FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BRO-0606(001) BRO-PRES(006)	2019	1	62

STATE OF RHODE ISLAND

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED

BRIDGE GROUP 16A FOS, GLO, PVD, SCI, SMI

VOLUME I OF II

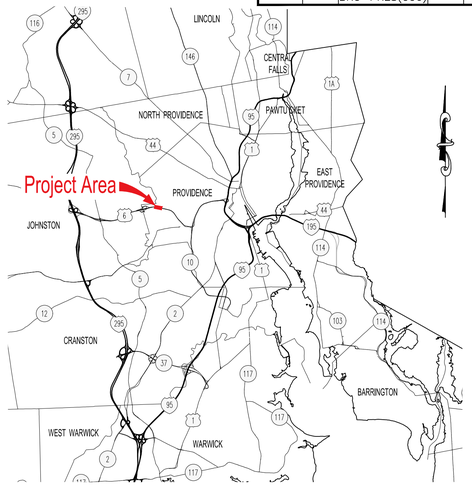
PROVIDENCE, RHODE ISLAND
PROVIDENCE COUNTY

R.I. CONTRACT NO. 2019-CB-048 F.A. PROJECT NOS. BRO-0606(001) & BRO-PRES(006)

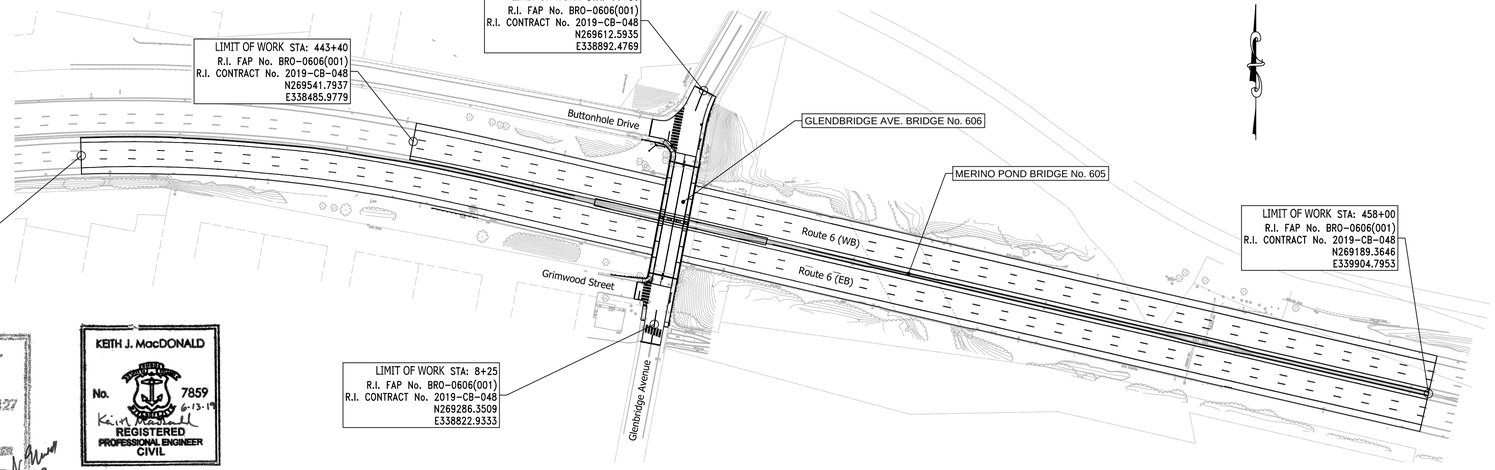
0.07 MILES

INDEX OF DRAWINGS

SHEET No.	DESCRIPTION
VOLUME I	BRIDGE GROUP 16A (GLENBRIDGE AVE BRIDGE NO. 606)
1	COVER SHEET
2	STANDARD PLAN SYMBOLS & STANDARD LEGEND
3	STANDARD NOTES - 1
4	STANDARD NOTES - 2
5	JOB SPECIFIC PLAN SYMBOLS, LEGEND, & NOTES
6	TYPICAL SECTIONS
7 , 8	GENERAL PLAN No. 1 AND No. 2
9	ROADWAY PROFILE
10 - 11	DRAINAGE AND UTILITY PLAN No. 1 TO No. 2
12	GRADE PLAN
13	LOCATION PLAN
14 - 15	SIGNING AND STRIPING PLAN No. 1 AND No. 2
16 - 25	TEMPORARY TRAFFIC CONTROL PLAN No. 1 TO No. 10
26 - 28	DETAILS No. 1 TO No. 3
29 - 31	BRIDGE NOTES No.1 TO No.3
32	BRIDGE DEMOLITION PLAN
33	BRIDGE GENERAL PLAN
34	BRIDGE SECTIONS
35	PHASED CONSTRUCTION SECTIONS
36	TEMPORARY PIER SHORING DETAILS
37	SOUTH ABUTMENT PLAN, ELEVATION, AND SECTION
38	NORTH ABUTMENT PLAN AND ELEVATION
39	RETURN WALL ELEVATIONS AND SECTION
40	ABUTMENT JOINT DETAILS
41	PIER PLAN, ELEVATION AND SECTION
42	APPROACH SLAB AND BACKWALL DETAILS
43	FRAMING PLAN
44	STRINGER ELEVATION & DETAILS
45	SPLICE DETAILS
46-48	DIAPHRAGM DETAILS 1 TO 3
49	DECK PLAN AND NOTES
50	DECK GRADING PLAN
51-52	DECK SECTIONS & DETAILS 1 AND 2
53	SIDEWALK DETAILS 1
54	SIDEWALK JOINT & FENCE POST SPACING PLAN
55	END POST DETAILS
56	PROTECTIVE SCREEN
57	CURB DETAILS
58	TYPICAL JOINT DETAILS
59	BORING LOCATION PLAN
60	BORING LOGS
VOLUME I	BRIDGE GROUP 16B (MERINO POND BRIDGE NO. 605)
61	BRIDGE 605 - DECK PLAN
62	BRIDGE 605 - ROADWAY JOINTS
VOLUME II	BRIDGE GROUP 16A (BRIDGE REPAIRS)



LOCATION MAP
SCALE: N.T.S.



LAYOUT PLAN
SCALE: 1" = 100'

DESIGN DESIGNATION

GLENBRIDGE AVE	ROUTE 6
AADT (2019) = 14,200 VPH	AADT (2019) = 67,800 VPH
AADT (2039) = 15,000 VPH	AADT (2039) = 71,200 VPH
DHV (2039) = 1,350 VPH	DHV (2039) = 5,696 VPH
K = 9%	K = 8%
D = 50/50	D = 45/55
T = 7%	T = 4%
DESIGN SPEED = 30 MPH	DESIGN SPEED = 60 MPH

PROPOSED PAVEMENT STRUCTURE

ROUTE 6:
MICROMILL 1.5" OF EXISTING PAVEMENT
INSTALL 1.5" OF FRICTION COURSE
ASPHALT EMULSION TACK COAT BETWEEN LAYERS

GLENBRIDGE AVE:
FULL DEPTH PAVEMENT CONSTRUCTION
2" MODIFIED CLASS 12.5 HMA SURFACE COURSE
5" CLASS 19.0 HMA (PLACED IN TWO 2.5" LIFTS)
12" GRAVEL BORROW SUBBASE
ASPHALT EMULSION TACK COAT BETWEEN LAYERS

BRIDGE DECK:
INSTALL 3" OF MODIFIED CLASS 9.5 HMA
PLACED IN (2) 1.5" LIFTS

DAVID J. ELWELL
No. 7127
REGISTERED PROFESSIONAL ENGINEER
CIVIL
6-13-19

BRIDGE PLANS

KEITH J. MacDONALD
No. 7859
6-13-19
REGISTERED PROFESSIONAL ENGINEER
CIVIL

HIGHWAY PLANS

SEE SHEETS 61 & 62 FOR P.E. STAMPS FOR BRIDGE NO. 605

HURRICANE EVACUATION ROUTE

THIS PROJECT INCLUDES WORK ON A DESIGNATED HURRICANE EVACUATION AND DIVERSIONARY ROUTE AS FOLLOWS:
- STATE ROUTE 6
- GLENBRIDGE AVE.

REFER TO NOTE 18 ON SHEET 3.

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS

SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION (AMENDED MARCH 2018), WITH ALL REVISIONS AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISIONS.

SCALES OF DRAWINGS
PLANS: 1 INCH = 20 FEET

BASE OF LEVELS
VERTICAL DATUM USED: NAVD-88
HORIZONTAL DATUM: RHODE ISLAND STATE PLANE, NAD-83 (2007) (2002.00)

PARE
PARE CORPORATION
ENGINEERS • SCIENTISTS • PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

Contract Number 2019-CB-048
Number of Sheet 1
Total Sheets 62

R.I. DEPARTMENT OF TRANSPORTATION

APPROVED
David W. Fish 6-14-19
ADMINISTRATOR, PROJECT MANAGEMENT DATE

APPROVED
Robert Rocchio 6-14-19
CHIEF ENGINEER OF INFRASTRUCTURE DATE

APPROVED
6/17/19
DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

0013V_V1_001_COVER

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	2	62

EXISTING

- EDGE OF PAVEMENT
- BERM
- CURB
- GUARDRAIL
- MB — MAILBOX
- NO. — UTILITY POLE
- POLE GUY
- LUMINARE
- SIGN — SIGN
- (SIZE)SD — SUBDRAIN
- (SIZE)D — STORMDRAIN
- (SIZE)S — SANITARY SEWER
- (SIZE)W — WATER MAIN
- (SIZE)G — GAS MAIN
- (SIZE)T — TELEPHONE DUCT
- (SIZE)E — ELECTRIC DUCT
- PLUG AND CAP PIPE
- ABANDONED UTILITY
- FLARED END SECTION
- HEADWALL
- WG OR GG — WATER OR GAS GATE
- CB — CATCH BASIN
- MH — MANHOLE
- HYD — HYDRANT
- 1+00 — BASELINE OR CENTERLINE
- EXIST. S.H.L. PLAT NO. XX — STATE HIGHWAY LINE
- EXIST. S.F.L. PLAT NO. XX — STATE FREEWAY LINE
- EXIST. P.E.B. — PERMANENT EASEMENT LINE
- EXIST. T.E.B. — TEMPORARY EASEMENT LINE
- PROPERTY LINE
- CITY NAME / TOWN NAME — CITY OR TOWN LINE
- PWW — PAVED WATERWAY
- ELEV. — CONTOUR LINE
- OPEN DITCH
- R.I.H.B. — R.I. HIGHWAY BOUND
- S.B. — STONE BOUND
- RETAINING WALL
- FIELD STONE WALL
- NO. / TYPE — BORINGS
- FENCE
- WOOD OR BRUSH LINE
- TREES
- (NAME) — RIVER OR STREAM
- WETLAND AREA
- NO. / TYPE / MATERIAL — BUILDING
- FOUNDATION
- BUILDING TO BE REMOVED
- RAILROAD TRACKS
- CUT AND MATCH
- RIP-RAP
- CUT SLOPE
- FILL SLOPE
- ROCK CUT
- 00x00 — SPOT GRADE
- AREA GRADED TO DRAIN
- BALED HAY RI STD 9.1.0
- BALED HAY & SILT FENCE RI STD. 9.3.0
- 123 124 125 — EDGE OF WETLAND
- WETLAND PERIMETER
- ASSF — AREA SUBJECT TO STORM FLOW
- 100 YR. FLOOD BOUNDARY — 100-YEAR FLOOD PLAIN
- LIMIT OF DISTURBANCE
- LIMIT OF CLEARING

NEW

- NO. / GUY
- N(SIZE)SD — (Length → Size)
- (Length → Size)
- N(SIZE)W
- N(SIZE)G
- N-#(SIZE)T
- N-#(SIZE)E
- 1+00
- NEW S.H.L. PLAT NO. XX
- NEW S.F.L. PLAT NO. XX
- NEW P.E.B.
- NEW T.E.B.
- ELEV.
- NO.
- ROADWAY / TOP OF SLOPE
- ROADWAY / TOE OF SLOPE
- ROCK SHELF / ROCK / CUT
- 00.00
- ELEV.
- LIMIT OF DISTURBANCE
- LIMIT OF CLEARING

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 SPLOPED 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 3" BITUMINOUS CONCRETE TYPE I-2 8" GRAVEL BORROW SUBBASE COURSE
BPS	BUILD NEW STRUCTURE OVER EXISTING PIPE
CCB	CLEAN CATCH BASIN
CCP	CUT AND CAP PIPE WITH RESTRAINT (ALL SIZES)
CFP	CLEAN AND FLUSH PIPE
CG	CLEARING AND GRUBBING
CMH	CLEAN MANHOLE
CP (DEPTH)	COLD PLANE
CPP	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
NWCB	FURNISH AND INSTALL NEW WATER CURB STOP BOX
NWSB	FURNISH AND INSTALL NEW WATER CURB STOP AND BOX
PCD	PERMANENT CHECK DAM
PS	4" PLANTABLE SOIL AND SEED
RCB	RECONSTRUCT TYPE "D" CATCH BASIN, TO CATCH BASIN WITH GUTTER INLET
RCM	R.I.D.O.T. COMMUNICATIONS MANHOLE
RHH	REMOVE, HANDLE, HAUL, TRIM, RESET CURB 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

REVISIONS		
NO.	DATE	BY
1	6/07	TRB

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

STANDARD PLAN SYMBOLS & STANDARD LEGEND

CHECKED BY _____ DATE _____ SCALE _____

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	3	62

GENERAL NOTES:

1. 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.

2. 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.

3. 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.

4. ALL R.I. STD. 9.9.0 CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.

5. THE FREQUENCY AND APPLICATION RATES FOR THE DUST CONTROL ITEMS WILL BE AS DIRECTED BY THE ENGINEER.

6. ALL SIDEWALK AND DRIVEWAYS DESIGNATED FOR REPLACEMENT SHALL BE CUT AND MATCHED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

7. 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."

8. 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.

9. UNDER NO CIRCUMSTANCE WILL THE CONTRACTOR BE ALLOWED TO STOCKPILE REMOVED PAVEMENT MATERIALS WITHIN THE PROJECT LIMITS.

10. 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.

11. PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE APPROVED OR MODIFIED BY THE ENGINEER.

12. THE COORDINATE SYSTEM, IF SHOWN, IS THE RHODE ISLAND STATE PLANE COORDINATE SYSTEM.

13. 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 SKI-TYPE DEVICE FOR AUTOMATIC GRADE CONTROL, BUT WILL BE ALLOWED TO MANUALLY ADJUST THE BITUMINOUS PAVER FOR CONTROLLING GRADE.

14. 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.

15. 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.

16. 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.

17. 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.

18. 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.

19. 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).

20. 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).

21. 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.

22. 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:

1. 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).

2. 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.

3. 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.

4. 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.

5. 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.

6. SEEDING ON ALL SLOPES 3 TO 1 OR STEEPER SHALL CONSIST OF THE FOLLOWING APPLICATIONS UNLESS CHANGED IN THE CONTRACT.

   a. SEEDING TYPE I.

   b. ADHESIVE MULCH STABILIZER

7. UNVEGETATED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR PERIODS IN EXCESS OF 2 WEEKS OR THROUGH THE INACTIVE WINTER SEASON.

8. 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.

9. ALL DRAINAGE AND UTILITY STRUCTURES WITHIN THE PAVED ROADWAY SHALL BE ADJUSTED TO GRADE WITH THE SURROUNDING PAVEMENT PRIOR TO THE WINTER SHUTDOWN.

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

11. 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.

12. PROVISIONS FOR CLEARING TO ACCESS OUTFALLS DURING THE CLEANING AND FLUSHING OF THE CLOSED DRAINAGE SYSTEM SHALL BE KEPT TO A MINIMUM.

   a. ANY VEGETATIVE CLEARING SHALL BE LIMITED TO BRUSH AND TREES LESS THAN 3" DIAMETER.

   b. NO HEAVY EQUIPMENT MAY ENCROACH UPON VEGETATED PERIMETER OR RIVERBANK WETLANDS AS WELL AS BIOLOGICAL WETLANDS.

13. 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.

14. 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.

15. 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):

16. 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.

17. 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.

18. 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.

19. 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.

20. 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.

21. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE SPECIFIED IN SUBSECTION L.02.03 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.

22. 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:

1. 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.

2. 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.

3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CAPPED.

4. EXISTING WATER SERVICES SHALL BE RECONNECTED TO THE NEW WATER MAINS.

5. UTILITY SERVICE CONNECTIONS SHALL BE MAINTAINED TO ALL EXISTING FACILITIES TO REMAIN.

6. FIRE HYDRANTS SHALL NOT BE REMOVED FROM SERVICE WITHOUT WRITTEN AUTHORIZATION FROM THE FIRE DEPARTMENT OR THE WATER AUTHORITY.

7. ALL NEW WATER LINES SHALL BE DISINFECTED TO THE SATISFACTION OF THE WATER AUTHORITY IN ACCORDANCE WITH THE SPECIFICATIONS.

8. ALL UTILITY POLE RELATED WORK SHALL BE BY OTHERS.

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

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

STANDARD NOTES - 1

CHECKED BY _____ DATE _____ SCALE _____

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	4	62

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–PLANED AND NEW ROADWAY SURFACES THAT WILL BE OPENED TO TRAFFIC AT THE END OF THE SHIFT.

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

PARE CORPORATION
ENGINEERS · SCIENTISTS · PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

STANDARD NOTES - 2

CHECKED BY _____ DATE _____ SCALE _____

0013V_V1_004_STDNOTES002

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	5	62

R-1

JOB SPECIFIC GENERAL NOTES:

1. EXISTING CONDITIONS SURVEY WAS PREPARED BY AEROTECH CORP. PROVIDENCE, RHODE ISLAND, IN SEPTEMBER OF 2018, AND FIELD EDITED BY PARE CORPORATION IN OCTOBER 2018.
2. FOR SURVEY WORK PERFORMED BY THE CONTRACTOR, ALL SURVEY FIELD BOOKS AND ELECTRONIC DATA SHALL BE SUBMITTED TO THE RIDOT SURVEY SECTION UPON COMPLETION OF THE CONSTRUCTION WORK. FIELD BOOKS SHALL INCLUDE A LISTING OF ALL RI HIGHWAY BOUNDS THAT WERE SET WITH STATIONS, OFFSETS, COORDINATES, AND DATE SET CERTIFIED BY THE CONTRACTOR'S PROFESSIONAL LAND SURVEYOR.
3. ALL REQUIRED TREE TRIMMING WILL BE COMPLETED UNDER THE RIDOT STATEWIDE TRIMMING CONTRACT. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK.
4. ALL GRASSED AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REESTABLISHED WITH LOAM AND TYPE 2 SEED OR PLANTABLE SOIL AND TYPE I SEED. IF AREAS ARE BEYOND WORK LIMIT LINES, THEN THE COST SHALL BE BORNE BY THE CONTRACTOR.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING TREES AND THEIR ROOT SYSTEMS DURING CONSTRUCTION.
6. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES AND NOTIFY THE APPROPRIATE UTILITY AUTHORITIES INCLUDING "DIG SAFE" PRIOR TO STARTING WORK. ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE COST OF REPAIRS SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
7. ALL WORK WITHIN THE STATE RIGHT-OF-WAY AND PORTIONS OF WORK ON CITY/TOWN ROADWAYS SHALL CONFORM TO THE RHODE ISLAND STANDARD SPECIFICATIONS, DETAILS, AND ALL ADDENDA.
8. THE CONTRACTOR SHALL BE AWARE OF THE PRESENCE OF OVERHEAD UTILITIES WITHIN THE WORK ZONE AND SHALL PLAN ALL CONSTRUCTION ACCORDINGLY. NO ADDITIONAL PAYMENT WILL BE MADE FOR EQUIPMENT AND METHODS REQUIRED TO ACCOMMODATE THE OVERHEAD UTILITIES.
9. NO SEPARATE PAYMENT WILL BE MADE FOR TEMPORARY EARTH SUPPORT. SHOULD THE CONTRACTOR USE ANY TEMPORARY EARTH SUPPORT STRUCTURES, THE COST SHALL BE CONSIDERED INCIDENTAL TO THE CORRESPONDING ITEMS OF WORK.
10. CONTRACTOR TO EXCAVATE TEST PITS IN AREAS OF POTENTIAL UTILITY CONFLICTS AND RELAY INFORMATION TO RESIDENT ENGINEER PRIOR TO COMMENCEMENT OF UTILITY WORK.
11. THERE SHALL BE NO PARKING OR STORING OF CONSTRUCTION EQUIPMENT UNDER THE DRIPLINE OF ANY TREE.
12. THE CONTRACTOR SHALL BE AWARE OF THE PRESENCE OF LOW-LEVEL CONTAMINATION OBSERVED AT BORINGS B-3 AND B-3. THIS CONTAMINATION HAS BEEN DETERMINED TO NOT BE A RIDEM JURISDICTIONAL RELEASE. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS FOR WORKER PROTECTION AND SHALL LEGALLY DISPOSE OF THE MATERIAL.
13. THE BASELINE ON ROUTE 6 SHALL NOT BE USED FOR CONSTRUCTION LAYOUT AND IS SHOWN FOR QUANTITY PURPOSES ONLY.

JOB SPECIFIC GUARDRAIL REPLACEMENT NOTES:

1. NEW GUARDRAIL AND GUARDRAIL TERMINAL INSTALLATIONS SHALL BE MASH COMPLIANT.
2. THE APPROXIMATE LOCATION AND LENGTH OF PARTIAL AND COMPLETE GUARDRAIL REMOVAL AND REPLACEMENT ARE SHOWN IN THE REFERENCE DRAWINGS. PRIOR TO DISMANTLING ANY SECTION OF THE GUARDRAIL, THE CONTRACTOR SHALL VERIFY THESE LOCATIONS AND LENGTHS WITH THE ENGINEER. ALL GUARDRAIL SECTIONS THAT ARE TO BE REMOVED SHALL BE REPLACED THE SAME DAY. IF SAME DAY REPLACEMENT IS NOT POSSIBLE, THE CONTRACTOR SHALL PROVIDE CONCRETE BARRIERS WITH FLARE OUTSIDE THE CLEAR ZONE OR CRASH CUSHION. PLACEMENT AND REMOVAL OF CONCRETE BARRIER SHALL BE CONSIDERED INCIDENTAL TO THE GUARDRAIL REPLACEMENT, THEREFORE THERE IS NO SEPARATE PAYMENT.
3. THE CONTRACTOR SHALL NOT INSTALL GUARDRAIL POSTS WITHIN PAVED WATERWAYS, ON TOP OF DRAIN LINES, OR ON TOP OF BOX CULVERTS. WHERE NECESSARY, POST SPACING SHALL BE ADJUSTED TO AVOID CONFLICTS, PROVIDED MINIMUM DEFLECTION REQUIREMENTS ARE STILL MET. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO INSTALL STEEL BEAM GUARDRAIL POSTS ON EITHER SIDE OF AN OBSTRUCTION THAT IS LESS THAN SIX (6) FEET WIDE USING THE NORMAL 6'-3" POST SPACING. THIS MAY REQUIRE THAT THE GUARDRAIL INSTALLATION IS STARTED AT THE OBSTRUCTION AND CONTINUED IN EITHER DIRECTION AWAY FROM THE OBSTRUCTION TO THE DESIRED LENGTH SHOWN ON THE PLANS AND SPECIFIED IN THE CONTRACT DOCUMENTS.
4. THE CONTRACTOR SHALL NOTE THAT THE REQUIRED INSTALLATION OF REFLECTORIZED DELINEATORS ON ALL GUARDRAIL AND GUARDRAIL END TREATMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE GUARDRAIL ITEM. NO SEPARATE PAYMENT WILL BE MADE FOR THE REFLECTORIZED DELINEATORS. DELINEATION STICKERS ARE ALSO REQUIRED ON ALL APPROACH END SECTIONS, AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE END TREATMENT.
5. WHERE EXISTING GUARDRAIL POSTS ARE REMOVED AND NO NEW GUARDRAIL IS INSTALLED, THE POST HOLES SHALL BE FILLED WITH COMMON BORROW. PLANTABLE SOIL AND SEED SHALL BE SPREAD ACROSS THE FILLED HOLES. HOLES SHALL BE FILLED WITH CONCRETE BIT PATCH ON IMPERVIOUS SURFACES. THE COST OF THIS ITEM SHALL BE INCIDENTAL TO ITEM CODE 201.0415 REMOVE AND DISPOSE GUARDRAIL AND POST ALL TYPES.
6. THERE WILL BE NO DIRECT PAYMENT FOR ANY HARDWARE, UNLESS OTHERWISE NOTED, REQUIRED TO PROPERLY COMPLETE THE INSTALLATION OF GUARDRAIL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, STANDARD DETAILS, OR SPECIAL DETAILS CONTAINED IN THE CONTRACT. HARDWARE SHALL INCLUDE ALL NUTS, BOLTS, AND WASHERS.

JOB SPECIFIC VERIZON UTILITY NOTES:

1. ANY/ALL ADJUSTMENTS TO VERIZON OWNED UNDERGROUND EQUIPMENT (MANHOLES, FRAME & COVERS, CONDUITS, ETC) MUST BE PERFORMED BY AN APPROVED VERIZON CONTRACTOR. ADDITIONALLY, ALL ADJUSTMENTS MUST BE INSPECTED BY VERIZON'S CONTRACT WORK INSPECTOR (CWI). PLEASE CONTACT DAN MELLO (CWI) @ (401)439-5571...48 HOURS IN ADVANCE BEFORE COMMENCING WORK.
2. IF VERIZON'S UNDERGROUND (UG) STRUCTURES (CONDUITS, CABLES, MANHOLES, ETC...) ARE EXPOSED DURING CONSTRUCTION, THE GENERAL CONTRACTOR (GC) MUST PROVIDE PROTECTION FOR THE EXPOSED PLANT IN ACCORDANCE WITH VERIZON'S METHODS AND PROCEDURES AND WITH THE APPROVAL OF VERIZON'S CWI. ADDITIONALLY, AN APPROVED PARTITION MUST BE PLACED BETWEEN EXISTING VERIZON STRUCTURES AND NEW CONCRETE CONSTRUCTION WHERE CONTACT AND/OR ENCROACHMENT MAY ARISE.
3. THE UNDERMINING OF VERIZON DUCTS (INCLUDING THOSE CONCRETE ENCASED) IS NOT PERMITTED WITHOUT INSPECTION/PERMISSION OF VERIZON'S CWI.
4. A RADIAL CLEARANCE OF THREE FEET (3') MUST BE MAINTAINED BETWEEN VERIZON'S AERIAL EQUIPMENT (CABLES, TERMINALS, POLES, ETC) IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS. THIS INCLUDES TRAFFIC SIGNAL AND CONSTRUCTION EQUIPMENT.... EITHER TEMPORARY OR PERMANENT. PLEASE REFER TO R.I.D.O.T. DOCUMENT TAC-0049 FOR ADDITIONAL INFORMATION.

ADDENDUM No.1

JOB SPECIFIC NATIONAL GRID GAS NOTES:

DESCRIPTION

THIS GUIDELINE SHALL CONTROL WORK AROUND EXISTING CORROSION CONTROL COMPONENTS. REPLACEMENT OF TEST STATIONS, ANODES, AND TEST WIRE LEADS SHALL COMPLY WITH STANDARDS AND SPECIFICATIONS STIPULATED BY NATIONAL GRID. IF DESIGN PLANS CALL FOR WORK IN THE AREA OF CORROSION CONTROL COMPONENTS, CARE MUST BE TAKEN TO PREVENT DAMAGE TO SUCH COMPONENTS.

GENERAL NATIONAL GRID CONSIDERATIONS

THE CONTRACTOR SHALL PERFORM REPLACEMENT OF DAMAGED CORROSION CONTROL TEST BOXES, RESETTING OF DISTURBED TEST BOXES, AND ENSURE A MINIMUM OF 12" OF EXCESS WIRE ABOVE THE RIM OF THE TEST BOX AFTER SET TO FINISHED GRADE. WIRES SHALL NOT BE PULLED TAUGHT TO ACHIEVE THE 12" ABOVE THE BOX, AS THIS WILL CAUSE STRESS ON THE WIRE CONNECTION AT THE MAIN. WIRES NEEDING TO BE LENGTHENED, DAMAGED CORROSION CONTROL COMPONENTS I.E. WIRES, OR WIRE COATING, SHALL REQUIRE NOTIFICATION TO THE CORROSION CONTROL DEPARTMENT (525-5610 OR 474-5171) TO INITIATE INSPECTION/REPAIR OR REPLACEMENT OF THE DAMAGED COMPONENTS.

BACKFILLING EXPOSED CORROSION CONTROL WIRE COMPONENTS SHALL BEGIN IMMEDIATELY AFTER THE WORK IN THAT LOCATION IS COMPLETE. THE REGION WITHIN 6" ALONGSIDE AND ON TOP OF THE CONNECTOR WIRES SHALL BE BACKFILLED WITH PADDING SAND (FREE OF CINDERS, ASH, AND ROCK). TEST WIRE LEADS MUST BE KEPT WITH ENOUGH SLACK TO PREVENT STRESS ON THE POINTS WHERE THE WIRES CONNECT TO THE GAS MAIN. TRENCH SPOIL MATERIAL SHALL BE SUITABLE FOR BACKFILLING ABOVE THE PADDING MATERIAL AS LONG AS ROCKS WITH A DIAMETER LARGER THAN 3" ARE REMOVED. THE REMAINDER OF THE TRENCH SHALL BE BACKFILLED & COMPACTED IN ACCORDANCE WITH SECTION 205.05.5 OF THE RIDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.

ALL VALVE BOXES AND CORROSION (CP) TEST BOXES HAVE BEEN MARKED ON THE PLANS. THESE BOXES NEED TO BE ADJUSTED TO THE NEW ROAD SURFACE. NEW BOXES CAN BE OBTAINED AT THE NATIONAL GRID PROVIDENCE FACILITY AT 477 DEXTER STREET. CORROSION TEST BOXES CONTAIN WIRES. USE CAUTION WHEN ADJUSTING THESE BOXES AND CONTACT RON VINCENT AT 617-438-5192 IF THE WIRES ARE DAMAGED. ALL VALVE BOXES MUST BE ACCESSIBLE AT ALL TIMES TO BE OPERATED IN THE EVENT OF AN EMERGENCY.

SEE APPENDIX J "NATIONAL GRID GAS REQUIREMENTS" FOR FURTHER NOTES AND GUIDANCE FOR WORKING NEAR NATIONAL GRID GAS UTILITIES.

THE CONTRACTOR SHALL ASSUME SECTIONS OF PIPE TO BE REMOVED ARE CONTAMINATED AND SHALL BE DISPOSED OF ACCORDING TO THE GUIDELINES IN APPENDIX J. THE COST OF HANDLING AND TRANSPORTING THE REMOVED PIPE SHALL BE INCIDENTAL TO ITEM 201.0414 "REMOVE AND DISPOSE PIPE-ALL SIZES"

1

JOB SPECIFIC DRAINAGE NOTES:

1. DRAINAGE STRUCTURES, INCLUDING BUT NOT LIMIT TO, DRAINAGE PIPES, MANHOLES, AND CATCH BASINS ADJACENT TO THE WORK AREA SHALL BE CLEANED OR FLUSHED. THE FINAL QUANTITY OF DRAINAGE STRUCTURES TO BE CLEANED WILL BE AS DIRECTED BY THE ENGINEER.
2. CATCH BASIN INLET SEDIMENT CONTROL DEVICES, AS SHOWN ON DETAILS SHEET, SHALL BE UTILIZED WHEN ADJACENT WORK ACTIVITY EXPOSES ERODIBLE SOILS.
3. VEGETATION CLEARING TO ACCESS OUTFALLS DURING CLEANING AND FLUSHING PIPE SHALL BE AS DIRECTED BY THE ENGINEER.

JOB SPECIFIC EROSION CONTROL NOTES:

1. BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS MUST BE USED AND MAINTAINED IN EFFECTIVE OPERATIONAL CONDITION DURING THE ACTIVITY, AND ALL EXPOSED SOIL AND OTHER FILLS MUST BE PERMANENTLY STABILIZED AT THE EARLIEST POSSIBLE DATE. (SEE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" ("RISESC HANDBOOK") AND THE LATEST VERSION OF THE "RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL ("RISDIS MANUAL") FOR DESIGN GUIDANCE AND ADDITIONAL REQUIREMENTS".)
2. NO ACTIVITY SHALL RESULT IN SEDIMENT TRANSPORT TO WETLANDS AND/OR WATERWAYS.
3. NO EQUIPMENT SHALL BE PLACED IN ANY WATERCOURSE OR WETLAND FOR THE PURPOSE OF THE REPAIR, UNLESS AUTHORIZED BY THE GOVERNING AUTHORITY. ANY MATERIAL REMOVED FROM THE STRUCTURE DURING THE REPAIR SHALL BE DISPOSED PROPERLY OFFSITE.
4. EXCEPT AS PROVIDED FOR BY PAY ITEMS, ALL WORK REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE CONSIDERED INCIDENTAL TO THE WORK.

JOB SPECIFIC CONSTRUCTION ACTIVITY NOTES:

1. ALL WETLAND FUNCTIONS AND VALUES MUST BE PROTECTED TO THE MAXIMUM EXTENT POSSIBLE SO AS TO PREVENT POLLUTANTS, SEDIMENT, DIRECT DISCHARGE OF STORMWATER RUNOFF, OR ANY MATERIAL FOREIGN TO A WETLAND OR HAZARDOUS TO LIFE, FROM ENTERING ANY WETLAND.
2. STATE AND LOCAL PERMITTING AGENCIES MAY REQUIRE A WORK PLAN PRIOR TO THE ISSUANCE OF A PERMIT.

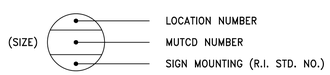
GENERAL NOTE REGARDING TEMPORARY CONSTRUCTION CONDITIONS :

1. ALL TEMPORARY BARRIERS TO BE UTILIZED ON BRIDGES AND THEIR APPROACHES DURING CONSTRUCTION SHALL MEET THE THE FOLLOWING TEST LEVELS:

   BRIDGE 606 - TL-3
   BRIDGE 605 - TL-4

2. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE THE EXISTING PAVEMENT DURING THE INSTALLATION AND RELOCATION OF TEMPORARY BARRELS.

TYPICAL SIGN DESIGNATION SYMBOL



JOB SPECIFIC PLAN SYMBOLS

EXISTING		NEW
	CUT AND MATCH	
	DIRECTION OF TRAVEL	
C.L.F.	CHAIN LINK FENCE	
SW	STONE WALL	
	TREE	
	BOLLARD	
	SIGN	
	TEMPORARY CHAIN LINK FENCE	
U.P.#	UTILITY POLE	
GV	GAS GATE	
CPT	C.P. TEST (GAS)	
WV	WATER GATE	
S	SEWER MANHOLE	SMH
D	DRAIN MANHOLE	
	CATCH BASIN	CB
	ELECTRICAL MANHOLE	
T	TELEPHONE MANHOLE	
	CURB INLET	
GC	VERTICAL GRANITE CURB	
BIT	BITUMINOUS	
CONC	CONCRETE	
CW	CONCRETE WALK	
B7 B8 B9	WETLAND EDGE	
	200' FOOT RIVERBANK WETLAND	
OHW	OVERHEAD WIRES	
SMRW	STONE MASONRY RETAINING WALL	
	GUARDRAIL	
	COMPOST FILTER SOCK	

R.I. STD. DETAILS

7.3.2M	6' GRANITE TRANSITION CURB, QUARRY SPLIT SPECIAL TRANSITION R.I. STANDARD 7.3.2 (MODIFIED) 6'-0" GRANITE TRANSITION CURB (6" - 7" TRANSITION CURB REVEAL) THIS WORK SHALL BE PAID FOR UNDER ITEM 906.0118
7.3.9	GRANITE RAMP STONE
26.1.0	FLUORESCENT TRAFFIC CONES
29.1.0	CONSTRUCTION SIGNS
29.2.0	GUIDE SIGNS
34.1.0M	TYPICAL GUARDRAIL INSTALLATION (31" HEIGHT)
34.3.7	GUARDRAIL CONNECTION TO BARRIER - -APPROACH END SECTION - STD. 34.3.7
43.1.0M	CEMENT CONCRETE SIDEWALK (MODIFIED) REINFORCED PER RIDOT STD 42.2.1 (THIS WORK SHALL BE PAID FOR UNDER ITEM NO 905.0110 PORTLAND CEMENT SIDEWALK)
47.1.1	TRANSVERSE PAVEMENT CUT AND MATCH

JOB SPECIFIC LEGEND

B	54" TL-5 BARRIER (SEE DETAILS)
BT	BARRIER TRANSITION (SEE DETAILS)
CM	CUT AND MATCH (SEE DETAIL)
CFS	COMPOST FILTER SOCK (SEE DETAILS)
CW	CROSSWALK (SEE DETAILS)
DCS	REMOVE AND DISPOSE CONCRETE SLAB
EMH	NATIONAL GRID TWO-WAY ELECTRIC MANHOLE (SEE CS PAGES FOR DETAILS)
ETEA	GUARDRAIL END TERMINAL - ENERGY ABSORBING
FDS	FULL DEPTH SAWCUT OF BITUMINOUS PAVEMENT
GRT	BRIDGE RAIL TO GUARDRAIL TRANSITION (SEE DETAILS)
ISCD	INLET SEDIMENT CONTROL DEVICE (SEE DETAILS)
MEPM	MATCH EXISTING PAVEMENT MARKING
MMO	MICROMILL 1.5" OF EXISTING PAVEMENT INSTALL 1.5" OF FRICTION COURSE ASPHALT EMULSION TACK COAT BETWEEN LAYERS
NGR	PROVIDE NESTED GUARD RAIL AT LOCATIONS WHERE GUARD RAIL POSTS HAVE BEEN ELIMINATED TO AVOID UNDERGROUND UTILITIES, AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 901.0193 "GUARDRAIL STEEL BEAM SINGLE FACE STD. 34.2.0.
P-1	FULL DEPTH PAVEMENT CONSTRUCTION 2" MODIFIED CLASS 12.5 HMA SURFACE COURSE 5" CLASS 19.0 HMA (PLACED IN TWO 2.5" LIFTS) 12" GRAVEL BORROW SUBBASE ASPHALT EMULSION TACK COAT BETWEEN LAYERS
P-2	FULL DEPTH PAVEMENT CONSTRUCTION 3" CLASS 12.5 HMA SURFACE COURSE 8" CEMENT CONCRETE 8" GRAVEL BORROW SUBBASE
PMG	PLACEMENT OF MILLINGS BENEATH GUARDRAIL TO A MINIMUM DEPTH OF 5"
PVI	PIPELINE VIDEO INSPECTION AND REPORTING
RC	RECONSTRUCT CATCH BASIN OR MANHOLE CORBEL CONE
RRM	ONE-WAY REFLECTORIZED RECESSED PAVEMENT MARKER (SEE DETAILS)
RRL	REMOVE, STOCKPILE, AND RESET CITY STREET LIGHT
RS	RUMBLE STRIP (SEE DETAILS)
SSB	SAW AND SEAL BRIDGE JOINT
6TW	6" TEMPORARY WATERBORNE PAVEMENT MARKING PAINT- WHITE
6TY	6" TEMPORARY WATERBORNE PAVEMENT MARKING PAINT- YELLOW
24TW	24" TEMPORARY WATERBORNE PAVEMENT MARKING PAINT- WHITE
GD-1	GUARDRAIL END DELINEATOR-RED (SEE DETAILS)

REVISIONS		
NO.	DATE	BY
1	7/15/19	ETS

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

JOB SPECIFIC
PLAN SYMBOLS, LEGEND & NOTES

CHECKED BY _____ DATE _____ SCALE _____

0013V_V1_005_JSNOTSYM

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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4. THE CONTRACTOR SHALL NOTE THAT THE REQUIRED INSTALLATION OF REFLECTORIZED DELINEATORS ON ALL GUARDRAIL AND GUARDRAIL END TREATMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE GUARDRAIL ITEM. NO SEPARATE PAYMENT WILL BE MADE FOR THE REFLECTORIZED DELINEATORS. DELINEATION STICKERS ARE ALSO REQUIRED ON ALL APPROACH END SECTIONS, AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE END TREATMENT.
5. WHERE EXISTING GUARDRAIL POSTS ARE REMOVED AND NO NEW GUARDRAIL IS INSTALLED, THE POST HOLES SHALL BE FILLED WITH COMMON BORROW. PLANTABLE SOIL AND SEED SHALL BE SPREAD ACROSS THE FILLED HOLES. HOLES SHALL BE FILLED WITH CONCRETE BIT PATCH ON IMPERVIOUS SURFACES. THE COST OF THIS ITEM SHALL BE INCIDENTAL TO ITEM CODE 201.0415 REMOVE AND DISPOSE GUARDRAIL AND POST ALL TYPES.
6. THERE WILL BE NO DIRECT PAYMENT FOR ANY HARDWARE, UNLESS OTHERWISE NOTED, REQUIRED TO PROPERLY COMPLETE THE INSTALLATION OF GUARDRAIL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, STANDARD DETAILS, OR SPECIAL DETAILS CONTAINED IN THE CONTRACT. HARDWARE SHALL INCLUDE ALL NUTS, BOLTS, AND WASHERS.

JOB SPECIFIC VERIZON UTILITY NOTES:

1. ANY/ALL ADJUSTMENTS TO VERIZON OWNED UNDERGROUND EQUIPMENT (MANHOLES, FRAME & COVERS, CONDUITS, ETC) MUST BE PERFORMED BY AN APPROVED VERIZON CONTRACTOR. ADDITIONALLY, ALL ADJUSTMENTS MUST BE INSPECTED BY VERIZON'S CONTRACT WORK INSPECTOR (CWI). PLEASE CONTACT DAN MELLO (CWI) @ (401)439-5571...48 HOURS IN ADVANCE BEFORE COMMENCING WORK.
2. IF VERIZON'S UNDERGROUND (UG) STRUCTURES (CONDUITS, CABLES, MANHOLES, ETC...) ARE EXPOSED DURING CONSTRUCTION, THE GENERAL CONTRACTOR (GC) MUST PROVIDE PROTECTION FOR THE EXPOSED PLANT IN ACCORDANCE WITH VERIZON'S METHODS AND PROCEDURES AND WITH THE APPROVAL OF VERIZON'S CWI. ADDITIONALLY, AN APPROVED PARTITION MUST BE PLACED BETWEEN EXISTING VERIZON STRUCTURES AND NEW CONCRETE CONSTRUCTION WHERE CONTACT AND/OR ENCROACHMENT MAY ARISE.
3. THE UNDERMINING OF VERIZON DUCTS (INCLUDING THOSE CONCRETE ENCASED) IS NOT PERMITTED WITHOUT INSPECTION/PERMISSION OF VERIZON'S CWI.
4. A RADIAL CLEARANCE OF THREE FEET (3') MUST BE MAINTAINED BETWEEN VERIZON'S AERIAL EQUIPMENT (CABLES, TERMINALS, POLES, ETC) IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS. THIS INCLUDES TRAFFIC SIGNAL AND CONSTRUCTION EQUIPMENT.... EITHER TEMPORARY OR PERMANENT. PLEASE REFER TO R.I.D.O.T. DOCUMENT TAC-0049 FOR ADDITIONAL INFORMATION.

JOB SPECIFIC NATIONAL GRID GAS NOTES:

DESCRIPTION

THIS GUIDELINE SHALL CONTROL WORK AROUND EXISTING CORROSION CONTROL COMPONENTS. REPLACEMENT OF TEST STATIONS, ANODES, AND TEST WIRE LEADS SHALL COMPLY WITH STANDARDS AND SPECIFICATIONS STIPULATED BY NATIONAL GRID. IF DESIGN PLANS CALL FOR WORK IN THE AREA OF CORROSION CONTROL COMPONENTS, CARE MUST BE TAKEN TO PREVENT DAMAGE TO SUCH COMPONENTS.

GENERAL NATIONAL GRID CONSIDERATIONS

THE CONTRACTOR SHALL PERFORM REPLACEMENT OF DAMAGED CORROSION CONTROL TEST BOXES, RESETTING OF DISTURBED TEST BOXES, AND ENSURE A MINIMUM OF 12" OF EXCESS WIRE ABOVE THE RIM OF THE TEST BOX AFTER SET TO FINISHED GRADE. WIRES SHALL NOT BE PULLED TAUGHT TO ACHIEVE THE 12" ABOVE THE BOX, AS THIS WILL CAUSE STRESS ON THE WIRE CONNECTION AT THE MAIN. WIRES NEEDING TO BE LENGTHENED, DAMAGED CORROSION CONTROL COMPONENTS I.E. WIRES, OR WIRE COATING, SHALL REQUIRE NOTIFICATION TO THE CORROSION CONTROL DEPARTMENT (525-5610 OR 474-5171) TO INITIATE INSPECTION/REPAIR OR REPLACEMENT OF THE DAMAGED COMPONENTS.

BACKFILLING EXPOSED CORROSION CONTROL WIRE COMPONENTS SHALL BEGIN IMMEDIATELY AFTER THE WORK IN THAT LOCATION IS COMPLETE. THE REGION WITHIN 6" ALONGSIDE AND ON TOP OF THE CONNECTOR WIRES SHALL BE BACKFILLED WITH PADDING SAND (FREE OF CINDERS, ASH, AND ROCK). TEST WIRE LEADS MUST BE KEPT WITH ENOUGH SLACK TO PREVENT STRESS ON THE POINTS WHERE THE WIRES CONNECT TO THE GAS MAIN. TRENCH SPOIL MATERIAL SHALL BE SUITABLE FOR BACKFILLING ABOVE THE PADDING MATERIAL AS LONG AS ROCKS WITH A DIAMETER LARGER THAN 3" ARE REMOVED. THE REMAINDER OF THE TRENCH SHALL BE BACKFILLED & COMPACTED IN ACCORDANCE WITH SECTION 205.05.5 OF THE RIDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.

ALL VALVE BOXES AND CORROSION (CP) TEST BOXES HAVE BEEN MARKED ON THE PLANS. THESE BOXES NEED TO BE ADJUSTED TO THE NEW ROAD SURFACE. NEW BOXES CAN BE OBTAINED AT THE NATIONAL GRID PROVIDENCE FACILITY AT 477 DEXTER STREET. CORROSION TEST BOXES CONTAIN WIRES. USE CAUTION WHEN ADJUSTING THESE BOXES AND CONTACT RON VINCENT AT 617-438-5192 IF THE WIRES ARE DAMAGED. ALL VALVE BOXES MUST BE ACCESSIBLE AT ALL TIMES TO BE OPERATED IN THE EVENT OF AN EMERGENCY.

JOB SPECIFIC DRAINAGE NOTES:

1. DRAINAGE STRUCTURES, INCLUDING BUT NOT LIMIT TO, DRAINAGE PIPES, MANHOLES, AND CATCH BASINS ADJACENT TO THE WORK AREA SHALL BE CLEANED OR FLUSHED. THE FINAL QUANTITY OF DRAINAGE STRUCTURES TO BE CLEANED WILL BE AS DIRECTED BY THE ENGINEER.
2. CATCH BASIN INLET SEDIMENT CONTROL DEVICES, AS SHOWN ON DETAILS SHEET, SHALL BE UTILIZED WHEN ADJACENT WORK ACTIVITY EXPOSES ERODIBLE SOILS.
3. VEGETATION CLEARING TO ACCESS OUTFALLS DURING CLEANING AND FLUSHING PIPE SHALL BE AS DIRECTED BY THE ENGINEER.

JOB SPECIFIC EROSION CONTROL NOTES:

1. BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS MUST BE USED AND MAINTAINED IN EFFECTIVE OPERATIONAL CONDITION DURING THE ACTIVITY, AND ALL EXPOSED SOIL AND OTHER FILLS MUST BE PERMANENTLY STABILIZED AT THE EARLIEST POSSIBLE DATE. (SEE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" ("RISESC HANDBOOK") AND THE LATEST VERSION OF THE "RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL ("RISDIS MANUAL") FOR DESIGN GUIDANCE AND ADDITIONAL REQUIREMENTS".)
2. NO ACTIVITY SHALL RESULT IN SEDIMENT TRANSPORT TO WETLANDS AND/OR WATERWAYS.
3. NO EQUIPMENT SHALL BE PLACED IN ANY WATERCOURSE OR WETLAND FOR THE PURPOSE OF THE REPAIR, UNLESS AUTHORIZED BY THE GOVERNING AUTHORITY. ANY MATERIAL REMOVED FROM THE STRUCTURE DURING THE REPAIR SHALL BE DISPOSED PROPERLY OFFSITE.
4. EXCEPT AS PROVIDED FOR BY PAY ITEMS, ALL WORK REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE CONSIDERED INCIDENTAL TO THE WORK.

JOB SPECIFIC CONSTRUCTION ACTIVITY NOTES:

1. ALL WETLAND FUNCTIONS AND VALUES MUST BE PROTECTED TO THE MAXIMUM EXTENT POSSIBLE SO AS TO PREVENT POLLUTANTS, SEDIMENT, DIRECT DISCHARGE OF STORMWATER RUNOFF, OR ANY MATERIAL FOREIGN TO A WETLAND OR HAZARDOUS TO LIFE, FROM ENTERING ANY WETLAND.
2. STATE AND LOCAL PERMITTING AGENCIES MAY REQUIRE A WORK PLAN PRIOR TO THE ISSUANCE OF A PERMIT.

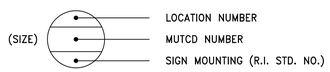
GENERAL NOTE REGARDING TEMPORARY CONSTRUCTION CONDITIONS :

1. ALL TEMPORARY BARRIERS TO BE UTILIZED ON BRIDGES AND THEIR APPROACHES DURING CONSTRUCTION SHALL MEET THE THE FOLLOWING TEST LEVELS:

   BRIDGE 606 – TL-3
   BRIDGE 605 – TL-4

2. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE THE EXISTING PAVEMENT DURING THE INSTALLATION AND RELOCATION OF TEMPORARY BARRELS.

TYPICAL SIGN DESIGNATION SYMBOL



JOB SPECIFIC PLAN SYMBOLS

EXISTING		NEW
	CUT AND MATCH	
	DIRECTION OF TRAVEL	
C.L.F.	CHAIN LINK FENCE	
SW	STONE WALL	
	TREE	
	BOLLARD	
	SIGN	
	TEMPORARY CHAIN LINK FENCE	
U.P.#	UTILITY POLE	
GV	GAS GATE	
GPT	C.P. TEST (GAS)	
WV	WATER GATE	
S	SEWER MANHOLE	SMH
D	DRAIN MANHOLE	
	CATCH BASIN	CB
	ELECTRICAL MANHOLE	
T	TELEPHONE MANHOLE	
	CURB INLET	
GC	VERTICAL GRANITE CURB	
BIT	BITUMINOUS	
CONC	CONCRETE	
CW	CONCRETE WALK	
B7 B8 B9	WETLAND EDGE	
	200' FOOT RIVERBANK WETLAND	
OHW	OVERHEAD WIRES	
SMRW	STONE MASONRY RETAINING WALL	
	GUARDRAIL	
	COMPOST FILTER SOCK	

R.I. STD. DETAILS

7.3.2M	6' GRANITE TRANSITION CURB, QUARRY SPLIT SPECIAL TRANSITION R.I. STANDARD 7.3.2 (MODIFIED) 6'-0" GRANITE TRANSITION CURB (6" – 7" TRANSITION CURB REVEAL) THIS WORK SHALL BE PAID FOR UNDER ITEM 906.0118
7.3.9	GRANITE RAMP STONE
26.1.0	FLUORESCENT TRAFFIC CONES
29.1.0	CONSTRUCTION SIGNS
29.2.0	GUIDE SIGNS
34.1.0M	TYPICAL GUARDRAIL INSTALLATION (31" HEIGHT)
34.3.7	GUARDRAIL CONNECTION TO BARRIER – –APPROACH END SECTION – STD. 34.3.7
43.1.0M	CEMENT CONCRETE SIDEWALK (MODIFIED) REINFORCED PER RIDOT STD 42.2.1 (THIS WORK SHALL BE PAID FOR UNDER ITEM NO 905.0110 PORTLAND CEMENT SIDEWALK)
47.1.1	TRANSVERSE PAVEMENT CUT AND MATCH

JOB SPECIFIC LEGEND

B	54" TL-5 BARRIER (SEE DETAILS)
BT	BARRIER TRANSITION (SEE DETAILS)
CM	CUT AND MATCH (SEE DETAIL)
CFS	COMPOST FILTER SOCK (SEE DETAILS)
CW	CROSSWALK (SEE DETAILS)
DCS	REMOVE AND DISPOSE CONCRETE SLAB
EMH	NATIONAL GRID TWO-WAY ELECTRIC MANHOLE (SEE CS PAGES FOR DETAILS)
ETEA	GUARDRAIL END TERMINAL – ENERGY ABSORBING
FDS	FULL DEPTH SAWCUT OF BITUMINOUS PAVEMENT
GRT	BRIDGE RAIL TO GUARDRAIL TRANSITION (SEE DETAILS)
ISCD	INLET SEDIMENT CONTROL DEVICE (SEE DETAILS)
MEPM	MATCH EXISTING PAVEMENT MARKING
MMO	MICROMILL 1.5" OF EXISTING PAVEMENT INSTALL 1.5" OF FRICTION COURSE ASPHALT EMULSION TACK COAT BETWEEN LAYERS
NGR	PROVIDE NESTED GUARD RAIL AT LOCATIONS WHERE GUARD RAIL POSTS HAVE BEEN ELIMINATED TO AVOID UNDERGROUND UTILITIES, AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 901.0193 "GUARDRAIL STEEL BEAM SINGLE FACE STD. 34.2.0.
P-1	FULL DEPTH PAVEMENT CONSTRUCTION 2" MODIFIED CLASS 12.5 HMA SURFACE COURSE 5" CLASS 19.0 HMA (PLACED IN TWO 2.5" LIFTS) 12" GRAVEL BORROW SUBBASE ASPHALT EMULSION TACK COAT BETWEEN LAYERS
P-2	FULL DEPTH PAVEMENT CONSTRUCTION 3" CLASS 12.5 HMA SURFACE COURSE 8" CEMENT CONCRETE 8" GRAVEL BORROW SUBBASE
PMG	PLACEMENT OF MILLINGS BENEATH GUARDRAIL TO A MINIMUM DEPTH OF 5"
PVI	PIPELINE VIDEO INSPECTION AND REPORTING
RC	RECONSTRUCT CATCH BASIN OR MANHOLE CORBEL CONE
RRM	ONE-WAY REFLECTORIZED RECESSED PAVEMENT MARKER (SEE DETAILS)
RRL	REMOVE, STOCKPILE, AND RESET CITY STREET LIGHT
RS	RUMBLE STRIP (SEE DETAILS)
SSB	SAW AND SEAL BRIDGE JOINT
6TW	6" TEMPORARY WATERBORNE PAVEMENT MARKING PAINT– WHITE
6TY	6" TEMPORARY WATERBORNE PAVEMENT MARKING PAINT– YELLOW
24TW	24" TEMPORARY WATERBORNE PAVEMENT MARKING PAINT– WHITE
GD-1	GUARDRAIL END DELINEATOR-RED (SEE DETAILS)

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ENGINEERS - SCIENTISTS - PLANNERS
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LINCOLN, RI 02865
401-334-4100

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

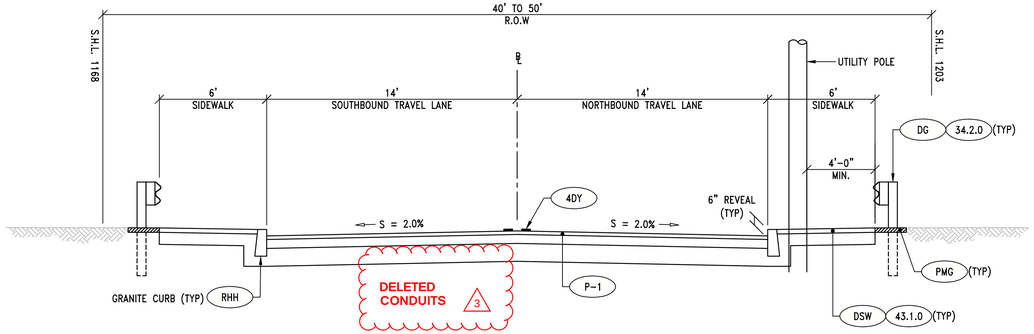
JOB SPECIFIC
PLAN SYMBOLS, LEGEND & NOTES

CHECKED BY _____ DATE _____ SCALE _____

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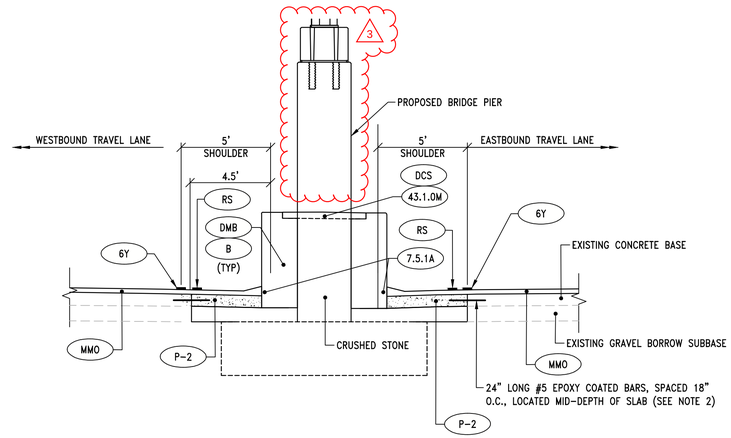
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	6	62

R-3



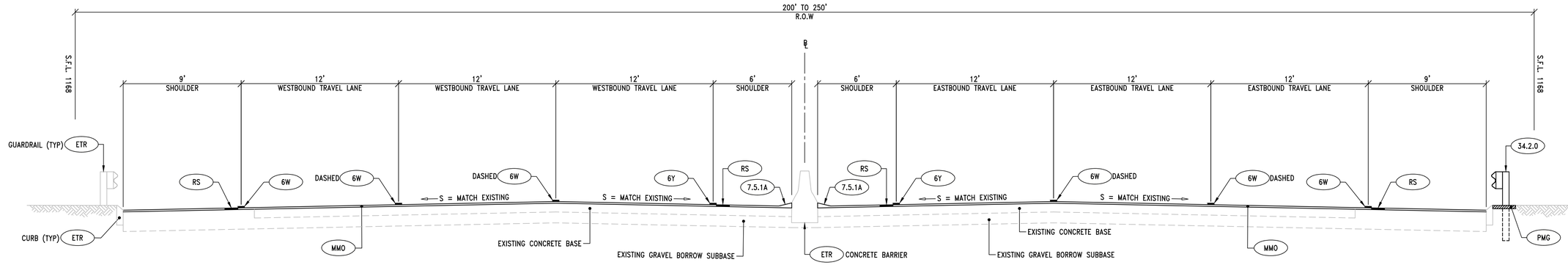
TYPICAL ROADWAY SECTION - GLENBRIDGE AVENUE

STA: 8+25 TO STA: 9+23
STA: 10+26 TO STA: 11+86



TYPICAL ROADWAY SECTION - ROUTE 6 AT BRIDGE PIER

STA: 445+55 TO STA: 448+80



TYPICAL ROADWAY SECTION - ROUTE 6

MMO EASTBOUND STA: 438+78 TO STA: 458+00
MMO WESTBOUND STA: 443+40 TO STA: 458+00

PAVEMENT STUCTURE:

MMO
MICROMILL 1.5" OF EXISTING PAVEMENT
INSTALL 1.5" OF FRICTION COURSE
ASPHALT EMULSION TACK COAT BETWEEN LAYERS

P-1
FULL DEPTH PAVEMENT CONSTRUCTION
2" MODIFIED CLASS 12.5 HMA SURFACE COURSE
5" CLASS 19.0 HMA (PLACED IN TWO 2.5" LIFTS)
12" GRAVEL BORROW SUBBASE
ASPHALT EMULSION TACK COAT BETWEEN LAYERS

P-2
FULL DEPTH PAVEMENT CONSTRUCTION
3" CLASS 12.5 HMA SURFACE COURSE
8" CEMENT CONCRETE
8" GRAVEL BORROW SUBBASE

NOTES:

1. EXISTING LANE AND SHOULDER WIDTHS ARE INTENDED TO BE MAINTAINED, UNLESS OTHERWISE NOTED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEASURE THE EXISTING LANE AND SHOULDER WIDTHS AND INSTALL NEW PAVEMENT MARKINGS TO MATCH EXISTING LANE AND SHOULDER WIDTHS.
2. EXISTING CONCRETE BASE TO BE DRILLED AND DOWELED PRIOR TO INSTALLING NEW CONCRETE BASE. DOWELS SHALL CONFORM TO RIDOT STD. SPECIFICATIONS 505 AND SHALL BE INCIDENTAL TO ITEM 501.0103 "PORTLAND CEMENT CONCRETE BASE".

Scale: 1"=4'
0 2' 4' 8'

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401-334-4100

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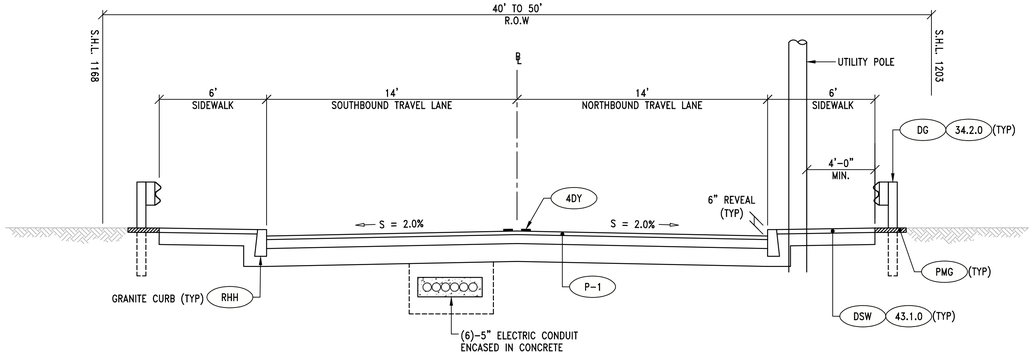
PROVIDENCE COUNTY RHODE ISLAND

TYPICAL SECTIONS

CHECKED BY _____ DATE _____ SCALE 1"=4'

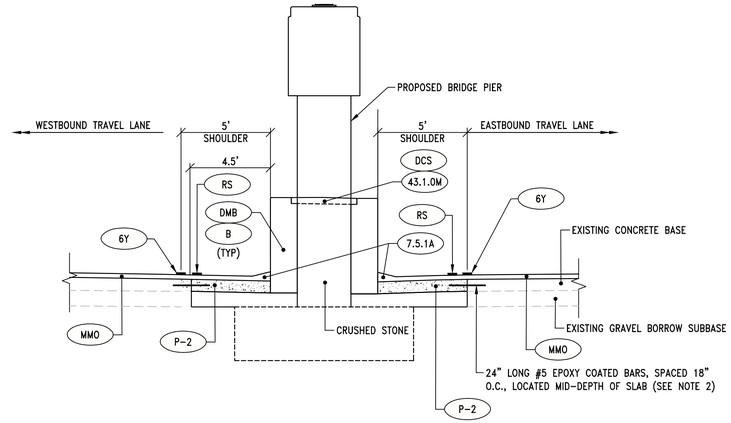
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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	6	62



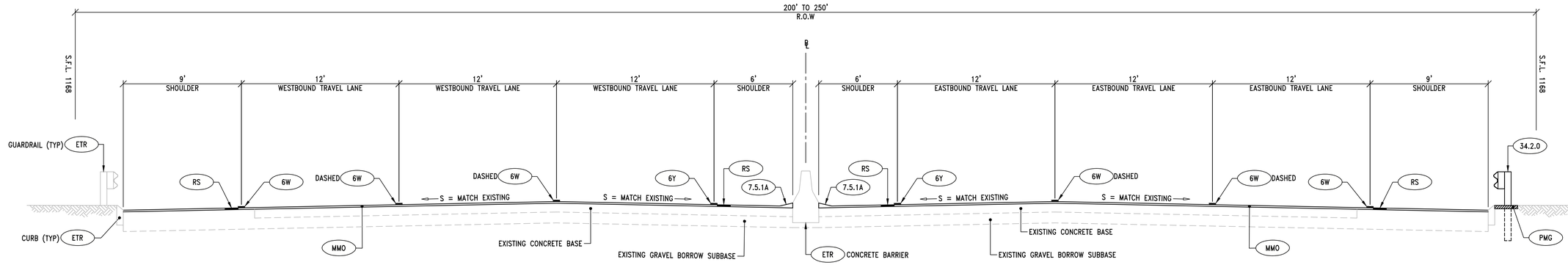
TYPICAL ROADWAY SECTION - GLENBRIDGE AVENUE

STA: 8+25 TO STA: 9+23
STA: 10+26 TO STA: 11+86



TYPICAL ROADWAY SECTION - ROUTE 6 AT BRIDGE PIER

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FULL DEPTH PAVEMENT CONSTRUCTION
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Scale: 1"=4'
0 2' 4' 8'

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TYPICAL SECTIONS

CHECKED BY _____ DATE _____ SCALE 1"=4'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	7	62

R-1

LIMIT OF WORK STA: 8+04
R.I. FAP No. BRO-0606(001)
R.I. CONTRACT No. 2019-CB-048
N269286.3509
E338822.9333

LIMIT OF WORK STA: 11+86
R.I. FAP No. BRO-0606(001)
R.I. CONTRACT No. 2019-CB-048
N269612.5935
E338892.4769

Grimwood Street

Buttonhole Drive

Glenbridge Avenue

Route 6 (EB)

Route 6 (WB)

Woonasquatucket River Greenway

WOONASQUATUCKET RIVER ± 70' WIDE

MATCH LINE TO INSET 'A'

TIE INTO EXISTING GUARDRAIL AND C.L.F.

TIE INTO EXISTING GUARDRAIL (TYP)

AREA SUBJECT TO STORM FLOWAGE

ELIMINATE INLET TO ALLOW FOR WCR CURB

FOR ROUTE 6 RELATED WORK REFER TO "GENERAL PLAN No. 2"

FOR BRIDGE RELATED WORK REFER TO "BRIDGE GENERAL PLAN"

℄ OF GLENBRIDGE AVE

GUTTER LINE (TYP)

200-FOOT RIVERBANK

INSET 'A'

Scale: 1"=20'
0 10' 20' 40'

NOTES:

1. SEE "LOCATION PLAN" FOR WHEELCHAIR RAMP TABLE.
2. ANY GRANITE CURBING REMOVED AND NOT RE-USED SHOULD BE STOCKPILED AND BROUGHT TO THE PROVIDENCE DEPARTMENT OF PUBLIC WORKS AT 700 ALLENS AVENUE, PROVIDENCE, R.I.

