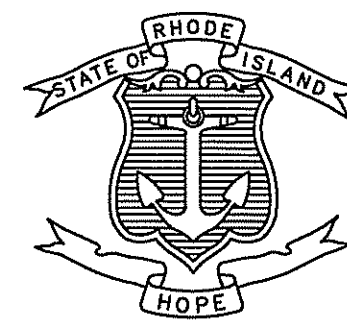


INDEX
VOLUME 1 - BIKEWAY

SHEET NO.	DESCRIPTION
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2	STANDARD PLAN SYMBOLS & STANDARD LEGEND
3-4	STANDARD NOTES 1 & 2
5	JOB SPECIFIC PLAN SYMBOLS, LEGEND & NOTES
6	TYPICAL SECTIONS
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16-25	GROSS SECTIONS (NOT INCLUDED)

STATE OF RHODE ISLAND



DEPARTMENT OF TRANSPORTATION

PLAN, PROFILE AND SECTIONS OF PROPOSED

BLACKSTONE RIVER BIKEWAY
SEGMENT 8C

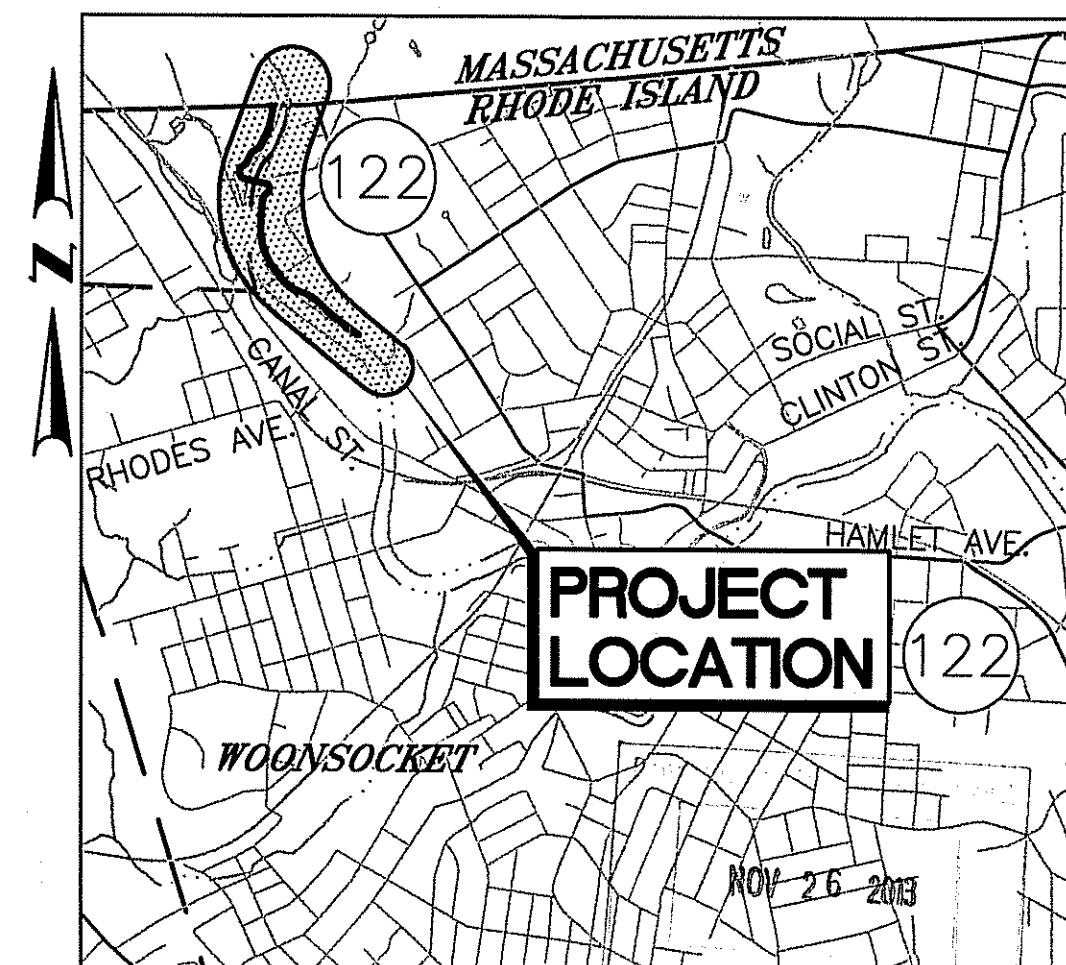
VOLUME 1

FROM COLD SPRING PARK TO THE MEADOWS PARK

CITY OF WOONSOCKET
TOWN OF NORTH SMITHFIELD
COUNTY OF PROVIDENCE

R.I. CONTRACT NO. 2013-XX-XXX F.A. PROJECT NO. XXX-XXXX (XXX)

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI		2013	1	25



LOCATION PLAN



PAVEMENT STRUCTURE

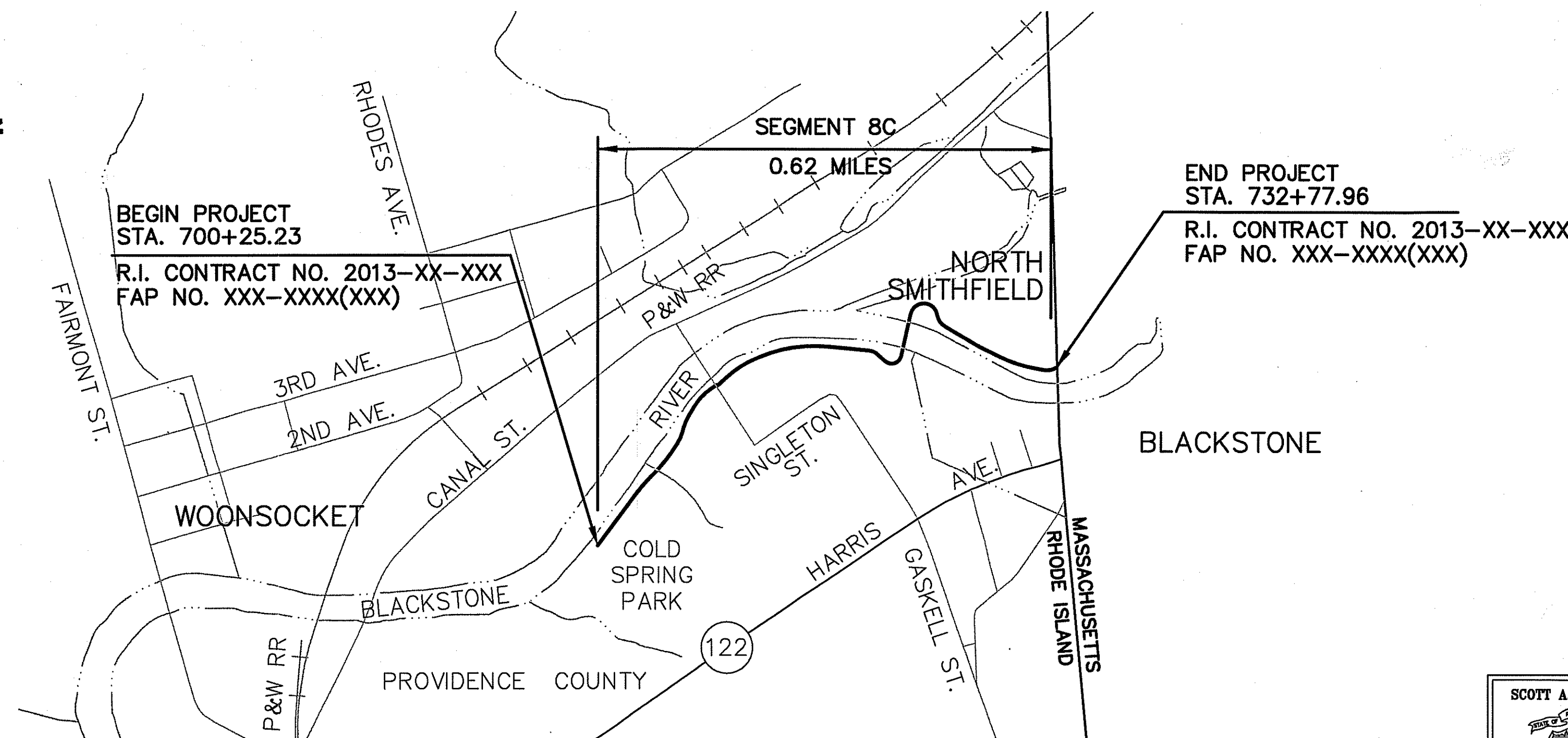
DRIVEWAY PAVEMENT
2" CLASS 4.75 HOT MIX ASPHALT
2" CLASS 12.5 HOT MIX ASPHALT

BIKEWAY PAVEMENT
2" CLASS 4.75 HOT MIX ASPHALT
2" CLASS 12.5 HOT MIX ASPHALT
6" GRAVEL BORROW SUBBASE COURSE

FULL DEPTH PAVEMENT
2" CLASS 4.75 HOT MIX ASPHALT
4" CLASS 12.5 HOT MIX ASPHALT
12" GRAVEL BORROW SUBBASE COURSE

REVISED
PERMIT SUBMISSION
NOVEMBER 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 6 2013 FILE # 13-0126
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



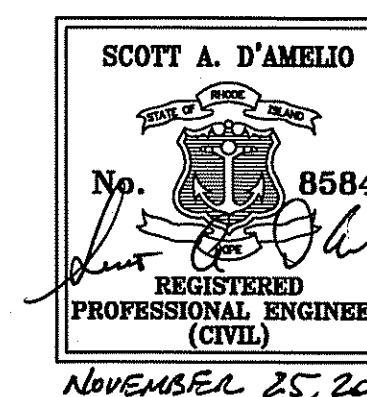
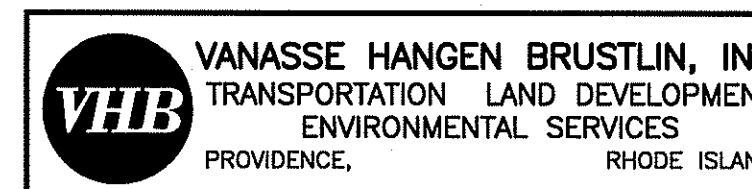
R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS
SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD
SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED 2010,
WITH ALL REVISIONS, AND THE STATE AND FEDERAL SPECIAL PROVISIONS
INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR
THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL
REVISIONS.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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LAYOUT
SCALE: 1"= 500'

BASE OF LEVELS
NGVD 1929

SCALES OF DRAWINGS
AS SHOWN



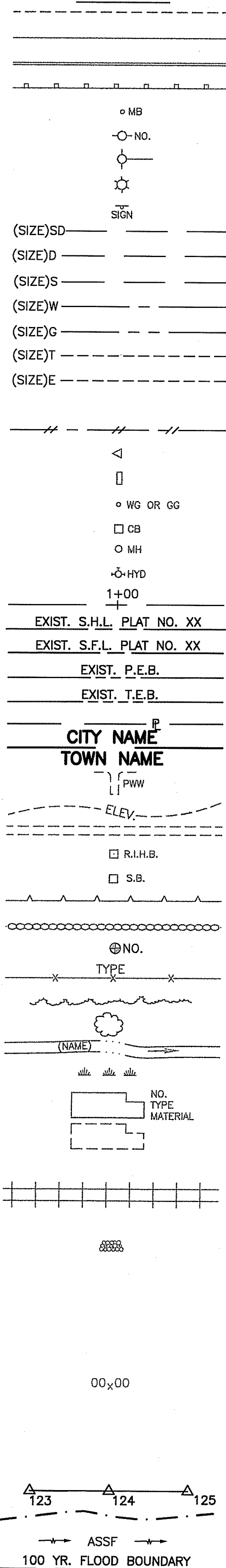
Contract Number 2013-XX-XXX

Number of Sheet 1

Total Sheets 25

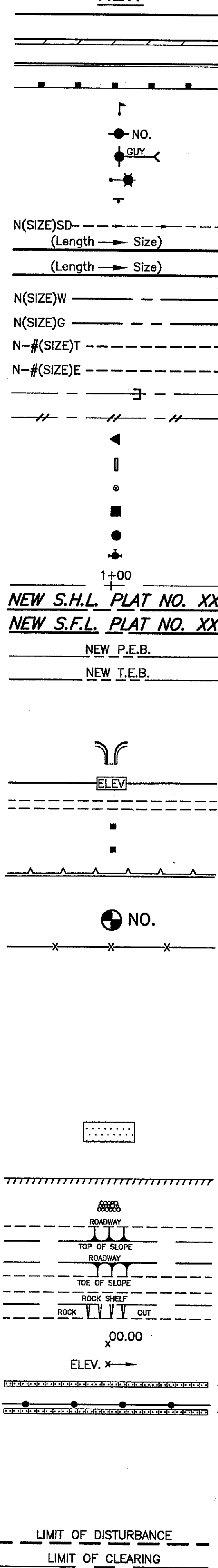
R.I. DEPARTMENT OF TRANSPORTATION	
APPROVED	
DEPUTY CHIEF ENGINEER	DATE
APPROVED	
CHIEF ENGINEER	DATE
APPROVED	
DIRECTOR	DATE
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	
DIVISION ADMINISTRATOR	DATE

EXISTING



EDGE OF PAVEMENT
BERM
CURB
GUARDRAIL
MAILBOX
UTILITY POLE
POLE GUY
LUMINARE
SIGN
SUBDRAIN
STORMDRAIN
SANITARY SEWER
WATER MAIN
GAS MAIN
TELEPHONE DUCT
ELECTRIC DUCT
PLUG AND CAP PIPE
ABANDONED UTILITY
FLARED END SECTION
HEADWALL
WATER OR GAS GATE
CATCH BASIN
MANHOLE
HYDRANT
BASELINE OR CENTERLINE
STATE HIGHWAY LINE
STATE FREEWAY LINE
PERMANENT EASEMENT LINE
TEMPORARY EASEMENT LINE
PROPERTY LINE
CITY OR TOWN LINE
PAVED WATERWAY
CONTOUR LINE
OPEN DITCH
R.I. HIGHWAY BOUND
STONE BOUND
RETAINING WALL
FIELD STONE WALL
BORINGS
FENCE
WOOD OR BRUSH LINE
TREES
RIVER OR STREAM
WETLAND AREA
BUILDING
FOUNDATION
BUILDING TO BE REMOVED
RAILROAD TRACKS
CUT AND MATCH
RIP-RAP
CUT SLOPE
FILL SLOPE
ROCK CUT
SPOT GRADE
AREA GRADED TO DRAIN
BALED HAY RI STD 9.1.0
BALED HAY & SILT FENCE RI STD. 9.3.0
EDGE OF WETLAND
WETLAND PERIMETER
AREA SUBJECT TO STORM FLOW
100-YEAR FLOOD PLAIN
LIMIT OF DISTURBANCE
LIMIT OF CLEARING

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
BFS 3" BITUMINOUS CONCRETE TYPE 1-2
CCB 8" GRAVEL BORROW SUBBASE COURSE
CCP BUILD NEW STRUCTURE OVER EXISTING PIPE
CFP CLEAN CATCH BASIN
CG CUT AND CAP PIPE WITH RESTRAINT (ALL SIZES)
CMH CLEAN AND FLUSH PIPE
CP CLEARING AND GRUBBING
CP (DEPTH) CLEAN MANHOLE
COP COLD PLANE
COP CUT AND PLUG PIPE (ALL TYPES, ALL SIZES)
DB REMOVE AND DISPOSE BITUMINOUS CURB
DC REMOVE AND DISPOSE CONCRETE CURB
DCB REMOVE AND DISPOSE CATCH BASIN
DDI REMOVE AND DISPOSE DROP INLET
DF REMOVE AND DISPOSE FENCE
DFC REMOVE AND DISPOSE FRAME AND COVER
DFE REMOVE AND DISPOSE FLARED END SECTION
DFG REMOVE AND DISPOSE FRAME AND GRATE
DFH REMOVE AND DISPOSE FIRE HYDRANT
DFP REMOVE AND DISPOSE FLEXIBLE PAVEMENT
DG REMOVE AND DISPOSE GUARDRAIL
DH REMOVE AND DISPOSE HEADWALL
DHB REMOVE AND DISPOSE HIGHWAY BOUND
DHH REMOVE AND DISPOSE HANDHOLE
DL REMOVE AND DISPOSE LIGHT AND FOUNDATION
DMB REMOVE AND DISPOSE MEDIAN BARRIER
DMH REMOVE AND DISPOSE MANHOLE
DMM REMOVE AND DISPOSE MEDIAN MARKER
DOW REMOVE AND DISPOSE OBSERVATION WELL
DP REMOVE AND DISPOSE PIPE
DPB REMOVE AND DISPOSE PAVEMENT AND RIGID BASE
DRB REMOVE AND DISPOSE RIGID BASE
DS REMOVE AND DISPOSE SIGN
DSS REMOVE AND DISPOSE TRAFFIC SIGNAL SYSTEM
DSW REMOVE AND DISPOSE SIDEWALK
DTD REMOVE AND DISPOSE TELEPHONE DUCT BANKS
DUP REMOVE AND DISPOSE UTILITY POLE
DWW REMOVE AND DISPOSE PAVED WATERWAY
FF FILTER FABRIC RIPRAP FLARED END UNDERLAYMENT
GET FLARED GUARDRAIL END TREATMENT
IA IMPACT ATTENUATOR
IDL IMPERVIOUS DITCH LINER
LOD LIMIT OF DISTURBANCE
LOR LIMIT OF REGRADING
LS 4" LOAM AND SEED

- 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
NWCGB 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 EDGING, STRAIGHT, CIRCULAR (ALL TYPES)
RLP 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)
SD- STRUCTURAL DISPOSITION - SEE CS PAGES OF SPECIFICATION
SF REMOVE AND STOCKPILE FENCE
SGA SPECIAL GRADED AGGREGATE
SGC REMOVE AND STOCKPILE GRANITE CURB
SGR REMOVE AND STOCKPILE GUARDRAIL
SH REMOVE AND STOCKPILE HYDRANT
SS REMOVE AND STOCKPILE SIGN
STS REMOVE AND STOCKPILE TRAFFIC SIGNAL SYSTEM
TB CONCRETE THRUST BLOCK
TEP TIE EXISTING PIPE INTO NEW STRUCTURE
TNP TIE NEW PIPE INTO EXISTING STRUCTURE
TBT THRIE BEAM TRANSITION
TBBC THRIE BEAM BRIDGE CONNECTION
TT 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

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Approved D. Wenzel

REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
1	6/07	TRB	BLACKSTONE RIVER BIKEWAY SEGMENT 8C	
			WOONSOCKET	TO N. SMITHFIELD
			STANDARD PLAN SYMBOLS & STANDARD LEGEND	
			CHECKED BY _____ DATE _____ SCALE NO. SCALE	

VHB VANASSE HANGEN BRUSTLIN, INC.
TRANSPORTATION LAND DEVELOPMENT
ENVIRONMENTAL SERVICES
PROVIDENCE, RHODE ISLAND

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 IS THE R.I. STANDARD GRID SYSTEM, NAD 83. THE VERTICAL CONTROL IS NGVD 29.
- 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 RIPDES 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 SIDE 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 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.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 6 2013 FILE # 12-0126
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Myra D. Wonsch



REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
1	4/07	TRB	BLACKSTONE RIVER BIKEWAY SEGMENT 8C	
2	3/10	RBH		
			WOONSOCKET TO N. SMITHFIELD	
			STANDARD NOTES - 1	
			CHECKED BY _____ DATE _____ SCALE NO SCALE	

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 DEC 6 2013 FILE # 13-0126
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Michael D. Womack



REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
1	4/07	TRB	BLACKSTONE RIVER BIKEWAY SEGMENT 8C	
2	11/07	TRB		
3	3/10	RBH		
			WOONSOCKET TO N. SMITHFIELD	
			STANDARD NOTES - 2	
			CHECKED BY _____ DATE _____ SCALE _____	

JOB SPECIFIC GENERAL LEGEND

7.3.9	GRANITE RAMP STONE, R.I. STD. 7.3.9
Q.1.0M	COMPOST FILTER SOCK
9.12P	BALED HAY CATCH BASIN INLET PROTECTION (SEE DETAIL PLAN NO. 2)
43.3.0	OPENING WIDTH WHEEL CHAIR RAMP, R.I. STD 43.3.0
AMH	ADJUST MANHOLE
BGR	BIAXIAL GRID REINFORCEMENT
BOL	STEEL BOLLARD (SEE DETAIL PLAN NO. 1)
BR	SPLIT RAIL BICYCLE RAILING (SEE DETAIL PLAN NO. 2)
BWP	BIKEWAY PAVEMENT 2" CLASS 4.75 HOT MIX ASPHALT 2" CLASS 12.5 HOT MIX ASPHALT 6" GRAVEL BORROW SUBBASE COURSE
BWP1	BIKEWAY PAVEMENT 2" CLASS 4.75 HOT MIX ASPHALT 2" CLASS 12.5 HOT MIX ASPHALT
CW	CROSSWALK
DGA	REMOVE AND DISPOSE GATE
DT	REMOVE AND DISPOSE TREE
FDP	FULL DEPTH PAVEMENT 2" CLASS 9.5 HOT MIX ASPHALT 4" CLASS 12.5 HOT MIX ASPHALT 12" GRAVEL BORROW SUBBASE
GB	GRANITE BENCH (SEE DETAIL PLAN NO. 1)
GM	GRANITE MILE MARKER (SEE DETAIL PLAN NO. 2)
GP	GRANITE SETT PAVING (SEE DETAIL PLAN NO. 1)
RRB	REMOVE AND RELOCATE BOULDER
SDP	STONE DUST PAVEMENT – 10' WIDE 3" STONE DUST 8" GRAVEL BORROW SUBBASE
SID	STATE ID GRANITE BOLLARD (SEE DETAIL PLAN NO. 2)
SOP	STONE OUTLET PROTECTION (SEE DETAIL PLAN NO. 1)
4BYL	4" EPOXY RESIN PAVEMENT MARKINGS – BROKEN YELLOW LINE

— 200' RIVERBANK WETLAND

----- 100' RIVERBANK WETLAND

JOB SPECIFIC GENERAL NOTES

- TOPOGRAPHICAL INFORMATION FROM AERIAL SURVEY AND FIELD SURVEY BY
AERIAL: CHARLES H. SELLS, INC.
FIELD: VANASSE HANGEN BRUSTLIN, INC.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK,
THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY
DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION
FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND
ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES
BY THE UTILITY COMPANIES.
- INTERSECTING ROADS SHALL BE RECONSTRUCTED TO THE LIMITS
SHOWN ON THE PLANS AND CROSS SECTIONS OR AS DIRECTED BY THE
ENGINEER. THE PAVEMENT MAKE-UP SHALL BE THE SAME AS THE BIKEWAY
PAVEMENT UNLESS OTHERWISE SHOWN ON THE PLANS AND TYPICAL DETAILS.
- ALL EXISTING MANHOLES, CATCH BASINS, ROADWAY BOXES, AND SIDEWALK
CURB STOPS FOR ALL UTILITIES WITHIN THE PROJECT WORK LIMITS SHALL
BE ADJUSTED TO GRADE AS REQUIRED EXCEPT WHERE REPLACEMENT IS
CALLED FOR ON THE PLANS OR DIRECTED BY THE ENGINEER.

JOB SPECIFIC GENERAL NOTES - DRAINAGE

- ALL CEMENT CONCRETE FOR DRAINAGE STRUCTURES SHALL BE
CLASS XX (AE).
- ALL CATCH BASINS SHALL PROVIDE A 3 FOOT SUMP.
- ALL CATCH BASINS SHALL BE 4 FOOT DIAMETER UNLESS OTHERWISE NOTED.

JOB SPECIFIC GENERAL NOTES - PAVEMENT MARKINGS

- ALL PAVEMENT MARKINGS FOR THIS PROJECT SHALL BE
EPOXY RESIN PAVEMENT MARKINGS UNLESS OTHERWISE
INDICATED.
- THE LOCATION OF PAVEMENT MARKINGS SHALL BE IN ACCORDANCE
WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
AS AMENDED.
- ALL PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED PAVEMENT MARKINGS
SHALL BE REMOVED BY APPROVED METHOD.

JOB SPECIFIC GENERAL NOTES - LANDSCAPING

- ALL PLANT MATERIAL MUST BE TAGGED AT THE NURSERY (RECOGNIZED
LICENSED GROWER OF PLANT MATERIAL) IN ACCORDANCE WITH R.I.
STANDARD SPECIFICATIONS.

ALL PLANT MATERIAL IS TO BE FIELD LOCATED BY A RIDOT LANDSCAPE
REPRESENTATIVE.

JOB SPECIFIC GENERAL NOTES - SIGNS

- PRIOR TO INSTALLATION, ALL SIGNS, MOUNTING AND LOCATIONS
SHALL BE APPROVED OR MODIFIED BY THE ENGINEER.
- TEMPORARY CONSTRUCTION SIGN PANELS SHALL BE 3/4" THICK
EXTERIOR GRADE PLYWOOD CONFORMING TO SECTION M-19 OF THE
STANDARD SPECIFICATIONS.
- ALL SIGN RADII AND BORDERS SHALL BE AS SPECIFIED IN THE
MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION
WITH ALL REVISIONS.

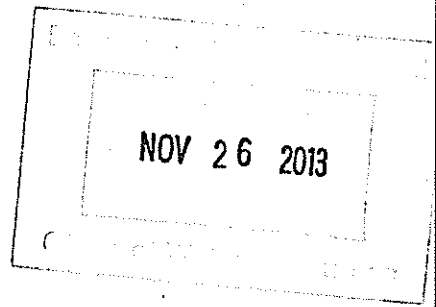
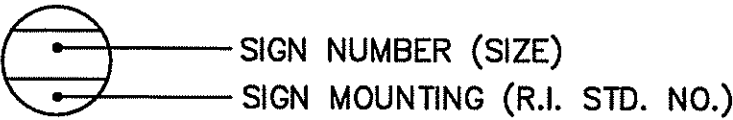
JOB SPECIFIC GENERAL NOTES - CONCRETE

- THE ALLOWABLE WORKING STRESSES FOR PORTLAND CEMENT CONCRETE AND
REINFORCING STEEL SHALL BE AS REQUIRED BY THE RHODE ISLAND STANDARD
SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

JOB SPECIFIC ABBREVIATIONS

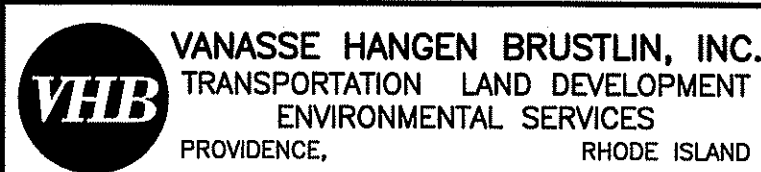
U.P.	UTILITY POLE
DIP	DUCTILE IRON PIPE

JOB SPECIFIC TYPICAL SIGN DESIGNATION SYMBOL

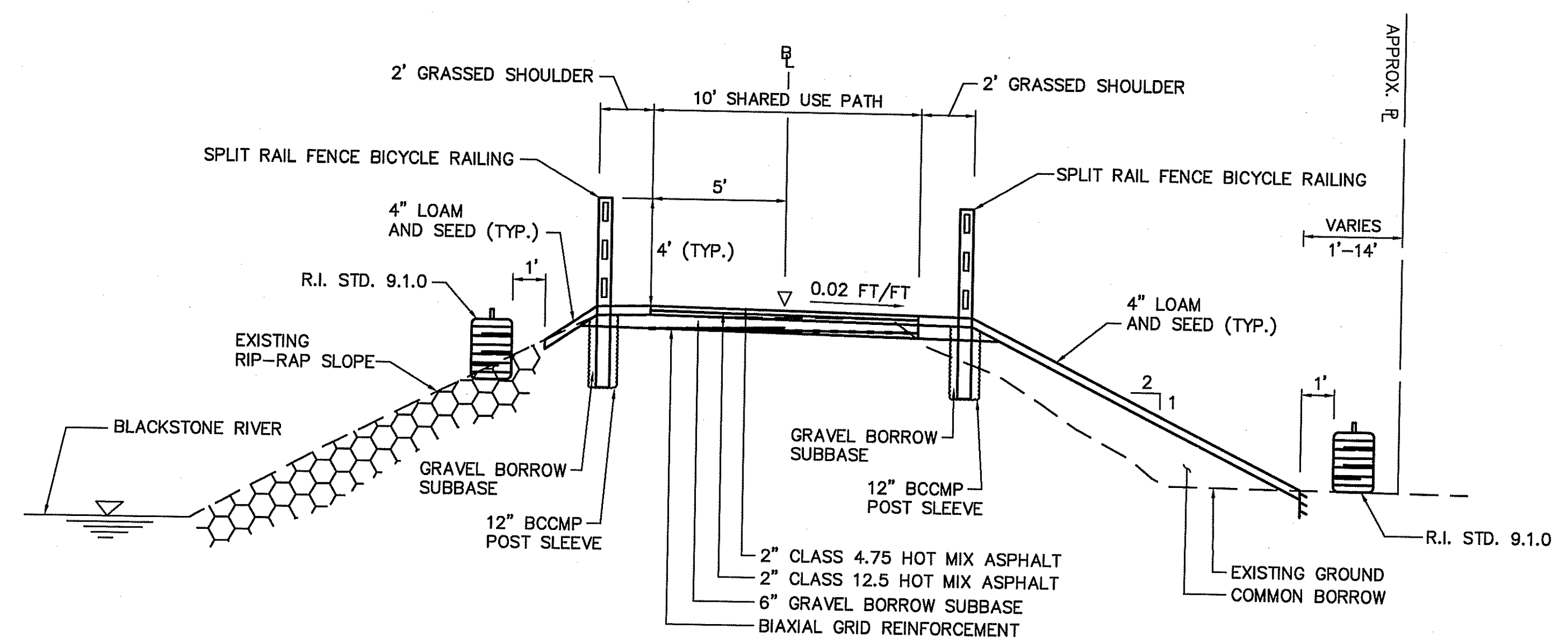


DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
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DATED DEC 6 2013 FILE # 13-0126
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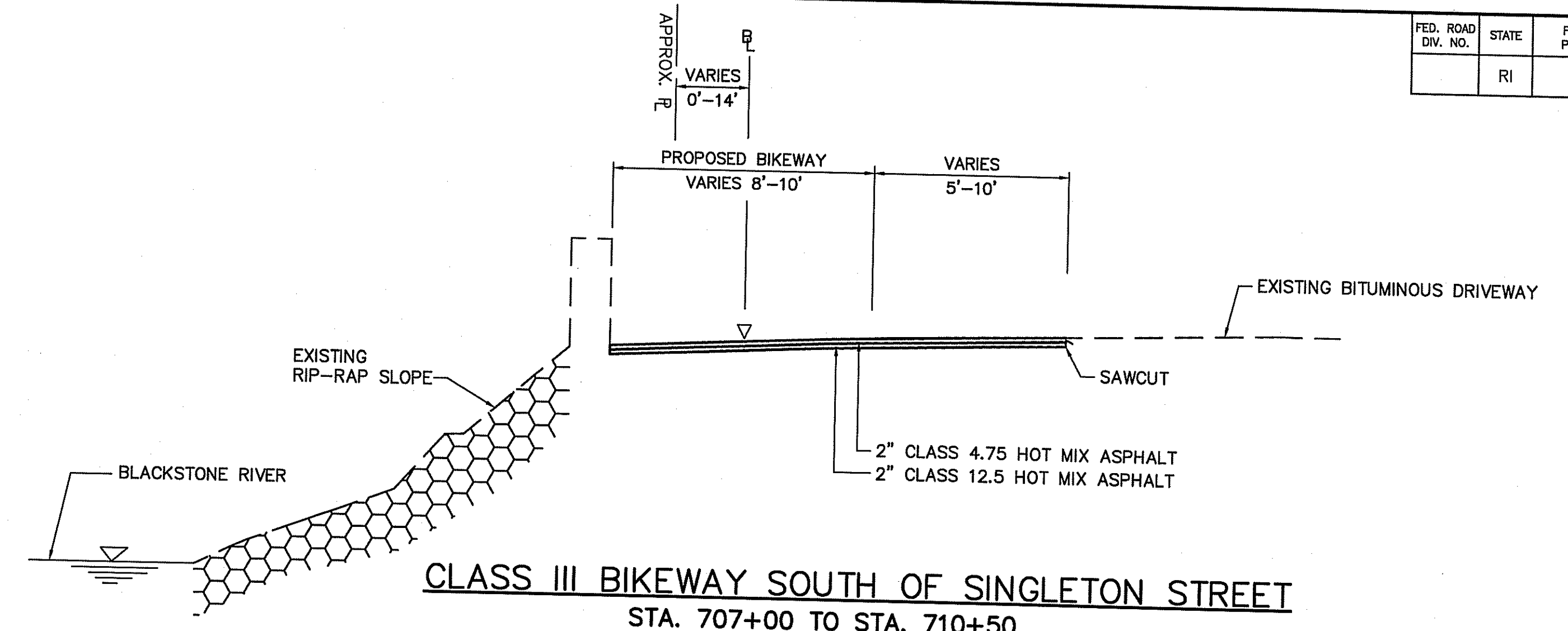
Martin D. Wood



REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
			BLACKSTONE RIVER BIKEWAY SEGMENT 8C	
			WOONSOCKET	TO N. SMITHFIELD
			JOB SPECIFIC PLAN SYMBOLS, LEGEND & NOTES	
			CHECKED BY _____ DATE _____ SCALE _____	

