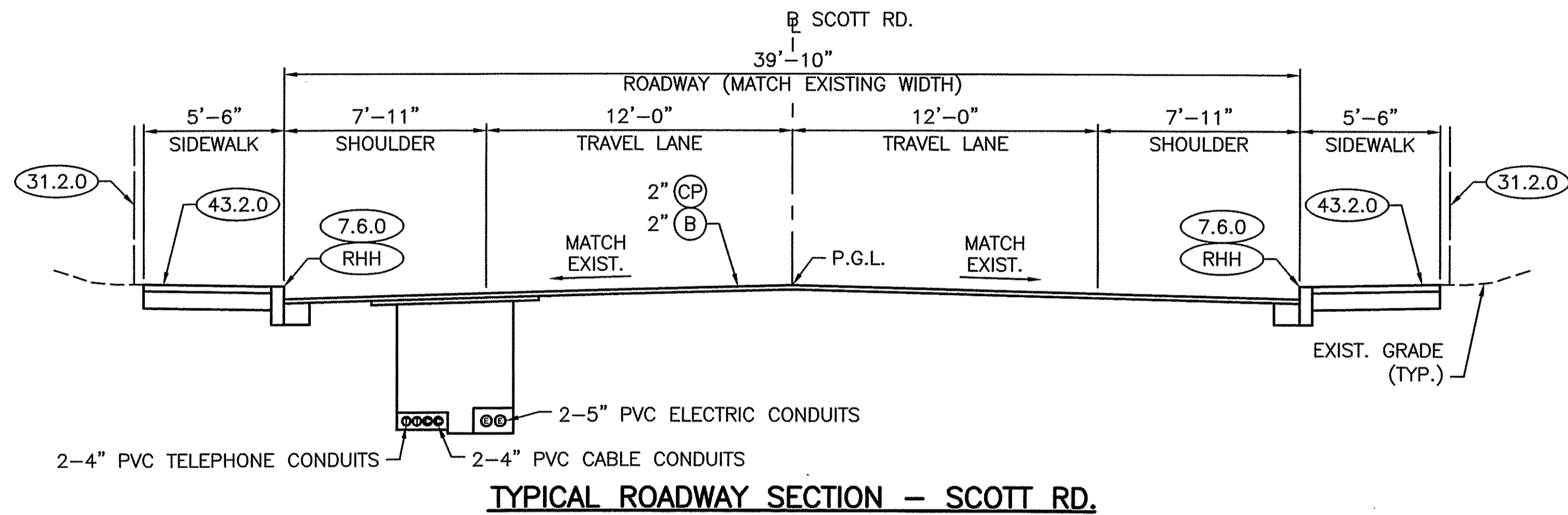
TYPICAL SECTIONS NO. 4

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=4'

CROSSMAN ENGINEERING  
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APPROVED PLANS SHEET NO. 13  
OCT 15 2018  
180208

Environmental Management  
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Office of Water Resources



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
PERMIT REVIEW PROGRAM  
APPROVAL  
OCT 15 2018  
180201  
NO CHANGES ALLOWED TO THESE APPROVED PLANS WITHOUT THE SIGNATURE OF THE APPROVING AGENCY

STEVEN M. CABRAL  
No. 4847  
REGISTERED  
PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

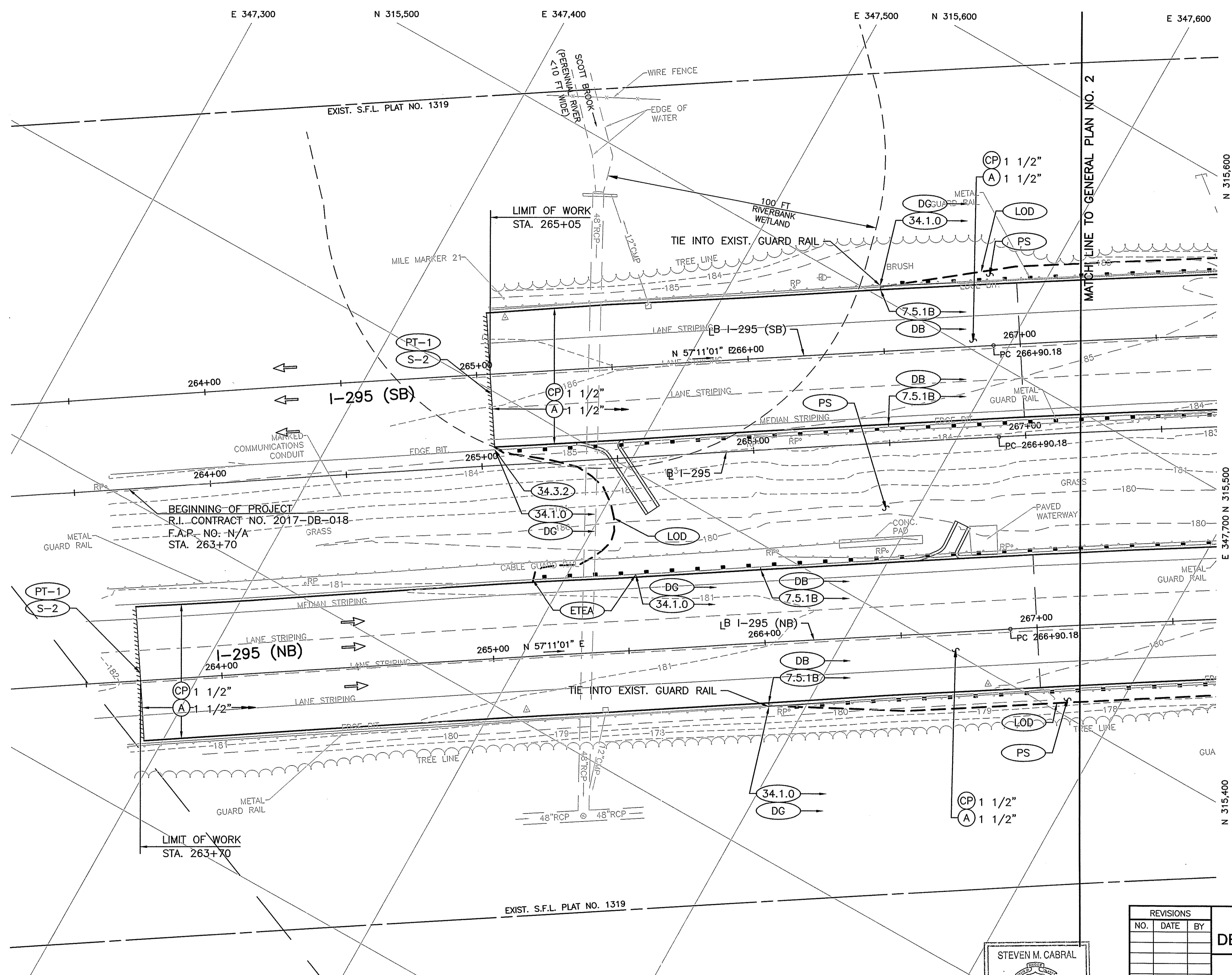
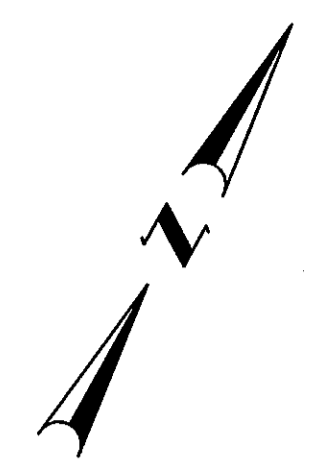
REVISIONS		
NO.	DATE	BY

**RHODE ISLAND**  
**DEPARTMENT OF TRANSPORTATION**  
REPLACEMENT OF  
**CUMBERLAND I-295**  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND

**TYPICAL SECTIONS NO. 5**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=4'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			11	42



Environmental Management  
 AUG 2 2018  
 Office of Water Resources

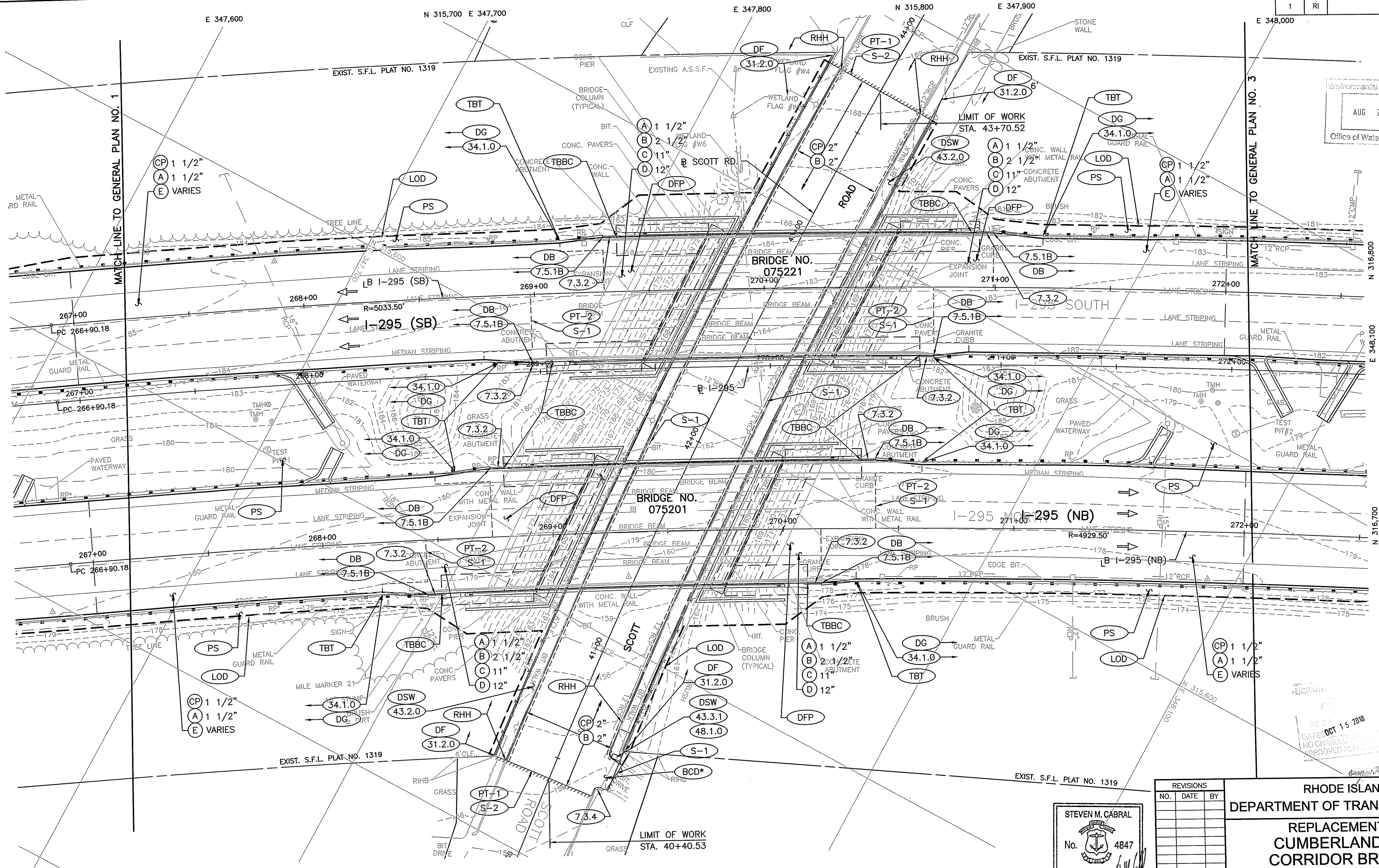
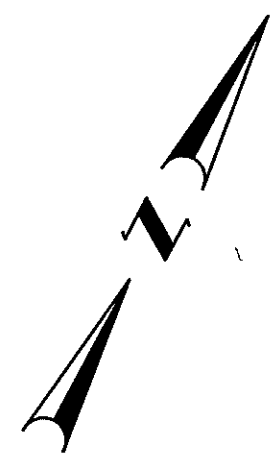
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 PERMIT NO. 18-020  
 DATE: OCT 15 2018  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 GENERAL PLAN NO. 1  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'  
 0114S\_V2\_011-016\_GENERAL001-006



Environmental Management  
AUG 2 2018  
Office of Water Resources

AS SHOWN  
DATE: OCT 15 2018  
NO CHANGES AT CONSTRUCTION SITE  
APPROVED PLANNING & CONSTRUCTION SITE  
*180205*

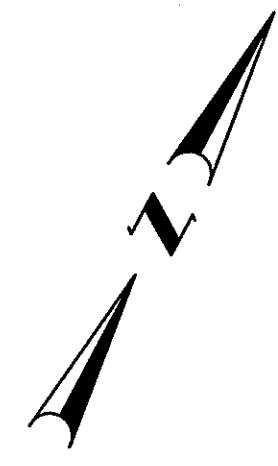
STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

REVISIONS	NO.	DATE	BY

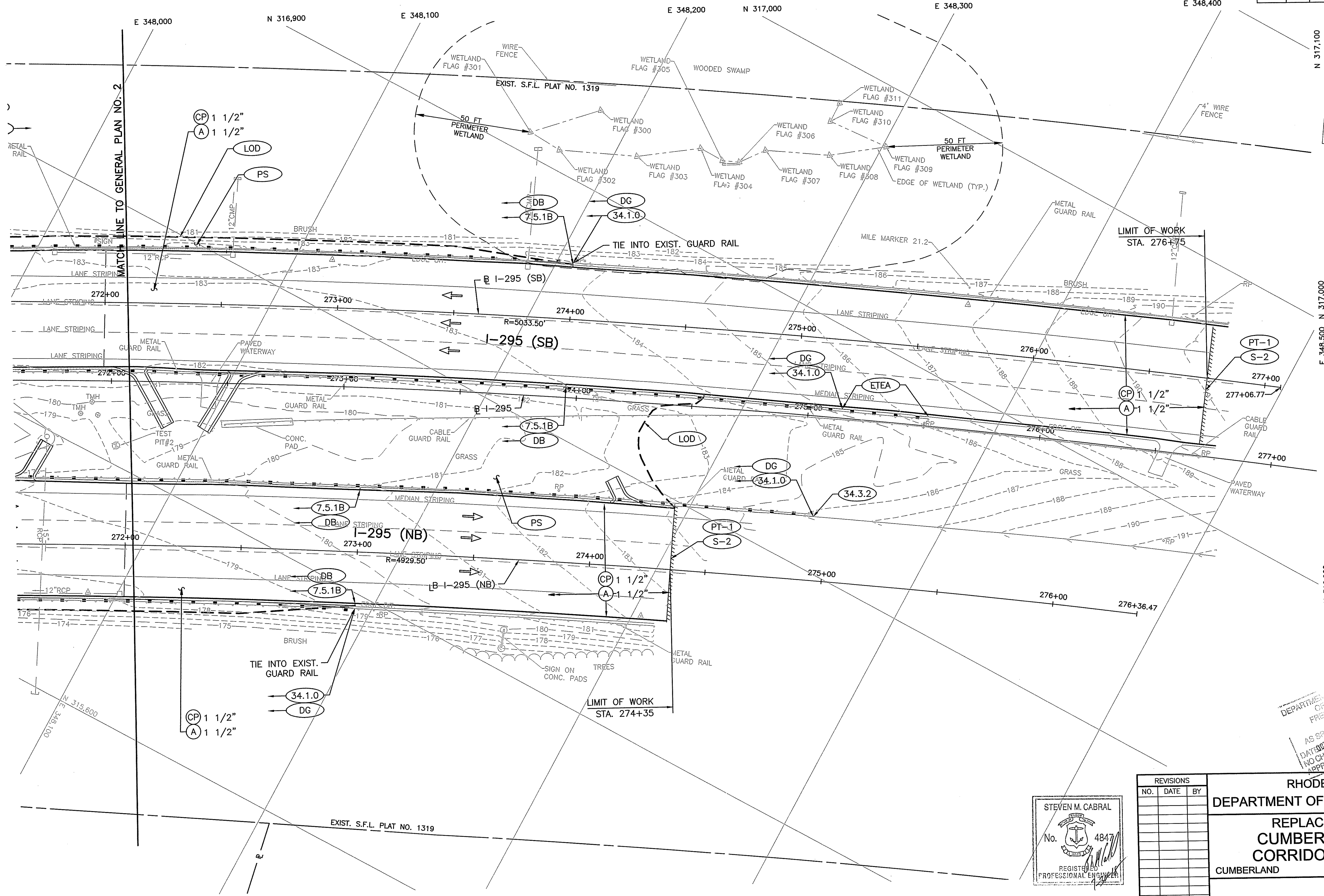
RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
GENERAL PLAN NO. 2

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'  
0114S\_V2\_011-016\_GENERAL001-006



Environmental Management  
 AUG 2 2018  
 Office of Water Resources



DEPARTMENT OF TRANSPORTATION  
 AS SPECIFIED IN THE LETTERS OF APPROVAL  
 DATED OCT 15 2018  
 NO CHANGES ALLOWED WITHOUT WRITTEN APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

180205

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

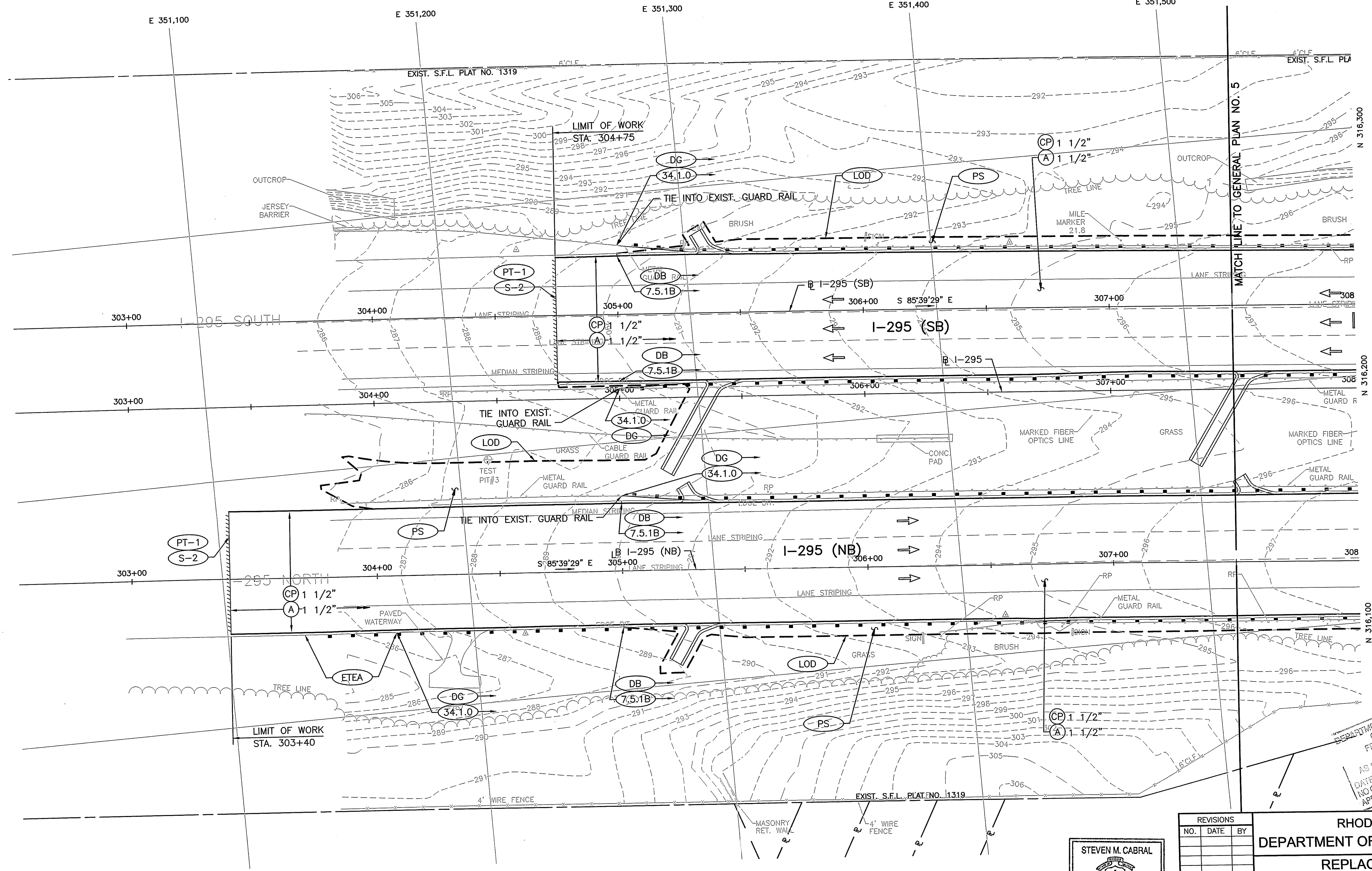
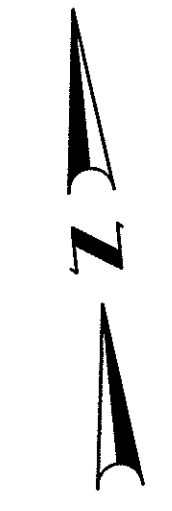
REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND

GENERAL PLAN NO. 3

CROSSMAN ENGINEERING  
 151 Centerville Road | Warwick, Rhode Island 02886

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'



Environmental Management  
AUG 2 2018  
Office of Water Resources

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF ENVIRONMENTAL RESOURCES  
FRESHWATER CONSTRUCTION PROGRAM  
APPROVAL  
18020  
AS SPREAD SHEETS AND PERMITTED FROM APPROVAL  
DATED OCT 15 2018  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BEAT CONSTRUCTION START