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PROVIDENCE COUNTY RHODE ISLAND

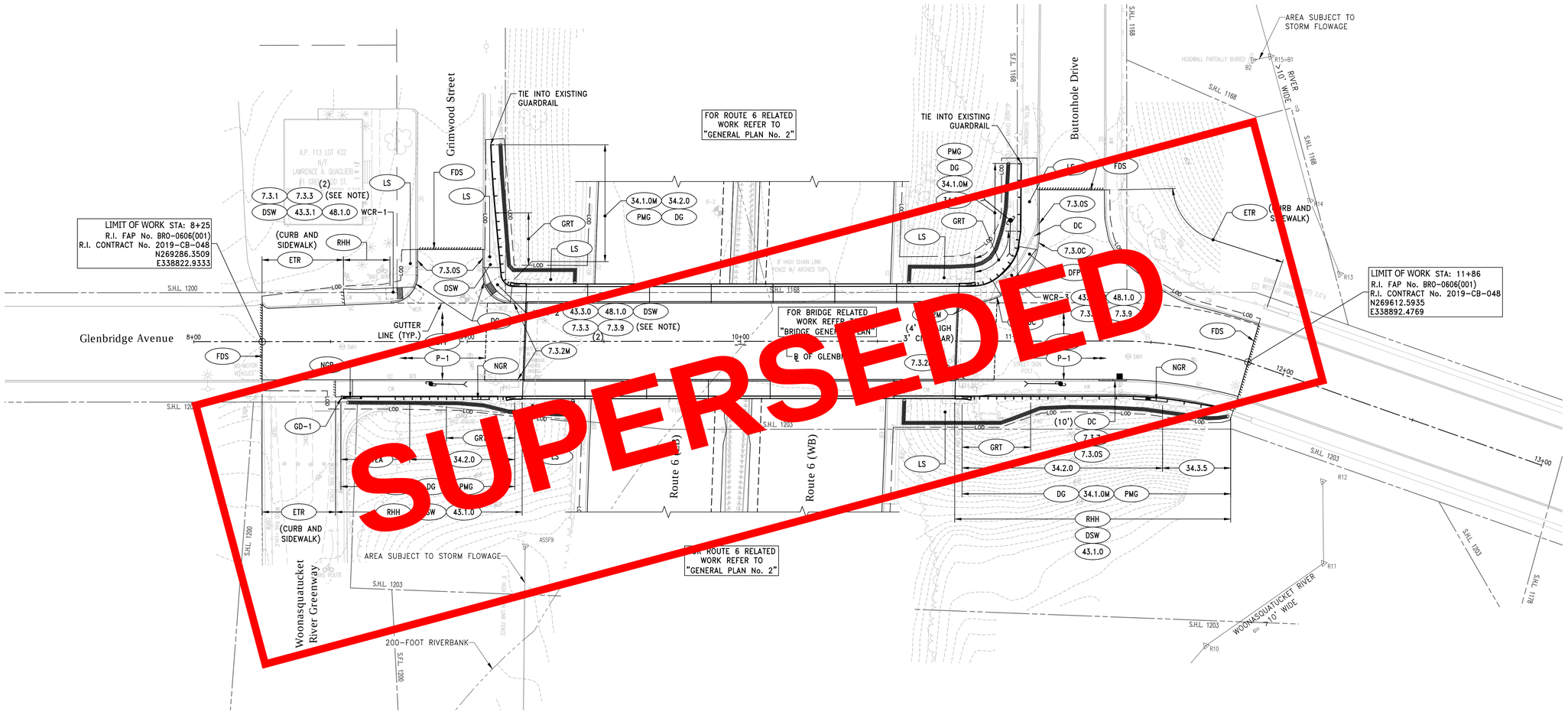
GENERAL PLAN No. 1

CHECKED BY _____ DATE _____ SCALE 1"=20'

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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	7	62



NOTE:

1. SEE "LOCATION PLAN" FOR WHEELCHAIR RAMP TABLE.

Scale: 1"=20'

0 10' 20' 40'

PARE CORPORATION
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401-334-4100

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RHODE ISLAND
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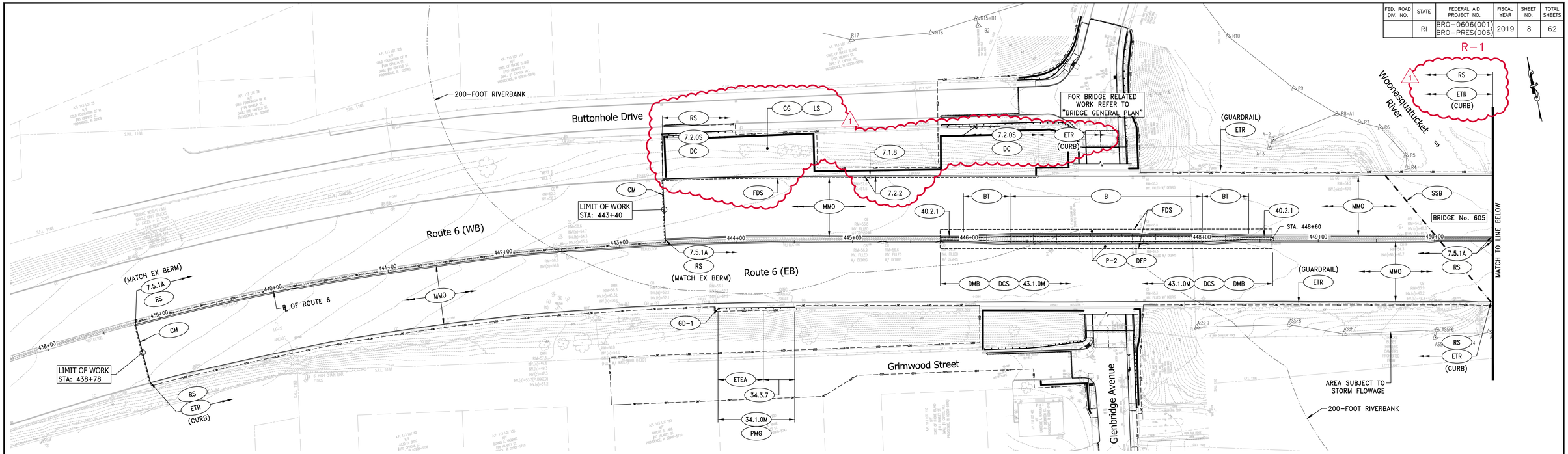
PROVIDENCE COUNTY RHODE ISLAND

GENERAL PLAN No. 1

CHECKED BY _____ DATE _____ SCALE 1"=20'

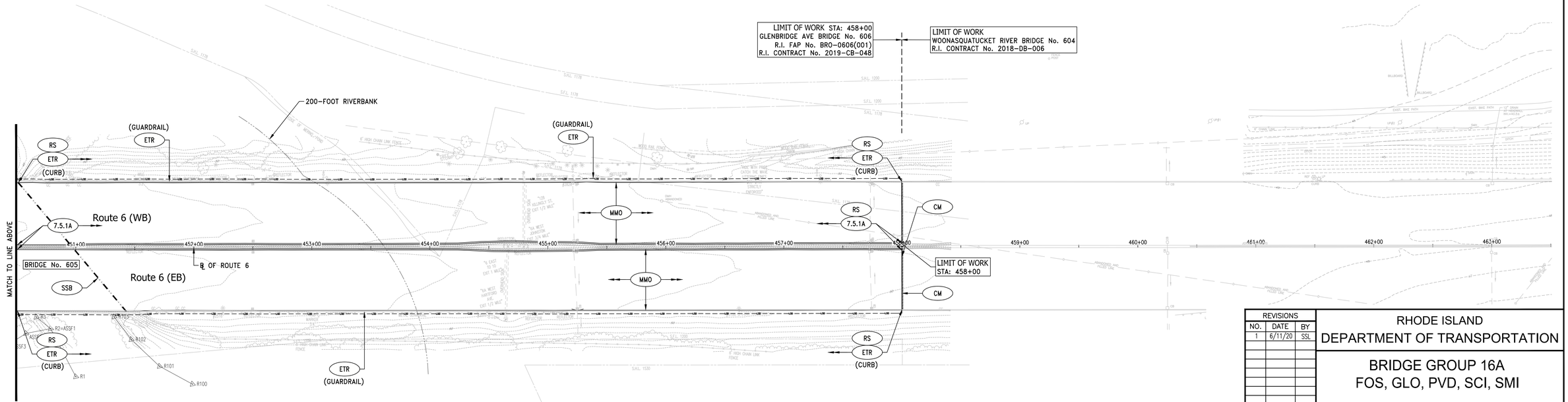
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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	8	62



NOTE:

1. SEE "DETAILS-3" FOR BARRIER TRANSITION.



Scale: 1"=40'
0 20' 40' 80'

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RHODE ISLAND
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BRIDGE GROUP 16A
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PROVIDENCE COUNTY RHODE ISLAND

GENERAL PLAN No. 2

CHECKED BY _____ DATE _____ SCALE 1"=40'

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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	8	62

SUPERSEDED

200-FOOT RIVERBANK

Buttonhole Drive

Woonasquatucket River

FOR BRIDGE RELATED WORK REFER TO "BRIDGE GENERAL PLAN"

(GUARDRAIL) ETR

(CURB) ETR RS

LIMIT OF WORK STA: 443+40

CM

(MATCH EXISTING BERM)

MMO

Route 6 (WB)

Route 6 (EB)

℄ OF ROUTE 6

40.2.1

BT B BT

40.2.1

STA. 448+60

SSB

BRIDGE No. 605

7.5.1A RS

P-2 DFP

DMB DCS 43.1.0M

43.1.0M DCS DMB

(GUARDRAIL) ETR

MMO

(CURB) ETR RS

MATCH TO LINE BELOW

(MATCH EXISTING BERM) 7.5.1A RS

CM

LIMIT OF WORK STA: 438+78

RS ETR (CURB)

GD-1

ETEA

34.3.7

34.1

Glenbridge Avenue

AREA SUBJECT TO STORM FLOWAGE

200-FOOT RIVERBANK

NOTE:

1. SEE "DETAILS-3" FOR BARRIER TRANSITION.

LIMIT OF WORK STA: [illegible]
GLENBRIDGE AVE. - BDG. No. 606
R.I. CONTRACT No. BRO-0606(001)
CONTRACT No. 2019-CB-048

LIMIT OF WORK
WOONASQUATUCKET RIVER BRIDGE No. 604
R.I. CONTRACT No. 2018-DB-006

200-FOOT RIVERBANK

(GUARDRAIL) ETR

RS ETR (CURB)

Route 6 (WB)

7.5.1A RS

BRIDGE No. 605

SSB

Route 6 (EB)

℄ OF ROUTE 6

MMO

CM

LIMIT OF WORK STA: 458+00

MATCH TO LINE ABOVE

(GUARDRAIL) ETR

RS ETR (CURB)

Scale: 1"=40'

0 20' 40' 80'

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

GENERAL PLAN No. 2

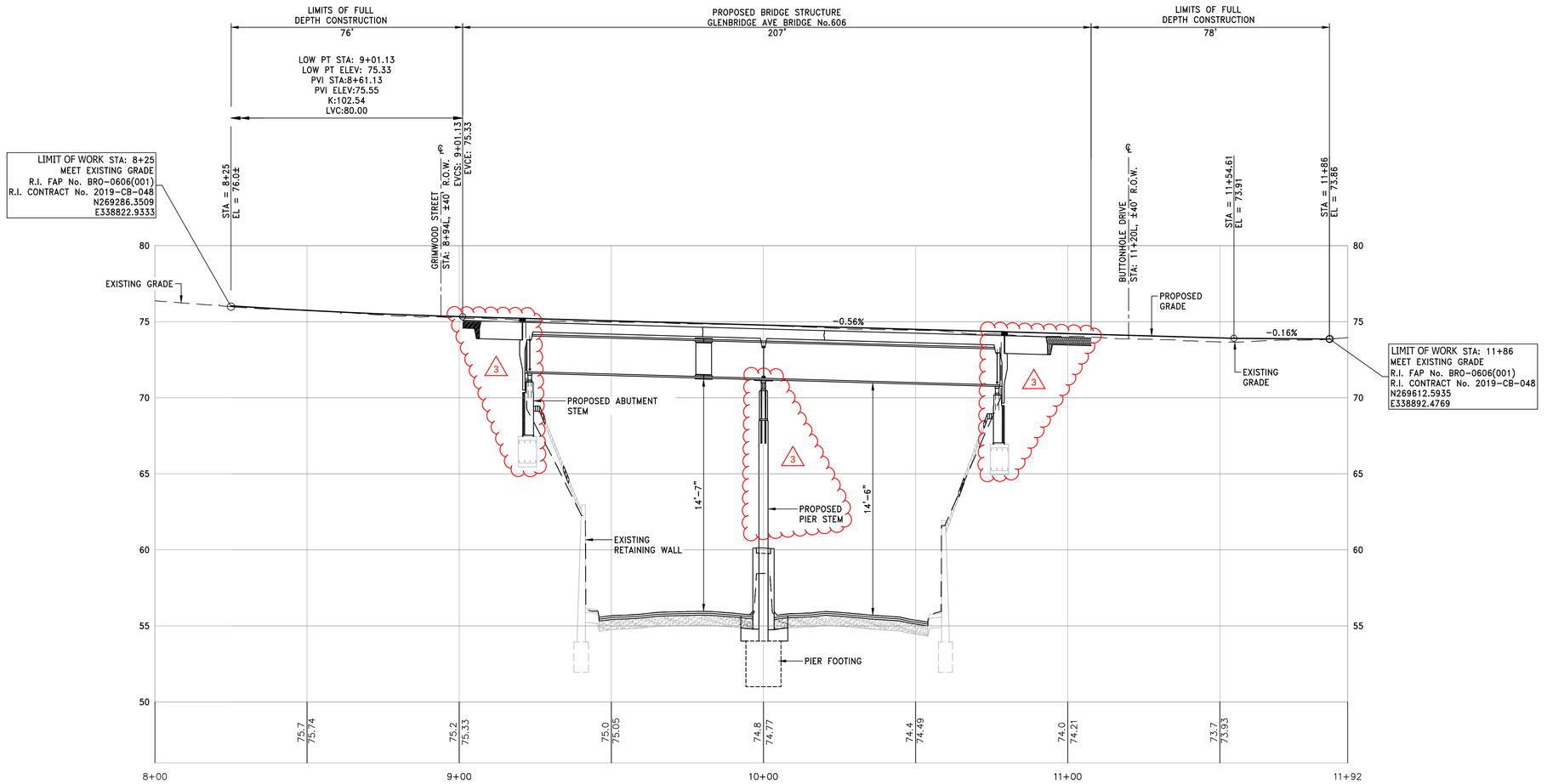
CHECKED BY _____ DATE _____ SCALE 1"=40'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_008_GENERAL002

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	9	62

R-3



GLENBRIDGE AVE PROFILE (LOOKING WEST)

Scale: 1"=20' Horizontal
0 10' 20' 40'
0 2' 4' 8'
Scale: 1"=4' Vertical

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

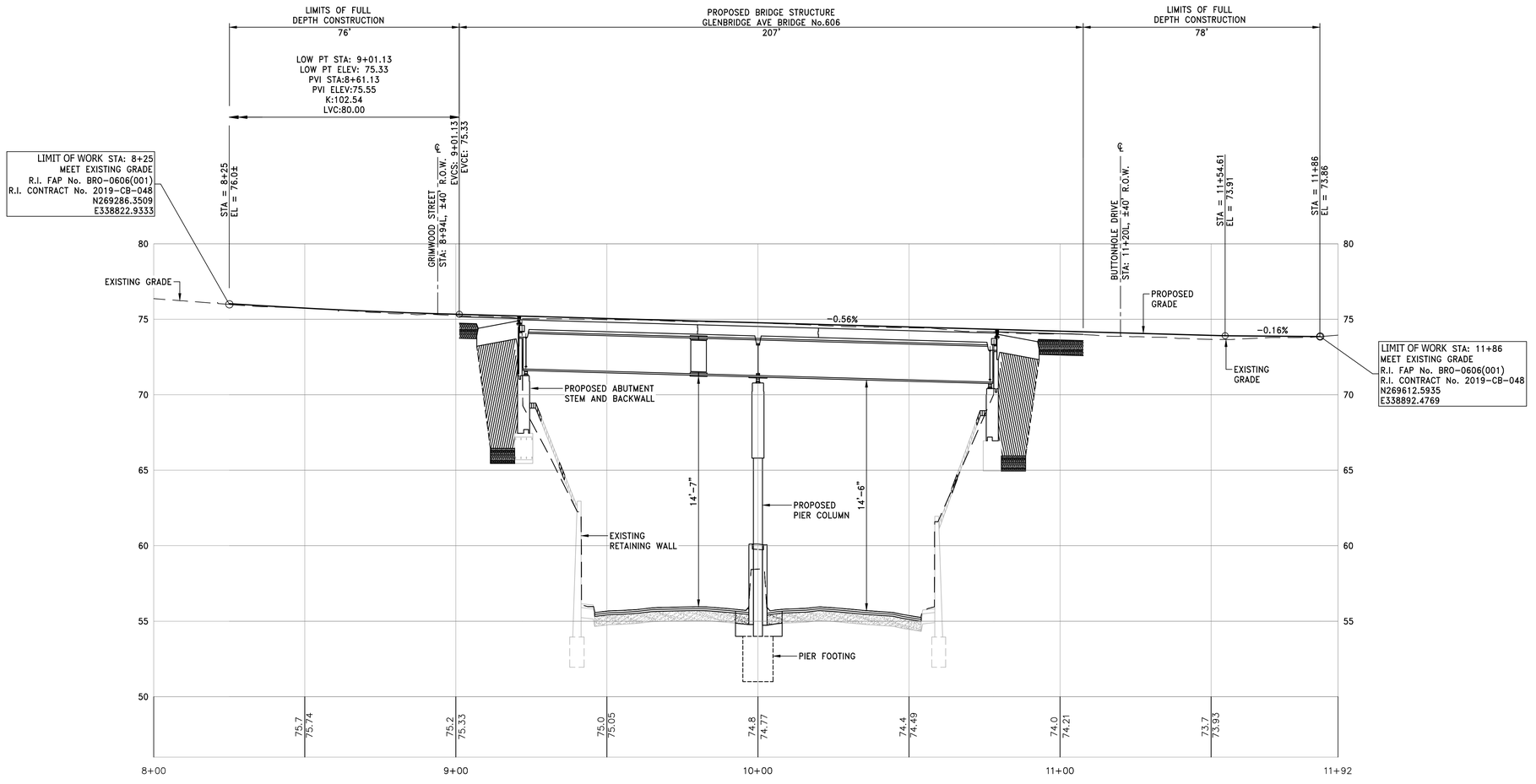
PROVIDENCE COUNTY RHODE ISLAND

ROADWAY PROFILE

CHECKED BY _____ DATE _____ SCALE 1"=20'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	9	62



GLENBRIDGE AVE PROFILE (LOOKING WEST)

Scale: 1"=20' Horizontal
0 10' 20' 40'
0 2' 4' 8'
Scale: 1"=4' Vertical

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

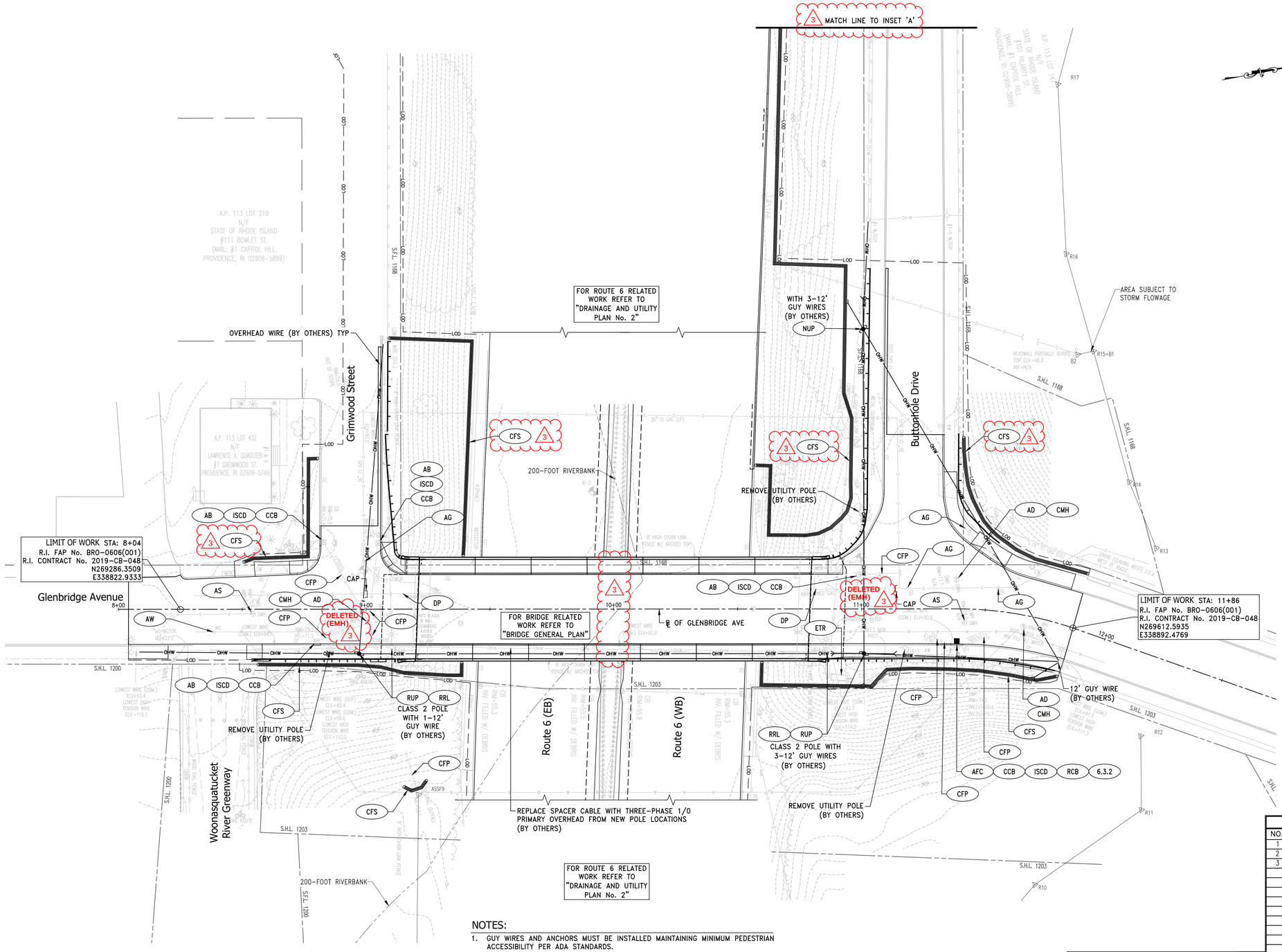
ROADWAY PROFILE

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_009_PROFILE001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	10	62

R-3



NOTES:

1. GUY WIRES AND ANCHORS MUST BE INSTALLED MAINTAINING MINIMUM PEDESTRIAN ACCESSIBILITY PER ADA STANDARDS.
2. MINIMUM 1'-0" SEPARATION BETWEEN GAS MAIN EDGE AND MANHOLE. EXPOSURE OF MAIN REQUIRES DAMAGE PREVENTION ON-SITE. NO MORE THAN 10'-0" EXPOSURE ALLOWED OR RELAY REQUIRED.

Scale: 1"=20'
0 10' 20' 40'

REVISIONS		
NO.	DATE	BY
1	7/10/19	ETS
2	7/20/20	SSL
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

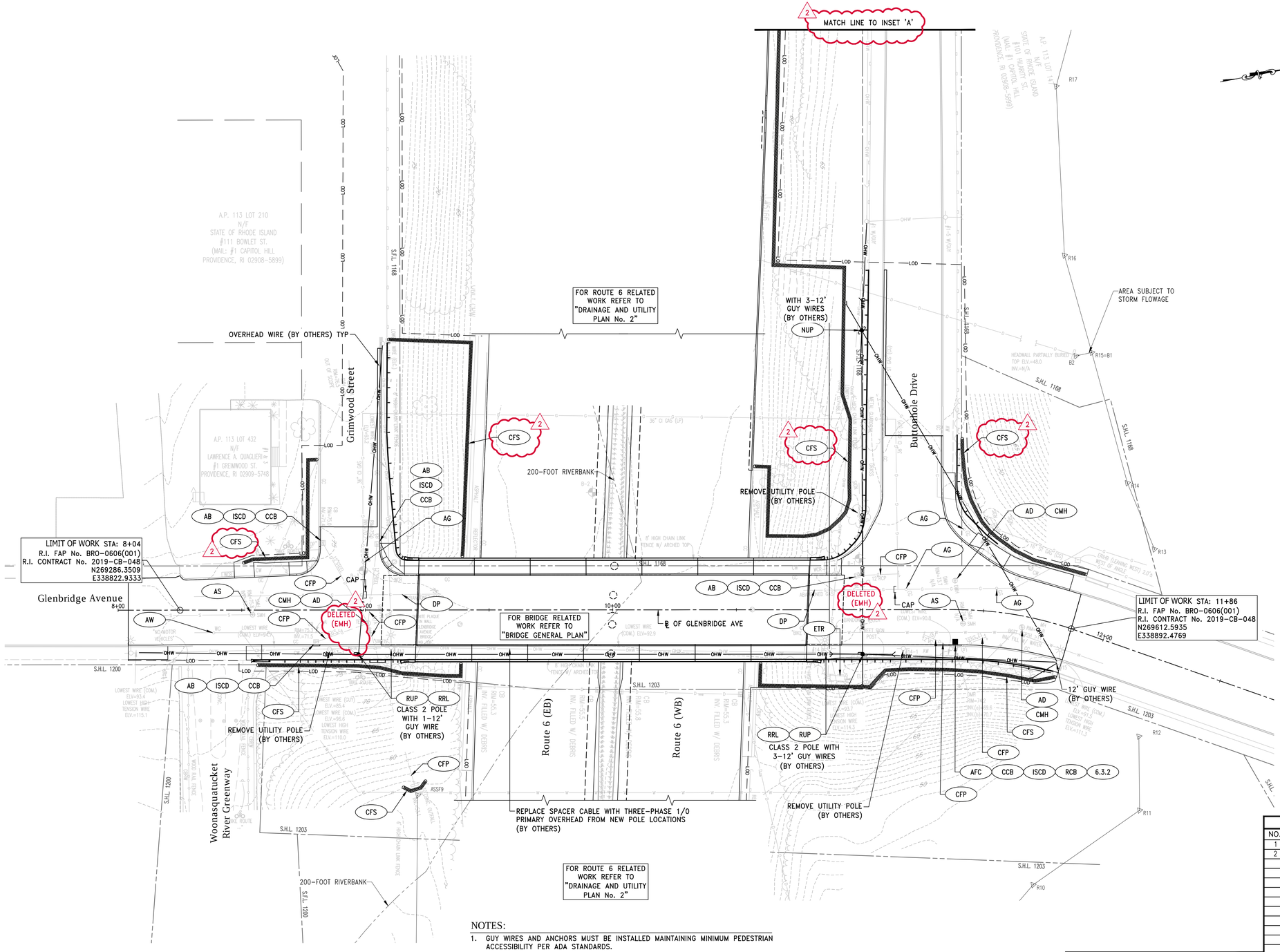
DRAINAGE AND UTILITY PLAN No. 1

CHECKED BY _____ DATE _____ SCALE 1"=20'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	10	62

R-2



NOTES:

1. GUY WIRES AND ANCHORS MUST BE INSTALLED MAINTAINING MINIMUM PEDESTRIAN ACCESSIBILITY PER ADA STANDARDS.
2. MINIMUM 1'-0" SEPARATION BETWEEN GAS MAIN EDGE AND MANHOLE. EXPOSURE OF MAIN REQUIRES DAMAGE PREVENTION ON-SITE. NO MORE THAN 10'-0" EXPOSURE ALLOWED OR RELAY REQUIRED.

Scale: 1"=20'
0 10' 20' 40'

REVISIONS		
NO.	DATE	BY
1	7/10/19	ETS
2	7/20/20	SSL

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

DRAINAGE AND UTILITY PLAN No. 1

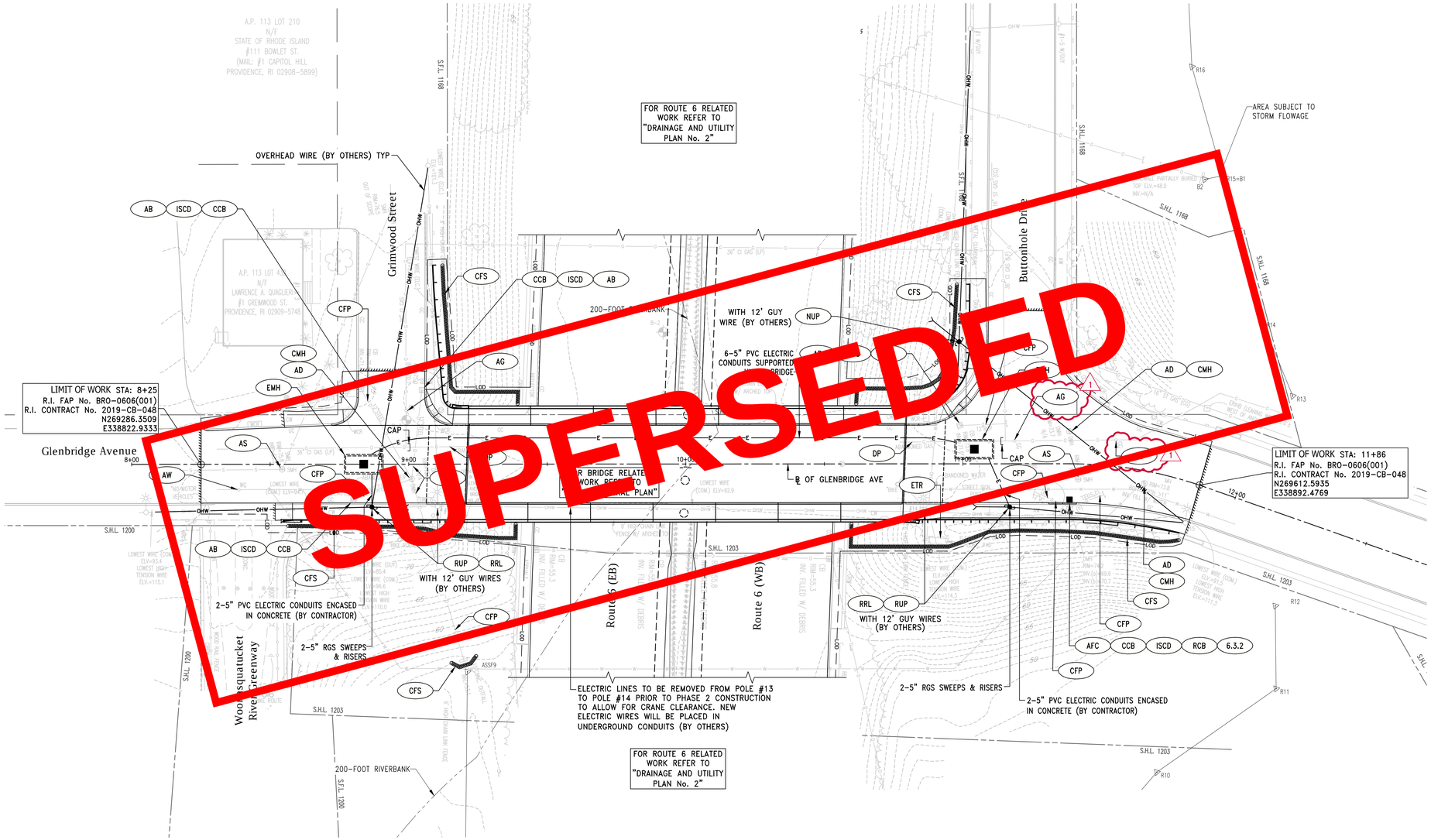
CHECKED BY _____ DATE _____ SCALE 1"=20'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	10	62

R-1

SUPERSEDED



1

NOTES:

1. GUY WIRES AND ANCHORS MUST BE INSTALLED MAINTAINING MINIMUM PEDESTRIAN ACCESSIBILITY PER ADA STANDARDS.
2. MINIMUM 1'-0" SEPARATION BETWEEN GAS MAIN EDGE AND MANHOLE. EXPOSURE OF MAIN REQUIRES DAMAGE PREVENTION ON-SITE. NO MORE THAN 10'-0" EXPOSURE ALLOWED OR RELAY REQUIRED.

Scale: 1"=20'

0 10' 20' 40'

REVISIONS		
NO.	DATE	BY
1	7/10/19	ETS

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

DRAINAGE AND UTILITY PLAN No. 1

CHECKED BY _____ DATE _____ SCALE 1"=20'

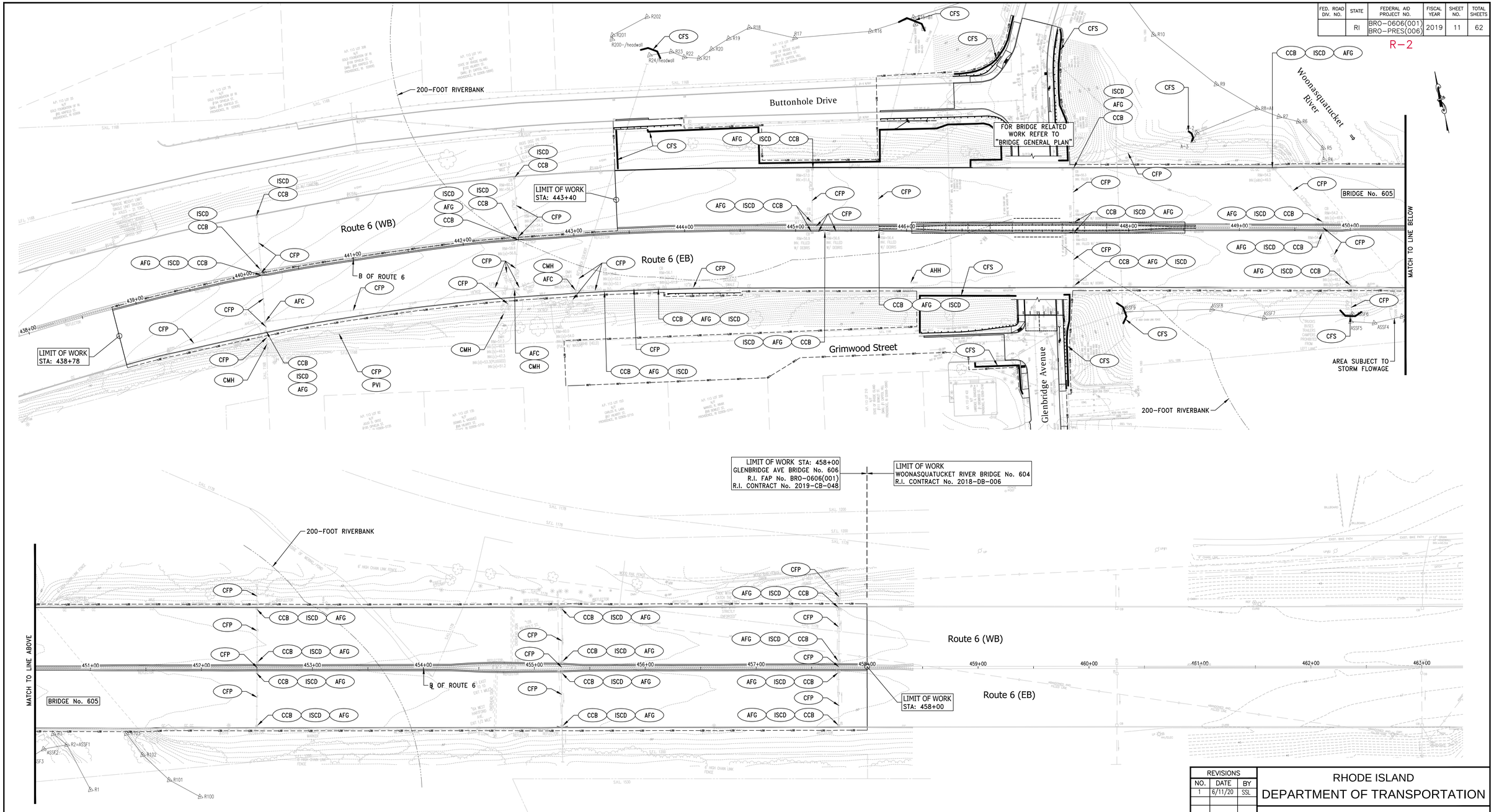
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

ADDENDUM No.1

0013V_V1_010_DRAINAGE001_REV01

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	11	62

R-2



Scale: 1"=40'

0 20' 40' 80'

REVISIONS		
NO.	DATE	BY
1	6/11/20	SSL

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

DRAINAGE AND UTILITY PLAN No. 2

CHECKED BY _____ DATE _____ SCALE 1"=40'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	11	62



SUPERSEDED

Scale: 1"=40'
0 20' 40' 80'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

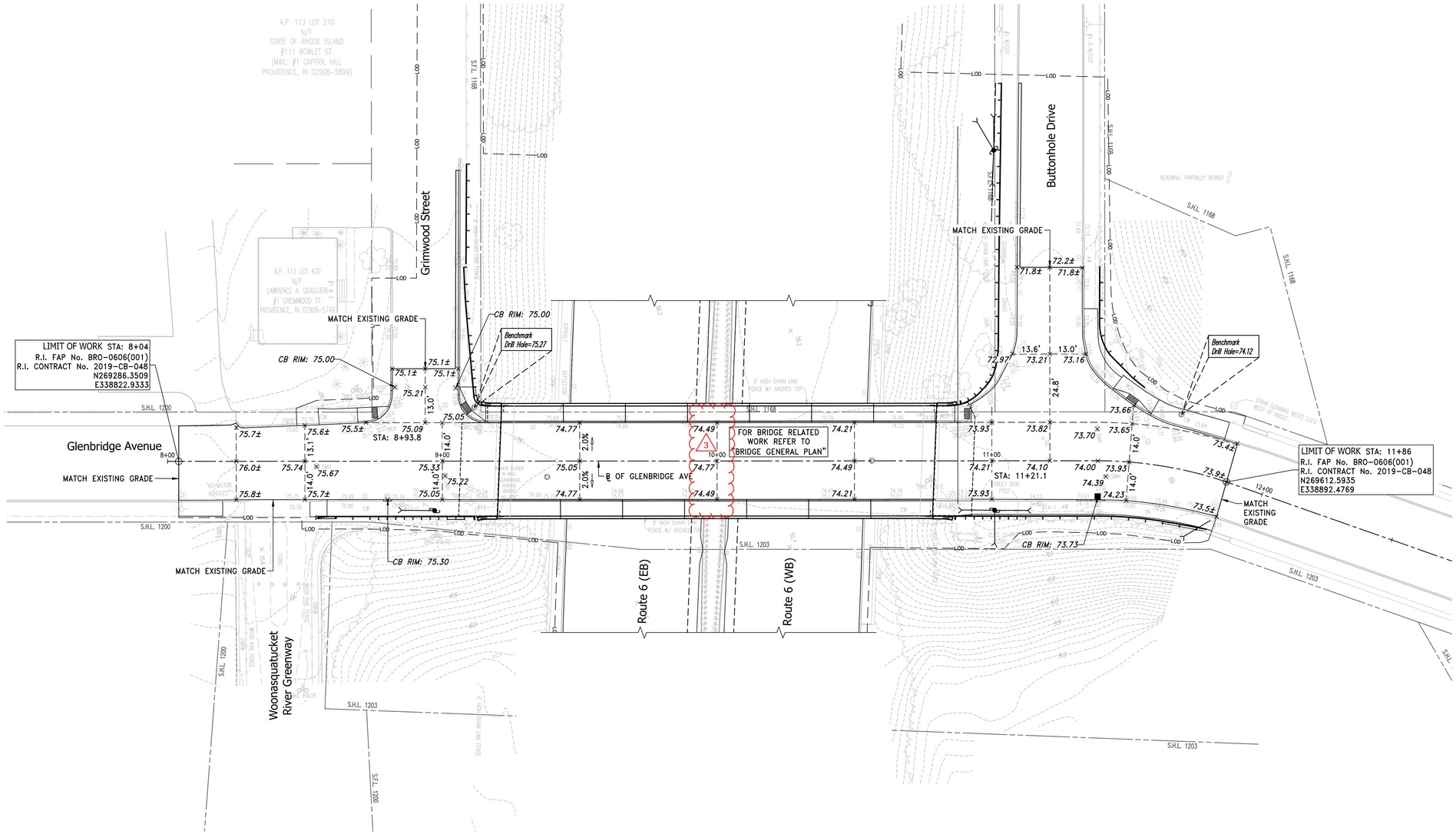
DRAINAGE AND UTILITY PLAN No. 2

CHECKED BY _____ DATE _____ SCALE 1"=40'

0013V_V1_011_DRAINAGE002

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	12	62

R-3



Scale: 1"=20'

0 10' 20' 40'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY
1	6/11/20	SSL
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

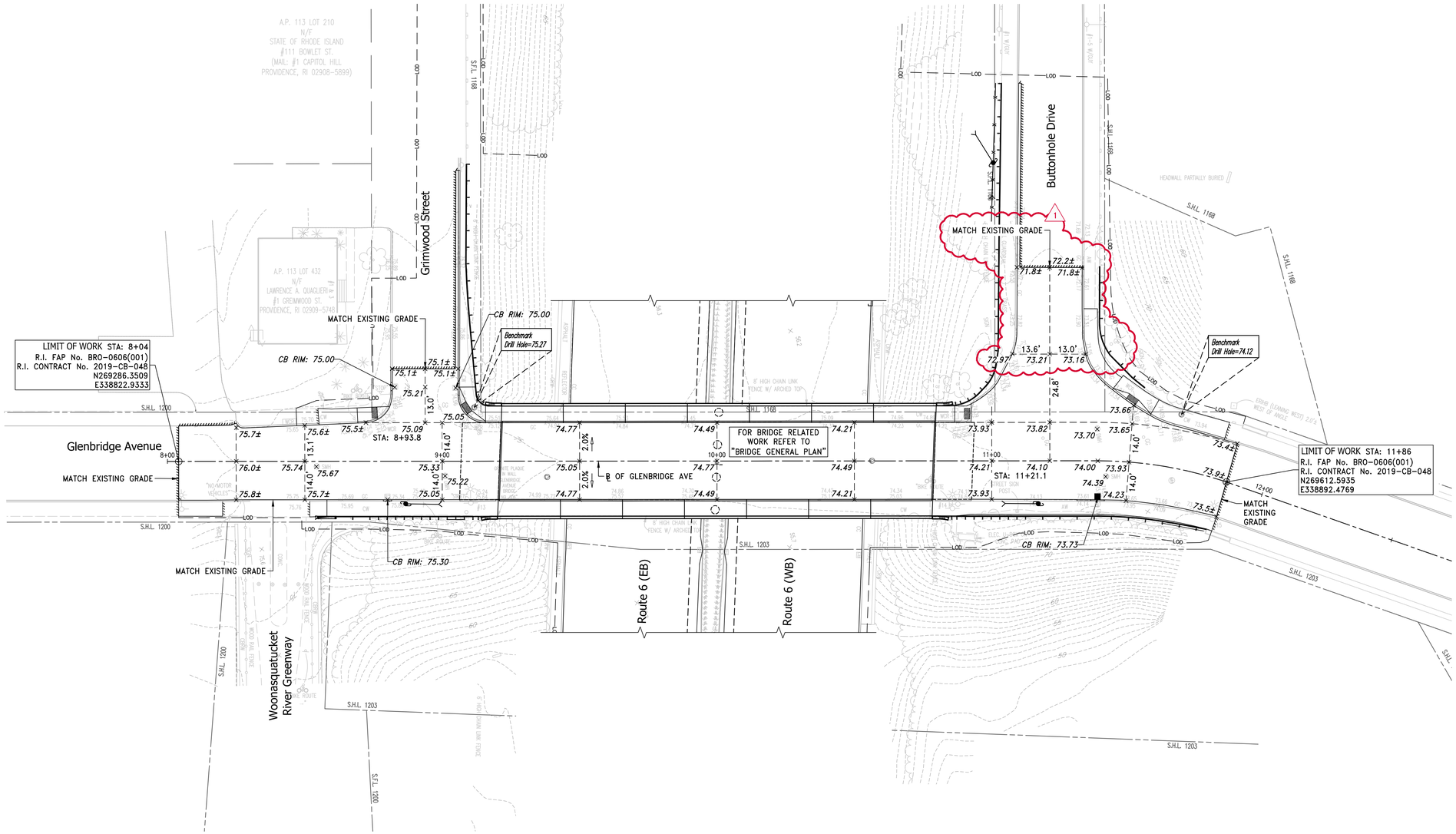
GRADE PLAN

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_012_GRADE001_Rev

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	12	62

R-1



REVISIONS		
NO.	DATE	BY
1	6/11/20	SSL

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

GRADE PLAN

CHECKED BY _____ DATE _____ SCALE 1"=20'

Scale: 1"=20'
0 10' 20' 40'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_012_GRADE001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	12	62



SUPERSEDED

Scale: 1"=20'
0 10' 20' 40'

PARE

PARE CORPORATION
ENGINEERS · SCIENTISTS · PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

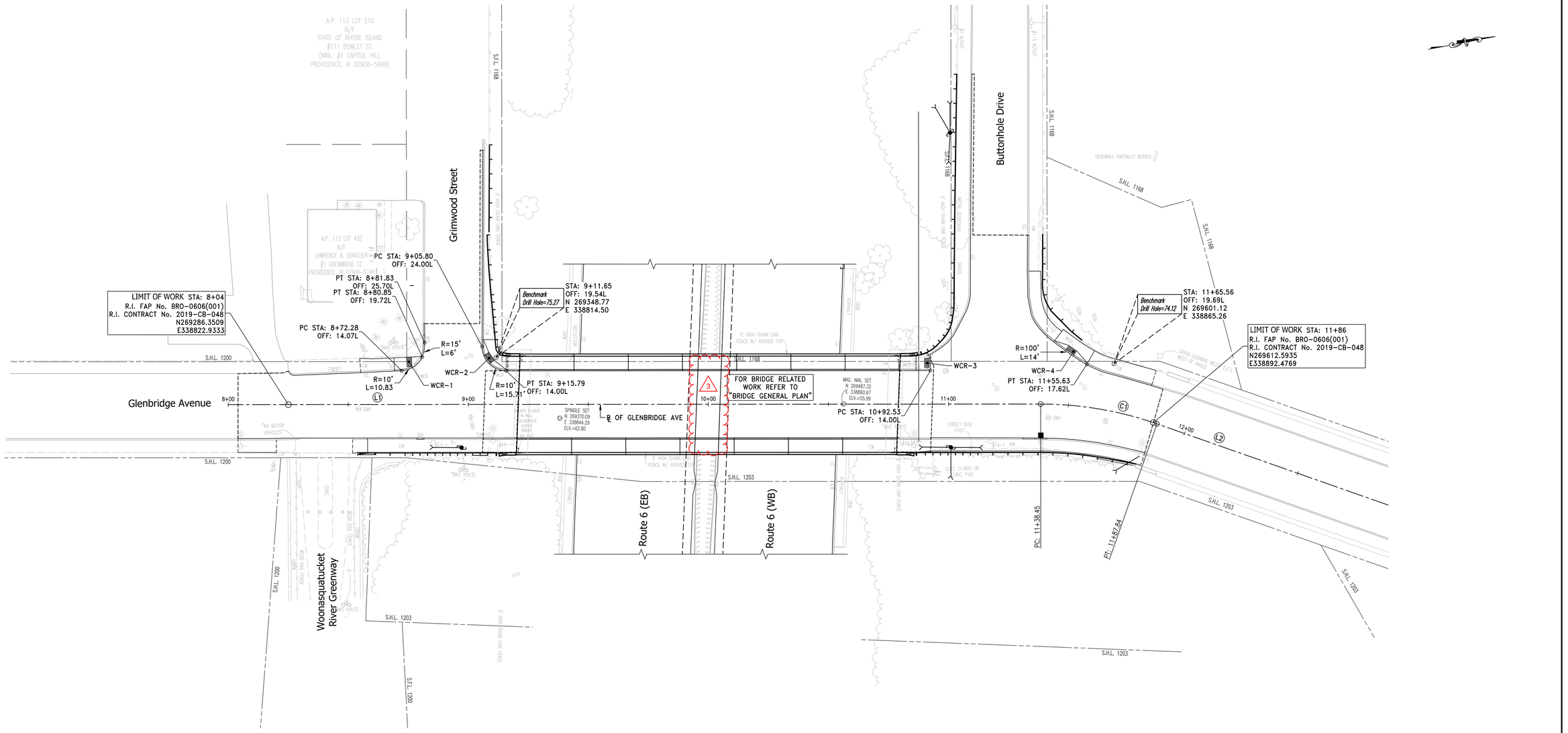
GRADE PLAN

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_012_GRADE001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	13	62

R-3



WHEELCHAIR RAMP ALIGNMENT DATA

WCR #	RAMP LOCATION (CENTERLINE OF RAMP STONE)		LENGTH OF PRIMARY RAMP (2' MIN)	LENGTH OF LANDING (4' MIN.)	WIDTH OF RAMP ENTRANCE (4' MIN)	ROADWAY GUTTER SLOPE (%)		TRANSITION LENGTH R.I. STD. 7.33				RAMP STONE R.I. STD. 7.3.9	
								LEFT SIDE		RIGHT SIDE			
	STATION	OFFSET				LEFT SIDE	RIGHT SIDE	CIRCULAR	STRAIGHT	CIRCULAR	STRAIGHT	CIRCULAR	STRAIGHT
WCR-1	8+79.71	17.91'L	3.36'	4'	–	1.9%	1.1%	4.63'	3'	6'	–	–	–
WCR-2	9+07.45	18.49'L	2'	4'	4'	0.41%	0.56%	3.7'	3'	7.76'	–	4.24'	–
WCR-3	10+92.53	17.19'L	6'	4'	5.5'	0.55%	3.7%	–	–	–	–	–	–
WCR-4	11+48.78	21.54'L	2'	4'	4'	–	–	6'	–	6'	–	4'	–

GLENBRIDGE AVE BASELINE ALIGNMENT DATA

NUMBER	START STATION	NORTHING	EASTING	RADIUS	LENGTH	LINE/CHORD DIRECTION	DELTA Δ	END STATION	NORTHING	EASTING
L1	8+00.00	269235.4346	338812.8167		338.45'	N10° 46' 24"E		11+38.45	269567.9178	338876.0809
C1	11+38.45	269567.9178	338876.0809	146.00'	49.39'	N20° 27' 50"E	19°22'52"	11+87.84	269613.9672	338893.2650
L2	11+87.84	269613.9672	338893.2650		112.16'	N30° 09' 16"E		13+00.00	269710.9529	338949.6086

Scale: 1"=20'
0 10' 20' 40'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY
1	6/11/20	SSL
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

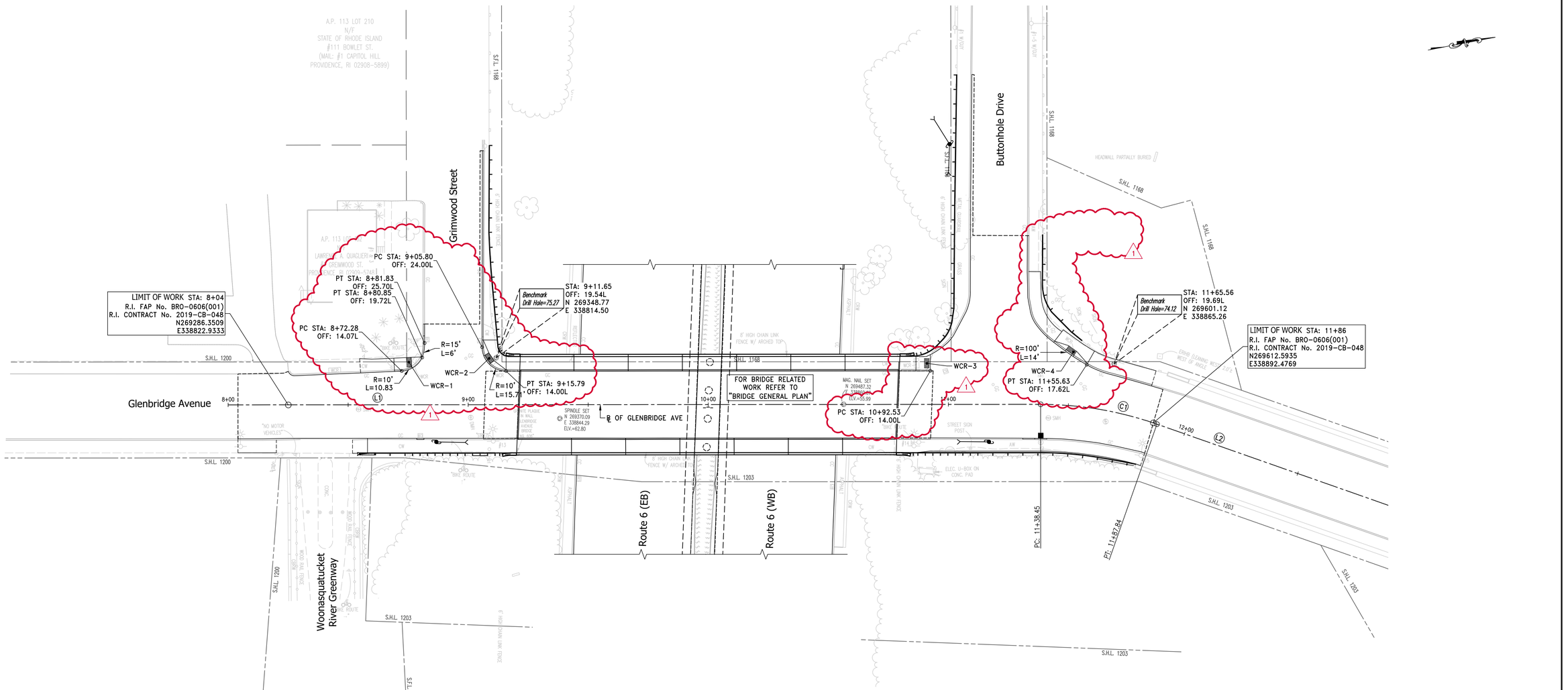
PROVIDENCE COUNTY RHODE ISLAND

LOCATION PLAN

CHECKED BY _____ DATE _____ SCALE 1"=20'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	13	62

R-1



WHEELCHAIR RAMP ALIGNMENT DATA

WCR #	RAMP LOCATION (CENTERLINE OF RAMP STONE)		LENGTH OF PRIMARY RAMP (2' MIN)	LENGTH OF LANDING (4' MIN.)	WIDTH OF RAMP ENTRANCE (4' MIN)	ROADWAY GUTTER SLOPE (%)		TRANSITION LENGTH R.I. STD. 7.33				RAMP STONE R.I. STD. 7.3.9	
								LEFT SIDE		RIGHT SIDE			
	STATION	OFFSET				LEFT SIDE	RIGHT SIDE	CIRCULAR	STRAIGHT	CIRCULAR	STRAIGHT	CIRCULAR	STRAIGHT
WCR-1	8+79.71	17.91'L	3.36'	4'	–	1.9%	1.1%	4.63'	3'	6'	–	–	–
WCR-2	9+07.45	18.49'L	2'	4'	4'	0.41%	0.56%	3.7'	3'	7.76'	–	4.24'	–
WCR-3	10+92.53	17.19'L	6'	4'	5.5'	0.55%	3.7%	–	–	–	–	–	–
WCR-4	11+48.78	21.54'L	2'	4'	4'	–	–	6'	–	6'	–	4'	–

GLENBRIDGE AVE BASELINE ALIGNMENT DATA

NUMBER	START STATION	NORTHING	EASTING	RADIUS	LENGTH	LINE/CHORD DIRECTION	DELTA Δ	END STATION	NORTHING	EASTING
L1	8+00.00	269235.4346	338812.8167		338.45'	N10° 46' 24"E		11+38.45	269567.9178	338876.0809
C1	11+38.45	269567.9178	338876.0809	146.00'	49.39'	N20° 27' 50"E	19°22'52"	11+87.84	269613.9672	338893.2650
L2	11+87.84	269613.9672	338893.2650		112.16'	N30° 09' 16"E		13+00.00	269710.9529	338949.6086

Scale: 1"=20'
0 10' 20' 40'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY
1	6/11/20	SSL

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

LOCATION PLAN

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_013_LOCATION001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	13	62



WHEELCHAIR RAMP ALIGNMENT DATA

WCR #	RAMP LOCATION (CENTERLINE OF RAMP STONE)		LENGTH OF PRIMARY RAMP (2' MIN)	LENGTH OF LANDING (4' MIN.)	WIDTH OF RAMP ENTRANCE (4' MIN)	ROADWAY GUTTER SLOPE (%)		TRANSITION LENGTH			
								LEFT SIDE		RIGHT SIDE	
	STATION	OFFSET				LEFT SIDE	RIGHT SIDE	CIRCULAR	STRAIGHT	CIRCULAR	STRAIGHT
WCR-1	8+79.76	18.00'L	2'	4'	–	1.9000	1.1000	4.63'	3'	4.48'	3'
WCR-2	9+07.73	18.00'L	2'	4'	4'	0.4100	0.5600	3.69'	3'	7.76'	–
WCR-3	11+01.79	21.30'L	2'	4'	4'	0.5500	3.7000	6'	–	11.50'	–

GLENBRIDGE AVE BASELINE ALIGNMENT DATA

NUMBER	START STATION	NORTHING	EASTING	RADIUS	LENGTH	LINE/CHORD DIRECTION	DELTA Δ	END STATION	NORTHING	EASTING
L1	8+00.00	269235.4346	338812.8167		338.45'	N10° 46' 24"E		11+38.45	269567.9178	338876.0809
C1	11+38.45	269567.9178	338876.0809	146.00'	49.39'	N20° 27' 50"E	19°22'52"	11+87.84	269613.9672	338893.2650
L2	11+87.84	269613.9672	338893.2650		112.16'	N30° 09' 16"E		13+00.00	269710.9529	338949.6086

Scale: 1"=20'
0 10' 20' 40'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

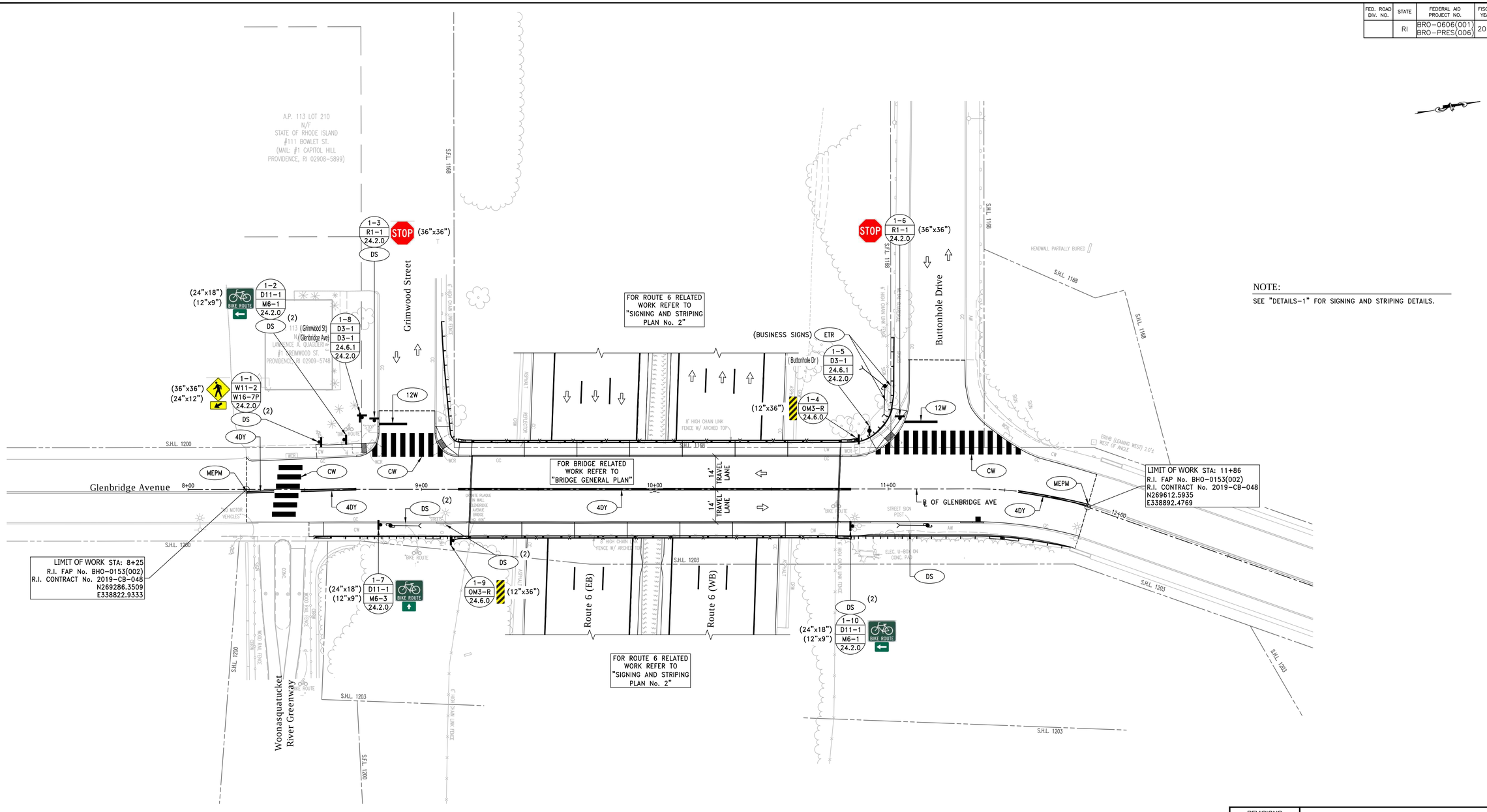
PROVIDENCE COUNTY RHODE ISLAND

LOCATION PLAN

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_013_LOCATION001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	14	62



NOTE:

SEE "DETAILS-1" FOR SIGNING AND STRIPING DETAILS.

Scale: 1"=20'

0 10' 20' 40'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

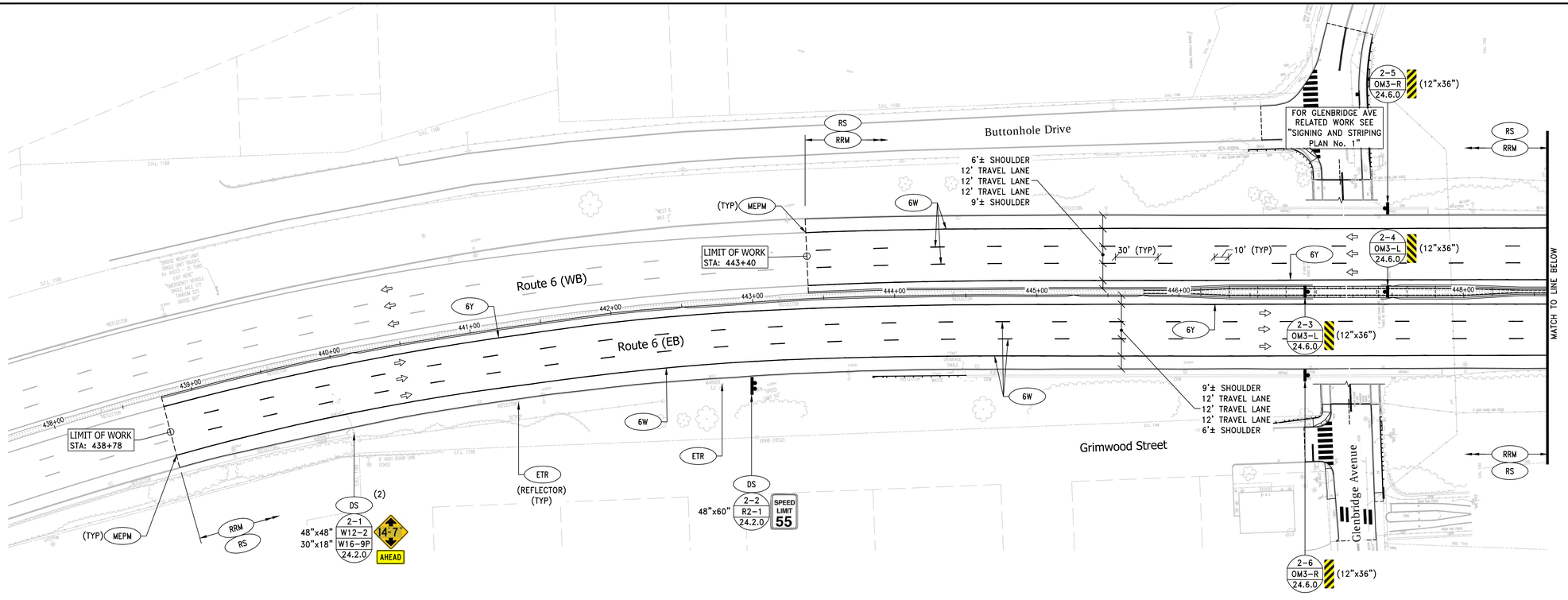
PROVIDENCE COUNTY RHODE ISLAND

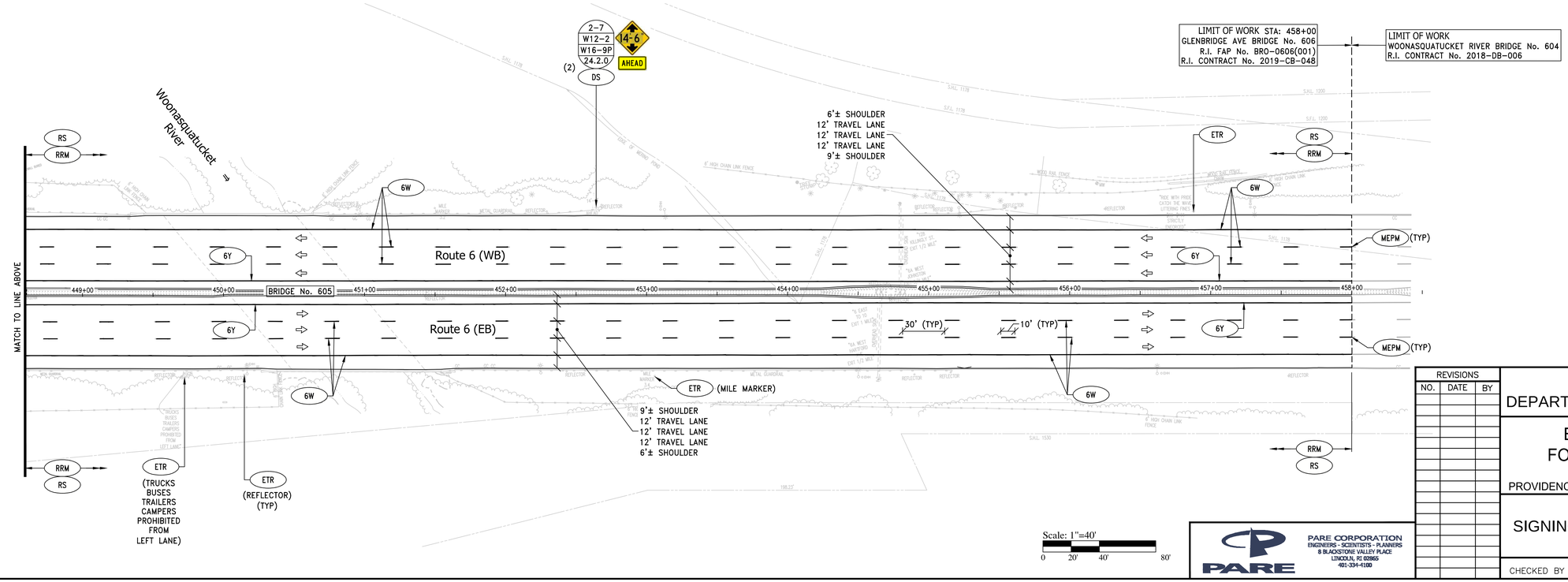
SIGNING AND STRIPING PLAN No. 1

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_014_STRIPING001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	15	62





Scale: 1"=40'
0 20' 40' 80'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

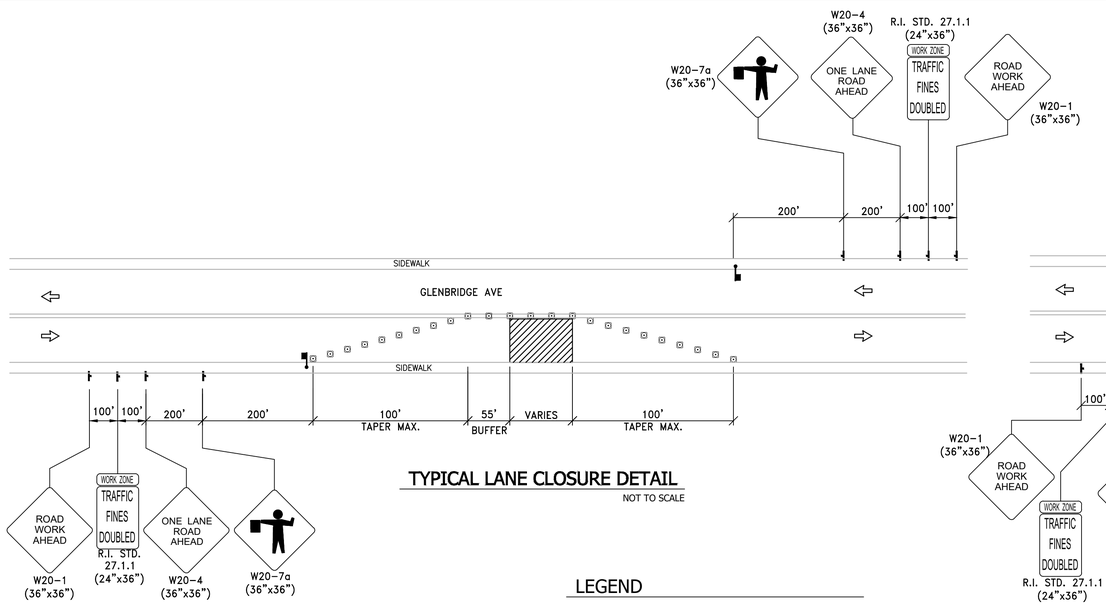
SIGNING AND STRIPING PLAN No. 2

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_015_STRIPING002

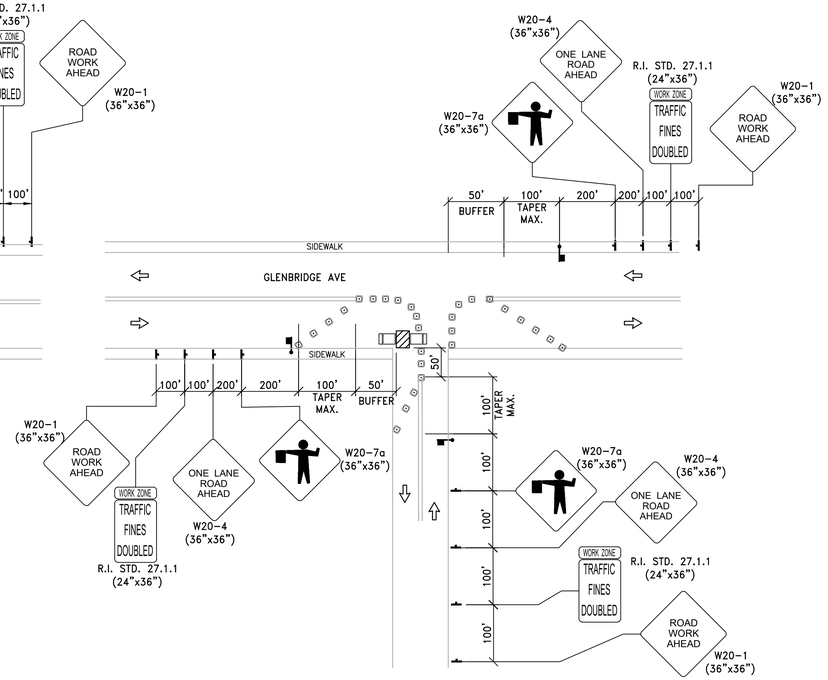
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	16	62

R-1



TYPICAL LANE CLOSURE DETAIL

NOT TO SCALE



TYPICAL CLOSURE AT SIDE OF "T" INTERSECTION

NOT TO SCALE

LEGEND

- FLUORESCENT TRAFFIC CONE R.I. STD. 26.1.0
- PLASTIC PIPE BARRICADE R.I. STD. 26.3.0
- DIRECTION OF TRAFFIC
- TEMPORARY SIGN
- WORK AREA
- FLAG PERSON/POLICE OFFICER
- TRUCK w/ARROW AND ATTENUATOR
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

NOTES

1. ALL TEMPORARY TRAFFIC CONTROL SET-UPS AND DEVICES AND THEIR INSTALLATION, MAINTENANCE, AND REMOVAL SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) WITH ALL REVISIONS, AND THE LATEST EDITION OF THE "RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WITH ALL REVISIONS.
2. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK.
3. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TEMPORARY TRAFFIC CONTROL DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
4. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
5. THE BUFFER SPACES SHOULD BE EXTENDED IF NECESSARY SO THAT THE 100' MAX. TWO-WAY TRAFFIC TAPERS ARE PLACED BEFORE THE HORIZONTAL (OR CREST VERTICAL) CURVES TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE FLAGGERS AND QUEUES OF STOPPED VEHICLES.
6. THE MAXIMUM SPACING BETWEEN THE FLUORESCENT TRAFFIC CONES FOR TAPER AND TANGENT SECTIONS ON GLENBRIDGE AVENUE SHALL BE TWENTY-FIVE (25) FEET. ON SIDE STREETS, THE MAXIMUM SHALL BE TWENTY-FIVE (25) FEET.
7. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF THE CHANNELIZATION DEVICES.
8. ACCESS TO ALL BUSINESSES AND RESIDENCES WITHIN THE WORK AREA SHALL BE MAINTAINED AT ALL TIMES.
9. TEMPORARY CONSTRUCTION SIGNS SHALL BE PLACED BEHIND THE BACK OF SIDEWALK, OR BEHIND THE EDGE OF PAVEMENT WHERE THERE IS NO SIDEWALK. THE CONTRACTOR SHALL ENSURE THAT A 36" UNOBSTRUCTED MINIMUM CLEARANCE IS PROVIDED AT ALL TIMES AT SIDEWALKS OPEN TO PEDESTRIANS. WHERE THERE IS INSUFFICIENT WIDTH, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO PROVIDE MOUNTED SIGNS WITH THE BOTTOM OF THE SIGN OVERHANG NO LESS THAN 84" HIGH IN ORDER TO MEET ADA STANDARDS.
10. TEMPORARY CONSTRUCTION ADVANCED WARNING SIGNS POSTED ON MINOR INTERSECTING STREETS SHOWN IN THE "TYPICAL CLOSURE AT SIDE OF INTERSECTION" DETAIL, MAY BE PLACED 100 FT APART.
11. THE LONGITUDINAL CHANNELING DEVICES SHALL BE POSITIONED SUCH THAT THERE ARE NO GAPS ACROSS DEVICES FOR THE ENTIRE WIDTH OF THE SIDEWALK.
12. THE LONGITUDINAL CHANNELING DEVICES USED FOR THE SIDEWALK CLOSURE SHALL HAVE A DETECTABLE EDGE IN ACCORDANCE WITH SECTION 6F.74 OF THE MOST RECENT EDITION OF THE MUTCD, INCLUDING ALL REVISIONS AND ADDENDA.
13. PLASTIC PIPE BARRICADES SHALL BE EQUIPPED WITH TYPE A WARNING LIGHTS IN ACCORDANCE WITH SECTION 6F.83 OF THE MOST RECENT EDITION OF THE MUTCD, INCLUDING ALL REVISIONS AND ADDENDA. PLASTIC PIPE BARRICADES SHOULD NOT BE SPACED MORE THAN 5 FEET APART WHEN REQUIRED FOR ROAD CLOSURES.
14. THE CONTRACTOR SHALL UTILIZE DRUM BARRICADES FOR TEMPORARY TRAFFIC CONTROL SETUPS WHEN NO WORKERS ARE PRESENT. FLUORESCENT TRAFFIC CONES SHALL BE USED DURING CONSTRUCTION OPERATION WHEN WORKERS ARE PRESENT.
15. THE SIZES OF ALL DIAMOND SHAPED ADVANCED WARNING SIGNS SHALL BE 36"x36" UNLESS OTHERWISE NOTED.
16. WHERE A SIDE STREET INTERSECTS THE WORK ZONE, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH PART 6 OF THE MUTCD.
17. CONTRACTOR TO REMOVE AND RESET TEMPORARY BARRIER AS NECESSARY TO GAIN ACCESS TO THE WORK AREA. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 926.0121.