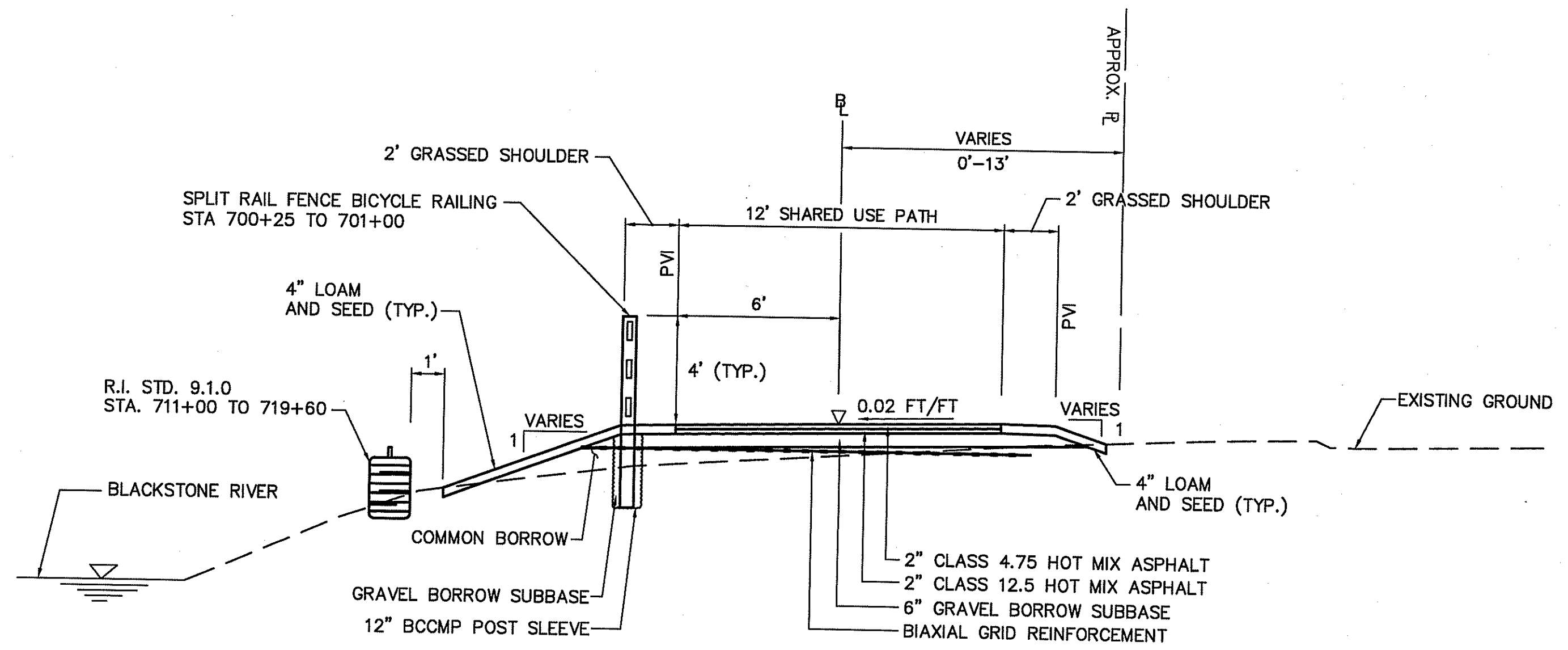


BIKEWAY ON TOP OF BERM
STA. 711+00 TO STA. 716+50

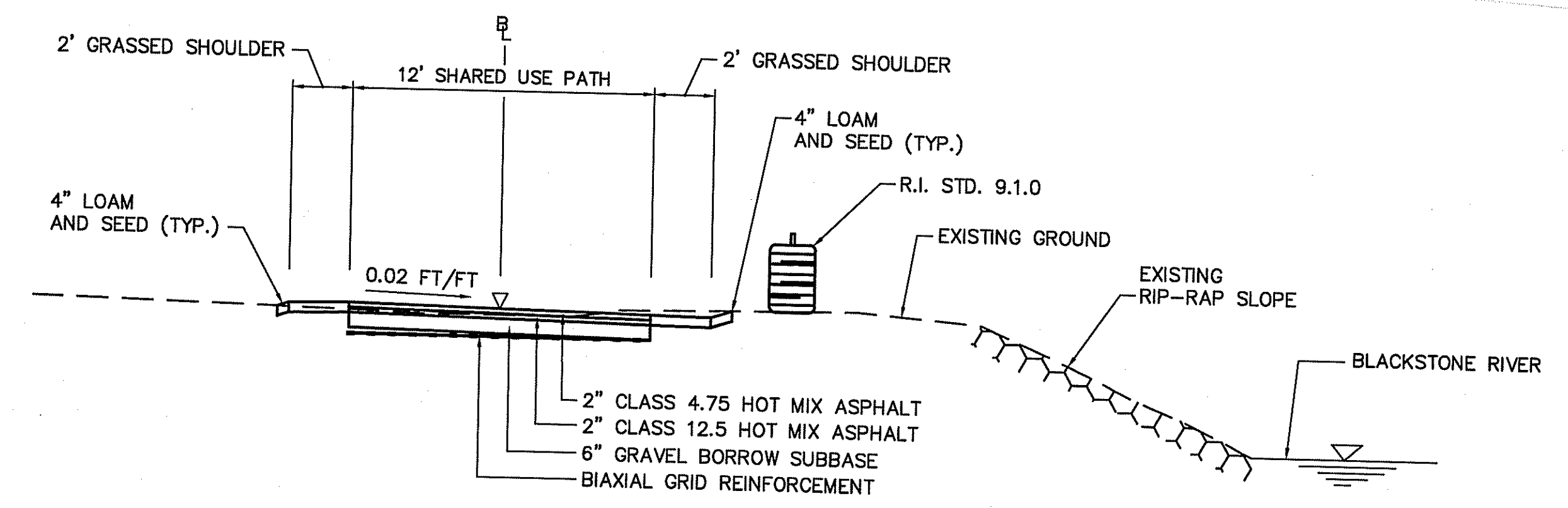


CLASS III BIKEWAY SOUTH OF SINGLETON STREET
STA. 707+00 TO STA. 710+50

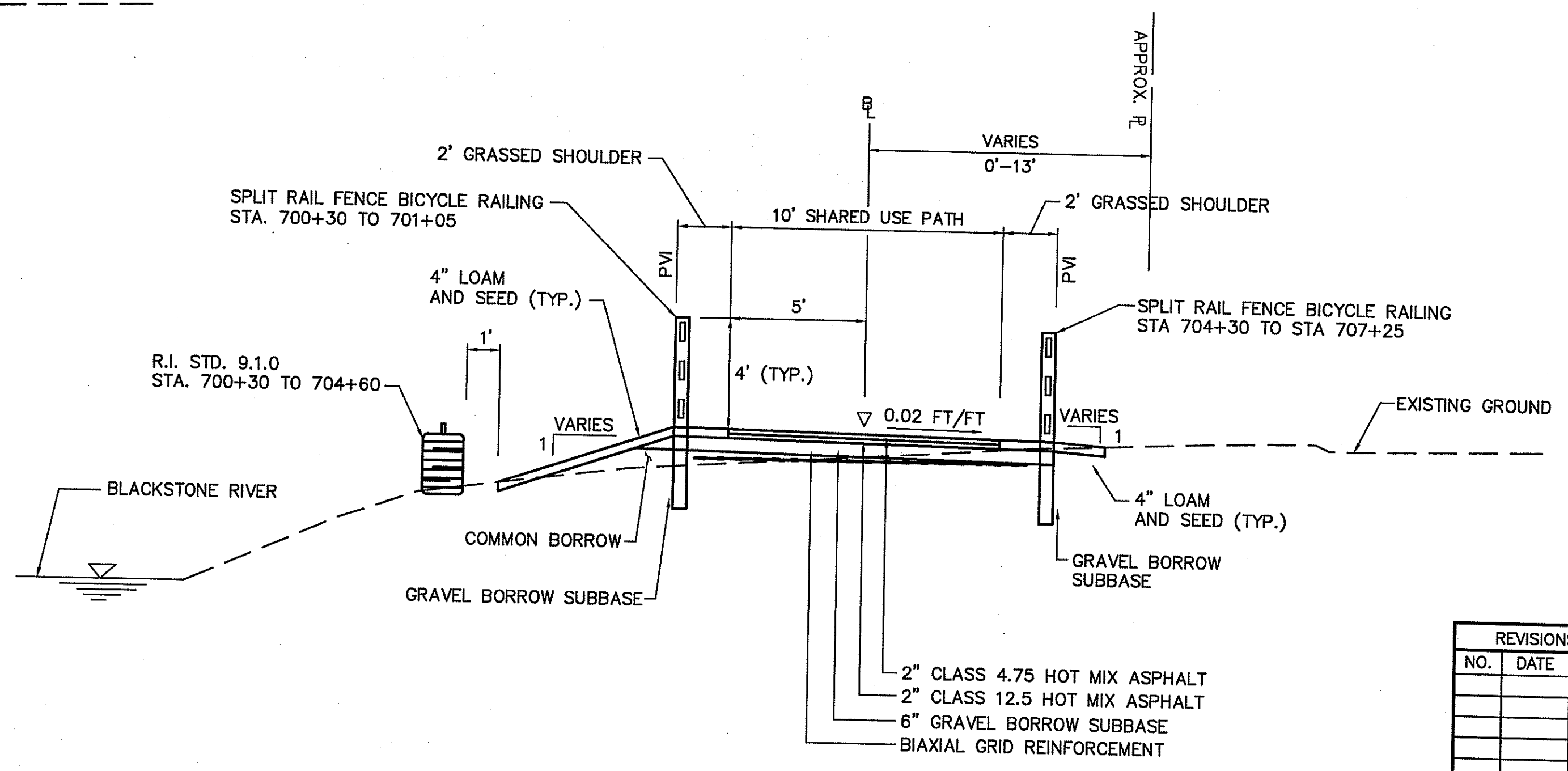
NOV 26 2013



BIKEWAY ON TOP OF BERM NORTH OF SINGLETON STREET
STA. 716+50 TO STA. 721+00



BIKEWAY ON TOP OF BERM WEST OF RIVER
STA. 723+50 TO STA. 732+77.96



BIKEWAY ON TOP OF BERM SOUTH OF SINGLETON STREET
STA. 700+00 TO STA. 707+00

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

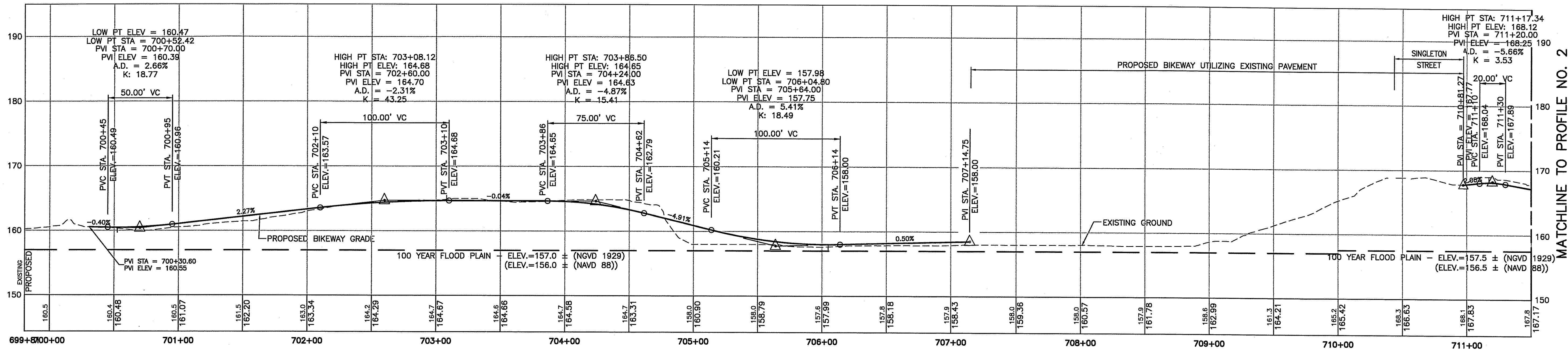
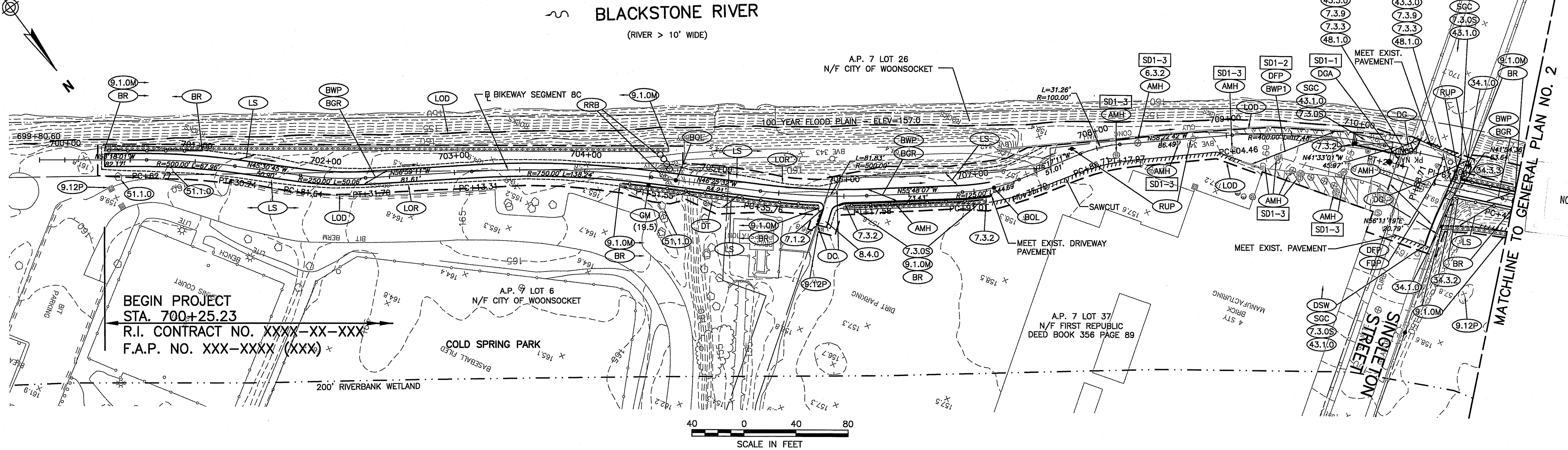
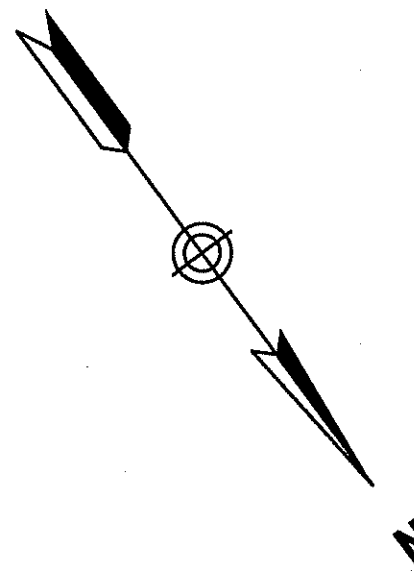
BLACKSTONE RIVER BIKEWAY
SEGMENT 8C

WOONSOCKET TO N. SMITHFIELD

TYPICAL SECTIONS

CHECKED BY _____ DATE _____ SCALE _____

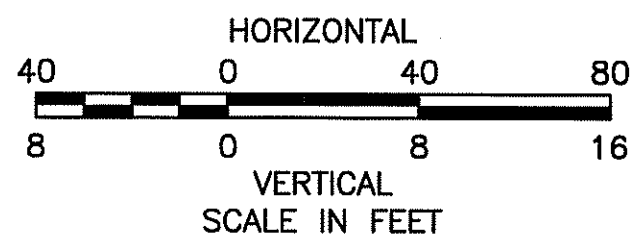
VHB VANASSE HANGEN BRUSTLIN, INC.
TRANSPORTATION LAND DEVELOPMENT
ENVIRONMENTAL SERVICES
PROVIDENCE, RHODE ISLAND



NOTES:

1. CONTRACTOR SHALL REUSE ALL STOCKPILED GRANITE CURB BEFORE PLACING NEW GRANITE CURB.

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

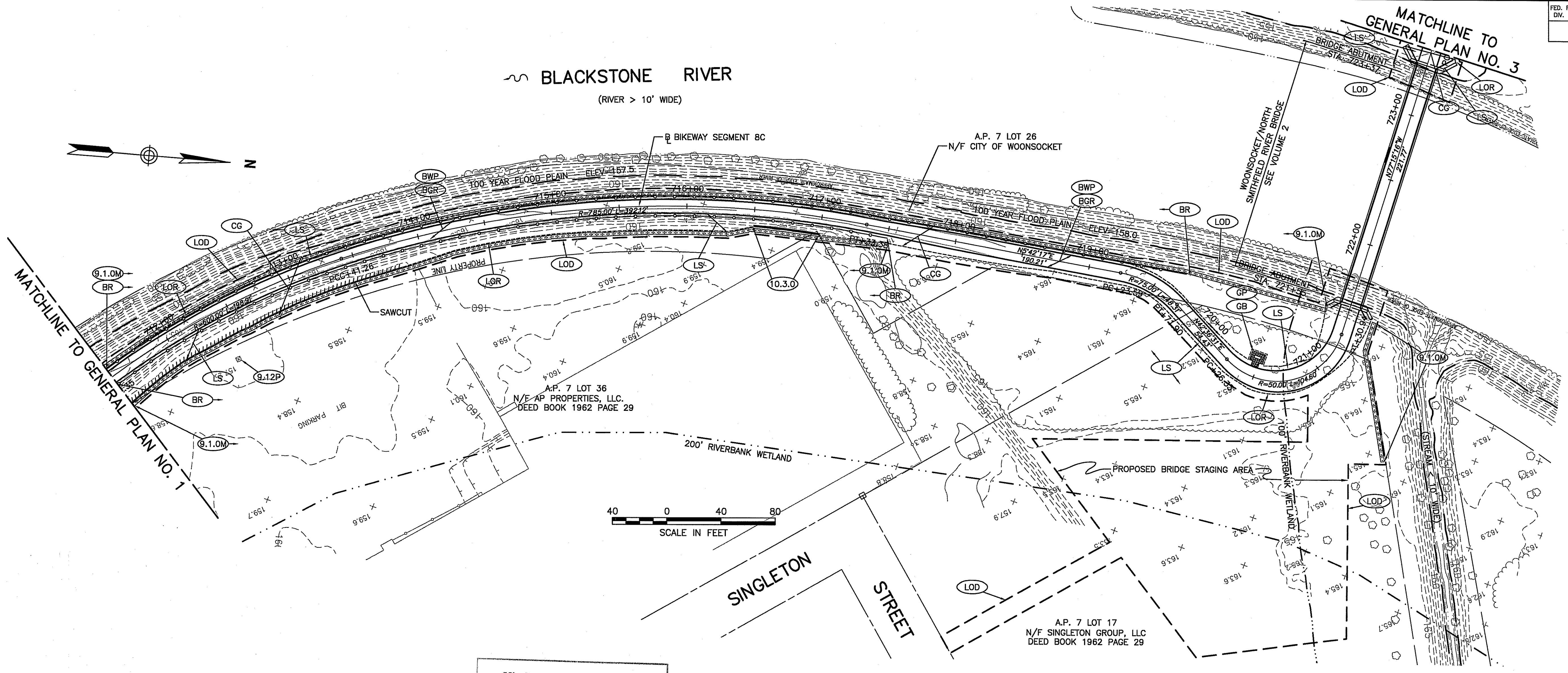
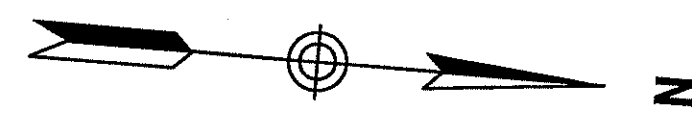


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VHB VANASSE HANGEN BRUSTLIN, INC.
TRANSPORTATION LAND DEVELOPMENT
ENVIRONMENTAL SERVICES
PROVIDENCE, RHODE ISLAND

REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
			BLACKSTONE RIVER BIKEWAY	
			SEGMENT 8C	
			WOONSOCKET	TO N. SMITHFIELD
			GENERAL PLAN & PROFILE NO. 1	
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BLACKSTONE RIVER
(RIVER > 10' WIDE)



NOV 26 2013



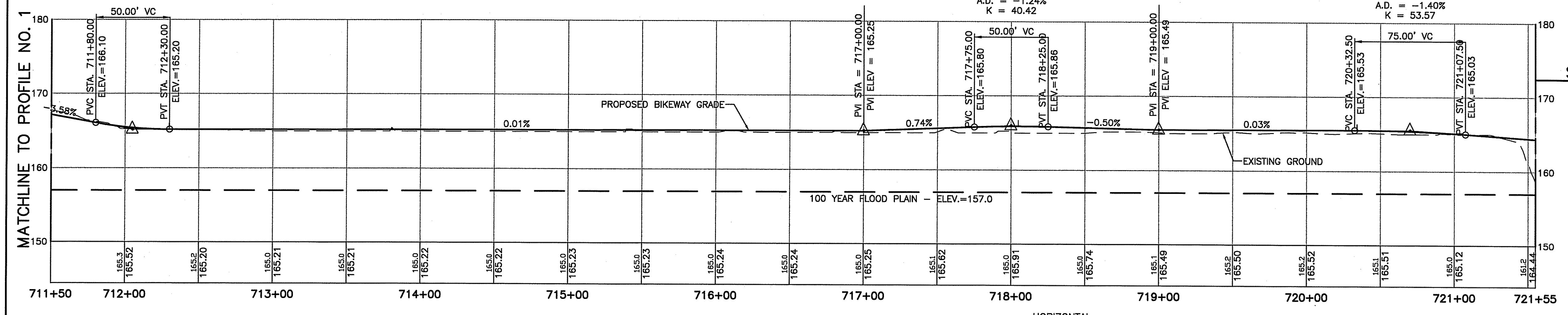
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LOW PT ELEV = 165.20
LOW PT STA = 712+29.86
PVI STA = 712+05.00
PVI ELEV = 165.20
A.D. = 3.59%
K = 13.91

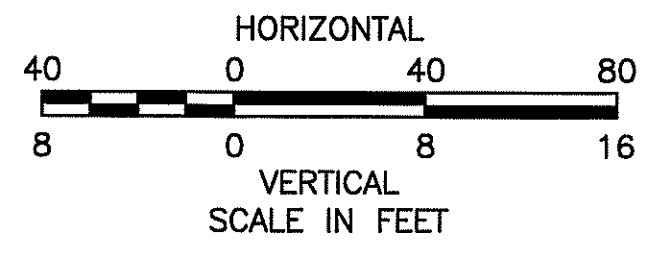
HIGH PT STA: 718+04.79
HIGH PT ELEV: 165.91
PVI STA = 718+00.00
PVI ELEV = 165.99
A.D. = -1.24%
K = 40.42

HIGH PT STA: 720+34.17
HIGH PT ELEV: 165.53
PVI STA = 720+70.00
PVI ELEV = 165.54
A.D. = -1.40%
K = 53.57

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SEE VOLUME 2 FOR
BRIDGE PROFILE



VHB VANASSE HANGEN BRUSTLIN, INC.
TRANSPORTATION LAND DEVELOPMENT
ENVIRONMENTAL SERVICES
PROVIDENCE, RHODE ISLAND

REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
			BLACKSTONE RIVER BIKEWAY SEGMENT 8C	
			WOONSOCKET	TO N. SMITHFIELD
			GENERAL PLAN & PROFILE NO. 2	
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CONSTRUCTION BASELINE COORDINATE DATA				
CURVE	DESCRIPTION	NORTHING	EASTING	
B-1	PC 700+62.77	337119.143	320972.229	
	CC	337520.033	321271.039	
	PT 701+30.74	337163.331	320920.663	
B-2	PC 701+81.64	337198.999	320884.351	
	CC	337020.649	320709.162	
	PT 702+31.70	337230.284	320845.372	
B-3	PC 703+13.31	337274.748	320776.939	
	CC	337903.653	321185.569	
	PT 704+51.55	337360.294	320668.597	
B-4	PC 705+35.76	337418.339	320607.589	
	CC	337056.099	320262.941	
	PT 706+17.58	337469.649	320543.967	
B-5	PC 706+91.01	337510.918	320483.237	
	CC	337407.531	320412.980	
	PT 707+35.70	337528.967	320442.614	
B-6	PC 707+86.71	337541.061	320383.056	
	CC	337638.210	320416.763	
	PT 708+17.97	337553.057	320384.332	
B-7	PC 709+04.46	337598.404	320290.684	
	CC	337939.016	320500.407	
	PT 710+21.94	337673.705	320201.058	
B-8	PC 711+42.35	337759.604	320152.009	
	CC	338160.381	320598.527	
	PCC 713+41.26	337926.756	320045.879	
B-9	PCC 713+41.26	337926.756	320045.879	
	CC	338222.605	320724.217	
	PT 717+33.38	338310.446	319987.814	