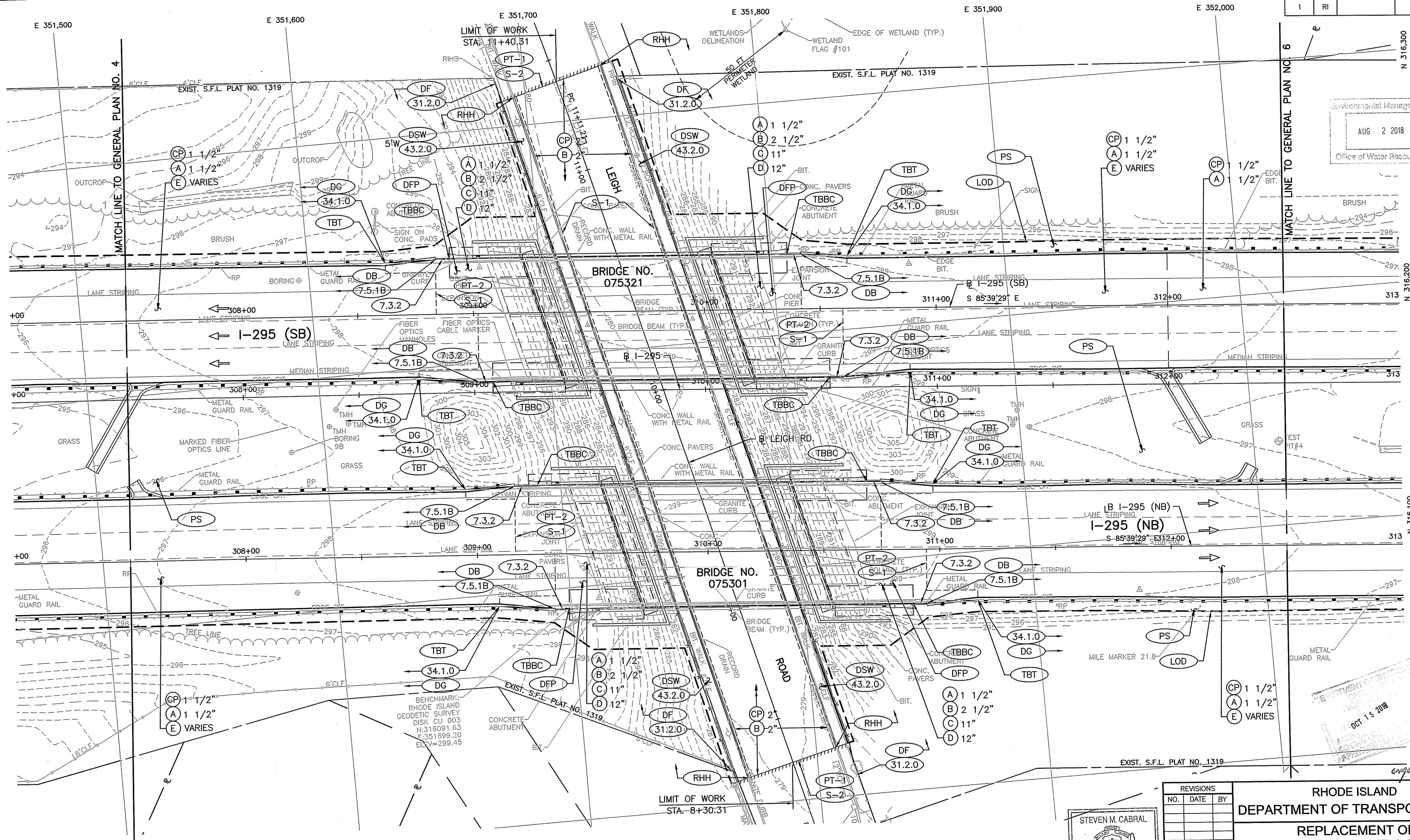
STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS	NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
GENERAL PLAN NO. 4

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'  
01145\_V2\_011-016\_GENERAL001-006



Environmental Management  
 AUG 2 2018  
 Office of Water Resources

180205  
 OCT 15 2018  
 Steven M. Cabral

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

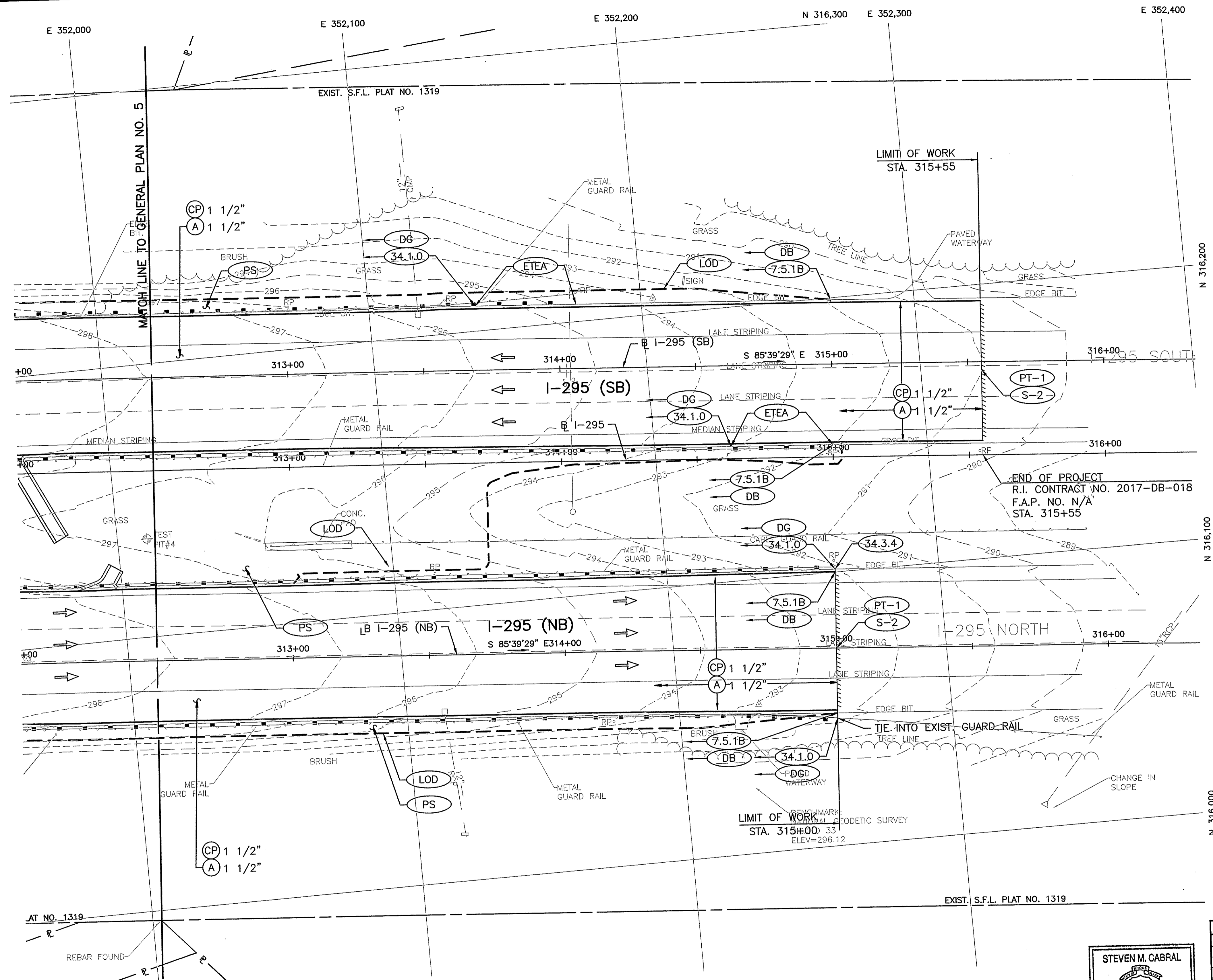
REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 GENERAL PLAN NO. 5

**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

Environmental Management  
AUG 2 2018  
Office of Water Resources



STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

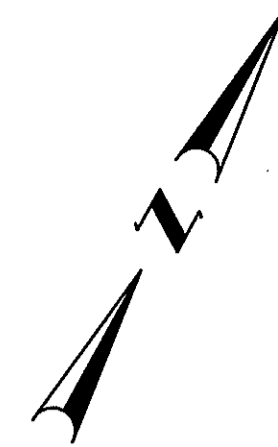
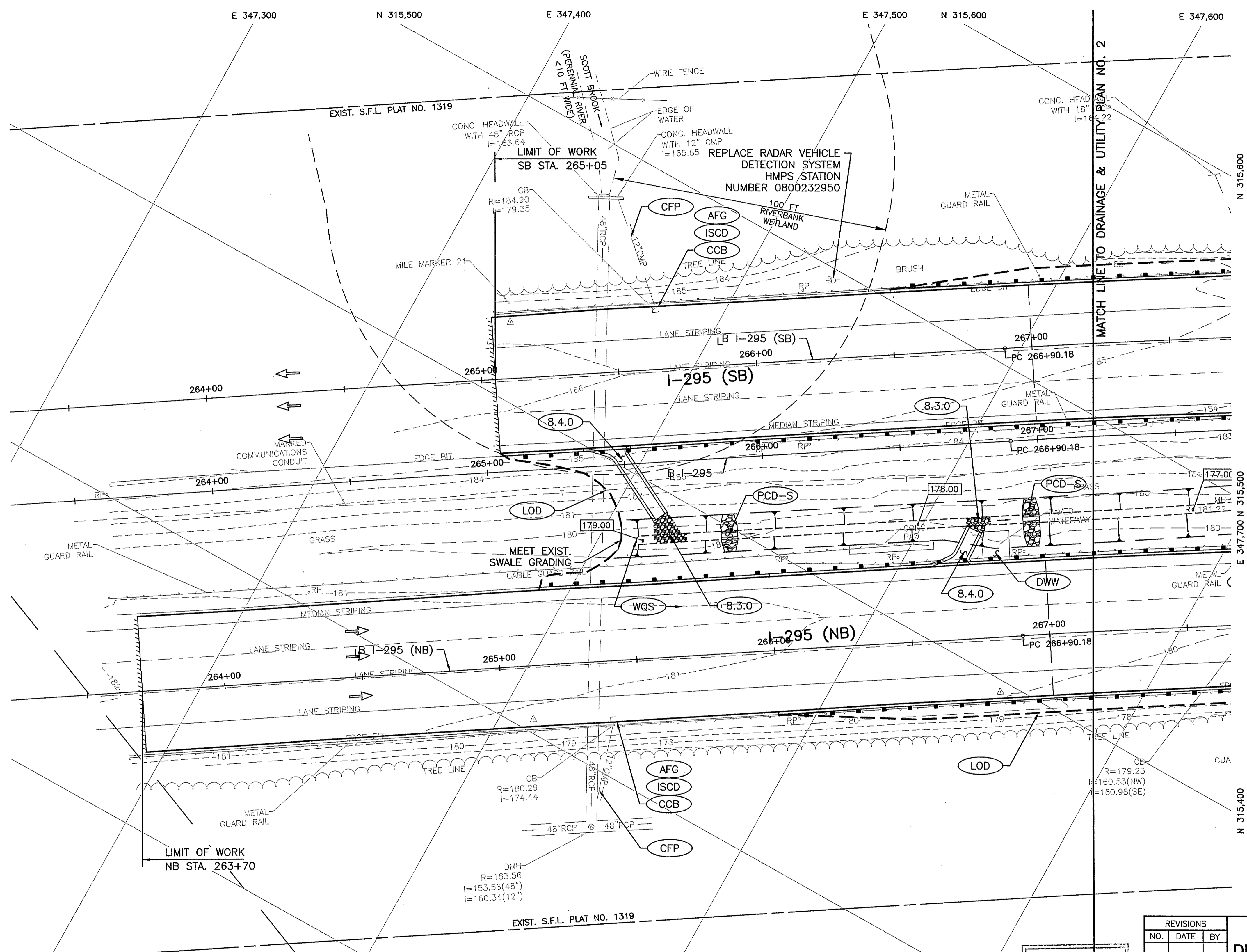
RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
GENERAL PLAN NO. 6

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'  
01145\_V2\_011-016\_GENERAL001-006

APPROVED  
DATED  
NO CHANGES TO BE MADE  
APPROVED PLAN SHEET  
OCT 15 2018

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			17	42

Environmental Management  
AUG 2 2018  
Office of Water Resources



OCT 15 2018  
NO CHANGES ALLOWED WITHOUT PER APPROV APPROVED PLANS MUST BE AT CONSTRUCTION

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

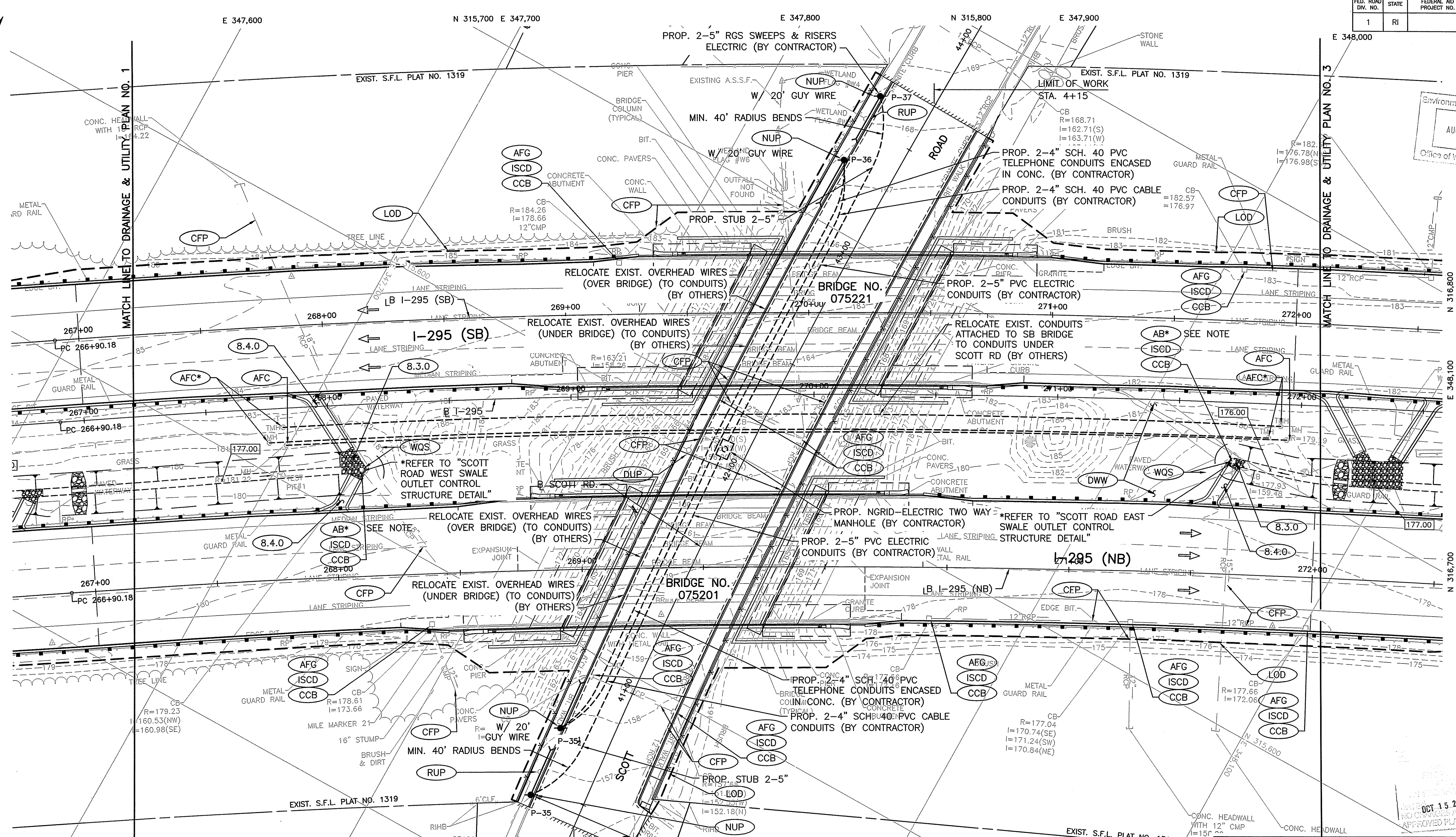
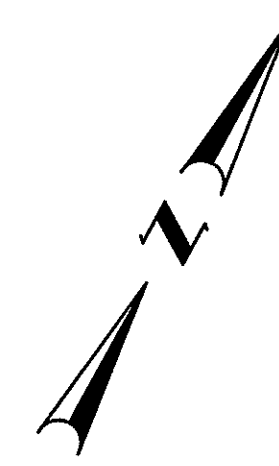
REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND

DRAINAGE & UTILITY  
PLAN NO. 1

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'



Environmental Management  
AUG 2 2018  
Office of Water Resources

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

REVISIONS		
NO.	DATE	BY

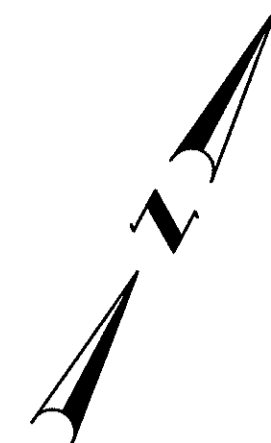
RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND

CROSSMAN ENGINEERING  
151 Centerville Road | Warwick, Rhode Island 02886

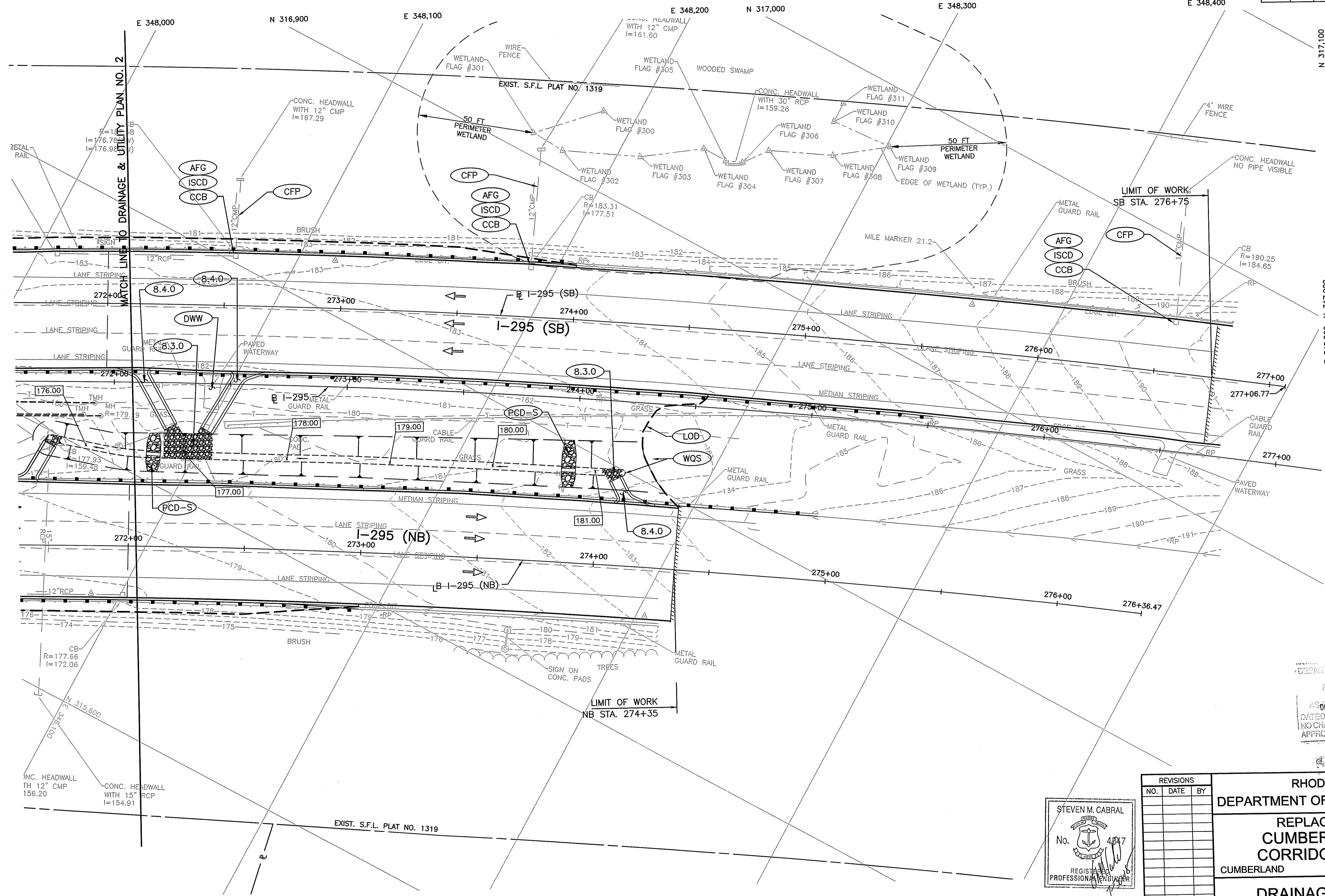
DRAINAGE & UTILITY  
PLAN NO. 2

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			19	42



Environmental Management  
AUG 2 2018  
Office of Water Resources



APPROVED FOR CONSTRUCTION  
DATE: OCT 16 2018  
180265  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