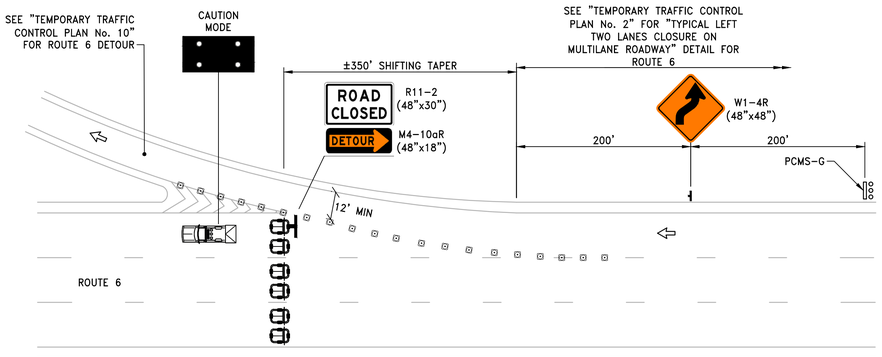
PORTABLE CHANGEABLE MESSAGE SIGN

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No.1" FOR NOTES APPLICABLE TO THIS SHEET.
2. THE DETOUR SHALL BE IN PLACE PRIOR TO THE CLOSING OF THE WORK AREA.
3. ALL SIGNS MAY BE FIELD ADJUSTED AS DIRECTED BY THE RESIDENT ENGINEER.
4. THE CONTRACTOR MUST COVER ALL SIGNS WHEN THE DETOUR IS NOT IN PLACE.
5. CONTRACTOR TO REMOVE BARRIERS AS NECESSARY TO GAIN ACCESS TO THE SITE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 926.0121 "UNANCHORED PRECAST CONCRETE BARRIER FOR TEMPORARY TRAFFIC CONTROL STANDARD 40.5.0".
6. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED ON THE SHOULDER OF THE ROADWAY OR, IF PRACTICAL, SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH BARRIER OR CRASH CUSHION. THE LOCATION AND USE OF THE PCMS SHALL BE DETERMINED DURING THE PRE-CONSTRUCTION MEETING OR AS DIRECTED BY THE RESIDENT ENGINEER. THE SUGGESTED MESSAGE SHALL BE DISPLAYED TWO WEEKS IN ADVANCED OF CONSTRUCTION AND SHOULD READ AS FOLLOWS:

	MESSAGE 1	MESSAGE 2
PCMS-A	BRIDGE CLOSED DATE	SEEK ALT ROUTES
PCMS-B	ROAD WORK DATE	EXPECT DELAYS

DURING CONSTRUCTION THESE SIGNS SHALL BE RELOCATED TO EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER. THE SUGGESTED MESSAGE SHALL BE DISPLAYED FOR THE DURATION OF THE PROJECT AND SHOULD READ AS FOLLOWS:

	MESSAGE 1	MESSAGE 2
PCMS-C	RTE 6 CLOSED 1 MILE	USE HARTFORD AVE
PCMS-D	ROAD WORK AHEAD	EXPECT DELAYS
PCMS-E	1	
PCMS-F	LANE SHIFT AHEAD	USE CAUTION
PCMS-G	ALL TRAFFIC EXIT RT	RTE 6 CLOSED AHEAD
PCMS-H	GLENBRGE AVENUE CLOSED	TO THRU TRAFFIC



ROUTE 6 CLOSURE DETAIL

NOT TO SCALE

REVISIONS		
NO.	DATE	BY
1	5/22/20	SSL

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

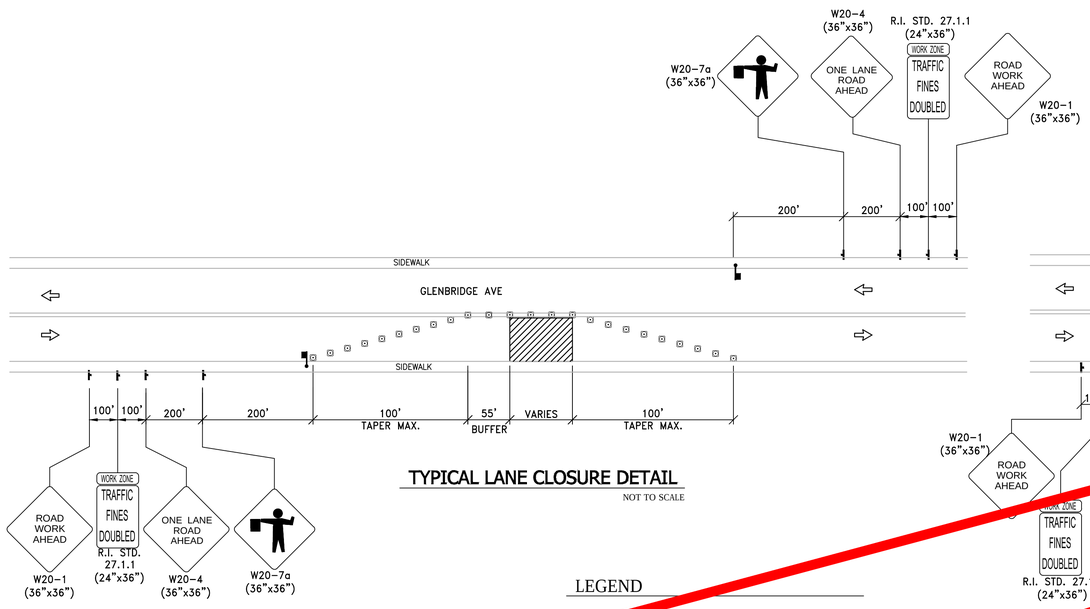
TEMPORARY TRAFFIC CONTROL PLAN No. 1

CHECKED BY _____ DATE _____ SCALE 1"=20'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

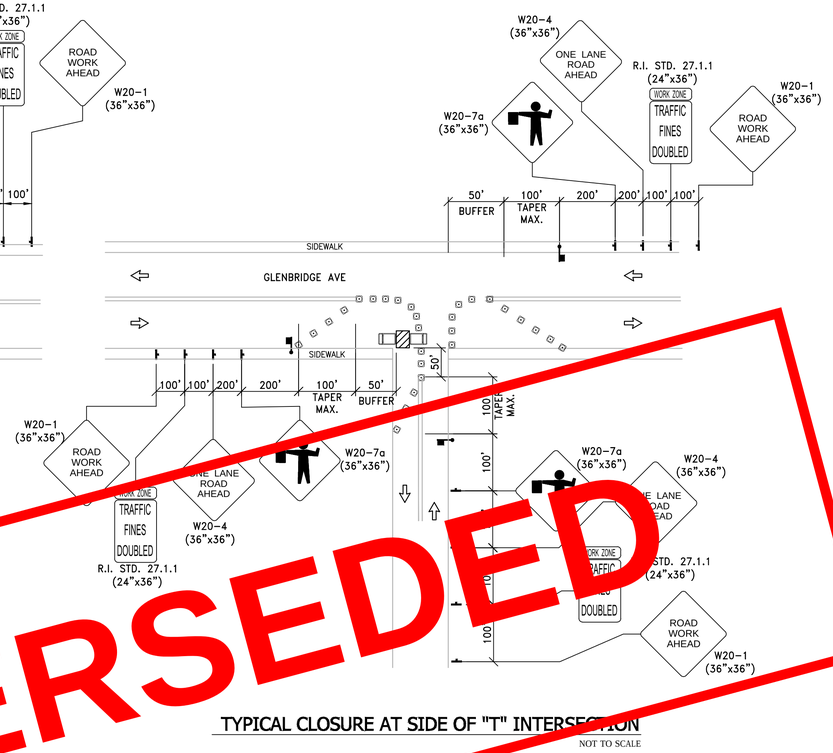
0013V_V1_016_TCONTROL001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	16	62



TYPICAL LANE CLOSURE DETAIL

NOT TO SCALE



TYPICAL CLOSURE AT SIDE OF "T" INTERSECTION

NOT TO SCALE

LEGEND

- FLUORESCENT TRAFFIC CONE R.I. STD. 26.1.0
- PLASTIC PIPE BARRICADE R.I. STD. 26.3.0
- DIRECTION OF TRAFFIC
- TEMPORARY SIGN
- WORK AREA
- FLAG PERSON / POLICE OFFICER
- TRUCK w/ARROW AND ATTENUATOR
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

NOTES

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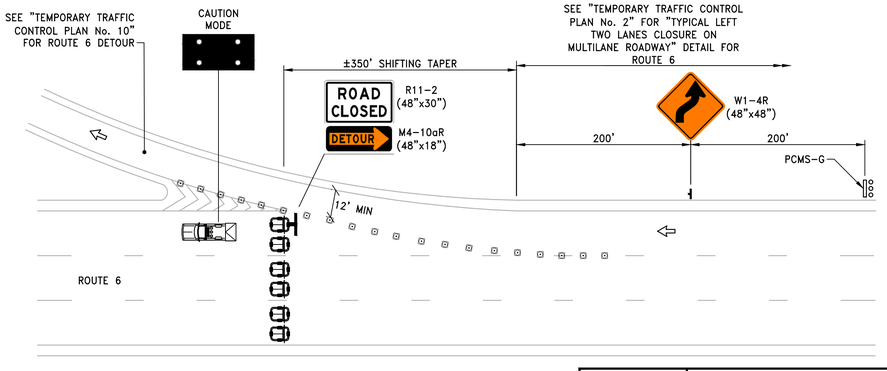
PORTABLE CHANGEABLE MESSAGE SIGN

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No.1" FOR NOTES APPLICABLE TO THIS SHEET.
2. THE DETOUR SHALL BE IN PLACE PRIOR TO THE CLOSING OF THE WORK AREA.
3. ALL SIGNS MAY BE FIELD ADJUSTED AS DIRECTED BY THE RESIDENT ENGINEER.
4. THE CONTRACTOR MUST COVER ALL SIGNS WHEN THE DETOUR IS NOT IN PLACE.
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	MESSAGE 1	MESSAGE 2
PCMS-A	BRIDGE CLOSED DATE	SEEK ALT ROUTES
PCMS-B	ROAD WORK DATE	EXPECT DELAYS

DURING CONSTRUCTION THESE SIGNS SHALL BE RELOCATED TO EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER. THE SUGGESTED MESSAGE SHALL BE DISPLAYED FOR THE DURATION OF THE PROJECT AND SHOULD READ AS FOLLOWS:

	MESSAGE 1	MESSAGE 2
PCMS-C	RTE 6 CLOSED 1 MILE	USE HARTFORD AVE
PCMS-D	ROAD WORK AHEAD	EXPECT DELAYS
PCMS-E	TEMP SIGNAL AHEAD	PREPARE TO STOP
PCMS-F	LANE SHIFT AHEAD	USE CAUTION
PCMS-G	ALL TRAFFIC EXIT RT	RTE 6 CLOSED AHEAD
PCMS-H	GLENBRGE AVENUE CLOSED	TO THRU TRAFFIC



ROUTE 6 CLOSURE DETAIL

NOT TO SCALE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

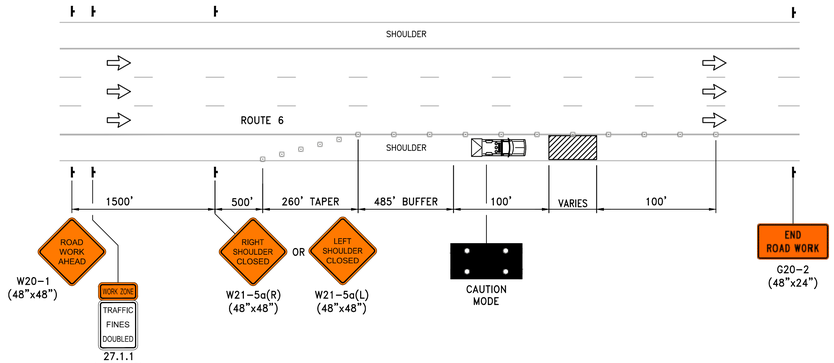
TEMPORARY TRAFFIC CONTROL PLAN No. 1

CHECKED BY _____ DATE _____ SCALE 1"=20'

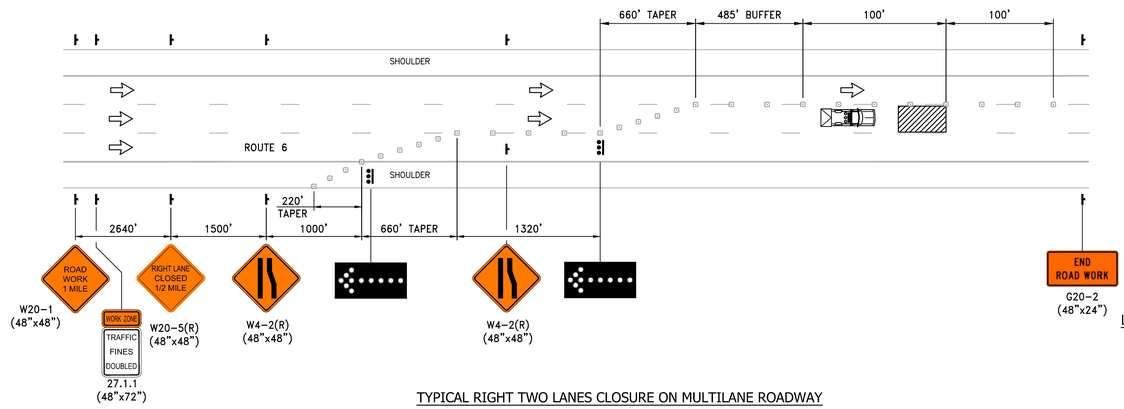
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

SUPERSEDED

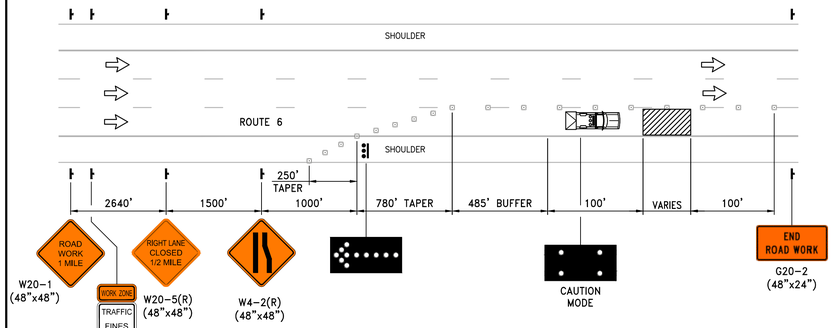
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	17	62



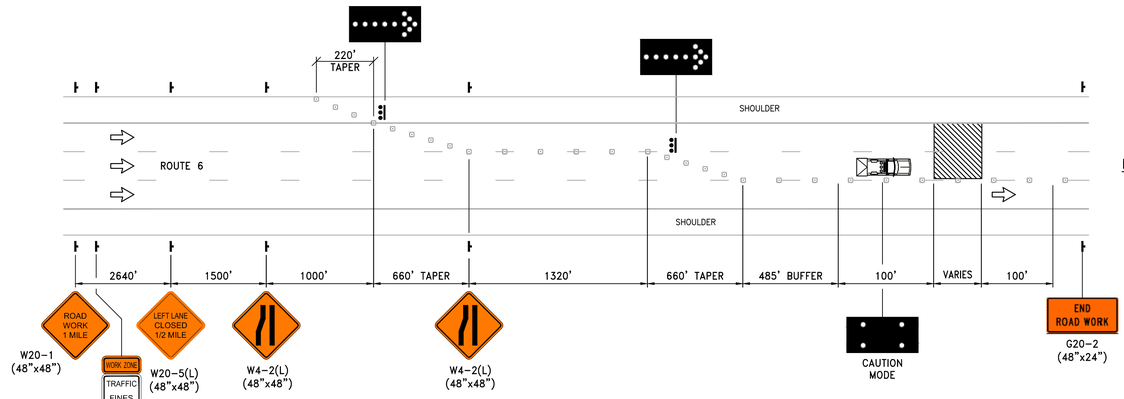
TYPICAL SHOULDER CLOSURE ON MULTILANE ROADWAY
(SHOULDER ≥ 8 FEET)



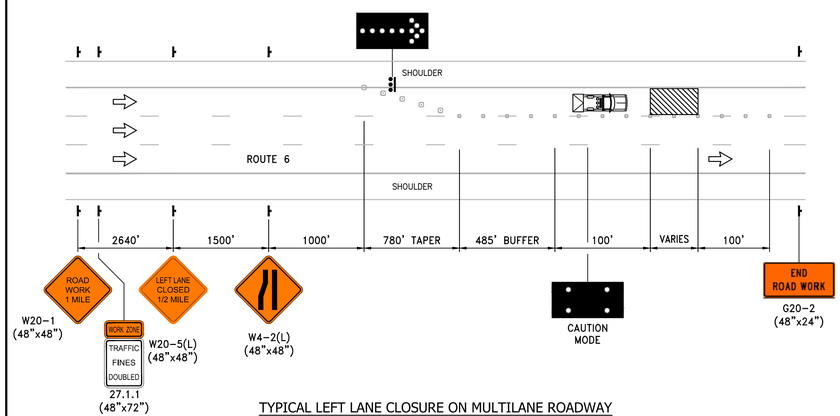
TYPICAL RIGHT TWO LANES CLOSURE ON MULTILANE ROADWAY



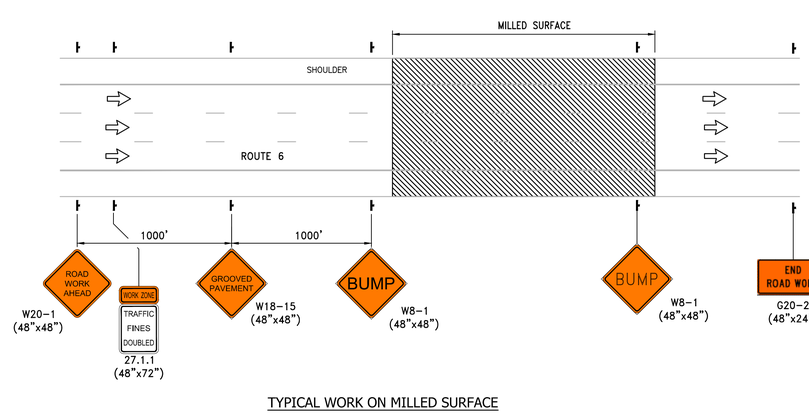
TYPICAL RIGHT LANE CLOSURE ON MULTILANE ROADWAY



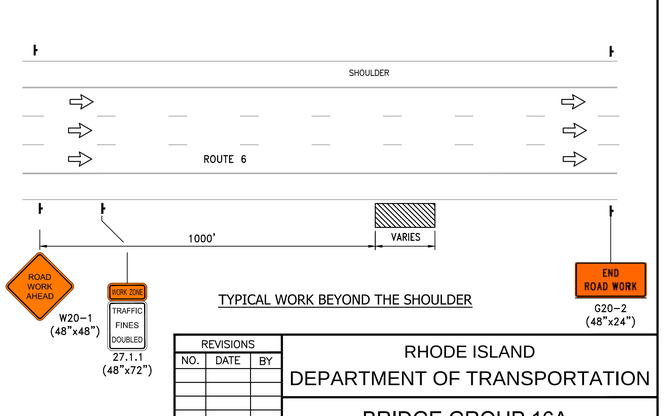
TYPICAL LEFT TWO LANES CLOSURE ON MULTILANE ROADWAY



TYPICAL LEFT LANE CLOSURE ON MULTILANE ROADWAY



TYPICAL WORK ON MILLED SURFACE



TYPICAL WORK BEYOND THE SHOULDER

LEGEND:

- FLUORESCENT TRAFFIC CONE R.I. STD. 26.1.0
- DIRECTION OF TRAFFIC
- ARROW PANEL
- TEMPORARY SIGN
- WORK AREA
- TRUCK w/ARROW AND ATTENUATOR

NOTE:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR ALL NOTES PERTAINING TO THIS SHEET.

NOTES

SEE TEMPORARY TRAFFIC CONTROL PLAN NO. 1 FOR NOTES APPLICABLE TO THIS SHEET.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

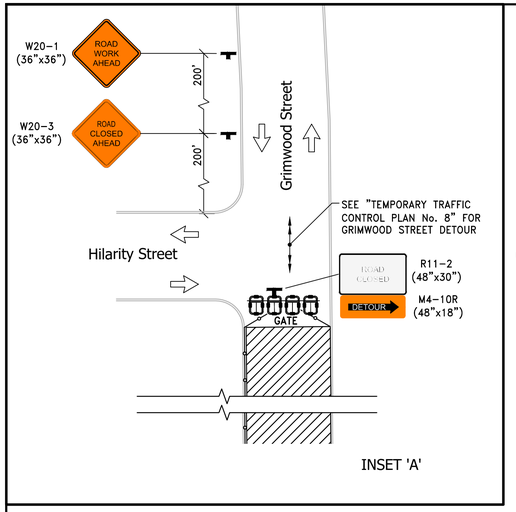
TEMPORARY TRAFFIC CONTROL PLAN No. 2

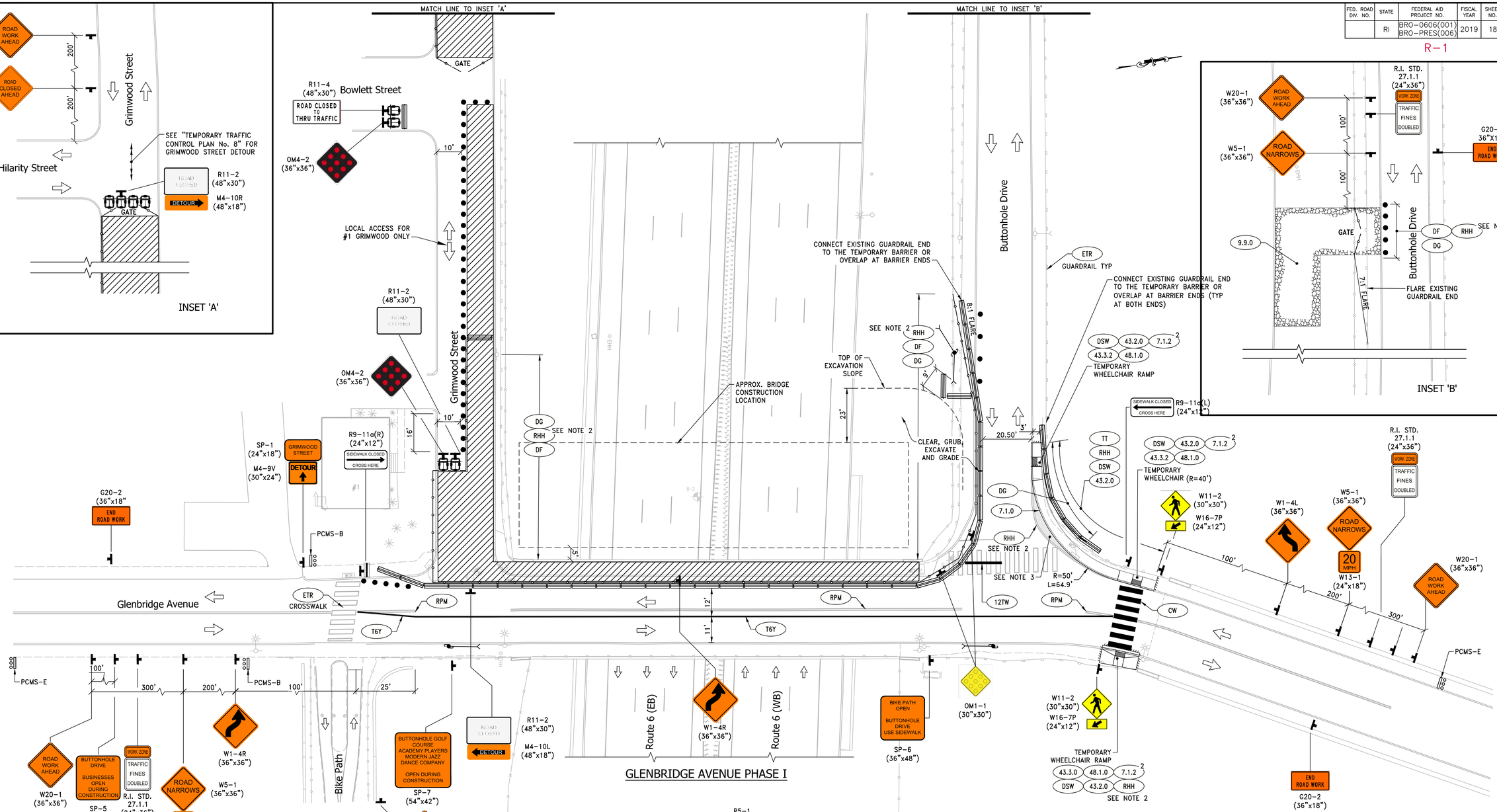
CHECKED BY _____ DATE _____ SCALE 1"=20'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	18	62

R-1





LEGEND:

- PLASTIC PIPE BARRICADE R.I. STD. 26.3.0
- DIRECTION OF TRAFFIC
- TEMPORARY SIGN
- TRAFFIC DRUM R.I. STD. 26.2.0 @ 5' SPACING
- WORK ZONE
- TEMPORARY IMPACT ATTENUATOR (SEE DETAILS)
- TEMPORARY MEDIAN BARRIER R.I. STD. 40.5.0
- TEMPORARY 6' CHAIN LINK FENCE, R.I. STD. 31.2.0
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- LONGITUDINAL PEDESTRIAN CHANNELIZING DEVICE
- NARROW IMPACT ATTENUATOR

NOTE:

INSTALL "DO NO ENTER" SIGN AT THE INTERSECTION OF HEDLEY AVENUE AND KING PHILLIP STREET IN JOHNSTON, RI.

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR ADDITIONAL NOTES PERTAINING TO THIS SHEET.
2. REMOVE AND STOCKPILE EXISTING GRANITE CURB. CURB TO BE RESET TO ITS ORIGINAL LOCATION AFTER COMPLETION OF THE BRIDGE WORK.
3. REMOVE AND DISPOSE SIDEWALK AND TEMPORARY PATCH 6" HMA OVER EXISTING GRAVEL FLUSH WITH ROADWAY SURFACE.

Scale: 1"=20'
0 10' 20' 40'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY
1	6/11/20	SSL

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

TEMPORARY TRAFFIC CONTROL PLAN No. 3

2

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_018_TCONTROL003

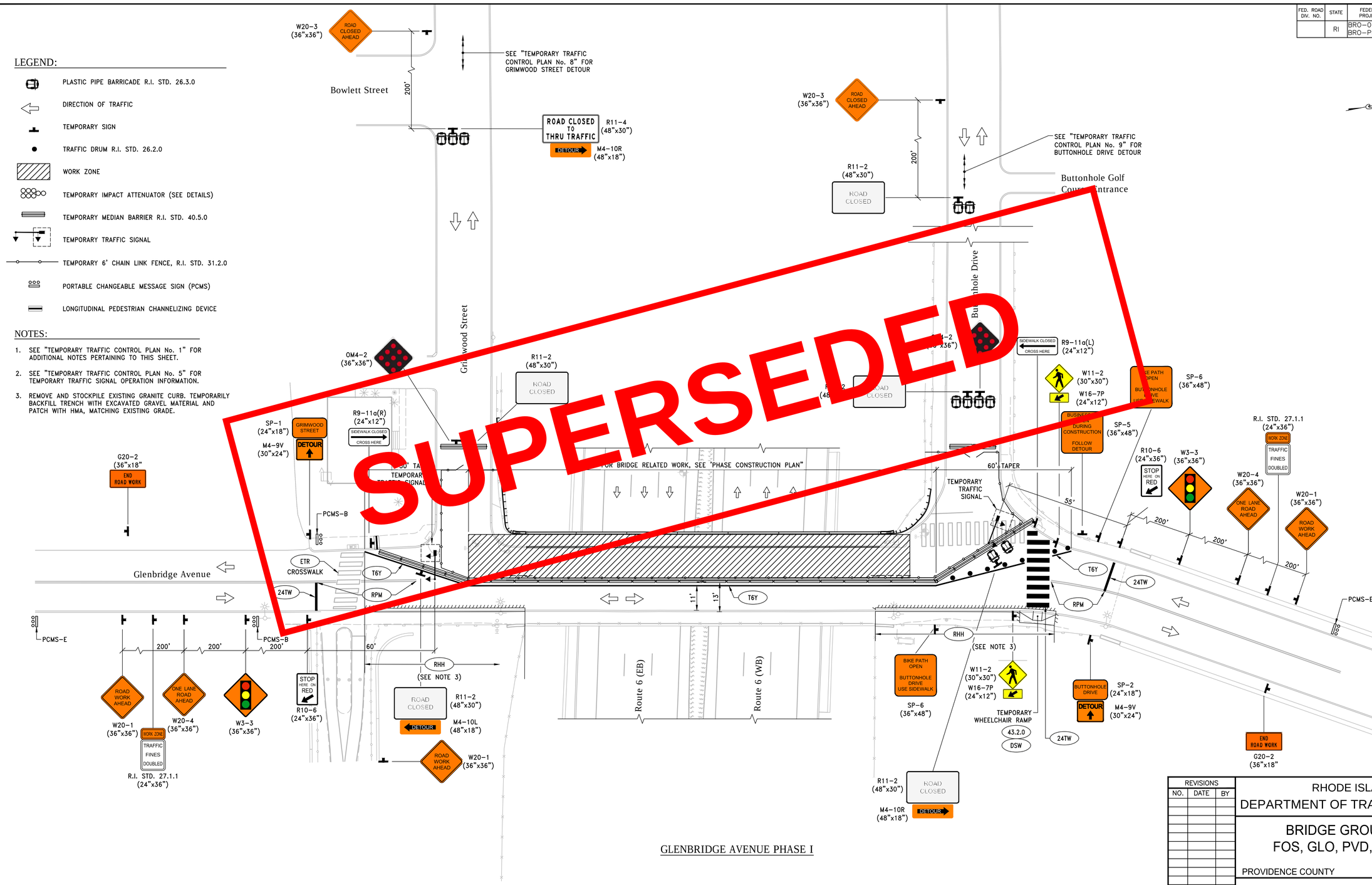
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	18	62

LEGEND:

- PLASTIC PIPE BARRICADE R.I. STD. 26.3.0
- DIRECTION OF TRAFFIC
- TEMPORARY SIGN
- TRAFFIC DRUM R.I. STD. 26.2.0
- WORK ZONE
- TEMPORARY IMPACT ATTENUATOR (SEE DETAILS)
- TEMPORARY MEDIAN BARRIER R.I. STD. 40.5.0
- TEMPORARY TRAFFIC SIGNAL
- TEMPORARY 6' CHAIN LINK FENCE, R.I. STD. 31.2.0
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- LONGITUDINAL PEDESTRIAN CHANNELIZING DEVICE

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR ADDITIONAL NOTES PERTAINING TO THIS SHEET.
2. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 5" FOR TEMPORARY TRAFFIC SIGNAL OPERATION INFORMATION.
3. REMOVE AND STOCKPILE EXISTING GRANITE CURB. TEMPORARILY BACKFILL TRENCH WITH EXCAVATED GRAVEL MATERIAL AND PATCH WITH HMA, MATCHING EXISTING GRADE.



SUPERSEDED

GLENBRIDGE AVENUE PHASE I

Scale: 1"=20'
0 10' 20' 40'

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401-334-4100

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NO.	DATE	BY

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BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

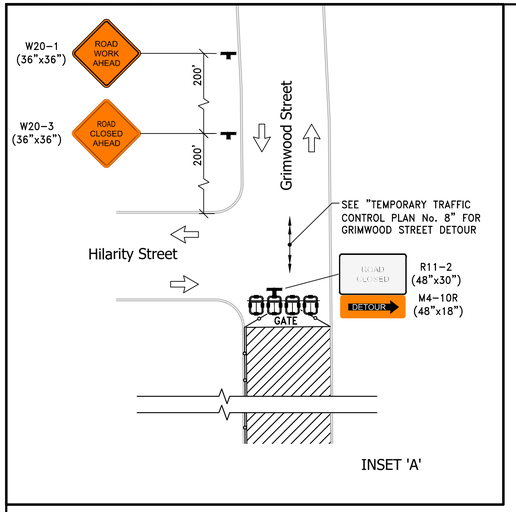
TEMPORARY TRAFFIC CONTROL PLAN No. 3

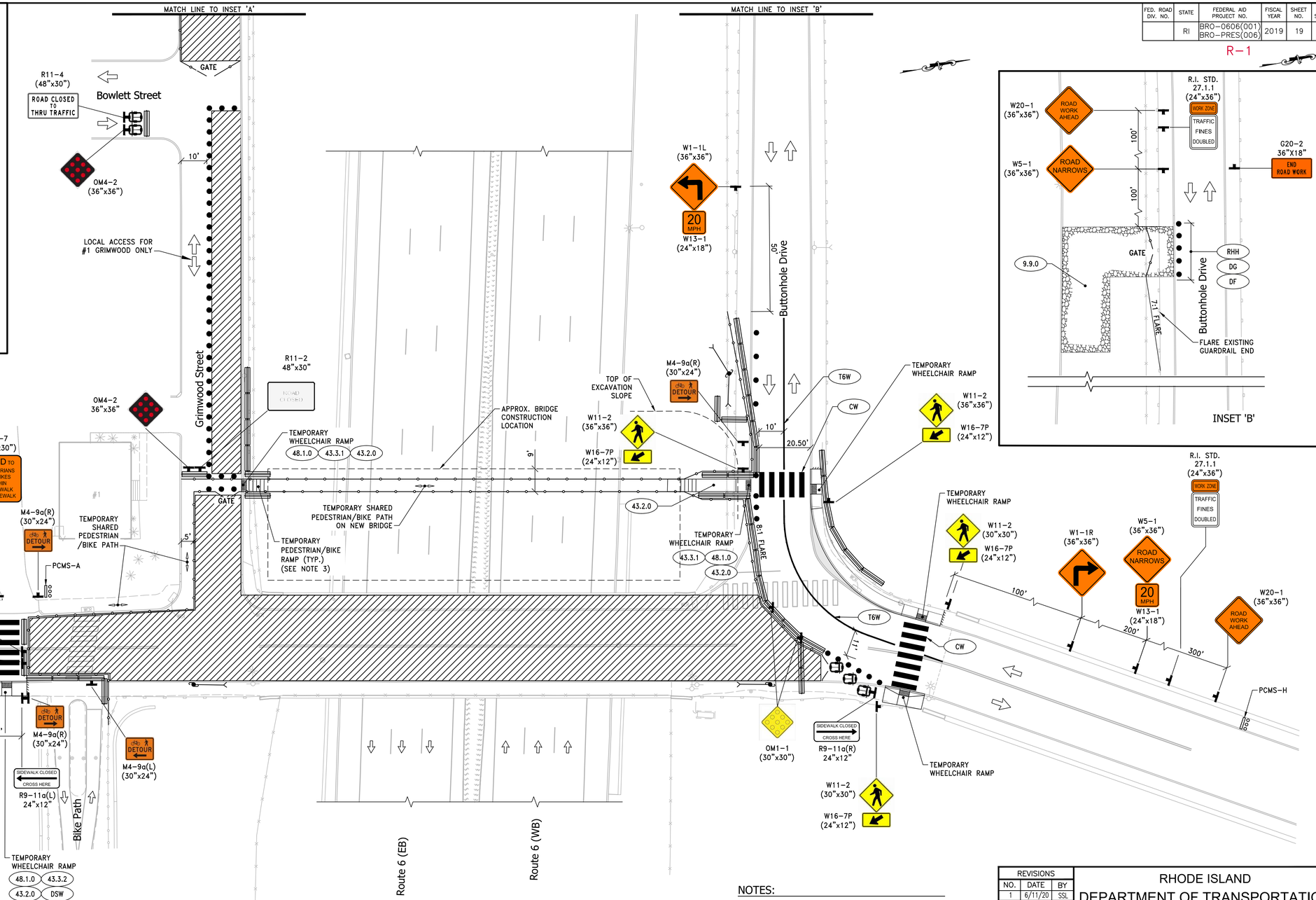
CHECKED BY _____ DATE _____ SCALE 1"=20'

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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	19	62

R-1





LEGEND:

- PLASTIC PIPE BARRICADE R.I. STD. 26.3.0
- DIRECTION OF TRAFFIC
- TEMPORARY SIGN
- TRAFFIC DRUM R.I. STD. 26.2.0 @ 5' SPACING
- WORK ZONE
- TEMPORARY IMPACT ATTENUATOR (SEE DETAILS)
- TEMPORARY MEDIAN BARRIER R.I. STD. 40.5.0 SEE NOTE 4
- TEMPORARY 6' CHAIN LINK FENCE, R.I. STD. 31.2.0
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- LONGITUDINAL PEDESTRIAN CHANNELIZING DEVICE
- NARROW IMPACT ATTENUATOR

GLENBRIDGE AVENUE PHASE II

Scale: 1"=20'
0 10' 20' 40'

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR ADDITIONAL NOTES PERTAINING TO THIS SHEET.
2. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 3" FOR ADDITIONAL INFORMATION PERTAINING TO THIS SHEET.
3. CONSTRUCT TEMPORARY RAMP TO TIE INTO NEW BRIDGE. RAMP SHOULD BE BUILT TO MEET ADA STANDARDS.

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PROVIDENCE COUNTY RHODE ISLAND

TEMPORARY TRAFFIC CONTROL PLAN No. 4

1

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_019_TCONTROL004

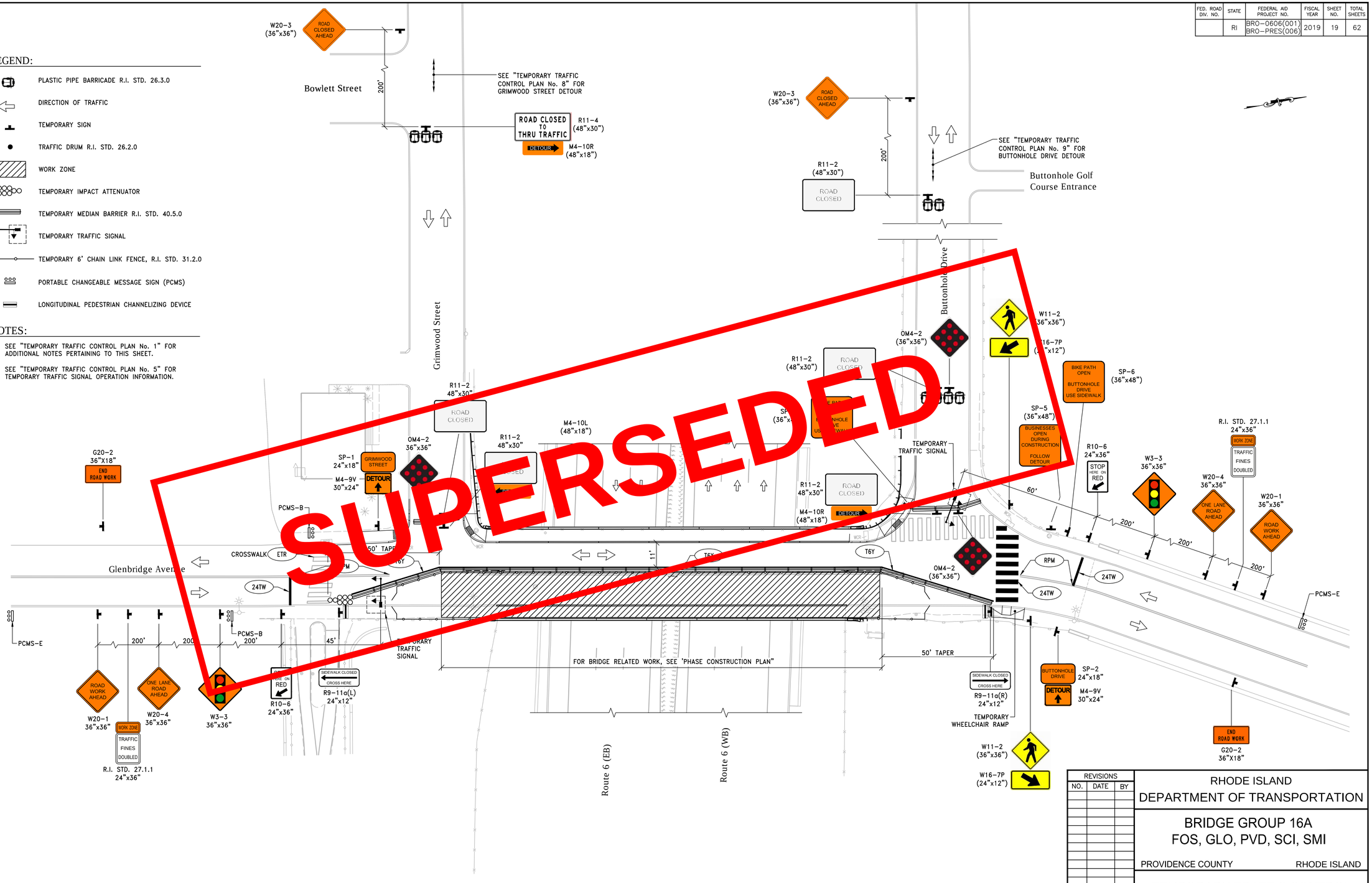
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	19	62

LEGEND:

- PLASTIC PIPE BARRICADE R.I. STD. 26.3.0
- DIRECTION OF TRAFFIC
- TEMPORARY SIGN
- TRAFFIC DRUM R.I. STD. 26.2.0
- WORK ZONE
- TEMPORARY IMPACT ATTENUATOR
- TEMPORARY MEDIAN BARRIER R.I. STD. 40.5.0
- TEMPORARY TRAFFIC SIGNAL
- TEMPORARY 6' CHAIN LINK FENCE, R.I. STD. 31.2.0
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- LONGITUDINAL PEDESTRIAN CHANNELIZING DEVICE

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR ADDITIONAL NOTES PERTAINING TO THIS SHEET.
2. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 5" FOR TEMPORARY TRAFFIC SIGNAL OPERATION INFORMATION.



SUPERSEDED

GLENBRIDGE AVENUE PHASE II

Scale: 1"=20'
0 10' 20' 40'

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REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
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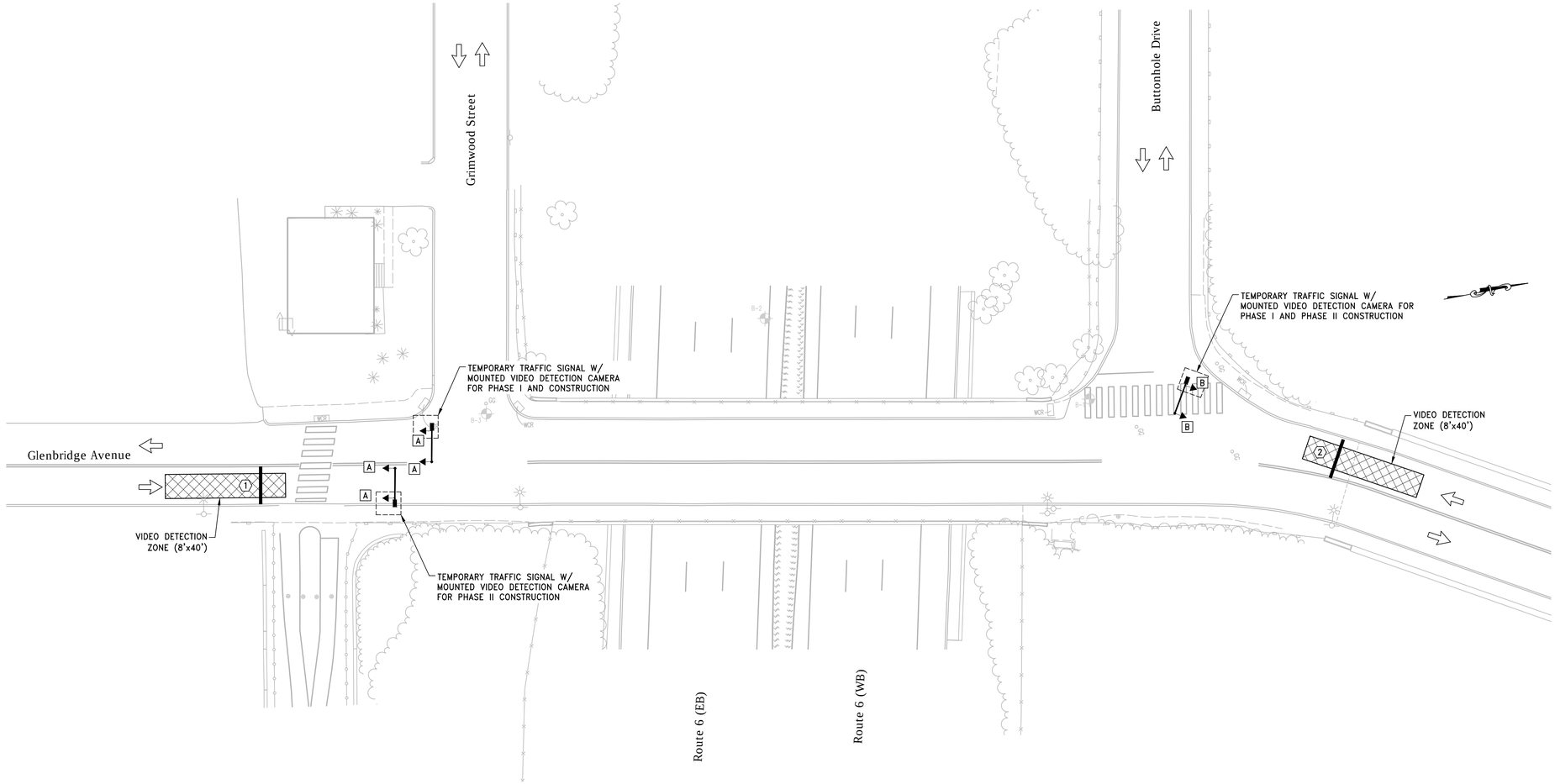
PROVIDENCE COUNTY RHODE ISLAND

TEMPORARY TRAFFIC CONTROL PLAN No. 4

CHECKED BY _____ DATE _____ SCALE 1"=20'

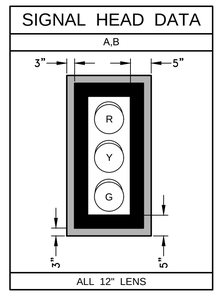
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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	20	62



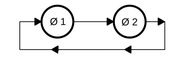
GLENBRIDGE AVENUE
TEMPORARY SIGNAL PLAN

SIGNAL HEAD DATA



NOTES:

1. ALL TRAFFIC SIGNAL HEADS ARE PROPOSED AND SHALL BE EQUIPPED WITH LED MODULES.
2. SIGNAL HEADS SHALL BE FURNISHED WITH BACK PLATES AS SHOWN. BACK PLATES SHALL BE EQUIPPED WITH A 3" YELLOW RETROREFLECTIVE STRIP IN ACCORDANCE WITH SECTION 4D.12 OF THE MUTCD 2009 EDITION, WITH ALL REVISIONS.
3. ALL SIGNAL HEADS SHALL BE FURNISHED WITH SIGNAL VISORS.



PHASE SEQUENCE DIAGRAM

DETECTOR DATA

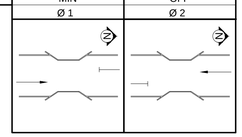
DETECTOR No.	DELAY (SEC)	CALL PHASE	EXTEND PHASE
⟨1⟩	3	1	1
⟨2⟩	3	2	2

PHASING AND TIMING DIAGRAM

APPROACH	DIRECTION	HOUSING	Ø 1			Ø 2			FLASHING OPERATION
MINIMUM INTERVAL			8			8			
VEHICLE EXTENSION			2.6			2.6			
MAXIMUM 1 (FREE OPERATION)			55			50			
MAXIMUM 2 (NOT USED)									
YELLOW CHANGE				3.5			3.5		
RED CLEARANCE					16.0			16.0	
GLENBRIDGE AVENUE	NB	A	G	Y	R	R	R	R	FR
GLENBRIDGE AVENUE	SB	B	R	R	R	G	Y	R	FR
DETECTOR			NON - LOCK			NON - LOCK			
RECALL			MIN			OFF			
			Ø 1			Ø 2			

PHASING AND TIMING NOTE:

1. FLASHING OPERATION PER M.U.T.C.D. SECTION 4D.28 - 4D.31.



NOTES:

1. THIS TEMPORARY TRAFFIC SIGNAL PLAN SHALL BE USED IN CONJUNCTION WITH THE TEMPORARY TRAFFIC CONTROL LAYOUT AS DESCRIBED IN "TEMPORARY TRAFFIC CONTROL PLAN NO. 3" AND "TEMPORARY TRAFFIC CONTROL PLAN NO. 4".
2. THE TEMPORARY TRAFFIC CONTROL SYSTEM SHALL BE IN CONFORMANCE WITH JOB SPECIFIC ITEM T12.9901.
3. THE TEMPORARY TRAFFIC CONTROL SIGNAL SYSTEM SHALL COMPLY WITH ALL RELATED SECTIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

Scale: 1"=20'
0 10' 20' 40'

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401-334-4100

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

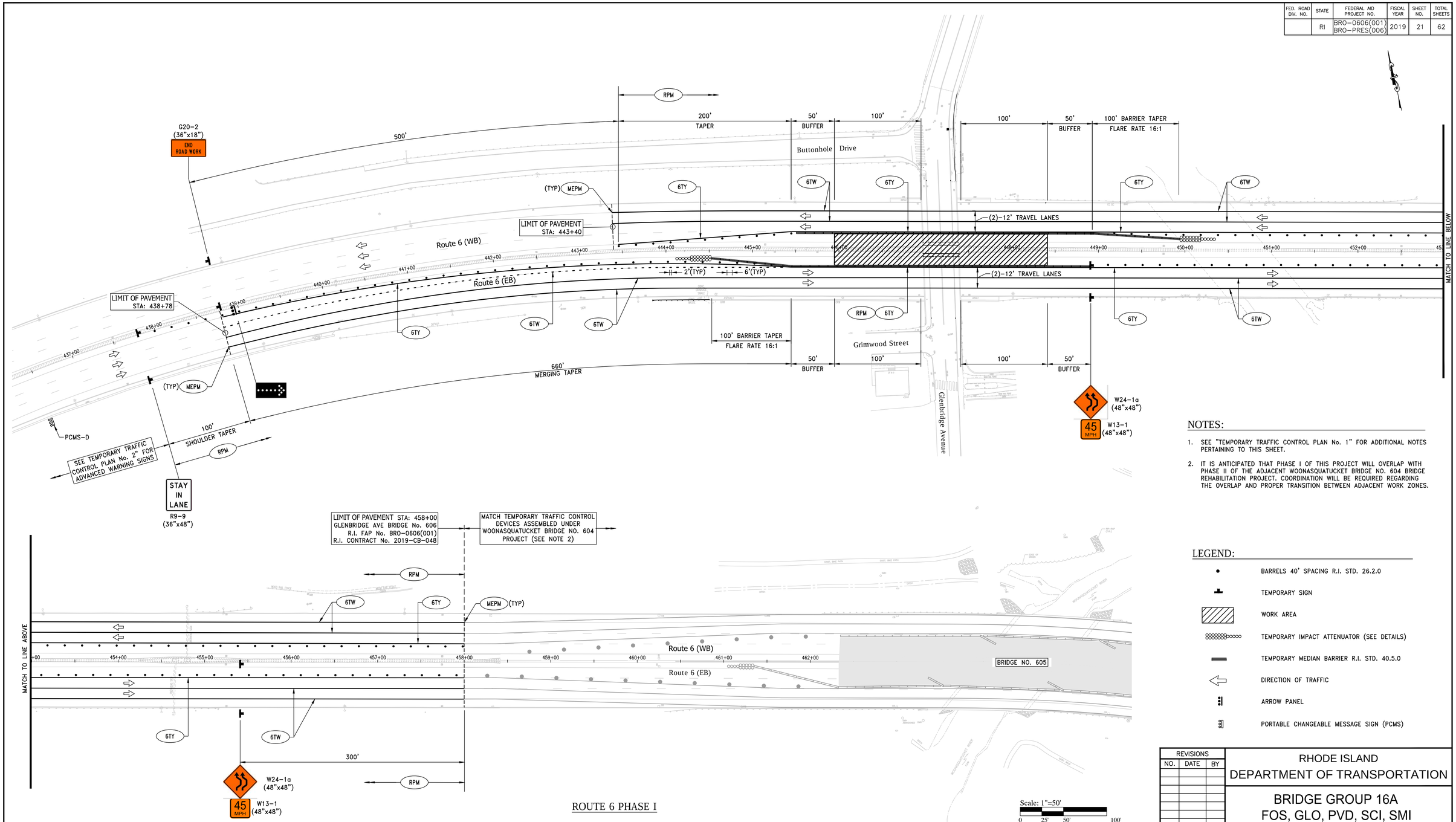
PROVIDENCE COUNTY RHODE ISLAND

TEMPORARY TRAFFIC CONTROL PLAN No. 5

CHECKED BY _____ DATE _____ SCALE 1"=20'

0013V_V1_020_TCONTROL005

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	21	62



ROUTE 6 PHASE I

Scale: 1"=50'
0 25' 50' 100'

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR ADDITIONAL NOTES PERTAINING TO THIS SHEET.
2. IT IS ANTICIPATED THAT PHASE I OF THIS PROJECT WILL OVERLAP WITH PHASE II OF THE ADJACENT WOONASQUATUCKET BRIDGE NO. 604 BRIDGE REHABILITATION PROJECT. COORDINATION WILL BE REQUIRED REGARDING THE OVERLAP AND PROPER TRANSITION BETWEEN ADJACENT WORK ZONES.

LEGEND:

- BARRELS 40' SPACING R.I. STD. 26.2.0
- TEMPORARY SIGN
- WORK AREA
- TEMPORARY IMPACT ATTENUATOR (SEE DETAILS)
- TEMPORARY MEDIAN BARRIER R.I. STD. 40.5.0
- DIRECTION OF TRAFFIC
- ARROW PANEL
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

REVISIONS		
NO.	DATE	BY

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DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

TEMPORARY TRAFFIC CONTROL PLAN No. 6

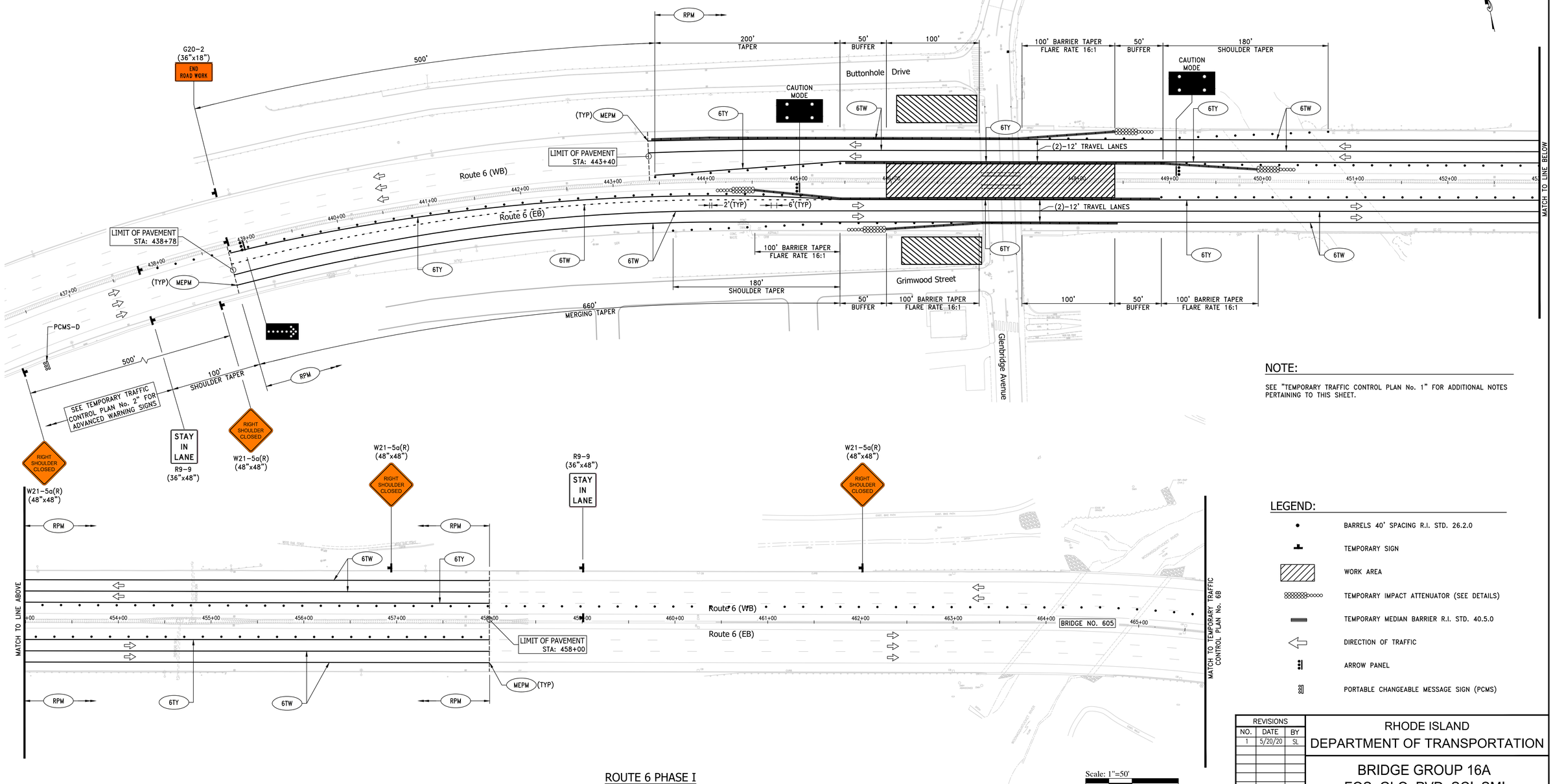
CHECKED BY _____ DATE _____ SCALE 1"=50'

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8 BLACKSTONE VALLEY PLACE
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0013V_V1_021_TCONTROL006

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	21A	62

R-1



NOTE:

SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR ADDITIONAL NOTES PERTAINING TO THIS SHEET.

LEGEND:

- BARRELS 40' SPACING R.I. STD. 26.2.0
- TEMPORARY SIGN
- WORK AREA
- TEMPORARY IMPACT ATTENUATOR (SEE DETAILS)
- TEMPORARY MEDIAN BARRIER R.I. STD. 40.5.0
- DIRECTION OF TRAFFIC
- ARROW PANEL
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

ROUTE 6 PHASE I

Scale: 1"=50'
0 25' 50' 100'

REVISIONS		
NO.	DATE	BY
1	5/20/20	SL

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

TEMPORARY TRAFFIC CONTROL
PLAN No. 6A

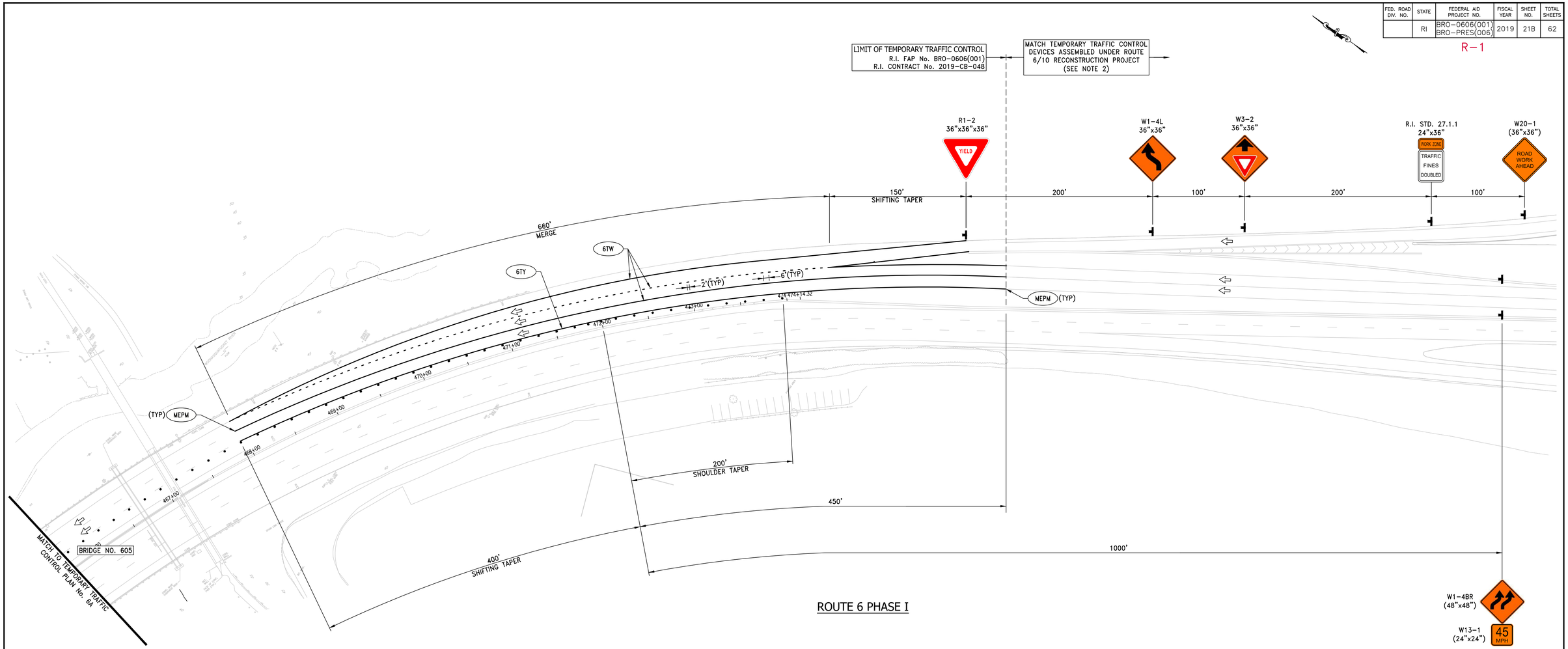
CHECKED BY _____ DATE _____ SCALE 1"=50'

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_021_TCONTROL006

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	21B	62

R-1



ROUTE 6 PHASE I

LEGEND:

- BARRELS 40' SPACING R.I. STD. 26.2.0
- TEMPORARY SIGN
- WORK AREA
- TEMPORARY IMPACT ATTENUATOR (SEE DETAILS)
- TEMPORARY MEDIAN BARRIER R.I. STD. 40.5.0
- DIRECTION OF TRAFFIC
- ARROW PANEL
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR ADDITIONAL NOTES PERTAINING TO THIS SHEET.
2. IT IS ANTICIPATED THAT PHASE I OF THIS PROJECT WILL OVERLAP WITH THE ADJACENT ROUTE 6/10 RECONSTRUCTION PROJECT. COORDINATION WILL BE REQUIRED REGARDING THE OVERLAP AND PROPER TRANSITION BETWEEN ADJACENT WORK ZONES.