P.I. COORDINATE DATA		
P.I. NO.	NORTHING	EASTING
P.I. #1	337139.4823	320944.9425
P.I. #2	337216.6000	320866.4326
P.I. #3	337312.5140	320718.8149
P.I. #4	337446.6026	320577.8821
P.I. #5	337523.6128	320464.5561
P.I. #6	337544.7960	320377.7492
P.I. #7	337629.4259	320240.3018
P.I. #8	337839.2823	320080.4925
P.I. #9	338121.2554	319968.9144

BASELINE CURVE DATA				
CURVE #	RADIUS	LENGTH	TANGENT	DELTA
B-1	500.00	67.96	34.03	007° 47' 16"
B-2	250.00	50.06	25.12	011° 28' 26"
B-3	750.00	138.24	69.32	010° 33' 29"
B-4	500.00	81.83	41.00	009° 22' 35"
B-5	125.00	44.69	44.45	020° 29' 03"
B-6	100.00	31.26	31.13	017° 54' 29"
B-7	400.00	117.48	117.06	016° 49' 41"
B-8	600.00	198.91	100.37	018° 59' 40"
B-9	785.00	392.12	200.24	028° 37' 13"

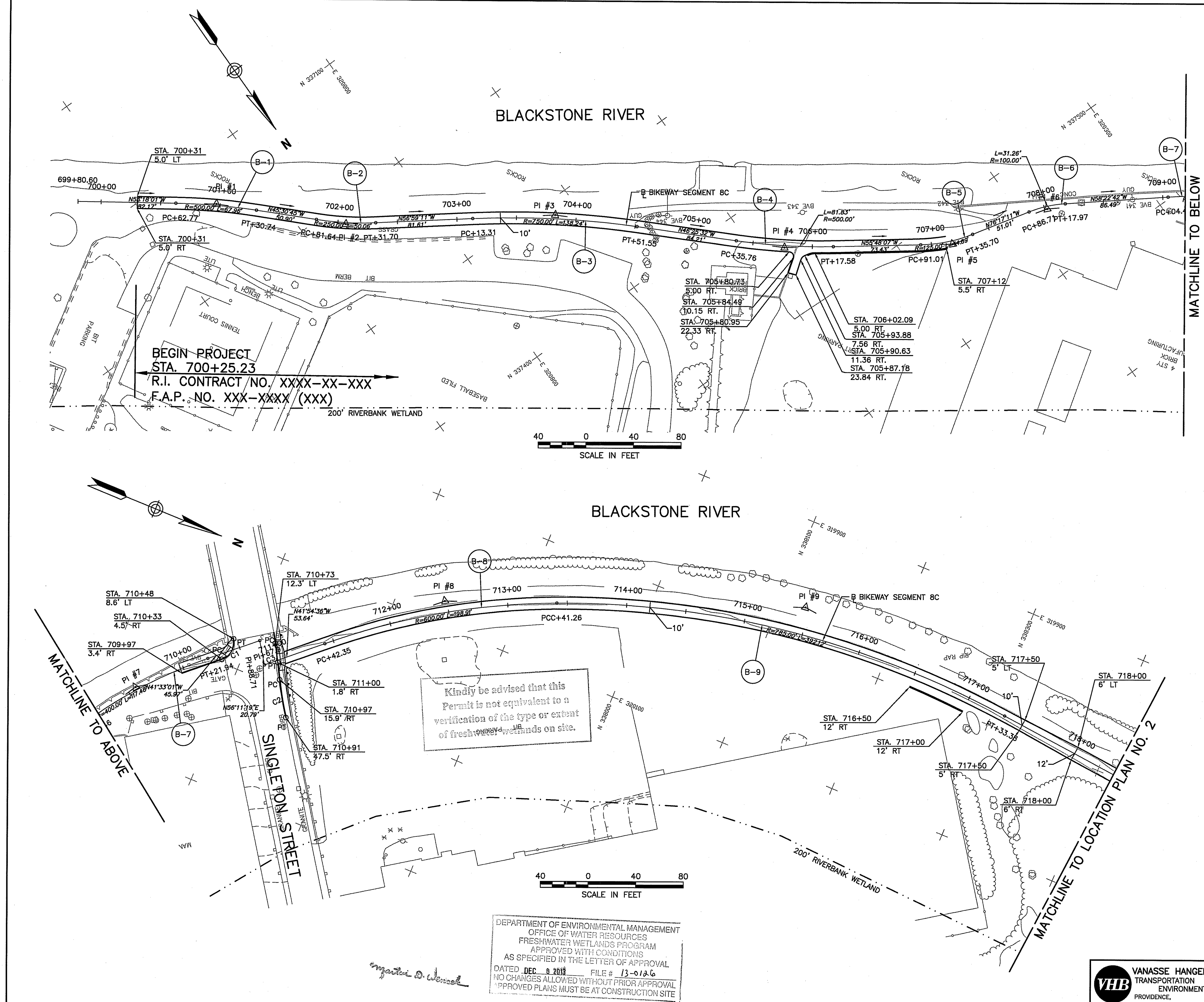
CURB CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	15.00	21.67	21.67	082° 47' 30"
C2	243.55	32.10	16.07	007° 33' 08"
C3	395.00	16.15	8.08	002° 20' 34"

REVISIONS NO. DATE BY	RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
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	WOONSOCKET	TO N. SMITHFIELD
	LOCATION PLAN NO. 1	
	CHECKED BY	DATE SCALE

VHB VANASSE HANGEN BRUSTLIN, INC.
TRANSPORTATION LAND DEVELOPMENT
ENVIRONMENTAL SERVICES
PROVIDENCE, RHODE ISLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
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Approved: D. Wenzel



THE MEADOWS PARK

END PROJECT
STA. 732+77.96
R.I. CONTRACT NO. XXXX-XX-XXX
F.A.P. NO. XXX-XXXX (XXX)

NOV 26 2013

BLACKSTONE RIVER

P.I. COORDINATE DATA		
P.I. NO.	NORTHING	EASTING
P.I. #10	338524.3925	320009.0028
P.I. #11	338646.6623	320121.4703
P.I. #12	338795.3446	319464.1504
P.I. #13	338859.0147	319869.7334
P.I. #14	338969.4137	319939.9563
P.I. #15	339257.6043	320079.8795
P.I. #16	339448.4140	320116.0272

BASELINE CURVE DATA				
CURVE #	RADIUS	LENGTH	TANGENT	DELTA
B-10	75.00	48.86	48.00	037° 19' 44"
B-11	50.00	104.60	86.54	119° 51' 48"
B-12	70.00	193.44	365.79	158° 19' 58"
B-13	100.00	84.18	44.76	048° 13' 48"
B-14	450.00	56.53	28.30	007° 11' 52"
B-15	703.71	183.29	92.17	014° 55' 24"
B-16	95.00	41.96	21.33	025° 18' 19"

CONSTRUCTION BASELINE COORDINATE DATA			
CURVE	DESCRIPTION	NORTHING	EASTING
B-10	PC 718+87.30	338500.368	320007.778
	CC	338493.467	320082.459
B-11	PT 719+36.17	338544.241	320027.260
	CC	338583.099	320063.003
B-12	PC 720+93.56	338665.716	320037.234
	CC	338419.671	319754.203
B-13	PT 725+46.15	338852.072	319825.511
	CC	338950.863	319810.003
B-14	PT 726+30.33	338896.621	319894.014
	CC	338945.202	319925.380
B-15	PT 727+44.69	338994.493	319952.984
	CC	339176.405	320040.339
B-16	PT 731+29.78	339350.045	320097.392
	CC	339427.460	320112.057
B-16	PT 732+50.52	339445.142	320018.717
	CC	339469.054	320110.659

CURB CURVE TABLE				
CURVE #	RADIUS	LENGTH	TANGENT	DELTA
C-4	45.00	94.14	77.73	119° 51' 48"
C-5	55.00	115.06	95.00	119° 51' 48"
C-6	63.00	141.35	130.77	128° 33' 18"
C-7	76.50	211.45	400.36	158° 21' 54"
C-8	24.00	22.65	12.25	054° 05' 14"
C-9	18.06	84.48	0.00	268° 02' 46"
C-10	24.00	16.26	8.45	038° 48' 34"
C-11	35.00	26.87	14.13	043° 58' 49"
C-12	10.00	18.67	13.50	106° 57' 38"
C-13	255.00	32.56	16.30	007° 18' 59"
C-14	245.00	31.28	15.66	007° 18' 59"

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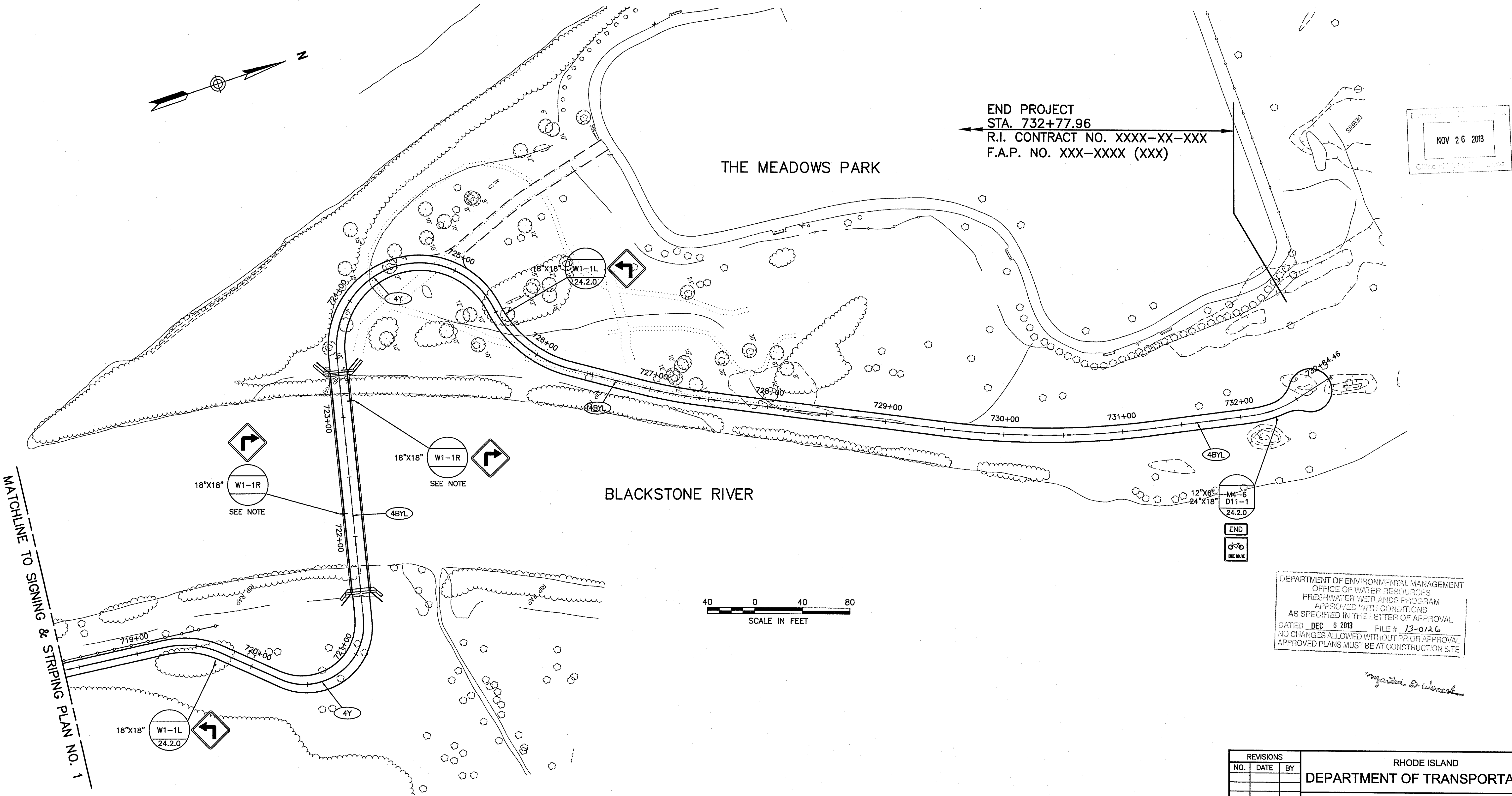


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TRANSPORTATION LAND DEVELOPMENT
ENVIRONMENTAL SERVICES
PROVIDENCE, RHODE ISLAND

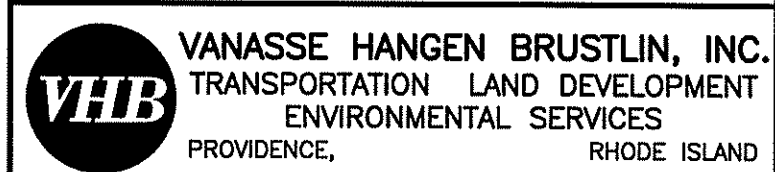
REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
			BLACKSTONE RIVER BIKEWAY	
			SEGMENT 8C	
			WOONSOCKET	TO N. SMITHFIELD
			LOCATION PLAN NO. 2	
			CHECKED BY	DATE SCALE

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI			13	25

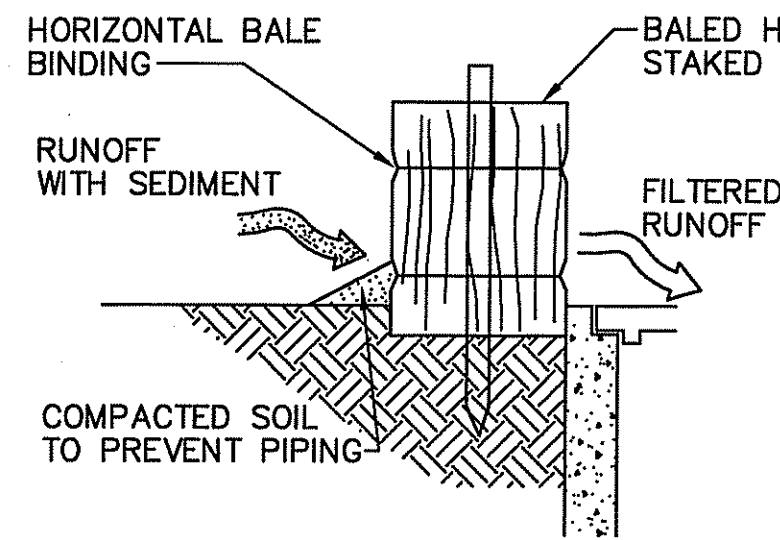
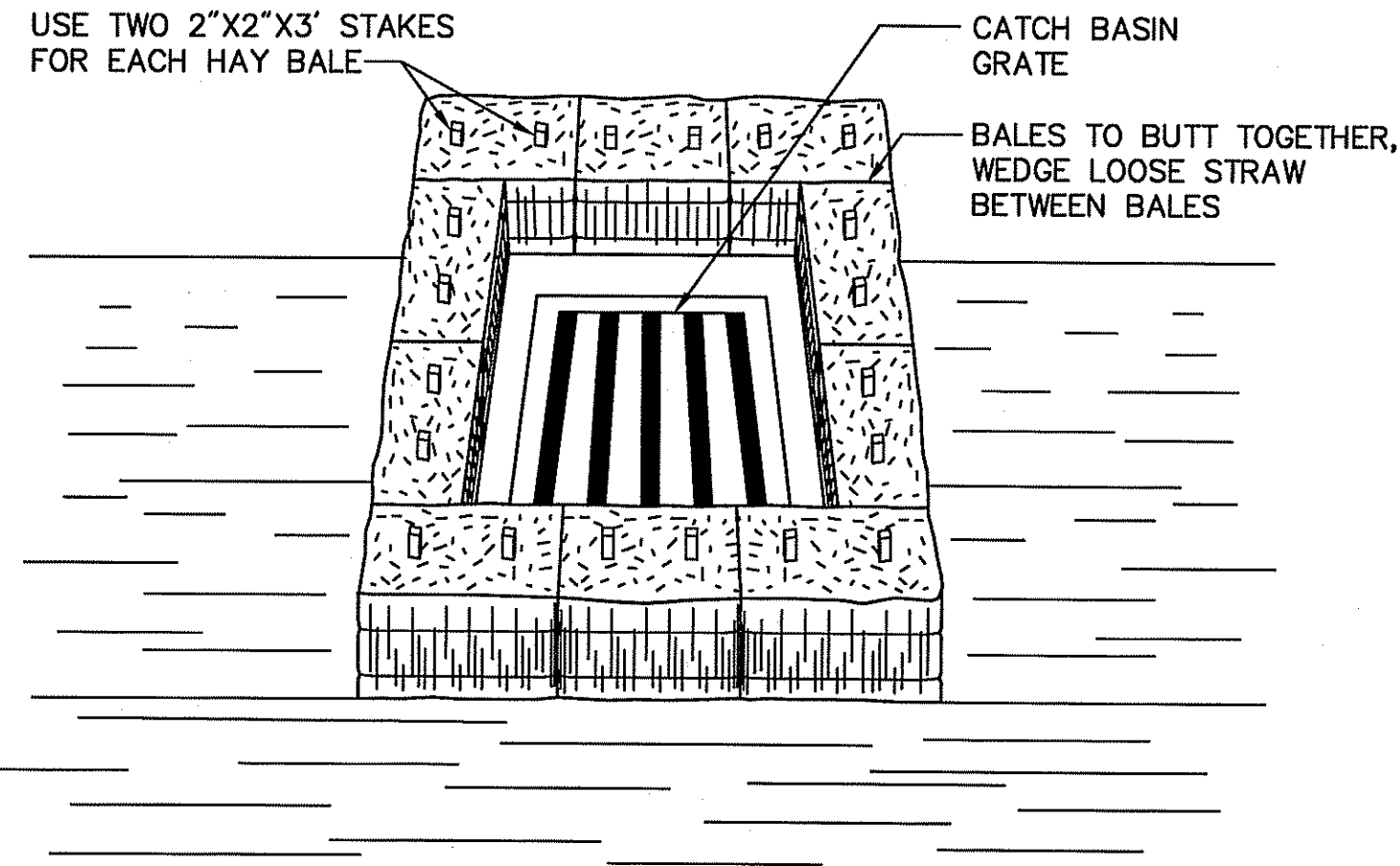


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NOTES
SEE VOLUME 2 FOR ANCHORAGE DETAILS.