STEVEN M. CABRAL  
No. 4047  
REGISTERED PROFESSIONAL ENGINEER

REVISIONS		
NO.	DATE	BY

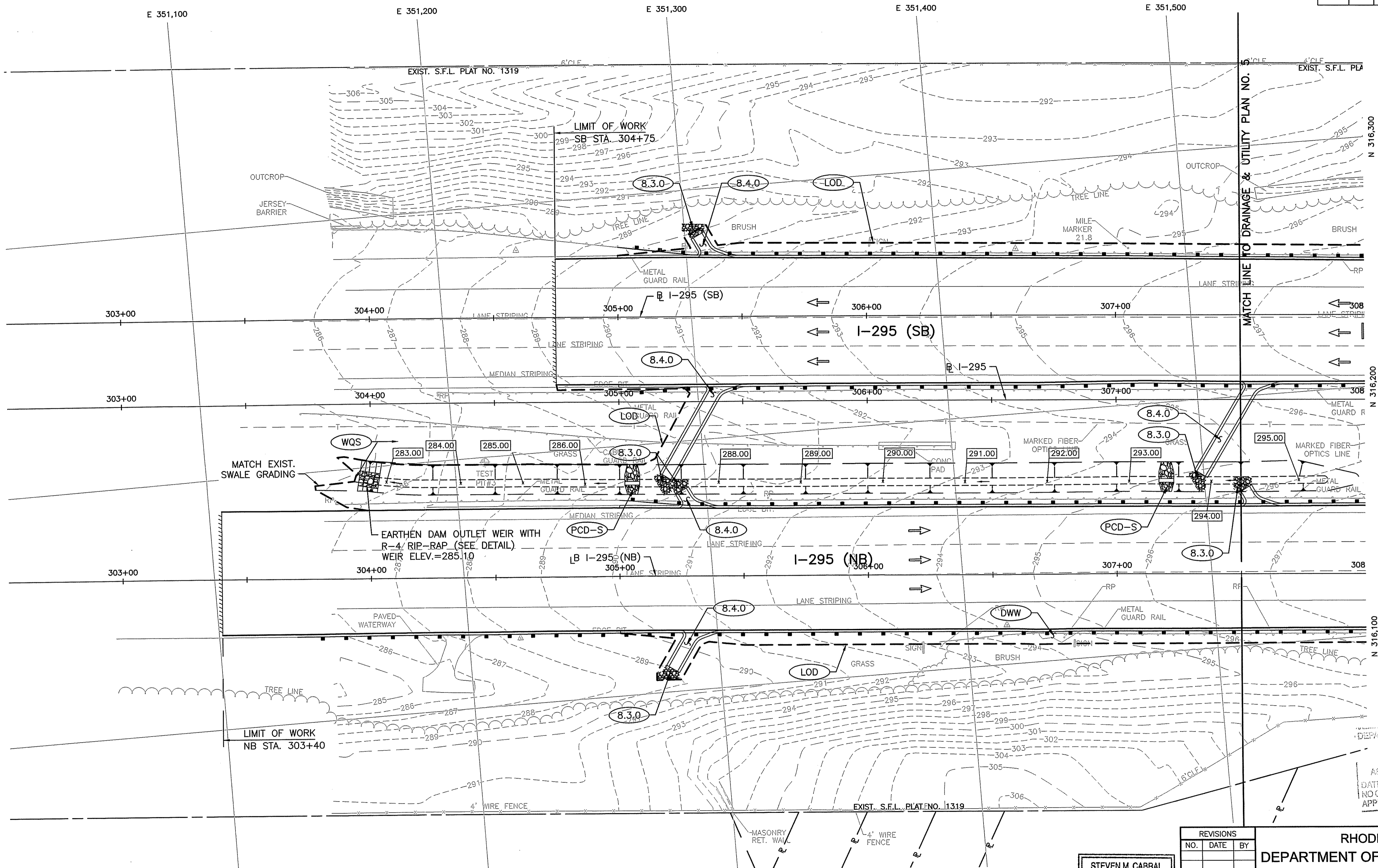
**RHODE ISLAND**  
**DEPARTMENT OF TRANSPORTATION**

**REPLACEMENT OF CUMBERLAND I-295 CORRIDOR BRIDGES**  
CUMBERLAND RHODE ISLAND

**DRAINAGE & UTILITY PLAN NO. 3**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886



Environmental Management  
 AUG 2 2018  
 Office of Water Resources

EARTHEN DAM OUTLET WEIR WITH  
 R-4 RIP-RAP (SEE DETAIL)  
 WEIR ELEV.=285.10

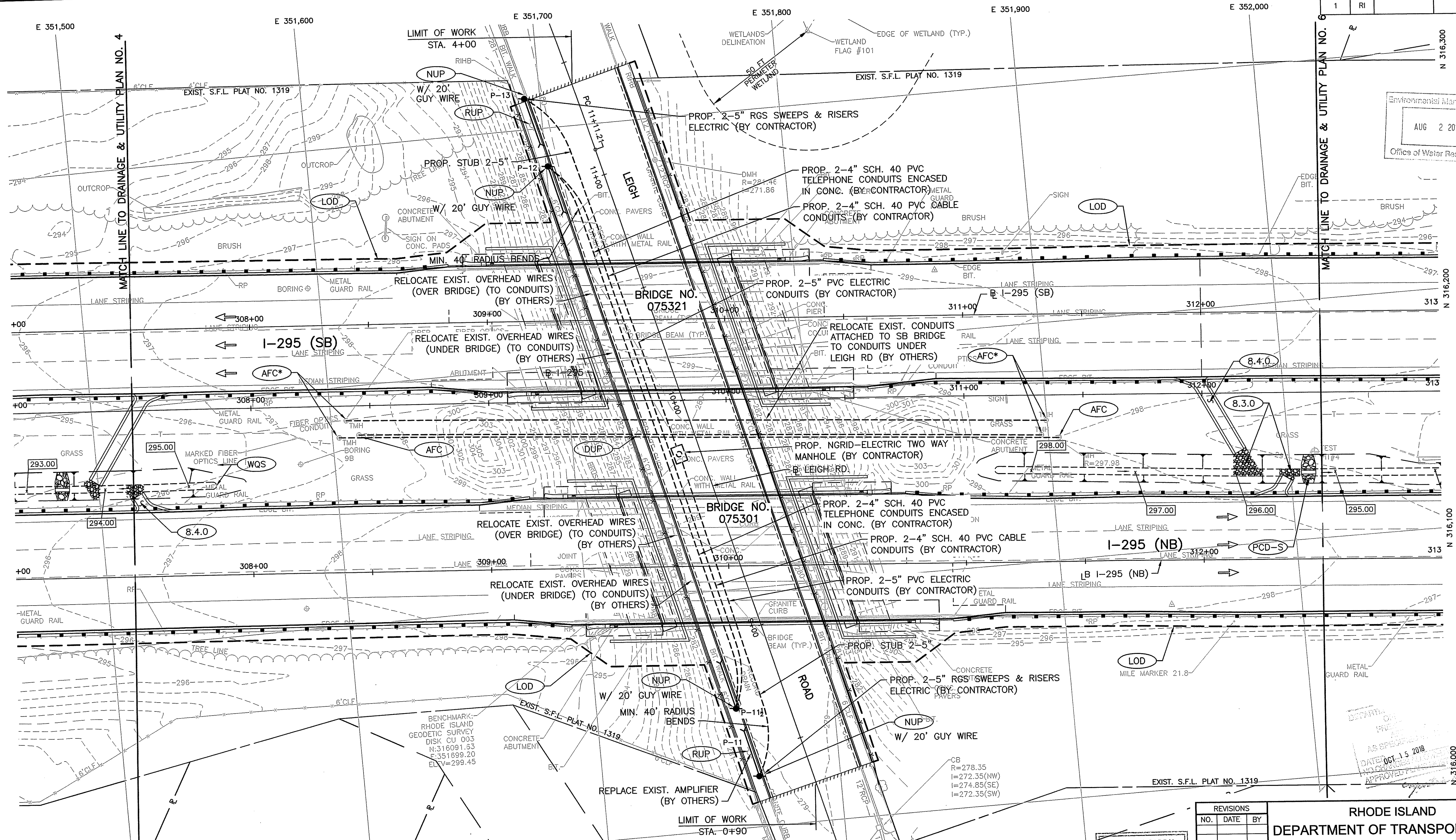
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF PERMITTING AND LICENSING  
 PREPARED BY: [Signature]  
 APPROVED BY: [Signature]  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED OCT 15 2018 FILE # 170205  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 DRAINAGE & UTILITY  
 PLAN NO. 4  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'



Environmental Management  
AUG 2 2018  
Office of Water Resources

BENCHMARK:  
RHODE ISLAND  
GEODETIC SURVEY  
DISK CU 003  
N: 316091.33  
E: 351699.20  
ELEV: 299.45

DATE: OCT 15 2018  
APPROVED: [Signature]

STEVEN M. CABRAL  
No. 1847  
REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS	NO.	DATE	BY

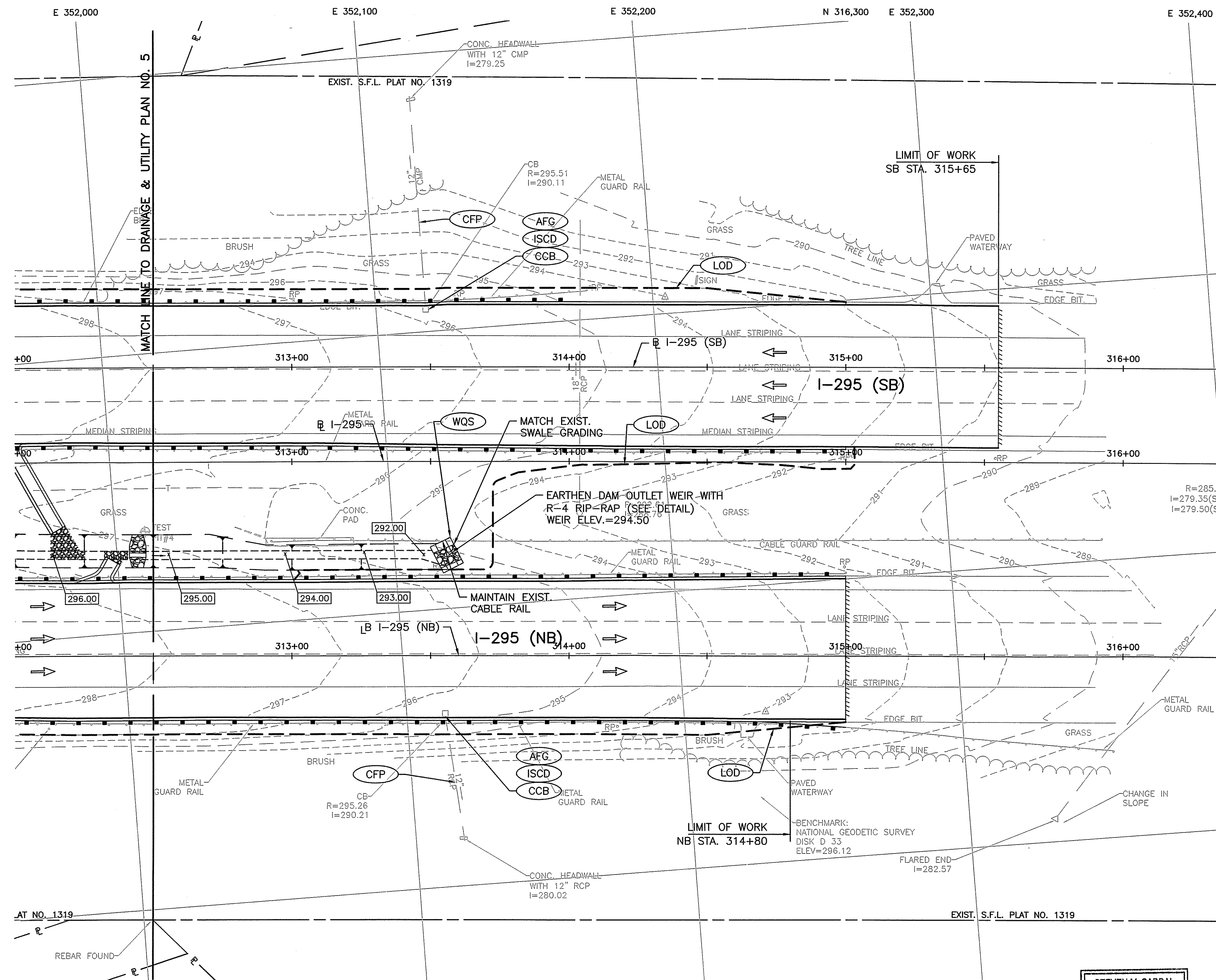
RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND

DRAINAGE & UTILITY  
PLAN NO. 5

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			22	42

Environmental Management  
 AUG 2 2018  
 Office of Water Resources



OCT 15 2018  
*18020*

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

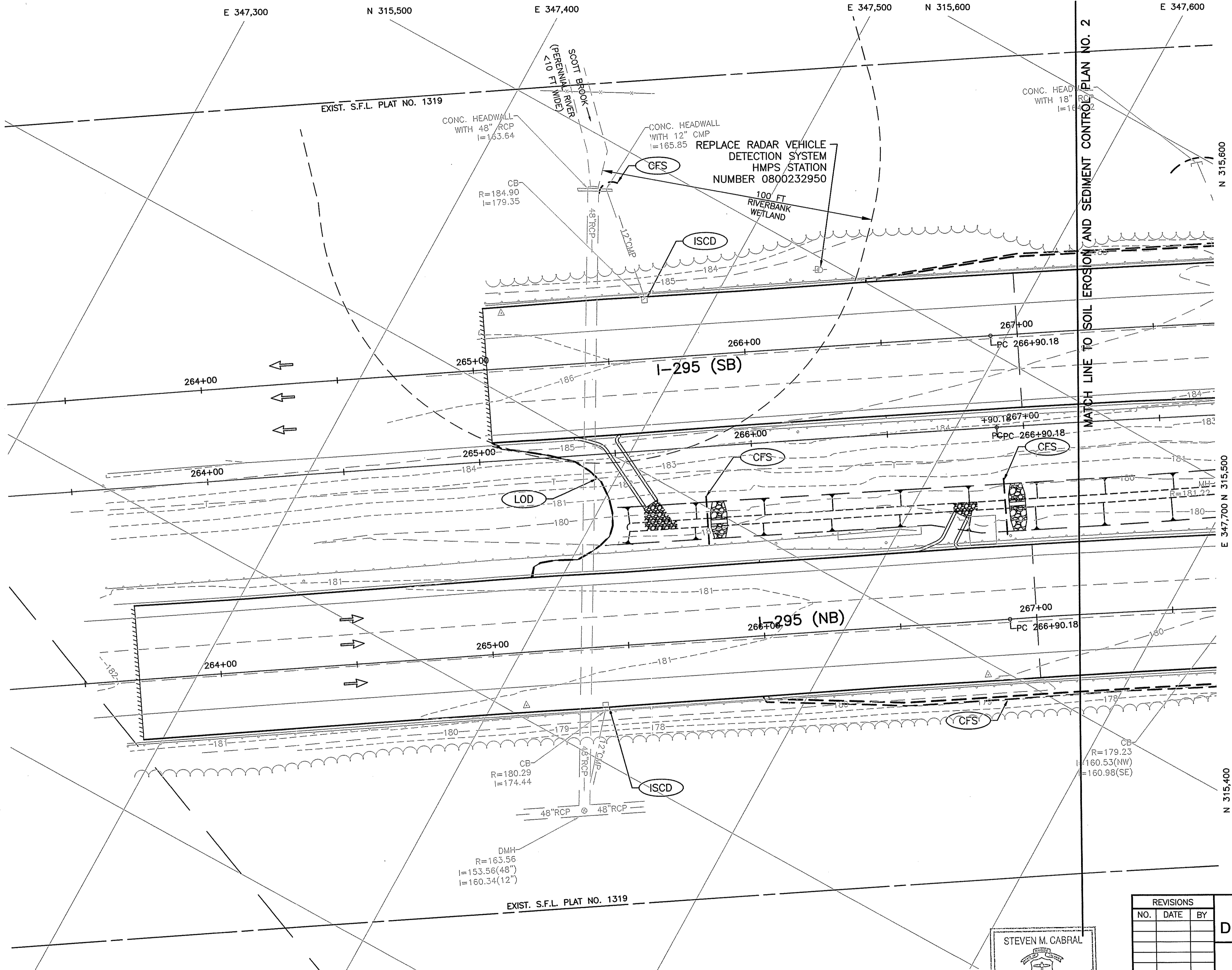
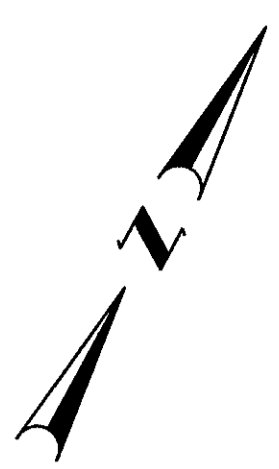
RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
**CUMBERLAND I-295**  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND

**DRAINAGE & UTILITY**  
 PLAN NO. 6

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			23	42

August 2, 2018  
Office of Water Resources



STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

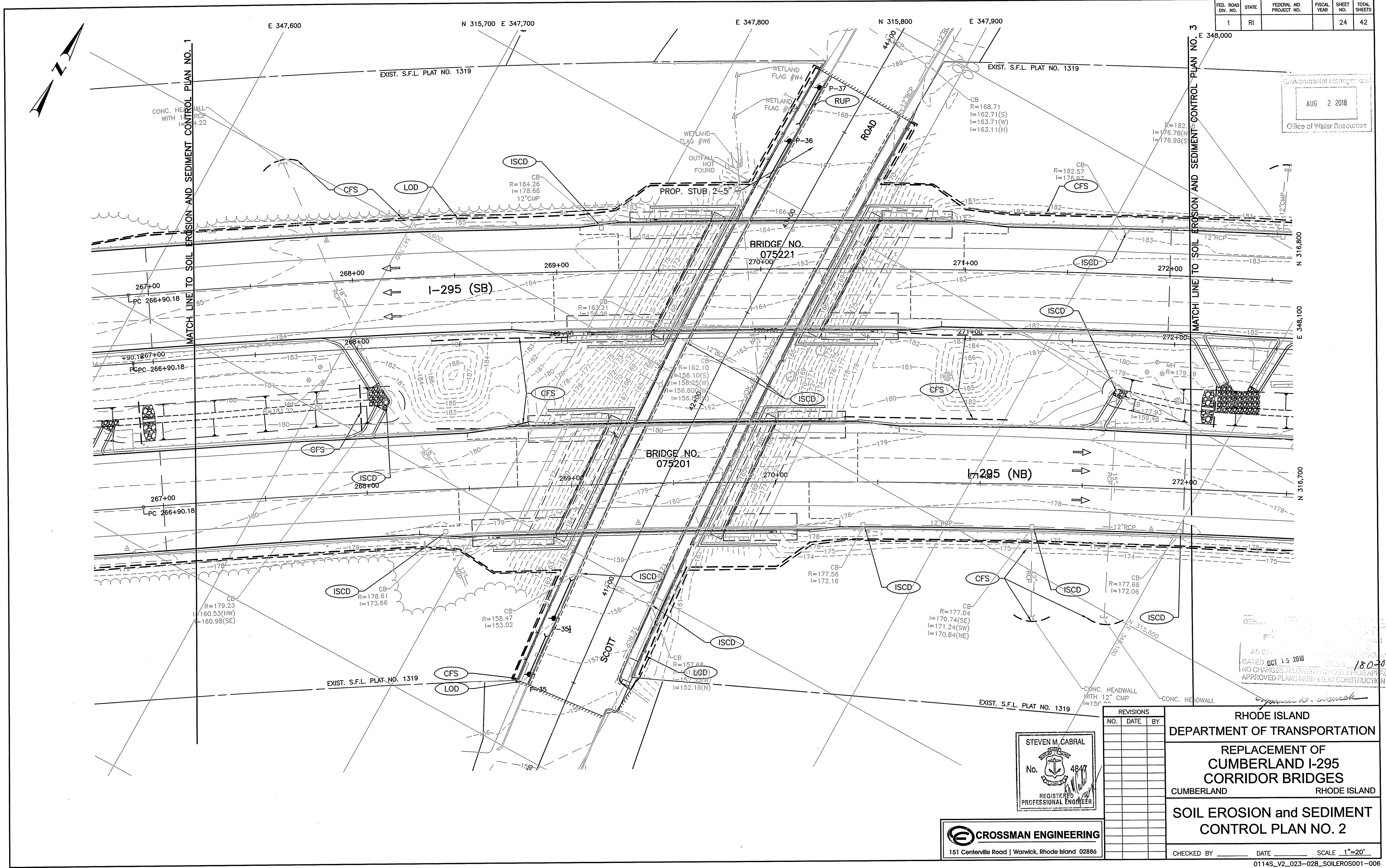
REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
SOIL EROSION and SEDIMENT  
CONTROL PLAN NO. 1  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

OCT 15 2018  
NO CHANGES ALLOWED AFTER THE DATE OF APPROVED PLANS UNLESS BY CONSTRUCTION

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			24	42

Environmental Management  
 AUG 2 2018  
 Office of Water Resources



AS SHOWN FOR APPROVAL  
 DATED OCT 15 2018 FILE # 180-05  
 NO CHANGES ALLOWED WITHOUT FISH APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