Scale: 1"=50'
0 25' 50' 100'

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401-334-4100

REVISIONS		
NO.	DATE	BY
1	5/20/20	SL

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
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PROVIDENCE COUNTY RHODE ISLAND

TEMPORARY TRAFFIC CONTROL PLAN NO. 6B

CHECKED BY _____ DATE _____ SCALE 1"=50'

0013V_V1_021_TCONTROL006

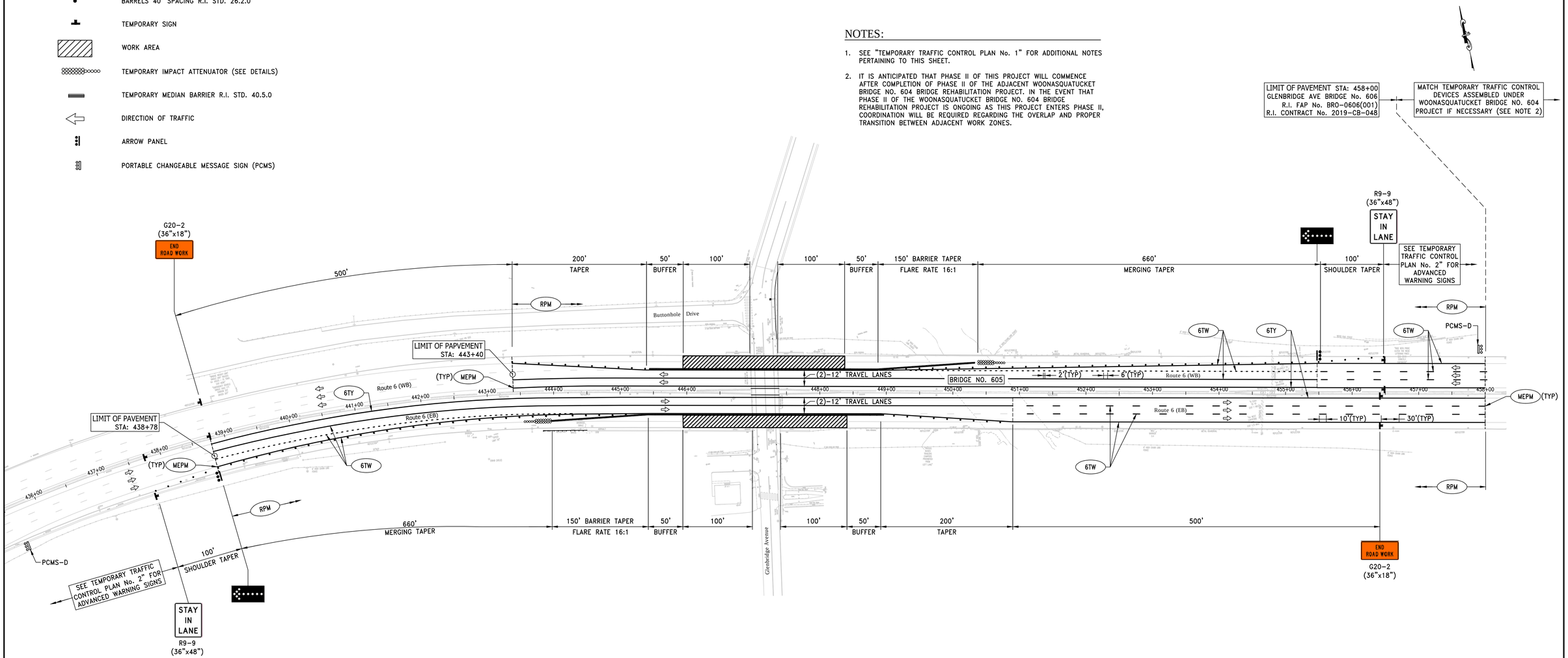
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	22	62

LEGEND:

- BARRELS 40' SPACING R.I. STD. 26.2.0
- TEMPORARY SIGN
- WORK AREA
- TEMPORARY IMPACT ATTENUATOR (SEE DETAILS)
- TEMPORARY MEDIAN BARRIER R.I. STD. 40.5.0
- DIRECTION OF TRAFFIC
- ARROW PANEL
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR ADDITIONAL NOTES PERTAINING TO THIS SHEET.
2. IT IS ANTICIPATED THAT PHASE II OF THIS PROJECT WILL COMMENCE AFTER COMPLETION OF PHASE II OF THE ADJACENT WOONASQUATUCKET BRIDGE NO. 604 BRIDGE REHABILITATION PROJECT. IN THE EVENT THAT PHASE II OF THE WOONASQUATUCKET BRIDGE NO. 604 BRIDGE REHABILITATION PROJECT IS ONGOING AS THIS PROJECT ENTERS PHASE II, COORDINATION WILL BE REQUIRED REGARDING THE OVERLAP AND PROPER TRANSITION BETWEEN ADJACENT WORK ZONES.



ROUTE 6 PHASE II

Scale: 1"=70'
0 35' 70' 140'

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PROVIDENCE COUNTY RHODE ISLAND

TEMPORARY TRAFFIC CONTROL PLAN No. 7

CHECKED BY _____ DATE _____ SCALE 1"=20'

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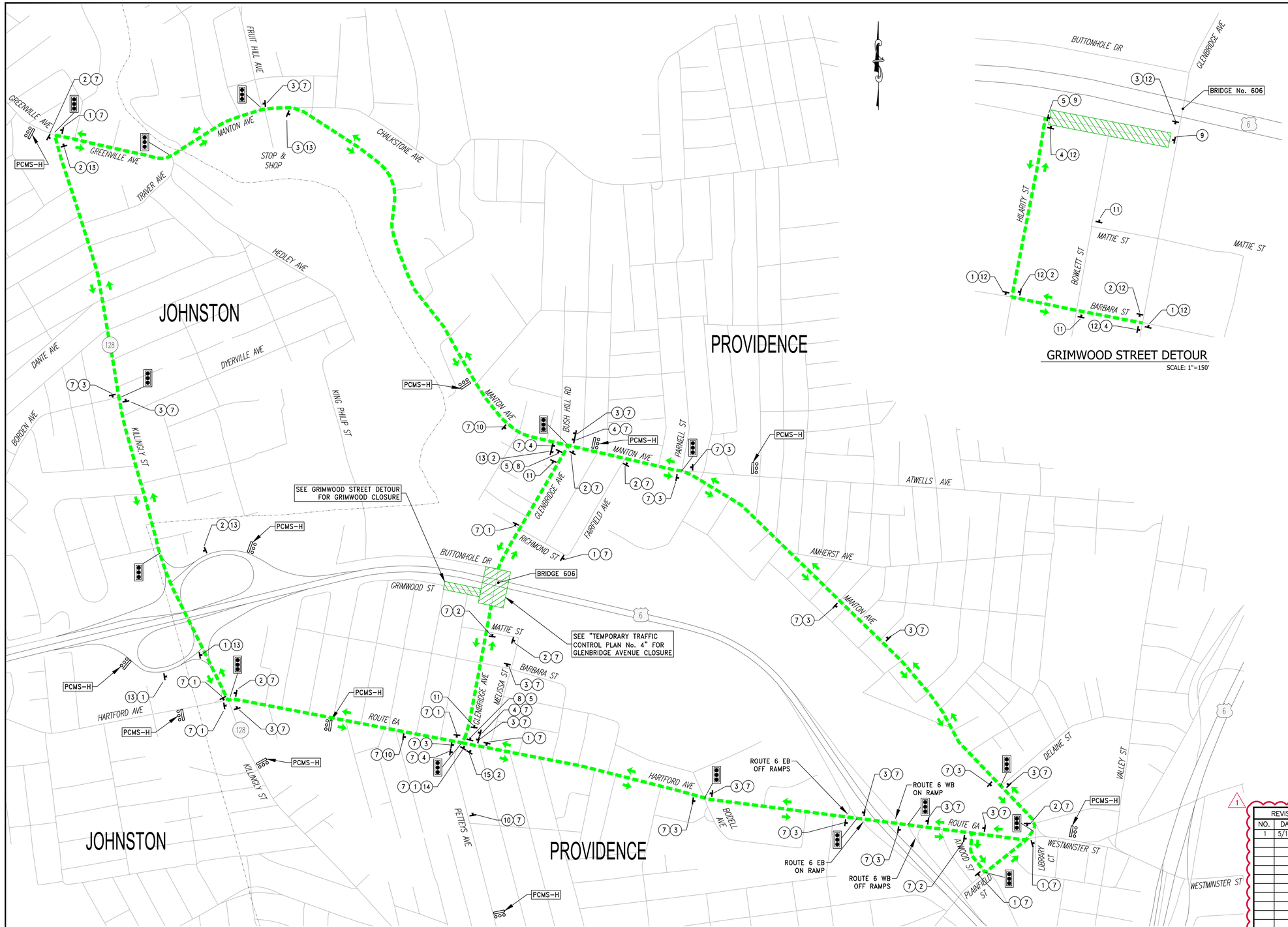
0013V_V1_022_TCONTROL007

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	23	62

R-1

DETOUR SIGN SCHEDULE

SYM.	LEGEND	DESIGNATION	SIZE
1	DETOUR ←	M4-9L	30" x 24"
2	DETOUR →	M4-9R	30" x 24"
3	DETOUR ↑	M4-9V	30" x 24"
4	END DETOUR	M4-8A	24" x 18"
5	DETOUR →	M4-10R	48" x 18"
6	DETOUR ←	M4-10L	48" x 18"
7	GLENBRIDGE AVENUE	SP-5	24" x 18"
8	ROAD CLOSED TO THRU TRAFFIC	R11-4	60" x 30"
9	ROAD CLOSED	R11-2	48" x 30"
10	DETOUR AHEAD	SP-4	36" x 36"
11	ROAD CLOSED AHEAD	W20-3	36" x 36"
12	GRIMWOOD STREET	SP-1	24"x18"
13	BUTTONHOLE DRIVE	SP-2	24"x18"
14	TRUCKS	SP-3	24"x18"
15	CARS	SP-6	24"x18"



GLENBRIDGE AVENUE DETOUR
SCALE: 1"=400'

GRIMWOOD STREET DETOUR
SCALE: 1"=150'

LEGEND:

- TEMPORARY SIGN
- WORK ZONE
- SIGNALIZED INTERSECTION
- DETOUR ROUTE
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

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1	5/15/20	SSL

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BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

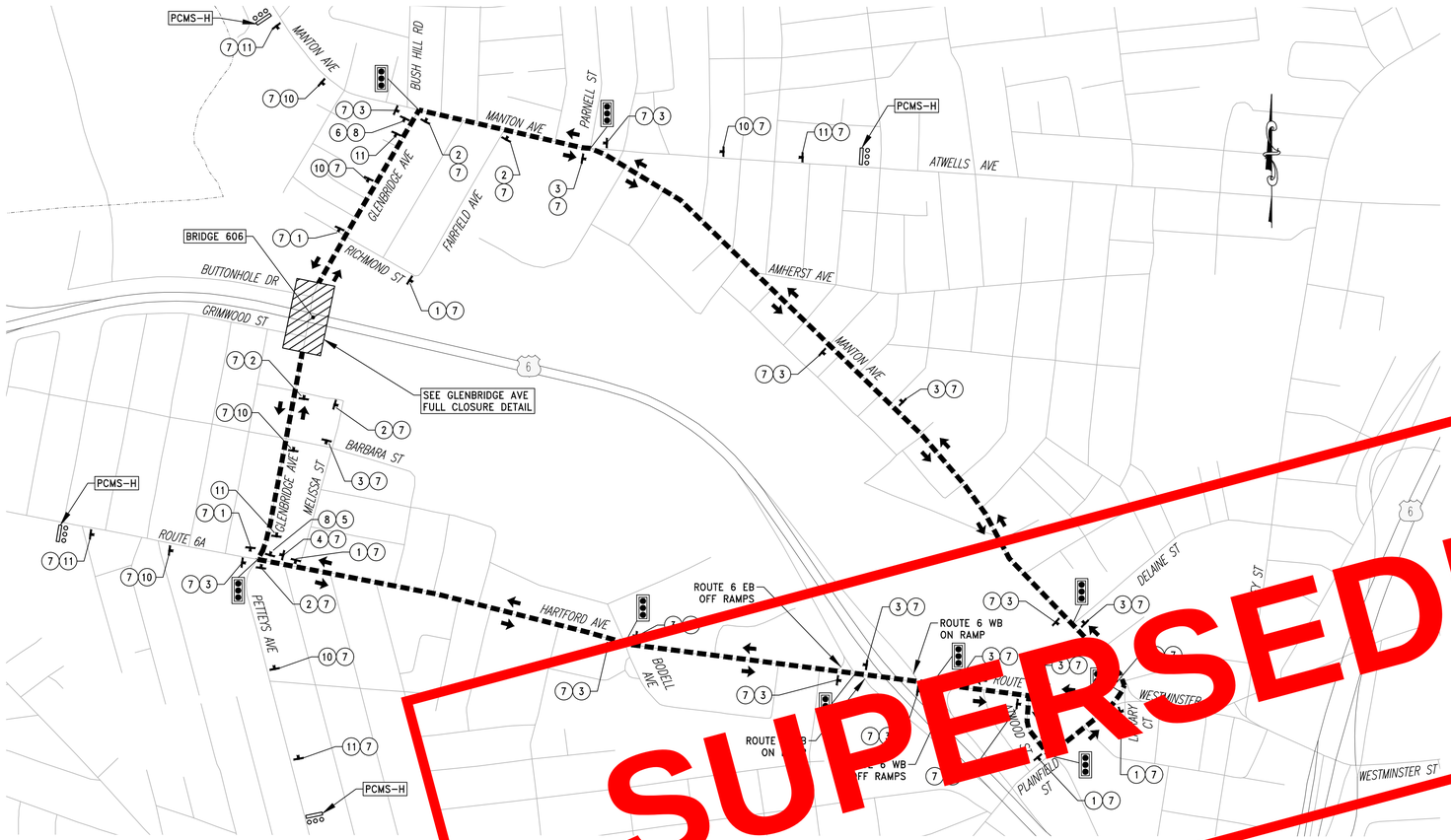
TEMPORARY TRAFFIC CONTROL PLAN No. 8

CHECKED BY _____ DATE _____ SCALE N/A

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LINCOLN, RI 02865
401-334-4100

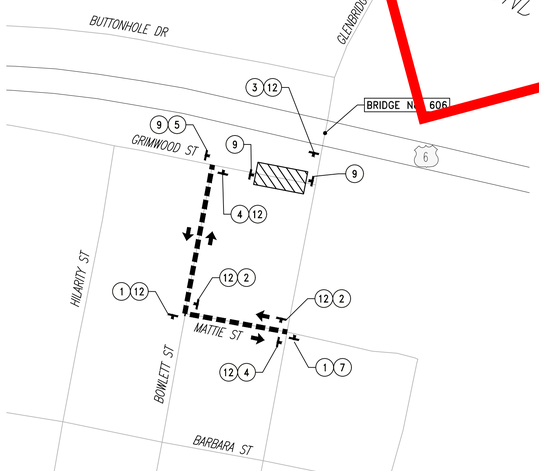
0013V_V1_023_TCONTROL008

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	23	62



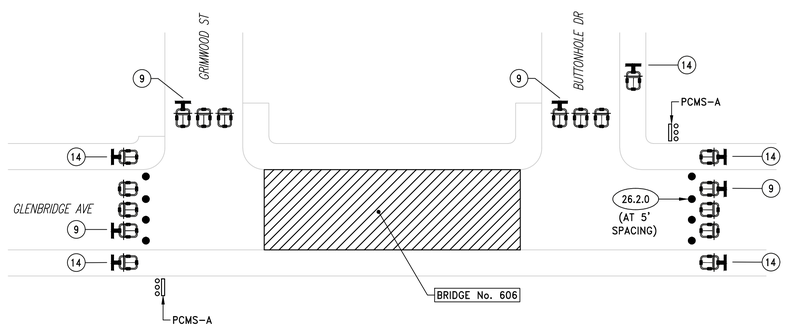
GLENBRIDGE AVENUE DETOUR

SCALE: 1"=400'



GRIMWOOD STREET DETOUR

SCALE: 1"=150'



GLENBRIDGE AVE FULL CLOSURE DETAIL

NOT TO SCALE

LEGEND:

- TEMPORARY SIGN
- WORK ZONE
- SIGNALIZED INTERSECTION
- DETOUR ROUTE
- PLASTIC PIPE BARRICADE R.I. STD. 26.3.0
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- POLYETHYLENE DRUM WITH MARKINGS R.I. STD. 26.2.0

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR NOTES PERTAINING TO THIS SHEET.
2. TRAFFIC POLICE OFFICERS SHALL BE POSITIONED AT ALL SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER.

DETOUR SIGN SCHEDULE

SYM.	LEGEND	DESIGNATION	SIZE
1	DETOUR ←	M4-9L	30" x 24"
2	DETOUR →	M4-9R	30" x 24"
3	DETOUR ↑	M4-9V	30" x 24"
4	END DETOUR	M4-8A	24" x 18"
5	DETOUR →	M4-10R	48" x 18"
6	← DETOUR	M4-10L	48" x 18"
7	GLENBRIDGE AVENUE	SP-3	24" x 18"
8	ROAD CLOSED TO THRU TRAFFIC	R11-4	60" x 30"
9	ROAD CLOSED	R11-2	48" x 30"
10	DETOUR AHEAD	SP-4	36" x 36"
11	ROAD CLOSED AHEAD	W20-3	36" x 36"
12	GRIMWOOD STREET	SP-1	24"x18"
13	BUTTONHOLE DRIVE	SP-2	24"x18"
14	SIDEWALK CLOSED	R9-9	24"x12"

SUPERSEDED

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

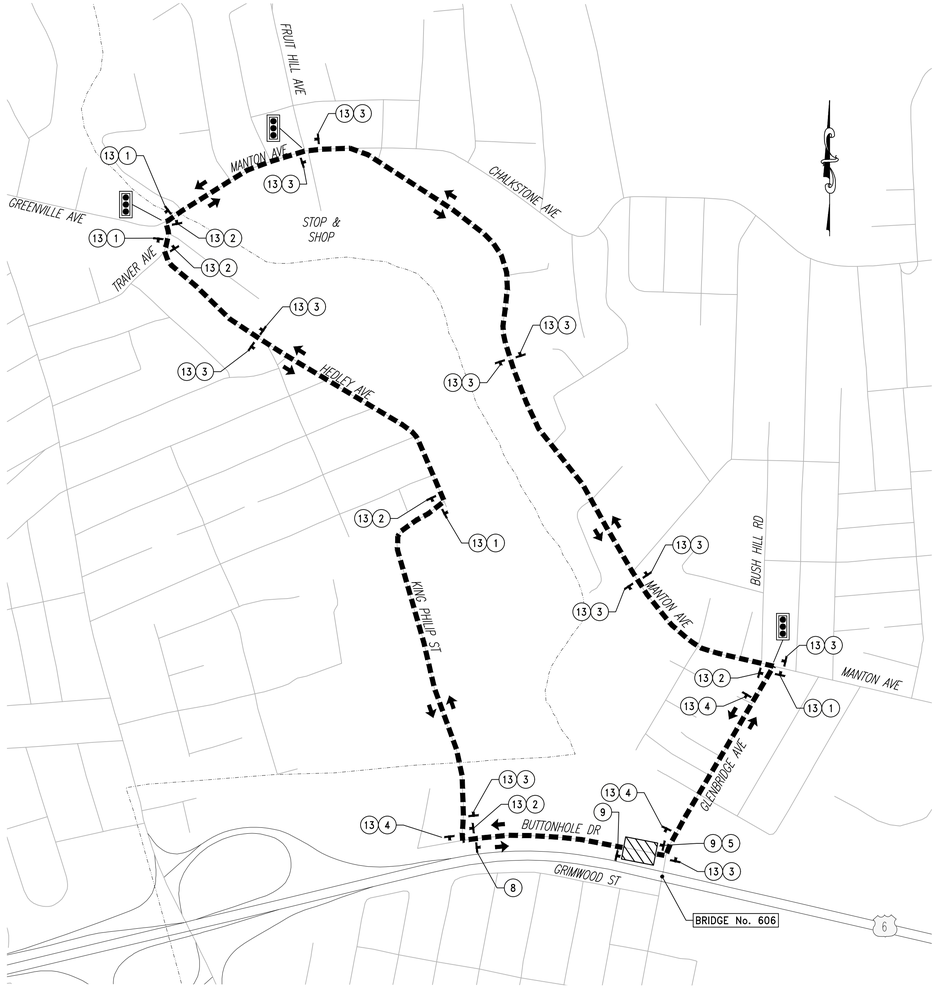
TEMPORARY TRAFFIC CONTROL PLAN No. 8

CHECKED BY _____ DATE _____ SCALE N/A

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_023_TCONTROL008

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	24	62



BUTTONHOLE DRIVE DETOUR

SCALE: 1"=400'

LEGEND:

- TEMPORARY SIGN
- WORK ZONE
- SIGNALIZED INTERSECTION
- DETOUR ROUTE

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR NOTES PERTAINING TO THIS SHEET.
2. TRAFFIC POLICE OFFICERS SHALL BE POSITIONED AT ALL SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER.

DETOUR SIGN SCHEDULE

SYM.	LEGEND	DESIGNATION	SIZE
1	DETOUR ←	M4-9L	30" x 24"
2	DETOUR →	M4-9R	30" x 24"
3	DETOUR ↑	M4-9V	30" x 24"
4	END DETOUR	M4-8A	24" x 18"
5	DETOUR →	M4-10R	48" x 18"
6	← DETOUR	M4-10L	48" x 18"
7	GLENBRIDGE AVENUE	SP-3	24" x 18"
8	ROAD CLOSED TO THRU TRAFFIC	R11-4	60" x 30"
9	ROAD CLOSED	R11-2	48" x 30"
10	DETOUR AHEAD	SP-4	36" x 36"
11	ROAD CLOSED AHEAD	W20-3	36" x 36"
12	GRIMWOOD STREET	SP-1	24"x18"
13	BUTTONHOLE DRIVE	SP-2	24"x18"

REVISIONS		
NO.	DATE	BY

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

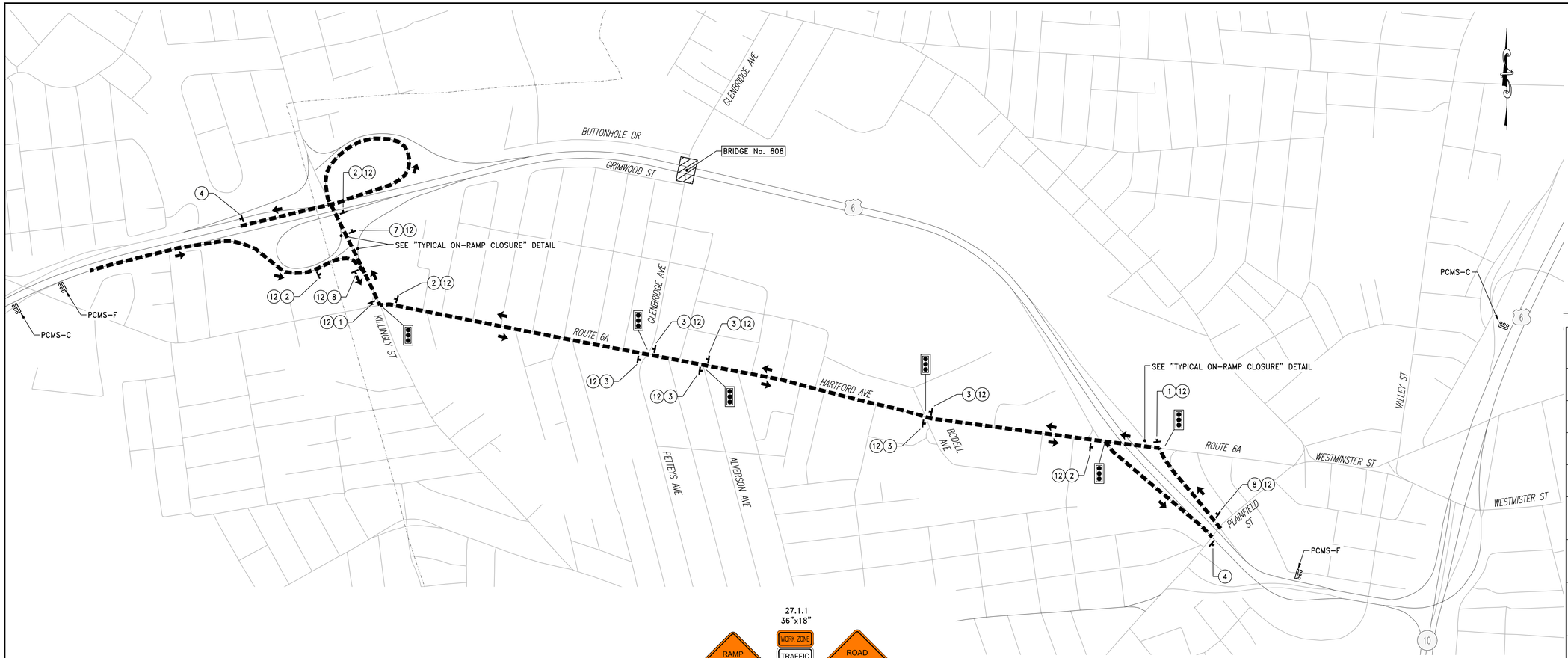
PROVIDENCE COUNTY RHODE ISLAND

TEMPORARY TRAFFIC CONTROL PLAN No. 9

CHECKED BY _____ DATE _____ SCALE N/A

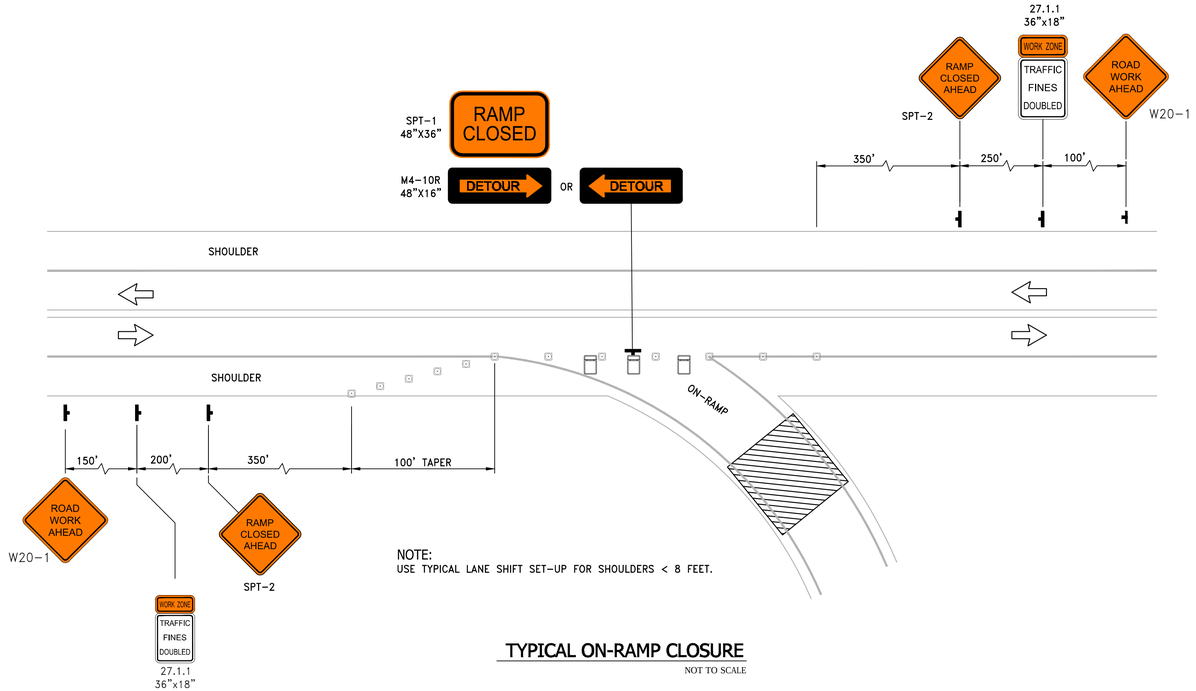
0013V_V1_024_TCONTROL009

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	25	62



ROUTE 6 DETOUR

SCALE: 1"=400'



NOTE:
USE TYPICAL LANE SHIFT SET-UP FOR SHOULDERS < 8 FEET.

TYPICAL ON-RAMP CLOSURE

NOT TO SCALE

DETOUR SIGN SCHEDULE

SYM.	LEGEND	DESIGNATION	SIZE
1	DETOUR ←	M4-9L	30" x 24"
2	DETOUR →	M4-9R	30" x 24"
3	DETOUR ↑	M4-9V	30" x 24"
4	END DETOUR	M4-8A	24" x 18"
5	DETOUR →	M4-10R	48" x 18"
6	DETOUR ←	M4-10L	48" x 18"
7	DETOUR	M4-9AR	30" x 24"
8	DETOUR	MA-9AL	30" x 24"
9	ROAD CLOSED	R11-2	48" x 30"
10	DETOUR AHEAD	SP-4	36" x 36"
11	ROAD CLOSED AHEAD	W20-3	36" x 36"
12	ROUTE 6	SP-1	24"x18"

LEGEND:

- TEMPORARY SIGN
- WORK ZONE
- SIGNALIZED INTERSECTION
- DETOUR ROUTE
- PORTABLE CHANGEABLE MESSAGE SIGN (PMCS)

NOTES:

1. SEE "TEMPORARY TRAFFIC CONTROL PLAN No. 1" FOR NOTES PERTAINING TO THIS SHEET.
2. TRAFFIC POLICE OFFICERS SHALL BE POSITIONED AT ALL SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

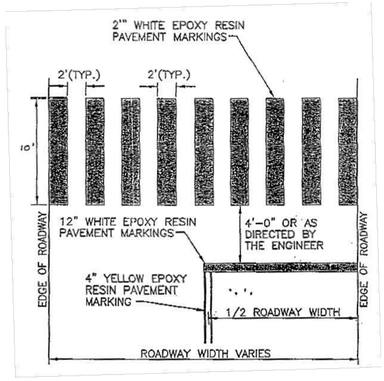
TEMPORARY TRAFFIC CONTROL PLAN No. 10

CHECKED BY _____ DATE _____ SCALE N/A

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_025_TCONTROL010

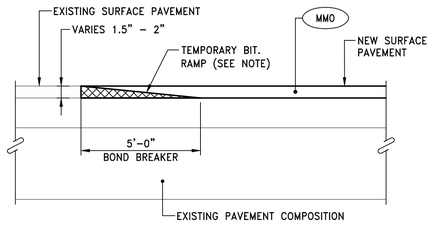
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	26	62



CITY OF PROVIDENCE CROSSWALK AND STOP BAR DETAIL

CW

NOT TO SCALE



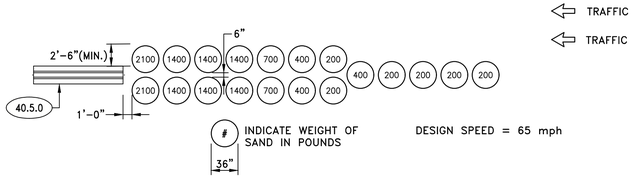
NOTES:

1. A BOND BREAKER (TAPERED OR EQUIVALENT) SHALL BE PLACED 5'-0" FROM THE JOINT AS A TEMPORARY RAMP. PRIOR TO PLACING THE SURFACE COURSE, THE BOND BREAKER SHALL BE REMOVED.
2. THE TEMPORARY HMA RAMPS SHALL BE PLACED BEFORE ROADWAY IS OPEN TO TRAFFIC.
3. THIS WORK SHALL BE PAID FOR UNDER ITEM 932.0/00 CUTTING AND MATCHING ASPHALT.

CUT AND MATCH FOR MILLING AND OVERLAY

CM

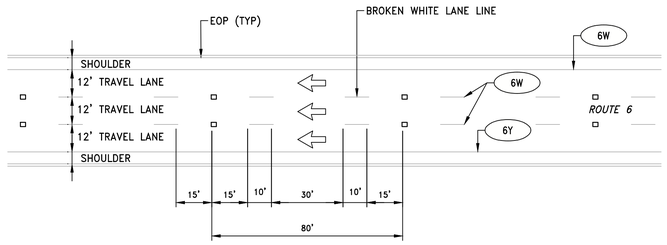
NOT TO SCALE



NOTE:
INSTALL PER MANUFACTURER'S RECOMMENDATION

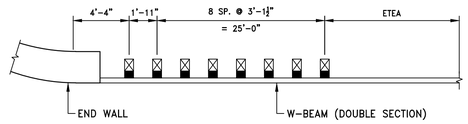
IMPACT ATTENUATOR

NOT TO SCALE



MAIN LINE RRM'S

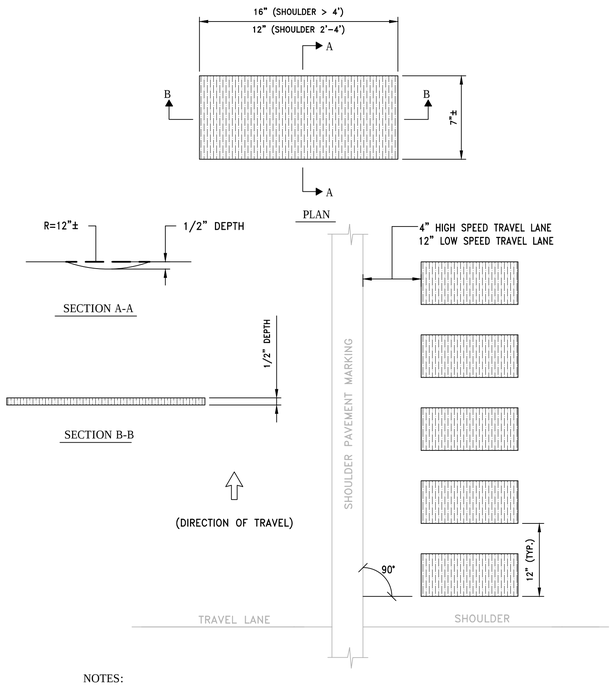
NOT TO SCALE



GRT

GUARDRAIL TRANSITION

NOT TO SCALE



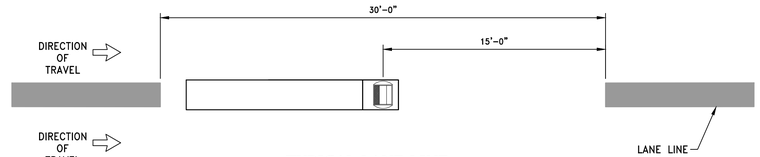
NOTES:

1. RUMBLE STRIP ALIGNMENT SHALL GENERALLY BE STRAIGHT. THE OFFSET MAY BE ADJUSTED TO ACCOMMODATE VARIATIONS IN THE EDGE LINE AS WELL AS TO AVOID EXISTING LONGITUDINAL CONSTRUCTION JOINTS.
2. THE 1/2" DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE WIDTH. SOME VARIATION TO SUIT SHOULDER SLOPE BREAKS MAY BE NECESSARY.
3. RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGE DECKS. RUMBLE STRIPS SHALL TERMINATE 50' PRIOR TO AND RESUME 50' AFTER A BRIDGE DECK.
4. IF A DRAINAGE STRUCTURE IS ENCOUNTERED IN THE PATH OF THE PROPOSED RUMBLE STRIP, THE CONTRACTOR SHALL NOT INSTALL RUMBLE STRIP FOR (2) FEET ON EITHER SIDE OF THE DRAINAGE STRUCTURE.

RS

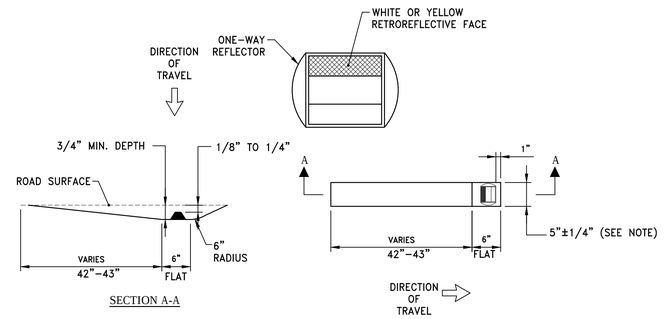
RUMBLE STRIP DETAIL

NOT TO SCALE



TYPICAL LANE LINE

NOT TO SCALE



SECTION A-A

NOTES:

1. RRM – REFLECTORIZED PAVEMENT MARKING (SLOTTED IN PAVEMENT)
2. SHAPE OF THE RRM'S SHOWN IS FOR INFORMATION ONLY. ACTUAL SHAPE AND MEASUREMENTS CAN VARY AS LONG AS IT CONFORMS TO THE STANDARD REQUIREMENTS.
3. RED REFLECTOR IS FACED AWAY FROM ONCOMING TRAFFIC
4. ON MULTILANE RAMPS RRM'S SHALL BE INSTALLED ON EVERY GAP OF BROKEN WHITE LANE LINES (40' CENTER ON CENTER) EXTENDING THE ENTIRE LIMIT OF THE RAMP. WHEN DOTTED EXTENSION WHITE LANE LINES ARE PRESENT RRM'S SHALL BE INSTALLED ON EVERY OTHER GAP OF BROKEN WHILE LANE LINE.
5. IN CASES WHERE THE PROPER RRM LOCATION IS PROHIBITED DUE TO A CONSTRUCTION JOINT OR DETERIORATING PAVEMENT SURFACE, THE RRM SHOULD DEVIATE LONGITUDINALLY BY A DISTANCE NOT GREATER THAN 10 PERCENT OF THE TYPICAL SPACING BETWEEN RRM'S. NO LATERAL DEVIATION FROM THE LANE ALIGNMENT SHALL OCCUR.
6. THE EDGE OF A RRM SHALL BE OFFSET, IN THE DIRECTION OF APPROACHING TRAFFIC, A DISTANCE OF 2 INCHES FROM THE EDGE OF PAVEMENT, A LONGITUDINAL CRACK OR JOINT, OR A SOLID LANE LINE.
7. ROADWAY LIMITS FOR THE INSTALLATION OF RRM'S ARE SHOWN ON STRIPING PLANS.
8. SEE "DETAILS No.8" FOR DETAILS PERTAINING TO THIS SHEET.

RRM

REFLECTORIZED PAVEMENT MARKER

NOT TO SCALE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

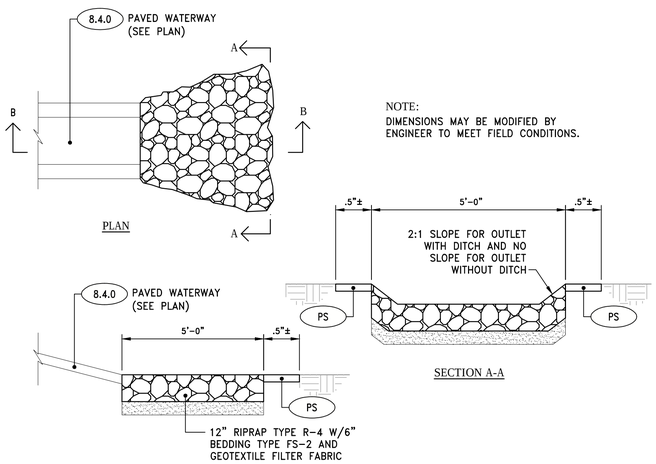
PROVIDENCE COUNTY — RHODE ISLAND

DETAILS-1

CHECKED BY _____ DATE _____ SCALE N/A

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

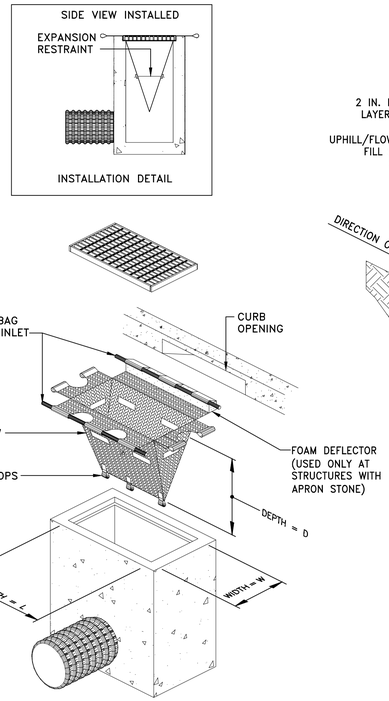
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	27	62



NOTES:

1. REMOVE AND DISPOSE EXISTING BITUMINOUS APRON, REPLACE WITH 3" HMA CLASS 9.5 AND 8" GRAVEL BORROW SUBBASE COURSE
2. THIS WORK SHALL BE PAID FOR UNDER ITEM CODE 711.0110 "3" PAVED WATERWAY CLASS I-1 STD 8.4.0".

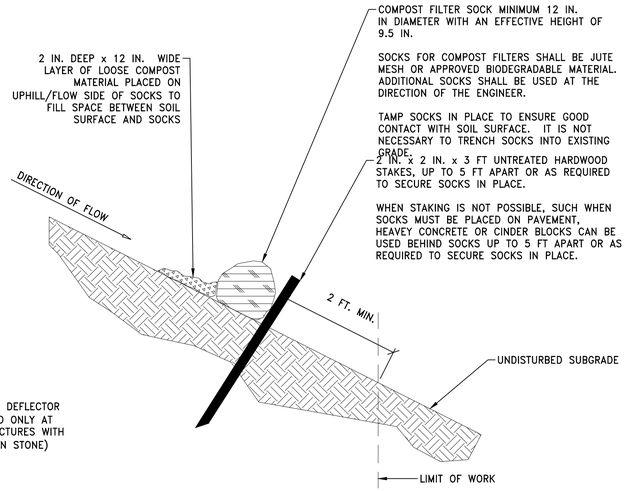
RRP **RIPRAP PAD**
NOT TO SCALE

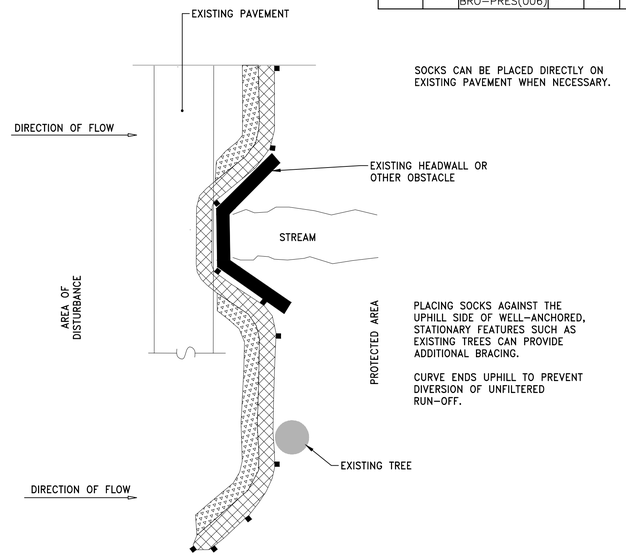


INLET SEDIMENT CONTROL DEVICE
(WITH OPTIONAL CURB DEFLECTOR)

ISCD

NOT TO SCALE

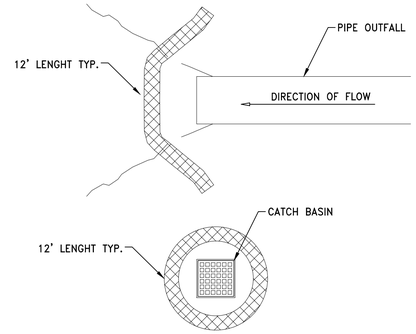




PLAN VIEW

PROVIDE 3 FT. MINIMUM OVERLAP AT ENDS OF SOCKS TO JOIN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING SOCKS SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM.

SECURES ENDS OF SOCKS WITH STAKES SPACED 18 IN. APART THROUGH TOPS OF SOCKS.

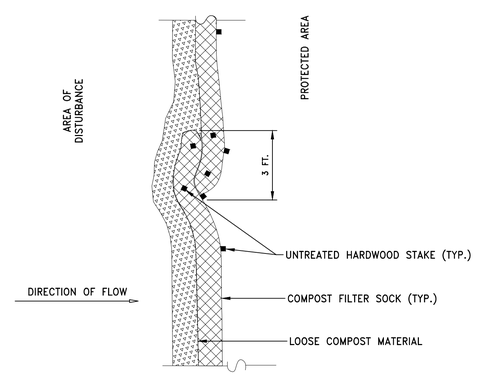


NOTES:

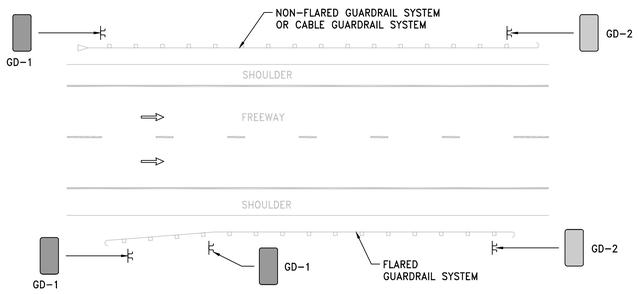
1. PROVIDE A MINIMUM SOCK DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER SOCK DIAMETER OR ADDITIONAL COURSING OF FILTER SOCKS TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL SOCKS ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE SOCKS AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.

CFS **COMPOST FILTER SOCK DETAIL**

NOT TO SCALE



PLAN VIEW - JOIN DETAIL

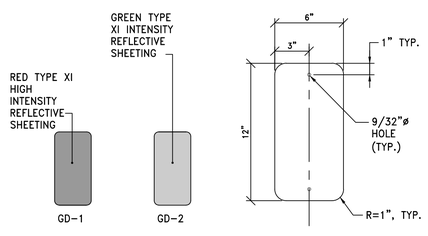


TYPICAL GUARDRAIL END DELINEATOR INSTALLATION ON HIGHWAYS

NOT TO SCALE

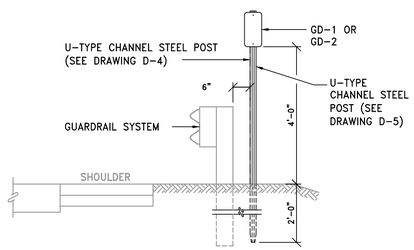
NOTES:

1. GUARDRAIL ENDS DELINEATOR GD-1 AND GD-2 SHALL BE USED TO MARK THE STARTS AND ENDS OF A LONGITUDINAL GUARDRAIL, AND SHALL BE INSTALLED IMMEDIATELY BEHIND GUARD RAIL TERMINAL ENDS (ALL TYPES) AS SHOWN ON THIS SHEET. THE HOLE SHALL BE THOROUGHLY PAINTED WITH TOUCH-UP GALVANIZING SPRAY PAINT PRIOR TO ATTACHING THE DELINEATOR POST.
2. WHEN SOUND ROCK IS ENCOUNTER BEFORE THE 2'-0" MINIMUM EMBEDDED DEPTH. POSTS SHALL BE SECURED A MINIMUM OF 12" INTO SOUND ROCK.
3. U-CHANNEL POST AND REFLECTOR SIZE AND HARDWARE SHALL MEET THE REQUIREMENTS OF "GROUND MOUNTED POST DETAILS AND NOTES" DRAWING NO. D-5 FOR SINGLE FACE REFLECTOR, WITH EXCEPTION OF THE COLOR OF THE REFLECTOR TO BE GREEN AND RED.
4. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 901.0193, "GUARDRAIL STEEL BEAM SINGLE FACE STD 34.2.0".



DELINEATOR DETAIL

NOT TO SCALE



TYPICAL SHOULDER SECTION

NOT TO SCALE

LEGEND

GD-1	GUARDRAIL END DELINEATOR – RED
GD-2	GUARDRAIL END DELINEATOR – GREEN
⊢	DELINEATOR
⇨	DIRECTION OF TRAVEL

GUARDRAIL END DELINEATOR DETAILS AND NOTES

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

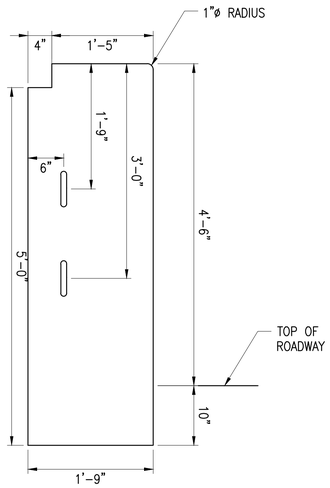
DETAILS-2

CHECKED BY _____ DATE _____ SCALE N/A

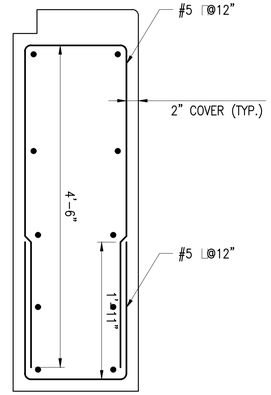
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	28	62

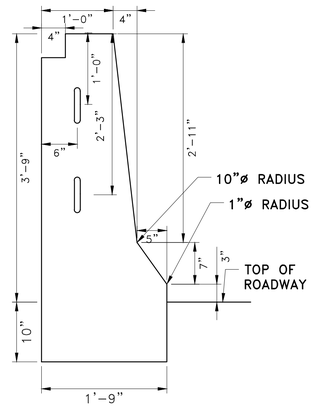
R-3



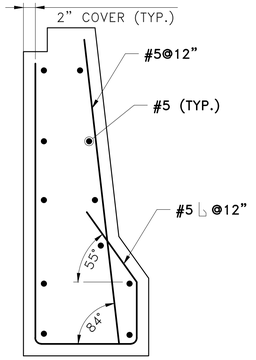
54" VERTICAL BARRIER
SCALE: 1"=1'-0"



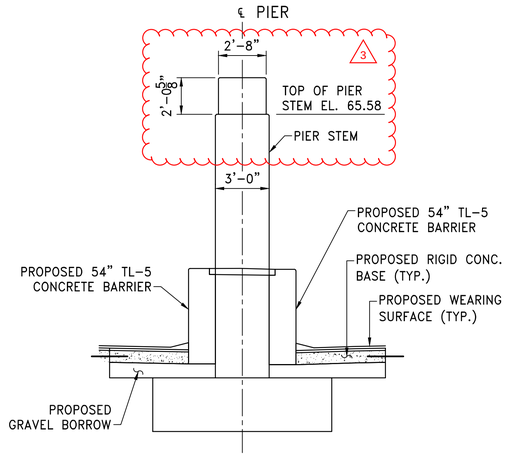
54" VERTICAL BARRIER REINFORCING
SCALE: 1"=1'-0"



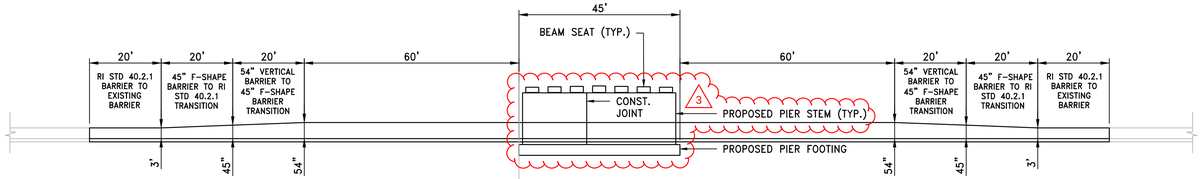
45" F-SHAPE BARRIER
SCALE: 1"=1'-0"



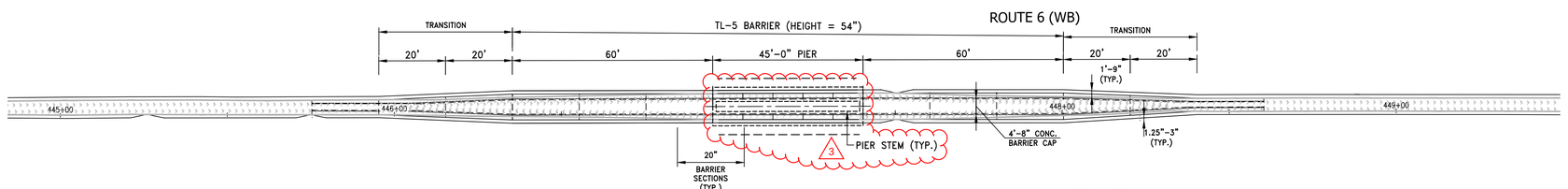
45" F-SHAPE BARRIER REINFORCING
SCALE: 1"=1'-0"



SECTION AT PIER DETAIL
SCALE: 1/4" = 1'-0"



BARRIER AT PIER ELEVATION
SCALE: 1" = 20'



BARRIER AT PIER DETAIL
SCALE: 1" = 20'

DELETED
DETAIL

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

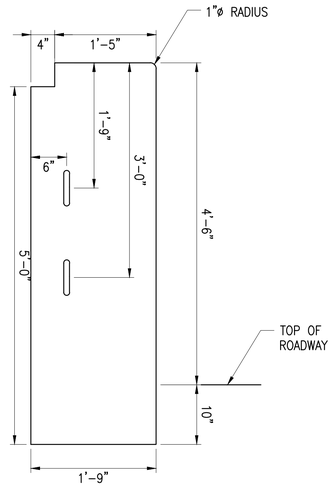
PROVIDENCE COUNTY RHODE ISLAND

DETAILS-3

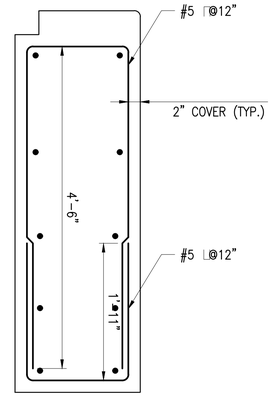
CHECKED BY _____ DATE _____ SCALE N/A

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

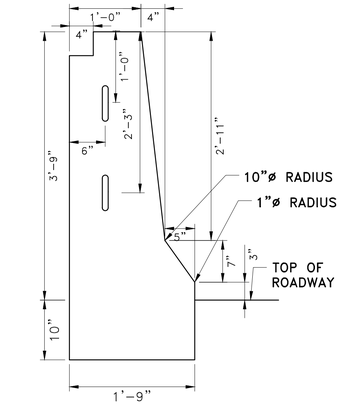
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	28	62



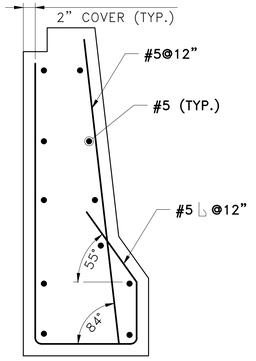
54" VERTICAL BARRIER
SCALE: 1"=1'-0"



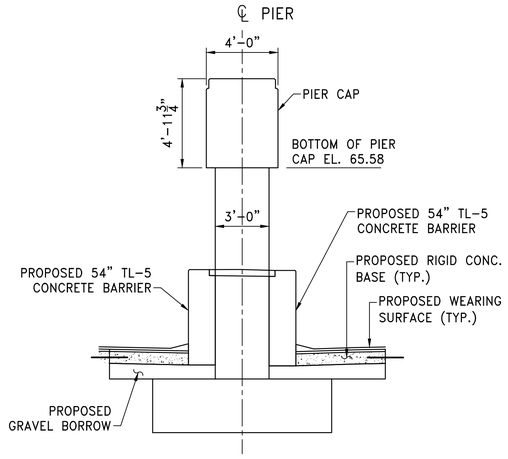
54" VERTICAL BARRIER REINFORCING
SCALE: 1"=1'-0"



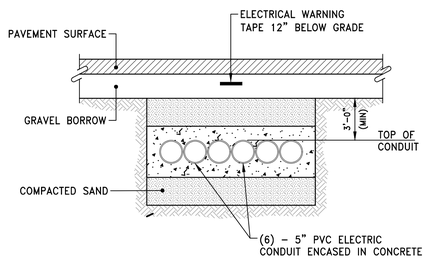
45" F-SHAPE BARRIER
SCALE: 1"=1'-0"



45" F-SHAPE BARRIER REINFORCING
SCALE: 1"=1'-0"



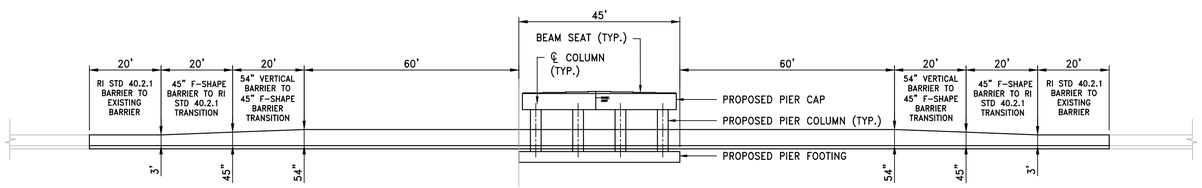
SECTION AT PIER DETAIL
SCALE: 1/4" = 1'-0"



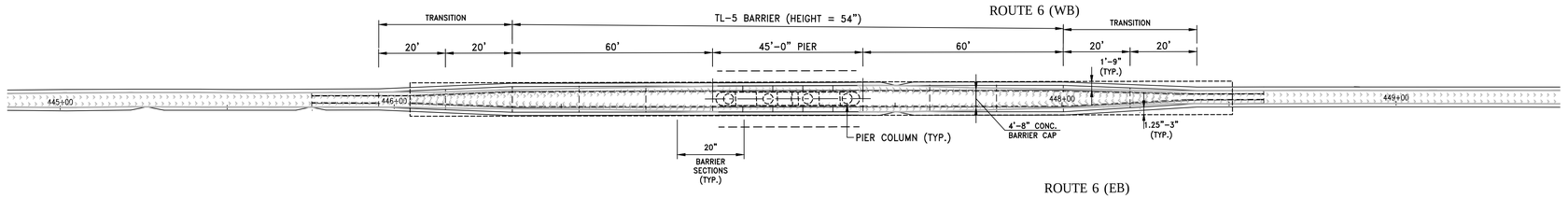
NOTES:

1. CONDUIT MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH NATIONAL GRID REQUIREMENTS.
2. SEE "BRIDGE PLANS" FOR CONDUIT SUPPORTS UNDER BRIDGE.
3. SEE "DRAINAGE AND UTILITY PLAN No. 1" FOR CONDUIT LAYOUT.

CONCRETE ENCASED CONDUIT DETAIL
NOT TO SCALE



BARRIER AT PIER ELEVATION
SCALE: 1" = 20'



BARRIER AT PIER DETAIL
SCALE: 1" = 20'

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

DETAILS-3

CHECKED BY _____ DATE _____ SCALE N/A

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	29	62

GENERAL NOTES

1. ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
   - THE RI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED MARCH 2018, WITH ALL REVISIONS (RI STANDARD SPECIFICATIONS).
   - THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, 4TH EDITION, 2017, INCLUDING THE LATEST INTERIM REVISIONS.
   - THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
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. ALL ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NAVD 88).
4. COORDINATES USED ON THESE PLANS ARE BASED ON THE STATEWIDE COORDINATE SYSTEM, THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
5. FOR BENCH MARKS AND TIES SEE HIGHWAY LOCATION PLANS.
6. ANGLES ARE SHOWN TO THE NEAREST SECOND.
7. ALL FOOTINGS SHALL BE APPROVED BY THE ENGINEER AS TO DIMENSIONS, ELEVATIONS, AND SUITABILITY OF FOUNDATION MATERIAL BEFORE THE PLACING OF CONCRETE.
8. ALL WORKING POINTS ARE SHOWN AT THE CENTERLINES OF BEARINGS OF ABUTMENTS AND AT THE CENTERLINES OF PIERS, UNLESS OTHERWISE NOTED.
9. ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
10. THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE AS DESIGNATED ON THE COVER SHEET. THE CONTRACTOR IS ADVISED THAT, UPON 12 (TWELVE) HOURS NOTICE, THE ROADWAY SHALL BE OPEN TO EVACUEES AND EMERGENCY PERSONNEL. ANY EXTRA WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.
11. THE EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND WERE LOCATED USING THE BEST AVAILABLE INFORMATION. NO BUILDING SERVICE CONNECTIONS (ELECTRIC, TELEPHONE, GAS, WATER, SANITARY AND OTHERS) ARE SHOWN. THE CONTRACTOR IS TO ASSUME THAT SERVICES TO ALL BUILDINGS ARE PRESENT.
12. BOTH FEDERAL AND STATE LAW (RI. GENERAL LAW 39-1.2) REQUIRE NOTIFICATION OF APPROPRIATE UTILITY COMPANIES BEFORE DIGGING, TRENCHING, BLASTING, DEMOLISHING, BORING, BACK FILLING, GRADING, LANDSCAPING, OR OTHER EARTH MOVING OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES (INCLUDING THROUGH THE "DIG SAFE" PROGRAM) TO ENSURE THAT ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "DIG SAFE" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANIES, SHALL BE REPAIRED OR REPLACED (AS DEEMED APPROPRIATE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY) AT NO ADDITIONAL COST TO THE STATE.

DESIGN DATA

1. DESIGN SPECIFICATIONS

- THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, 2017, INCLUDING ALL INTERIM REVISIONS TO DATE.
- THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL, 2008, INCLUDING ALL REVISIONS TO DATE.
- ALL OTHER APPLICABLE DESIGN SPECIFICATIONS ARE REFERENCED IN SECTION 1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED 2008.
- THE RI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED MARCH 2018, WITH ALL REVISIONS (RI STANDARD SPECIFICATIONS).
- IN CASE OF CONFLICT, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL SHALL GOVERN.

2. LOAD MODIFIERS

THE LOAD MODIFIERS FOR THIS PROJECT ARE AS FOLLOWS:

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

3. LOAD FACTORS

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

- THE LOAD FACTOR FOR TEMPERATURE GRADIENT SHALL BE TAKEN AS 0.0.
- THE LOAD FACTOR FOR LIVE LOAD FOR THE EXTREME EVENT I SHALL BE TAKEN AS ZERO.
- THE LOAD FACTOR FOR DEAD LOAD FOR THE EXTREME EVENT I AND EXTREME EVENT II SHALL BE TAKEN AS 1.0
- THE LOAD FACTOR FOR SETTLEMENT FOR ALL LIMIT STATES SHALL BE TAKEN AS 1.0

4. LIVE LOADS

- THE DESIGN VEHICULAR LIVE LOAD SHALL BE THE HL-93 DESIGNATION ADJUSTED FOR DYNAMIC LOAD ALLOWANCE AND MULTIPLE PRESENCE FACTOR AND AS SPECIFIED IN RODOT TO ALL CONSULTANTS MEMO #0298.
- THE DESIGN PEDESTRIAN LIVE LOAD SHALL BE 75 PSF.

5. FOUNDATION DESIGN DATA

SPREAD FOOTINGS:

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

LOCATION	TYPE OF BEARING MATERIAL	FACTORED BEARING RESISTANCE (KSF)	
		STRENGTH LIMIT STATES	EXTREME LIMIT STATES
ABUTMENT	GRAVEL	7.4	14.8
PIER	GRAVEL	6.5	13.0

6. WIND LOADING DESIGN DATA

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

- EXCEPT DURING CONSTRUCTION, THE DESIGN WIND PRESSURE IS BASED ON A DESIGN WIND SPEED OF 110 MPH.
- THE DESIGN WIND PRESSURES DURING CONSTRUCTION SHALL BE AS SPECIFIED UNDER THE NOTES TITLED "GENERAL NOTES REGARDING TEMPORARY CONSTRUCTION CONDITIONS" ON "BRIDGE NOTES-3" SHEET.

7. TRAFFIC DATA

DESIGN DESIGNATION GLENBRIDGE AVE
AADT (2018) = 14,200 VPH
AADT (2038) = 15,000 VPH
DHV (2038) = 1,350 VPH
K = 9%
D = 50/50
T = 7%
DESIGN SPEED = 30MPH

DESIGN DESIGNATION ROUTE 6
AADT (2018) = 67,800 VPH
AADT (2038) = 71,200 VPH
DHV (2038) = 5,696 VPH
K = 8%
D = 45/55
T = 4%
DESIGN SPEED = 60MPH

8. 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.

9. SEISMIC DESIGN DATA

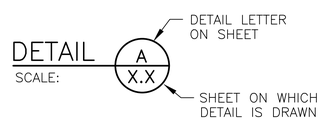
- THE SEISMIC ANALYSIS AND DESIGN SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL.
- THE COMBINATION OF SEISMIC FORCE EFFECTS IS IN ACCORDANCE WITH THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL.
- THIS BRIDGE HAS BEEN CLASSIFIED AS CRITICAL.
- THE SITE HAS BEEN CLASSIFIED AS SITE CLASS E.

HORIZONTAL DESIGN RESPONSE SPECTRA

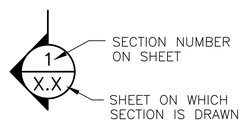
UPPER LEVEL EARTHQUAKE (3% IN 75 YEARS, 5% DAMPING)		LOWER LEVEL EARTHQUAKE (15% IN 75 YEARS, 5% DAMPING)	
PERIOD (SEC)	Sa (g)	PERIOD (SEC)	Sa (g)
0.00	0.261	0.00	0.092
0.09	0.654	0.10	0.230
0.20	0.654	0.20	0.230
0.43	0.654	-	-
0.50	0.566	0.48	0.230
0.50	0.566	0.50	0.220
0.60	0.472	0.60	0.183
0.70	0.404	0.70	0.157
0.80	0.354	0.80	0.137
0.90	0.314	0.90	0.122
1.00	0.283	1.00	0.110
1.10	0.257	1.10	0.100
1.20	0.236	1.20	0.091
1.30	0.218	1.30	0.084
1.40	0.202	1.40	0.078
1.50	0.189	1.50	0.073
1.60	0.177	1.60	0.069
1.70	0.166	1.70	0.065
1.80	0.157	1.80	0.061
1.90	0.149	1.90	0.058
2.00	0.141	2.00	0.055

LIST OF ABBREVIATIONS

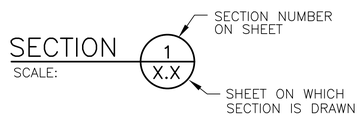
A		**E**		**M**	
ABUTMENT	= ABUT.	EACH	= EA.	MATERIAL	= MATL.
ALTERNATE	= ALT.	EACH FACE	= E.F.	MAXIMUM	= MAX.
ANCHOR BOLT	= A.B.	EACH WAY	= E.W.	MEAN HIGH WATER	= M.H.W.
AND	= &	EASTBOUND	= E.B.	MEAN SEA LEVEL	= M.S.L.
APPROVED	= APPD.	ELEVATION	= EL.	MINIMUM	= MIN.
APPROXIMATE	= APPROX.	EQUAL	= EQ.	MISCELLANEOUS	= MISC.
AT	= @	EXISTING	= EXIST.	**N**	
AVERAGE	= AVG.	EXPANSION	= EXP.	NEAR FACE	= N.F.
B		**F**		NEAR SIDE	= N.S.
BACK TO BACK	= B TO B	FABRICATE	= FAB.	NORTHBOUND	= N.B.
BASELINE	= ℄	FACE TO FACE	= F TO F	NORTHBOUND	= N.B.
BEAM	= BM.	FAR FACE	= F.F.	NORTHEAST EXTREME TEE	= NEXT
BEARING	= BRG.	FAR SIDE	= F.S.	NOT TO SCALE	= N.T.S.
BETWEEN	= BTWN	FLANGE	= FLG.	NUMBER	= NO.
BITUMINOUS	= BIT.	FLAT HEAD	= F.H.	**O**	
BOLT CIRCLE	= B.C.	FOOTING	= FTG.	ON CENTER	= O.C.
BOTTOM	= BOT.	FOUNDATION	= FDN.	OPENING	= OPNG.
BUILDING	= BLDG.	FURNISH, FABRICATE & ERECT	= F.F. & E.	OPTIONAL	= OPT.
BUILDING LINE	= B.L.	**G**		OUTSIDE DIAMETER	= O.D.
C		GAGE	= GA.	**P**	
CENTER TO CENTER	= C TO C	GALVANIZE	= GALV.	PLATE	= ℔
CENTERLINE	= ℄	GRADE	= GR.	POINT OF CURVATURE	= P.C.
CIRCLE	= CIR.	GRATING	= GRTG.	POINT OF TANGENCY	= P.T.
CLASS I CONTROLLED LOW STRENGTH MATERIAL	= CLSM	GROUND	= GND.	POINT OF VERTICAL CURVATURE	= P.V.C.
CLEARANCE	= CL.	**H**		POINT OF VERTICAL INTERSECTION	= P.V.I.
COLUMN	= COL.	HEIGHT	= HGT.	POINT OF VERTICAL TANGENCY	= P.V.T.
CONCRETE	= CONC.	HEXAGON	= HEX.	POLYVINYL CHLORIDE	= PVC
CONDUIT	= COND.	HIGH POINT	= HP	POUNDS PER SQUARE FOOT	= P.S.F.
CONNECTION	= CONN.	HORIZONTAL	= HORIZ.	POUNDS PER SQUARE INCH	= P.S.I.
CONSTRUCTION	= CONST.	**I**		**R**	
CONTRACTION	= CONTR.	INCH	= IN.	RADIUS	= RAD.
COUNTERSINK	= CSK.	INFORMATION	= INFO.	RAILROAD	= RR
COUPLING	= CPLG.	INSIDE DIAMETER	= I.D.	REHABILITATION	= REHAB.
D		INVERT	= INV.	REINFORCING	= REINF.
DETAIL	= DET.	**J**		REMOVE & DISPOSE	= R & D
DIAGONAL	= DIAG.	JOINT	= JT.	REMOVE & STOCKPILE	= R & S
DIAMETER	= DIA.	**L**		REQUIRED	= REQD.
DIAPHRAGM	= DIAPHM.	LENGTH	= LGTH. OR LEN	**S**	
DIMENSION	= DIM.	LIGHTING	= LTG.	SCHEDULE	= SCH.
DRAIN	= DR.	LOAD AND RESISTANCE FACTOR DESIGN	= LP	SCHEMATIC	= SCHEM.
DRAWING	= DWG.	LONG	= LG.	SECTION	= SECT.
		LOW POINT	= LP	SHEET	= SH.
				SIDEWALK	= SW
				SOUTHBOUND	= S.B.
				SPACES	= SP.
				STATION	= STA.
				STAY IN PLACE	= S.I.P.
				SYMMETRICAL	= SYM.
				T	
				TOP	= T
				TOP AND BOTTOM	= T&B
				TOP OF WALL	= T.O.W.
				TYPICAL	= TYP.
				V	
				VARIES	= VAR.
				VERTICAL	= VERT.
				VERTICAL CURVE	= V.C.
				W	
				WELDED WIRE FABRIC	= W.W.F.
				WESTBOUND	= W.B.
				WIDE FLANGE	= W
				WITH	= W/
				WORKING POINT	= W.P.