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			SEGMENT 8C	
			WOONSOCKET	TO N. SMITHFIELD
			SIGNING & STRIPING	
			PLAN NO. 2	
			CHECKED BY	DATE SCALE



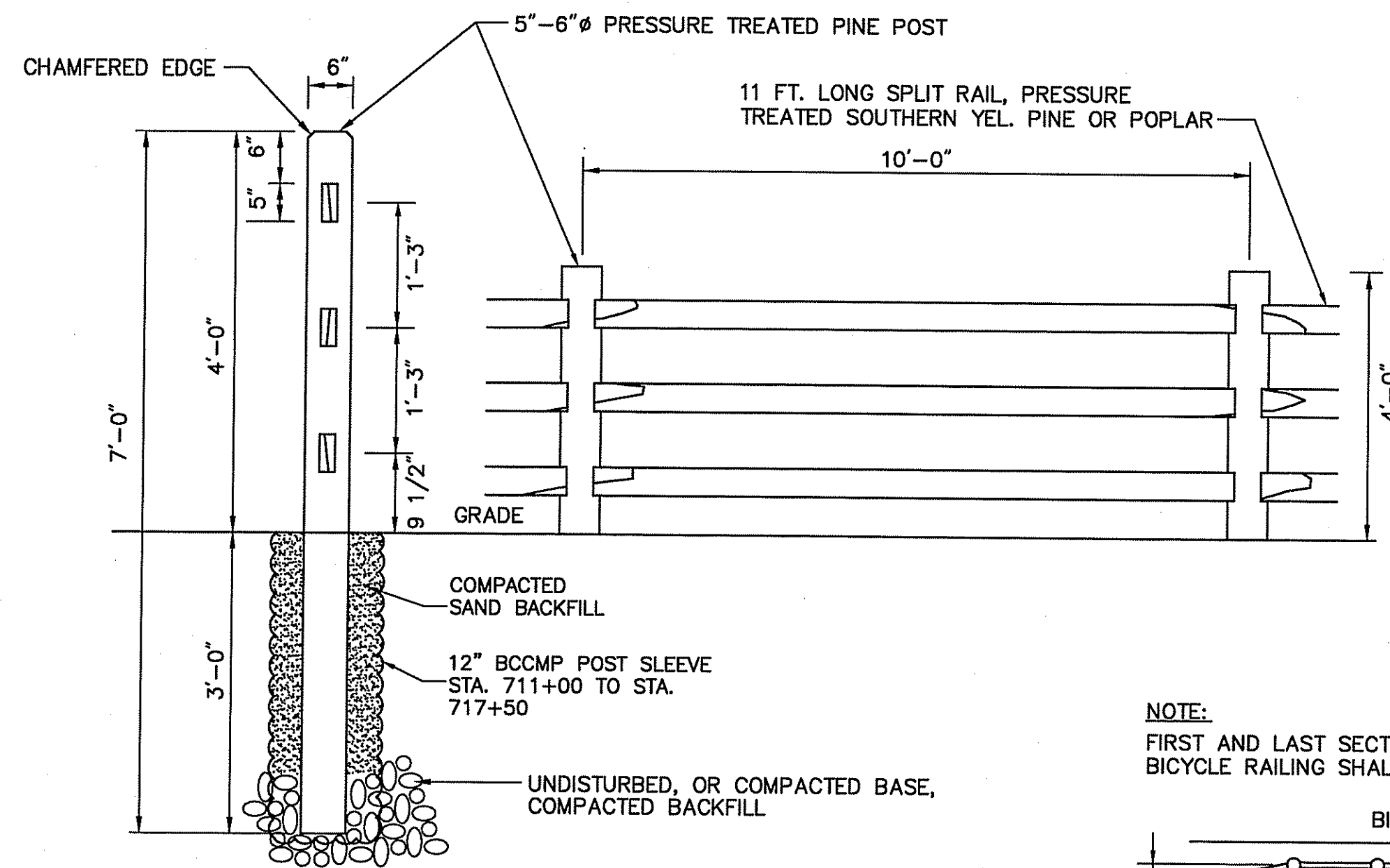
- NOTES:
- 1: ENCLOSE STRUCTURE WITH HAY BALES IMMEDIATELY AFTER CONSTRUCTION. MAINTAIN UNTIL REMOVAL IS AUTHORIZED BY ENGINEER.
 - 2: IF GRATE IS AGAINST AN EXISTING CURB THEN HAY BALES ARE TO BE PLACED AROUND THREE SIDES OF THE GRATE ONLY.
 - 3: WHEN STAKES MUST BE DRIVEN INTO PAVEMENT THE CONTRACTOR SHALL USE METAL STAKES OR DRILL HOLES AND INSTALL WOOD STAKES.
 - 4: BALE STRINGS SHALL BE PARALLEL TO BUT NOT RESTING ON THE GROUND.

Baled Hay Catch Basin Inlet Protection

S-1309RIREV

(9.12P)

N.T.S.

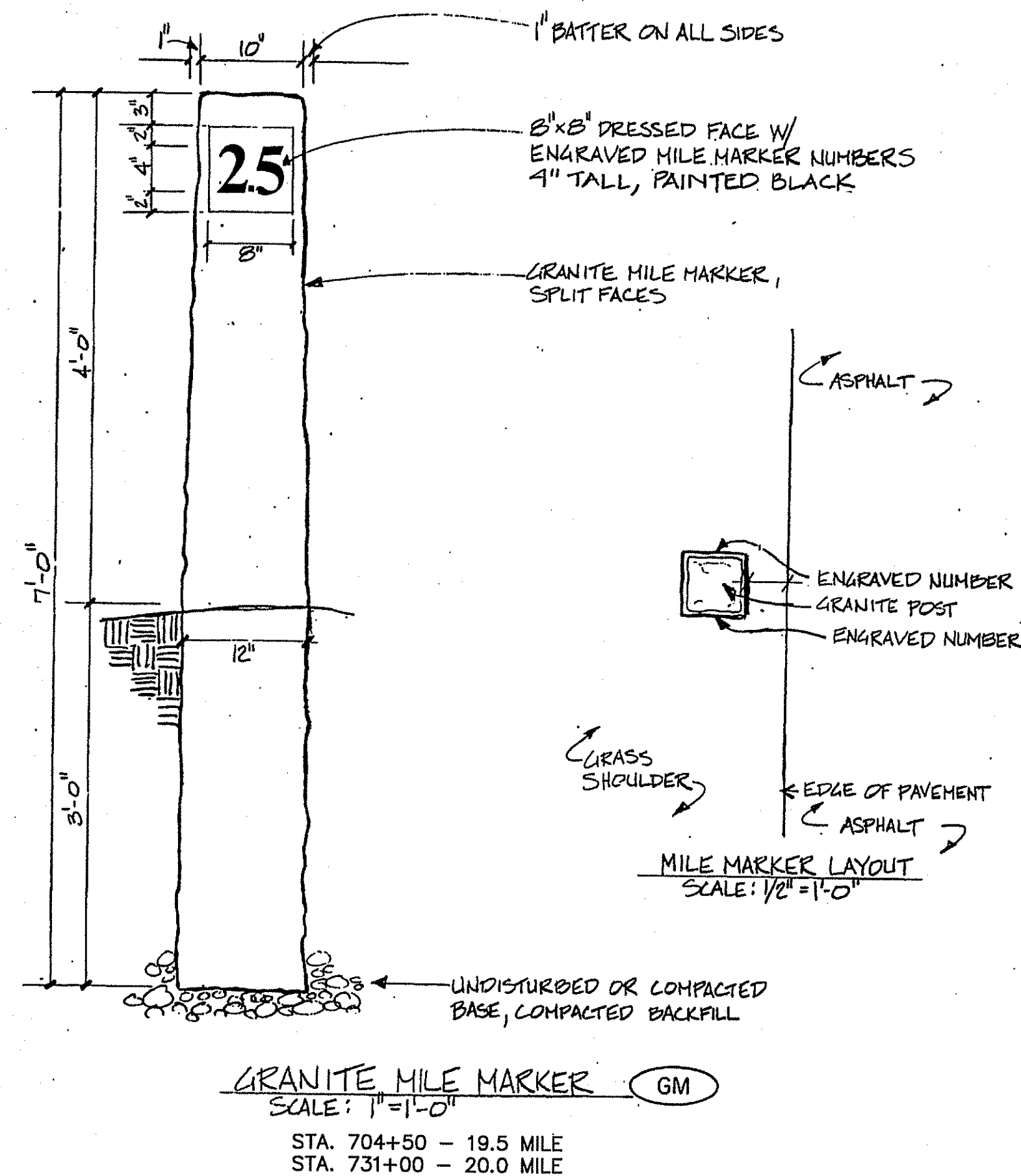
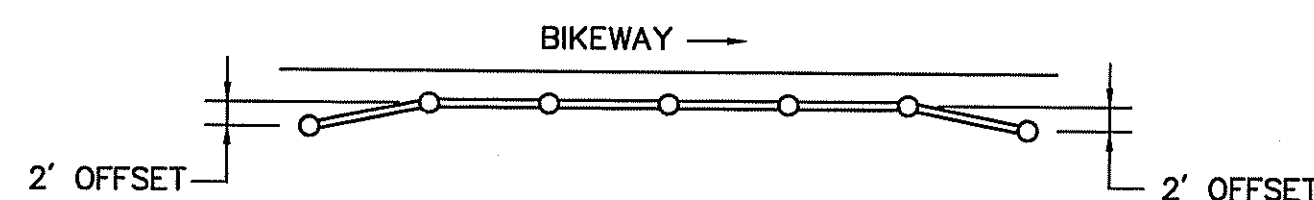


FENCE POST
SCALE: 3/4" = 1'-0"

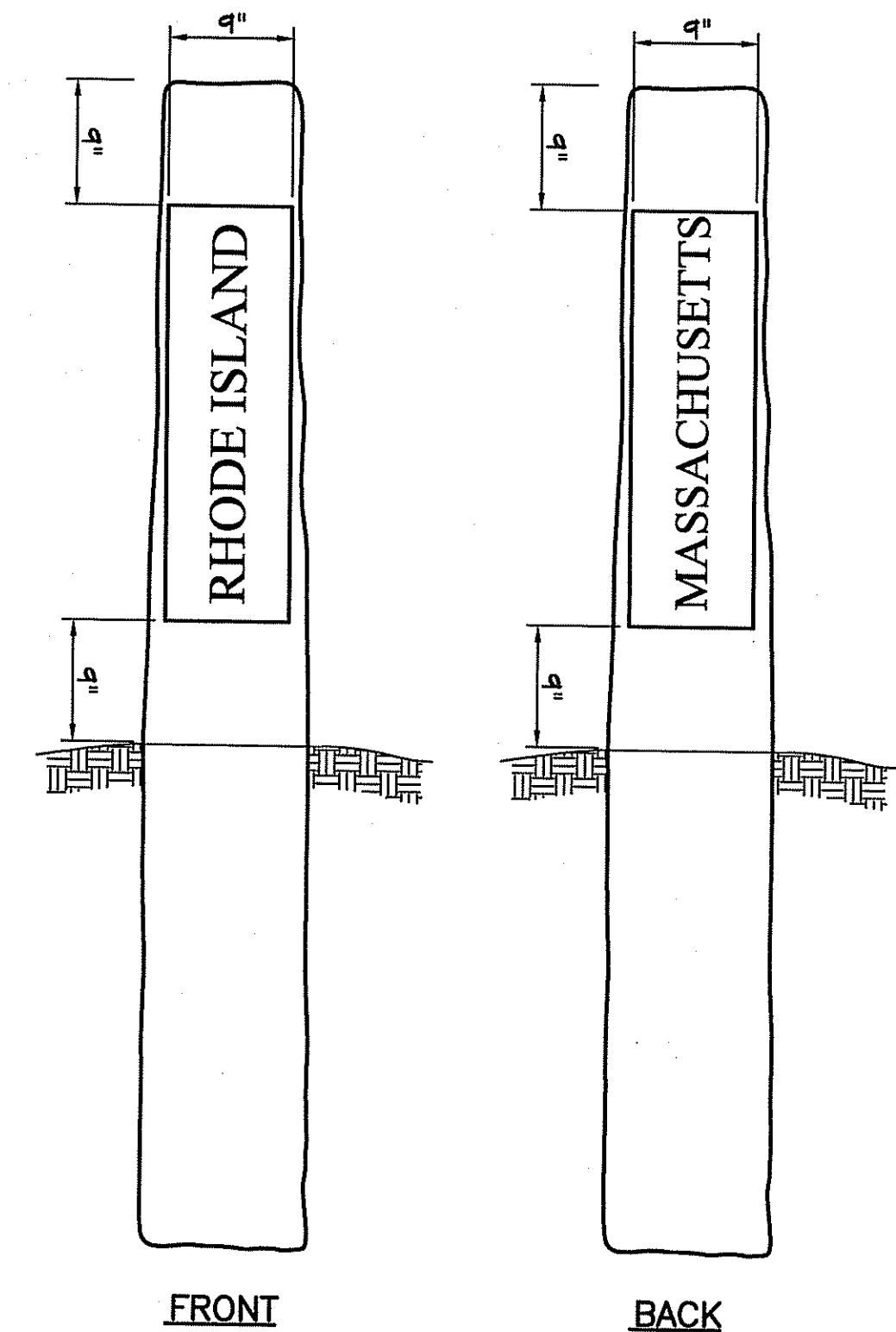
SPLIT RAIL FENCE BICYCLE RAILING

SCALE: 1/2" = 1'-0"

NOTE:
FIRST AND LAST SECTION OF A LINE OF SPLIT RAIL FENCE
BICYCLE RAILING SHALL BEGIN/END WITH A 2' OFFSET TAPER



GRANITE MILE MARKER (GM)
SCALE: 1" = 1'-0"
STA. 704+50 - 19.5 MILE
STA. 731+00 - 20.0 MILE



STATE ID GRANITE BOLLARD (SID)

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Margaret D. Wozniak

REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
1	4/25/11	VHB	BLACKSTONE RIVER BIKEWAY SEGMENT 8C	
			WOONSOCKET	TO N. SMITHFIELD
DETAIL PLAN NO. 2				
			CHECKED BY	DATE SCALE

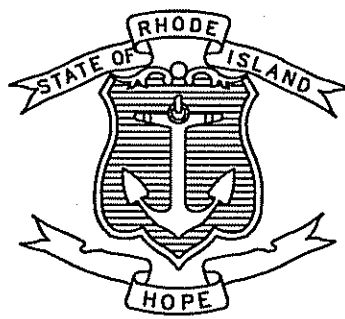
INDEX

VOLUME 1 - BIKEWAY
FOR BIKEWAY PLANS, SEE "VOLUME 1 - BIKEWAY"

VOLUME 2 - BRIDGE

SHEET NO.	DESCRIPTION
1	COVER
2	LIST OF ABBREVIATIONS
3	JOB SPECIFIC GENERAL NOTES 1
4	JOB SPECIFIC GENERAL NOTES 2
5	JOB SPECIFIC GENERAL NOTES 3
6	JOB SPECIFIC GENERAL NOTES 4
7	GENERAL PLAN AND LONGITUDINAL SECTION
8	PROFILE
9	FOUNDATION PLAN
10	FOUNDATION DETAILS (NOT INCLUDED)
11	EAST ABUTMENT PLAN AND ELEVATION (NOT INCLUDED)
12	WEST ABUTMENT PLAN AND ELEVATION (NOT INCLUDED)
13	ABUTMENT DETAILS (NOT INCLUDED)
14	MISCELLANEOUS DETAIL (NOT INCLUDED)
15	PREFABRICATED TRUSS SECTION (NOT INCLUDED)
16	PREFABRICATED TRUSS DETAILS (NOT INCLUDED)
17	RAILING DETAILS 1 (NOT INCLUDED)
18	RAILING DETAILS 2 (NOT INCLUDED)
19	RAILING DETAILS 3 (NOT INCLUDED)

STATE OF RHODE ISLAND



DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED

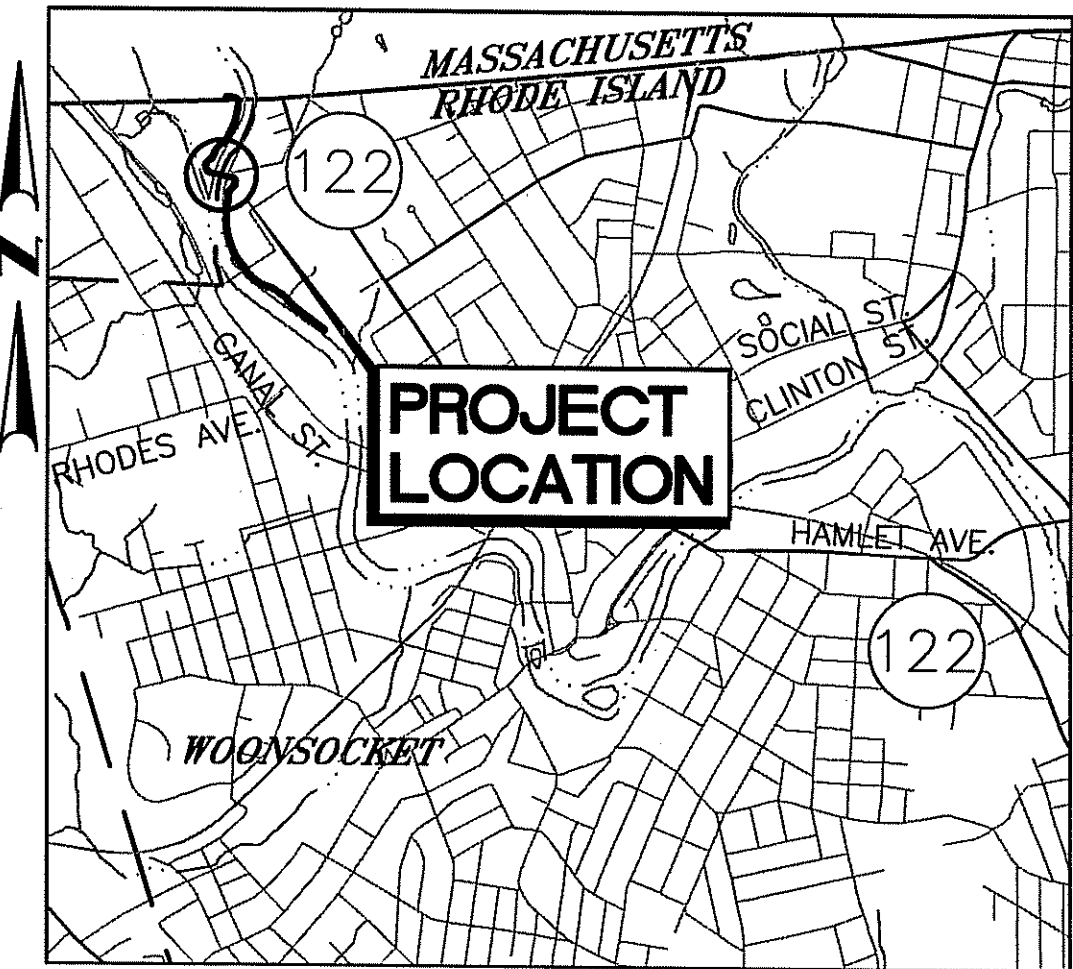
BLACKSTONE RIVER BIKEWAY
SEGMENT 8C

WOONSOCKET/NORTH SMITHFIELD RIVER BRIDGE
BRIDGE NO. 1054
VOLUME 2

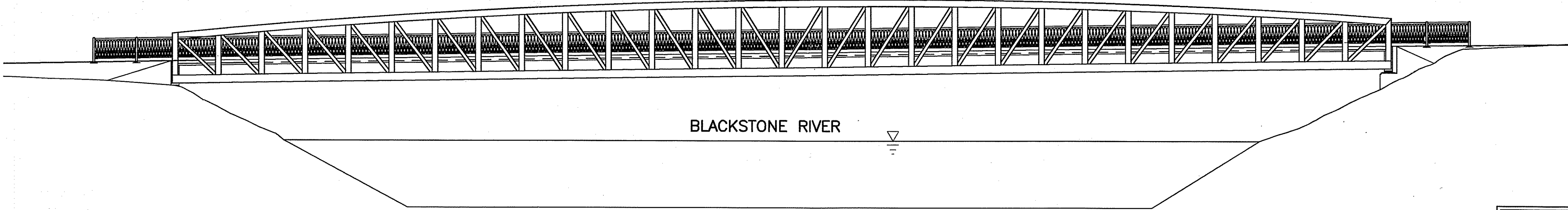
CITY OF WOONSOCKET/TOWN OF NORTH SMITHFIELD
COUNTY OF PROVIDENCE

R.I. CONTRACT NO. 2013-XX-XXX R.I. FEDERAL AID PROJECT NO. XXX-XXXX (XXX)
LENGTH X.XX MILES

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI		2013	1	19



LOCATION PLAN



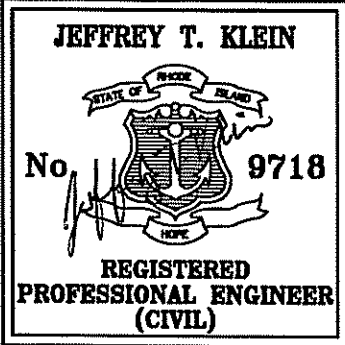
BLACKSTONE RIVER

ELEVATION
SCALE: 1" = 10'

BASE OF LEVELS
NGVD 1929

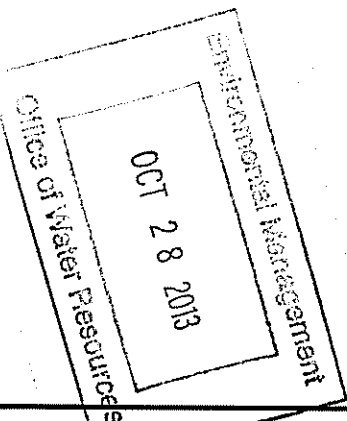
SCALES OF DRAWINGS
AS SHOWN

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC. 6 2013 FILE # 13-0126
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10-25-13

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS
SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD
SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED 2010,
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.