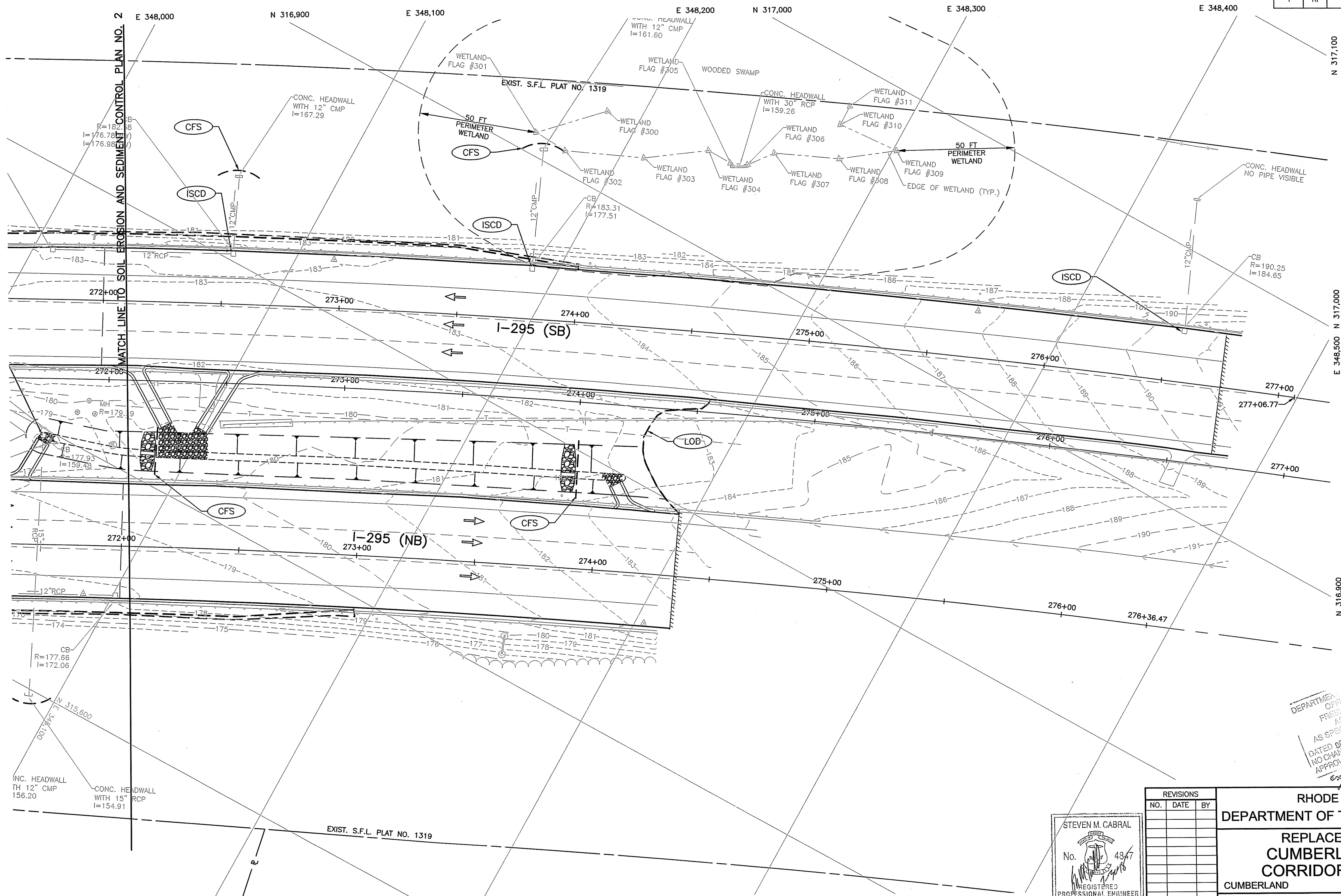
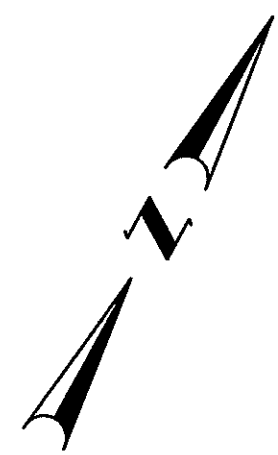
STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

CROSSMAN ENGINEERING  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 SOIL EROSION and SEDIMENT  
 CONTROL PLAN NO. 2  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			25	42



MATCH LINE TO SOIL EROSION AND SEDIMENT CONTROL PLAN NO. 2

Environmental Management  
AUG 2 2018  
Office of Water Resources

DEPARTMENT OF TRANSPORTATION  
OFFICE OF ENVIRONMENTAL MANAGEMENT  
FRESHWATER AND MARINE PROGRAMS  
AS SPECIFIED IN PERMITS APPROVAL  
DATED OCT 15 2018  
NO CHANGES ALLOWED WITHOUT PERMITS APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*[Signature]*

REVISIONS		
NO.	DATE	BY

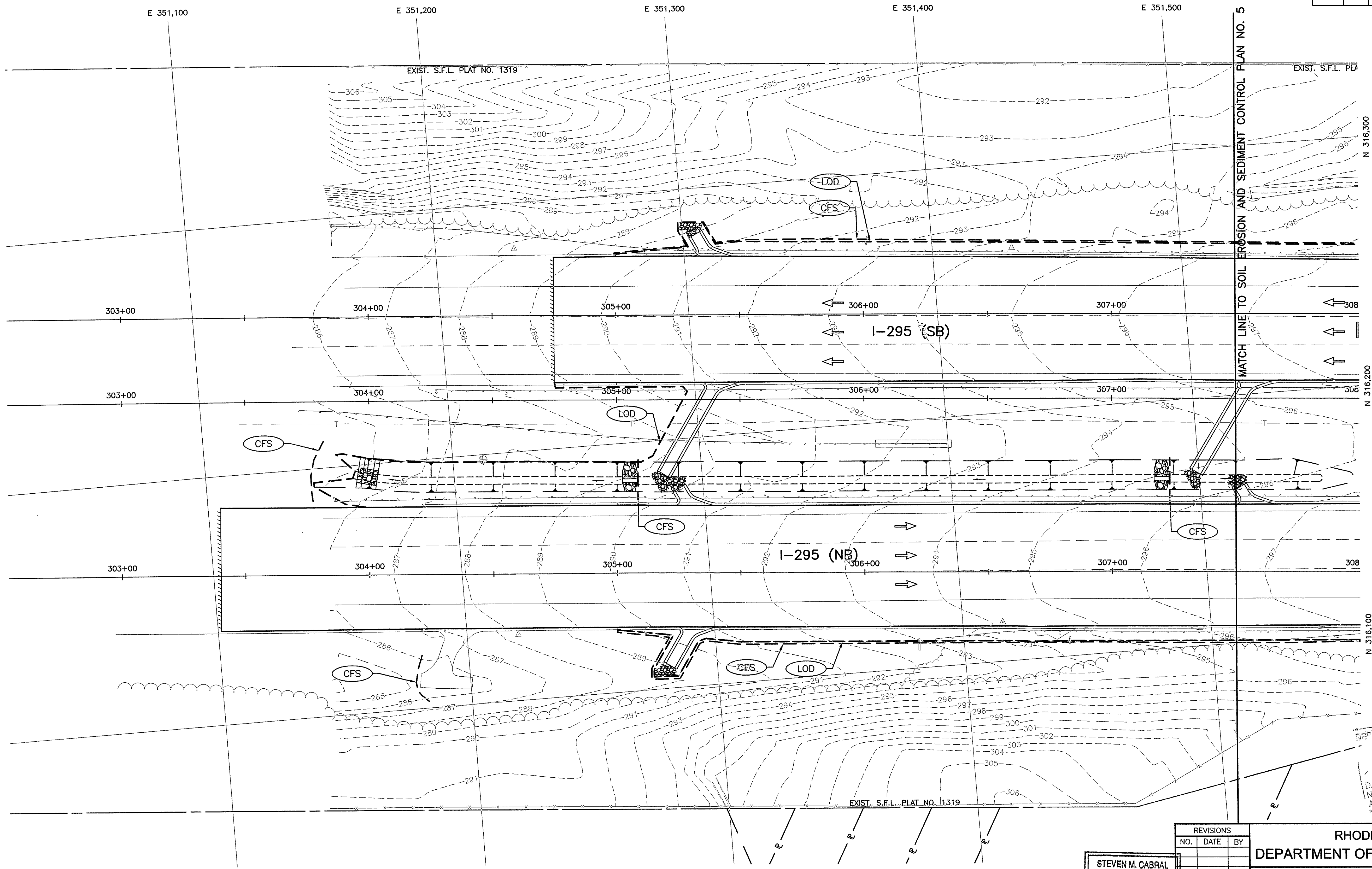
STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

**RHODE ISLAND**  
**DEPARTMENT OF TRANSPORTATION**  
**REPLACEMENT OF CUMBERLAND I-295 CORRIDOR BRIDGES**  
CUMBERLAND RHODE ISLAND  
**SOIL EROSION and SEDIMENT CONTROL PLAN NO. 3**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			26	42



Environmental Management  
 AUG 2 2018  
 Office of Water Resources

MATCH LINE TO SOIL EROSION AND SEDIMENT CONTROL PLAN NO. 5

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 APPROVED FOR CONSTRUCTION  
 AS SHOWN ON THE LATEST REVISION  
 FILE # 12025  
 DATED 08/15/2018  
 NO CHANGES ALLOWED WITHOUT THE APPROVED  
 APPROVED PLANS MUST BE AT CONSTRUCTION

REVISIONS		
NO.	DATE	BY

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

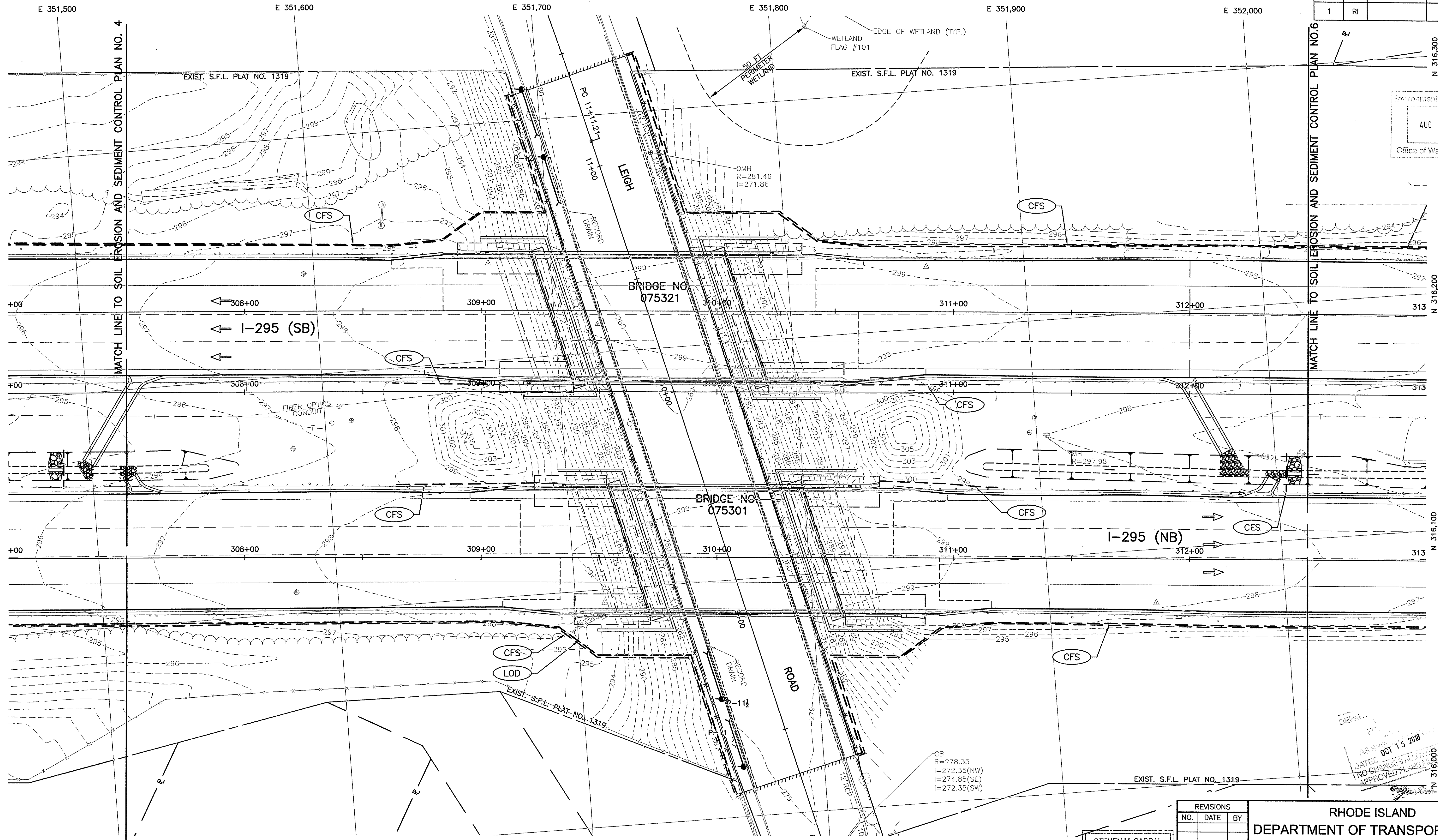
**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 SOIL EROSION and SEDIMENT  
 CONTROL PLAN NO. 4

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			27	42

Environmental Management  
 AUG 2 2018  
 Office of Water Resources



DEPART.  
 AS SHOWN  
 DATED OCT 15 2018  
 NO CHANGES ALLOWED WITHOUT APPROVED PLANS  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
 180205

STEVEN M. CABRAL  
 No. 4817  
 REGISTERED PROFESSIONAL ENGINEER

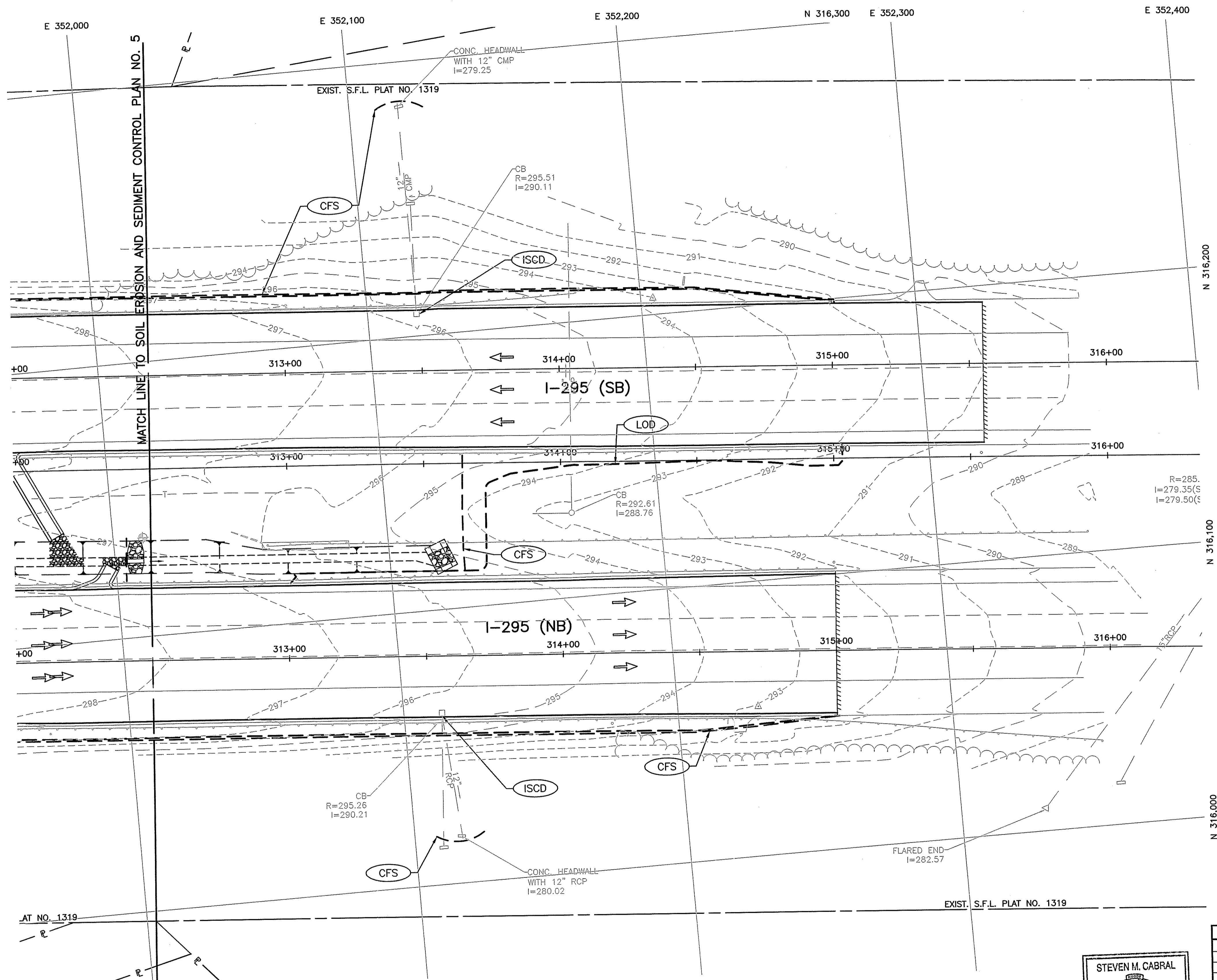
**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 SOIL EROSION and SEDIMENT  
 CONTROL PLAN NO. 5

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			28	42



Environmental Management  
AUG 2 2018  
Office of Water Resources

DEPARTMENT OF TRANSPORTATION  
OFFICE OF ENVIRONMENTAL MANAGEMENT  
PRESIDENTIAL AVENUE, SUITE 305  
PROVIDENCE, RHODE ISLAND 02903  
AS SPECIFIED IN THE LETTER  
DATED OCT 15 2018  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
780265

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
SOIL EROSION and SEDIMENT  
CONTROL PLAN NO. 6  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

CROSSMAN ENGINEERING  
151 Centerville Road | Warwick, Rhode Island 02886

Environmental Management  
AUG 2 2018  
Office of Water Resources

**DUST CONTROL NOTES**

ON AN AS-NEEDED BASIS OR AS DIRECTED BY RIDOT OR RIDEM, THE CONTRACTOR SHALL UTILIZE ONE OF THE FOLLOWING METHODS TO CONTROL DUST:  
 A. THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.  
 B. CALCIUM CHLORIDE SHOULD BE EITHER LOOSE DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH A SPREADER AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE.  
 THE METHODS SHOULD BE REPEATED AS NEEDED, AND SPECIAL ATTENTION MUST BE GIVEN TO THE ACCESS DRIVES.

**INSPECTION/MAINTENANCE NOTES**

- PRIOR TO COMMENCING EARTHWORK, FILTERSOXX SHALL BE PLACED INSIDE SAWCUT EDGE TO PREVENT SEDIMENT FROM ENTERING EXISTING ROADWAY DRAINAGE SYSTEM, WETLAND AREAS AND ADJUTING PROPERTIES.
- R.I. STD. 9.9.0 CONSTRUCTION ACCESS MUST BE INSTALLED AT ALL ENTRANCE LOCATIONS INTO THE CONSTRUCTION SITE WHERE DISTURBED SOIL IS PRESENT. THE LOCATION OF THESE ACCESS POINTS MAY VARY THROUGHOUT THE CONSTRUCTION PROCESS DUE TO THE SIZE AND SCOPE OF THE PROJECT. THE CONDITION AND LOCATIONS OF THE CONSTRUCTION ACCESS PADS MUST BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS.
- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM.
- ALL DISTURBED AREAS WHICH BECOME SUBJECT TO EROSION TENDENCIES WHETHER THEY BE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SLOPE PROTECTION - SUCH AS RIP-RAP.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING PERIODS OF RAINFALL.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT / REPLACE DAILY DURING CONSTRUCTION, FOLLOWING RAINFALL AND WEEKLY DURING NON CONSTRUCTION PERIODS.
- ADDITIONAL FILTERSOXX OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- THE LATEST VERSION OF THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE R.I. STATE CONSERVATION COMMITTEE, MUST BE UTILIZED BY THE CONTRACTOR AS A GUIDE.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL AND FOR THE ENTIRE PROJECT DURATION, INCLUDING TEMPORARY SHUT-DOWN PERIODS, MUST MONITOR AND REPAIR, AS NEEDED, ALL SLOPES TO ENSURE A STABLE PRODUCT.

**GENERAL PROJECT WIDE NOTES**

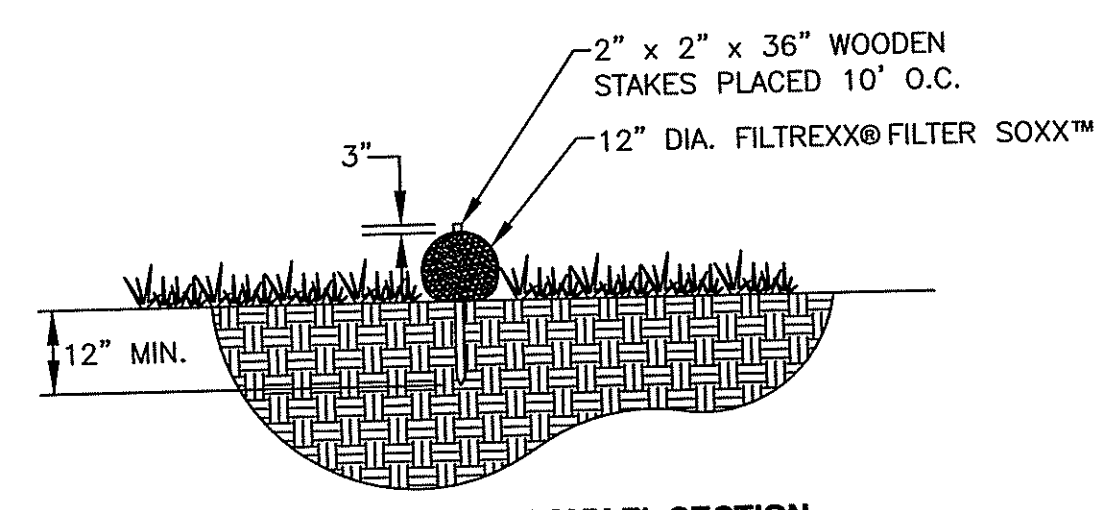
- CONTRACTOR SHALL INSTALL TEMPORARY MEASURES SUCH AS; FIBER MATTING, CRUSHED STONE, HAY OR STRAW IN AREAS WHERE SLOPES OR STABILIZATION HAS FAILED.
- IF SEDIMENT IS TRACKED OR ERODED INTO THE ROADWAY, THE CONTRACTOR WILL BE REQUIRED TO INSTALL SILT SACK OR APPROVED EQUAL UNDER THE EXISTING CATCH BASIN GRATES. REMOVE AFTER CONSTRUCTION.
- FILTER SOXX (OR APPROVED EQUAL) SHALL BE INSTALLED AROUND THE PERIMETER OF THE AREA TO BE DISTURBED BY CONSTRUCTION. ADDITIONAL APPLICATIONS OF THESE CONTROLS MEASURES MAY BE REQUIRED DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL INSPECT THE SITE AT A MINIMUM OF ONCE PER WEEK OR WITHIN 24 HOURS AFTER A STORM EVENT.
- IF EROSION OR EROSION TENDENCIES ARE APPARENT ON THE SITE, THE CONTRACTOR IS RESPONSIBLE TO INSTALL ADDITIONAL CONSTRUCTION BMP'S SUCH AS SAND BAGS AS DIRECTED BY RIDEM, RIDOT, OR ENGINEER DURING CONSTRUCTION.
- IF SEDIMENT OR DEBRIS IS TRACKED ONTO EXISTING PAVED AREAS ADJACENT TO THE CONSTRUCTION AREA, THE CONTRACTOR IS REQUIRED TO SWEEP THE PAVEMENT ON A DAILY BASIS. THE AREA SHALL BE INSPECTED DAILY.
- THE CONTRACTOR IS RESPONSIBLE TO KEEP THE SITE CLEAN OF TRASH. RECOMMENDED DAILY PATROL OF THE CONSTRUCTION SHOULD BE CONDUCTED TO PICK-UP TRASH.