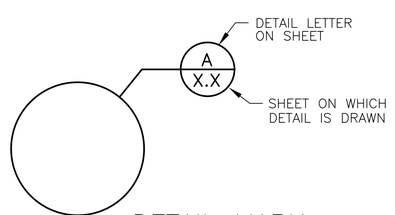
DETAIL TITLE



SECTION MARK



SECTION TITLE



DETAIL MARK

SECTION & DETAIL DESIGNATIONS

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

BRIDGE NOTES - 1

CHECKED BY _____ DATE _____ SCALE AS NOTED

0013V_V1_029_STDBRNOT001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	30	62

MATERIALS

STRUCTURAL STEEL:

- AASHTO DESIGNATION M 270, GRADE 50

REINFORCING STEEL:

- AASHTO DESIGNATION M 31, GRADE 60

CONCRETE STRENGTHS:

- CLASS HP ¾" f'c=5,000 PSI — BRIDGE DECK, PIER CAP, COLUMNS, FOOTINGS, ABUTMENT STEMS, BEAMSEATS, BACKWALLS, SIDEWALKS, PARAPETS, AND END POSTS
- CLASS XX ¾" f'c=4,000 PSI — APPROACH SLABS

CONCRETE NOTES

1. CLASSES OF CONCRETE SHALL BE HIGH PERFORMANCE CLASS HP, CLASS XX , AND CLASS A AS DESCRIBED IN THE RI STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. REFER TO THE "MATERIAL" NOTES FOR CLASSES OF CONCRETE SPECIFIED FOR VARIOUS COMPONENTS.
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. THE CONTRACTOR MAY ELECT TO USE PRECAST CONCRETE PIER AND ABUTMENT COMPONENTS IN LIEU OF CAST-IN-PLACE CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT DETAILS STAMPED BY A RHODE ISLAND REGISTERED PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL. DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST PCI GUIDELINES FOR PRECAST COMPONENTS.
4. ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED.
5. 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 ALSO BE GALVANIZED. GALVANIZED COATING FOR REINFORCING STEEL SHALL CONFORM TO ASTM A767 CLASS 1.
6. ALL CRITICAL LAP SPLICES SHALL BE AS SHOWN ON THE PLANS. ALL SPLICES NOT SHOWN ON THE PLANS SHALL BE LAPPED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR CLASS B LAP SPLICES.
7. THE TOP BARS IN THE DECK SLABS SHALL BE SPLICED AT THE CENTER OF SPANS BETWEEN GIRDERS. THE BOTTOM BARS SHALL BE SPLICED OVER THE GIRDERS.
8. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL MAIN REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO EARTH (FOOTINGS, ABUTMENT AND WALL FACES, BACKWALLS)		3"
DECK SLABS (WITH WEARING SURFACE)	TOP	2" (+1/4", -0")
	BOTTOM	1" (+1/8", -0")
ALL OTHER BARS		2"

   COVER TO TIES AND STIRRUPS MAY BE 0.5 INCH LESS THAN THE ABOVE VALUES SPECIFIED FOR MAIN REINFORCING, BUT IN NO CASE LESS THAN 1.5 INCHES.
9. ALL ANCHOR BOLTS SHALL BE ASTM DESIGNATION A 307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232 OR METALIZED IN ACCORDANCE WITH SECTION M.05. SWEDGED RODS SHALL BE AASHTO DESIGNATION M 270 GRADE 36 AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232.
10. ALL ANCHOR BOLTS SHALL BE SET PRIOR TO PLACEMENT OF CONCRETE UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
11. 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.
12. UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CONCRETE SURFACES VISIBLE IN ELEVATION TO ONE FOOT BELOW FINAL GROUND LINE (AND THE UNDERSIDE OF ALL CONCRETE DECK SLABS OUTSIDE OF THE FASCIA BEAMS), SHALL RECEIVE A CONCRETE SURFACE RUBBED FINISH IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.
13. THE ENTIRE TOPSIDE SURFACES OF ABUTMENT AND PIER CAP BEAM SEATS, AS WELL AS VERTICAL FACES OF BACKWALLS, AND PARAPETS/BARRIERS 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.
14. ALL EXPOSED EDGES AND REENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM ¾" CHAMFER.
15. ALL JOINT SEALANT SHALL BE POLYURETHANE, POLYURETHANE ELASTOMERIC, OR SILICONE SEALANT AS DESIGNATED ON THE PLANS. THE COLOR OF THE JOINT SEALANT, WHERE EXPOSED, SHALL BE NEUTRAL (LIGHT GRAY OR TAN). THE COLOR OF THE SEALANT, WHERE NOT EXPOSED, WILL BE AT THE DISCRETION OF THE CONTRACTOR.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATIONS DURING CONSTRUCTION UNTIL SUCH TIME WHEN THE SURFACES ARE APPROVED AND ACCEPTED. ANY CONCRETE STAINS OR DISCOLORATIONS OCCURRING PRIOR TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
17. UNLESS OTHERWISE NOTED ON THE PLANS, JOINT FILLER IS TO BE A PREFORMED, NON-EXPANSIVE, NON-EXTRUDING TYPE IN ACCORDANCE WITH SECTION M.02.11.1 OF THE RI STANDARD SPECIFICATIONS.
18. PLACEMENT, FINISHING 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.

    SUPPORT RAILS FOR THE FINISHING MACHINE(S) SHALL BE LOCATED BEYOND THE CURB LINE SUCH THAT 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 THE CANTILEVER 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 FASCIA STRINGER ROTATION.
19. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL DECK FORMS SHALL BE OF THE REMOVABLE TYPE THAT WILL PRODUCE THE DIMENSIONS SHOWN ON THE PLANS. THE CONTRACTOR MAY ELECT TO USE STAY-IN-PLACE FORMS (SEE "DECK PLAN AND NOTES" SHEET.
20. EMBEDMENT LENGTHS FOR DRILLED AND GROUTED DOWELS SHALL BE IN ACCORDANCE WITH SECTION 819 OF THE RI STANDARD SPECIFICATIONS.
21. IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS, ALL METAL TIES, NON-METALLIC TIES OR ANCHORAGES WHICH ARE REQUIRED FOR CONCRETE FORMWORK SHALL BE SO CONSTRUCTED THAT THEY CAN BE REMOVED TO AT LEAST ONE INCH BELOW THE EXPOSED SURFACE OF THE CONCRETE WITHOUT CAUSING DAMAGE TO THE CONCRETE SURFACE. SNAP TIES MAY BE USED ONLY IF APPROVED BY THE ENGINEER. IF THE CONTRACTOR PROPOSES TO USE THEM, A CATALOG CUT AND OTHER NECESSARY INFORMATION MUST BE SUBMITTED TO THE ENGINEER TO DEMONSTRATE THAT THE TIES WILL SNAP-OFF FAR ENOUGH INTO THE CONCRETE TO ALLOW FOR PROPER PATCHING. SNAP TIES MUST PROVIDE ADEQUATE STRENGTH TO SUPPORT THE FORMS. ALL CAVITIES SHALL BE FILLED WITH AN APPROVED CEMENT MORTAR MEETING THE REQUIREMENTS OF ASTM C 928.
22. 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.

STRUCTURAL STEEL NOTES

1. FRAMING DIMENSIONS ARE GIVEN ALONG CENTERLINES OF GIRDERS AND ALONG CENTERLINES OF BEARINGS ON ABUTMENTS AND PIERS. 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.
4. 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.
5. 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 OR DYE-PENETRANT TESTED.
6. STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE LATEST PROVISIONS OF AASHTO DESIGNATION M 270 AND GRADE 50 AS DESIGNATED ON THE PLANS.
7. 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" AND "FRACTURE-CRITICAL" COMPONENTS. THE ZONE 2 FRACTURE TOUGHNESS REQUIREMENTS ARE AS FOLLOWS:

    NONFRACTURE-CRITICAL

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

    SAMPLING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO T 243. 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 AND MODULAR BRIDGE JOINT SYSTEMS
    - DRAINAGE MATERIAL
    - RAILINGS
    - FOUNDATION H-PILES AND PIPE PILES
    - SUPPORT OF EXCAVATION COMPONENTS
8. WELDING SHALL BE IN ACCORDANCE WITH THE LATEST BRIDGE WELDING CODE AASHTO/AWS D1.5 (INCLUDING ALL INTERIMS TO DATE) AND APPLICABLE SUPPLEMENTAL AWS PUBLICATIONS.
9. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO AASHTO DESIGNATION M 164, AND THEY SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 824 OF THE RI STANDARD SPECIFICATIONS.
10. WASHERS MEETING AASHTO DESIGNATION M 293 ARE TO BE USED OVER ALL HOLES THAT ARE MORE THAN 1/16" IN DIAMETER GREATER THAN THE BOLT DIAMETER AND UNDER ALL PARTS TURNED DURING ASSEMBLY.
11. WELDING ELECTRODES SHALL HAVE THE SAME CORROSION RESISTANCE AS THE BASE METAL AND SHALL BE FREE OF MOISTURE AT THE TIME OF USE.
12. STRUCTURAL STEEL SHALL BE PREPARED AND PAINTED IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS THE FINISH COAT COLOR SHALL BE BLUE (SEMI GLOSS) TO MATCH FEDERAL STANDARD 25183.
13. 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.
14. PRIOR TO FABRICATION, ALL MATERIALS SHALL FIRST BE SOLVENT CLEANED TO SSPC-SP1 TO REMOVE ALL OIL, GREASE AND DIRT; FOLLOWED BY BLAST-CLEANING TO SSPC-SP10 TO REMOVE ALL MILL SCALE, RUST, AND OTHER DELETERIOUS MATERIALS FROM THE SURFACES OF THE STEEL TO BE FABRICATED.
15. 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.

    UPON COMPLETION OF ALL FABRICATION AND PRIOR TO THE APPLICATION OF THE SHOP PRIMER COAT THE STRUCTURAL STEEL SHALL BE RESTORED TO AN SSPC-SP10 CONDITION.
16. WELDING OF ATTACHMENTS TO GIRDER FLANGES OR WEBS FOR CONSTRUCTION PURPOSES IS NOT PERMITTED EXCEPT WHEN APPROVED BY THE ENGINEER.
17. THE ENDS OF ALL GIRDERS SHALL BE VERTICAL AFTER ALL DEAD LOADS HAVE BEEN PLACED.
18. INTERMEDIATE STIFFENERS AND CONNECTION PLATES SHALL BE PLACED ON THE INTERIOR SIDE OF THE FASCIA BEAM WEBS AND ON BOTH SIDES OF ALL INTERIOR BEAM WEBS.
19. BEARING STIFFENERS SHALL BE FABRICATED AS SHOWN ON THE PLANS AND SHALL BE PLACED ON BOTH SIDES OF ALL BEAM WEBS.
20. INTERMEDIATE STIFFENERS AND CONNECTION PLATES SHALL BE SET PERPENDICULAR TO THE FLANGES OF THE GIRDERS.
21. END BEARING STIFFENERS AT GIRDER ENDS SHALL BE PLUMB AFTER DEAD LOADS ARE APPLIED.
22. 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.
23. THE GIRDERS 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 SPANS), THE INFORMATION PROVIDED SHALL BE SUFFICIENT ENOUGH FOR THE ENGINEER TO EVALUATE WHETHER THE CAMBER HAS BEEN CORRECTLY INTERPRETED.
24. SPLICES OTHER THAN THOSE SHOWN ON THE PLANS WILL NOT BE PERMITTED.
    - NO MORE THAN TWO SHOP WEB SPLICES WILL BE PERMITTED BETWEEN FIELD SPLICES. SPLICING OF GIRDERS BY FIELD WELDING WILL NOT BE PERMITTED.
25. ALL FILLET WELDS SHALL BE IN ACCORDANCE WITH THE BRIDGE WELDING CODE AASHTO/AWS D1.5 TABLE 2.1 (¼" MINIMUM).
26. 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.
27. WHEN STEEL DIE STAMPS ARE USED TO IDENTIFY PIECES AND MEMBERS, FABRICATORS SHALL UTILIZE LOW STRESS STAMPS.
28. FOR SIZE AND LOCATION OF ANCHOR BOLTS, SEE PIER, ABUTMENT, AND BEARING DRAWINGS.
29. 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.

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

BRIDGE NOTES - 2

CHECKED BY _____ DATE _____ SCALE AS NOTED

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	31	62

GENERAL NOTES REGARDING TEMPORARY CONSTRUCTION CONDITIONS:

1. DESIGN WIND PRESSURES FOR CONSTRUCTION:

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

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

   TABLE NOTES:

   A. APPLICATION OF THE TABULAR PRESSURE:

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

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

   B. WHERE APPLICABLE HIGHER AMTRAK WIND REQUIREMENTS SHALL SUPERSEDE THESE REQUIREMENTS.

   C. FOR STRUCTURES SITUATED ABOVE LIVE INTERSTATE TRAFFIC, THE TABULAR VALUES SHALL BE INCREASED BY 5 PSF.

2. ERECTION OF BRIDGE COMPONENTS:

   FOR THE ERECTION OF STRUCTURES, THE FOLLOWING SHALL APPLY:

   - THE CONTRACTOR SHALL SUBMIT AN ERECTION PLAN THAT PROVIDES COMPLETE DETAILS OF THE PROCESS INCLUDING, BUT NOT LIMITED TO, TEMPORARY SUPPORTS, SCHEDULING AND OPERATION SEQUENCING, CRANE PLACEMENT, AND ASSUMED LOADS AND CALCULATED STRESSES DURING VARYING STAGES OF LIFTING. THIS APPLIES TO STRUCTURES OF ANY KIND. THE CAPACITY OF THE CRANE AND ALL LIFTING AND CONNECTING DEVICES SHALL BE ADEQUATE FOR 125 PERCENT (150 PERCENT OVER AMTRAK) OF THE TOTAL PICK LOAD INCLUDING SPREADERS, RIGGING, HOOKS, AND ALL OTHER MATERIALS. THIS FACTOR OF SAFETY SHALL BE IN ADDITION TO ALL MANUFACTURERS' PUBLISHED FACTORS OF SAFETY.
   - A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF RHODE ISLAND, WILL BE REQUIRED TO STAMP THE CONTRACTOR'S ERECTION PLAN.
   - THE CONTRACTOR'S PROFESSIONAL ENGINEER WILL BE REQUIRED TO INSPECT AND PROVIDE WRITTEN APPROVAL OF INSTALLATION, PRIOR TO ALLOWING VEHICLES OR PEDESTRIANS ON OR BELOW THE STRUCTURE. THE PROFESSIONAL ENGINEER MUST ALSO STAMP ALL CHANGES TO THE CONTRACTOR'S ERECTION PLAN. ADDITIONALLY, ALL PROPOSED CHANGES MUST BE SUBMITTED TO RIDOT FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION.
   - A MANDATORY PRE-ERECTION CONFERENCE WILL BE HELD AT LEAST TWO WEEKS PRIOR TO THE START OF THE GIRDER INSTALLATION TO DISCUSS THE PLAN AND PROCEDURES, WORK SCHEDULES, CONTINGENCY PLANS, SAFETY REQUIREMENTS AND TRAFFIC CONTROL. THE CONTRACTOR'S PROFESSIONAL ENGINEER AND ERECTION SUBCONTRACTOR WILL BE REQUIRED TO ATTEND THIS MEETING, AS WILL THE RIDOT RESIDENT ENGINEER, THE DESIGN PROJECT ENGINEER AND THE DESIGN CONSULTANT. BASED UPON DISCUSSIONS AT THIS MEETING AND A REVIEW OF THE CONTRACTOR'S ERECTION PLAN, RIDOT MAY ORDER THE CONTRACTOR TO MODIFY AND RESUBMIT THE ERECTION PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.
   - THE CONTRACTOR WILL BE REQUIRED TO PERFORM DAILY INSPECTIONS OF THE ERECTED GIRDERS UNTIL THE BRIDGE DECK IS COMPLETELY POURED.
   - THE COST OF PREPARING AND STAMPING THE ERECTION PLAN, COMPUTATIONS, AND REPORTS, RESPONDING TO RIDOT'S COMMENTS AND MAKING THE NECESSARY REVISIONS, AND ATTENDANCE AT MEETINGS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SUPERSTRUCTURE PAY ITEM, BE IT CONCRETE, STEEL OR TIMBER.\

3. TEMPORARY BARRIER ON BRIDGES

   TEMPORARY BARRIER TO BE UTILIZED ON BRIDGES AND THEIR APPROACH DURING CONSTRUCTION SHALL MEET TEST LEVEL TL-3.

SHOP DRAWINGS (STRUCTURAL/BRIDGE)

AT A MINIMUM, THE FOLLOWING ITEMS REQUIRE SHOP DRAWINGS AND/OR SUBMITTALS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS. THIS LIST IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR, AND IS NOT GUARANTEED COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING ALL INFORMATION REQUIRED BY THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.

1. CONSTRUCTION PROCEDURES: TYPE, SIZE, AND PLACEMENT OF EQUIPMENT, DETAILED SEQUENCE OF WORK, PHASING, METHODS, CONCRETE FALSEWORK DETAILS, ETC.
2. TEMPORARY EARTH SUPPORT
3. TEMPORARY PIER SHORING
4. BRIDGE DEMOLITION: METHODS, EQUIPMENT, SHIELDING, AND DETAILED SEQUENCE OF WORK
5. CONCRETE AND CLSM: MIX DESIGNS, PLACING & POURING SEQUENCE, METHODS AND EQUIPMENT, CURING PLAN INCLUDING HEAT FLOW ANALYSES AND METHODS, PERSONAL RESOURCES, FORMLINERS, FINISHING METHODS
6. STRUCTURAL STEEL
7. STRUCTURAL STEEL COATING
8. WATERSTOPS
9. JOINT FILLERS
10. REINFORCING STEEL, SPLICERS, AND INSERTS
11. ISOLATION BEARINGS
12. STRIP SEAL JOINTS
13. ELECTRIC CONDUIT AND SUPPORTS
14. MEMBRANE WATERPROOFING
15. GRANITE CURB FOR BRIDGES
16. PROTECTIVE FENCE
17. FILTER FABRIC
18. MSE BACKFILL

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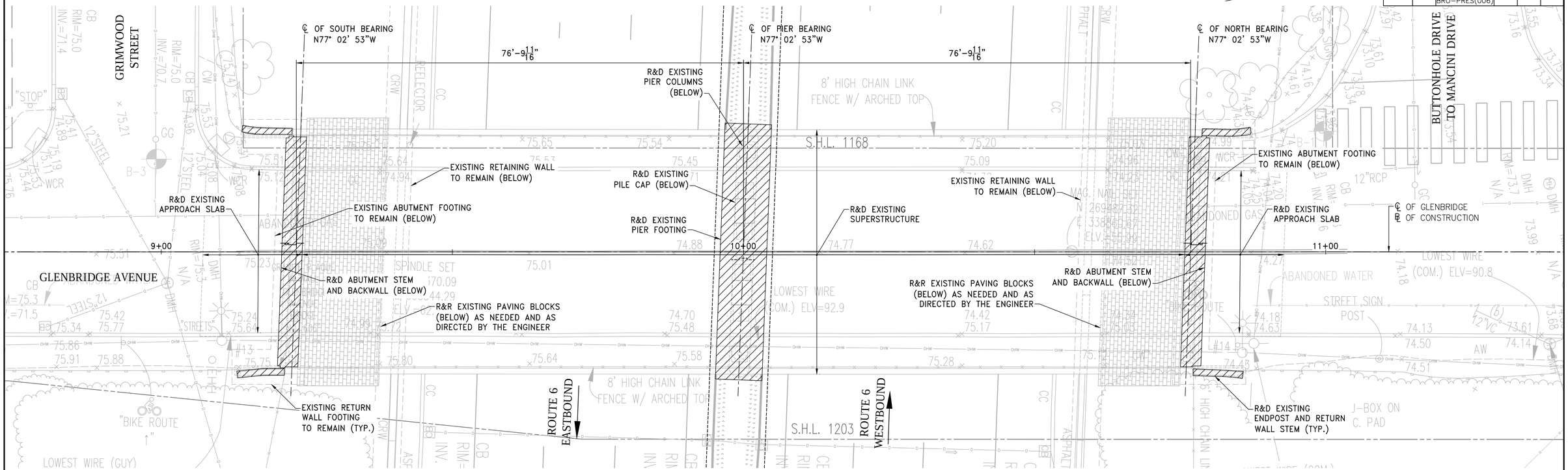
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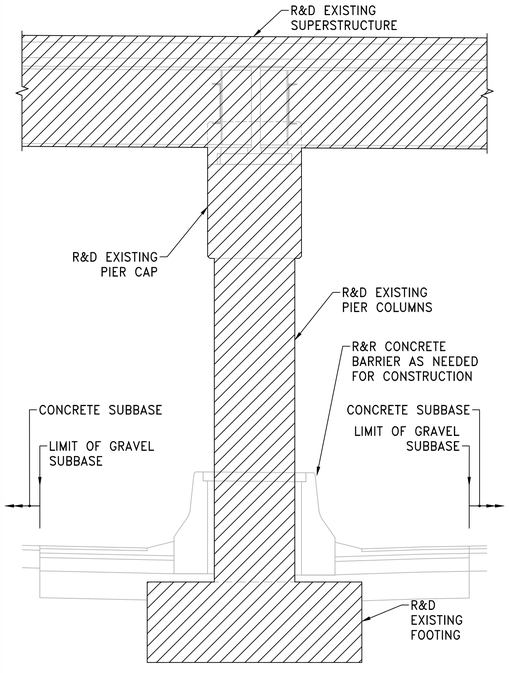
BRIDGE NOTES - 3

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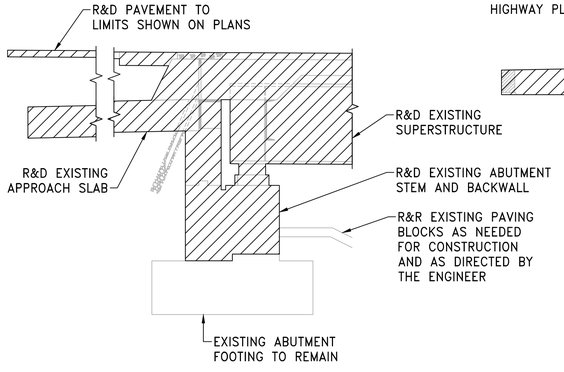
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	RI	BRO-0606(001) BRO-PRES(006)	2019	32	62



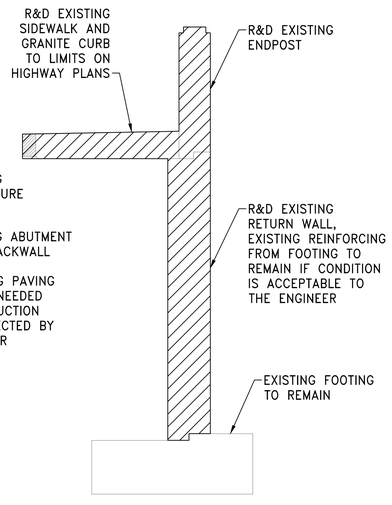
DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



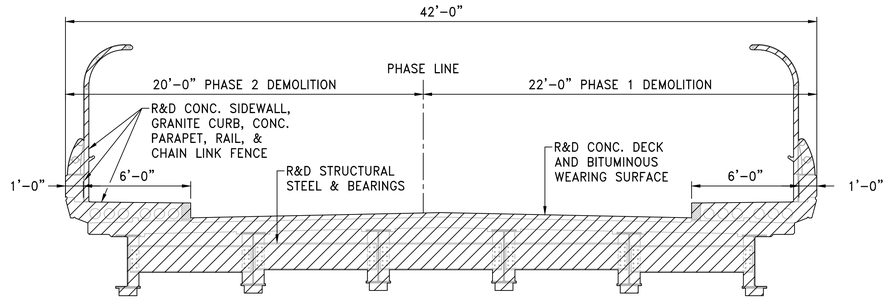
PIER DEMOLITION
SCALE: 3/8" = 1'-0"



ABUTMENT DEMOLITION
SCALE: 3/8" = 1'-0"



RETURN WALL & END POST DEMOLITION
SCALE: 3/8" = 1'-0"



NOTE:

SEE PHASING PLANS AND SECTIONS FOR LIMITS OF DEMOLITION FOR EACH PHASE.

SUPERSTRUCTURE DEMOLITION
SCALE: 1/4" = 1'-0"

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BRIDGE DEMOLITION PLAN

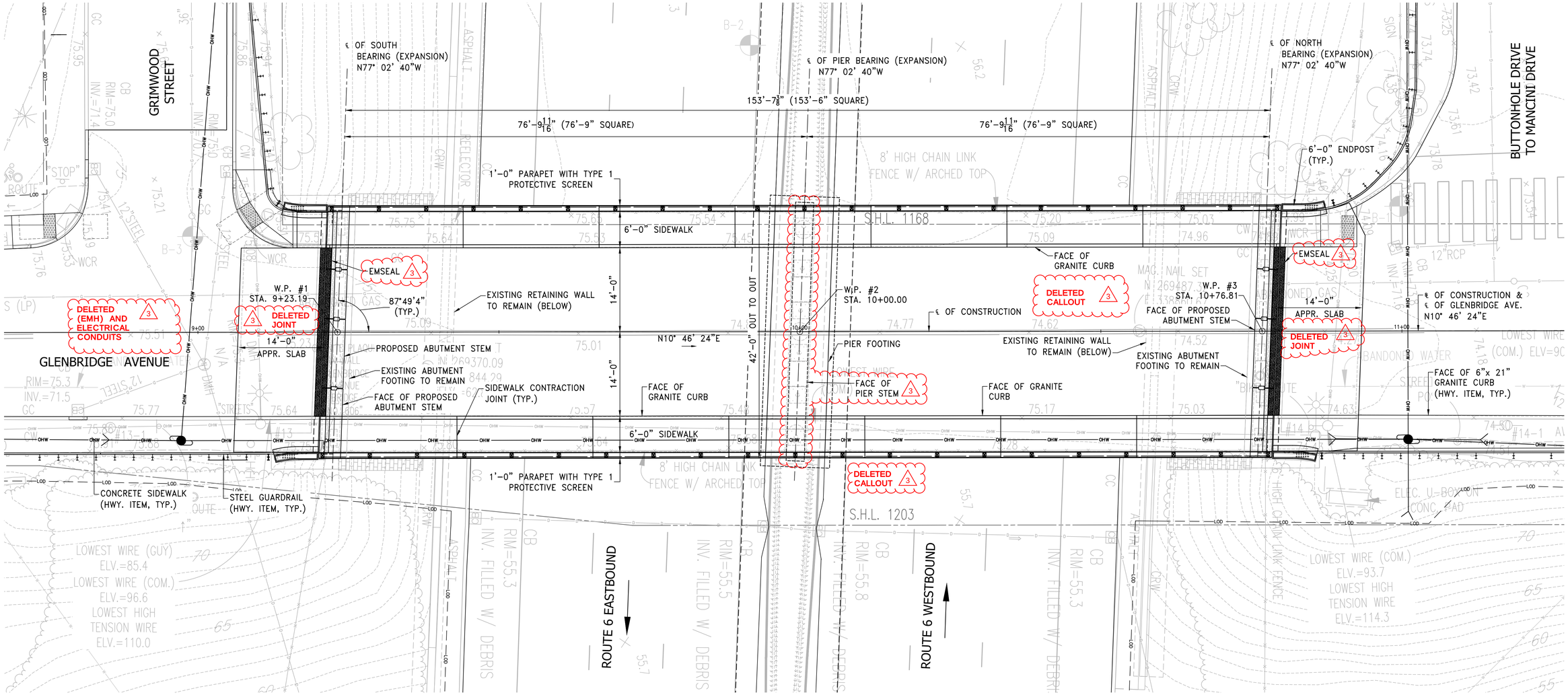
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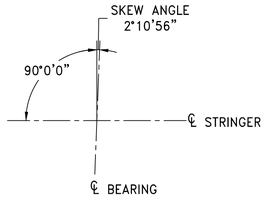
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R-3



NOTE:

1. SEE "DRAINAGE AND UTILITY PLAN No. 1 TO No. 3" FOR MORE INFORMATION ON EXISTING AND PROPOSED UTILITIES
2. CONCRETE PATCHING MORTAR REPAIRS TO EXISTING RETAINING WALLS TO REMAIN. LOCATION AND LIMITS OF REPAIRS AS DIRECTED BY THE ENGINEER. SEE "DETAILS – 1" SHEET IN VOLUME II OF THESE PLANS FOR CONCRETE REPAIR DETAILS.



SKEW DESIGNATION

WORKING POINT COORDINATES		
W.P. #1	N269356.4567	E338835.8445
W.P. #2	N269431.9086	E338850.2014
W.P. #3	N269507.3606	E338864.5582

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3	10/09/20	SJH

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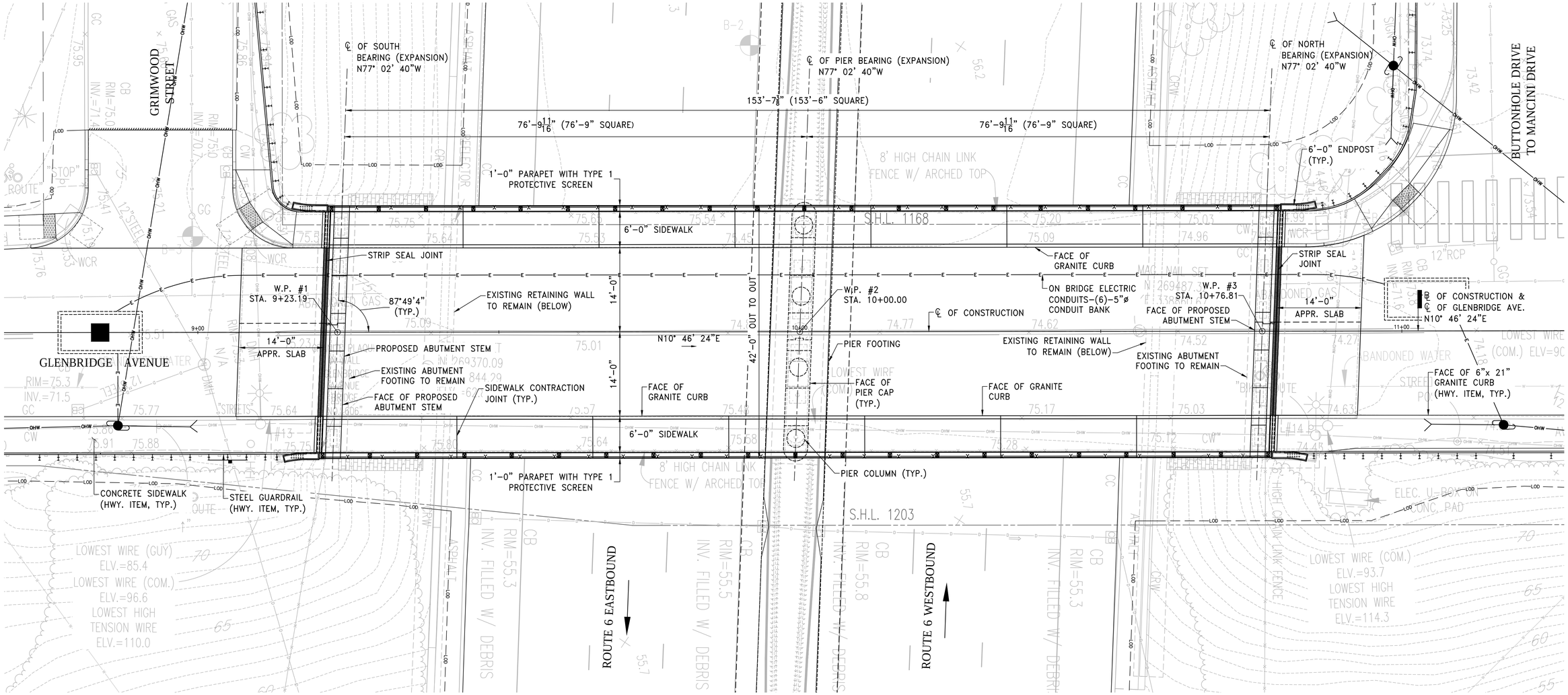
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BRIDGE GENERAL PLAN

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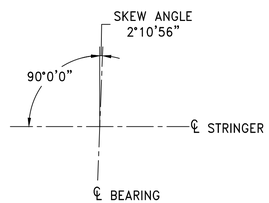
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NOTE:

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BRIDGE GENERAL PLAN

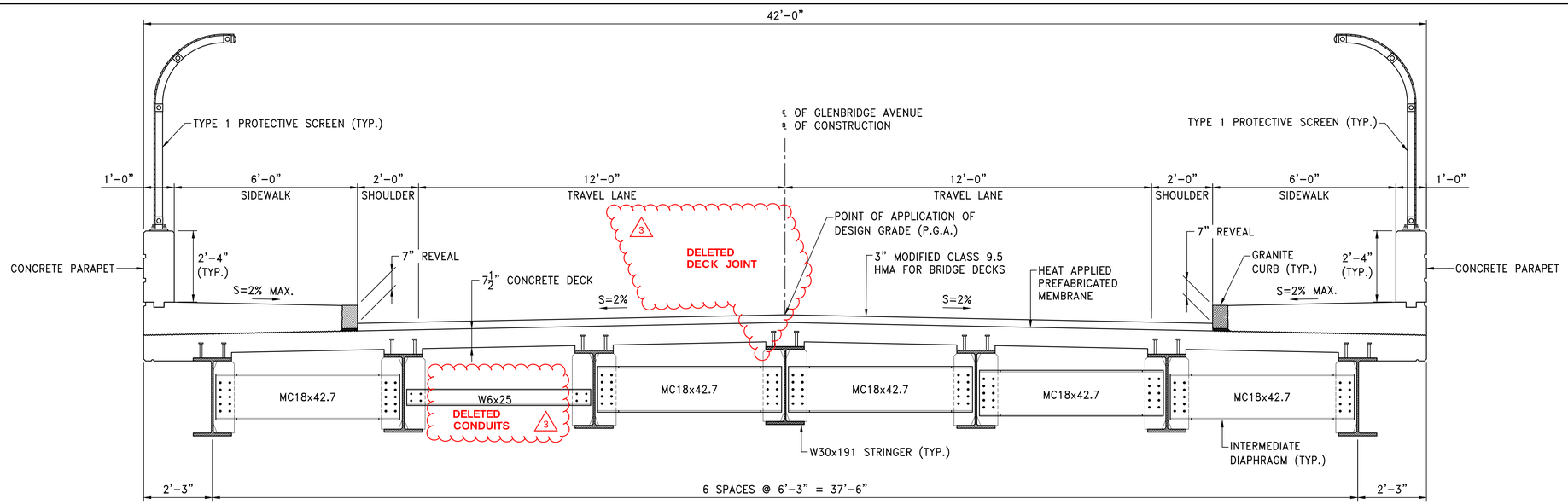
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401-334-4100

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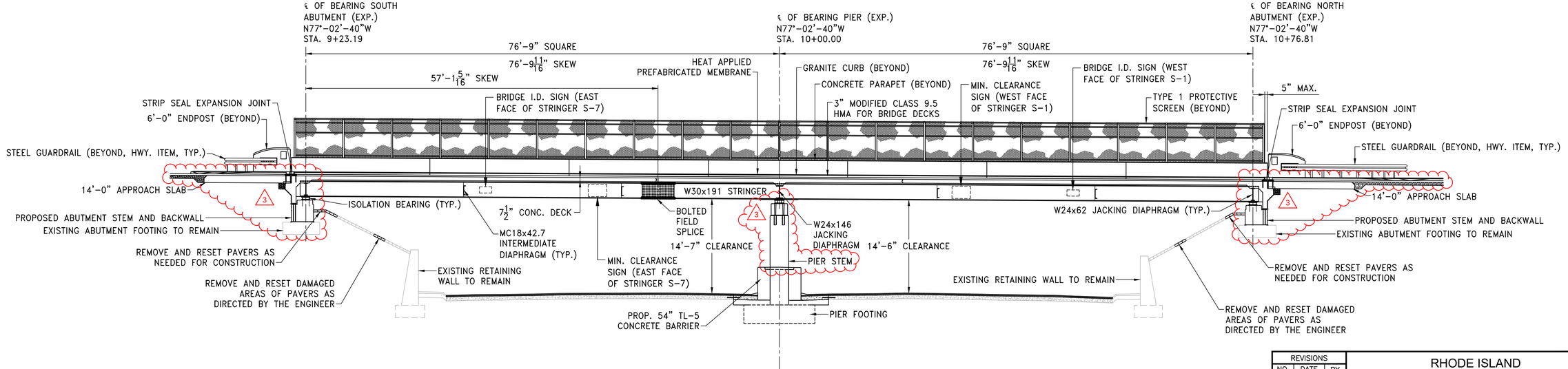
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	34	62

R-3



TRANSVERSE SECTION

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



LONGITUDINAL SECTION

SCALE: 1/8" = 1'-0"

REVISIONS		
NO.	DATE	BY
1	11/25/19	ETS
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

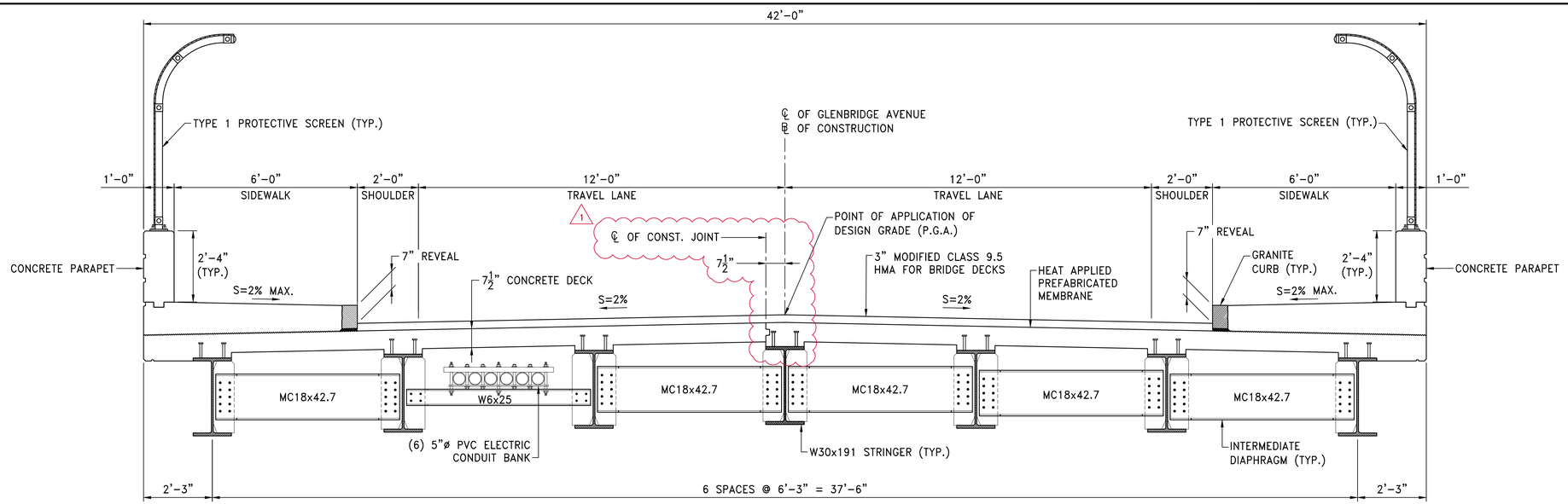
PROVIDENCE COUNTY RHODE ISLAND

BRIDGE SECTIONS

CHECKED BY _____ DATE _____ SCALE AS NOTED

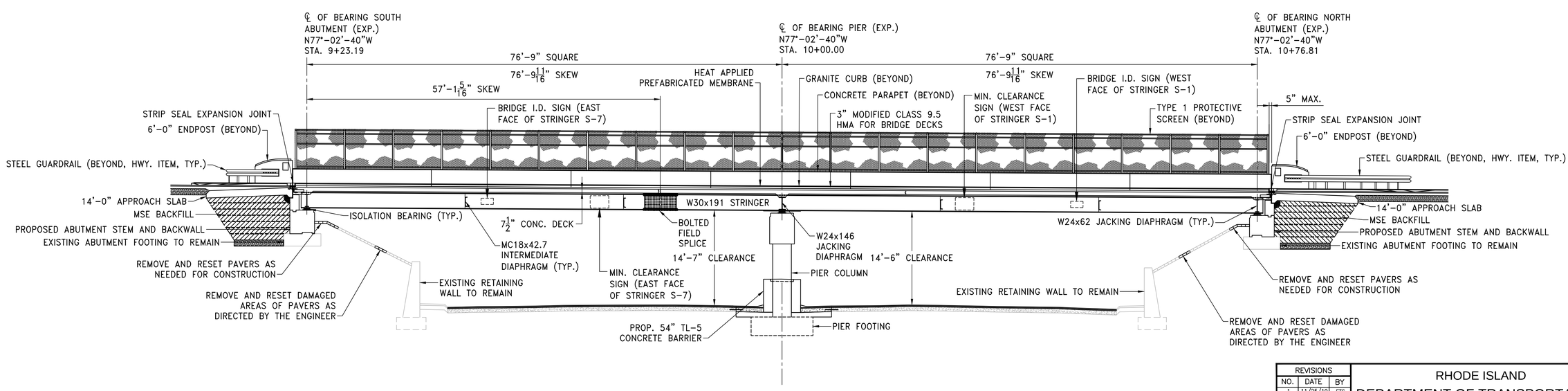
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	34	62



TRANSVERSE SECTION

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



LONGITUDINAL SECTION

SCALE: 1/8" = 1'-0"

REVISIONS		
NO.	DATE	BY
1	11/25/19	ETS

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

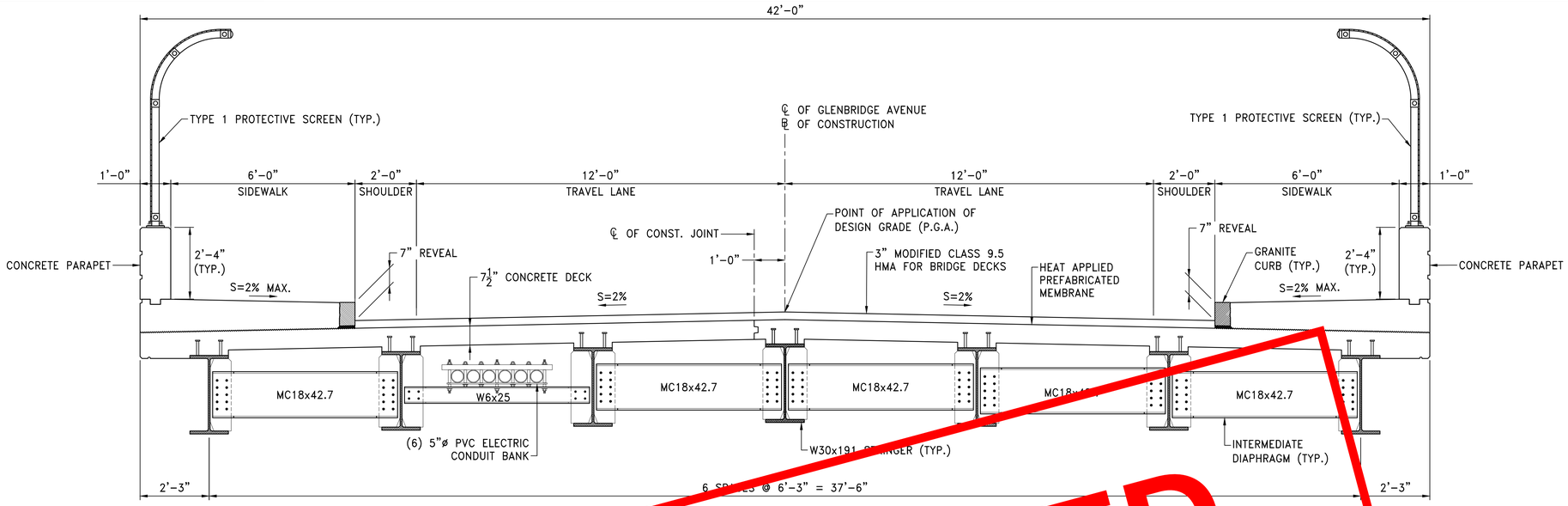
PROVIDENCE COUNTY — RHODE ISLAND

BRIDGE SECTIONS

CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

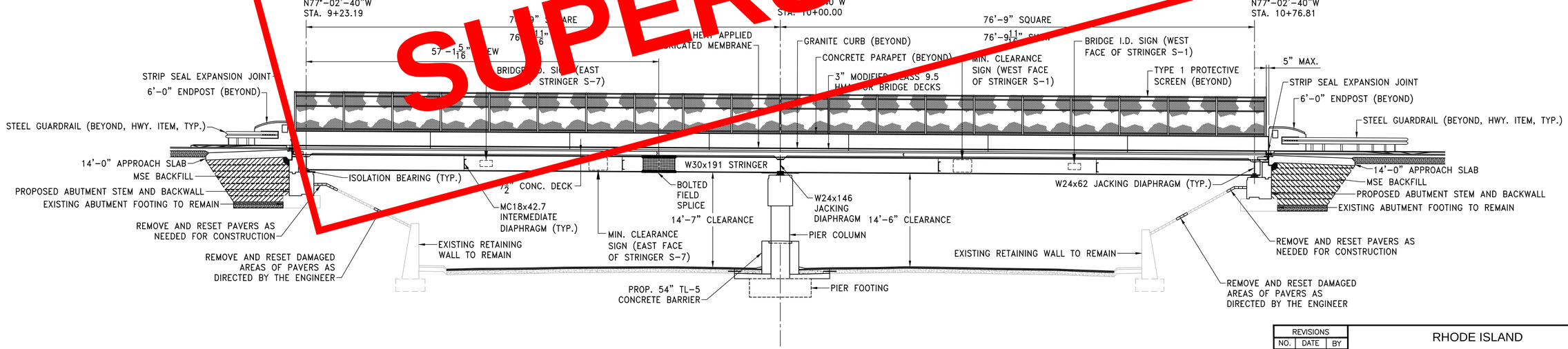
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	34	62



TRANSVERSE SECTION

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

SUPERSEDED



LONGITUDINAL SECTION

SCALE: 1/8" = 1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

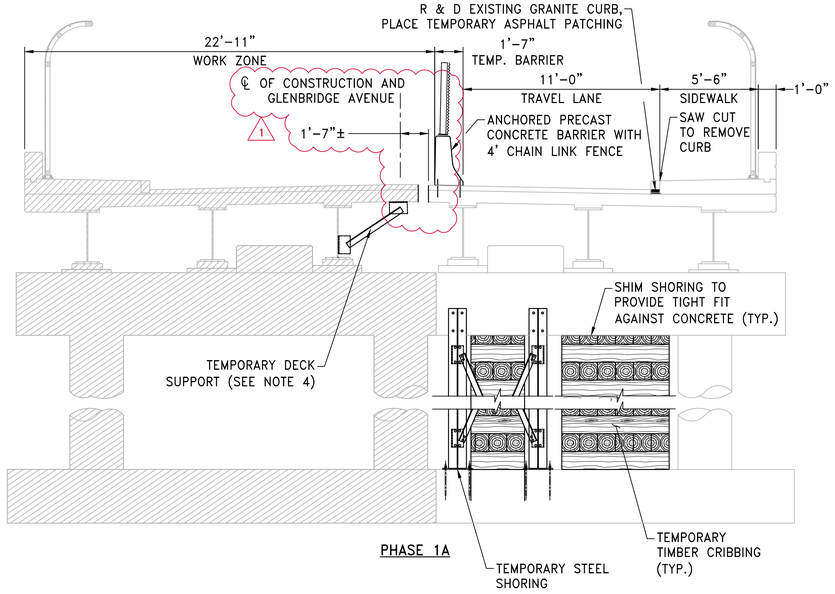
BRIDGE SECTIONS

CHECKED BY _____ DATE _____ SCALE AS NOTED

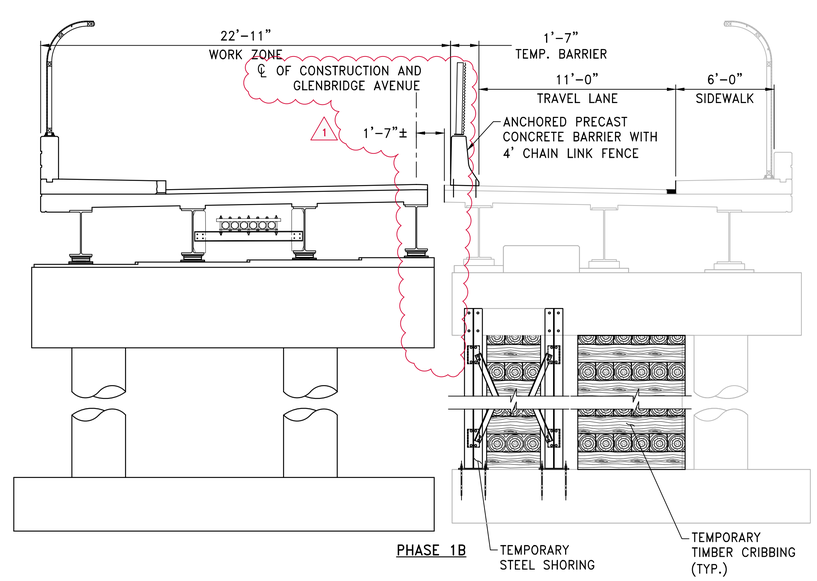
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_034_BTYPICAL

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	35	62



PHASE 1A



PHASE 1B

SUGGESTED SEQUENCE OF CONSTRUCTION

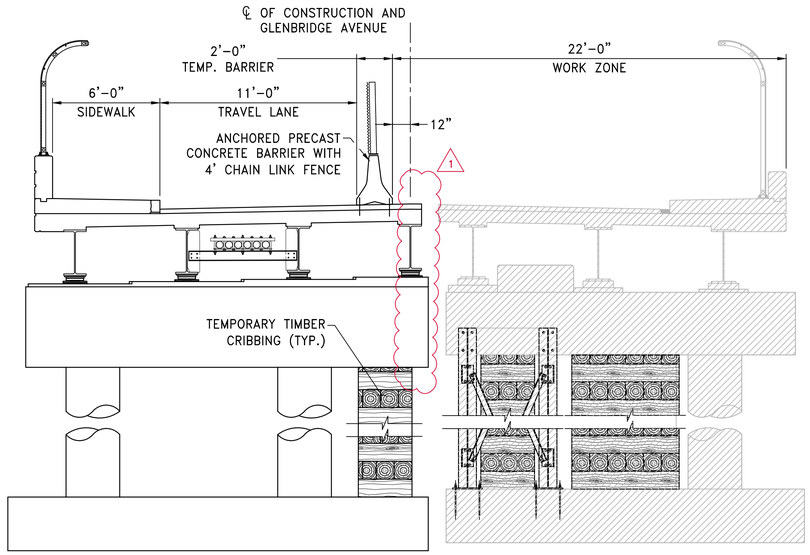
PHASE 1A
1. CONSTRUCT TEMPORARY PIER SHORING. REMOVE AND DISPOSE EXISTING GRANITE CURB AND PLACE TEMPORARY ASPHALT PATCHING IN ITS PLACE.
2. PLACE TRAFFIC CONTROLS AND SHIFT TRAFFIC TO SINGLE LANE ALTERNATING.
3. DEMOLISH PORTION OF EXISTING SUPERSTRUCTURE AND SUBSTRUCTURE TO THE LIMITS SHOWN.

PHASE 1B
1. CONSTRUCT EAST PORTION OF PROPOSED SUBSTRUCTURE, SUPERSTRUCTURE, AND APPROACHES.
2. RELOCATE ELECTRIC UTILITY TO BRIDGE CONDUIT.

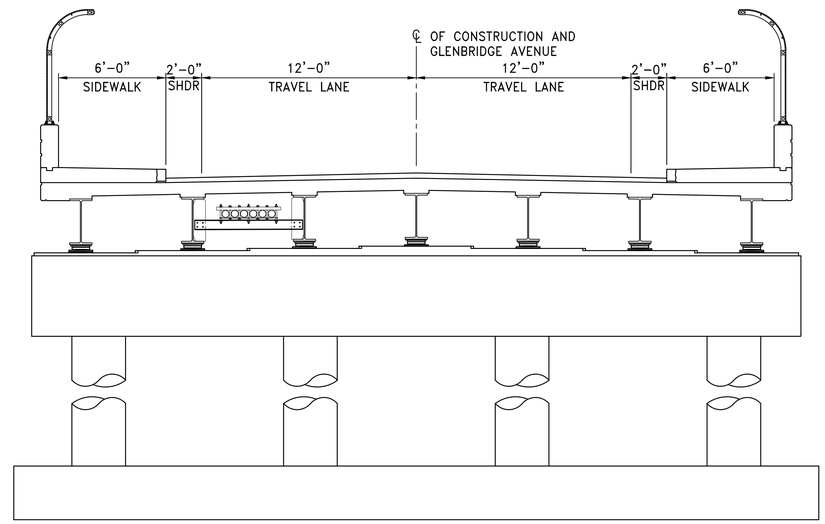
PHASE 2A
1. RELOCATE TRAFFIC CONTROLS AND SHIFT TRAFFIC TO NEW PORTION OF BRIDGE.
2. DEMOLISH REMAINING PORTION OF EXISTING SUPERSTRUCTURE AND SUBSTRUCTURE TO THE LIMITS SHOWN.

PHASE 2B
1. CONSTRUCT PROPOSED SUBSTRUCTURE, SUPERSTRUCTURE, AND APPROACHES.
2. OPEN BRIDGE TO TWO-WAY TRAFFIC.
3. COMPLETE REMAINING APPROACH AND PAVEMENT WORK.

NOTE:
1. TIMBER CRIBBING AND TEMPORARY STEEL PIER SHORING WILL BE PAID FOR UNDER ITEM 802.9901.
2. REMOVAL AND DISPOSAL OF THE EXISTING GRANITE CURB, AND TEMPORARY ASPHALT PATCHING WILL BE PAID FOR UNDER ITEM 803.0100.
3. ALL BARRIER SHALL MEET THE REQUIREMENTS IN THE BRIDGE NOTES.
4. THE CONTRACTOR SHALL SUPPORT THE DECK OVERHANG AFTER SAWCUTTING THE DECK WHILE THE BRIDGE CARRIES TRAFFIC PRIOR TO BEING DEMOLISHED IN PHASE 1A. THE SUPPORT SHALL BE DESIGNED PER THE AASHTO LFRD BRIDGE DESIGN SPECIFICATIONS. THE SUPPORT WILL BE PAID FOR UNDER ITEM 802.9901.



PHASE 2A



PHASE 2B

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

REVISIONS		
NO.	DATE	BY
1	11/25/19	ETS

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

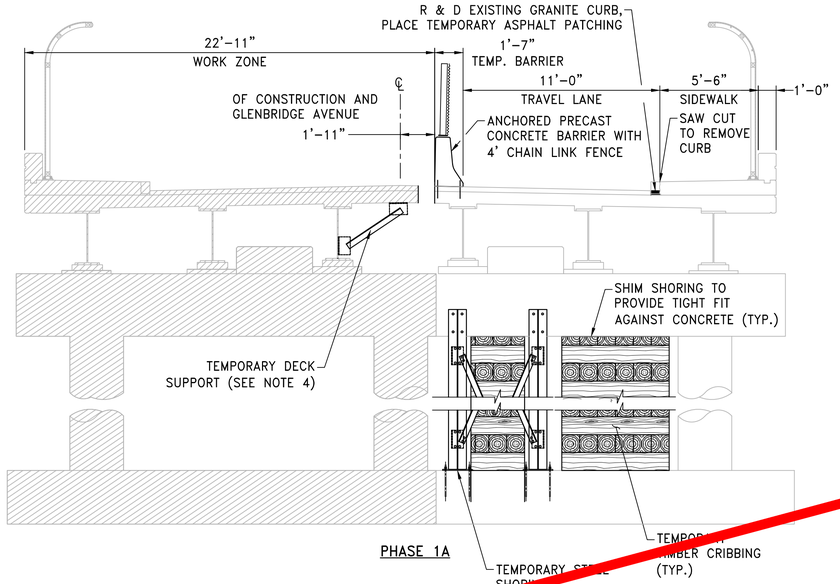
PROVIDENCE COUNTY — RHODE ISLAND

PHASED CONSTRUCTION SECTIONS

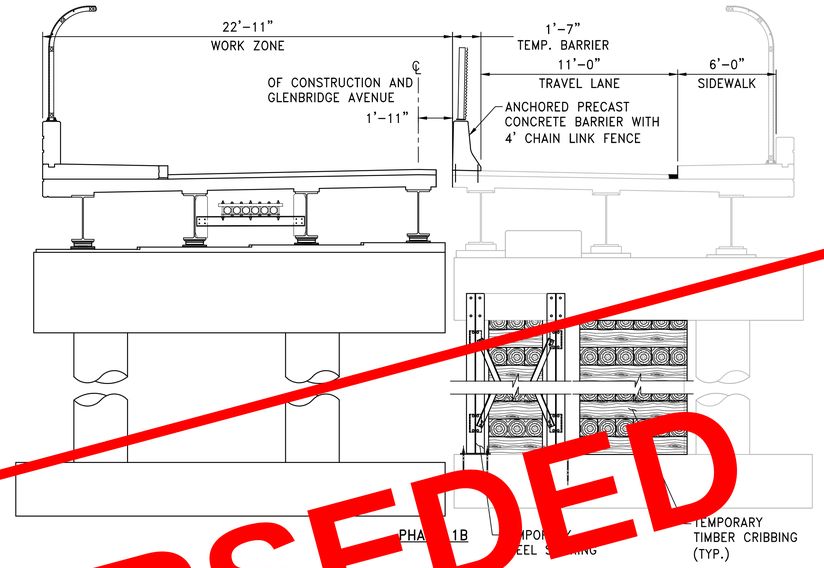
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

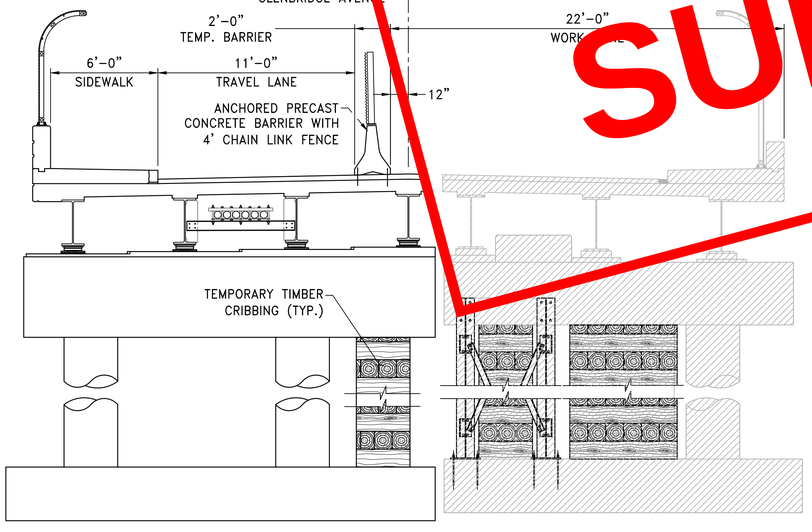
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	35	62



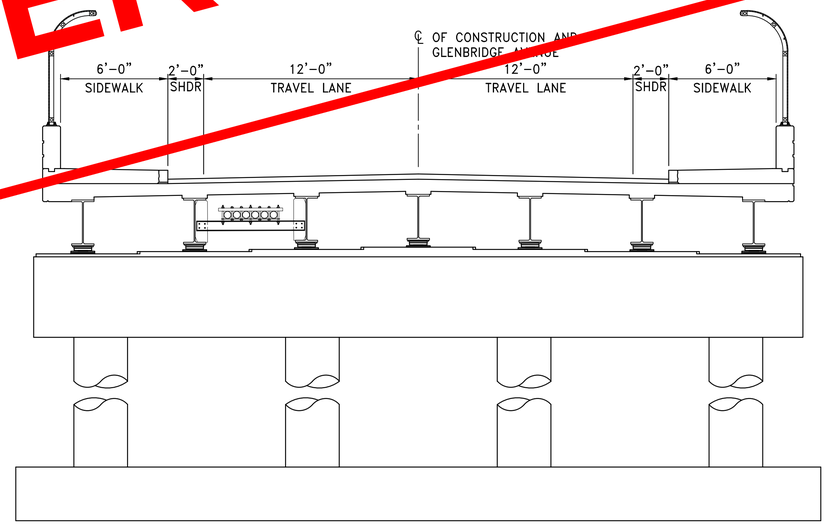
PHASE 1A



PHASE 1B



PHASE 2A



PHASE 2B

SUGGESTED SEQUENCE OF CONSTRUCTION

PHASE 1A
1. CONSTRUCT TEMPORARY PIER SHORING. REMOVE AND DISPOSE EXISTING GRANITE CURB AND PLACE TEMPORARY ASPHALT PATCHING IN ITS PLACE.
2. PLACE TRAFFIC CONTROLS AND SHIFT TRAFFIC TO SINGLE LANE ALTERNATING.
3. DEMOLISH PORTION OF EXISTING SUPERSTRUCTURE AND SUBSTRUCTURE TO THE LIMITS SHOWN.

PHASE 1B
1. CONSTRUCT EAST PORTION OF PROPOSED SUBSTRUCTURE, SUPERSTRUCTURE, AND APPROACHES.
2. RELOCATE ELECTRIC UTILITY TO BRIDGE CONDUIT.

PHASE 2A
1. RELOCATE TRAFFIC CONTROLS AND SHIFT TRAFFIC TO NEW PORTION OF BRIDGE.
2. DEMOLISH REMAINING PORTION OF EXISTING SUPERSTRUCTURE AND SUBSTRUCTURE TO THE LIMITS SHOWN.

PHASE 2B
1. CONSTRUCT PROPOSED SUBSTRUCTURE, SUPERSTRUCTURE, AND APPROACHES.
2. OPEN BRIDGE TO TWO-WAY TRAFFIC.
3. COMPLETE REMAINING APPROACH AND PAVEMENT WORK.

NOTES:
1. TIMBER CRIBBING AND TEMPORARY STEEL PIER SHORING WILL BE PAID FOR UNDER ITEM 802.9901.
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3. ALL BARRIER SHALL MEET THE REQUIREMENTS IN THE BRIDGE NOTES.
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SUPERSEDED

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

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

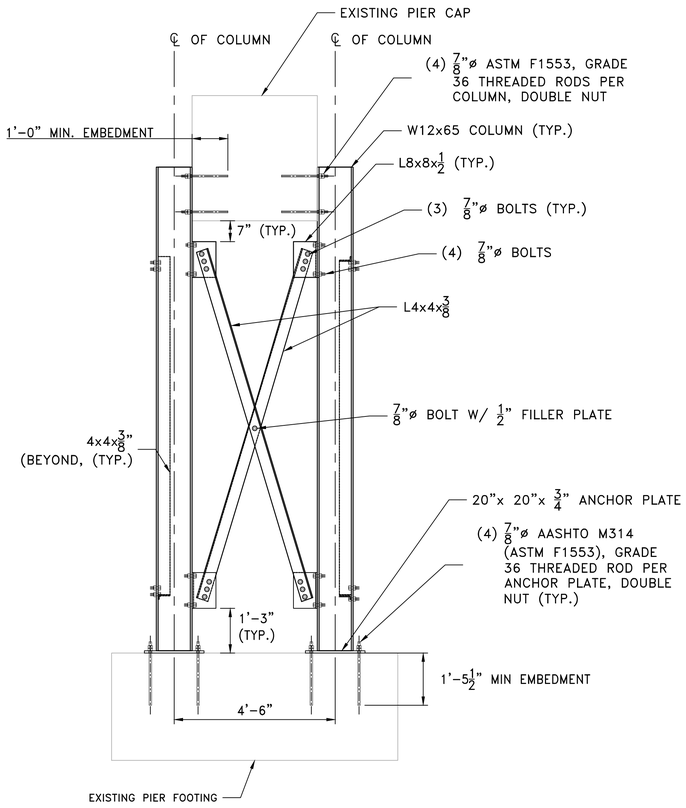
PROVIDENCE COUNTY RHODE ISLAND

PHASED CONSTRUCTION SECTIONS

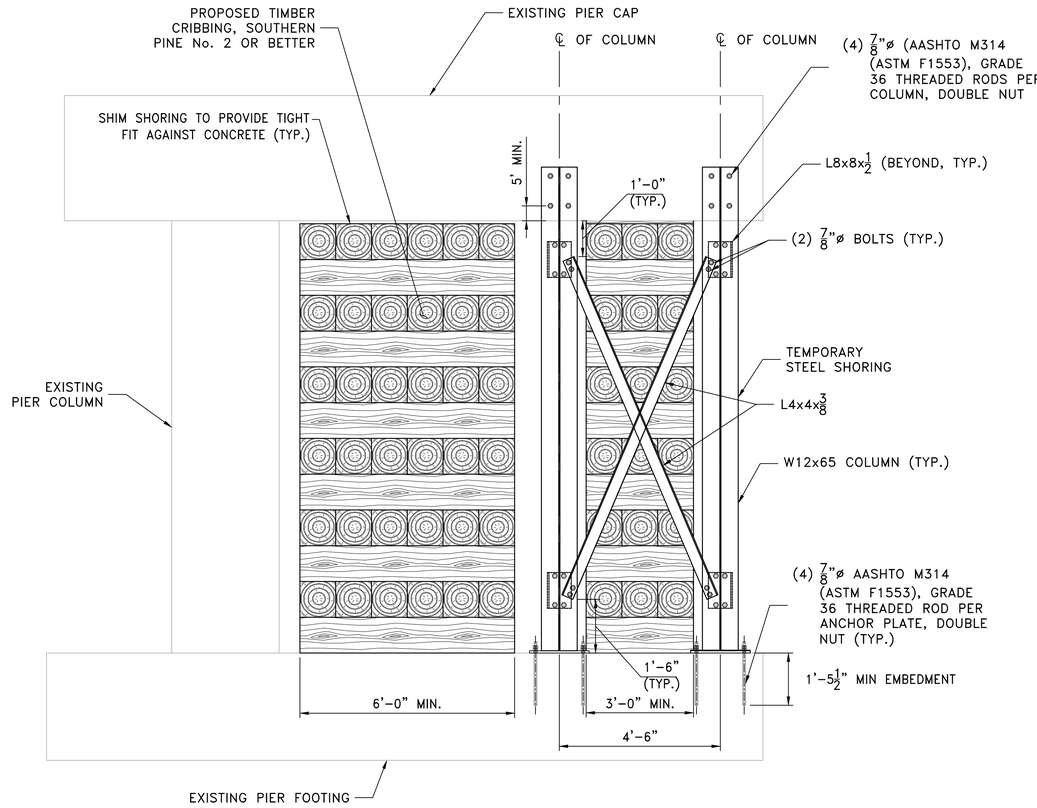
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	36	62



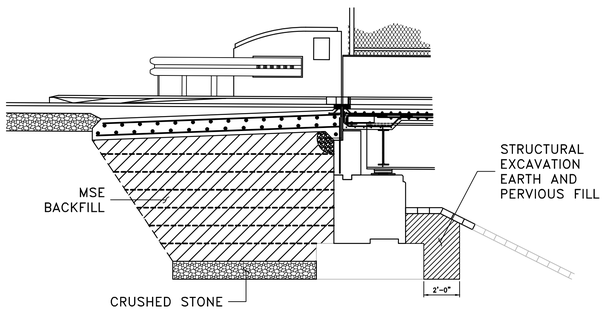
SECTION
SCALE: 1/2" = 1'=0"



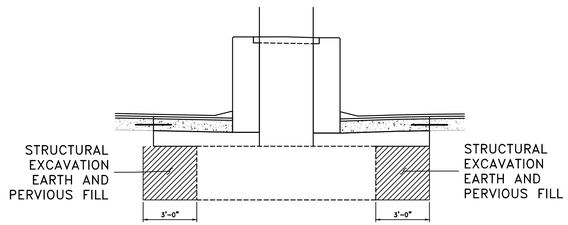
ELEVATION
SCALE: 1/2" = 1'=0"

NOTES:

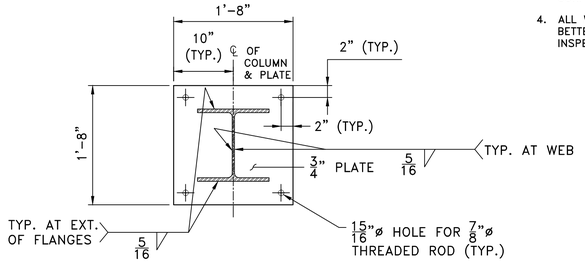
1. ALL STEEL SHALL BE AASHTO M270 (ASTM A709) GRADE 50 STEEL.
2. ALL BOLTS AND HARDWARE SHALL BE AASHTO M164 (ASTM A325) UNLESS OTHERWISE NOTED.
3. ALL CONNECTIONS SHALL BE SLIP CRITICAL WITH CLASS B FAYING SURFACES.
4. ALL WELDS SHALL HAVE AN ELECTRODE STRENGTH OF 70 KSI OR BETTER AND SHALL BE INSPECTED BY A CERTIFIED WELDING INSPECTOR IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.