REVISED
PERMIT SUBMISSION
OCTOBER 2013

R.I. DEPARTMENT OF TRANSPORTATION

APPROVED

DEPUTY CHIEF ENGINEER
APPROVED

CHIEF ENGINEER
APPROVED

DIRECTOR

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR

DATE

DATE

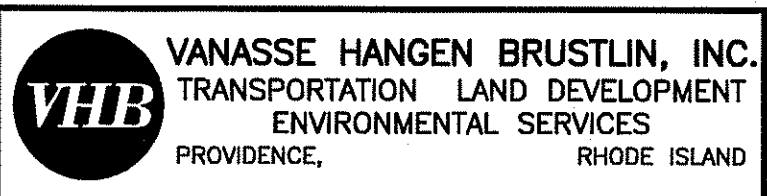
DATE

DATE

Contract Number 2013-XX-XXX

Number of Sheet 1

Total Sheets 19

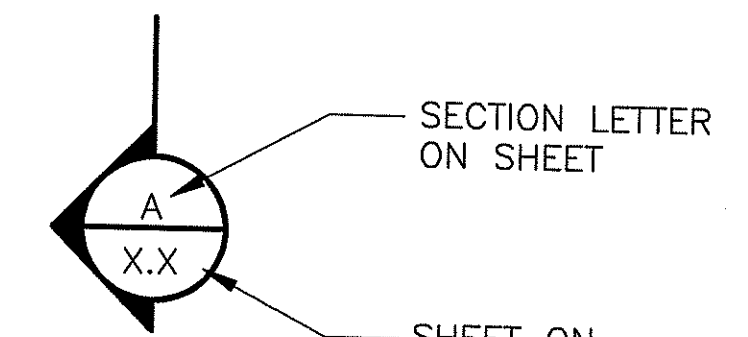


LIST OF ABBREVIATIONS

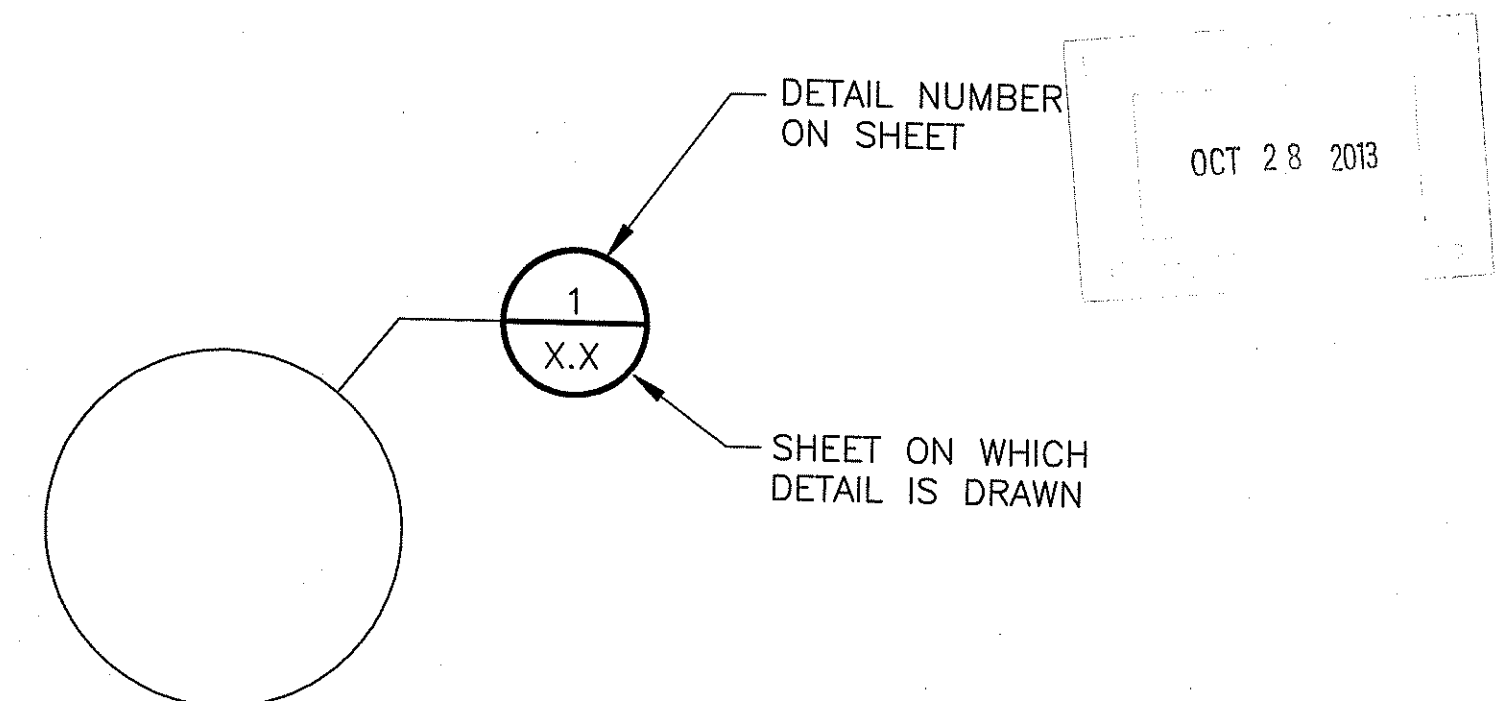
A	
ABANDONED	= ABD.
ABUTMENT	= ABUT.
ALTERNATE	= ALT.
AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	= AASHTO
ANCHOR BOLT	= A.B.
APPROVED	= APPD.
APPROXIMATE	= APPROX.
AT	= @
AVERAGE	= AVG.
B	
BASELINE OF CONSTRUCTION	= B
BACK TO BACK	= B TO B
BEAM	= BM.
BEARING	= BRG.
BEND POINT	= B.P.
BETWEEN	= BTWN
BITUMINOUS	= BIT.
BITUMINOUS COATED	
CORRUGATED METAL PIPE	= B.R.C.M.P.
BUILDING	= BLDG.
BUILDING LINE	= B.L.
BOLT CIRCLE	= B.C.
BOTH SIDES	= B.S.
BOTTOM	= BOT.
BOTTOM OF FOOTING	= B.O.F.
C	
CENTER TO CENTER	= C TO C, C/C
CENTERLINE	= C
CIRCLE	= CIR.
CONTROLLED LOW STRENGTH MATERIAL	= CLSM
CLEARANCE	= CLR.
COLUMN	= COL.
CONCRETE	= CONC.
CONDUIT	= COND.
CONNECTION	= CONN.
CONSTRUCTION	= CONST.
CONTINUOUS	= CONT.
CONTRACTION	= CONTR.
CORRUGATED METAL PIPE	= CMP
COUNTERSINK	= CSK.
COUPLING	= CPLG.
D	
DETAIL	= DET.
DIAGONAL	= DIAG.
DIAPHRAGM	= DIAPHM.
DIAMETER	= DIA.
DIMENSION	= DIM.
DRAIN	= DR.
DRAWING	= DWG.
DRILL & GROUT	= D&G
E	
EACH	= EA.
EACH FACE	= E.F.
EACH WAY	= E.W.
EAST	= E.
EASTBOUND	= EB
ELECTRIC	= ELEC.
ELEVATION	= EL.
EXISTING	= EXIST.
EXPANSION	= EXP.
EQUAL	= EQ.
F	
FABRICATE	= FAB.
FACE TO FACE	= F TO F
FAR FACE	= F.F.
FAR SIDE	= F.S.
FLANGE	= FLG.
FLAT HEAD	= F.H.
FOOTING	= FTG.
FOUNDATION	= FDN.
FURNISH, FABRICATE & ERECT	= F.F. & E.
G	
GAGE	= GA.
GALVANIZED	= GALV.
GRADE	= GR.
GRATING	= GRTG.
GROUND	= GND.
H	
HEIGHT	= HGT., HT.
HEXAGON	= HEX.
HIGH STRENGTH	= HS
HOLLOW STRUCTURAL SECTION	= HSS
HORIZONTAL	= HORIZ.

I	
INCH	= IN.
INFORMATION	= INFO.
INSIDE DIAMETER	= I.D.
INTELLIGENT TRANSPORTATION	
SYSTEMS	= I.T.S.
INVERT	= INV.
J	
JOINT	= JT.
L	
LEFT	= LT.
LENGTH	= LGTH.
LIGHTING	= LTG.
LONG	= LG.
LONGITUDINAL	= LONGIT.
M	
MATERIAL	= MATL.
MAXIMUM	= MAX.
MEAN HIGH WATER	= M.H.W.
MEAN LOW WATER	= M.L.W.
MEAN SEA LEVEL	= M.S.L.
MINIMUM	= MIN.
MISCELLANEOUS	= MISC.
N	
NEAR FACE	
NEAR SIDE	= N.F.
NORTH	= N.S.
NORTHBOUND	= N.
NOT IN CONTRACT	= NB
NOT TO SCALE	= N.I.C.
NUMBER	= N.T.S.
O	
ON CENTER	= NO.
OPENING	= O.C.
OUTSIDE DIAMETER	= OPNG.
OPTIONAL	= O.D.
OVERHEAD WIRE	= OPT.
OPPOSITE	= O.H.W.
P	
PARALLEL	= OPP.
PEDESTRIAN	= PRL.
PLATE	= PED.
POINT OF VERTICAL CURVATURE	= P
POINT OF VERTICAL TANGENCY	= P.V.C.
POINT	= P.V.T.
POINT OF CURVATURE	= PT.
POINT OF TANGENCY	= PC
POLYVINYL CHLORIDE	= PT
POUNDS PER SQUARE INCH	= PVC
PRECAST CONCRETE INSTITUTE	= P.S.I.
PRECAST	= PCI
PRESTRESSED	= P/C
PROFILE GRADE LINE	= P/S
PROPOSED	= PGL
R	
RADIUS	= PROP.
RAILROAD	= RAD., R
REHABILITATION	= RR.
REINFORCED CONCRETE PIPE	= REHAB.
REINFORCING	= RCP
RELOCATED	= REINF.
REMOVE & DISPOSE	= RELOC.
REMOVE & RESET	= R&D
REQUIRED	= R&R
RETAINING	= REQD.
RHODE ISLAND	= RET.
RIGHT	= R.I.
RIGID STEEL CONDUIT	= RT.
ROAD WEATHER INFORMATION SYSTEM	= R.S.C.
S	
SECTION	= RWIS
SCHEDULE	= SECT.
SCHEMATIC	= SCH.
SHEET	= SCHEM.
SIMILAR	= SH., SHT.
SOLDIER PILE & LAGGING	= SIM.
SOUTH	= SPL
SOUTHBOUND	= S.
SPACES	= SB
SPACING	= SP.
STANDARD	= SPC.
STAY-IN-PLACE	= STD.
STANDARD	= SIP
STATION	= STD.
STAINLESS STEEL	= STA.
STIFFENER	= S.S.
SUPPORT OF EXCAVATION	= STIFF.
SYMMETRICAL	= SOE, S.O.E.
	= SYM.

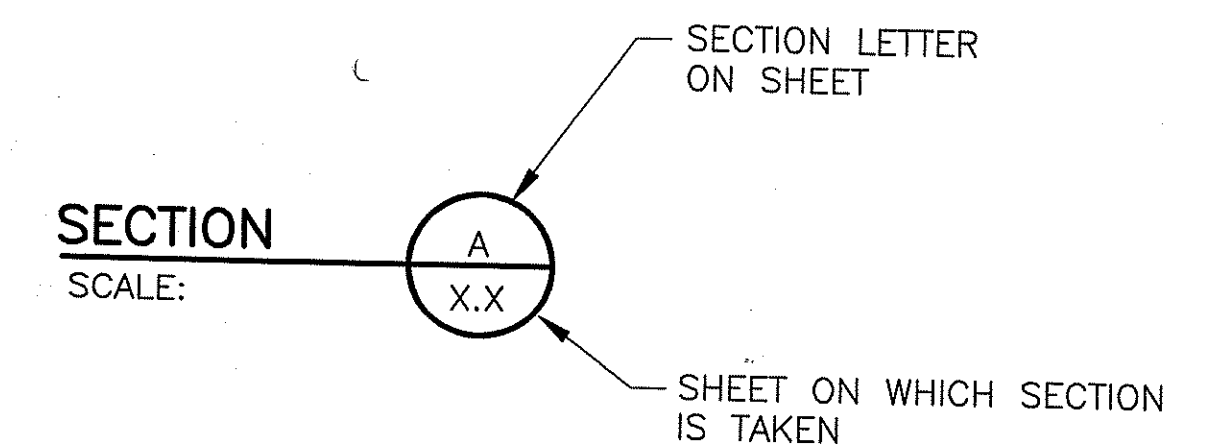
<u>T</u>	
TANGENT	= TAN.
TEMPORARY	= TEMP.
TOP	= T
TOP AND BOTTOM	= T&B
TOP OF WALL	= T.O.W.
TRANSVERSE	= TRANS
TUBE SECTION	= TS
TYPICAL	= TYP.
<u>U</u>	
UNLESS NOTED OTHERWISE	= U.N.O.
<u>V</u>	
VARIES	= VAR.
VERTICAL CURVE	= V.C.
VERTICAL	= VERT.
<u>W</u>	
WELDED WIRE FABRIC	= W.W.F.
WEST	= W.
WESTBOUND	= WB
WITH	= W/
WIDE FLANGE	= W
WORKING POINT	= W.P.



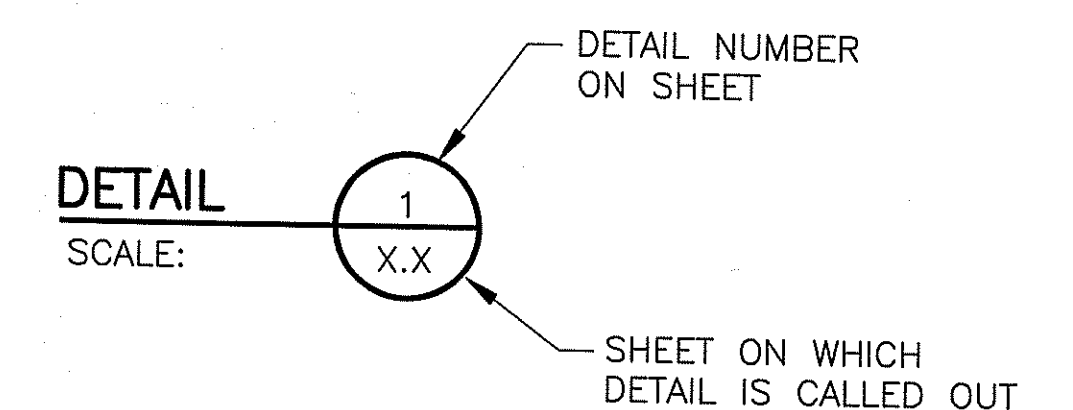
SECTION MARK



DETAIL MARK



SECTION TITLE



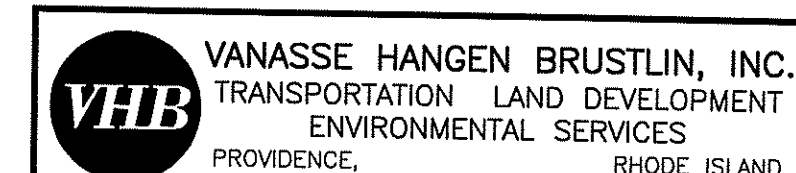
DETAIL TITLE

SECTION & DETAIL DESIGNATIONS

[illegible]

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
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Wm. A. Daniel



GENERAL NOTES

1. ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:

- * THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED 2010 INCLUDING ALL REVISIONS OR SUPPLEMENTS UP TO YEAR 2012.
- * THE 2007 EDITION OF THE STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION LRFD BRIDGE DESIGN MANUAL, INCLUDING ALL REVISIONS OR SUPPLEMENTS UP TO YEAR 2012.
- * 2012 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, INCLUDING LATEST INTERIMS UP TO YEAR 2012.
- * THE SPECIFICATIONS ACCOMPANYING THESE PLANS.

IN CASE OF CONFLICT, THE SPECIAL PROVISIONS OF THE SPECIFICATIONS ACCOMPANYING THESE PLANS SHALL GOVERN.