**FILTREXX SOXX NOTE**

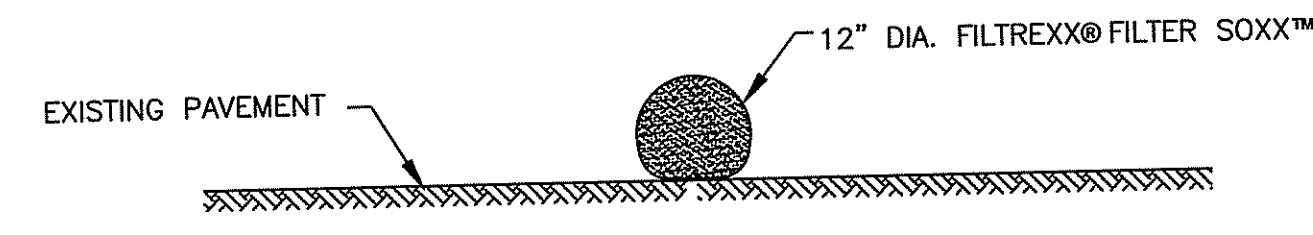
CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE FILTREXX PRODUCTS AND COORDINATE INSTALLATION SCHEDULES AND METHODS WITH THE ENGINEER PRIOR TO PLACEMENT.

**SOIL EROSION AND SEDIMENT CONTROL PLAN NOTES**

- THE CONTRACTOR SHALL REFER TO THE DRAINAGE PLANS FOR THE SOIL EROSION AND SEDIMENT CONTROL MEASURES. DUE TO THE NATURE OF THE PROJECT, THE MAJORITY OF THE EROSION CONTROLS SHALL BE IN THE FORM OF INLET PROTECTION FOR THE EXISTING DRAINAGE SYSTEMS. ALL EXISTING AND PROPOSED DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS REQUIRE INLET PROTECTION, AND ARE SHOWN ON THE DRAINAGE PLANS. RIDEM AND RIDOT RESERVE THE RIGHT TO REQUIRE THE CONTRACTOR TO INSTALL ADDITIONAL EROSION CONTROL MEASURES WHERE DEEMED NECESSARY.
- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM, WETLAND AREAS, ADJACENT PROPERTY, WETLANDS AND ROADWAYS.
- TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH PROTECTIVE COVERS, SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE OWNER.
- HAY OR STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 3,000-4,000 LBS/ACRE.
- STOCKPILES SHALL HAVE NO SLOPE STEEPER THAN 2:1 AND SHALL BE SURROUNDED BY 12-INCH COMPOST FILTER SOCK OR SILT FENCE.
- STOCKPILES EXPOSED FOR EXCESSIVE PERIODS SHALL RECEIVE TEMPORARY TREATMENT CONSISTING OF HAY, STRAW OR FIBER MATTING.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT/REPLACE AS NEEDED.
- ALL CATCH BASINS ADJACENT TO AND WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED BY SILT SACKS. ALL CATCH BASINS IN AREAS WITH EXPOSED SUBSOILS SHALL RECEIVE COMPOST FILTER SOCK (CFS).
- THE FILTREXX FILTER SOXX MAY BE INSTALLED ON THE EXISTING PAVEMENT /IMPERVIOUS AREAS WITH OUT STAKES. CONTRACTOR SHALL INSPECT DAILY, IF SOIL EROSION OR SEDIMENT IS OBSERVED IN THESE AREAS, THE CONTRACTOR SHALL RELOCATE OR INSTALL ADDITIONAL FILTREXX FILTER SOXX IN LOCATIONS THAT CAN BE STAKED.



**FILTREXX® FILTER SOXX™ SECTION**



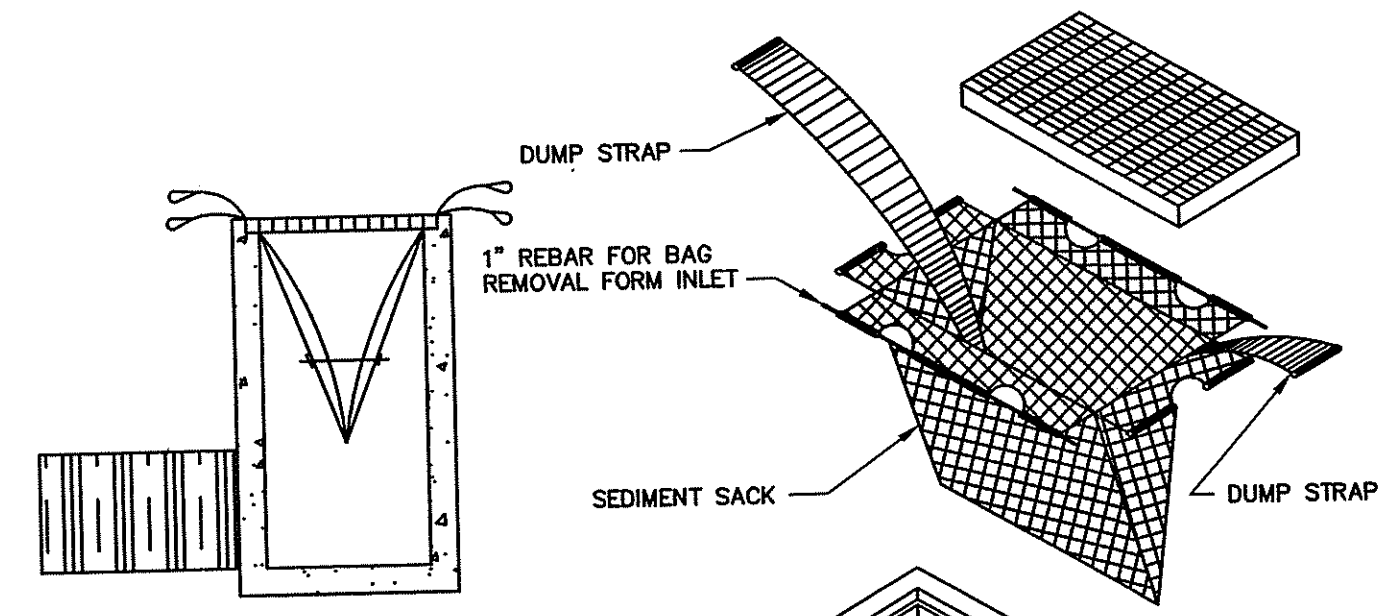
**(CFS) FILTREXX® FILTER SOXX™ PAVEMENT OPTION**

**NOTE**

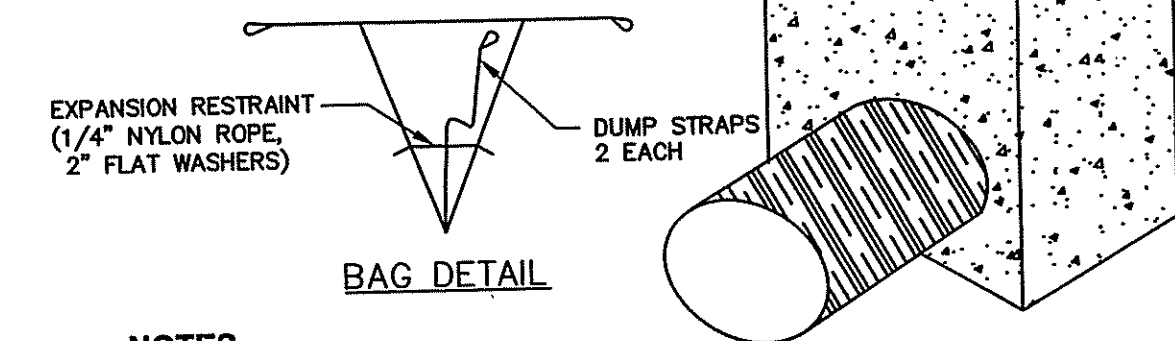
- FILTREXX FILTER SOXX MAY BE USED IN LIEU OF SILT FENCE.
- CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE FILTREXX PRODUCTS AND COORDINATE INSTALLATION SCHEDULES AND METHODS WITH THE ENGINEER PRIOR TO PLACEMENT.
- ALL MATERIAL SHALL MEET FILTREXX SPECIFICATIONS.
- COMPOST MATERIAL TO BE DISPERSED ON SITE AS DETERMINED BY ENGINEER.

**FILTREXX® FILTER SOXX™ DETAIL**

NOT TO SCALE



**INSTALLATION DETAIL**



**BAG DETAIL**

**NOTES**

- INSTALL SILT SACK AT CATCH BASINS IN VICINITY OF CONSTRUCTION.
- CONTRACTOR SHALL SUBMIT SILT SACK PRODUCT TO ENGINEER FOR APPROVAL.

**TYPICAL SILT SACK DETAIL (ISCD)**

NOT TO SCALE

DEPARTMENT OF TRANSPORTATION  
OFFICE OF WATER RESOURCES  
AS SPECIFIED BY THE DESIGN CONTRACT  
DATE: OCT 15 2018  
NO CHANGES ALLOWED WITHOUT THE APPROVED PLANS MUST BE AT CONSTRUCTION

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

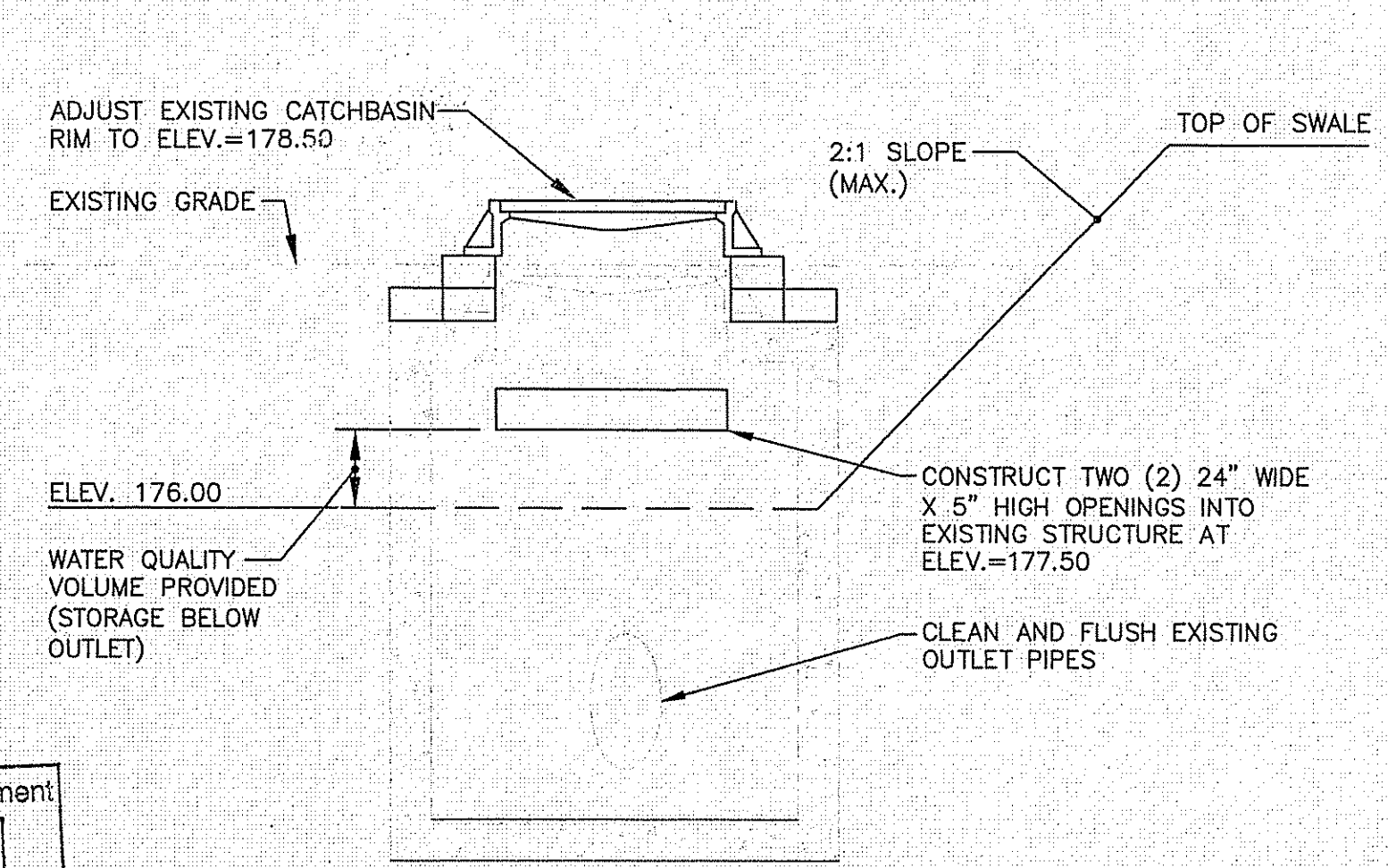
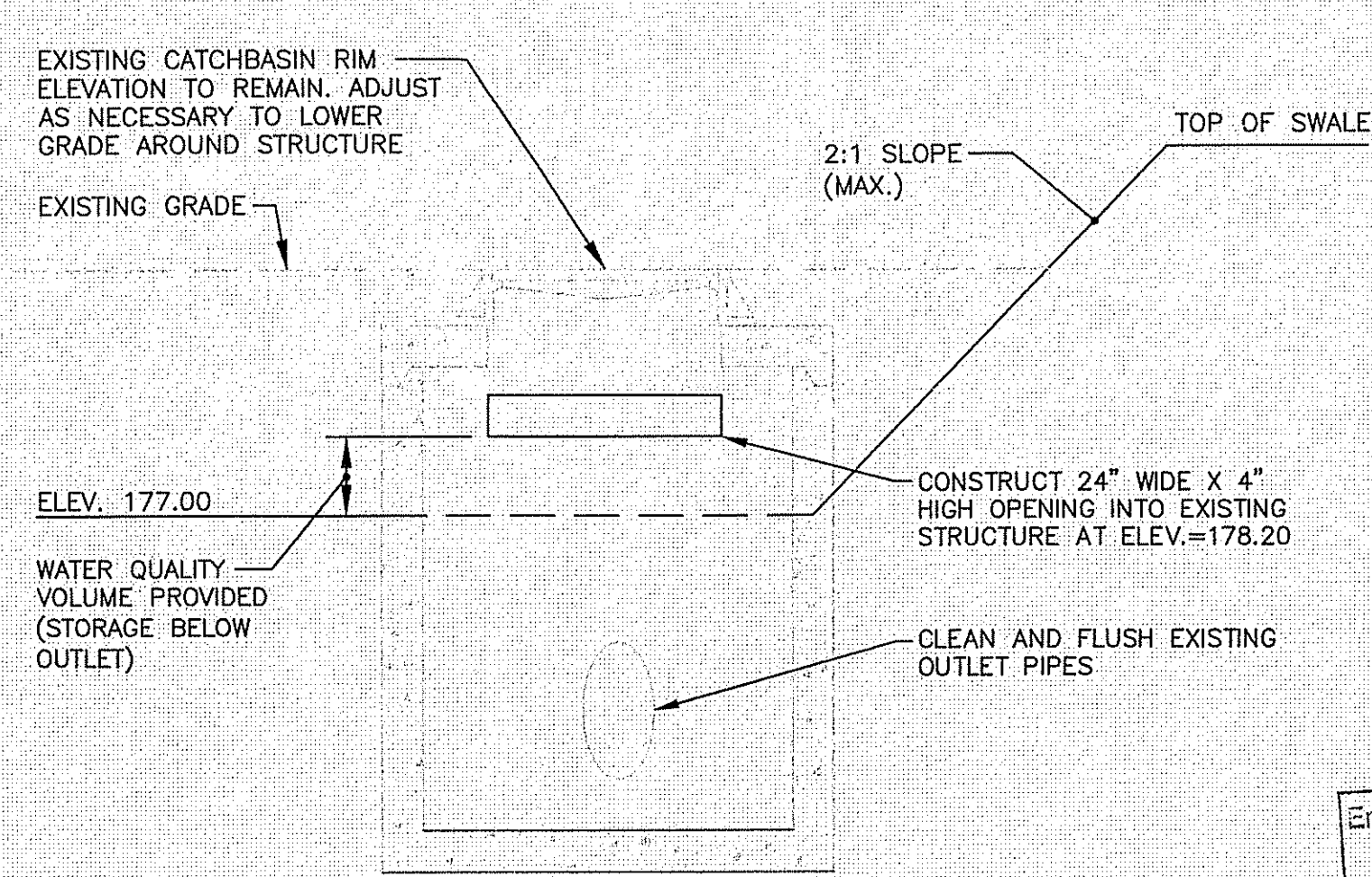
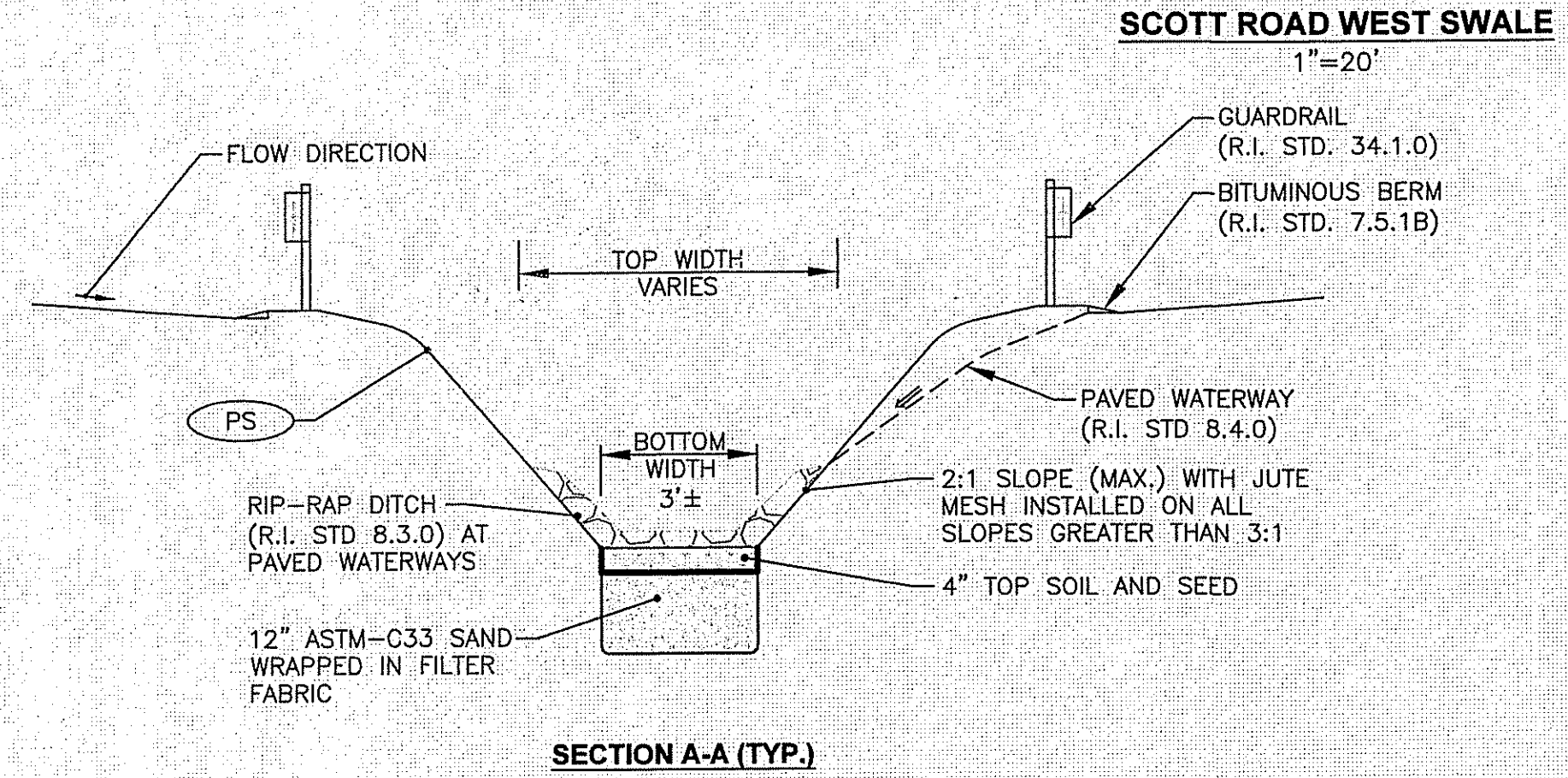
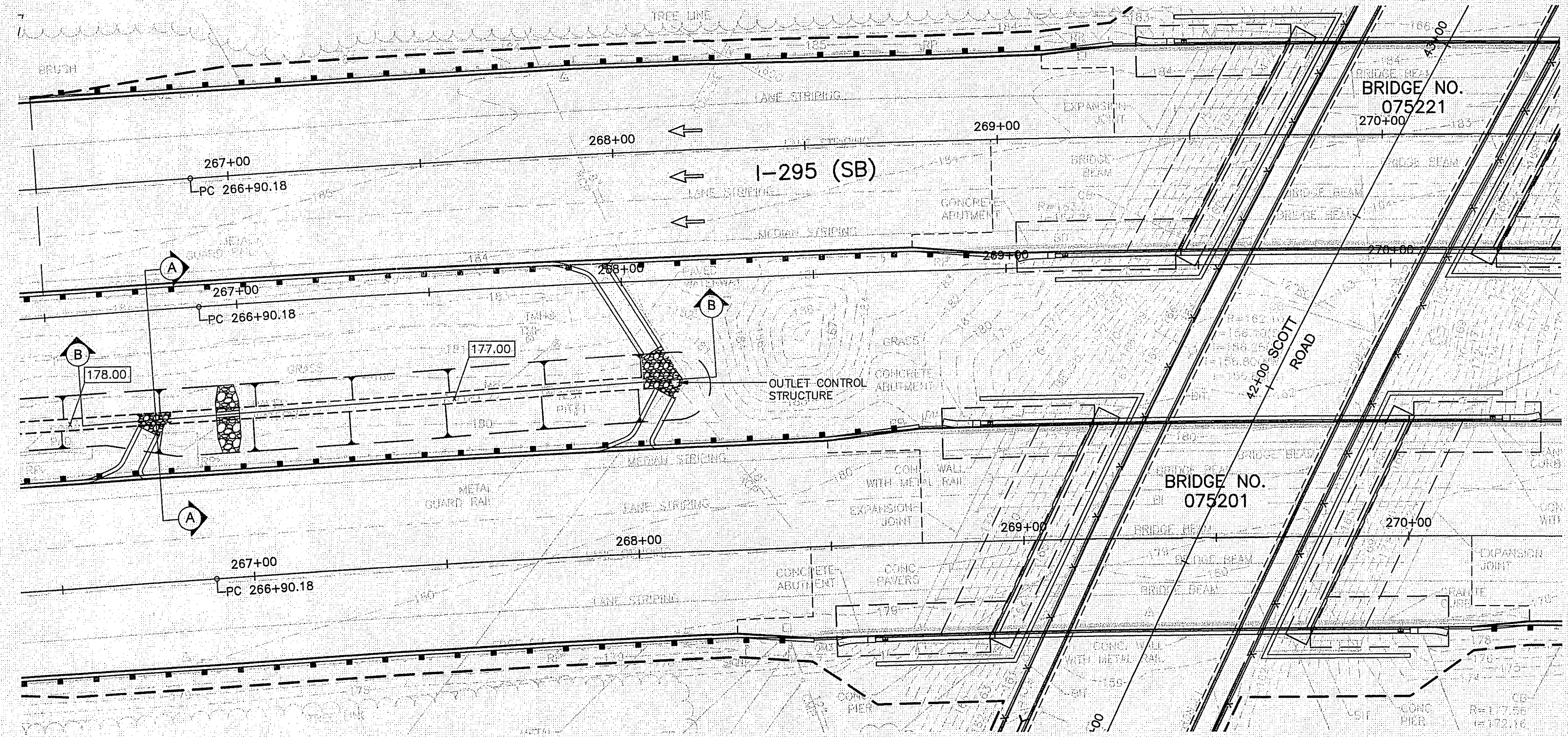
**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