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



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



BASE PLATE DETAIL
SCALE: 1" = 1'-0"

PAY LIMITS
SCALE: 1/2" = 1'=0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

TEMPORARY PIER SHORING DETAILS

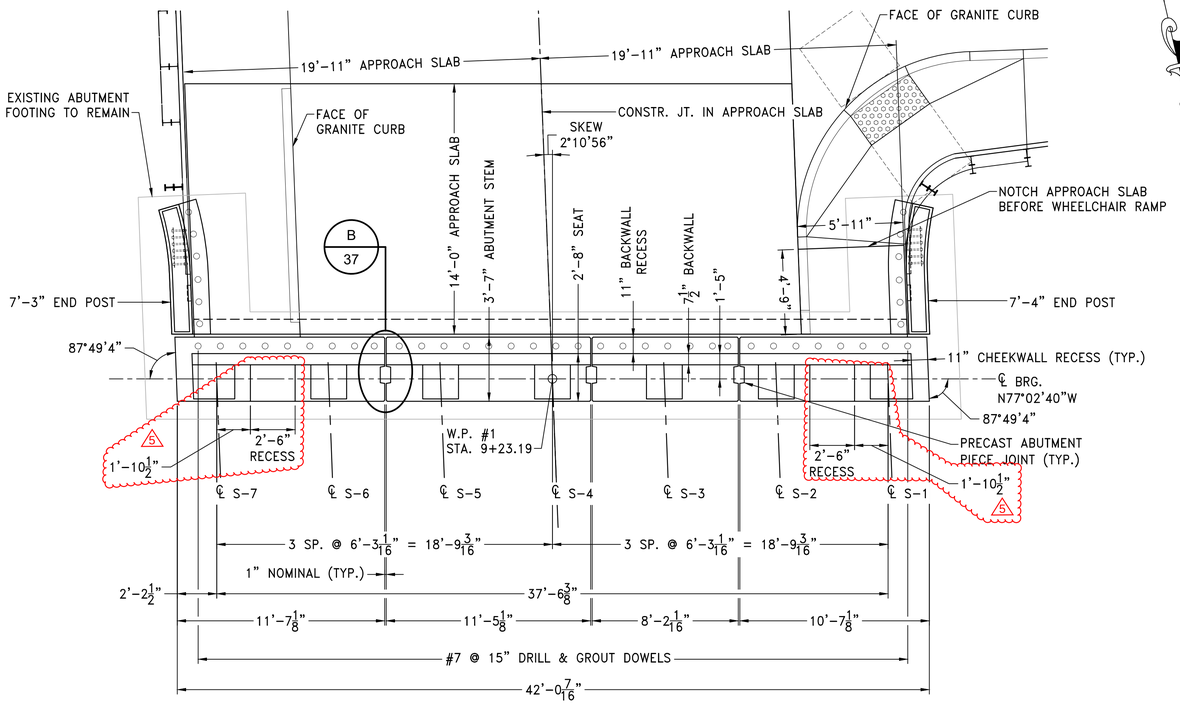
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_036_SHORINGDETAILS

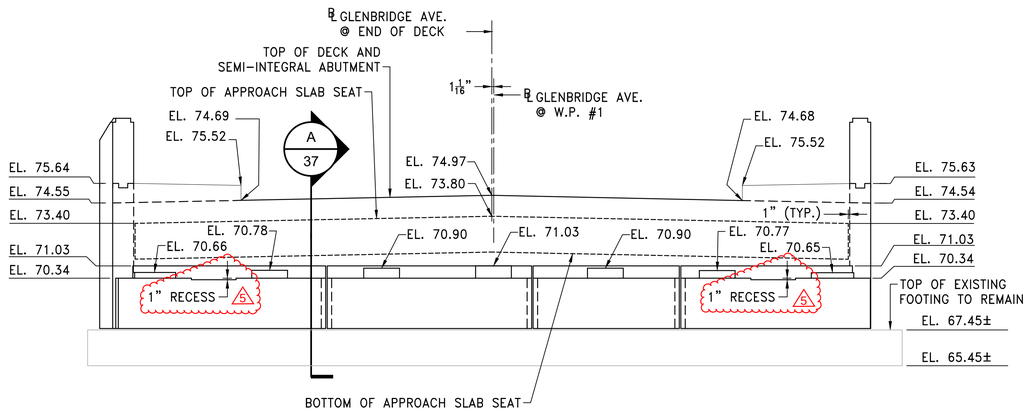
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	37	62

R-5



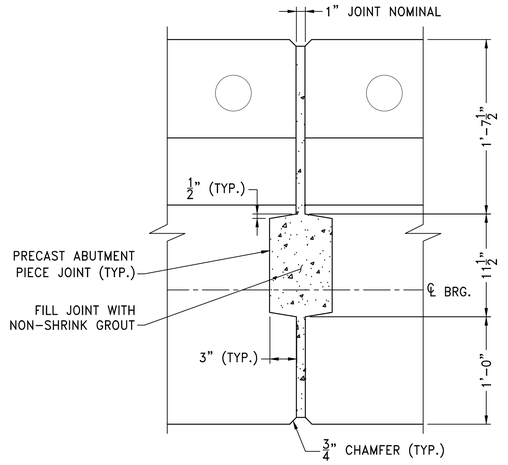
SOUTH ABUTMENT PLAN

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



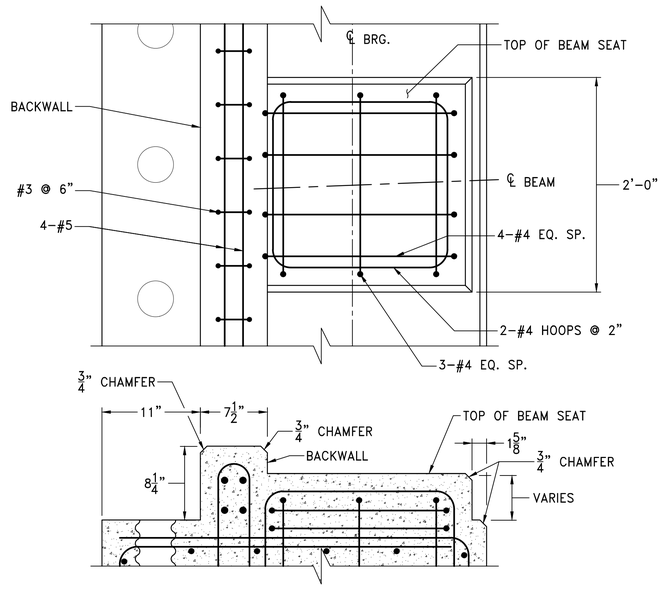
SOUTH ABUTMENT ELEVATION

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



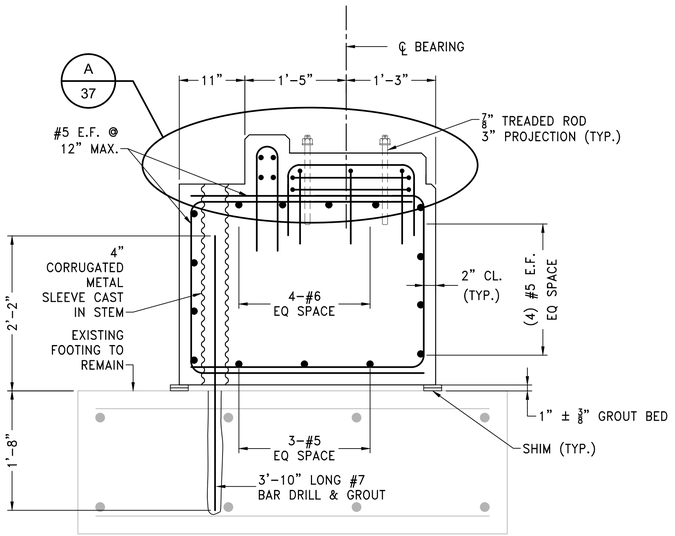
DETAIL B

NOT TO SCALE — B 37



DETAIL A

NOT TO SCALE — A 37



SECTION

SCALE: 1" = 1'-0" — 1 37

NOTES:

1. SEE "APPROACH SLAB AND BACKWALL DETAILS" SHEET FOR BACKWALL AND APPROACH SLAB DETAILS.
2. EXISTING BARS SHALL BE CUT OFF AT THE TOP OF CONCRETE AND NEW DOWELS SHALL BE DRILLED AND GROUTED INTO THE EXISTING FOOTING.
3. PAYMENT FOR DRILLING AND GROUTING DOWELS WILL BE MADE UNDER ITEM NO. 800.9901 "DRILL AND GROUT REINFORCING DOWELS.
4. TOP OF DECK, CURB, SIDEWALK, AND APPROACH SLAB ELEVATIONS ARE GIVEN AT DECK END.
5. ALL GROUT SHALL BE 5,000 PSI NON-SHRINK GROUT.

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH
5	04/27/21	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

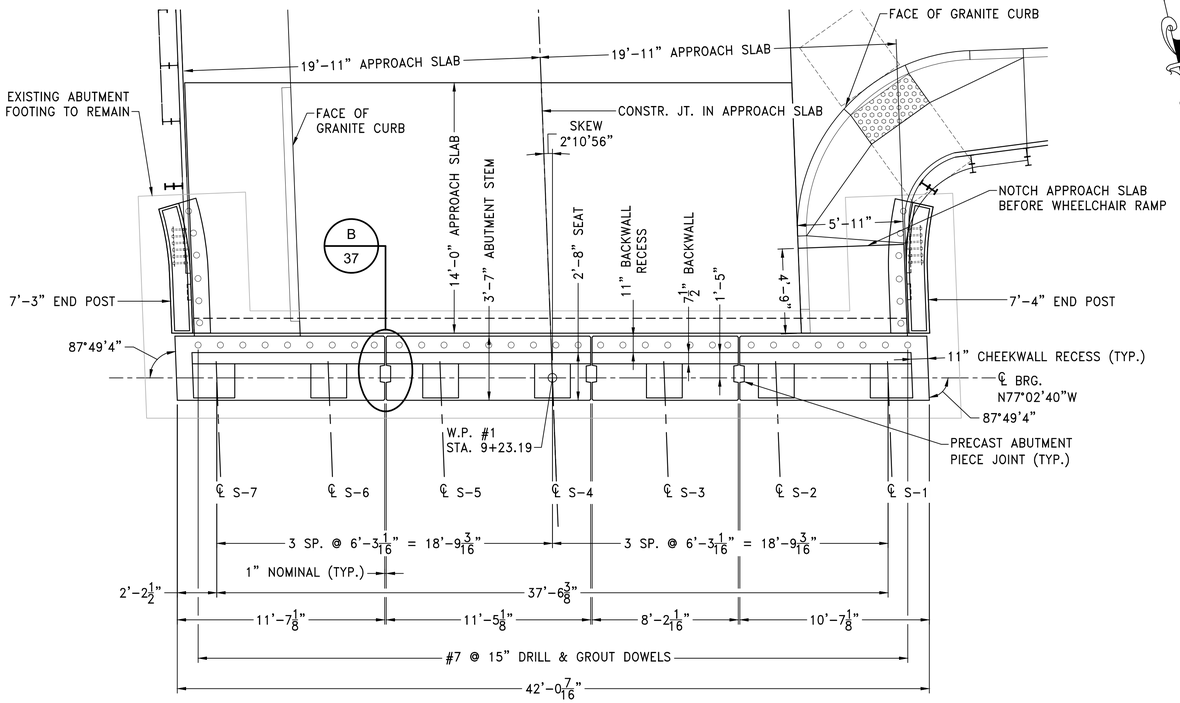
SOUTH ABUTMENT PLAN, ELEVATION, AND SECTION

CHECKED BY _____ DATE _____ SCALE AS NOTED

CHA
227 WEST EXCHANGE STREET
SUITE 101
PROVIDENCE, RI 02903

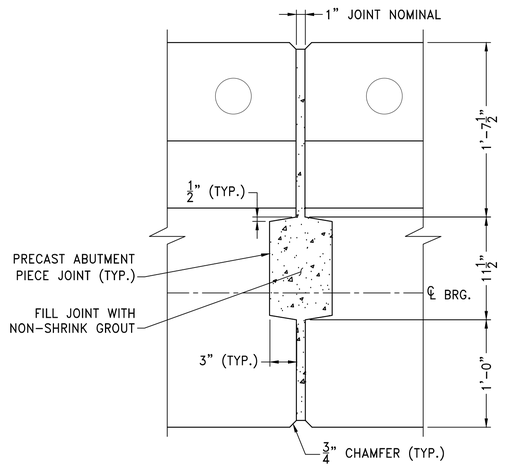
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	37	62

R-3



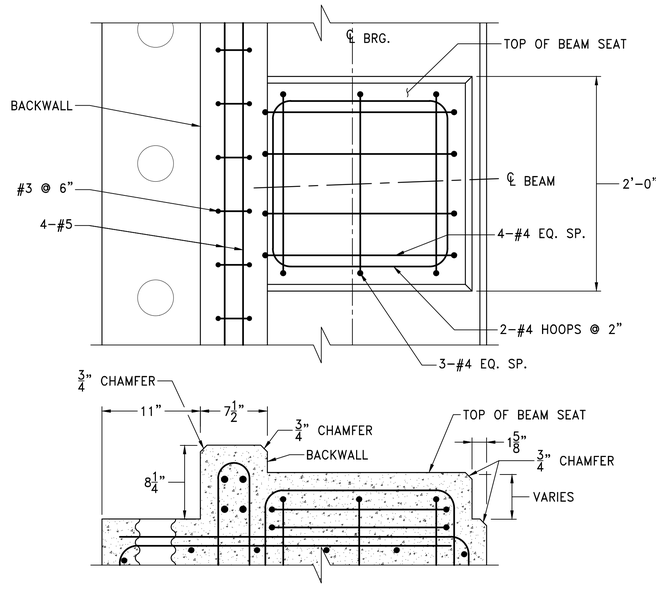
SOUTH ABUTMENT PLAN

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



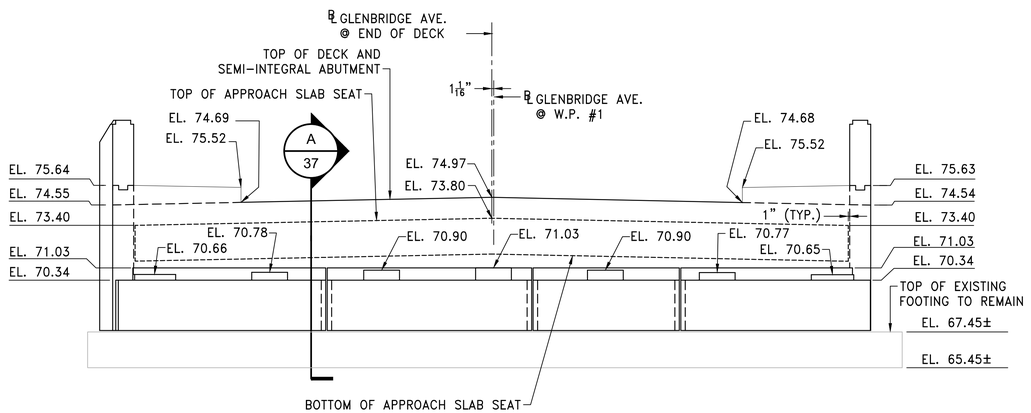
DETAIL B (B / 37)

NOT TO SCALE



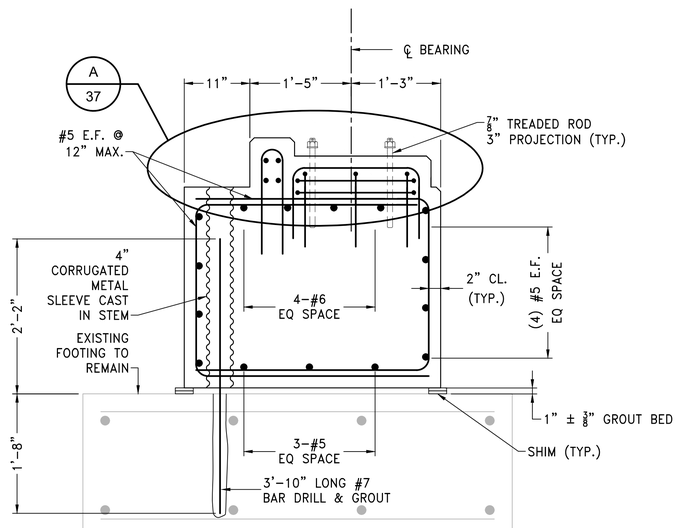
DETAIL A (A / 37)

NOT TO SCALE



SOUTH ABUTMENT ELEVATION

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



SECTION (1 / 37)

SCALE: 1" = 1'-0"

NOTES:

1. SEE "APPROACH SLAB AND BACKWALL DETAILS" SHEET FOR BACKWALL AND APPROACH SLAB DETAILS.
2. EXISTING BARS SHALL BE CUT OFF AT THE TOP OF CONCRETE AND NEW DOWELS SHALL BE DRILLED AND GROUTED INTO THE EXISTING FOOTING.
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4. TOP OF DECK, CURB, SIDEWALK, AND APPROACH SLAB ELEVATIONS ARE GIVEN AT DECK END.
5. ALL GROUT SHALL BE 5,000 PSI NON-SHRINK GROUT.

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

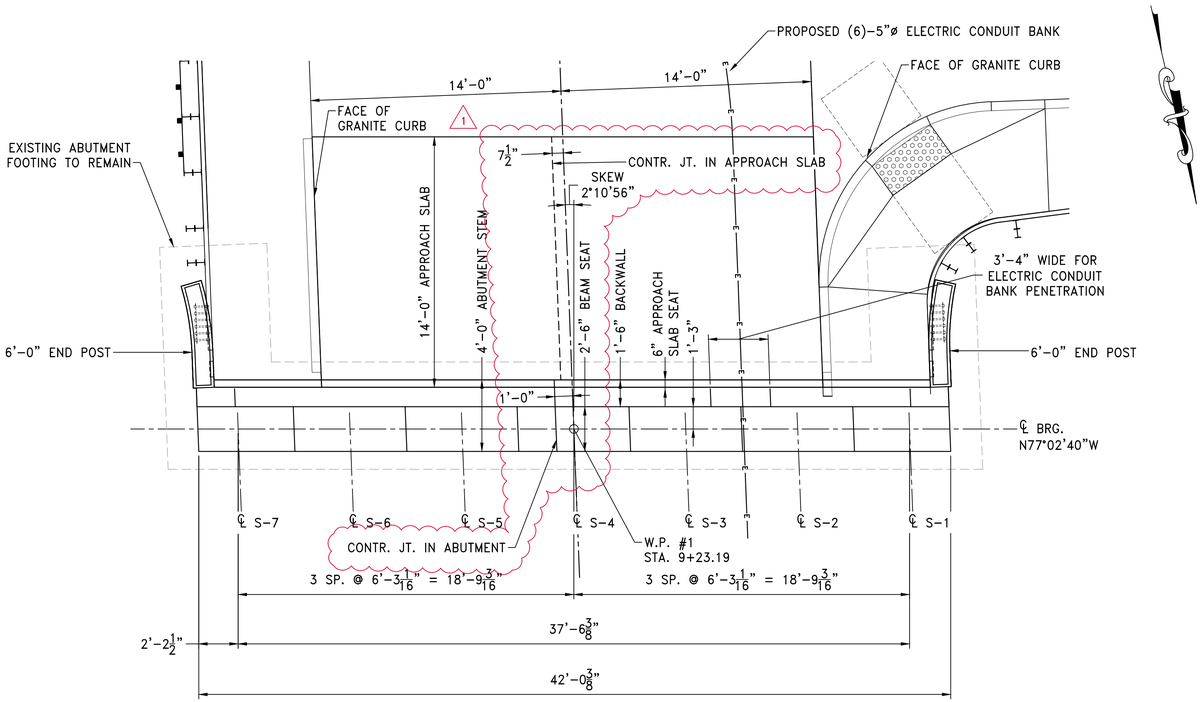
PROVIDENCE COUNTY — RHODE ISLAND

SOUTH ABUTMENT PLAN, ELEVATION, AND SECTION

CHECKED BY _____ DATE _____ SCALE AS NOTED

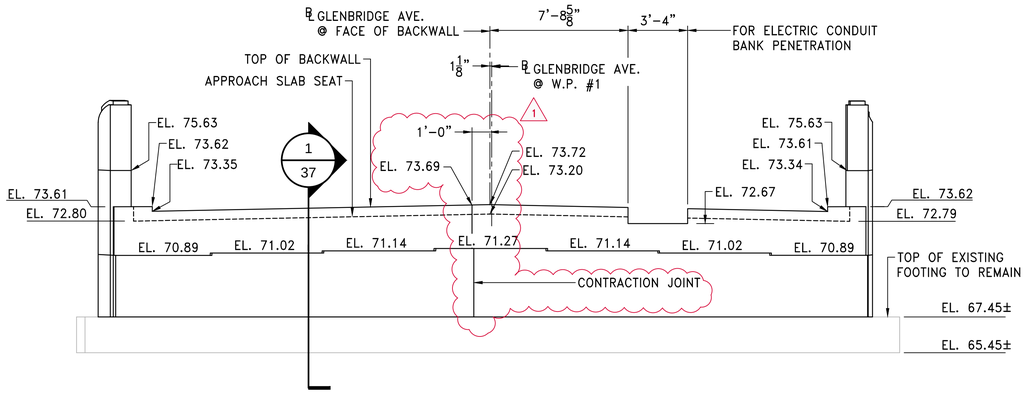
CHA
227 WEST EXCHANGE STREET
SUITE 101
PROVIDENCE, RI 02903

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	37	62



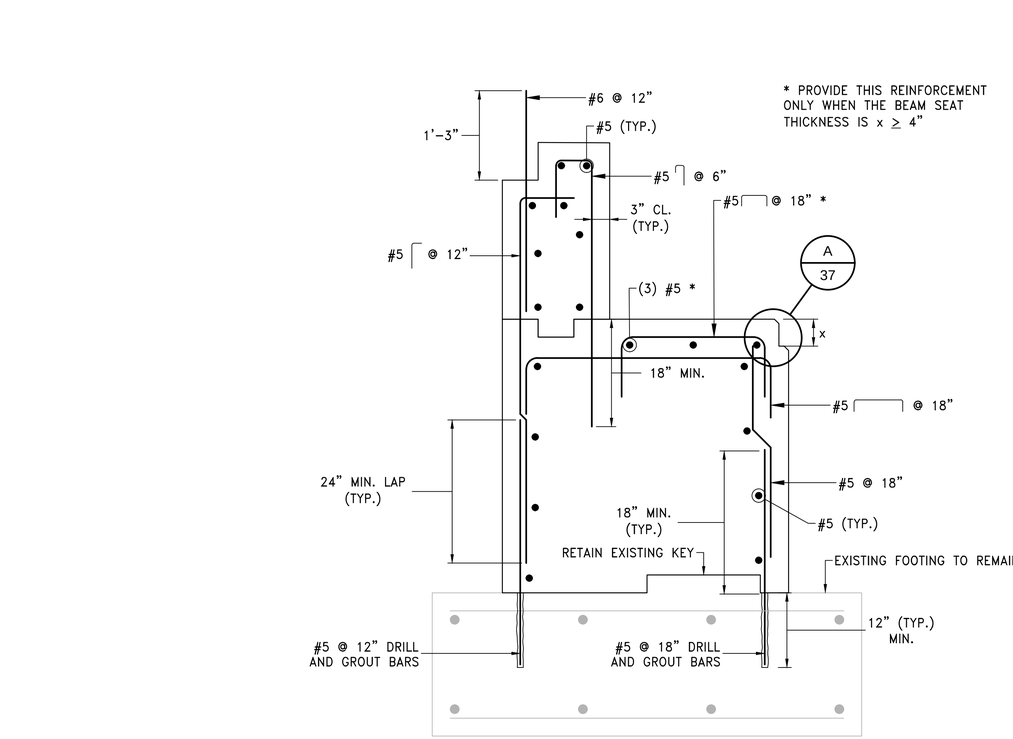
SOUTH ABUTMENT PLAN

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



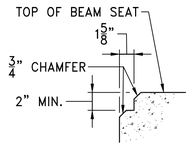
SOUTH ABUTMENT LEVATION

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



SECTION 1/37

SCALE: 1" = 1'-0"



DETAIL A/37

NOT TO SCALE

NOTES:

1. BACKWALL ELEVATIONS ARE GIVEN AT THE FRONT FACE OF BACKWALL.
2. BEAM SEAT ELEVATIONS ARE BASED ON AN ASSUMED BEARING THICKNESS OF 4 INCHES. THE CONTRACTOR SHALL ADJUST BEAM SEAT ELEVATIONS BASED ON THE ACTUAL ISOLATION BEARING THICKNESSES.
3. SEE "APPROACH SLAB AND BACKWALL DETAILS" SHEET FOR BACKWALL OPENING DETAILS AND APPROACH SLAB DETAILS.
4. DIMENSIONS AT THE PHASING JOINTS SHALL BE ADJUSTED IN THE FIELD AS NECESSARY AND AS APPROVED BY THE ENGINEER.
5. EXISTING BARS SHALL BE CUT OFF AT THE TOP OF CONCRETE AND NEW DOWELS SHALL BE DRILLED AND GROUTED INTO THE EXISTING FOOTING.
6. PAYMENT FOR DRILLING AND GROUTING DOWELS WILL BE MADE UNDER ITEM NO. 800.9901 "DRILL AND GROUT REINFORCING DOWELS.

REVISIONS		
NO.	DATE	BY
1	11/25/19	ETS

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

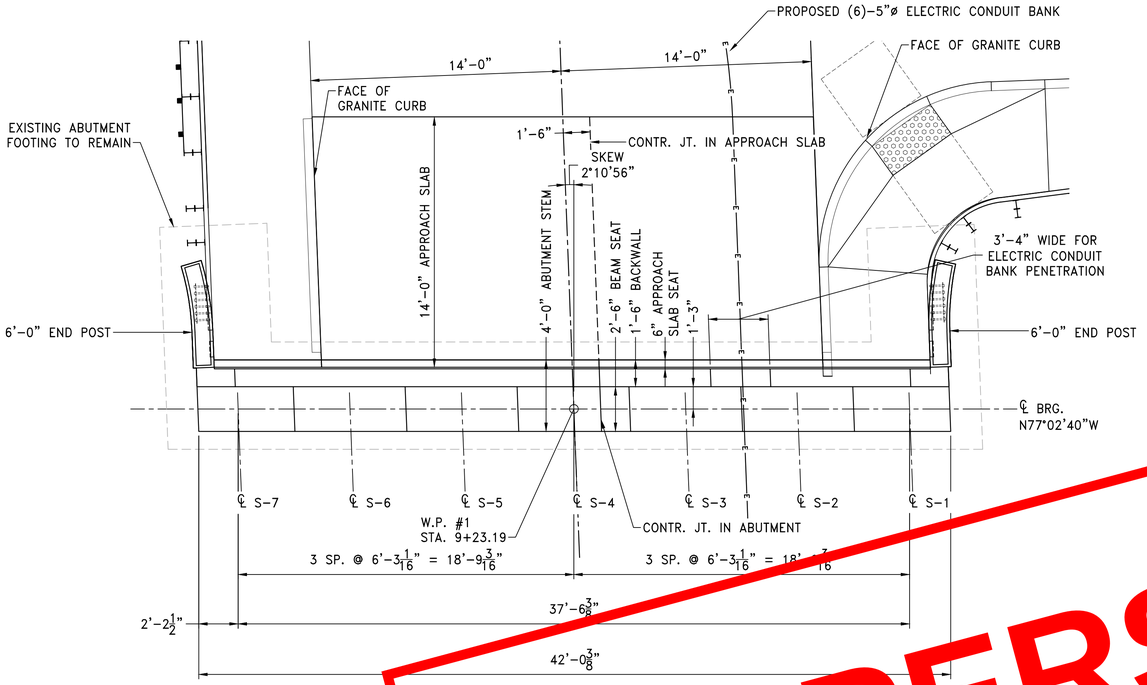
PROVIDENCE COUNTY — RHODE ISLAND

SOUTH ABUTMENT PLAN, ELEVATION, AND SECTION

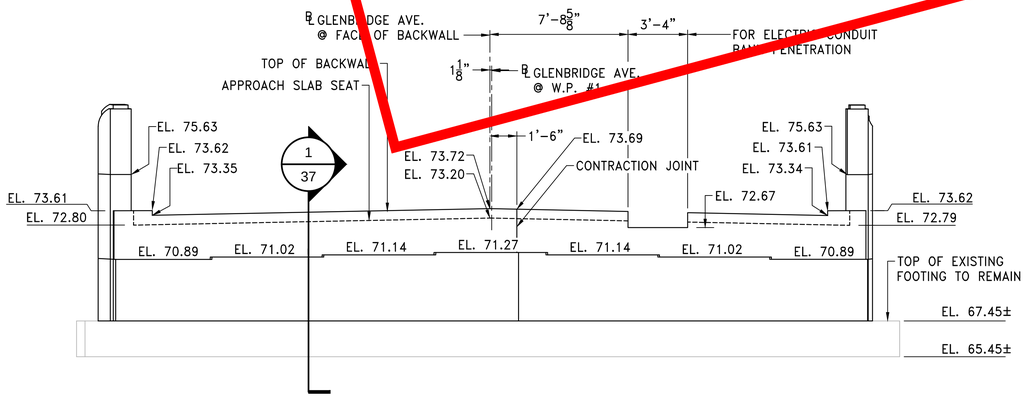
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401-334-4100

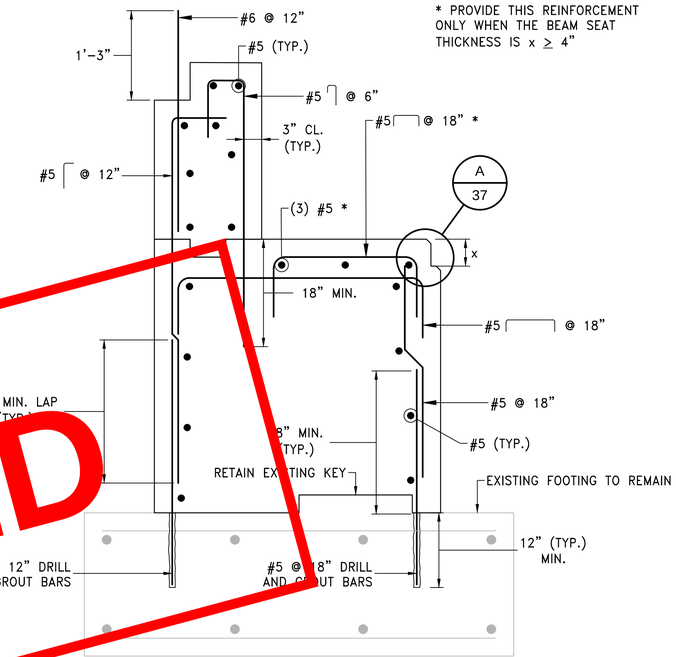
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	37	62



SOUTH ABUTMENT PLAN
SCALE: 1/4" = 1'

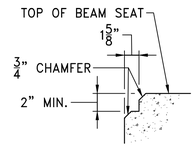


SOUTH ABUTMENT LEVATION
SCALE: 1/4" = 1'-0"



* PROVIDE THIS REINFORCEMENT ONLY WHEN THE BEAM SEAT THICKNESS IS x ≥ 4"

SECTION 1/37
SCALE: 1" = 1'-0"



DETAIL A/37
NOT TO SCALE

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SUPERSEDED

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

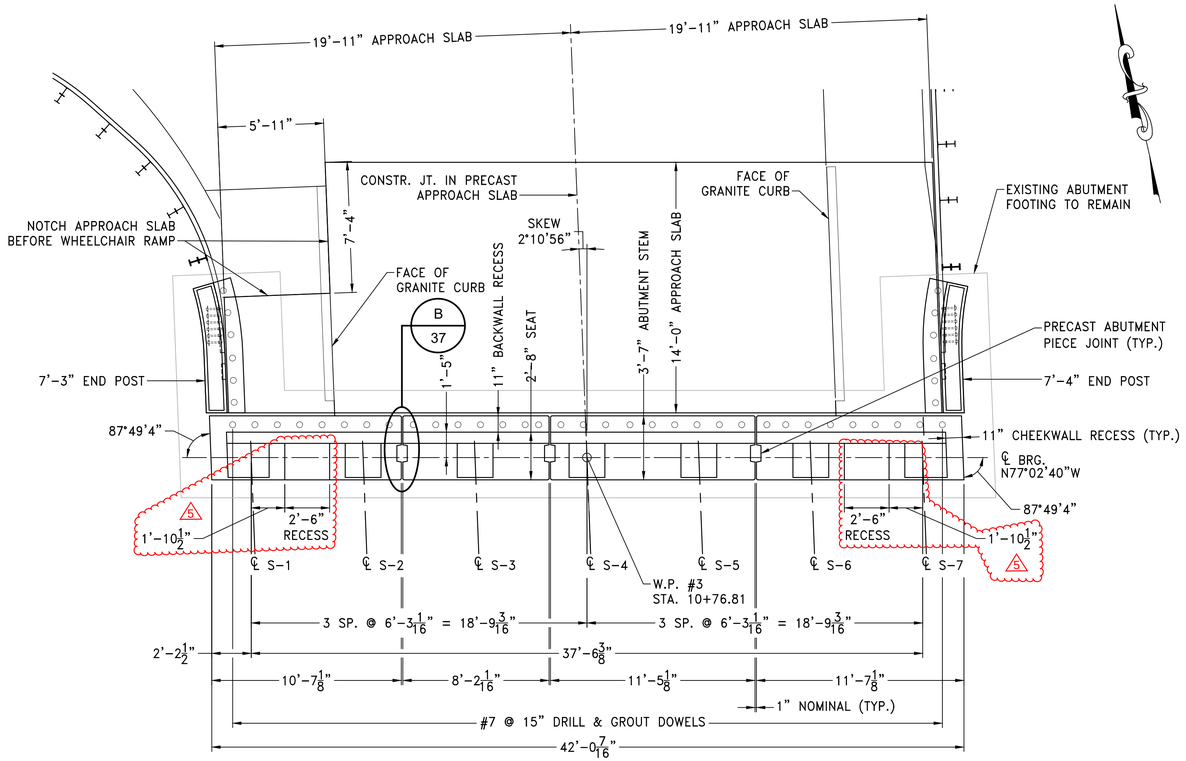
PROVIDENCE COUNTY — RHODE ISLAND

SOUTH ABUTMENT PLAN, ELEVATION, AND SECTION

CHECKED BY _____ DATE _____ SCALE AS NOTED

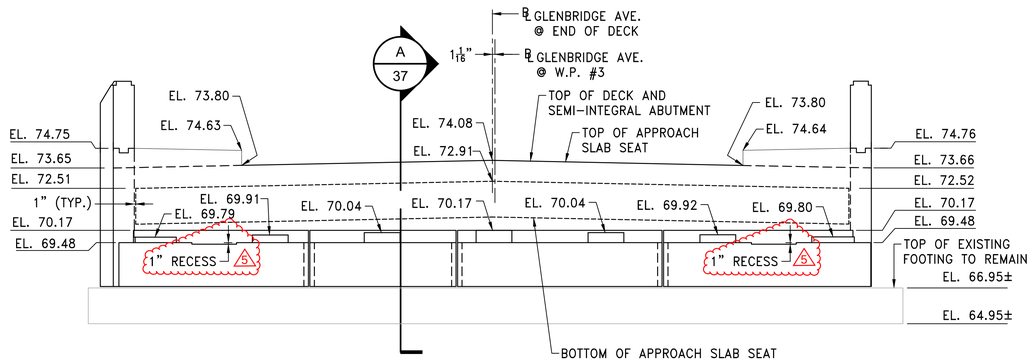
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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	38	62



NORTH ABUTMENT PLAN

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



NORTH ABUTMENT LEVATION

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

ISOLATION BEARING UNFACTORED DESIGN LOADS (KIPS/BEARING) R-5

				ABUTMENT (INT. BEARING)	ABUTMENT (EXT. BEARING)	PIER (INT. BEARING)	PIER (EXT. BEARING)
SERVICE	VERTICAL	DEAD LOAD		51.0	67.0	121.0	173.0
		LIVE LOAD WITH IMPACT		67.0	38.0	106.0	73.0
	HORIZONTAL	LONG.	BRAKING	2.3	2.3	2.3	2.3
			WS	1.5	1.5	4.5	4.5
			WL	1.0	1.0	1.0	1.0
		TRANS.	WS	4.5	4.5	8.0	8.0
			WL	1.0	1.0	1.5	1.5
EXTREME	MAX. ALLOWABLE HORIZONTAL LOAD (LONG. & TRANS.)			17.0	17.0	16.0	16.0
	MAXIMUM ALLOWABLE DISPLACEMENT (IN)			2.0	2.0	2.0	2.0

TABLE NOTES:

1. ALL LOADS SHALL BE FACTORED PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, THE RIDOT LRFD BRIDGE MANUAL, AND THE CONTRACT DOCUMENTS.

ISOLATION BEARING NOTES:

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3. BEAM SEAT ELEVATIONS AT THE ABUTMENTS ARE BASED ON A BEARING HEIGHT OF 6.860", A 1.25" MASONRY PLATE AND A 0.125" PAD. BEAM SEAT ELEVATIONS AT THE PIER ARE BASED ON A BEARING HEIGHT OF 7.80" AND A 0.125" PAD. THE OVERALL HEIGHT OF THE BEARINGS SHALL BE COORDINATED WITH THE BEARING SUPPLIER.
4. MASONRY BASE PLATES SHALL BE PLACED ON 1/8" PREFORMED FABRIC PADS AS SPECIFIED IN SECTION M.13.04 (RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION).
5. ANCHOR RODS SHALL BE GALVANIZED ACCORDING TO AASHTO DESIGNATION M 232 OR METALIZED IN A MANNER APPROVED BY THE BEARING SUPPLIER.
6. BEARING INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE SPECIAL PROVISIONS AND THE BEARING SUPPLIER'S REQUIREMENTS.

NOTES:

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4. TOP OF DECK, CURB, SIDEWALK, AND APPROACH SLAB ELEVATIONS ARE GIVEN AT DECK END.

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH
4	01/28/21	CL
5	04/27/21	SJH

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

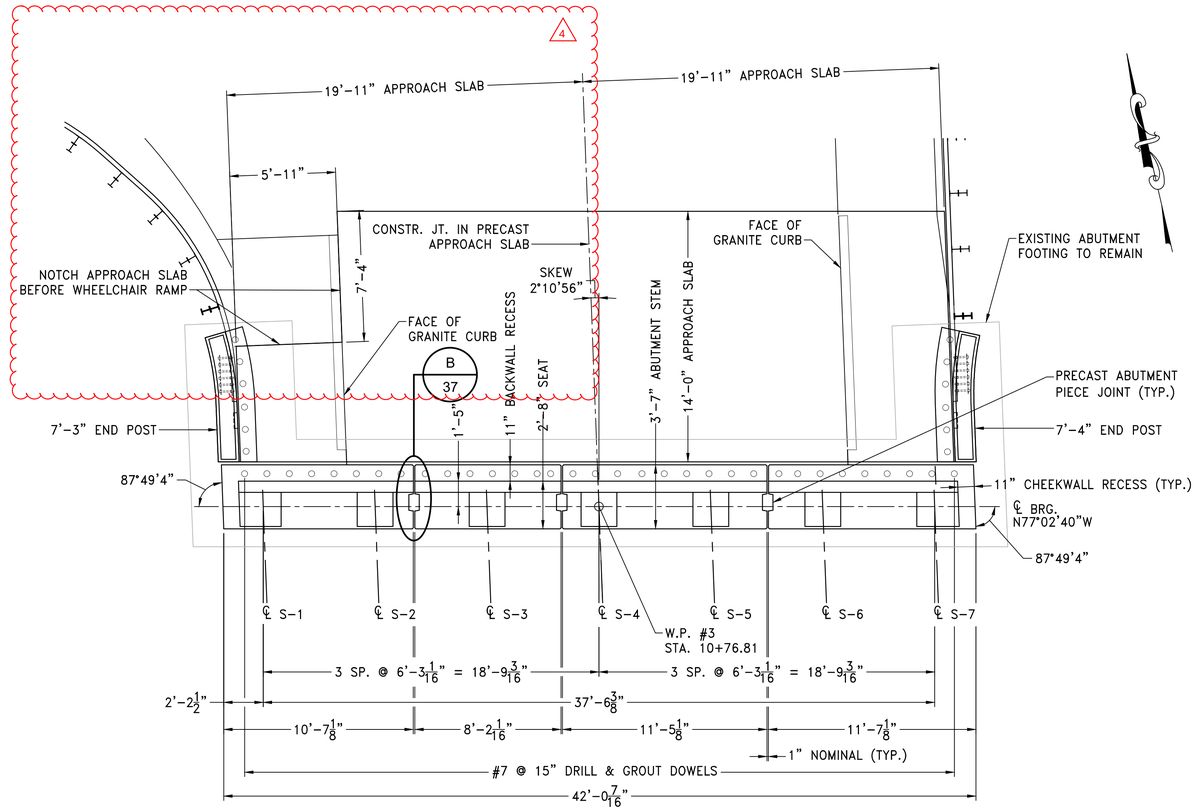
BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

NORTH ABUTMENT PLAN AND ELEVATION

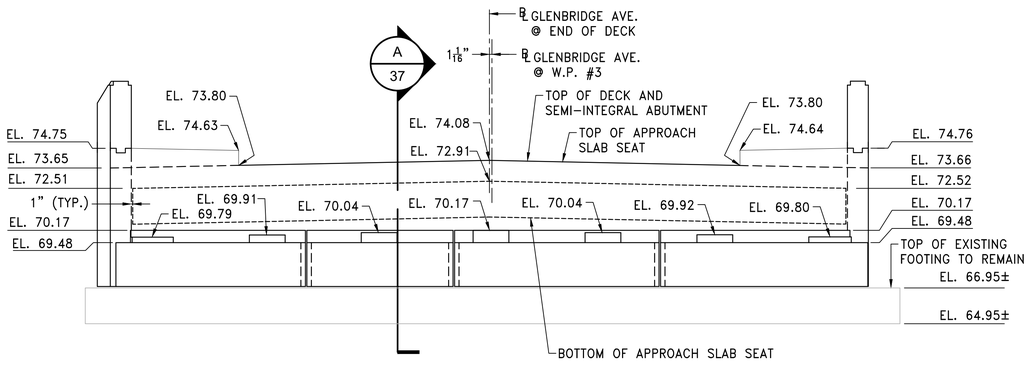
CHECKED BY _____ DATE _____ SCALE AS NOTED

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	38	62



NORTH ABUTMENT PLAN

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



NORTH ABUTMENT LEVATION

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

ISOLATION BEARING UNFACTORED DESIGN LOADS (KIPS/BEARING) R-4

				ABUTMENT (INT. BEARING)	ABUTMENT (EXT. BEARING)	PIER (INT. BEARING)	PIER (EXT. BEARING)
SERVICE	VERTICAL	DEAD LOAD		51.0	67.0	121.0	173.0
		LIVE LOAD WITH IMPACT		67.0	38.0	106.0	73.0
	HORIZONTAL	LONG.	BRAKING	2.3	2.3	2.3	2.3
			WS	1.5	1.5	4.5	4.5
			WL	1.0	1.0	1.0	1.0
		TRANS.	WS	4.5	4.5	8.0	8.0
			WL	1.0	1.0	1.5	1.5
EXTREME	MAX. ALLOWABLE HORIZONTAL LOAD (LONG. & TRANS.)			17.0	17.0	16.0	16.0
	MAXIMUM ALLOWABLE DISPLACEMENT (IN)			2.0	2.0	2.0	2.0

TABLE NOTES:

1. ALL LOADS SHALL BE FACTORED PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, THE RIDOT LRFD BRIDGE MANUAL, AND THE CONTRACT DOCUMENTS.

ISOLATION BEARING NOTES:

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5. ANCHOR RODS SHALL BE GALVANIZED ACCORDING TO AASHTO DESIGNATION M 232 OR METALIZED IN A MANNER APPROVED BY THE BEARING SUPPLIER.
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NOTES:

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4. TOP OF DECK, CURB, SIDEWALK, AND APPROACH SLAB ELEVATIONS ARE GIVEN AT DECK END.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

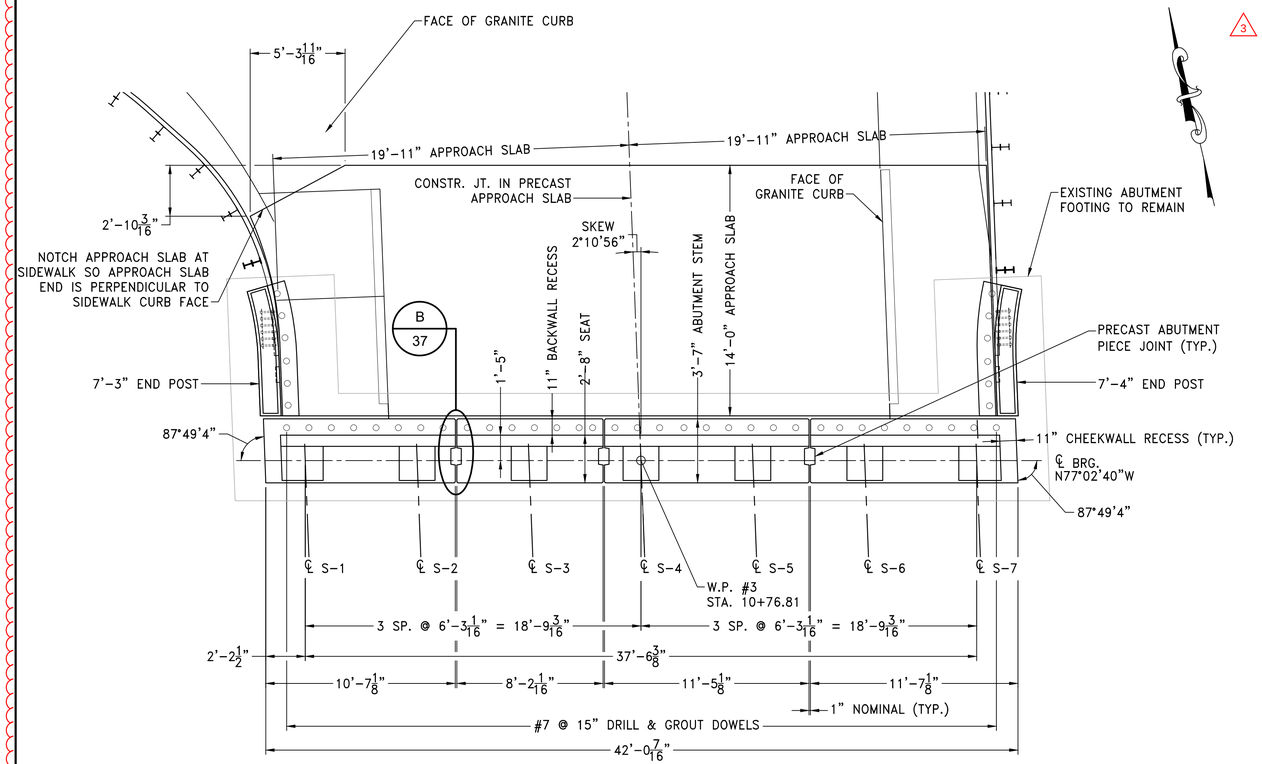
PROVIDENCE COUNTY — RHODE ISLAND

NORTH ABUTMENT PLAN AND ELEVATION

CHECKED BY _____ DATE _____ SCALE AS NOTED

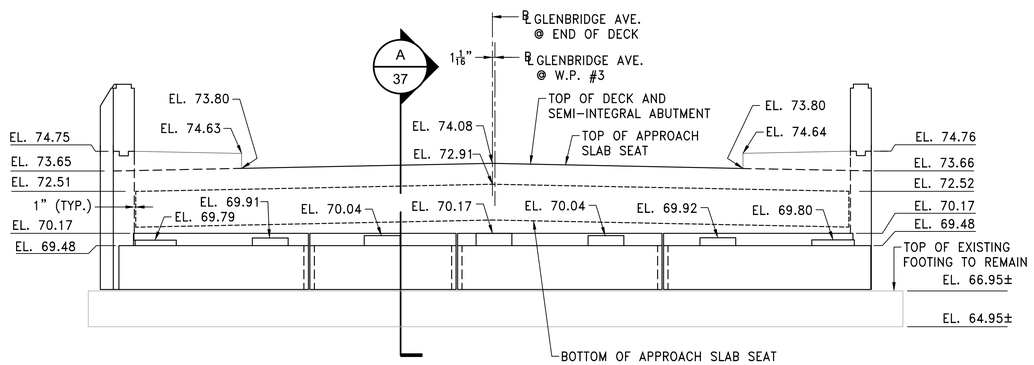
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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	38	62



NORTH ABUTMENT PLAN

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



NORTH ABUTMENT LEVATION

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

ISOLATION BEARING UNFACTORED DESIGN LOADS (KIPS/BEARING) R-3

				ABUTMENT (INT. BEARING)	ABUTMENT (EXT. BEARING)	PIER (INT. BEARING)	PIER (EXT. BEARING)
SERVICE	VERTICAL	DEAD LOAD		51.0	67.0	121.0	173.0
		LIVE LOAD WITH IMPACT		67.0	38.0	106.0	73.0
	HORIZONTAL	LONG.	BRAKING	2.3	2.3	2.3	2.3
			WS	1.5	1.5	4.5	4.5
			WL	1.0	1.0	1.0	1.0
		TRANS.	WS	4.5	4.5	8.0	8.0
			WL	1.0	1.0	1.5	1.5
EXTREME	MAX. ALLOWABLE HORIZONTAL LOAD (LONG. & TRANS.)			17.0	17.0	16.0	16.0
	MAXIMUM ALLOWABLE DISPLACEMENT (IN)			2.0	2.0	2.0	2.0

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REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
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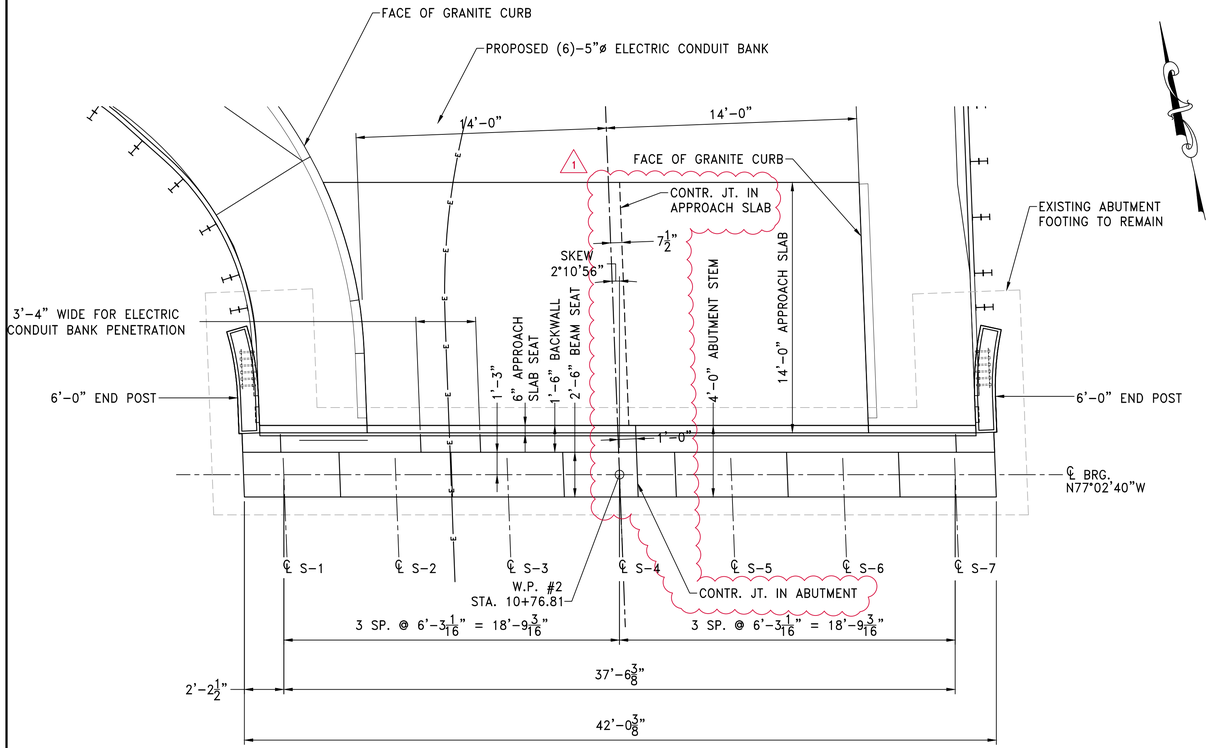
PROVIDENCE COUNTY — RHODE ISLAND

NORTH ABUTMENT PLAN AND ELEVATION

CHECKED BY _____ DATE _____ SCALE AS NOTED

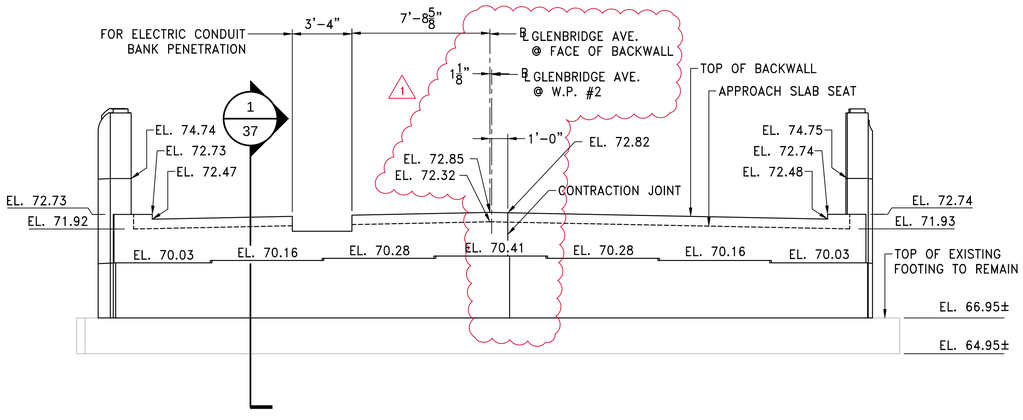
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	RI	BRO-0606(001) BRO-PRES(006)	2019	38	62



NORTH ABUTMENT PLAN

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



NORTH ABUTMENT LEVATION

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

ISOLATION BEARING UNFACTORED DESIGN LOADS (KIPS/BEARING)

				ABUTMENT (INT. BEARING)	ABUTMENT (EXT. BEARING)	PIER (INT. BEARING)	PIER (EXT. BEARING)
SERVICE	VERTICAL	DEAD LOAD		38.0	51.0	127.0	167.0
		LIVE LOAD WITH IMPACT		67.0	38.0	106.0	73.0
	HORIZONTAL	LONG.	BRAKING	2.3	2.3	23.	2.3
			WS	1.5	1.5	4.5	4.5
			WL	1.0	1.0	1.0	1.0
		TRANS.	WS	4.5	4.5	8.0	8.0
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5. ANCHOR ROD SPACING SHALL BE COORDINATED WITH THE BEARING MANUFACTURER.
6. ANCHOR RODS SHALL BE GALVANIZED ACCORDING TO AASHTO DESIGNATION M 232 OR METALIZED IN A MANNER APPROVED BY THE BEARING SUPPLIER.
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REVISIONS		
NO.	DATE	BY
1	11/25/19	ETS

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RHODE ISLAND
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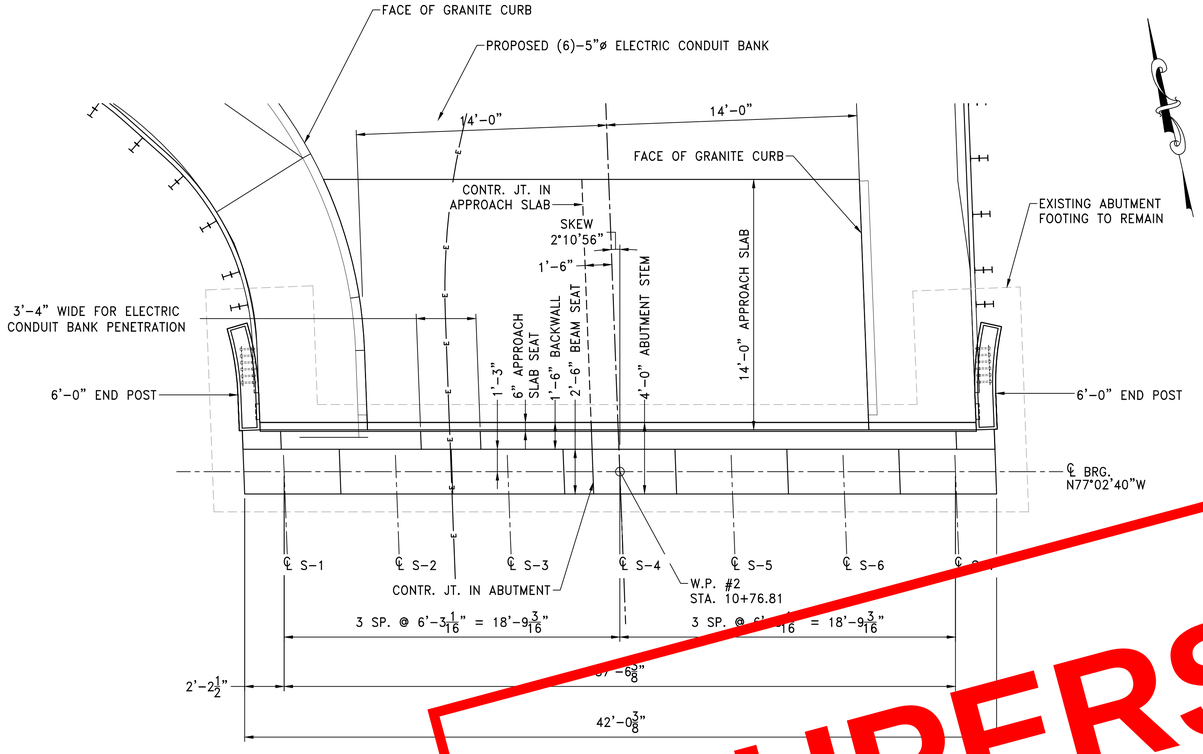
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PROVIDENCE COUNTY RHODE ISLAND

NORTH ABUTMENT PLAN AND ELEVATION

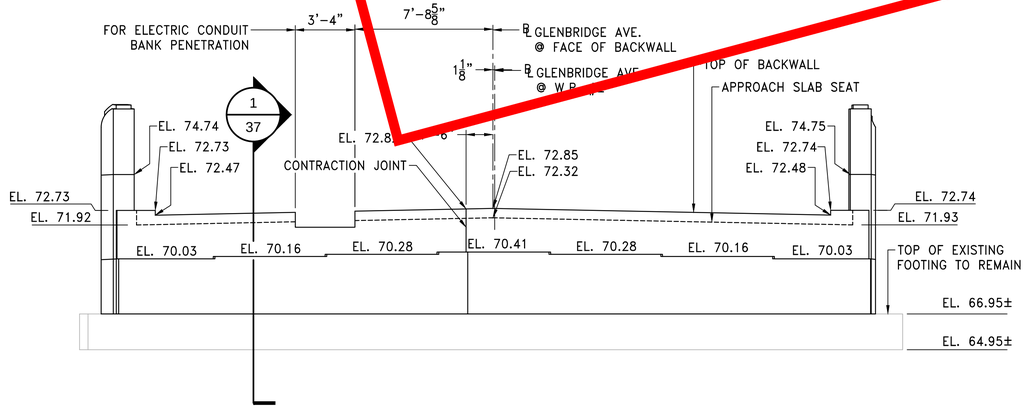
CHECKED BY _____ DATE _____ SCALE AS NOTED

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	38	62



NORTH ABUTMENT PLAN

SCALE: 1/4" = 1'



NORTH ABUTMENT LEVATION

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

ISOLATION BEARING DESIGN PARAMETERS

BEARING LOCATION	UNFACTORED VERTICAL LOAD (kips) (NOTE 2)	UNFACTORED HORIZONTAL LOAD (kips) (NOTE 3)	MAXIMUM HORIZONTAL MOVEMENTS (ASSUMING BEARING SET @ 60°F)		MAXIMUM DESIGN ROTATION (RADIANS)
			TEMPERATURE RISE (IN.)	TEMPERATURE FALL (IN.)	
PIER	233	34	–	–	0.02
ABUTMENTS (INTERIOR STRINGERS)	103	10	3/8"	1/2"	0.02
ABUTMENTS (EXTERIOR STRINGERS)	87	13	3/8"	1/2"	0.02

TABLE NOTES:

1. MOVEMENTS PROVIDED ARE BASED ON A BEARING SET TEMPERATURE OF 60°F. 1/16" SHALL BE ADDED OR SUBTRACTED FROM THESE VALUES FOR EVERY 10°F THE AMBIENT TEMPERATURE VARIES FROM 60°F.
2. LOADS INCLUDE LIVE LOAD WITH IMPACT AND SUPERSTRUCTURE DEADLOAD.
3. LOADS ARE CALCULATED BASED ON SEISMIC FORCE DUE TO THE SUPERSTRUCTURE.

ISOLATION BEARING NOTES:

1. THE BEARINGS SHALL BE DESIGNED TO MEET THE REQUIREMENTS AS LISTED IN THE "ISOLATION BEARING DESIGN PARAMETERS" TABLE ON THIS SHEET.
2. FOR GENERAL FABRICATION AND CONSTRUCTION REQUIREMENTS, REFER TO SECTION 828.9901 "ISOLATION BEARINGS" OF THE SPECIAL PROVISIONS.
3. THE OVERALL HEIGHT OF THE BEARINGS SHALL BE COORDINATED WITH THE BEARING SUPPLIER. BEAM SEAT ELEVATIONS SHOWN ON THE ABUTMENT AND PIER ELEVATION SHEETS ARE BASED ON AN ASSUMED BEARING THICKNESS OF 4 INCHES.
4. MASONRY BASE PLATES SHALL BE PLACED ON 1/8" PREFORMED FABRIC PADS AS SPECIFIED IN SECTION M.13.04 (RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION).
5. ANCHOR ROD SPACING SHALL BE COORDINATED WITH THE BEARING MANUFACTURER.
6. ANCHOR RODS SHALL BE GALVANIZED ACCORDING TO AASHTO DESIGNATION M 232 OR METALIZED IN A MANNER APPROVED BY THE BEARING SUPPLIER.
7. BEARING INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE SPECIAL PROVISIONS AND THE BEARING SUPPLIER'S REQUIREMENTS.

NOTES:

1. BACKWALL ELEVATIONS ARE GIVEN AT THE FRONT FACE OF BACKWALL.
2. BEAM SEAT ELEVATIONS ARE BASED ON AN ASSUMED BEARING THICKNESS OF 4 INCHES. THE CONTRACTOR SHALL ADJUST BEAM SEAT ELEVATIONS BASED ON THE ACTUAL ISOLATION BEARING THICKNESSES.
3. SEE "APPROACH SLAB AND BACKWALL DETAILS" SHEET FOR BACKWALL OPENING DETAILS AND APPROACH SLAB DETAILS.
4. DIMENSIONS AT THE PHASING JOINTS SHALL BE ADJUSTED IN THE FIELD AS NECESSARY AND AS APPROVED BY THE ENGINEER.
5. EXISTING BARS SHALL BE CUT OFF AT THE TOP OF CONCRETE AND NEW DOWELS SHALL BE DRILLED AND GROUTED INTO THE EXISTING FOOTING.
6. PAYMENT FOR DRILLING AND GROUTING DOWELS WILL BE MADE UNDER ITEM NO. 800.9901 "DRILL AND GROUT REINFORCING DOWELS.