2. DIMENSIONS, STATIONS, AND ELEVATIONS ARE SHOWN TO THE NEAREST ONE-HUNDREDTH OF A FOOT OR ONE-EIGHTH OF AN INCH, EXCEPT STRUCTURAL STEEL DIMENSIONS WHICH ARE TO THE NEAREST ONE-SIXTEENTH OF AN INCH.
3. ANGLES ARE SHOWN TO THE NEAREST SECOND.
4. ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
5. ALL ELEVATIONS ARE REFERENCED TO NGVD 1929.
6. ANY DAMAGE TO EXISTING STATE OR PRIVATE PROPERTY CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST THE STATE.
7. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIAL IN HIS FIELD YARD OR AT A SITE APPROVED BY THE ENGINEER. THE EQUIPMENT AND MATERIAL SHALL BE PLACED IN A STORAGE AREA SO AS NOT TO CAUSE A SAFETY HAZARD.
8. THE CONTRACTOR SHALL TAKE THE PROPER PRECAUTION TO ENSURE THE STABILITY OF ALL STRUCTURAL ELEMENTS DURING ALL PHASES OF CONSTRUCTION UNTIL THE TOTAL STRUCTURE IS IN PLACE.
9. CONTRACTOR SHALL CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO STARTING THE WORK TO VERIFY LOCATIONS OF EXISTING UTILITIES.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH UTILITY COMPANIES.
11. COORDINATES USED ON THESE PLANS ARE BASED ON THE STATEWIDE COORDINATE SYSTEM, THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
12. TOPOGRAPHIC CONDITIONS WERE OBTAINED FROM AERIAL PHOTOGRAMMETRY. ACCURACY OF VERTICAL TOPOGRAPHY IS WITHIN 10% OF ONE-HALF THE CONTOUR INTERVAL.
13. FOR BENCH MARKS AND TIES SEE BIKEWAY LOCATION PLANS.
14. ALL FOOTINGS SHALL BE APPROVED BY ENGINEER AS TO DIMENSIONS, ELEVATIONS, AND SUITABILITY OF FOUNDATION MATERIAL BEFORE THE PLACING OF CONCRETE.
15. ALL WORKING POINTS ARE SHOWN AT THE CENTERLINES OF ABUTMENT BEARING, UNLESS OTHERWISE NOTED.

DESIGN DATA

DESIGN SPECIFICATIONS:

- * THE 2004 EDITION OF STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, INCLUDING ALL REVISIONS OR SUPPLEMENTS UP TO YEAR 2012.
- * ALL OTHER APPLICABLE DESIGN SPECIFICATIONS ARE REFERENCED IN SECTION 1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED 2010.
- * THE 2007 EDITION OF THE STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION LRFD BRIDGE DESIGN MANUAL, INCLUDING ALL REVISIONS OR SUPPLEMENTS UP TO YEAR 2012.
- * 2012 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, INCLUDING LATEST INTERIMS UP TO YEAR 2012.
- * IN CASE OF CONFLICT, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL SHALL GOVERN.

LOAD MODIFIERS:

THE LOAD MODIFIERS FOR THIS PROJECT ARE AS FOLLOWS:

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

LOAD FACTORS:

- ALL LOAD FACTORS SHALL BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT AS MODIFIED IN THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL
- * THE LOAD FACTOR FOR LIVE LOAD FOR THE EXTREME EVENT I SHALL BE TAKEN AS 0.0.
 - * THE LOAD FACTOR FOR DEAD LOAD FOR THE EXTREME EVENT I AND EXTREME EVENT II SHALL BE TAKEN AS 0.0.
 - * THE LOAD FACTOR FOR SETTLEMENT FOR ALL LIMIT STATES SHALL BE TAKEN AS 1.0

LIVE LOADS:

- * THE DESIGN LIVE LOAD SHALL BE THE AASHTO H15-44 TRUCK OR 90 PSF PEDESTRIAN LIVE LOAD NOT APPLIED SIMULTANEOUSLY. THE DYNAMIC LOAD ALLOWANCE SHALL NOT BE CONSIDERED.
- * DEFLECTIONS DUE TO DESIGN LIVE LOAD SHALL BE LIMITED TO 1/1100 OF THE SPAN.

WIND LOADING DESIGN DATA:

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

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

TRAFFIC DATA:

N/A – PEDESTRIAN BRIDGE

THERMAL DESIGN FORCE DATA:

UNIFORM TEMPERATURE EFFECTS HAVE BEEN TAKEN INTO CONSIDERATION IN ACCORDANCE WITH THE PROCEDURE B OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE MINIMUM DESIGN TEMPERATURE SHALL BE -10 DEGREES F, AND THE MAXIMUM TEMPERATURE SHALL BE 105 DEGREES F.

SEISMIC DESIGN DATA:

N/A – PEDESTRIAN BRIDGE

FOUNDATION DESIGN DATA:

SPREAD FOUNDATIONS:

THE FACTORED BEARING RESISTANCE FOR THE VARIOUS SHALLOW FOUNDATION TYPES ARE AS FOLLOWS:

		FACTORED BEARING RESISTANCE (KSF)
LOCATION	TYPE OF BEARING MATERIAL	STRENGTH LIMIT STATES
ABUTMENTS, CULVERTS, AND APPROACH WALLS	FILL GRAVEL BORROW UNDER STRUCTURES	X

DEEP FOUNDATIONS:

THE FACTORED AXIAL UPLIFT RESISTANCE FOR THE VARIOUS DEEP FOUNDATION TYPES ARE AS FOLLOWS:

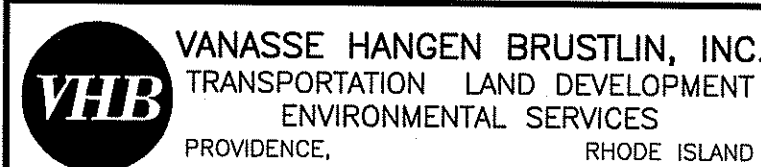
		FACTORED UPLIFT RESISTANCE (KIPS)
LOCATION	PILE TYPE	STRENGTH LIMIT STATES
ABUTMENTS, CULVERTS, AND APPROACH WALLS	MICROPILE	X

- * PILES WILL BE DRIVEN TO A FACTORED RESISTANCE EQUAL OR GREATER THAN THE FACTORED PILE DEMAND VALUES INDICATED ABOVE.

		FACTORED AXIAL PILE DEMAND (KIPS)	
		GEOTECHNICAL	STRUCTURAL
LOCATION	PILE TYPE	STRENGTH LIMIT STATES	STRENGTH LIMIT STATES
ABUTMENTS, CULVERTS, AND APPROACH WALLS	MICROPILE	X	X

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Martin D. Wenzel



REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
NO.	DATE	BY	BLACKSTONE RIVER BIKEWAY SEGMENT 8C	
			WOONSOCKET, RHODE ISLAND	
			JOB SPECIFIC GENERAL NOTES 1	
			CHECKED BY _____ DATE _____ SCALE _____	

MATERIALS

STRUCTURAL STEEL:

* AASHTO DESIGNATION M 270 (ASTM DESIGNATION A 709) GRADE 50.

REINFORCING STEEL:

* AASHTO DESIGNATION M 31 (ASTM DESIGNATION A 615) GRADE 60.

* ASTM DESIGNATION A706 GRADE 60

CONCRETE:

* CLASS HP f'c = 5,000 PSI
DECK, ABUTMENT BACKWALLS, SEPARATELY POURED BRIDGE SEAT
PEDESTALS (AS APPLICABLE).

* CLASS MC f'c = 3,500 PSI @ 28 DAYS, f'c = 5,000 PSI @ 56 DAYS,
PILE CAPS, ABUTMENT STEMS, WINGWALL STEMS.

* CLASS XX f'c = 4,000 PSI,
APPROACH SLABS.

CONCRETE NOTES

1. CLASSES OF CONCRETE SHALL BE HP, MC AND XX, AS DESCRIBED IN THE LATEST REVISION OF TABLES (1) AND (2) UNDER SECTION 601 "PORTLAND CEMENT CONCRETE" OF THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE SPECIAL PROVISIONS OF THE SPECIFICATIONS.

HP CONCRETE USED FOR DECKS ONLY SHALL BE MODIFIED WITH ADDITION OF SYNTHETIC FIBERS IN ACCORDANCE WITH SECTION 604 OF THE RI STANDARD SPECIFICATIONS.

2. THE CONTRACTOR MAY, AT THE APPROVAL OF THE ENGINEER, PROPOSE THE USE OF SELF-CONSOLIDATING CONCRETE FOR ANY CLASS OF CONCRETE ON THIS PROJECT. SECTION 606 "SELF CONSOLIDATING CONCRETE (SCC)", CONTAINS THE REQUIREMENTS FOR MODIFYING ALL CLASSES OF CONCRETE MIX DESIGN FOR SELF-CONSOLIDATING APPLICATIONS.

3. ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED PORTLAND CEMENT CONCRETE.

4. EXCEPT FOR FOOTINGS CAST BELOW GRADE, ALL REINFORCING STEEL SHALL BE GALVANIZED. ALL WIRE TIES AND MISCELLANEOUS HARDWARE USED FOR PLACEMENT OF GALVANIZED REINFORCING SHALL BE NON-METALIC. REINFORCING STEEL SHALL BE GALVANIZED PER ASTM A767 CLASS I (GALVANIZED STEEL).

5. ALL LAP SPLICES NOT SHOWN ON THE PLANS SHALL BE LAPPED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR CLASS C LAP SPLICES.

6. UNLESS OTHERWISE SPECIFIED ALL REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH (FOOTINGS, ABUTMENT AND WALL FACES, BACKWALLS)	MINIMUM COVER	
	TOP	BOTTOM
DECK SLABS (WITH WEARING SURFACE)	2" (+ $\frac{1}{4}$ ", -0")	1 $\frac{1}{2}$ " (+ $\frac{1}{8}$ ", -0")
DECK SLABS (EXPOSED DECKS)	3" (+ $\frac{1}{4}$ ", -0")	1 $\frac{1}{2}$ " (+ $\frac{1}{8}$ ", -0")
ALL OTHER BARS	2"	

COVER TO TIES AND STIRRUPS MAY BE 0.5 INCH LESS THAN ABOVE VALUES SPECIFIED FOR MAIN REINFORCING, BUT IN NO CASE LESS THAN 2 INCHES.

7. UNLESS OTHERWISE NOTED ON THE PLANS, ALL ANCHOR BOLTS SHALL BE ASTM DESIGNATION F 1554 AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232. SWEDGED RODS SHALL BE AASHTO DESIGNATION M 270 GRADE 36 AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232.

8. ALL ANCHOR BOLTS SHALL BE SET BY TEMPLATES PRIOR TO PLACEMENT OF CONCRETE UNLESS OTHERWISE INDICATED ON THE PLANS OR AS AUTHORIZED BY THE ENGINEER.

CONCRETE NOTES (CONTINUED)

9. HORIZONTAL CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON PLANS WILL NOT BE PERMITTED WITHOUT A WRITTEN REQUEST BY THE CONTRACTOR AND PRIOR AUTHORIZATION BY THE ENGINEER.
10. THE ENTIRE TOPSIDE SURFACES OF ABUTMENT AND PIER CAP BEAM SEATS, AS WELL AS VERTICAL FACES OF BACKWALLS, SHALL BE PROVIDED WITH A FILM-FORMING SEALER (M12.03.1) CONCRETE SURFACE TREATMENT-PROTECTIVE COATING IN ACCORDANCE WITH SECTION 820 OF THE RI STANDARD SPECIFICATIONS.
11. ALL EXPOSED EDGES AND REENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM $\frac{3}{4}$ " CHAMFER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATIONS DURING CONSTRUCTION UNTIL SUCH TIME AS THE SURFACES ARE APPROVED AND ACCEPTED BY THE ENGINEER. ANY CONCRETE STAINS OR DISCOLORATIONS OCCURRING PRIOR TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
13. ALL JOINT SEALANT SHALL BE POLYURETHANE, POLYURETHANE ELASTOMERIC, OR SILICONE SEALANT AS DESIGNATED ON THE PLANS. THE COLOR OF THE JOINT SEALANT, WHERE EXPOSED, SHALL BE NEUTRAL (LIGHT GRAY OR TAN). COLOR OF THE SEALANT WHERE NOT EXPOSED, WILL BE AT THE DISCRETION OF THE CONTRACTOR.
14. UNLESS OTHERWISE NOTED ON THE PLANS, JOINT FILLER IS TO BE PREFORMED NON-EXPANSIVE, NON-EXTRUDING TYPE IN ACCORDANCE WITH SECTION M.02.11.1 OF THE RI STANDARD SPECIFICATIONS.
15. PLACEMENT AND CURING OF BRIDGE DECK CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 814 OF THE RI STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH THE SEQUENCE AND DIRECTION OF POURS AS SHOWN ON THE PLANS.
16. IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS, ALL METAL TIES OR ANCHORAGES WHICH ARE REQUIRED FOR CONCRETE FORMWORK SHALL BE SO CONSTRUCTED THAT THEY CAN BE REMOVED TO AT LEAST TWO INCHES BELOW THE EXPOSED SURFACE OF THE CONCRETE WITHOUT CAUSING DAMAGE TO THE CONCRETE SURFACE. SNAP TIES MAY BE USED ONLY IF APPROVED BY THE ENGINEER. IF THE CONTRACTOR PROPOSES TO USE THEM, A CATALOG CUT AND OTHER NECESSARY INFORMATION MUST BE SUBMITTED TO THE ENGINEER TO DEMONSTRATE THAT THE TIES WILL SNAP-OFF FAR ENOUGH INTO THE CONCRETE TO ALLOW FOR PROPER PATCHING. SNAP TIES MUST PROVIDE ADEQUATE STRENGTH TO SUPPORT THE FORMS. ALL CAVITIES SHALL BE FILLED WITH AN APPROVED CEMENT MORTAR MEETING THE REQUIREMENTS OF ASTM C 928.
17. HAND-HELD VIBRATORS SHALL BE EQUIPPED WITH RUBBER TIPPED HEADS WHEN USED TO CONSOLIDATE CONCRETE AROUND REINFORCEMENT AND EMBEDMENT.
18. THE ENTIRE BRIDGE DECK SHALL RECEIVE A MACHINE FINISH. THE CONTRACTOR SHALL INCLUDE THE LOADING OF THE FINISHING MACHINE(S) AND THE SUPPORT RAIL SYSTEM IN THE DESIGN OF DECK SUPPORT SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST AND DESIGN OF THIS SUPPORT SYSTEM WHICH MAY REQUIRE THE ADDITION OF TEMPORARY DIAPHRAGMS OR BRACES TO PREVENT FLOORBEAM OR TRUSS ROTATION.
19. WATER STOPS ARE REQUIRED FOR HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS IN ABUTMENTS AND WALLS WHEN EXPOSED TO BACKFILL EARTH MATERIAL. WATER STOPS SHALL BE INSTALLED AT THE LOCATIONS DETAILED ON THE PLANS, AT THE LOCATIONS AS SPECIFIED ABOVE AND AT ALL LOCATIONS AS DIRECTED BY THE ENGINEER, ALL IN ACCORDANCE WITH SECTION 812 OF THE RI STANDARD SPECIFICATIONS.
20. UNLESS OTHERWISE DIMENSIONED ON THE PLANS, ALL REINFORCEMENT BENDS SHOWN ARE STANDARD HOOKS.
21. ALL EXPOSED FACES OF PIERS AND ABUTMENTS FROM THE BRIDGE SEATS TO THE GROUND SURFACE AND EXPOSED WALL SURFACES SHALL RECEIVE AN ANTI-GRAFFITI COATING.
22. UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CONCRETE SURFACES VISIBLE IN ELEVATION TO ONE FOOT BELOW FINAL GROUND LINE SHALL RECEIVE CONCRETE SURFACE RUBBED FINISH IN ACCORDANCE WITH THE R.I. STANDARD SPECIFICATIONS.

REINFORCEMENT NOTE

THE CONTRACTOR'S BAR FABRICATOR SHALL VERIFY THE CORRECTNESS IN PREPARING HIS ORDER LISTS AND BENDING DIAGRAMS. ANY EXPENSE INCIDENT TO REVISION OF MATERIAL AS SHOWN ON THE ORDER LISTS AND BENDING DIAGRAMS IN ORDER TO MAKE IT COMPLY WITH THE DESIGN DRAWINGS SHALL BE BORNE BY THE CONTRACTOR. SHOP DRAWINGS FOR ALL REINFORCEMENT DETAILS AND SCHEDULE SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING.

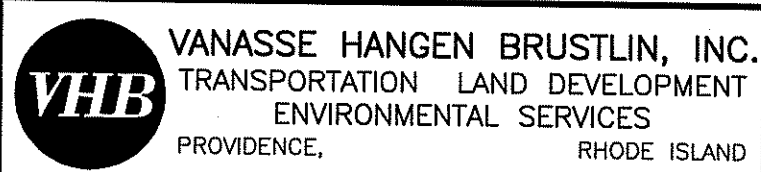
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI			4	19

OCT 28 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 6 2013 FILE # 13-0126
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wenzel

REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
NO.	DATE	BY	BLACKSTONE RIVER BIKEWAY SEGMENT 8C	
			WOONSOCKET, RHODE ISLAND	
			JOB SPECIFIC GENERAL NOTES 2	
			CHECKED BY _____ DATE _____ SCALE _____	



STRUCTURAL STEEL NOTES

1. FRAMING DIMENSIONS ARE GIVEN ALONG CENTERLINES OF GIRDERS AND ALONG CENTERLINES OF BEARINGS ON ABUTMENTS. THE FABRICATOR IS RESPONSIBLE FOR INCORPORATING THE CAMBER, CROSS SLOPE, AND OTHER EFFECTS THAT MAY IMPACT THE OVERALL GIRDER LENGTHS, DIMENSIONS AND/OR THE DETAILING.
2. THE SHOPS FABRICATING THE STRUCTURAL STEEL (EXCEPT FOR EXPANSION JOINTS, RAILINGS AND BEARINGS), MUST BE CERTIFIED FOR "MAJOR STEEL BRIDGES (CBR)" IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM OR EQUIVALENT. SHOPS FABRICATING THE EXPANSION JOINTS, RAILINGS AND BEARINGS SHALL, AT A MINIMUM, BE CERTIFIED FOR "SIMPLE STEEL BRIDGE STRUCTURES (SBR)".

THE SHOPS SHALL ALSO BE CERTIFIED UNDER THE AISC "SOPHISTICATED PAINT ENDORSEMENT (SPE)" QUALITY PROGRAM OR THE SSPC-QP3 PAINT CERTIFICATION PROGRAM.

THE FABRICATOR MUST SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED.