**RHODE ISLAND**  
**DEPARTMENT OF TRANSPORTATION**  
**REPLACEMENT OF**  
**CUMBERLAND I-295**  
**CORRIDOR BRIDGES**  
CUMBERLAND RHODE ISLAND  
**MISCELLANEOUS DETAILS**  
**PLAN NO. 1**  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'  
0114S\_V2\_029-030\_DETAIL001-002

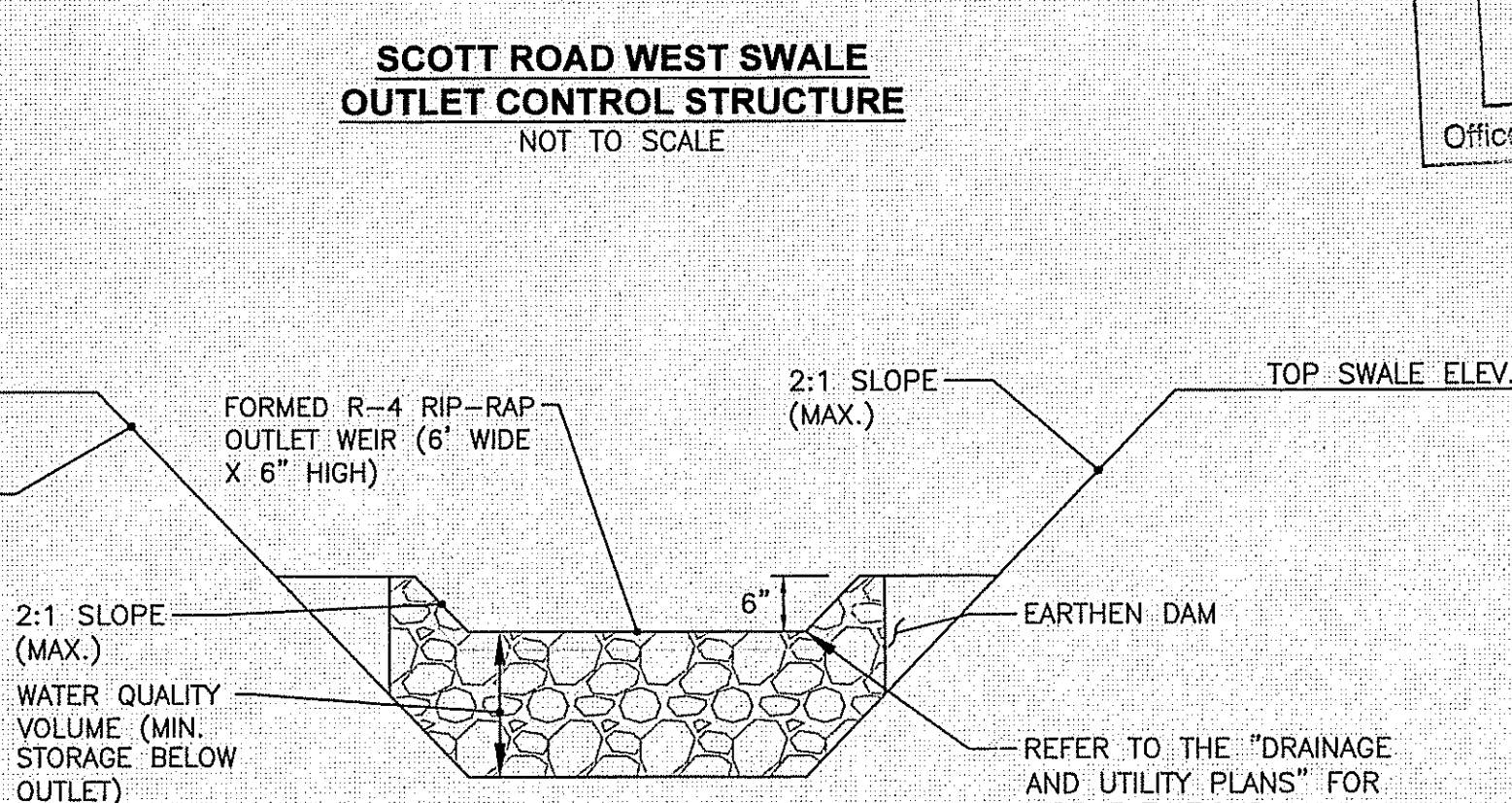
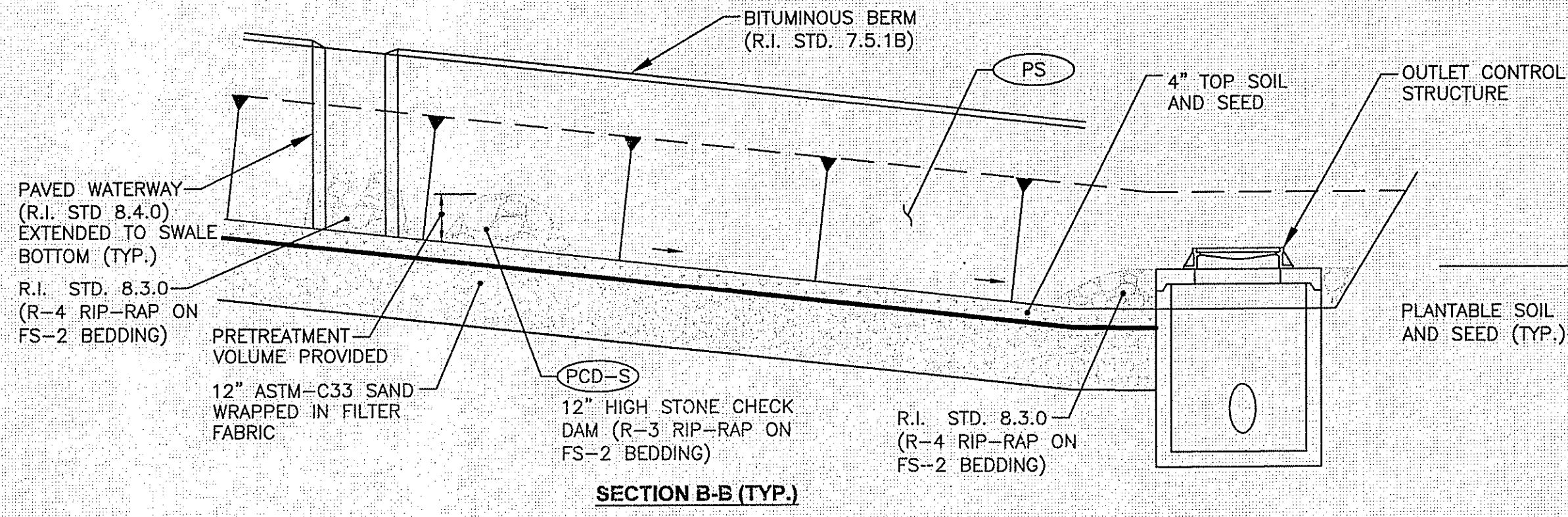
**WATER QUALITY SWALE CONSTRUCTION NOTE**

- WITHIN THE WATER QUALITY SWALE, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND SUBSOIL AREAS (A AND B HORIZONS) AND ANY EXISTING SOILS THAT YIELD A PERMEABILITY RATE <1.02 INCHES/HOUR. CONTRACTOR SHALL COORDINATE A BOTTOM BED INSPECTION WITH OWNER AND ENGINEER. PREPARE THE 4" TOPSOIL WITH THE FOLLOWING SAND, FINES, AND ORGANIC SOIL MIX:  
 SAND: 85-88%  
 SOIL FINES: 8-12% (NO MORE THAN 2% CLAY)  
 ORGANIC MATTER: 3-5%  
 FILTER FABRIC BETWEEN TOPSOIL AND SAND LAYERS SHALL BE MIRAFI 180-N OR APPROVED EQUAL.
- WATER QUALITY SWALE CONSTRUCTION AND MATERIALS SHALL CONFORM TO RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, MARCH 2015, APPENDIX F.5 CONSTRUCTION STANDARDS/SPECIFICATIONS FOR FILTER BMPs. AFTER CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE FINAL INSPECTIONS WITH THE OWNER IN ACCORDANCE WITH TABLE F-5 IN APPENDIX F.3.
- THE CONTRACTOR IS REQUIRED TO SUBMIT A LIST OF MATERIALS, GRADATIONS AND THE NAME AND ADDRESS OF THE SUPPLIERS TO THE ENGINEER FOR APPROVAL PRIOR TO BRINGING MATERIAL ON SITE. MATERIAL CERTIFICATIONS SHALL ALSO BE REQUIRED FOR REVIEW AND APPROVAL. MATERIAL USED FOR THE SAND FILTER MEDIA SHALL MEET THE REQUIREMENTS IN APPENDIX F-5 OF THE RISDGM.
- THE CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE ABOVE REFERENCED MANUAL. THE MANUAL CAN BE FOUND AT: <http://www.dem.ri.gov/pubs/regs/water/swmanual.pdf>
- GREAT CARE MUST BE TAKEN TO PREVENT THE INFILTRATION AREA FROM COMPACTION; BY MARKING OFF THE INFILTRATION UNDERGROUND SYSTEM LOCATION BEFORE THE START OF CONSTRUCTION, AND BY CONNECTING UPSTREAM DRAINAGE AREAS ONLY AFTER CONSTRUCTION IS COMPLETE AND THE CONTRIBUTING AREA IS STABILIZED.
- IF LARGE ROCKS OR BOULDERS ARE FOUND WITHIN 36" BELOW THE INFILTRATION SYSTEMS, OR WITHIN A 10' PERIMETER AROUND SYSTEM, THE CONTRACTOR SHALL REMOVE THE ROCKS/BOULDERS AND REPLACE WITH GRAVEL BORROW. CONTRACTOR SHALL COORDINATE WITH ENGINEER.



Environmental Management  
 SEP 25 2018  
 Office of Water Resources

OCT 15 2018  
 APPROVED FOR CONSTRUCTION



STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

REVISIONS		
NO.	DATE	BY
1	09/24/18	CC

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND

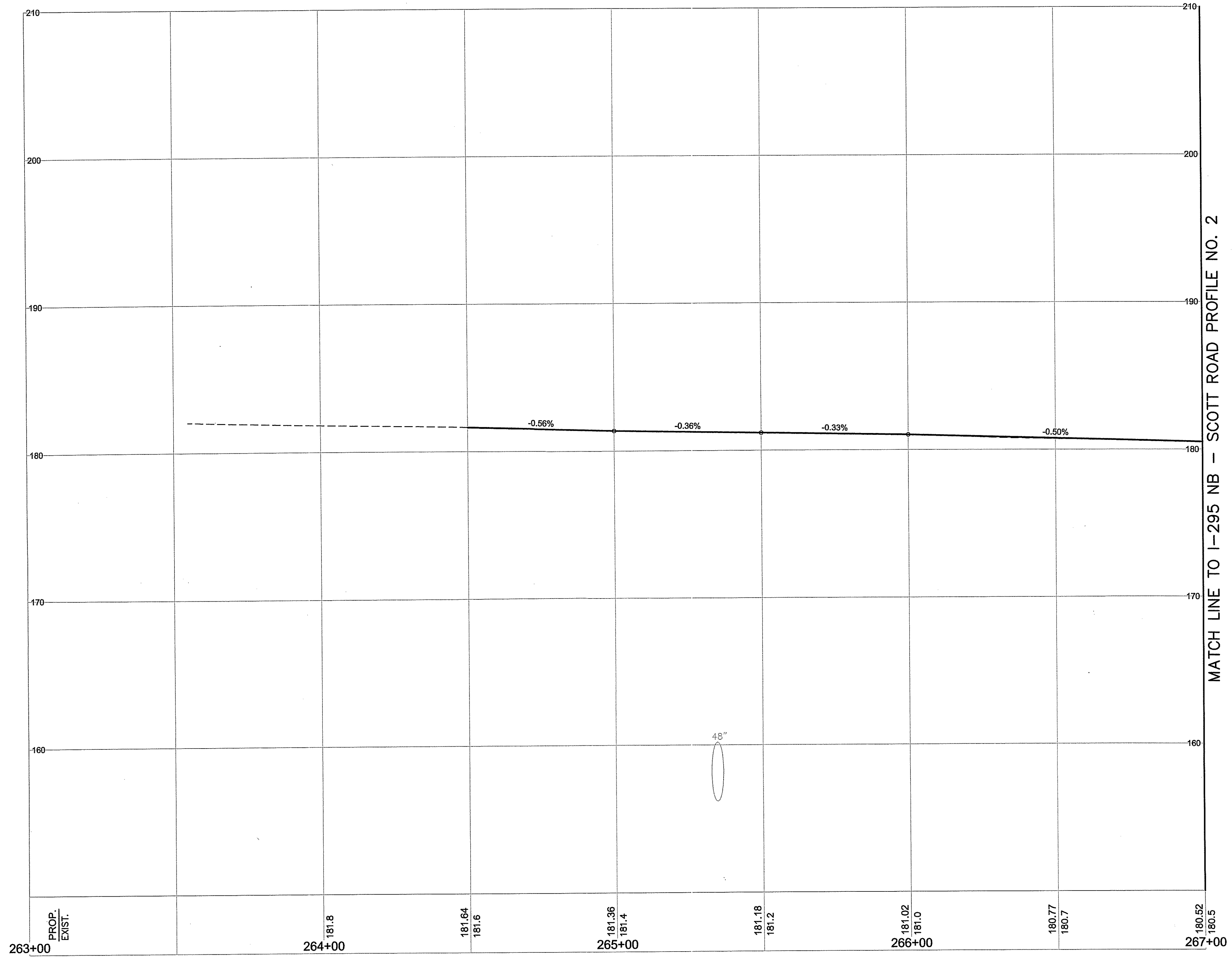
CROSSMAN ENGINEERING  
 151 Centerville Road | Warwick, Rhode Island

MISCELLANEOUS DETAILS  
 PLAN NO. 2

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			31	42

Environmental Management  
 AUG 2 2018  
 Office of Water Resources



MATCH LINE TO I-295 NB - SCOTT ROAD PROFILE NO. 2

AS SHOWN ON THESE PLANS  
 NO CHANGES ALLOWED WITHOUT THE APPROVAL OF THE ENGINEER  
 DATE: 07 15 2018  
 APPROVED PLANS MUST BE AT CONSTRUCTION

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

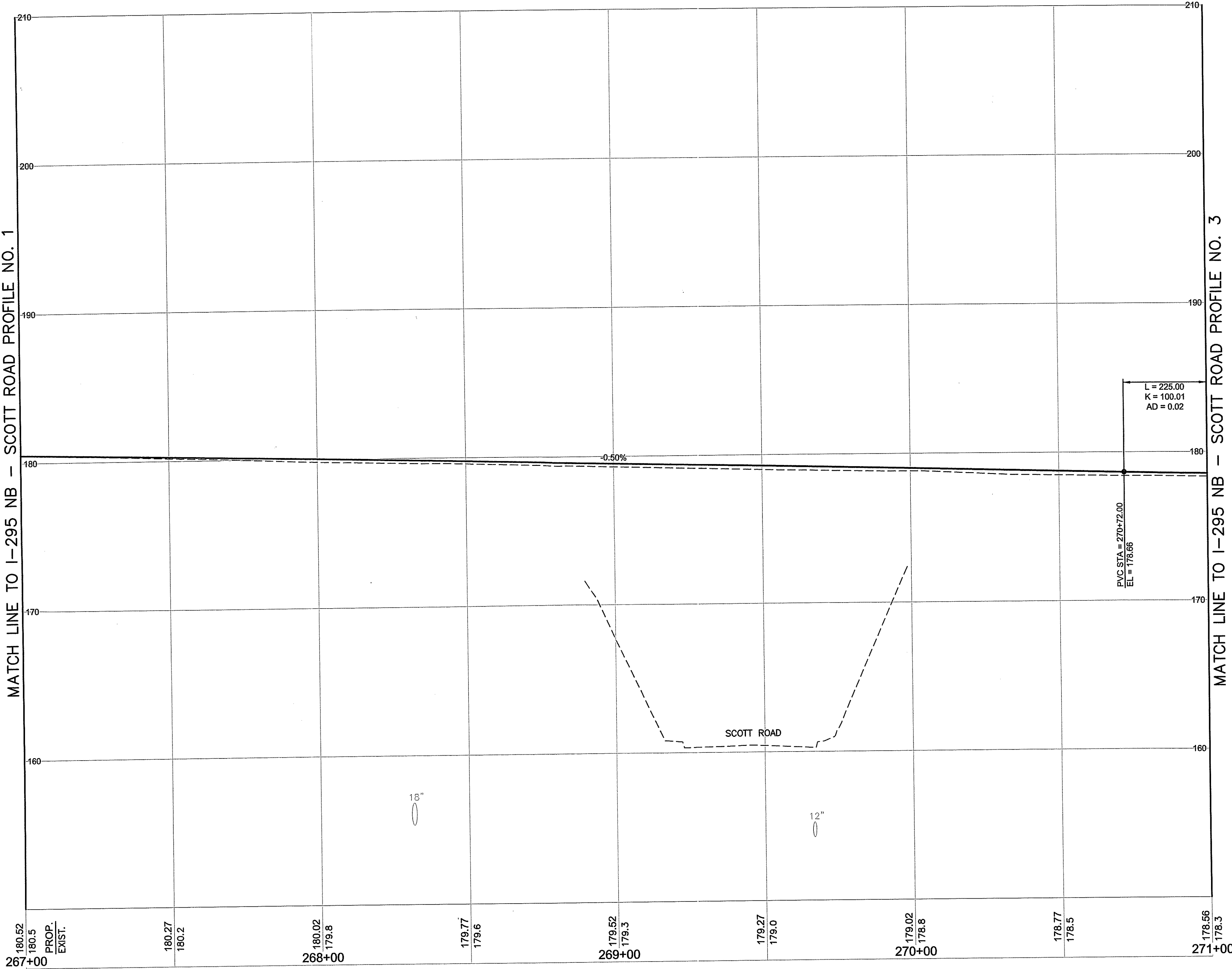
**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 I-295 NB - SCOTT ROAD  
 PROFILE NO. 1

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4'V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			32	42



Environmental Management  
AUG 2 2018  
Office of Water Resources

AS SPECIFIED IN THE  
DATE: OCT 15 2018  
NO CHANGES ALLOWED  
APPROVED PLANS MUST BE AT CONST. SITE  
*Christopher S. Jansen*

PROF. EXIST.	PROF.	EXIST.
180.52		267+00
180.27		180.2
180.02		268+00
179.77		179.6
179.52		269+00
179.27		179.0
179.02		270+00
178.77		178.5
178.52		271+00