SUPERSEDED

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

NORTH ABUTMENT PLAN AND ELEVATION

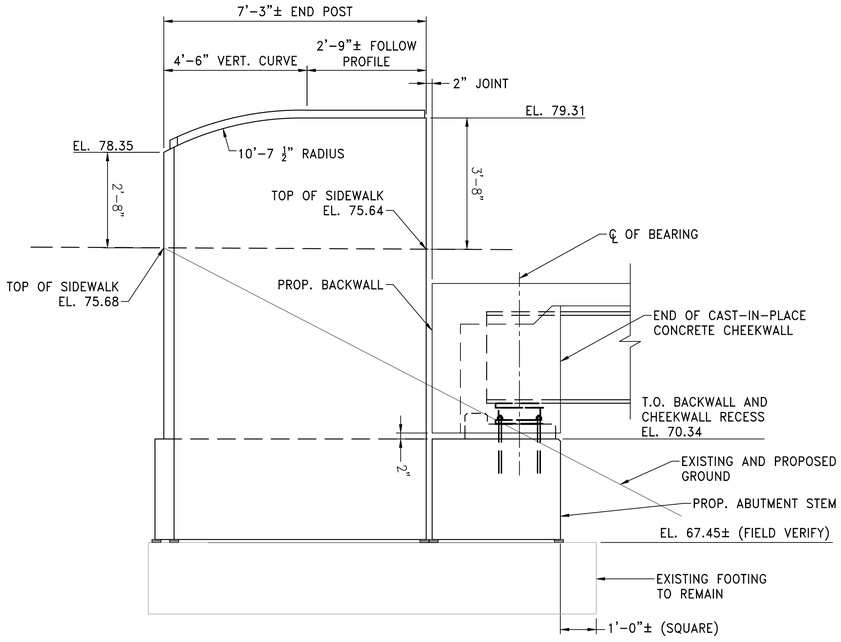
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401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	39	62

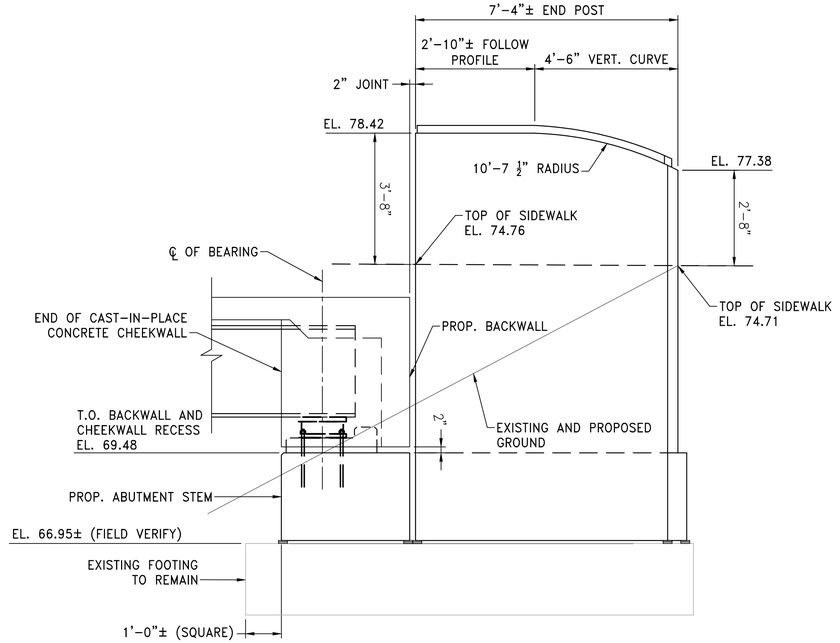
R-3

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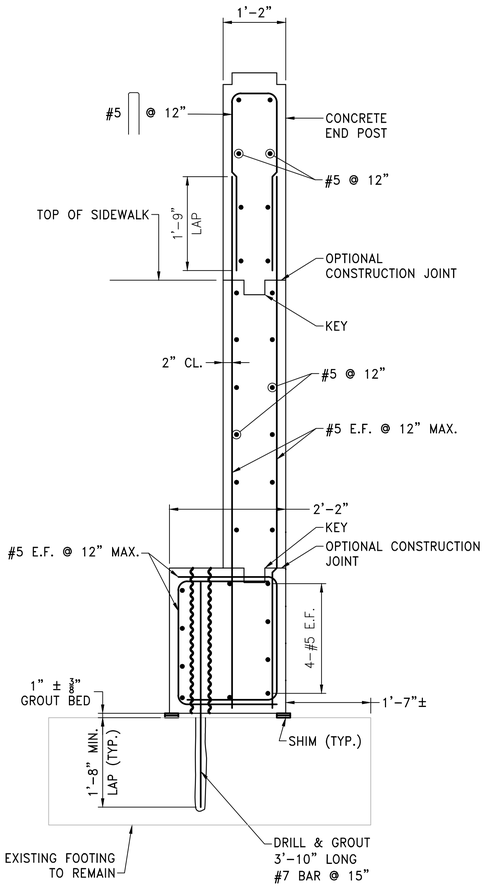
SOUTHEAST RETURN WALL

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



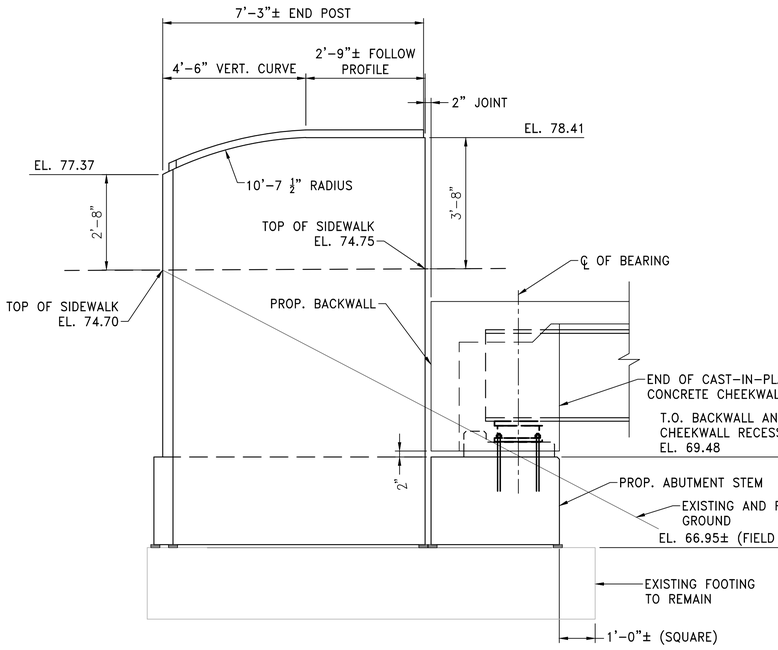
NORTHEAST RETURN WALL

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



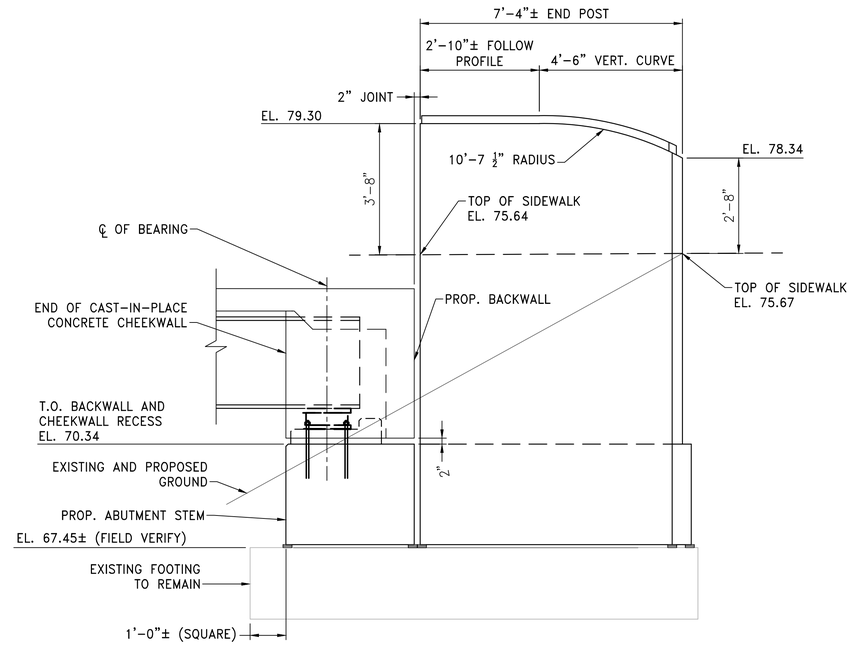
TYPICAL RETURN WALL SECTION

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



NORTHWEST RETURN WALL

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



SOUTHWEST RETURN WALL

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

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3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

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PROVIDENCE COUNTY — RHODE ISLAND

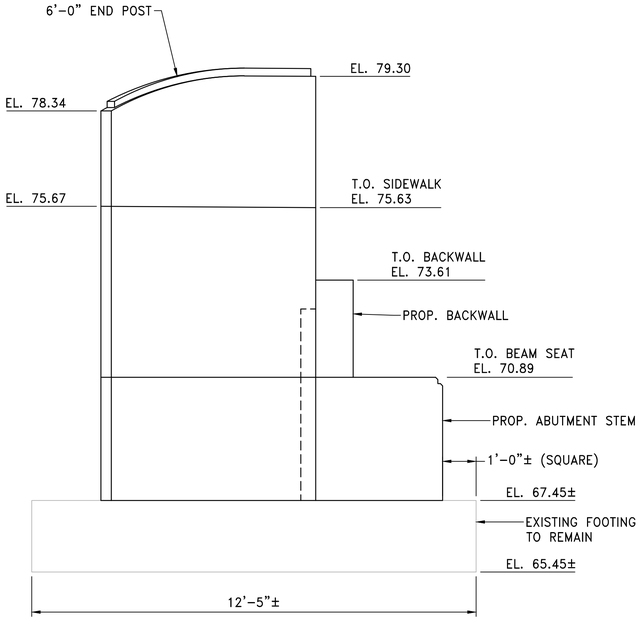
RETURN WALL ELEVATIONS AND SECTION

CHECKED BY _____ DATE _____ SCALE AS NOTED

CHA
227 WEST EXCHANGE STREET
SUITE 101
PROVIDENCE, RI 02903

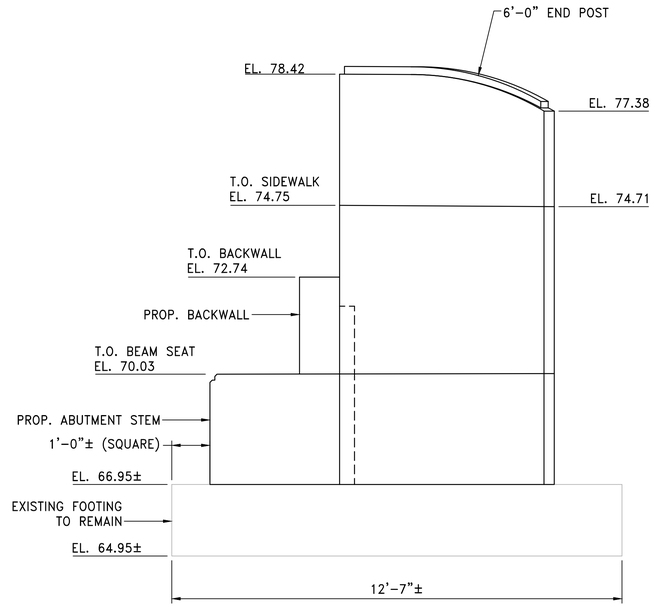
0013V_V1_039_WINGWALL_Rev

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	39	62



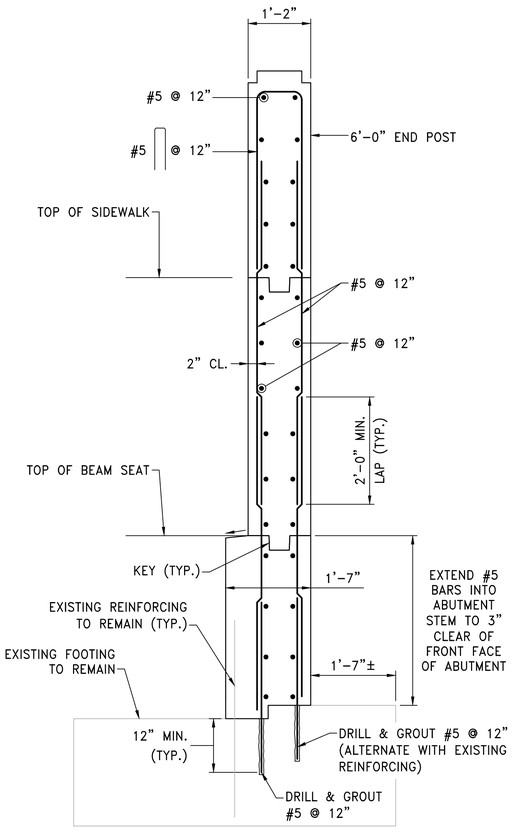
SOUTHEAST RETURN WALL

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



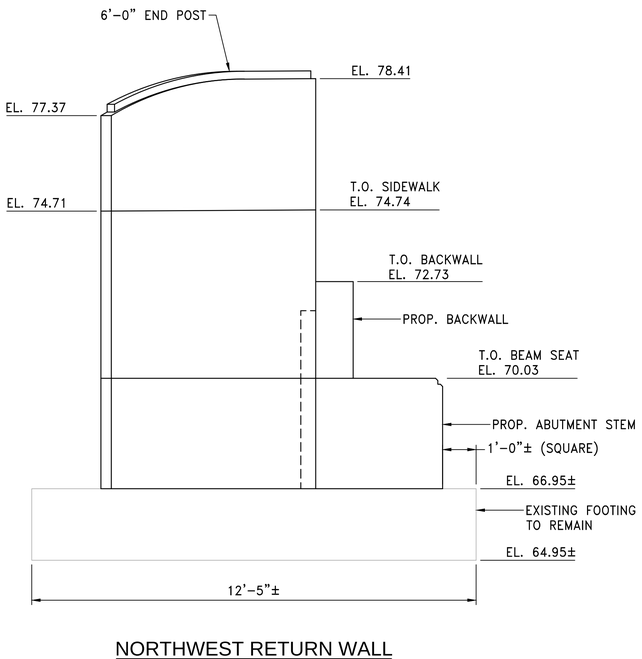
NORTHEAST RETURN WALL

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



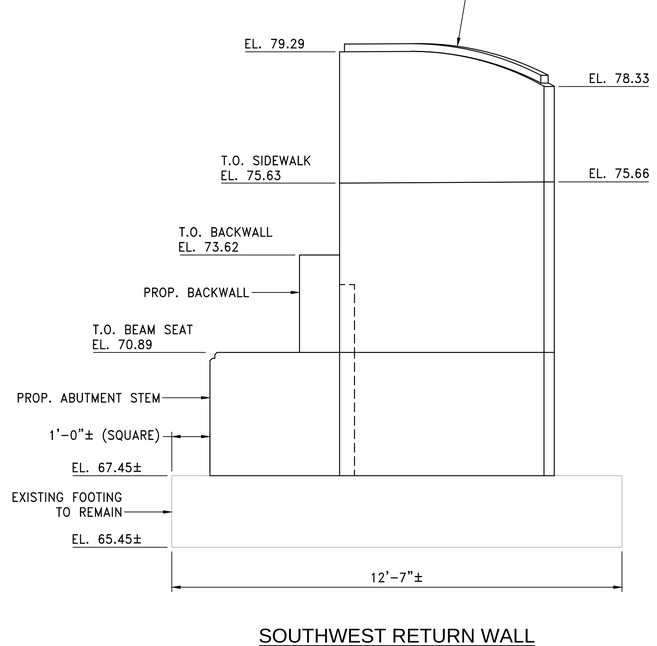
TYPICAL RETURN WALL SECTION

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



NORTHWEST RETURN WALL

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



SOUTHWEST RETURN WALL

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

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
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PROVIDENCE COUNTY RHODE ISLAND

RETURN WALL ELEVATIONS AND SECTION

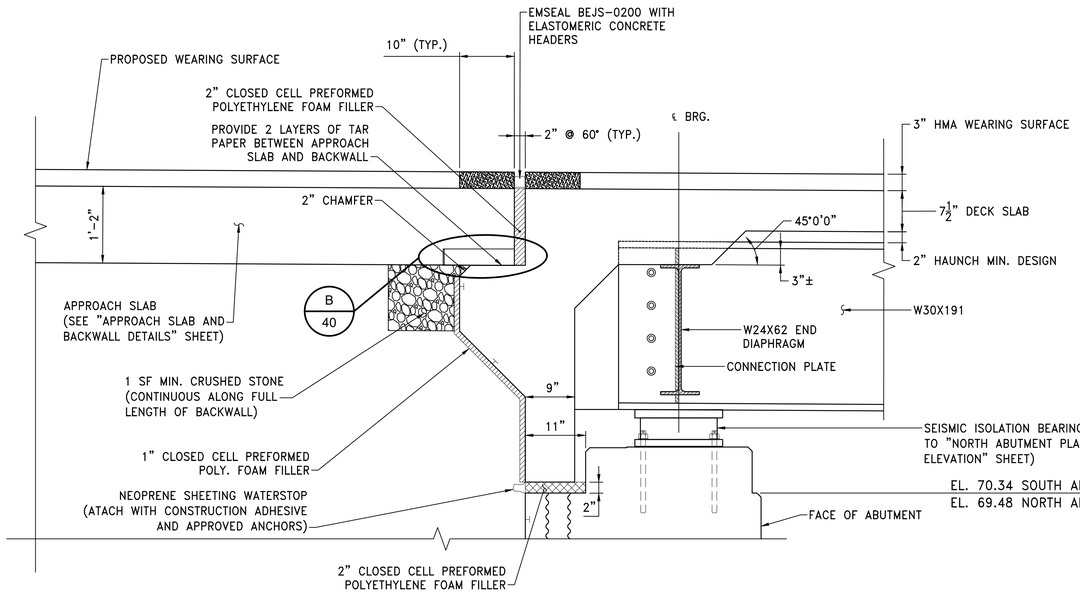
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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	40	62

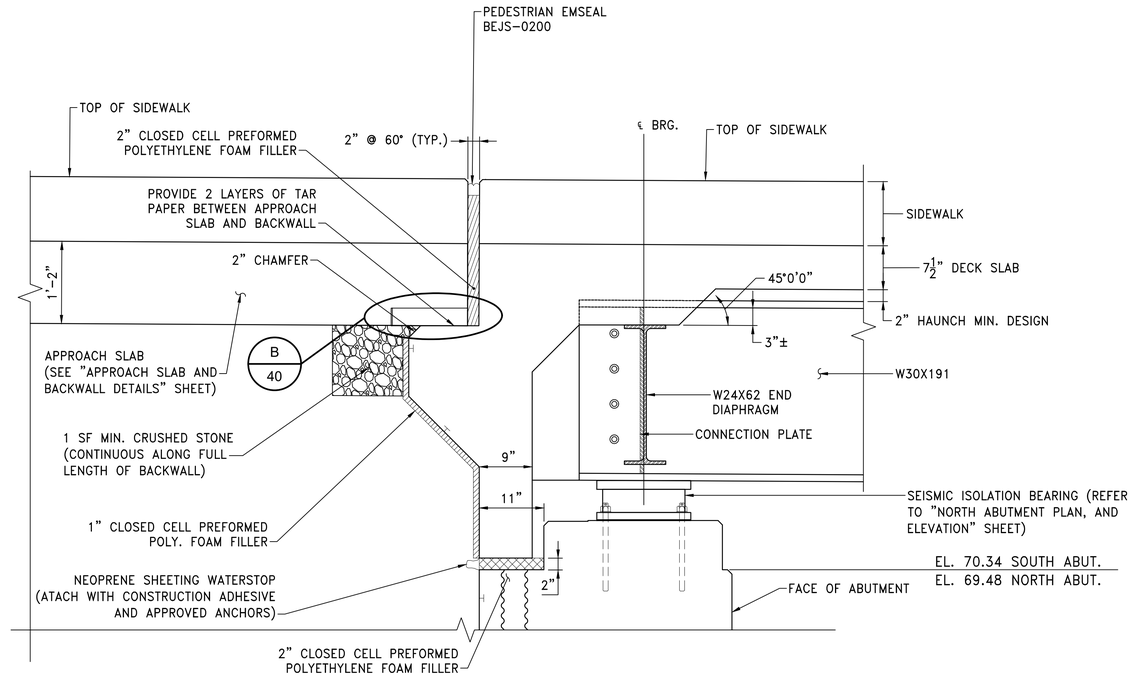
R-3

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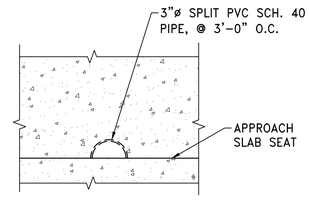
SECTION AT ABUTMENT

SCALE: 1" = 1'-0"



SECTION AT SIDEWALK

SCALE: 1" = 1'-0"



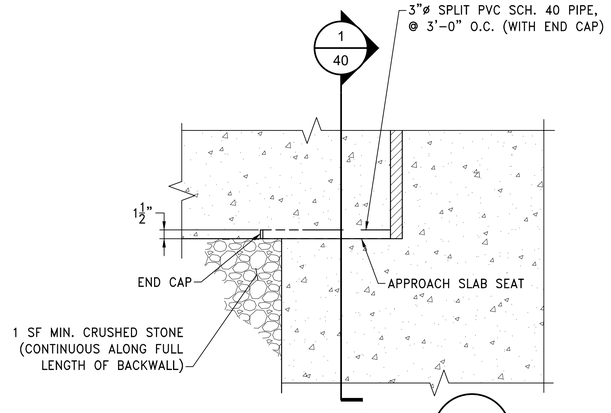
NOTE:

THE COST FOR THE PIPE DRAINS SHALL BE CONSIDERED INCIDENTAL TO, AND INCLUDED WITHIN, THE PAYMENT FOR ITEM 800.9901.

SECTION 1/40

PIPE DRAIN DETAIL

NOT TO SCALE



DETAIL B/40

TEMPERATURE (°F)	JOINT WIDTH (IN)
15	2.28
30	2.18
45	2.09
60	2.00
75	1.91
90	1.82
105	1.72
NOTE: JOINT SHALL ACCOMMODATE A TOTAL MOVEMENT OF 0.97 IN.	

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

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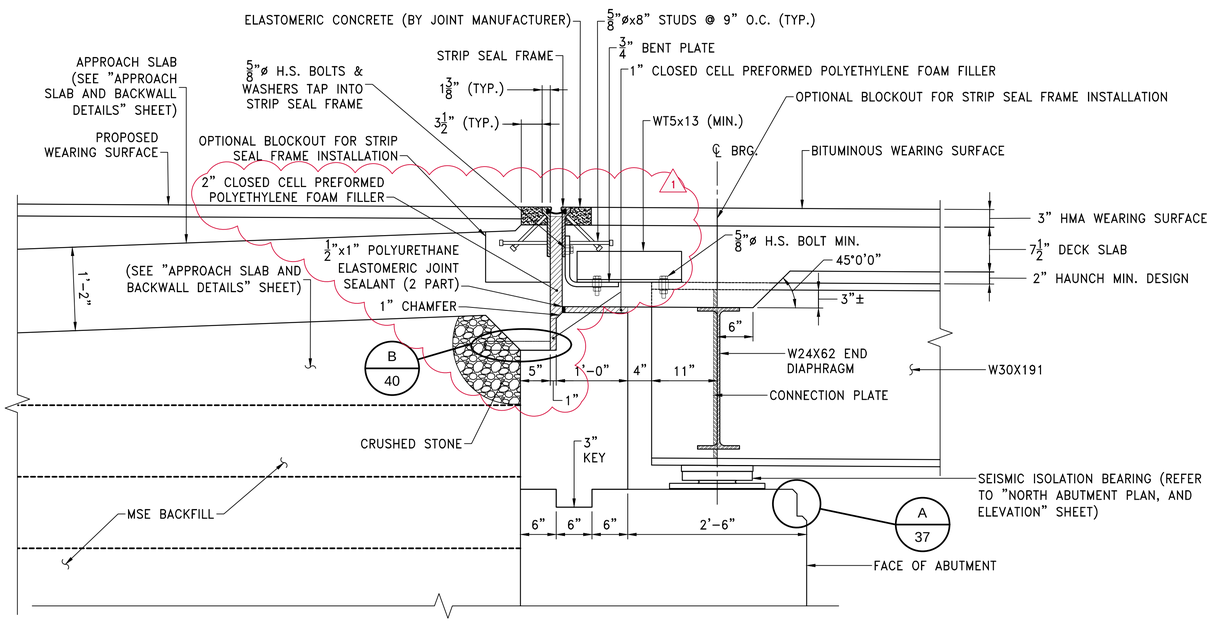
PROVIDENCE COUNTY — RHODE ISLAND

ABUTMENT JOINT DETAILS

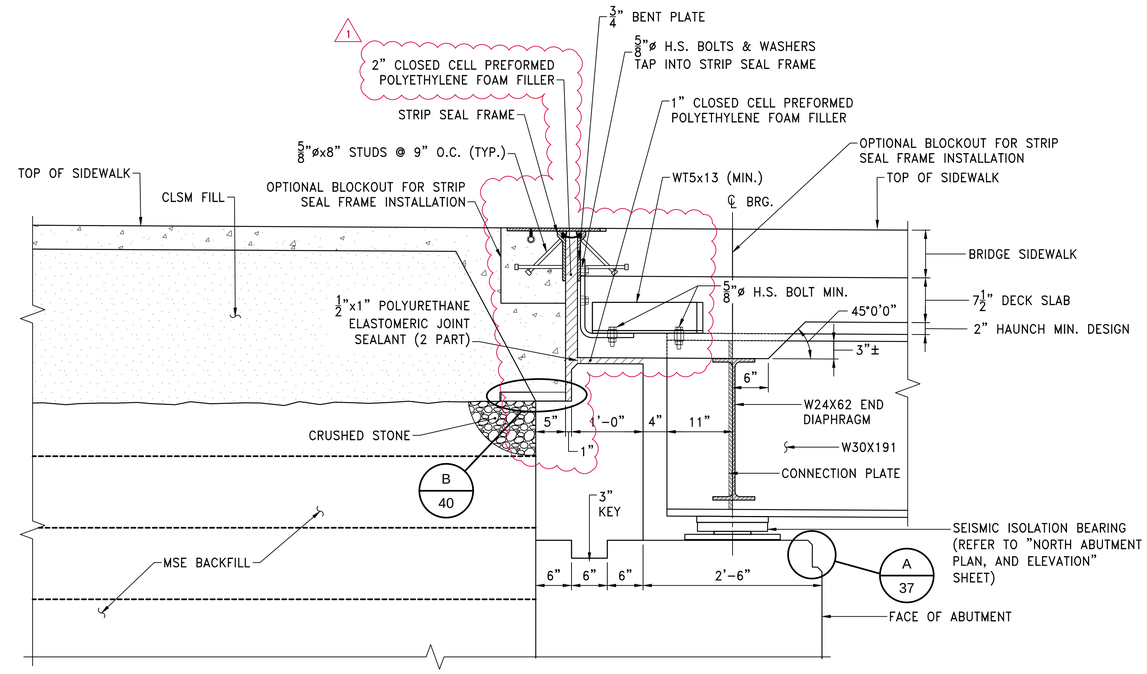
CHECKED BY _____ DATE _____ SCALE AS NOTED

CHA
227 WEST EXCHANGE STREET
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PROVIDENCE, RI 02903

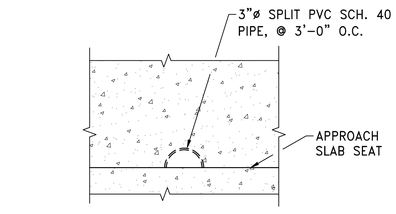
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	40	62



SECTION AT ABUTMENT
SCALE: 1" = 1'-0"



SECTION AT SIDEWALK
SCALE: 1" = 1'-0"

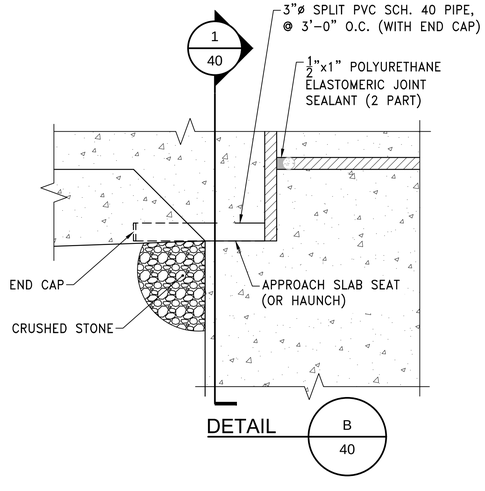


NOTE:

THE COST FOR THE PIPE DRAINS SHALL BE CONSIDERED INCIDENTAL TO, AND INCLUDED WITHIN, THE PAYMENT FOR ITEM 800.9901.

SECTION 1/40

PIPE DRAIN DETAIL
NOT TO SCALE



DETAIL B/40

1

TEMPERATURE (°F)	JOINT WIDTH (IN)
15	2.32
30	2.21
45	2.11
60	2.00
75	1.89
90	1.78
105	1.68
NOTE: JOINT SHALL ACCOMMODATE A TOTAL MOVEMENT OF 0.69 IN.	

REVISIONS		
NO.	DATE	BY
1	11/25/19	ETS

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
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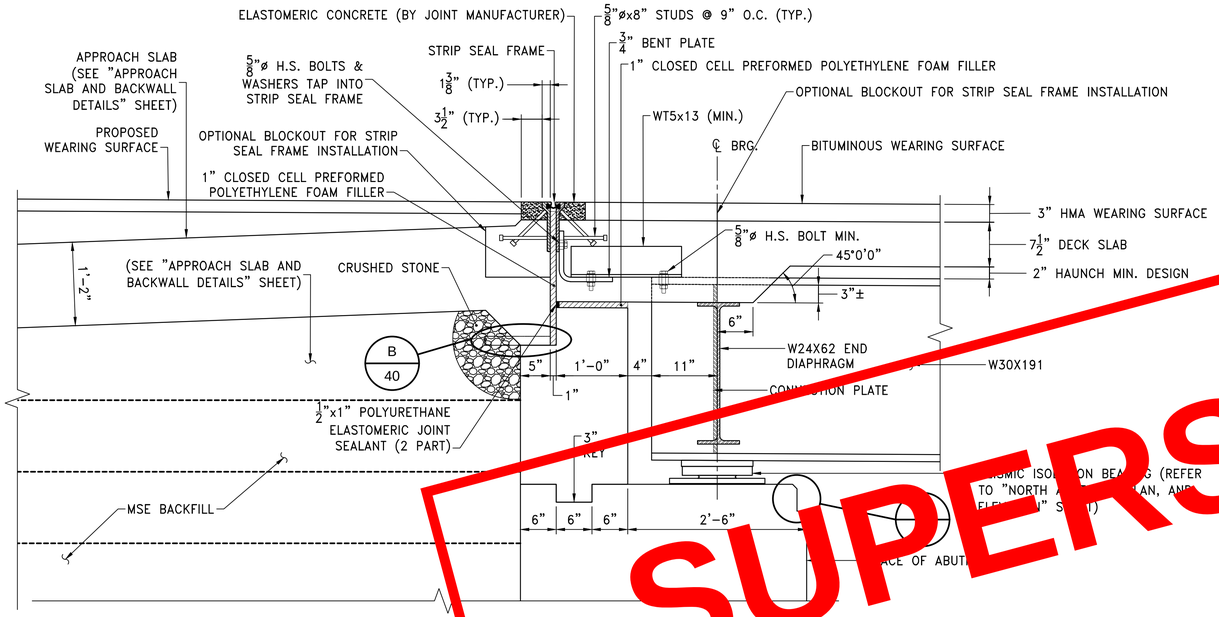
PROVIDENCE COUNTY RHODE ISLAND

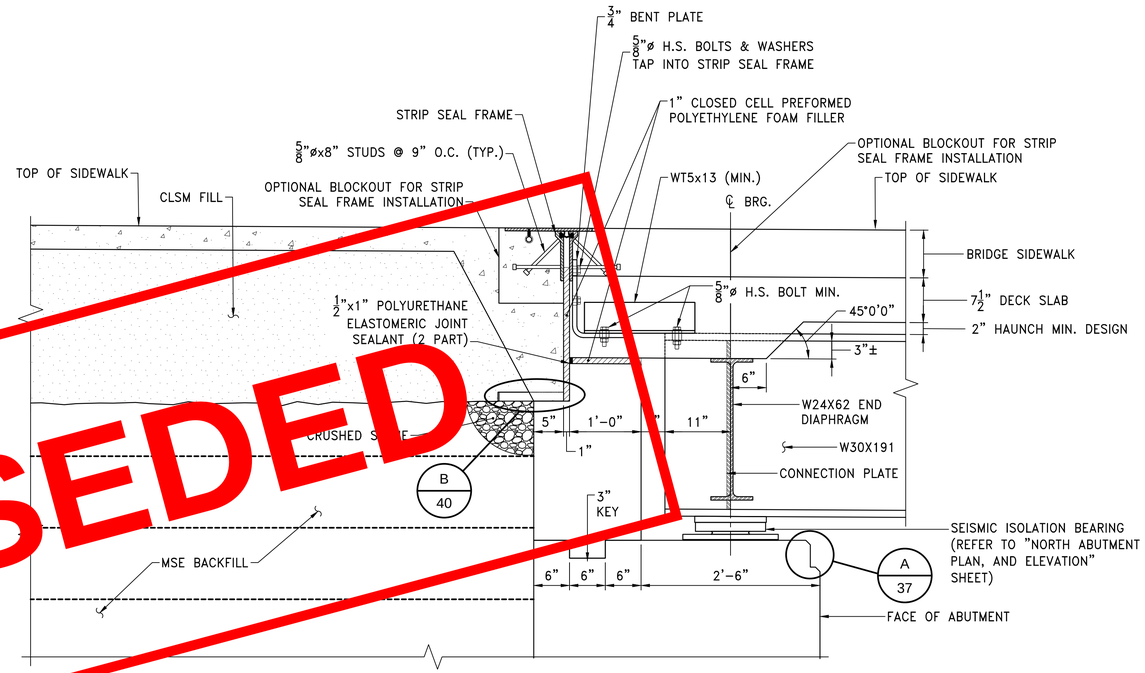
ABUTMENT JOINT DETAILS

CHECKED BY _____ DATE _____ SCALE AS NOTED

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	40	62

SUPERSEDED



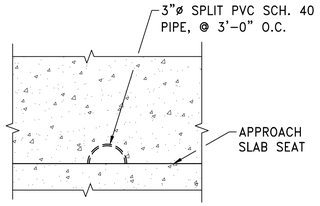


SECTION AT ABUTMENT

SCALE: 1" = 1'-0"

SECTION AT SIDEWALK

SCALE: 1" = 1'-0"



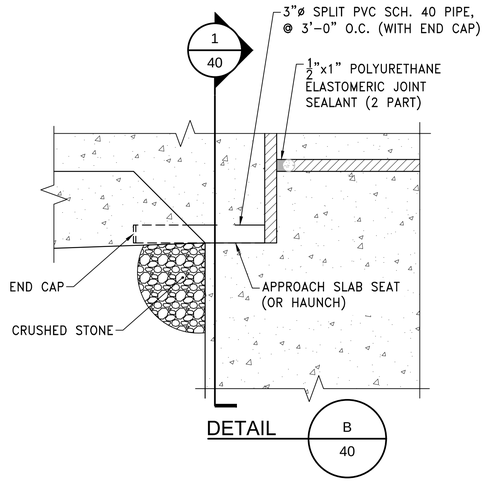
NOTE:

THE COST FOR THE PIPE DRAINS SHALL BE CONSIDERED INCIDENTAL TO, AND INCLUDED WITHIN, THE PAYMENT FOR ITEM 800.9901.

SECTION 1/40

PIPE DRAIN DETAIL

NOT TO SCALE



TEMPERATURE (°F)	JOINT WIDTH (IN)
15	1.32
30	1.21
45	1.11
60	1.00
75	0.89
90	0.78
105	0.68
NOTE: JOINT SHALL ACCOMMODATE A TOTAL MOVEMENT OF 0.69 IN.	

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
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PROVIDENCE COUNTY — RHODE ISLAND

ABUTMENT JOINT DETAILS

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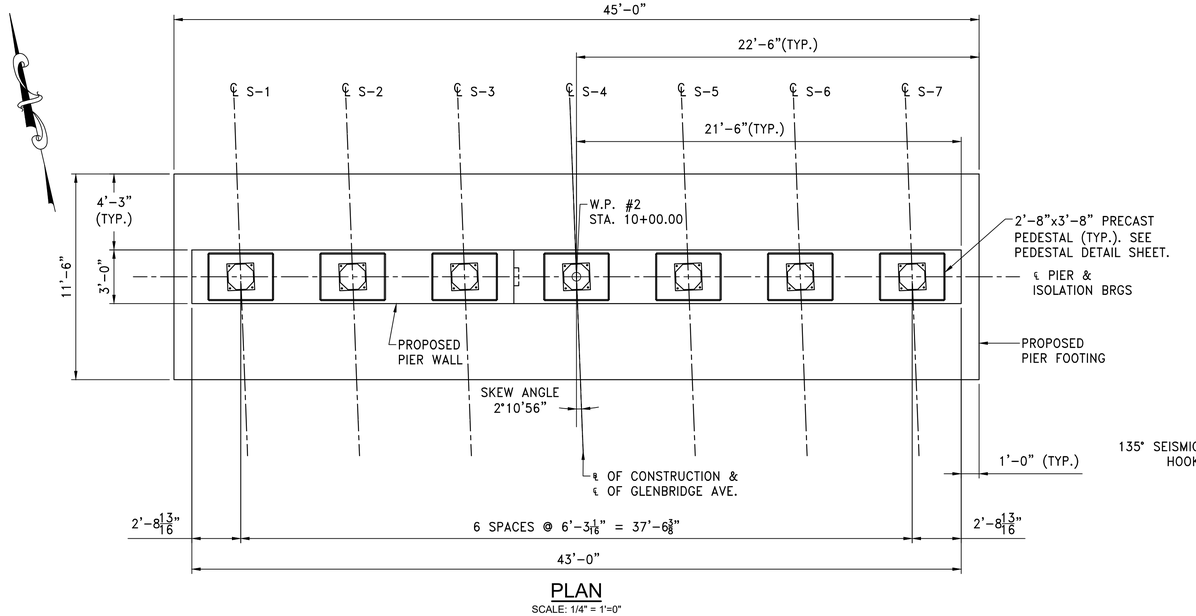
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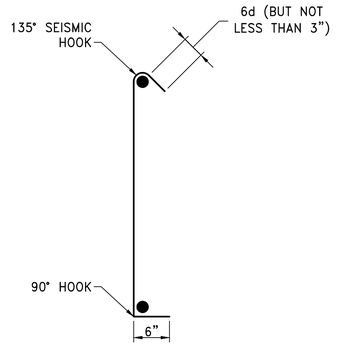
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	41	62

R-3

3

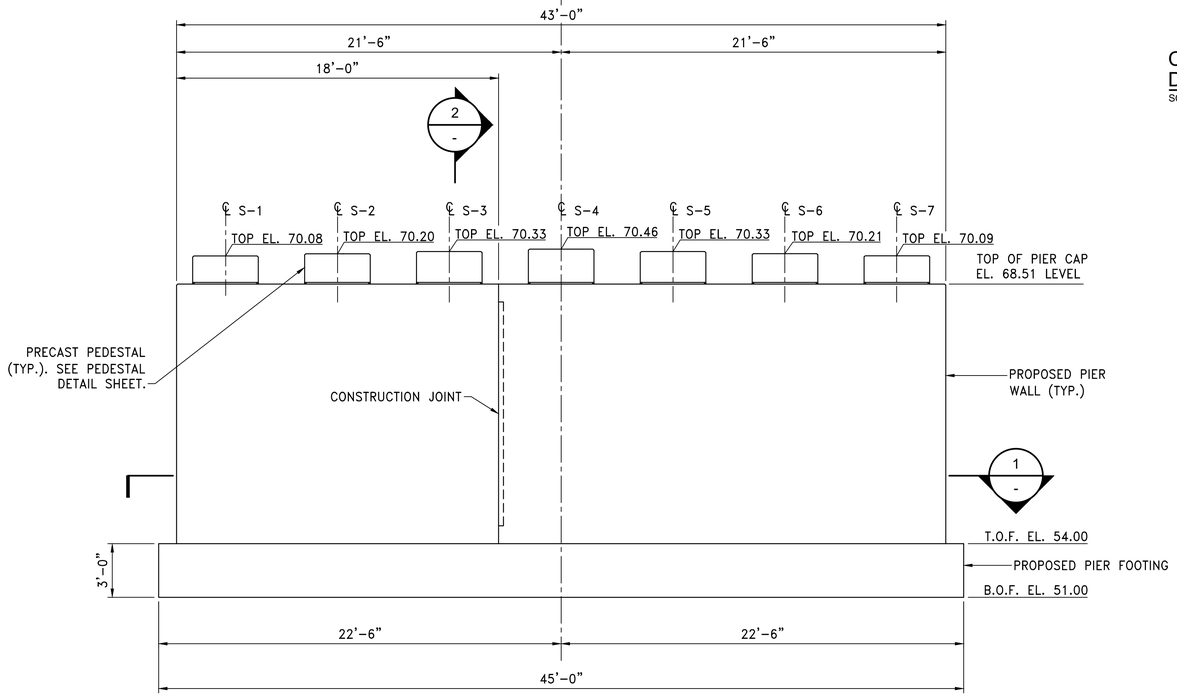


PLAN
SCALE: 1/4" = 1'-0"

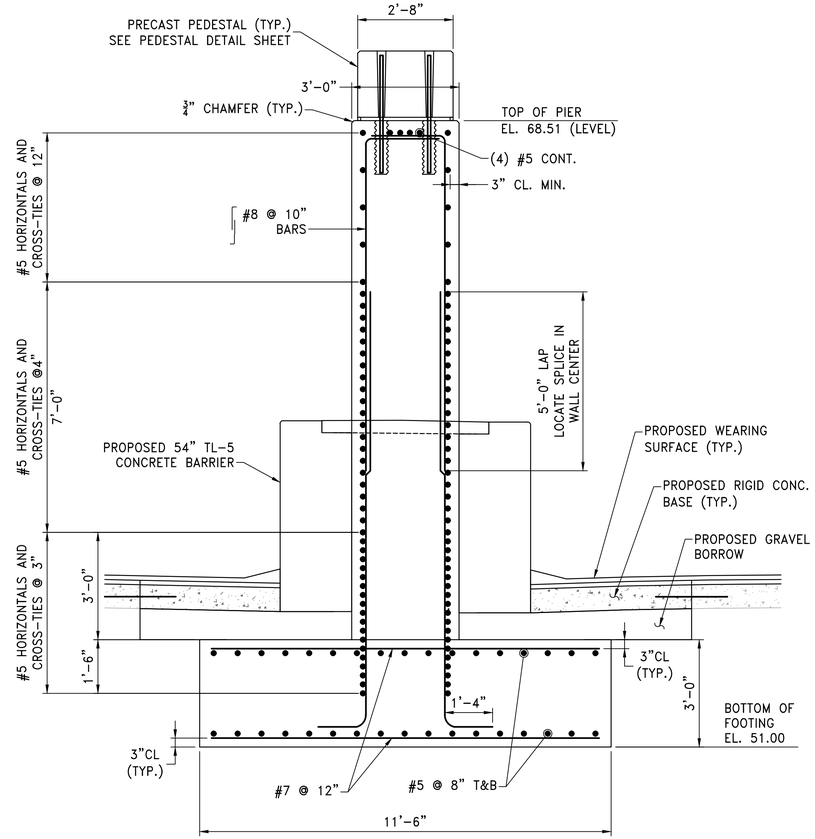


CROSS-TIE DETAIL
SCALE: 1"=1'-0"

A
-

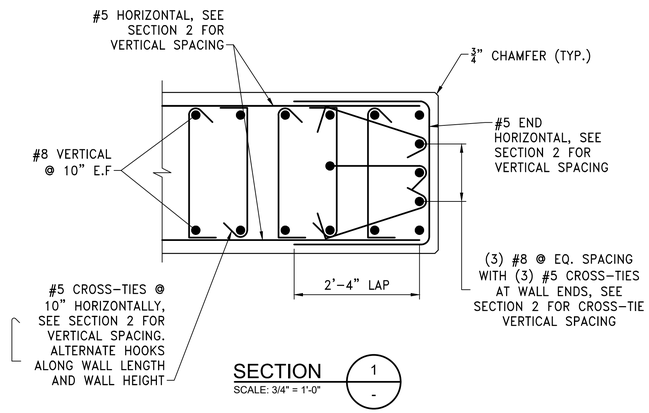


ELEVATION
SCALE: 1/4" = 1'-0"



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

2
-



SECTION
SCALE: 3/4" = 1'-0"

1
-

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

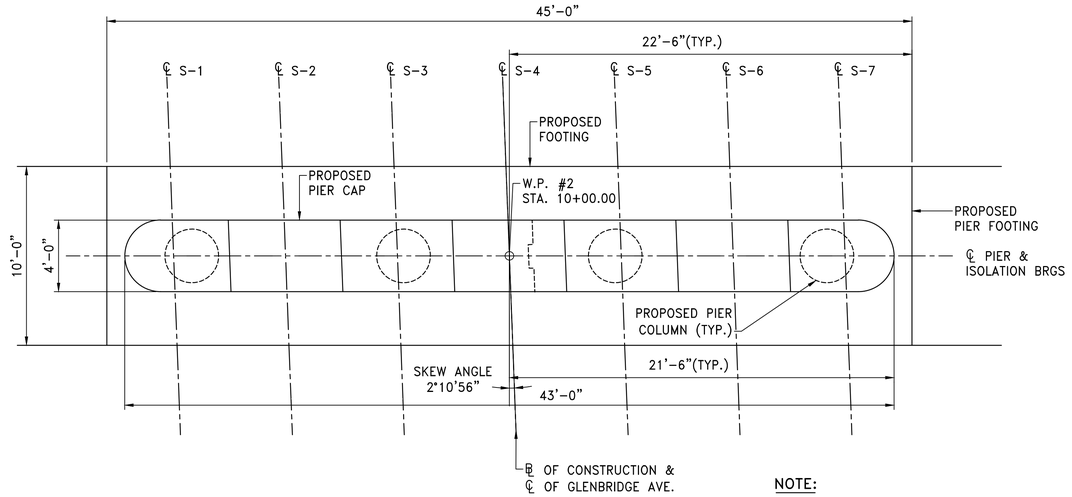
PIER PLAN, ELEVATION AND SECTION

CHECKED BY _____ DATE _____ SCALE AS NOTED

CHA
227 WEST EXCHANGE STREET
SUITE 101
PROVIDENCE, RI 02903

0013V_V1_041_PIER_Rev

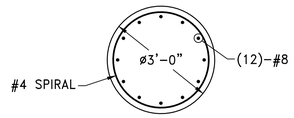
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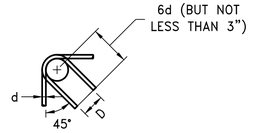
PLAN
SCALE: 1/4" = 1'-0"

NOTE:

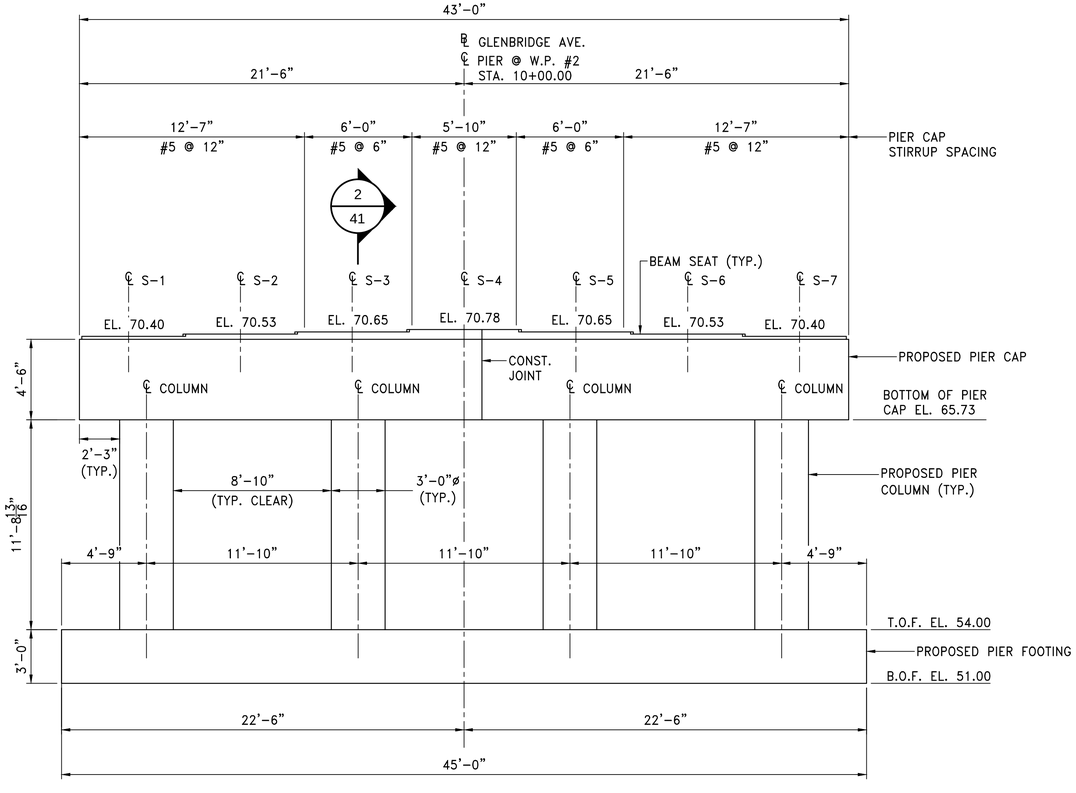
BEAM SEAT ELEVATIONS ARE BASED ON AN ASSUMED BEARING THICKNESS OF 4 INCHES. THE CONTRACTOR SHALL ADJUST BEAM SEAT ELEVATIONS BASED ON THE ACTUAL ISOLATION BEARING THICKNESSES.



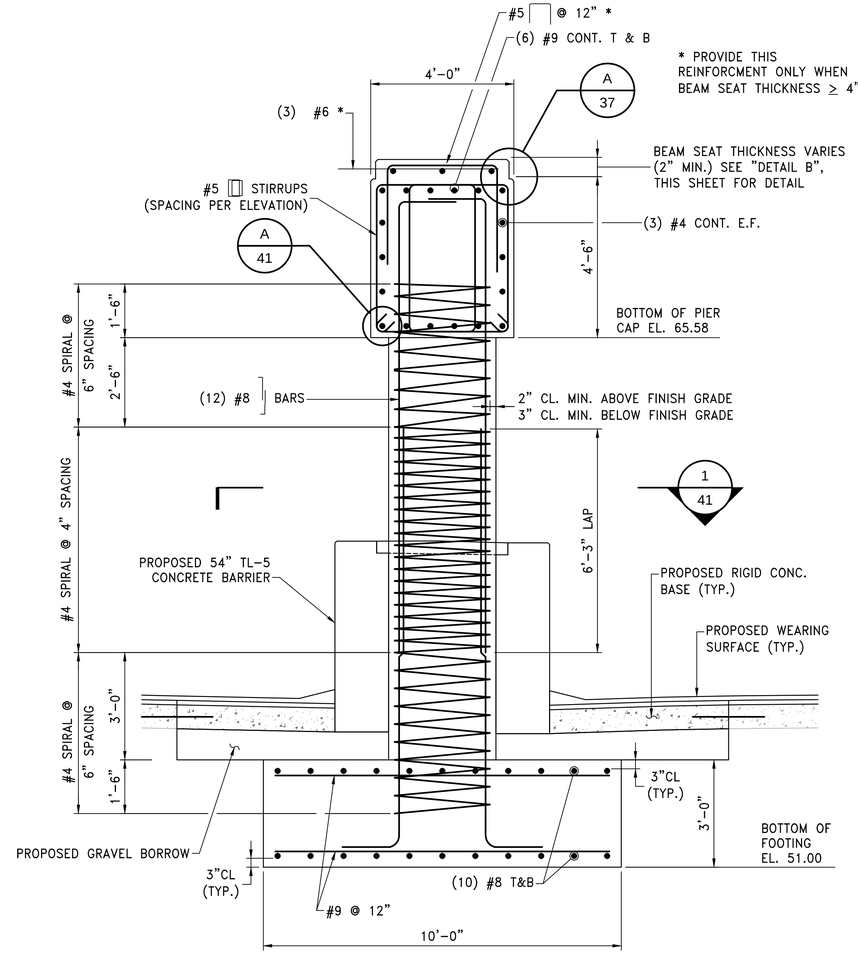
SECTION 1/41
SCALE: 1/2" = 1'-0"



DETAIL A/41
SCALE: 1" = 1'-0"



ELEVATION
SCALE: 1/4" = 1'-0"



SECTION 2/41
SCALE: 1/2" = 1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

PIER PLAN, ELEVATION AND SECTION

CHECKED BY _____ DATE _____ SCALE AS NOTED

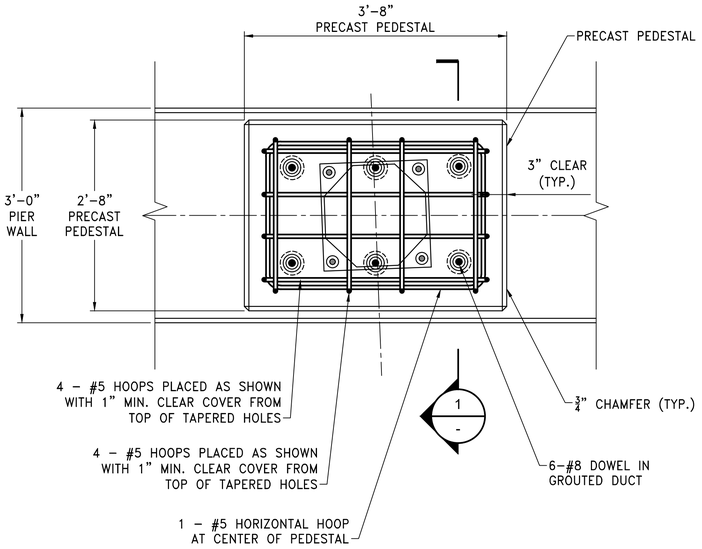
PARE CORPORATION
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8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_041_PIER

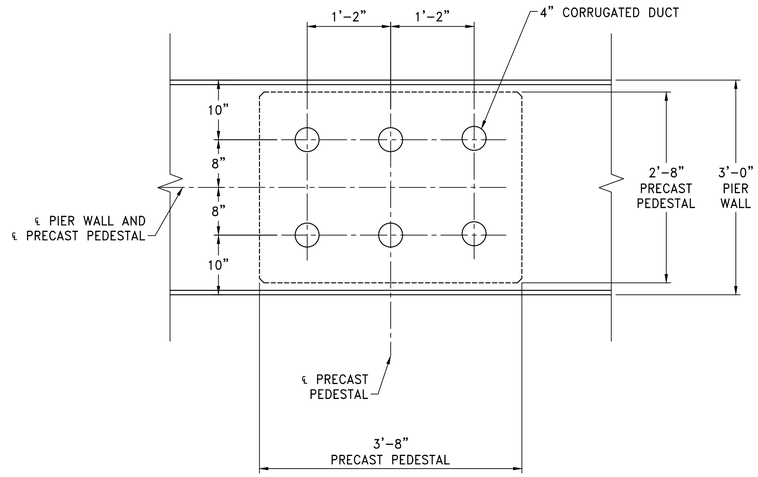
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	41B	62

R-3

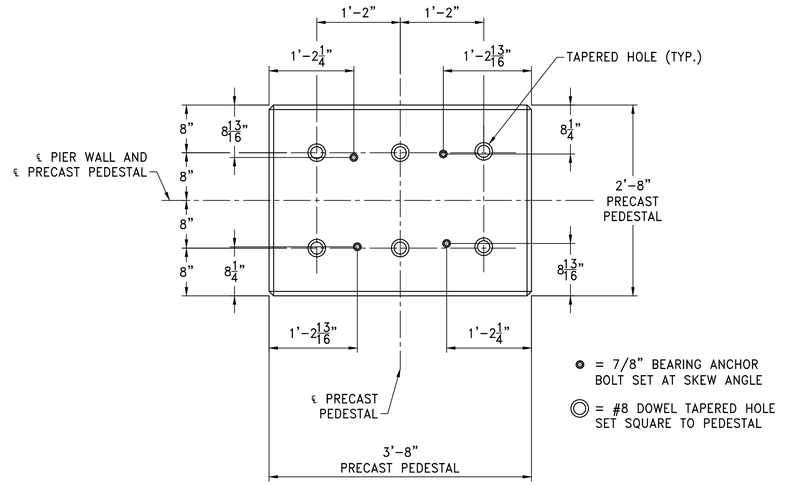
3



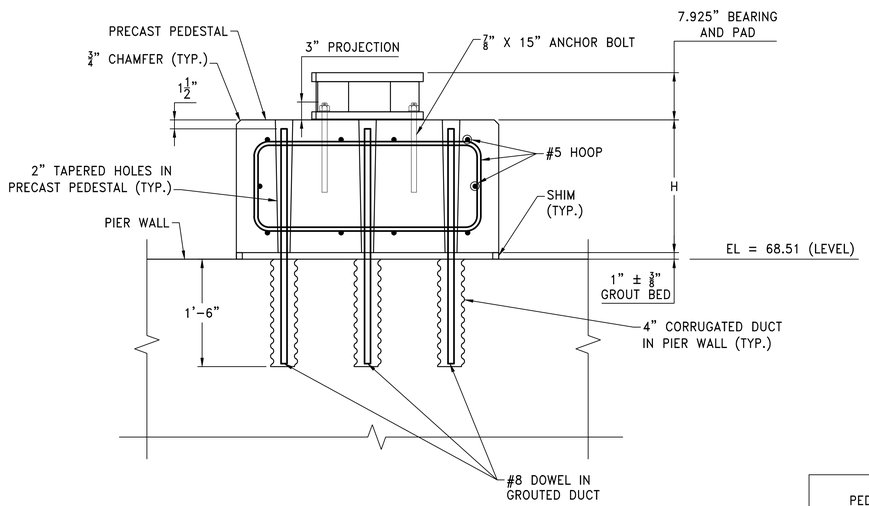
PEDESTAL PLAN
SCALE: 1" = 1'-0"



PIER WALL CORRUGATED INSERT LAYOUT
SCALE: 1" = 1'-0"

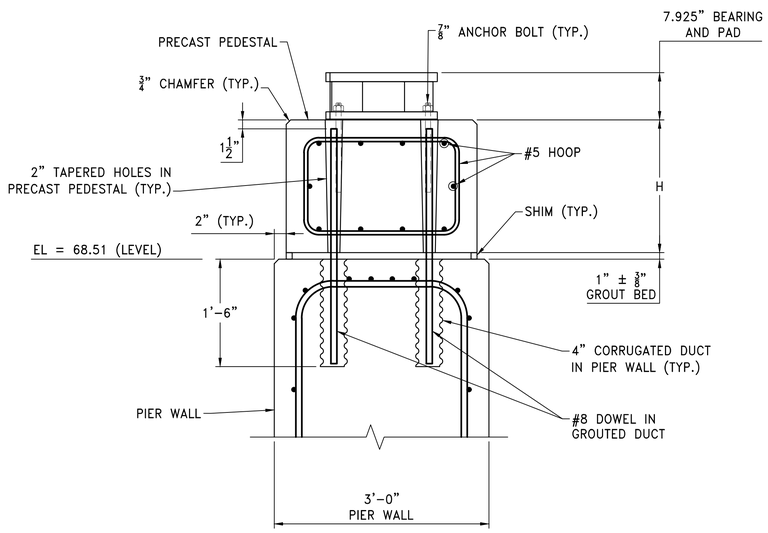


PRECAST PEDESTAL TAPERED HOLE LAYOUT
SCALE: 1" = 1'-0"

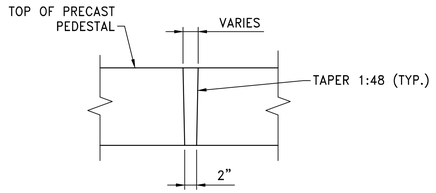


PEDESTAL ELEVATION
SCALE: 1" = 1'-0"

PRECAST PEDESTAL HEIGHT	
BEAM	H
1 & 7	17.75"
2 & 6	19.25"
3 & 5	20.75"
4	22.25"



SECTION 1 -
SCALE: 1" = 1'-0"



TAPERED HOLE DETAIL
SCALE: 1" = 1'-0"

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

PIER PEDESTAL DETAILS

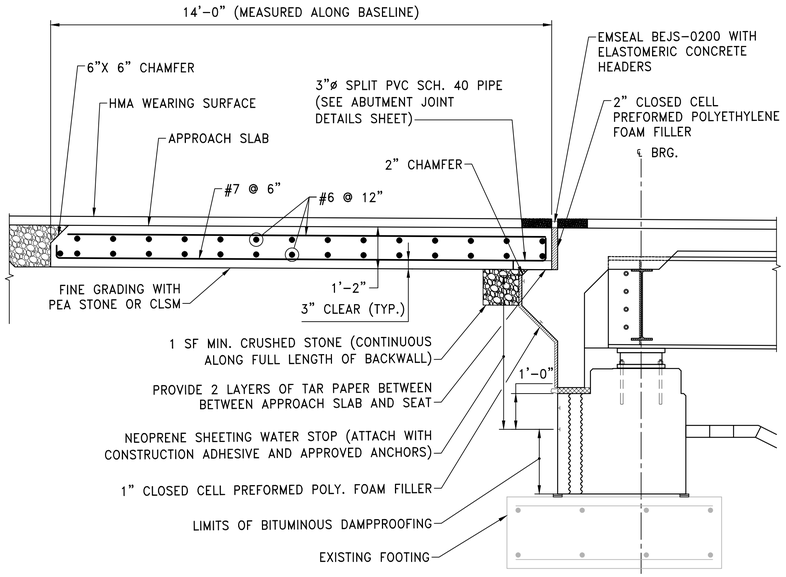
CHECKED BY _____ DATE _____ SCALE AS NOTED

CHA
227 WEST EXCHANGE STREET
SUITE 101
PROVIDENCE, RI 02903

0013V_V1_041B_PIER PEDESTAL DET_Rev

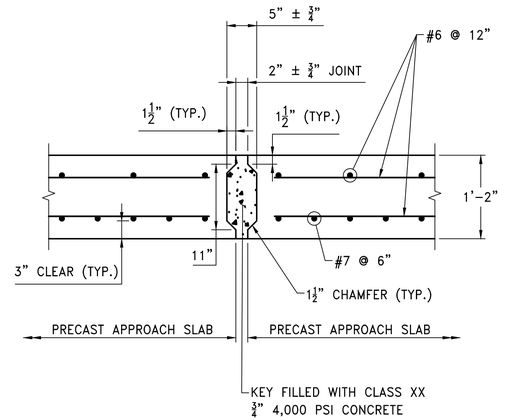
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	42	62

R-3



TYPICAL PRECAST APPROACH SLAB DETAIL

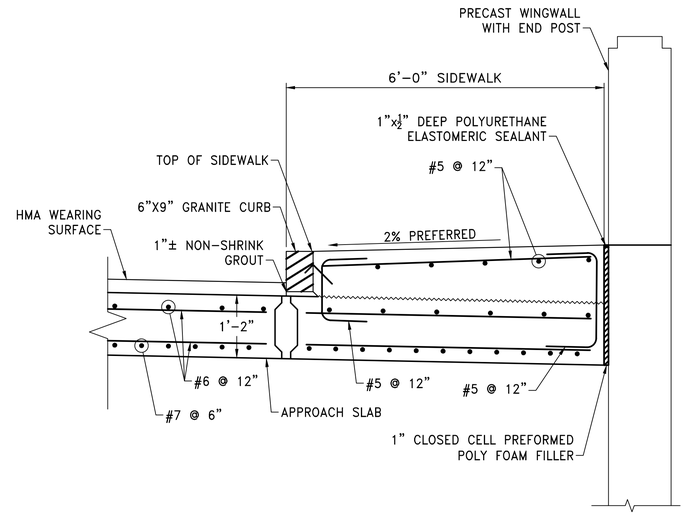
SCALE: 1/2" = 1'-0"



NOTE:
APPROACH SLAB SHALL BE PROVIDED IN SIX PIECES.
SEE ABUTMENT PLANS FOR JOINT LOCATIONS.

PRECAST APPROACH SLAB JOINT DETAIL

SCALE: 1" = 1'-0"



PRECAST APPROACH SLAB WITH INTEGRAL SIDEWALK DETAIL

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

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

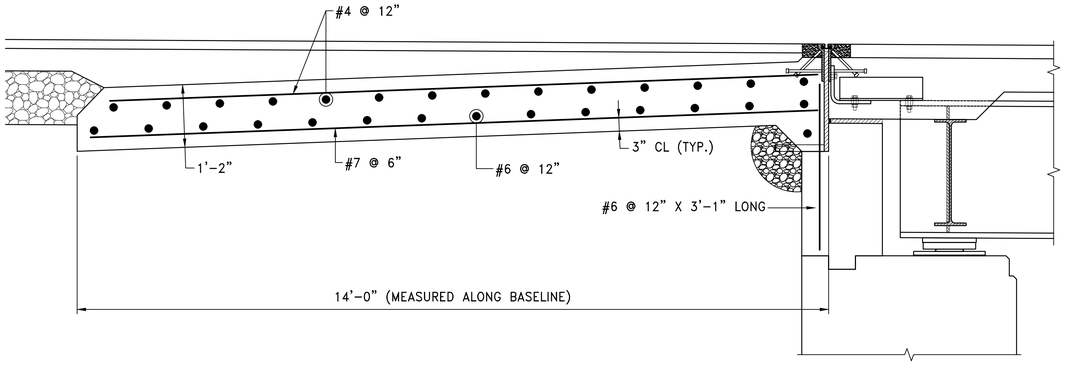
PROVIDENCE COUNTY — RHODE ISLAND

APPROACH SLAB AND BACKWALL DETAILS

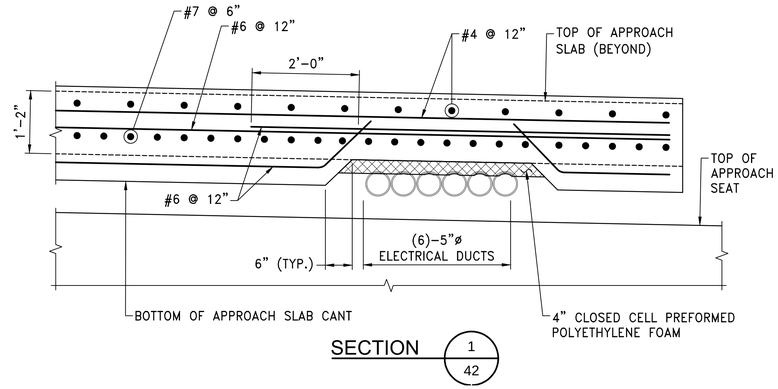
CHECKED BY _____ DATE _____ SCALE AS NOTED

CHA
227 WEST EXCHANGE STREET
SUITE 101
PROVIDENCE, RI 02903

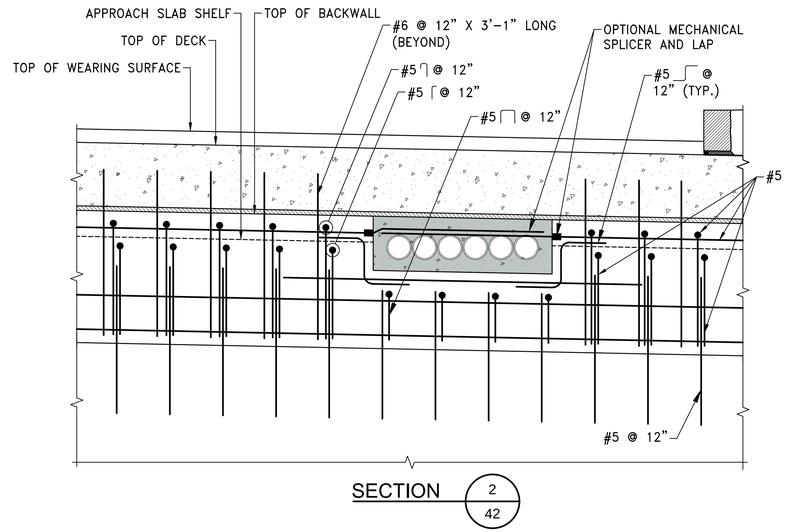
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	42	62



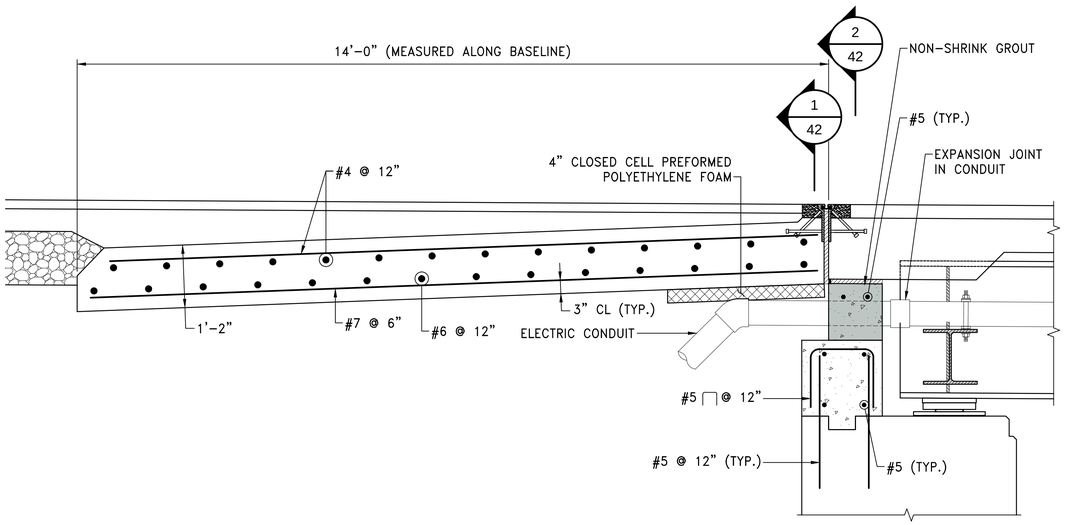
TYPICAL APPROACH SLAB DETAIL
SCALE: 3/4" = 1'-0"



APPROACH SLAB HAUNCH AT UTILITY
SCALE: 3/4" = 1'-0"



REINFORCING AT BACKWALL PENETRATION
SCALE: 3/4" = 1'-0"



SECTION THRU BACKWALL AT UTILITY OPENING
SCALE: 3/4" = 1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

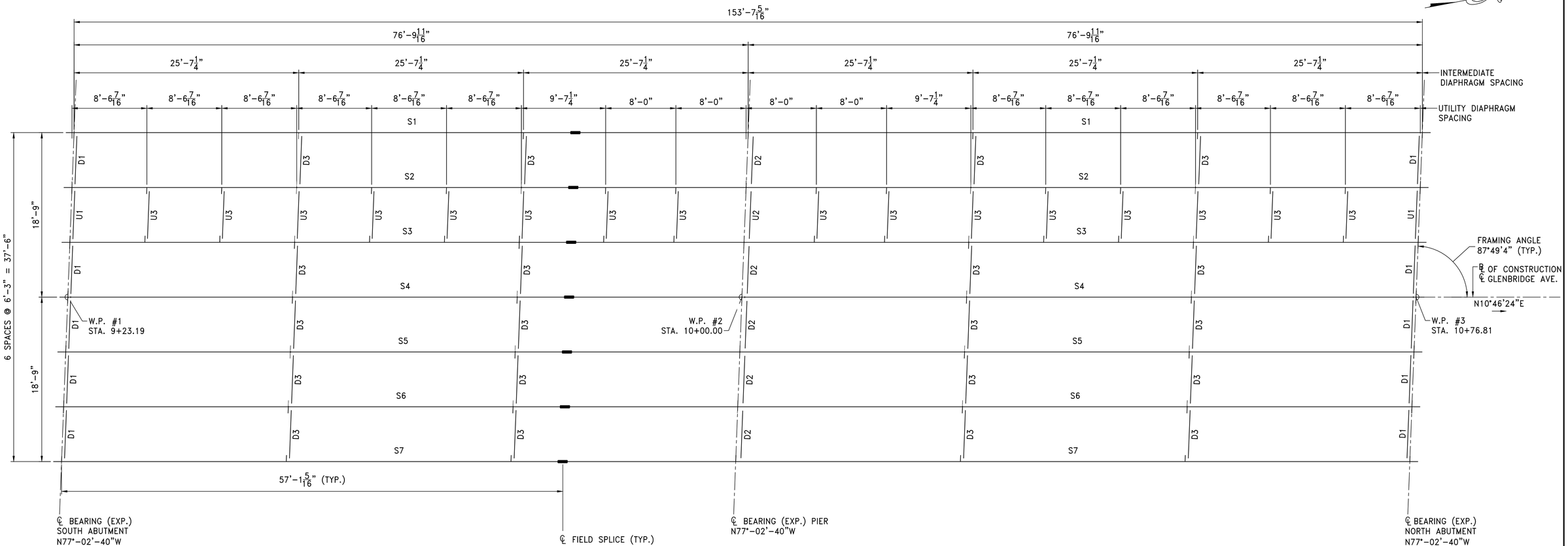
APPROACH SLAB AND BACKWALL DETAILS

CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_042_APPSLAB

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	43	62



REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

FRAMING PLAN

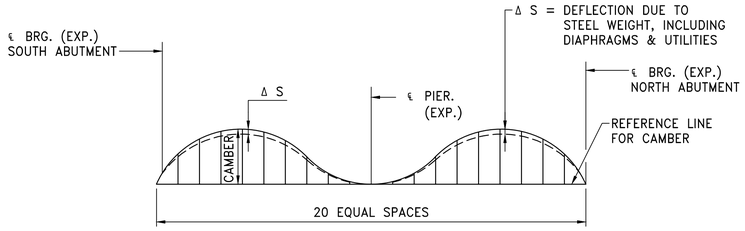
CHECKED BY _____ DATE _____ SCALE 3/16"=1'-0"

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_043_FRAMING

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	44	62

R-3



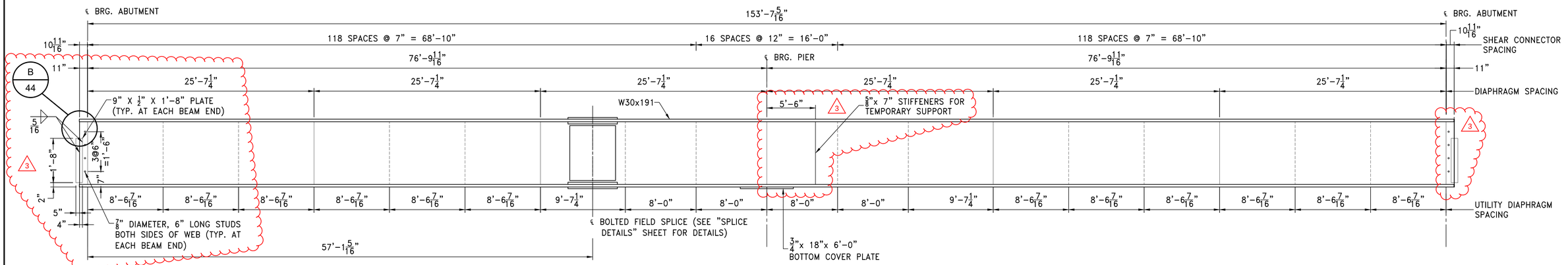
CONTINUOUS SPAN CAMBER DIAGRAM

NOT TO SCALE

COMPUTED CAMBER VALUES (INCHES)