3. THE STEEL ERECTOR/CONTRACTOR FOR THIS PROJECT SHALL BE CERTIFIED FOR "ADVANCED CERTIFIED STEEL ERECTOR (ASCE)" IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM. THE ERECTOR/CONTRACTOR OF THE STRUCTURAL STEEL SHALL BE REQUIRED TO SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED, INCLUDING THE QUALITY CONTROL PLAN AND SAFETY PLAN THAT IS REQUIRED TO OBTAIN THE CERTIFICATION.
4. FRACTURE CRITICAL MEMBERS (FCM) IF ANY, HAVE BEEN DESIGNATED ON THE STEEL FRAMING AND/OR THE STEEL DETAIL SHEETS.
5. SHOP DRAWINGS FOR ALL FABRICATED STEEL INCLUDING BEARINGS, EXPANSION JOINTS, RAILINGS AND FALSEWORK SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING PRIOR TO FABRICATION.
6. INSPECTION OF WELDS INCLUDING RADIOGRAPHIC TESTING (RT) AND MAGNETIC PARTICLE TESTING (MT) SHALL BE IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS AND THE AASHTO/AWS BRIDGE WELDING CODE, EXCEPT THAT THE REMAINING PERCENTAGE OF ALL GROOVE WELDS NOT RT TESTED SHALL BE MT.
7. STRUCTURAL STEEL SHAPES AND PLATES FOR TRUSSES SHALL CONFORM TO THE LATEST PROVISIONS OF AASHTO DESIGNATION M 270, GRADE 50, AS DESIGNATED ON THE PLANS. STRUCTURAL STEEL TUBULAR MEMBERS FOR TRUSSES SHALL CONFORM TO ASTM DESIGNATION A 500 (GRADE C). UNLESS OTHERWISE NOTED ALL STRUCTURAL STEEL SHALL BE GRADE 50.
8. STRUCTURAL STEEL SHAPES AND PLATES FOR RAILING SHALL CONFORM TO THE LATEST PROVISIONS OF AASHTO DESIGNATION M 270, GRADE 36, AS DESIGNATED ON THE PLANS. STRUCTURAL STEEL TUBULAR MEMBERS FOR RAILING SHALL CONFORM TO ASTM DESIGNATION A 500 (GRADE B).
9. ALL AASHTO M 270 STRUCTURAL STEEL USED IN GIRDERS (INCLUDING CONNECTION PLATES AND STIFFENERS), SHALL MEET THE ZONE 2 CHARPY V-NOTCH FRACTURE TOUGHNESS TEST REQUIREMENTS AS SPECIFIED IN TABLE 6.6.2-2 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR "NONFRACTURE-CRITICAL" COMPONENTS. THE ZONE 2 FRACTURE TOUGHNESS REQUIREMENTS ARE AS FOLLOWS:

NONFRACTURE-CRITICAL

GRADE 36 15 FT-LBS @ 40°F (UP TO 4 INCHES THICK)
GRADE 50 15 FT-LBS @ 40°F (UP TO AND INCLUDING 2 INCHES THICK)
GRADE 50 20 FT-LBS @ 40°F (FROM 2 INCHES THICK UP TO AND INCLUDING 4 INCHES THICK)

FRACTURE-CRITICAL

GRADE 36 25 FT-LBS @ 40°F (UP TO 4 INCHES THICK)
GRADE 50 25 FT-LBS @ 40°F (UP TO AND INCLUDING 2 INCHES THICK)
GRADE 50 30 FT-LBS @ 40°F (FROM 2 INCHES THICK UP TO AND INCLUDING 4 INCHES THICK)

SAMPLING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO T243. THE FREQUENCY OF TESTING SHALL BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THE CHARPY V-NOTCH FRACTURE TOUGHNESS TEST REQUIREMENT IS NOT MANDATORY FOR THE FOLLOWING STEEL COMPONENTS:

- BEARINGS, MASONRY PLATES AND SOLE PLATES
- EXPANSION JOINTS SYSTEMS
- DRAINAGE MATERIAL
- RAILINGS
- FOUNDATION MICRPILES, H-PILES AND PIPE PILES
- SUPPORT OF EXCAVATION COMPONENTS

10. WELDING SHALL BE IN ACCORDANCE WITH THE LATEST STRUCTURAL WELDING CODE AASHTO/AWS D1.5 INCLUDING ALL INTERIMS TO DATE) AND APPLICABLE SUPPLEMENTAL AWS PUBLICATIONS.
11. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO AASHTO DESIGNATION M164 (ASTM A325, TYPE 1), AND SHALL BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH AASHTO M298 (ASTM B645) CLASS 50. HIGH STRENGTH BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 824 OF THE RI STANDARD SPECIFICATIONS. ALL NUTS AND WASHERS SHALL BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH M05.04.4 OF THE RI STANDARD SPECIFICATIONS. UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL CONNECTIONS ARE "SLIP CRITICAL" WITH CLASS B SURFACE CONDITIONS.
12. WASHERS MEETING AASHTO DESIGNATION M 293 ARE TO BE USED OVER ALL HOLES THAT ARE MORE THAN $\frac{1}{16}$ " IN DIAMETER GREATER THAN THE BOLT DIAMETER AND UNDER ALL PARTS TURNED DURING ASSEMBLY.
13. WELDING ELECTRODES SHALL HAVE THE SAME CORROSION RESISTANCE AS THE BASE METAL AND SHALL BE FREE OF MOISTURE AT THE TIME OF USE.
14. UNLESS OTHERWISE SPECIFIED, STRUCTURAL STEEL SHALL BE PREPARED AND PAINTED IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.
15. UNLESS OTHERWISE SPECIFIED, THE UPPER SURFACES OF GIRDER TOP FLANGES SHALL BE FREE OF PAINT, OIL OR OTHER IMPURITIES THAT WOULD IN ANY WAY REDUCE THE BOND OF CONCRETE TO STEEL.

STRUCTURAL STEEL NOTES (CONTINUED)

16. PRIOR TO FABRICATION, ALL MATERIALS SHALL BE BLAST-CLEANED TO AT LEAST SSPC-SP6 TO REMOVE ALL OIL, DIRT, GREASE, MILL SCALE AND OTHER DELETERIOUS MATERIALS FROM THE SURFACES OF THE STEEL TO BE FABRICATED.
17. PRIOR TO SHOP COATING AS SPECIFIED IN SECTION 825 OF THE RI STANDARD SPECIFICATIONS, ALL CORNERS AND EDGES OF STEEL WHICH HAVE BEEN FLAME CUT OR OTHERWISE HARDENED SHALL BE SOFTENED BY GRINDING OR BLAST-CLEANING TO PROVIDE A SURFACE SUITABLE FOR APPLICATION OF THE SPECIFIED PAINT SYSTEM.
18. WELDING OF ATTACHMENTS TO GIRDER FLANGES OR WEBS FOR CONSTRUCTION PURPOSES IS NOT PERMITTED EXCEPT WHEN APPROVED BY THE ENGINEER.
19. THE ENDS OF ALL GIRDERS SHALL BE VERTICAL AFTER ALL DEAD LOADS HAVE BEEN PLACED.
20. INTERMEDIATE STIFFENERS SHALL BE PLACED ON THE INTERIOR SIDE OF THE FASCIA PLATE GIRDER WEBS AND ON BOTH SIDES OF ALL INTERIOR PLATE GIRDER WEBS.
21. BEARING STIFFENERS SHALL BE FABRICATED AS SHOWN ON THE PLANS AND SHALL BE PLACED ON BOTH SIDES OF ALL PLATE GIRDER WEBS.
22. INTERMEDIATE STIFFENERS AND CONNECTION PLATES SHALL BE SET PERPENDICULAR TO THE FLANGES OF THE GIRDERS.
23. END BEARING STIFFENERS AT GIRDER ENDS SHALL BE PLUMB.
24. BOLTED CONNECTIONS SHALL BE DESIGNED AS SLIP-CRITICAL CONNECTIONS. THE FAYING SURFACES SHALL SATISFY CLASS B SURFACE CONDITION AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
25. THE TRUSSES SHALL BE CAMBERED TO THE AMOUNTS SHOWN ON THE PLANS. THE FABRICATOR'S SHOP DRAWINGS SHALL INCLUDE, IN ADDITION TO ANY CUTTING OR CAMBER DIAGRAMS NECESSARY FOR THEIR PURPOSES, A SHOP ASSEMBLY DIAGRAM WHICH PROVIDES CAMBER OFFSETS CALCULATED BY THE FABRICATOR AT THE REFERENCE POINTS PROVIDED BY THE ENGINEER (USUALLY TENTH POINTS OF THE SPAN). THE INFORMATION PROVIDED SHALL BE SUFFICIENT ENOUGH FOR THE ENGINEER TO EVALUATE WHETHER THE CAMBER HAS BEEN CORRECTLY INTERPRETED.
- AT THE TIME AND PLACE OF ERECTION, TRUSSES SHALL HAVE THE REQUIRED AMOUNT OF CAMBER. THE ERECTED VERTICAL ALIGNMENT (CAMBER) SHALL NOT DEViate FROM THE THEORETICAL ERECTED VERTICAL ALIGNMENT BY MORE THAN FOLLOWING: $-0, +\frac{1}{4}$ " x (TOTAL LENGTH, IN FEET, FROM THE NEAREST SUPPORT)/10. THE MAXIMUM DEVIATION IS $1\frac{1}{2}$ " BETWEEN SUPPORTS.
26. ALL SHOP CONNECTIONS AND SPLICES SHALL BE WELDED. WELDING PROCEDURES AND TECHNIQUES TO BE USED IN FABRICATION AND ERECTION OF THE GIRDERS SHALL BE AS SHOWN ON THE SHOP DRAWINGS AND SHALL INCORPORATE THE FOLLOWING:
- BOTH FLANGES AND THE WEB SHALL BE COMPLETELY FABRICATED FOR THEIR ENTIRE LENGTHS BEFORE THE WELDING OF THE FLANGES TO THE WEB IS PERFORMED.
 - ALL WEB AND FLANGE SPLICES OTHER THAN THOSE SHOWN ON THE PLANS MUST BE APPROVED BY THE ENGINEER. ALTERNATE OR ADDITIONAL SPLICES ARE TO BE LOCATED AND DESIGNED BY THE FABRICATOR AND SHOWN ON THE SHOP DRAWINGS. THESE SPLICES ARE TO FULLY DEVELOP THE STRENGTH OF THE WEB AND FLANGE PLATES. WEB SPLICES, IF USED, SHALL BE LOCATED 2'-0" MINIMUM FROM ANY STIFFENER.
 - NO MORE THAN TWO SHOP WEB SPLICES WILL BE PERMITTED BETWEEN FIELD SPLICES. SPICING OF GIRDERS BY FIELD WELDING WILL NOT BE PERMITTED.
27. NO SHOP FILLET WELD SHALL BE LESS THAN $\frac{1}{4}$ ".
28. ALL SHEAR STUD CONNECTORS SHALL BE WELDED BY THE AUTOMATIC TIMED ELECTRIC ARC PROCESS. SHEAR STUDS SHALL BE INSPECTED AND TESTED IN ACCORDANCE WITH SECTION 824 OF THE RI STANDARD SPECIFICATIONS.
29. WHEN STEEL DIE STAMPS ARE USED TO IDENTIFY PIECES AND MEMBERS, FABRICATORS SHALL UTILIZE LOW STRESS STAMPS.
30. FOR SIZE AND LOCATION OF ANCHOR BOLTS, SEE ABUTMENT AND BEARING DRAWINGS.
31. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXPANSION JOINT SYSTEM PROVIDED WILL BE COMPATIBLE WITH BOTH THE END OF DECK OR PIER HAUNCHES AND/OR THE STRUCTURAL STEEL FRAMING CONFIGURATION. THAT IS, THE EXPANSION JOINT SYSTEM AND ALL ITS INHERENT COMPONENTS AND ATTACHMENT DEVICES SHALL BE SIZED OR ARRANGED TO BE COMPATIBLE WITH THE GIRDER AND DIAPHRAGM FLANGES, CONNECTION PLATES, BOLTS, SHEAR STUDS AND REINFORCING STEEL THAT SHARE THE END HAUNCH REGION.
32. THE DESIGN OF THE STRUCTURE IS BASED ON THE SELF-WEIGHT OF THE STRUCTURAL STEEL IN ITS COMPLETELY ERECTED CONFIGURATION ONLY. DEFLECTION INCURRED DURING THE VARIOUS STAGES OF THE ERECTION PROCESS ARE NOT CONSIDERED. THEREFORE, THE ACTUAL ERECTION METHODS AND SEQUENCES EMPLOYED BY THE CONTRACTOR MAY HAVE A SUBSTANTIAL EFFECT ON (1) THE TOTAL STRESS, I.E. THE DESIGN PLUS ERECTION STRESS, AND/OR (2) THE STEEL PROFILE AS ERECTED. THE CONTRACTOR SHALL SUBMIT AN ERECTION PROCEDURE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 824.03.10 ERECTION, OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE CALCULATIONS FOR ALL PHASES AND ERECTION CONDITIONS WHICH DEMONSTRATE THAT THE ALLOWABLE STRESSES ARE NOT EXCEEDED AND THAT THE GEOMETRY AS ERECTED (HORIZONTAL AND VERTICAL) WILL BE CONSISTENT WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. ANY CORRECTIVE WORK NECESSARY TO REPOSITION PREVIOUSLY ERECTED STEEL TO ACHIEVE ACCEPTABLE ALIGNMENT AND PROFILE MUST BE APPROVED BY THE ENGINEER AND SHALL BE PERFORMED AT NO EXTRA COST TO THE STATE.

SHOP DRAWING SUBMITTALS

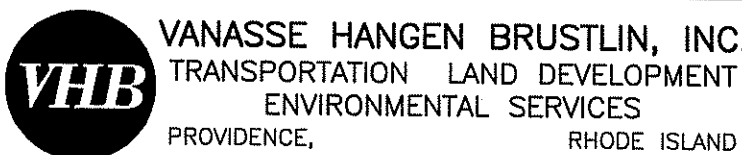
1. CRANE SUBMITTALS
2. CONCRETE: MIX DESIGNS, PLACING, METHODS, EQUIPMENT, CURING PLAN AND METHODS, PERSONNEL RESOURCES
3. REINFORCING STEEL, SPLICES AND INSERTS
4. STRUCTURAL STEEL
5. BRIDGE BEARING ASSEMBLY
6. BRIDGE NAME/SEAL TABLETS
7. FIXED AND EXPANSION JOINT ASSEMBLIES
8. CONCRETE SUBCONTRACTOR'S QUALIFICATIONS AND EXPERIENCE
9. STRUCTURAL COMPUTATIONS
10. DETAILED SEQUENCE OF WORK
11. FOUNDATION PILES; INSTALLATION AND LOAD TESTING PROCEDURES, EQUIPMENT AND DETAIL INCLUDING WEAP ANALYSIS
12. PILE POINTS AND SPLICES
13. EARTH SUPPORT SYSTEMS/COFFERDAMS (SHEETING, ETC.)
14. TEMPORARY PROTECTION SHIELDS FOR DEMOLITION AND CONSTRUCTION
15. ARCHITECTURAL TREATMENTS (SPECIAL FORMS/LINERS, ETC.)
16. CONCRETE FORMS; STAY-IN-PLACE, SPECIALTY FORMWORK
17. ERECTION PROCEDURES (INCLUDING STEEL ERECTOR'S QUALITY CONTROL PLAN); EQUIPMENT (TYPE/SIZE AND PLACEMENT), DETAILED SEQUENCE OF WORK
18. BRIDGE RAILINGS (ALL TYPES)
19. PAINTING
20. WELDING PROCEDURES; WELD SPLICES
21. DEWATERING
22. PREFABRICATED TRUSS

OCT 28 2013

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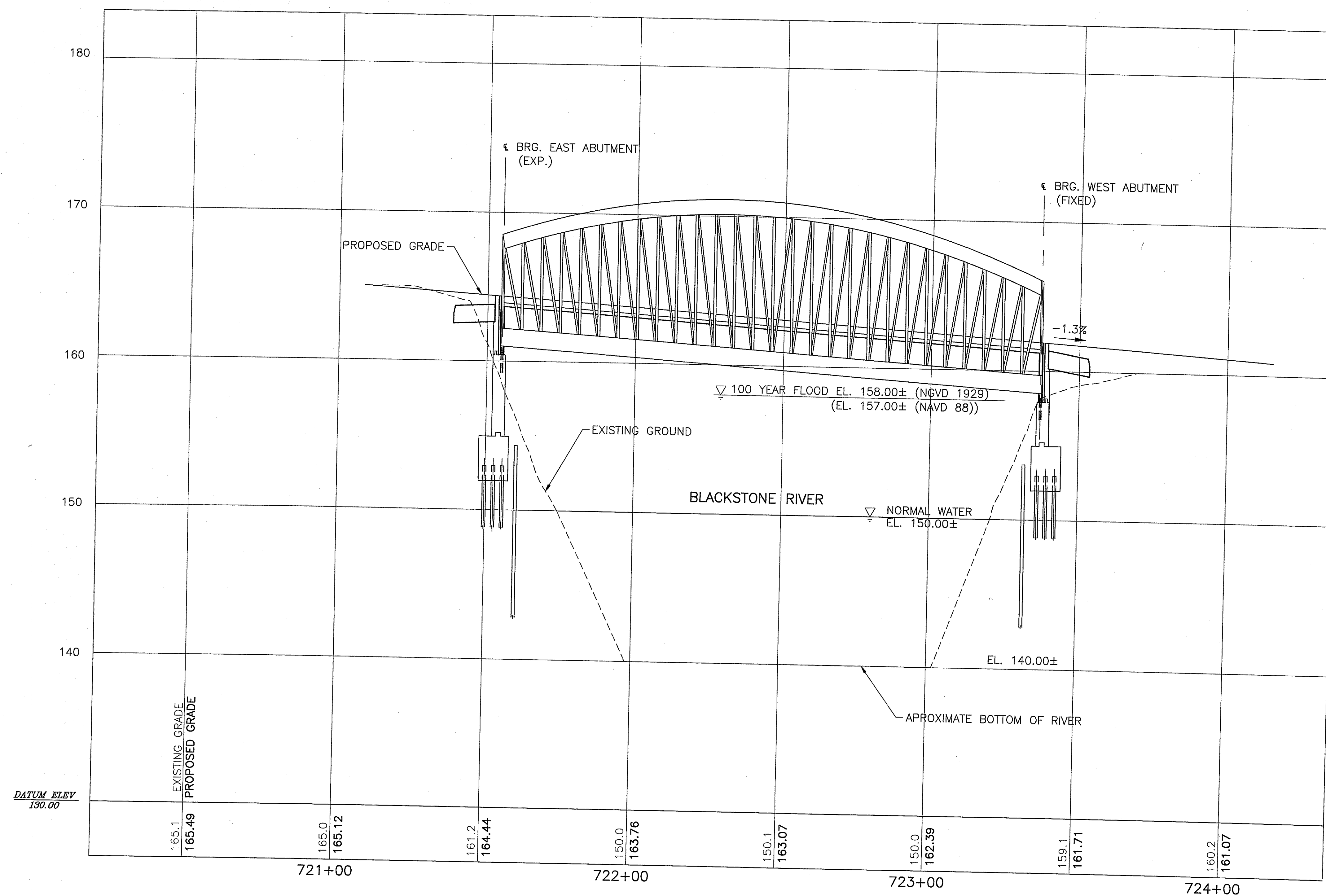
NECESSARY SUBMITTALS MAY NOT BE LIMITED TO THE ABOVE LIST AND MAY REQUIRE OTHER SUBMITTALS AT THE RESIDENT ENGINEER'S REQUEST FOR; SHOP DRAWINGS, CERTIFICATE OF COMPLIANCE, PRODUCT INFORMATION, CATALOG CUTS, TEST DATA OR OTHER.



REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION
NO.	DATE	BY	
			BLACKSTONE RIVER BIKEWAY SEGMENT 8C
			WOONSOCKET, RHODE ISLAND
			JOB SPECIFIC GENERAL NOTES 3
			CHECKED BY _____ DATE _____ SCALE _____

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
	RI			8	19

OCT 28 2013



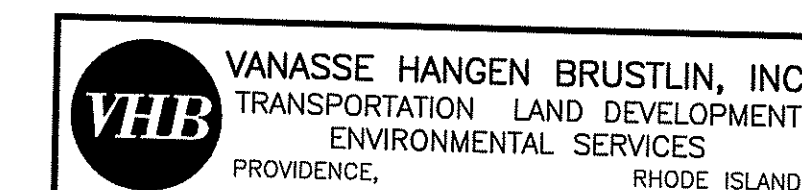
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Ernest D. Wenger

NOTES

1. STATIONING ON THIS SHEET SHOWN LEFT TO RIGHT. STATIONING ON GENERAL PLAN IS SHOWN RIGHT TO LEFT TO MATCH PLAN VIEW ORIENTATION.

PROFILE
(LOOKING SOUTH)
SCALE: HORIZONTAL 1" = 20'
VERTICAL 1" = 4'



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			PROFILE	
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