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

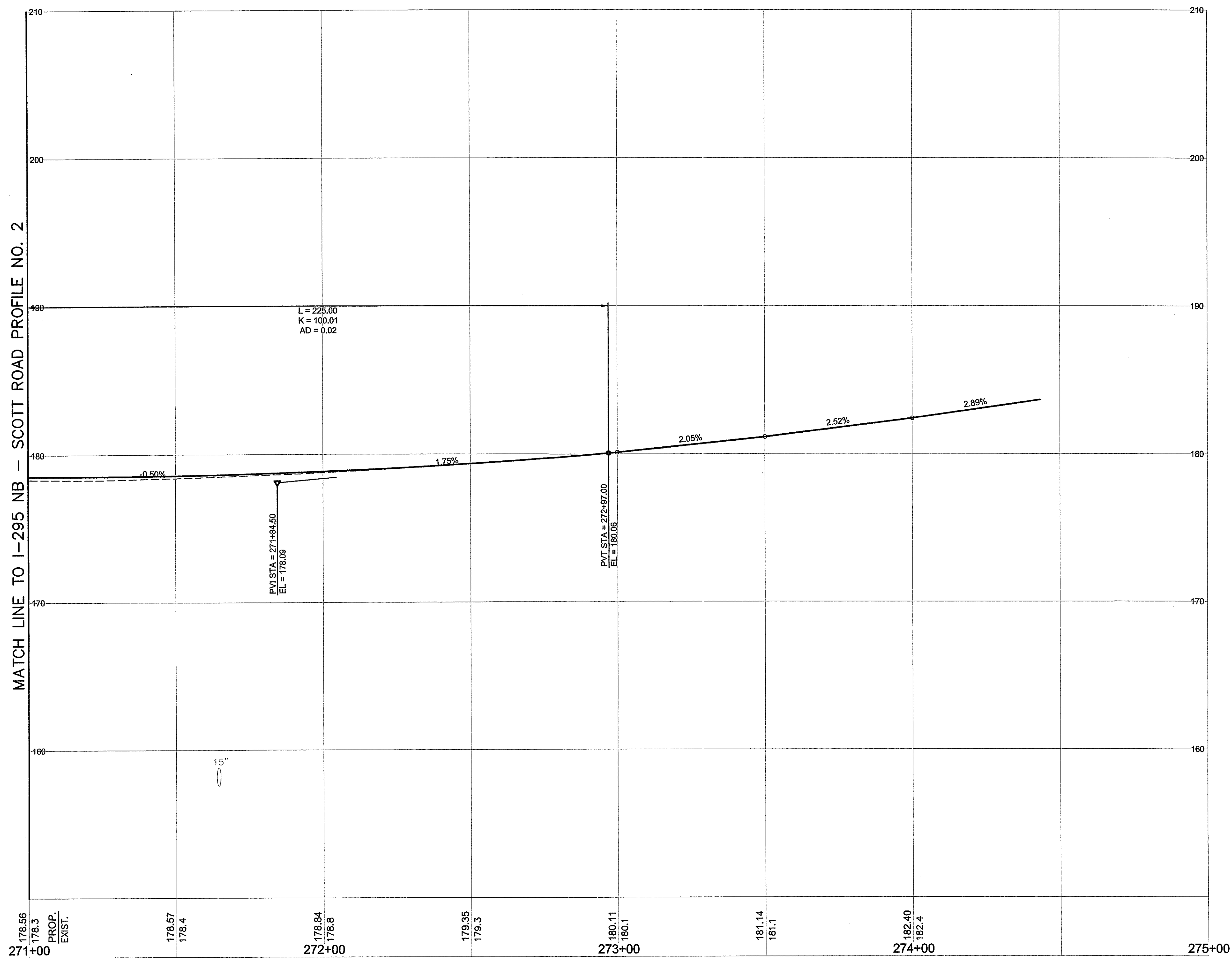
CROSSMAN ENGINEERING  
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
I-295 NB - SCOTT ROAD  
PROFILE NO. 2  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			33	42

Environmental Management  
AUG 2 2018  
Office of Water Resources



DEPARTMENT OF TRANSPORTATION  
AS SPECIFIED OCT 15 2018  
DATED NO CHANGES ALLOWED TO BE MADE WITHOUT APPROVED PLANS MUST BE AT CAPITAL PROJECTS  
*expansion 5. 2018*

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

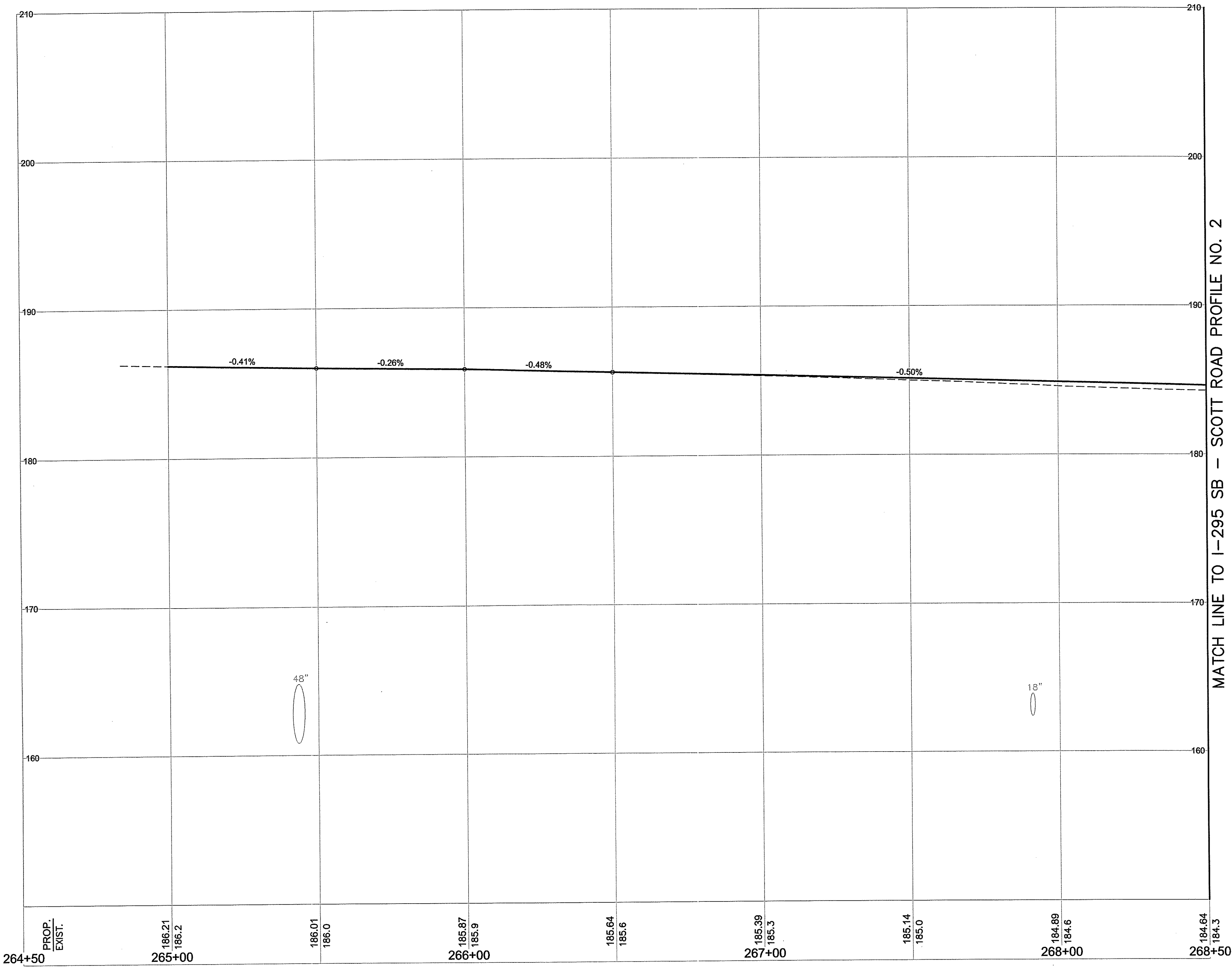
REVISIONS		
NO.	DATE	BY

**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
I-295 NB - SCOTT ROAD  
PROFILE NO. 3  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			34	42

Environmental Management  
 AUG 2 2018  
 Office of Water Resources



AS SPECIFIED HEREON  
 DATED JUL 15 2018  
 NO CHANGES ALLOWED WITHOUT PROPER APPROVAL  
 APPROVED PLANS MUST BE AT CONST. LOCATION

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

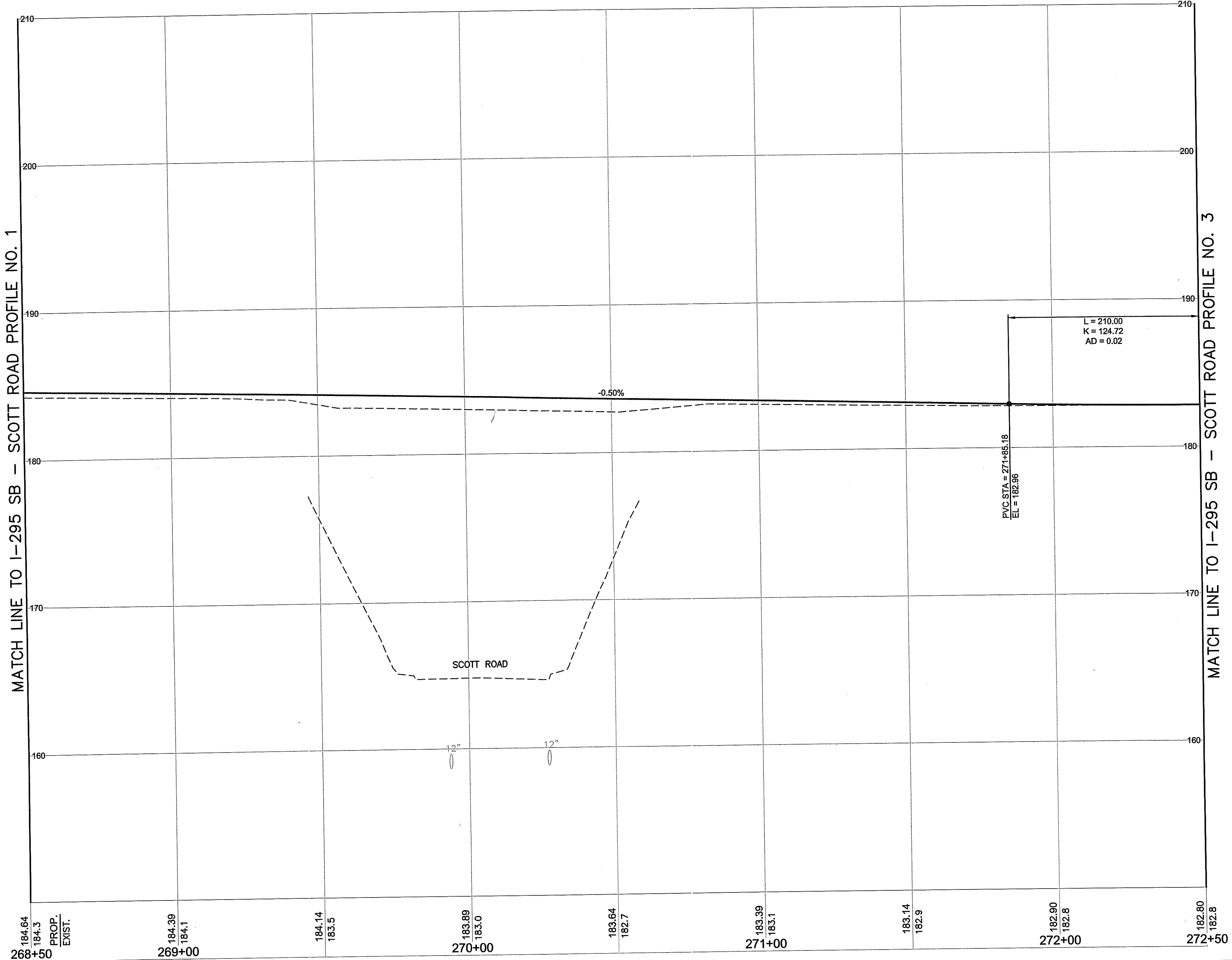
**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

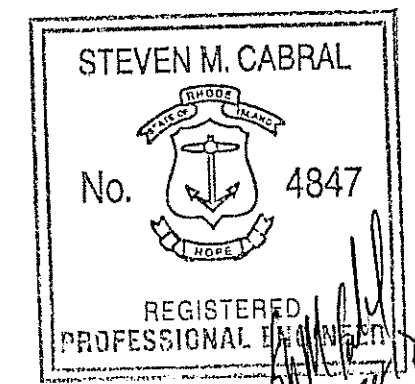
RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 I-295 SB - SCOTT ROAD  
 PROFILE NO. 1  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			35	42

Environmental Management  
AUG 2 2018  
Office of Water Resources



PROP.	EXIST.	STATION	ELEVATION
184.64	184.3	268+50	
184.39	184.1	269+00	
184.14	183.5	270+00	
183.89	183.0	270+00	
183.64	182.7	271+00	
183.39	183.1	271+00	
183.14	182.9	272+00	
182.90	182.8	272+00	
182.80	182.8	272+50	



**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

**REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES**  
CUMBERLAND RHODE ISLAND

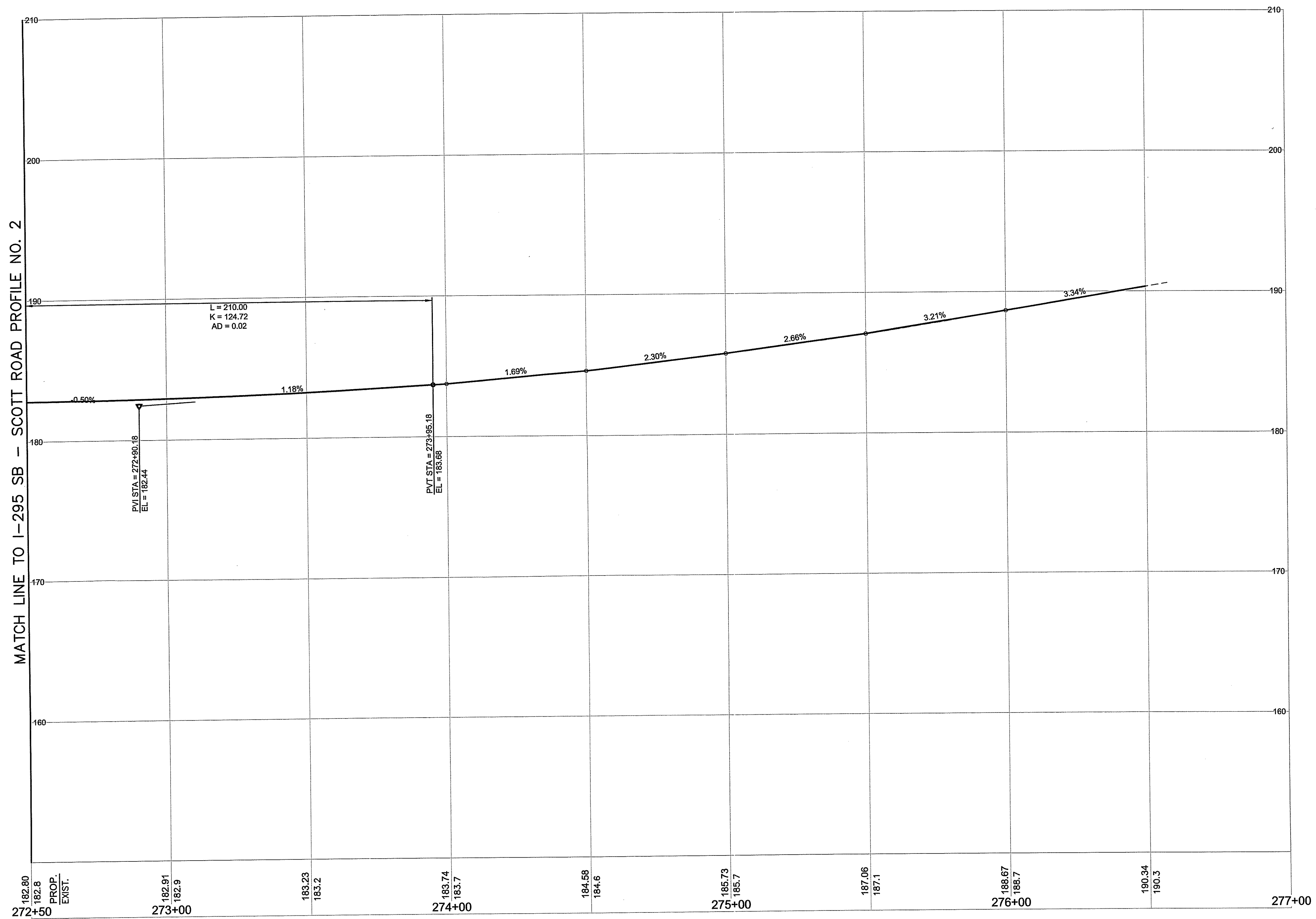
**I-295 SB - SCOTT ROAD  
PROFILE NO. 2**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V

AS SPEC OCT 1 5 2018  
DATED NO CHANGES ALLOWED AFTER PROJECT APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION  
*expertes D. wansen*

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			36	42

Environmental Management  
AUG 2 2018  
Office of Water Resources



DEPARTMENT OF TRANSPORTATION  
OFFICE OF WATER RESOURCES  
AS SPECIFIED IN PERMITS  
DATED 10 OCT 15 2018  
NO CHANGES ALLOWED WITHOUT APPROVED PLANS MUST BE AT CONSTRUCTION SITE

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

REVISIONS		
NO.	DATE	BY

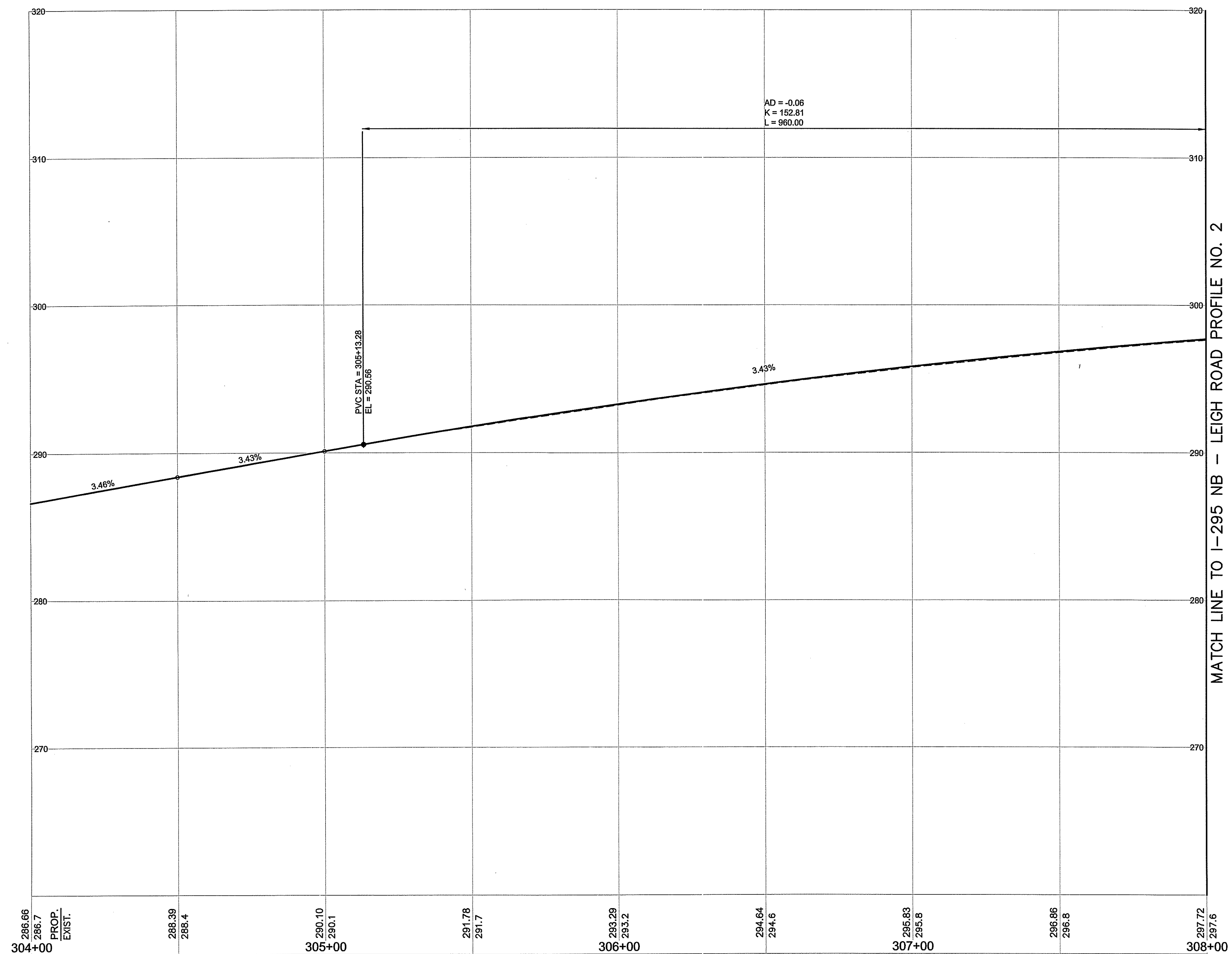
RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
I-295 SB - SCOTT ROAD  
PROFILE NO. 3

CROSSMAN ENGINEERING  
151 Centerville Road | Warwick, Rhode Island 02886

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4'V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			37	42

Environmental Management  
AUG 2 2018  
Office of Water Resources



MATCH LINE TO I-295 NB - LEIGH ROAD PROFILE NO. 2

DEPARTMENT OF TRANSPORTATION  
OFFICE OF ENVIRONMENTAL MANAGEMENT  
APPROVED FOR CONSTRUCTION  
AS SPECIFIED IN THE CONTRACT  
DATED OCT 15 2018  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

STEVEN M. CABRAL  
No. 4847  
REGISTERED PROFESSIONAL ENGINEER

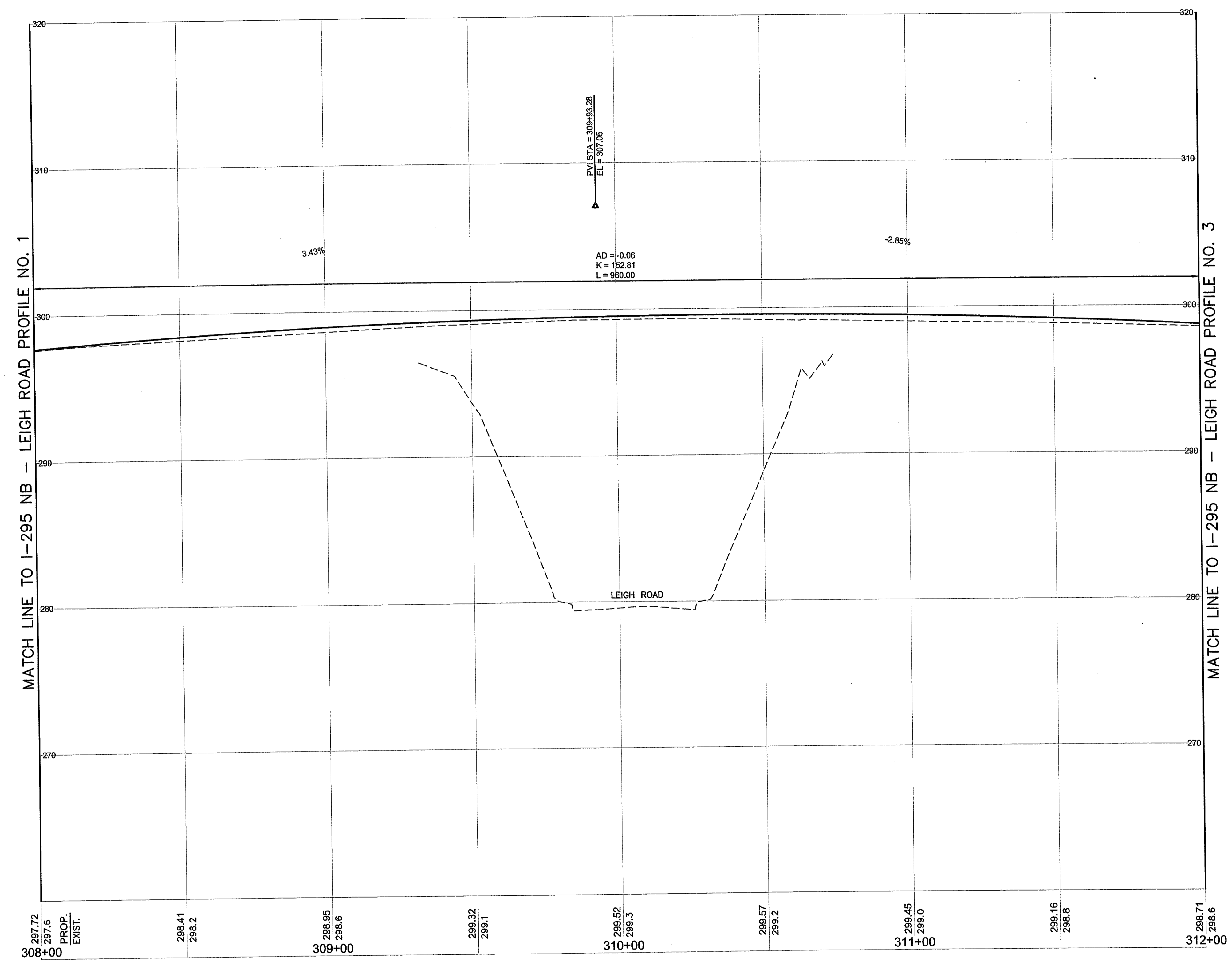
**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
I-295 NB - LEIGH ROAD  
PROFILE NO. 1  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			38	42

Environmental Management  
 AUG 2 2018  
 Office of Water Resources



DEPARTMENT OF TRANSPORTATION  
 AS SHOWN  
 DATED OCT 15 2018  
 NO CHANGES ALLOWED WITHOUT APPROVED PLANS  
 APPROVED BY [Signature]  
 1802-6

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

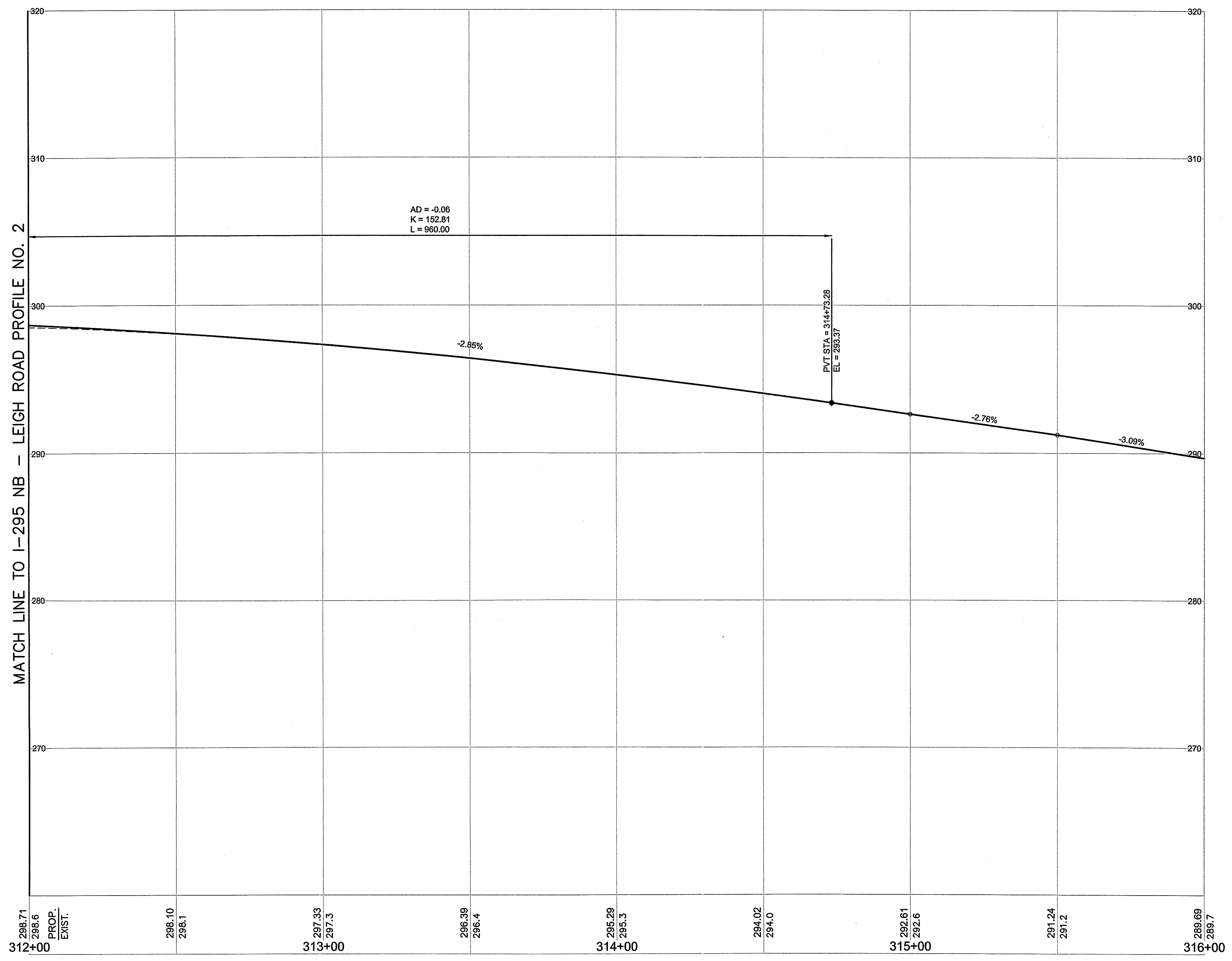
CROSSMAN ENGINEERING  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS	NO.	DATE	BY

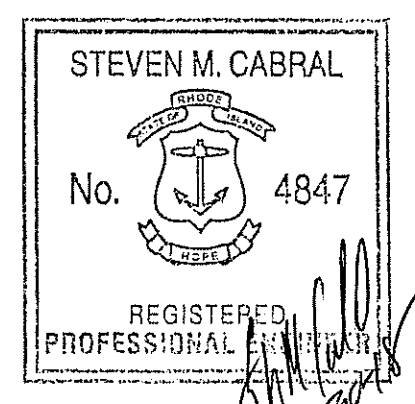
RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 I-295 NB - LEIGH ROAD  
 PROFILE NO. 2  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			39	42

Environmental Management  
AUG 2 2018  
Office of Water Resources



DEPARTMENT OF TRANSPORTATION  
OFFICE OF WATER RESOURCES  
AS SPECIFIED  
DATED OCT 15 2018  
NO CHANGES ALLOWED WITHOUT APPROVED PLANS  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*180205*  
*Superior D. Edwards*



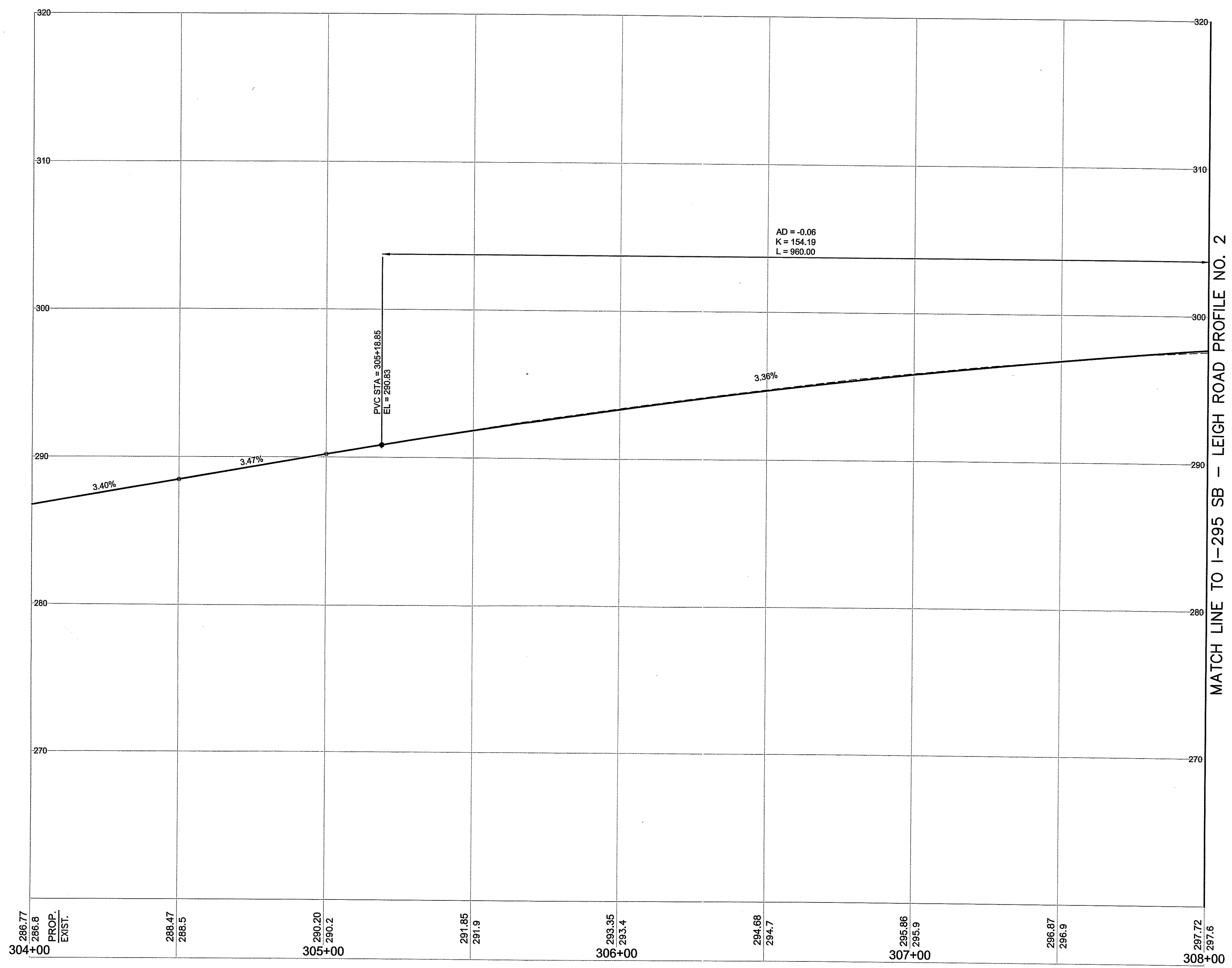
**CROSSMAN ENGINEERING**  
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
REPLACEMENT OF  
CUMBERLAND I-295  
CORRIDOR BRIDGES  
CUMBERLAND RHODE ISLAND  
I-295 NB - LEIGH ROAD  
PROFILE NO. 3  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			40	42

Environmental Management  
AUG 2 2018  
Office of Water Resources



DEPARTMENT OF TRANSPORTATION  
 OFFICE OF PROFESSIONAL MANAGEMENT  
 APPROVED FOR CONSTRUCTION  
 AS SPECIFIED IN THE LETTERS OF A  
 DATED **OCT 15 2018**  
 NO CHANGES ALLOWED WITHOUT FIELD  
 APPROVED PLANS MUST BE AT CONSTRUCTION

**STEVEN M. CABRAL**  
 No. 4847  
 REGISTERED  
 PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

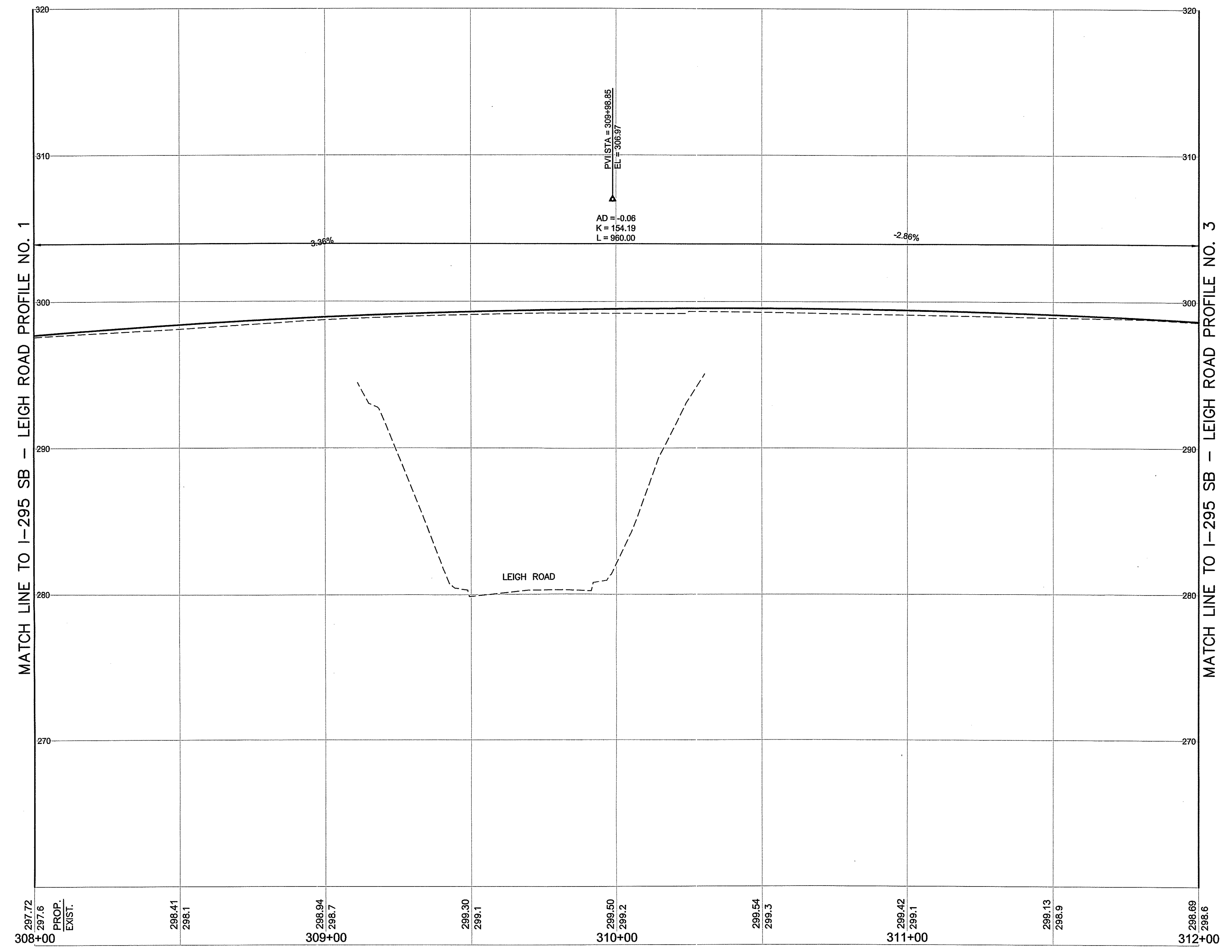
REVISIONS		
NO.	DATE	BY

**RHODE ISLAND**  
**DEPARTMENT OF TRANSPORTATION**  
**REPLACEMENT OF**  
**CUMBERLAND I-295**  
**CORRIDOR BRIDGES**  
 CUMBERLAND                      RHODE ISLAND  
**I-295 SB - LEIGH ROAD**  
**PROFILE NO. 1**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			41	42

Environmental Management  
 AUG 2 2018  
 Office of Water Resources



DEPARTMENT OF TRANSPORTATION  
 OFFICE OF ENVIRONMENTAL MANAGEMENT  
 AS SPECIFIED IN THE CONTRACT DOCUMENTS  
 DATE: OCT 15 2018  
 NO CHANGES ALLOWED WITHOUT APPROVED PLANS MUST BE AT CONSTRUCTION

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

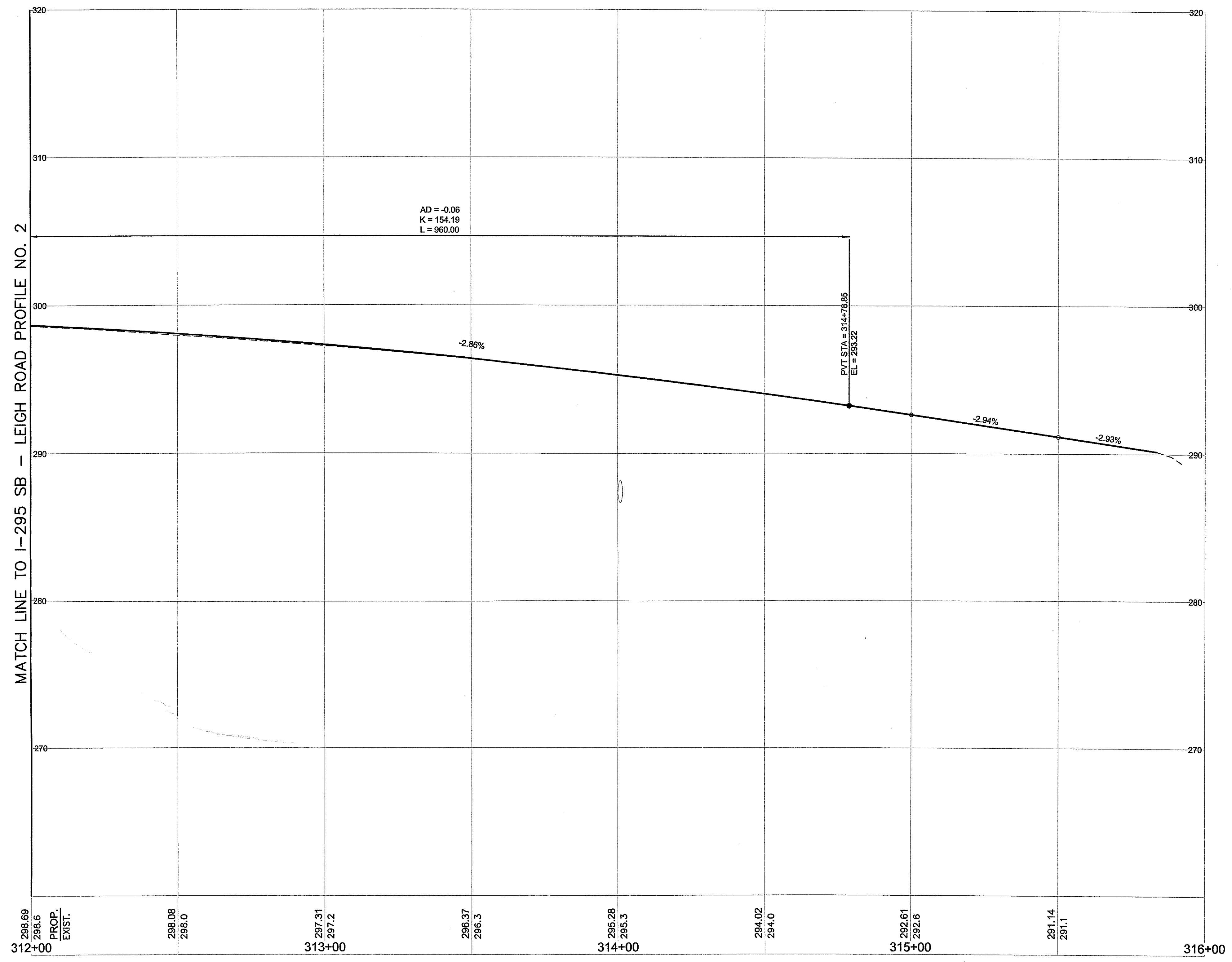
**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

**RHODE ISLAND**  
 DEPARTMENT OF TRANSPORTATION  
 REPLACEMENT OF  
 CUMBERLAND I-295  
 CORRIDOR BRIDGES  
 CUMBERLAND RHODE ISLAND  
 I-295 SB - LEIGH ROAD  
 PROFILE NO. 2  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI			42	42

Environmental Management  
 AUG 2 2018  
 Office of Water Resources



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 PREVENTIVE POLLUTION PROGRAM  
 ATTENTION: PERMITS SECTION  
 AS SPECIFIED IN PERMIT CONDITIONS  
 DATED **OCT 15 2018** *JK*  
 NO CHANGES ALLOWED WITHOUT PERMIT APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Gregory D. Wansel*

STEVEN M. CABRAL  
 No. 4847  
 REGISTERED PROFESSIONAL ENGINEER

**CROSSMAN ENGINEERING**  
 151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

**RHODE ISLAND**  
 DEPARTMENT OF TRANSPORTATION

**REPLACEMENT OF**  
**CUMBERLAND I-295**  
**CORRIDOR BRIDGES**  
 CUMBERLAND RHODE ISLAND

**I-295 SB - LEIGH ROAD**  
**PROFILE NO. 3**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'H, 4"V