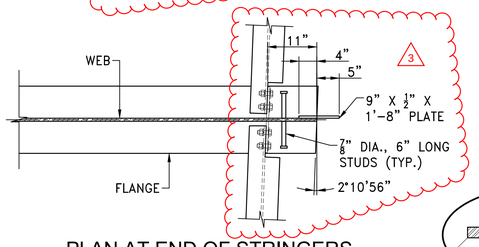
	SPAN No. 1											SPAN No. 2									
STRINGER No.	C.L. BRG (SOUTH)	0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	C.L. PIER	0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	C.L. BRG. (NORTH)
S-1	0.00	0.65	1.12	1.41	1.54	1.49	1.27	0.95	0.68	0.37	0.00	0.09	0.37	0.83	1.16	1.32	1.43	1.42	1.12	0.65	0.00
S-2	0.00	0.50	0.91	1.20	1.32	1.27	1.07	0.76	0.41	0.12	0.00	0.12	0.41	0.75	1.06	1.27	1.32	1.21	0.92	0.50	0.00
S-3	0.00	0.46	0.85	1.11	1.22	1.18	0.99	0.70	0.38	0.11	0.00	0.11	0.38	0.69	0.98	1.17	1.22	1.11	0.85	0.46	0.00
S-4	0.00	0.50	0.87	1.10	1.20	1.16	0.99	0.74	0.53	0.29	0.00	0.07	0.29	0.64	0.90	1.03	1.11	1.10	0.87	0.50	0.00
S-5	0.00	0.51	0.89	1.13	1.22	1.19	1.01	0.75	0.54	0.29	0.00	0.07	0.29	0.66	0.92	1.05	1.14	1.13	0.89	0.51	0.00
S-6	0.00	0.56	0.96	1.22	1.32	1.28	1.09	0.81	0.59	0.31	0.00	0.08	0.32	0.71	0.99	1.13	1.23	1.22	0.96	0.56	0.00
S-7	0.00	0.63	1.09	1.38	1.51	1.46	1.24	0.93	0.67	0.36	0.00	0.09	0.36	0.81	1.13	1.29	1.40	1.38	1.18	0.63	0.00

NOTE: L = SPAN LENGTH



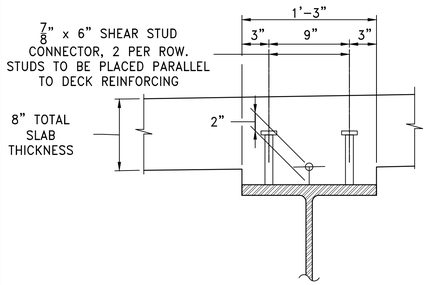
STRINGER ELEVATION

NOT TO SCALE



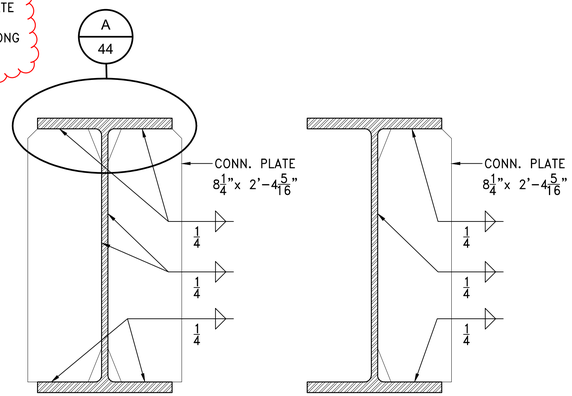
PLAN AT END OF STRINGERS

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



SHEAR CONNECTION DETAIL

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

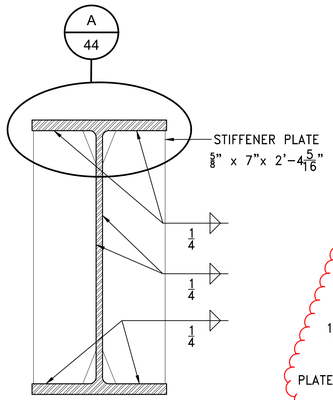


DIAPHRAGM CONNECTION PLATES (INTERIOR)

DIAPHRAGM CONNECTION PLATES (EXTERIOR)

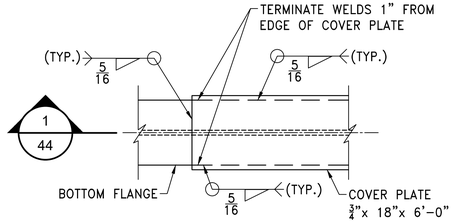
CONNECTION PLATE DETAIL

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



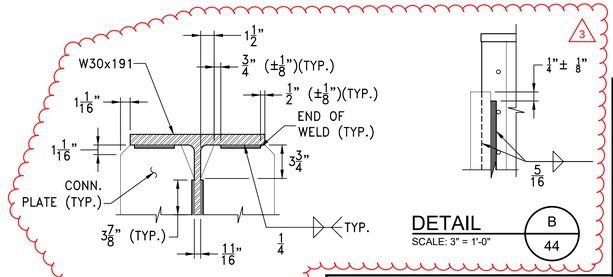
STIFFENER FOR TEMP SUPPORT

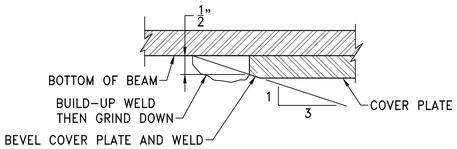
SCALE: 1 1/2" = 1'-0"



BOTTOM FLANGE

SCALE: 1"=1'-0"





SECTION 1/44

SCALE: 1"=1'-0"

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

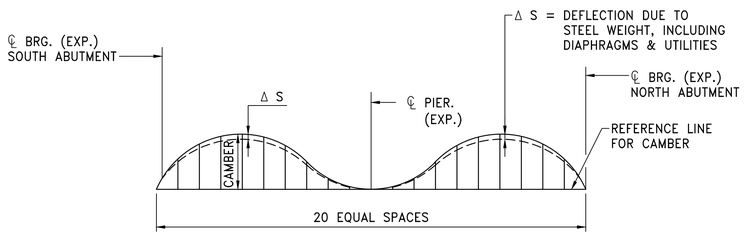
PROVIDENCE COUNTY — RHODE ISLAND

STRINGER ELEVATION & DETAILS

CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	44	62



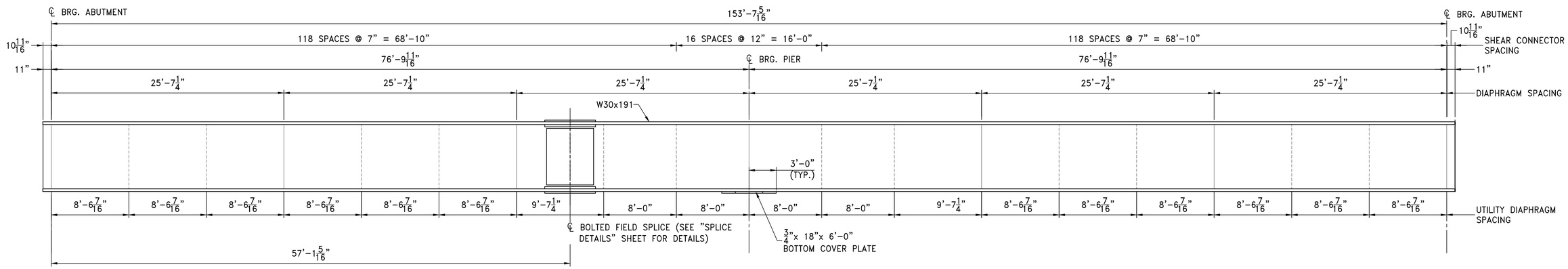
CONTINUOUS SPAN CAMBER DIAGRAM

NOT TO SCALE

COMPUTED CAMBER VALUES (INCHES)

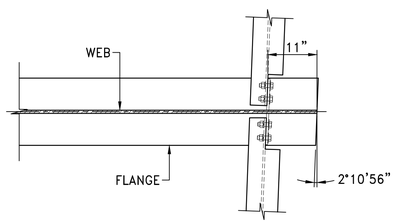
	SPAN No. 1										SPAN No. 2									
STRINGER No.	C.L. BRG (SOUTH)	0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	C.L. PIER	0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	C.L. BRG. (NORTH)
S-1	0.00	0.65	1.12	1.41	1.54	1.49	1.27	0.95	0.68	0.37	0.00	0.09	0.37	0.83	1.16	1.32	1.43	1.42	1.12	0.65	0.00
S-2	0.00	0.50	0.91	1.20	1.32	1.27	1.07	0.76	0.41	0.12	0.00	0.12	0.41	0.75	1.06	1.27	1.32	1.21	0.92	0.50	0.00
S-3	0.00	0.46	0.85	1.11	1.22	1.18	0.99	0.70	0.38	0.11	0.00	0.11	0.38	0.69	0.98	1.17	1.22	1.11	0.85	0.46	0.00
S-4	0.00	0.50	0.87	1.10	1.20	1.16	0.99	0.74	0.53	0.29	0.00	0.07	0.29	0.64	0.90	1.03	1.11	1.10	0.87	0.50	0.00
S-5	0.00	0.51	0.89	1.13	1.22	1.19	1.01	0.75	0.54	0.29	0.00	0.07	0.29	0.66	0.92	1.05	1.14	1.13	0.89	0.51	0.00
S-6	0.00	0.56	0.96	1.22	1.32	1.28	1.09	0.81	0.59	0.31	0.00	0.08	0.32	0.71	0.99	1.13	1.23	1.22	0.96	0.56	0.00
S-7	0.00	0.63	1.09	1.38	1.51	1.46	1.24	0.93	0.67	0.36	0.00	0.09	0.36	0.81	1.13	1.29	1.40	1.38	1.18	0.63	0.00

NOTE: L = SPAN LENGTH



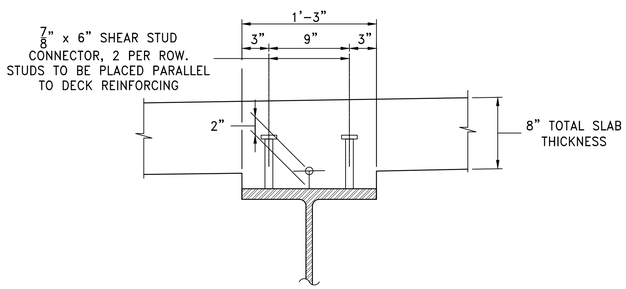
STRINGER ELEVATION

NOT TO SCALE



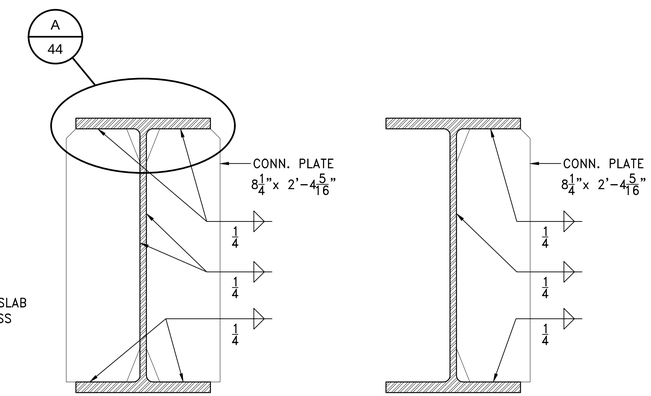
PLAN AT END OF STRINGERS

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



SHEAR CONNECTION DETAIL

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

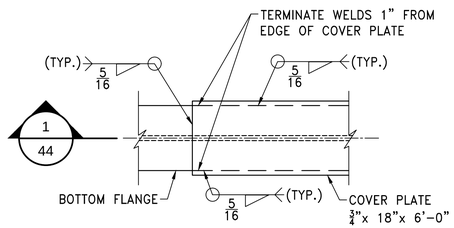


DIAPHRAGM CONNECTION PLATES (INTERIOR)

DIAPHRAGM CONNECTION PLATES (EXTERIOR)

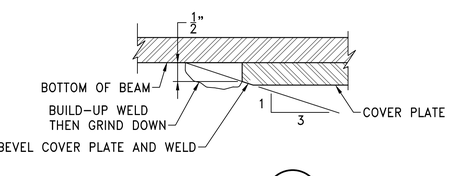
CONNECTION PLATE DETAIL

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



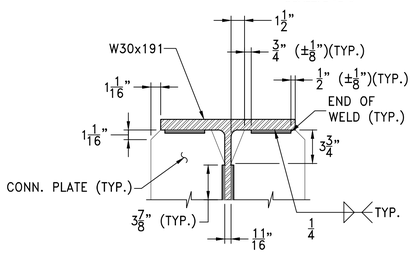
BOTTOM FLANGE

SCALE: 1"=1'-0"



SECTION 1/44

SCALE: 1"=1'-0"



DETAIL A/44

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

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

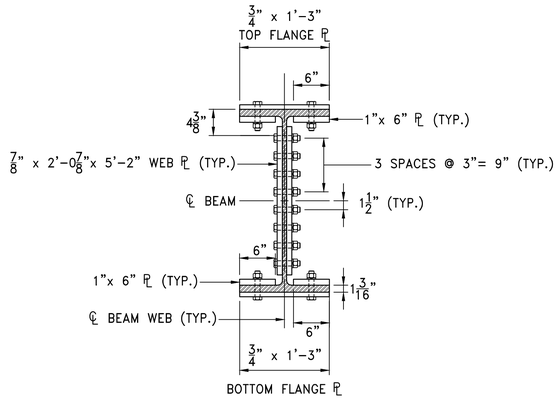
PROVIDENCE COUNTY — RHODE ISLAND

STRINGER ELEVATION & DETAILS

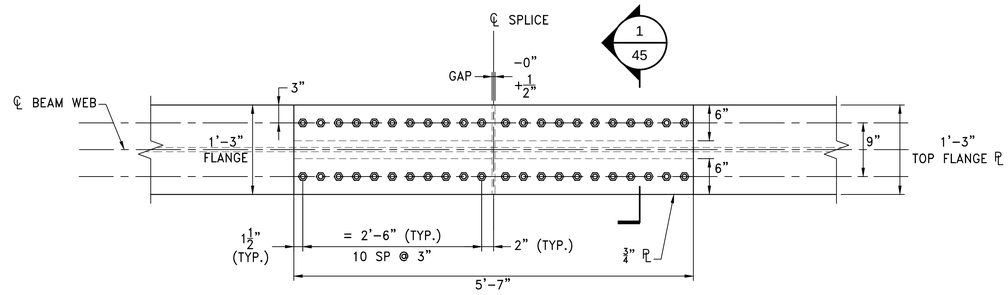
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

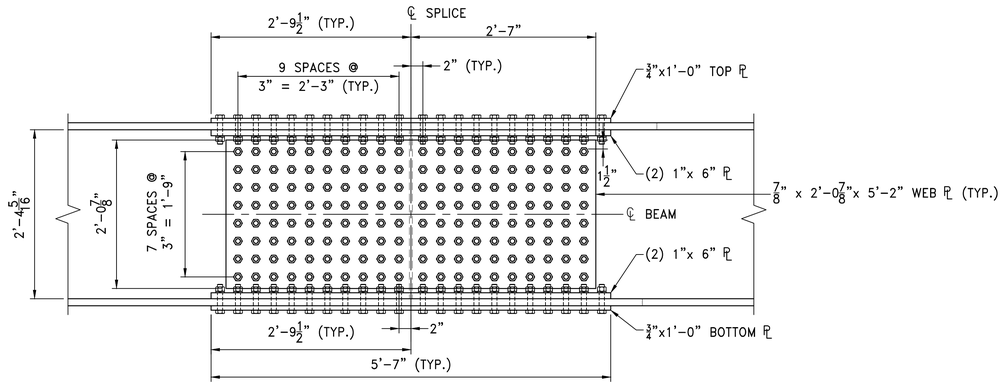
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	45	62



SECTION 1/45



PLAN - TOP FLANGE SHOWN
(BOTTOM FLANGE SIMILAR)



ELEVATION

NOTES:

1. BOLTED FIELD SPLICES SHALL BE CONSIDERED SLIP-CRITICAL CONNECTIONS WITH CLASS B FAYING SURFACES.
2. ALL BOLTS SHALL BE ⅞"ø ASTM A325 HIGH STRENGTH BOLT IN 15/16"ø HOLE.
3. THICKNESS DIFFERENCES OF 1/16" OR LESS DO NOT REQUIRE FILLER PLATES. FILLER PLATES SHALL CONFORM TO AASHTO M 270 GRADE 36 OR 50.
4. ONE ROW OF STUD SHEAR CONNECTORS SHALL BE PLACED ALONG THE CENTERLINE OF THE TOP FLANGE SPLICE PLATES.

BOLTED FIELD SPLICE DETAILS

SCALE: 1" = 1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

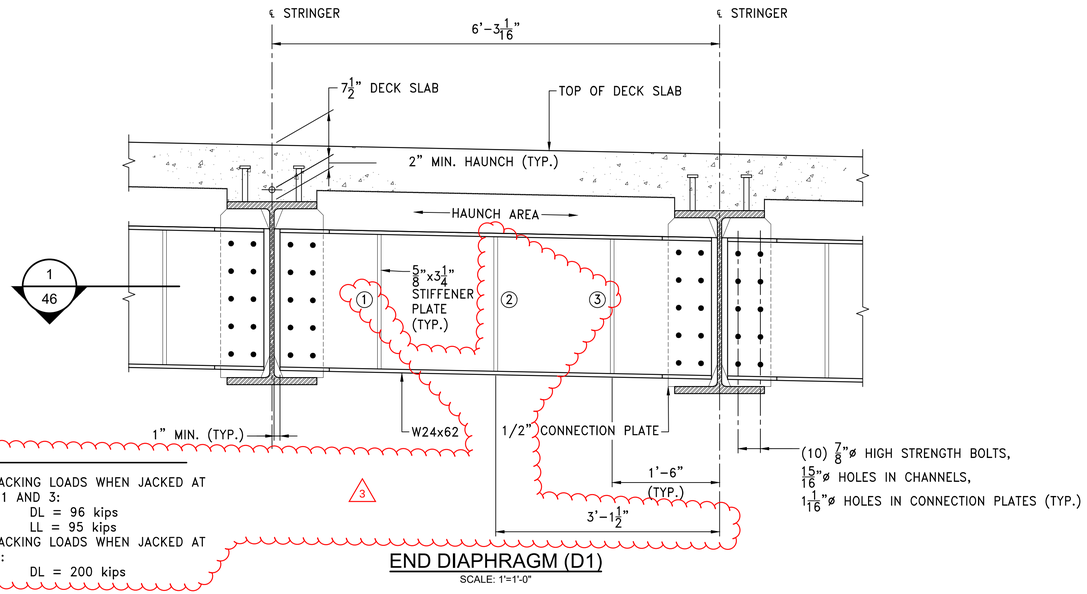
SPLICE DETAILS

CHECKED BY _____ DATE _____ SCALE 1"=1'-0"

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
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401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	46	62

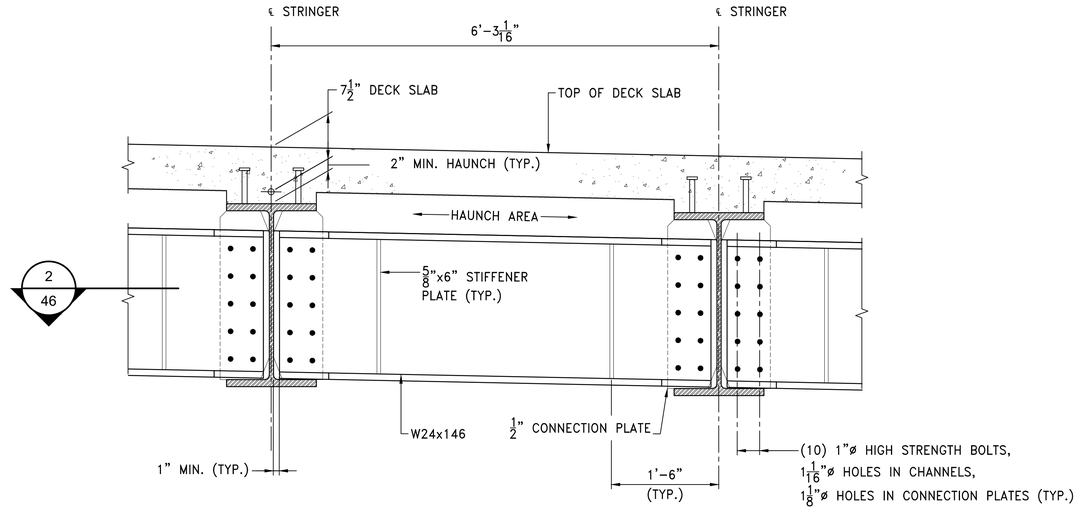
R-3



NOTE:

FACTORED JACKING LOADS WHEN JACKED AT STIFFENERS 1 AND 3:
DL = 96 kips
LL = 95 kips
FACTORED JACKING LOADS WHEN JACKED AT STIFFENER 2:
DL = 200 kips

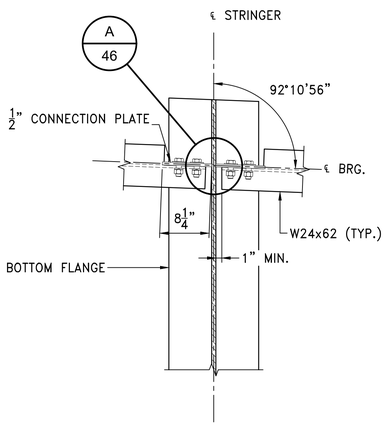
END DIAPHRAGM (D1)
SCALE: 1"=1'-0"



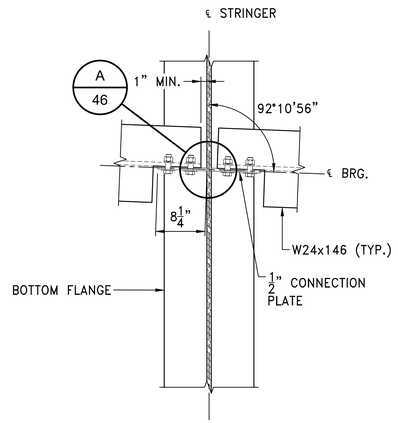
PIER DIAPHRAGM (D2)
SCALE: 1"=1'-0"

NOTE:

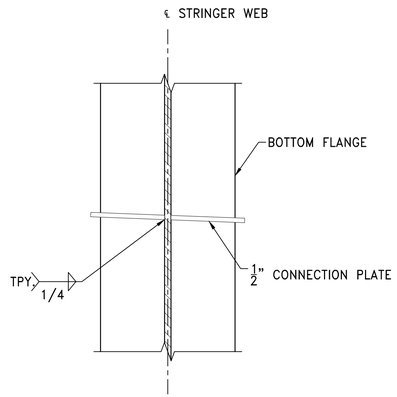
FACTORED JACKING LOADS: DL = 309 kips
LL = 190 kips



SECTION 1/46
SCALE: 1" = 1'-0"



SECTION 2/46
SCALE: 1" = 1'-0"



DETAIL A/46
SCALE: 1-1/2" = 1'-0"

NOTES:

1. THE END DIAPHRAGMS ARE TO FOLLOW THE CROSS PITCH OF THE ROADWAY.
2. LOCATIONS OF HOLES IN CONNECTION PLATES SHALL BE DETERMINED BY THE FABRICATOR.
3. FACTORED JACKING LOADS INCLUDE 1.1 FACTOR PER RIDOT TAC 0298 AND 1.1 FACTOR PER RIDOT BRIDGE MANUAL 3.2.5
4. THE FACTORED JACKING LOADS ARE APPLIED AT EACH STIFFENER LOCATION

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

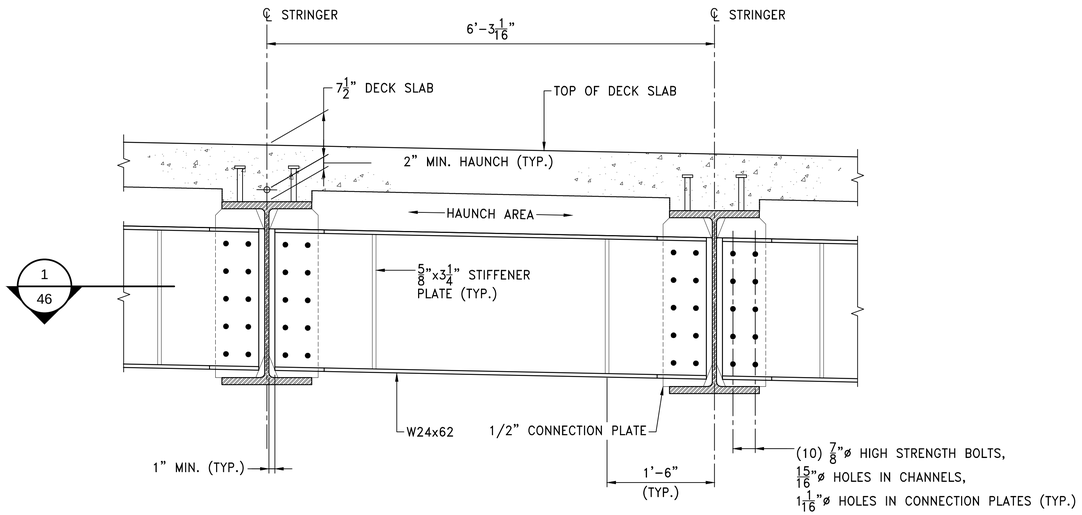
PROVIDENCE COUNTY RHODE ISLAND

DIAPHRAGM DETAILS 1

CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	46	62

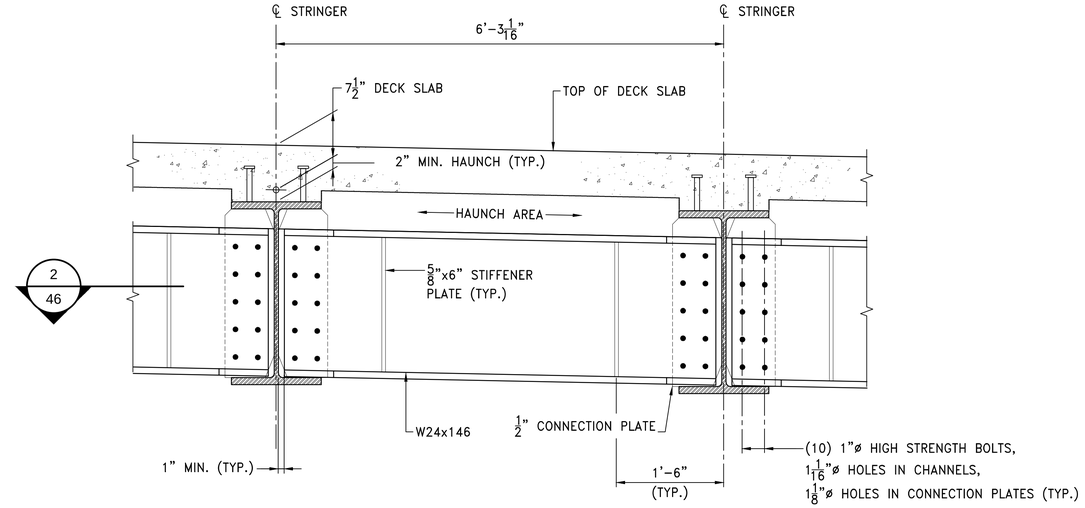


NOTE:

FACTORED JACKING LOADS: DL = 96 kips
LL = 95 kips

END DIAPHRAGM (D1)

SCALE: 1'=1'-0"

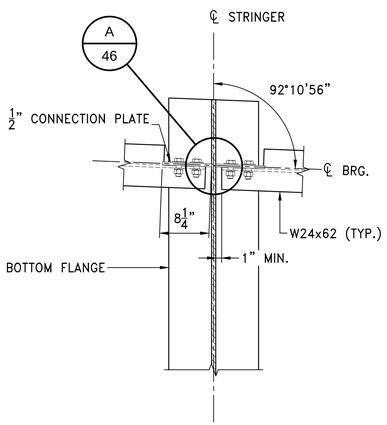


PIER DIAPHRAGM (D2)

SCALE: 1'=1'-0"

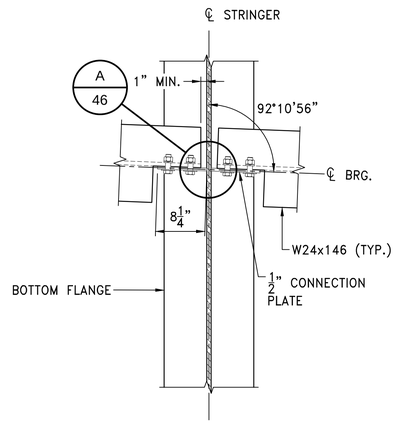
NOTE:

FACTORED JACKING LOADS: DL = 309 kips
LL = 190 kips



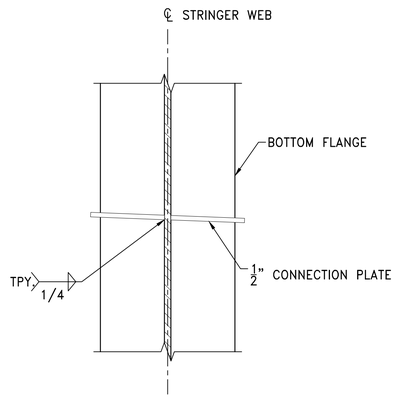
SECTION 1/46

SCALE: 1" = 1'-0"



SECTION 2/46

SCALE: 1" = 1'-0"



DETAIL A/46

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

NOTES:

1. THE END DIAPHRAGMS ARE TO FOLLOW THE CROSS PITCH OF THE ROADWAY.
2. LOCATIONS OF HOLES IN CONNECTION PLATES SHALL BE DETERMINED BY THE FABRICATOR.
3. FACTORED JACKING LOADS INCLUDE 1.1 FACTOR PER RIDOT TAC 0298 AND 1.1 FACTOR PER RIDOT BRIDGE MANUAL 3.2.5
4. THE FACTORED JACKING LOADS ARE APPLIED AT EACH STIFFENER LOCATION

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

DIAPHRAGM DETAILS 1

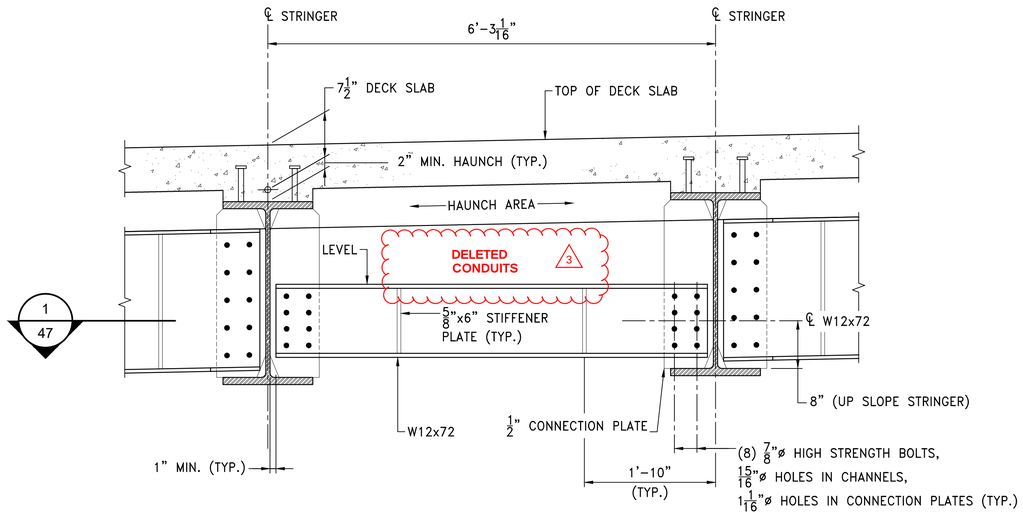
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_046_DIAPDETL001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	47	62

R-3

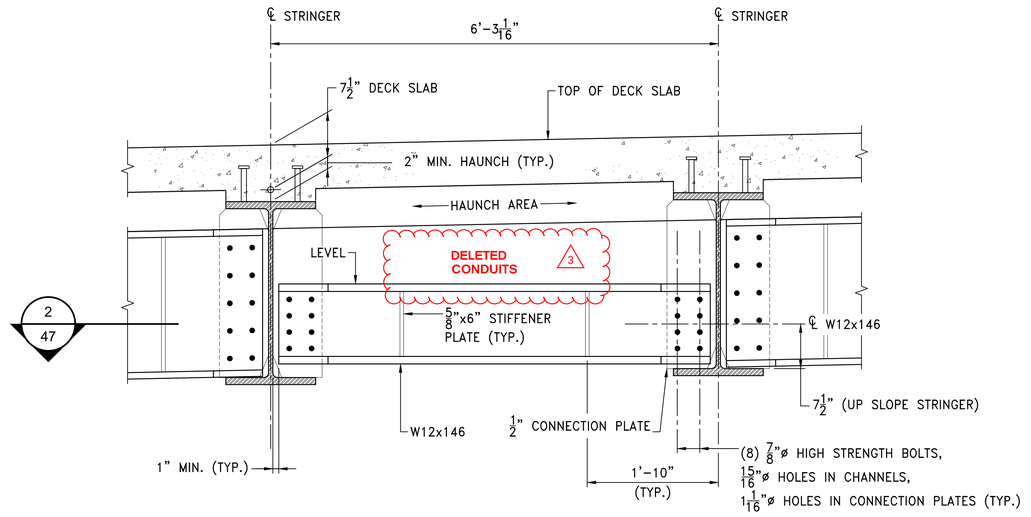


NOTE:

FACTORED JACKING LOADS: DL = 29 kips
LL = 79 kips

UTILITY END DIAPHRAGM (U1)

SCALE: 1"=1'-0"

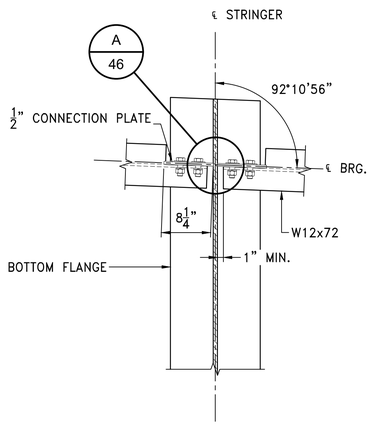


NOTE:

FACTORED JACKING LOADS: DL = 99 kips
LL = 128 kips

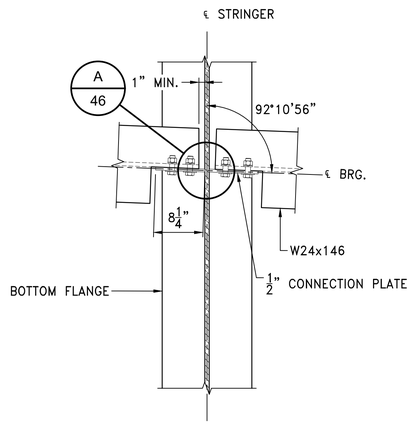
PIER UTILITY DIAPHRAGM (U2)

SCALE: 1"=1'-0"



SECTION 1/47

SCALE: 1" = 1'-0"



SECTION 2/47

SCALE: 1" = 1'-0"

DELETED DETAIL

3

NOTES:

1. THE END DIAPHRAGMS ARE TO FOLLOW THE CROSS PITCH OF THE ROADWAY.
2. LOCATIONS OF HOLES IN CONNECTION PLATES SHALL BE DETERMINED BY THE FABRICATOR.
3. FACTORED JACKING LOADS INCLUDE 1.1 FACTOR PER RIDOT TAC 0298 AND 1.1 FACTOR PER RIDOT BRIDGE MANUAL 3.2.5.
4. THE FACTORED JACKING LOADS ARE APPLIED AT EACH STIFFENER LOCATION

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

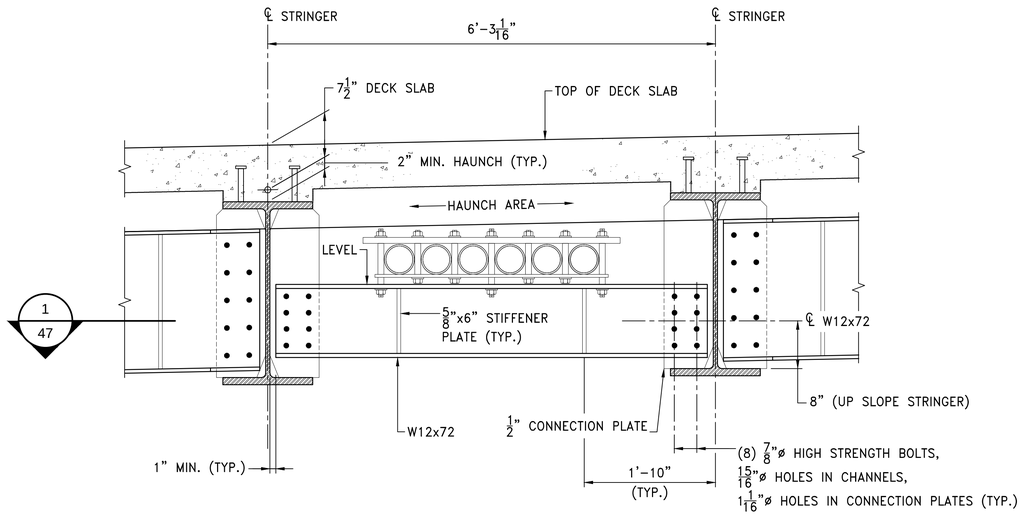
PROVIDENCE COUNTY RHODE ISLAND

DIAPHRAGM DETAILS 2

CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	47	62

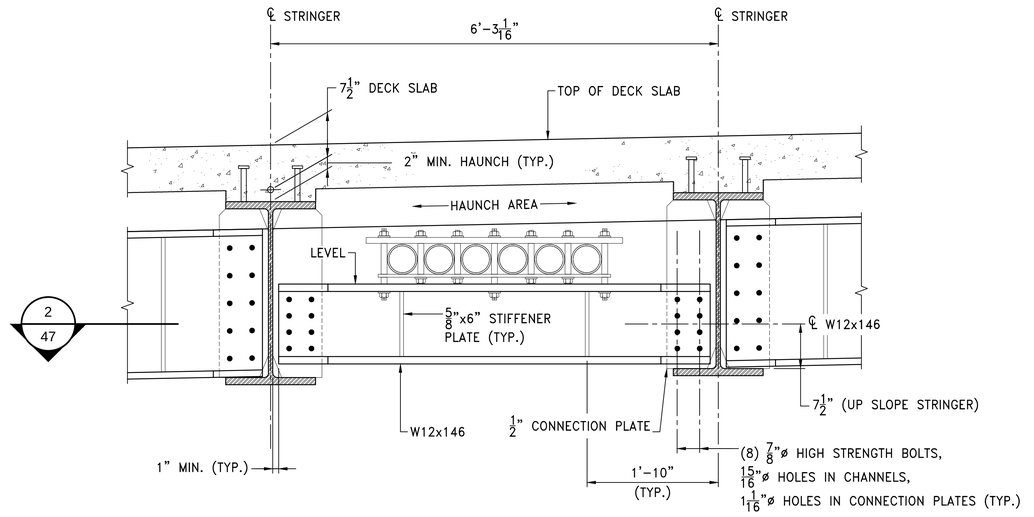


NOTE:

FACTORED JACKING LOADS: DL = 29 kips
LL = 79 kips

UTILITY END DIAPHRAGM (U1)

SCALE: 1"=1'-0"

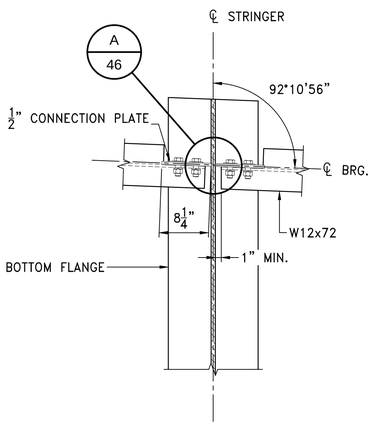


NOTE:

FACTORED JACKING LOADS: DL = 99 kips
LL = 128 kips

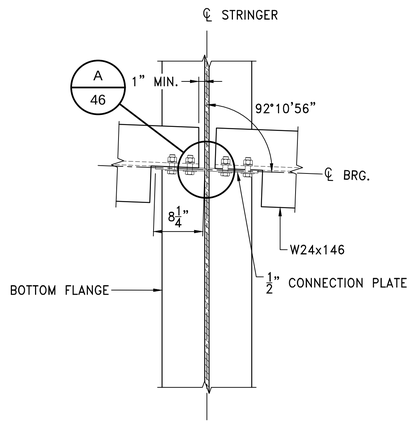
PIER UTILITY DIAPHRAGM (U2)

SCALE: 1"=1'-0"



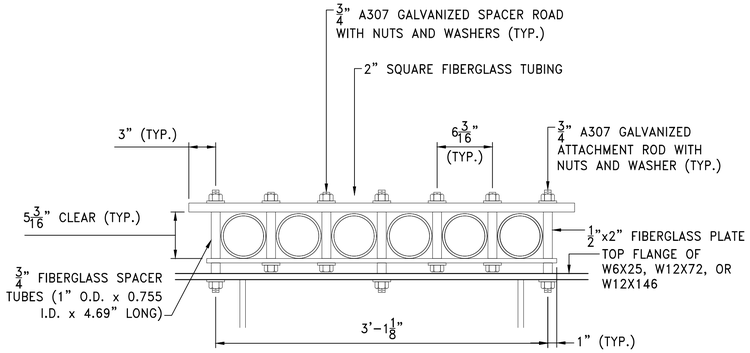
SECTION 1/47

SCALE: 1" = 1'-0"



SECTION 2/47

SCALE: 1" = 1'-0"



DUCT SUPPORT DETAIL

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

NOTES:

1. THE END DIAPHRAGMS ARE TO FOLLOW THE CROSS PITCH OF THE ROADWAY.
2. LOCATIONS OF HOLES IN CONNECTION PLATES SHALL BE DETERMINED BY THE FABRICATOR.
3. FACTORED JACKING LOADS INCLUDE 1.1 FACTOR PER RIDOT TAC 0298 AND 1.1 FACTOR PER RIDOT BRIDGE MANUAL 3.2.5.
4. THE FACTORED JACKING LOADS ARE APPLIED AT EACH STIFFENER LOCATION

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

DIAPHRAGM DETAILS 2

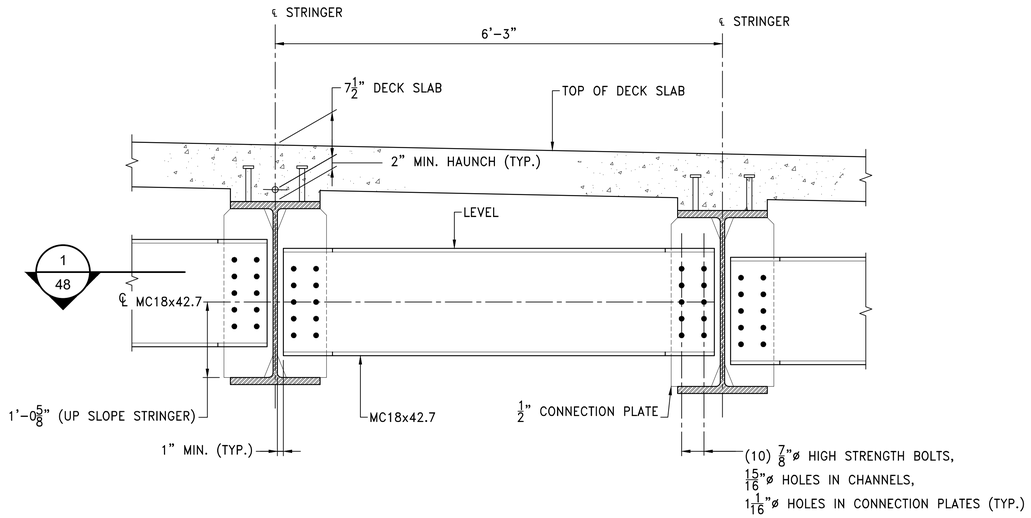
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_047_DIAPDETL002

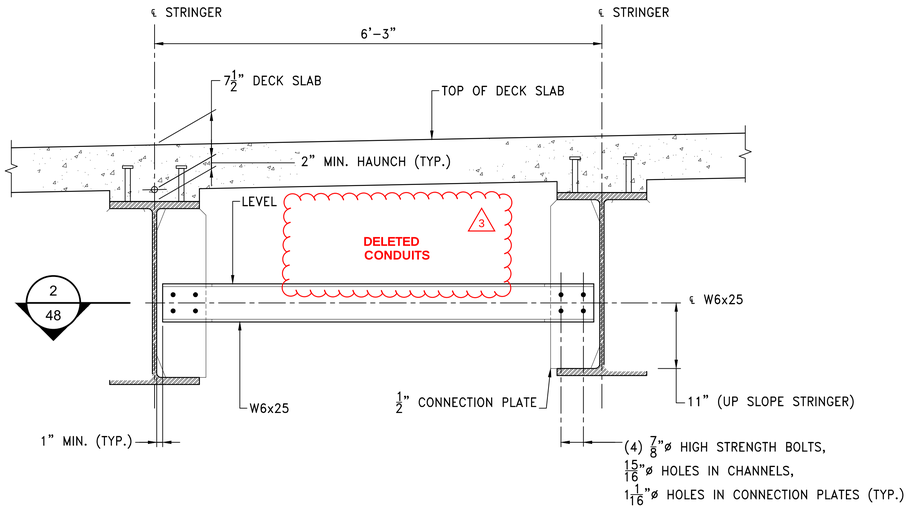
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	48	62

R-3



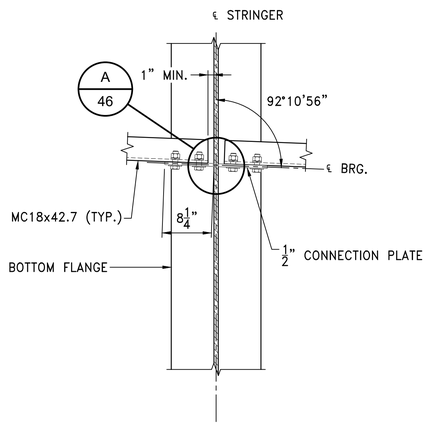
INTERMEDIATE DIAPHRAGM (D3)

SCALE: 1"=1'-0"



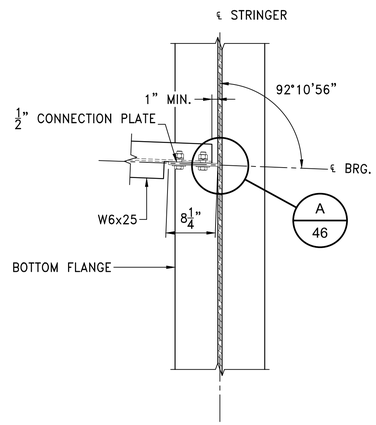
INTERMEDIATE UTILITY DIAPHRAGM (U3)

SCALE: 1"=1'-0"



SECTION 1/48

SCALE: 1" = 1'-0"



SECTION 2/48

SCALE: 1" = 1'-0"

NOTES:

1. LOCATIONS OF HOLES IN CONNECTION PLATES SHALL BE DETERMINED BY THE FABRICATOR.

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

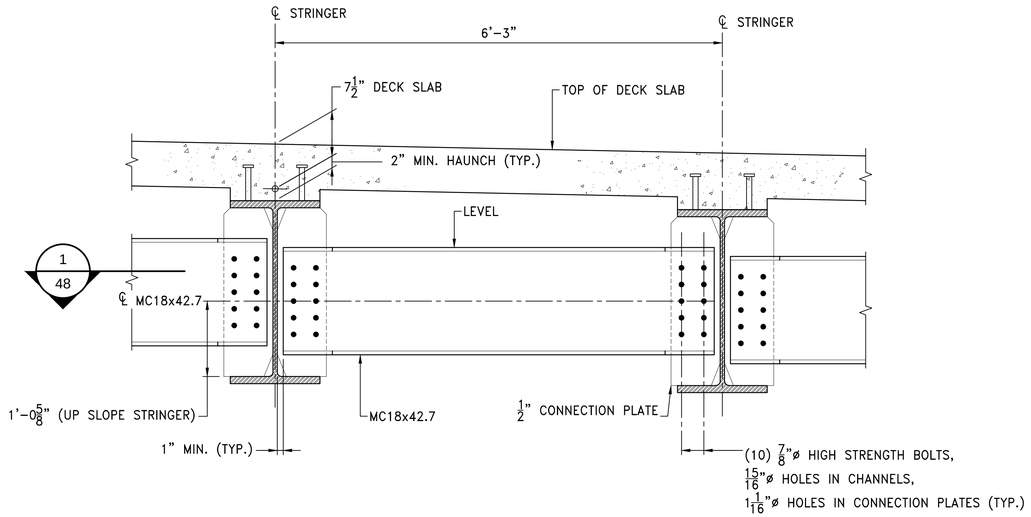
PROVIDENCE COUNTY — RHODE ISLAND

DIAPHRAGM DETAILS 3

CHECKED BY _____ DATE _____ SCALE AS NOTED

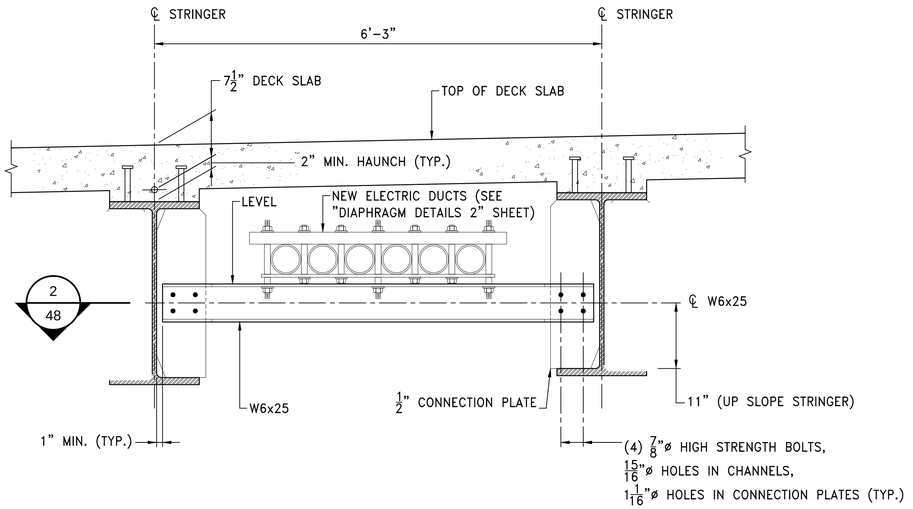
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	48	62



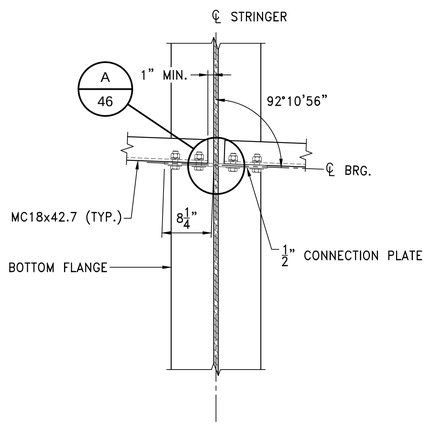
INTERMEDIATE DIAPHRAGM (D3)

SCALE: 1"=1'-0"



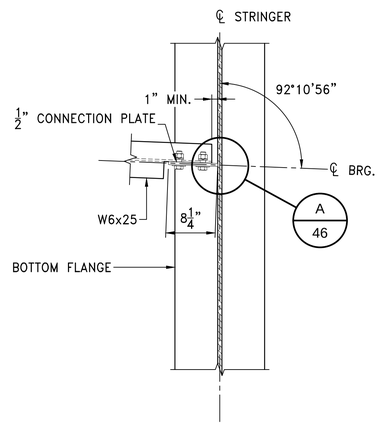
INTERMEDIATE UTILITY DIAPHRAGM (U3)

SCALE: 1"=1'-0"



SECTION 1/48

SCALE: 1" = 1'-0"



SECTION 2/48

SCALE: 1" = 1'-0"

NOTES:

1. LOCATIONS OF HOLES IN CONNECTION PLATES SHALL BE DETERMINED BY THE FABRICATOR.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

DIAPHRAGM DETAILS 3

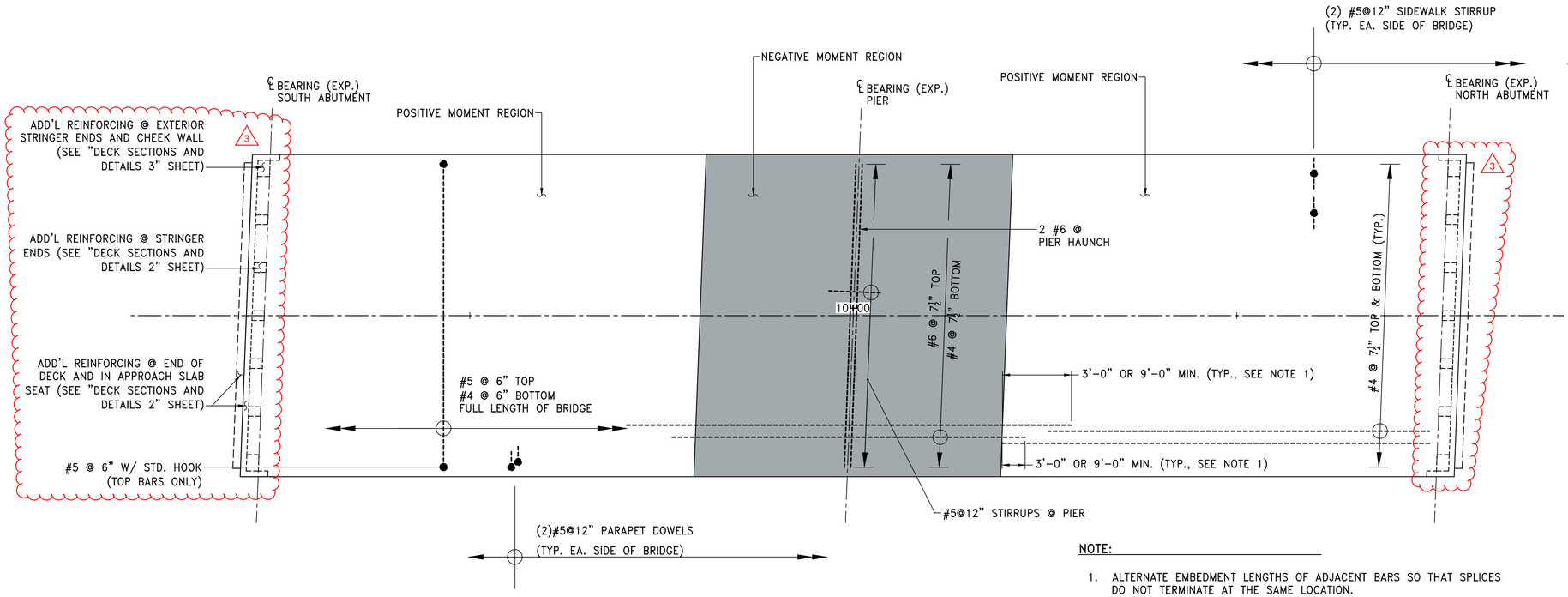
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_048_DIAPDETL003

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	49	62

R-3



NOTE:

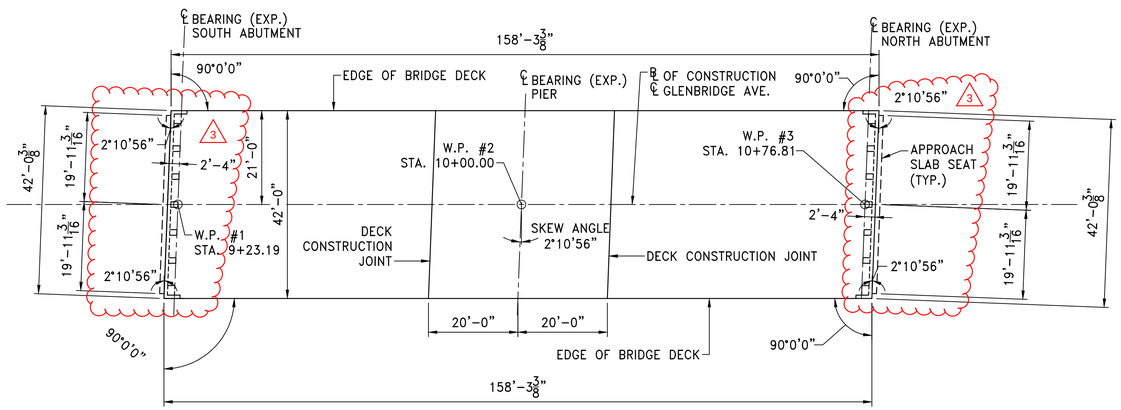
1. ALTERNATE EMBEDMENT LENGTHS OF ADJACENT BARS SO THAT SPLICES DO NOT TERMINATE AT THE SAME LOCATION.
2. SEE DECK SECTIONS AND DETAILS 1, 2 AND 3 SHEETS FOR REINFORCING SECTIONS.

DECK SLAB NOTES:

1. SPACE HAUNCH REINFORCING BETWEEN GIRDERS OR BEAMS AND TIE TO BOTTOM REINFORCING OF DECK.
2. TRANSVERSE REINFORCEMENT LISTED AS STRAIGHT SHALL BE SHOP OR FIELD BENT AS REQUIRED TO PROVIDE MINIMUM COVER.
3. DECK SLAB REINFORCING COVER SHALL HAVE TOLERANCE OF (+)1/4", (−)0" FOR TOP BARS AND (+)1/8", (−)0" FOR BOTTOM BARS.
4. CHAIRS SHALL BE SPACED TO PROVIDE THE REQUIRED CONCRETE COVER WITH THE SPECIFIED TOLERANCES. MAXIMUM SPACING OF CHAIRS SHALL BE 5'−0" ON CENTER, PREFERABLY LOCATED AT THE INTERSECTION OF REINFORCEMENT. CHAIRS SHALL HAVE APPROVED CORROSION PROTECTION (i.e. EPOXY COATED, PLASTIC COATED, ETC.)
5. DECK CONCRETE PLACEMENT SHALL BE IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.
6. SHOULD ADDITIONAL HAUNCH REINFORCING OR ADJUSTMENTS TO THE SHEAR STUD LENGTHS BE NECESSARY DUE TO DEVIATIONS IN THE AS BUILT CAMBER OF THE SUPERSTRUCTURE STEEL IT SHALL BE CONSIDERED AS INCIDENTAL TO ITEM 800.9901. THE ADJUSTED LENGTHS OF SHEAR STUDS SHALL BE DETERMINED BY THE ENGINEER. THE REQUIREMENTS FOR REINFORCING HAUNCHES GREATER THAN 4" HIGH SHALL BE AS SHOWN ON THIS SHEET.
7. THE CONTRACTOR MAY ELECT TO USE STAY-IN-PLACE FORMS FOR DECK CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT CALCULATIONS AND DETAILS STAMPED BY A RHODE ISLAND REGISTERED PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL. DETAILS SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND BRIDGE DESIGN STANDARD DETAILS.

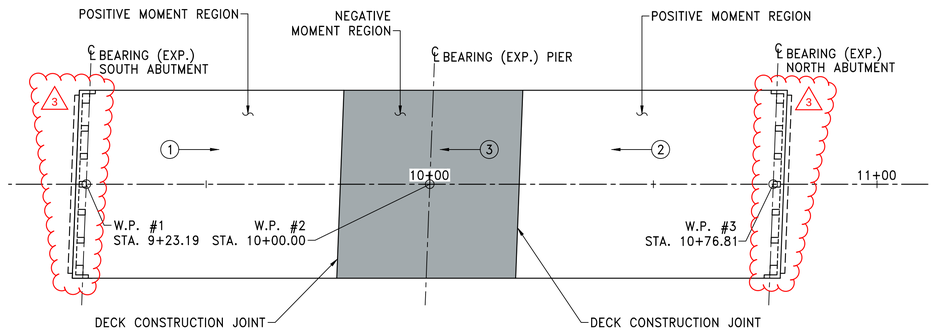
DECK REINFORCING PLAN

SCALE: 1/8" = 1'-0"



DECK PLAN

SCALE: 1/16" = 1'-0"



NOTES:

1. POUR ① & ② SHALL BE PLACED CONSECUTIVELY. AFTER CONCRETE HAS CURED FOR 72 HOURS, POUR SECTION ③.
2. SUPERIMPOSED LOADS TO POURS ① & ② MAY ONLY BE AS STATED IN THE STANDARD SPECIFICATIONS.
3. ARROWS INDICATE THE DIRECTION OF POURS.
4. SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY ELECT TO PLACE THE DECK IN A SINGLE POUR BY USING A RETARDING ADMIXTURE.

DECK POUR SEQUENCE

SCALE: 1/16" = 1'-0"

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

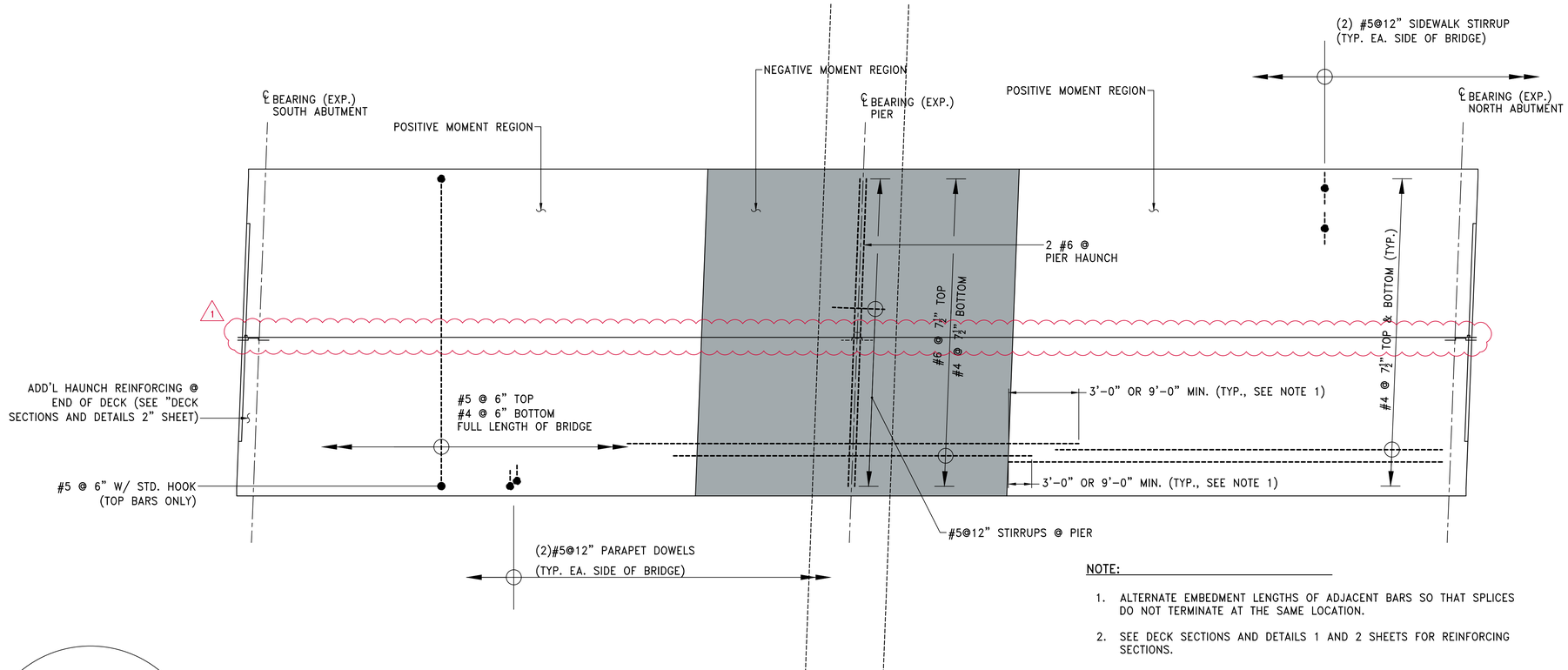
PROVIDENCE COUNTY RHODE ISLAND

DECK PLAN AND NOTES

CHECKED BY _____ DATE _____ SCALE AS NOTED

0013V_V1_049_DECKRDWY_Rev

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	49	62



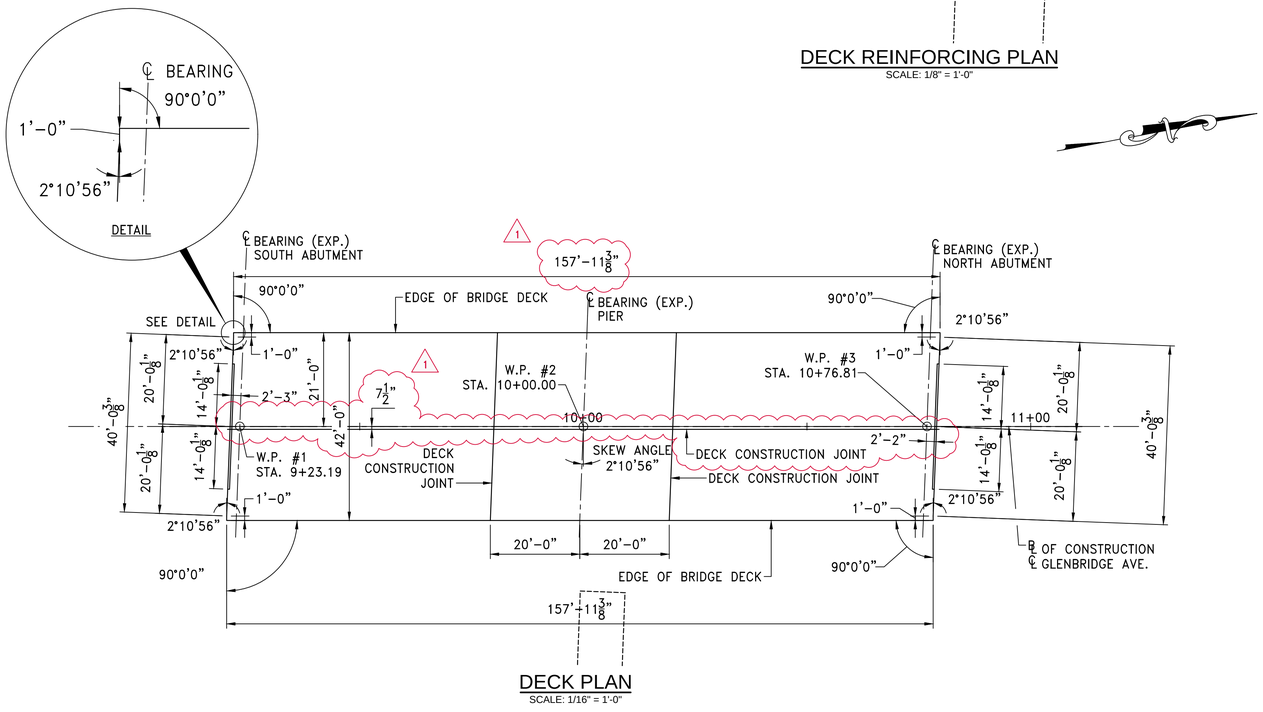
DECK REINFORCING PLAN
SCALE: 1/8" = 1'-0"

DECK SLAB NOTES:

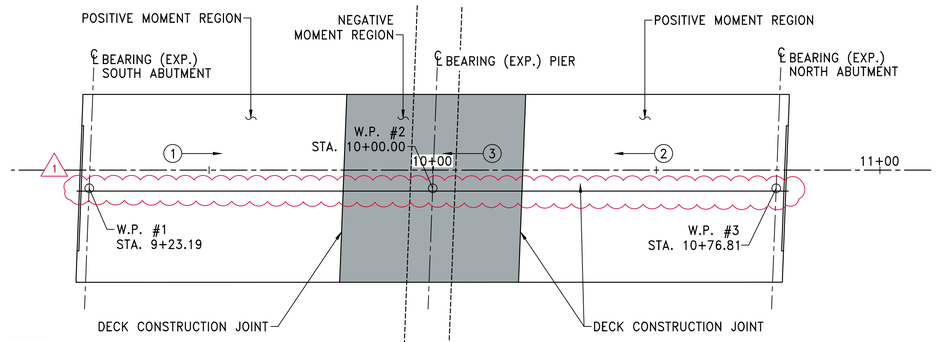
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7. THE CONTRACTOR MAY ELECT TO USE STAY-IN-PLACE FORMS FOR DECK CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT CALCULATIONS AND DETAILS STAMPED BY A RHODE ISLAND REGISTERED PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL. DETAILS SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND BRIDGE DESIGN STANDARD DETAILS.

NOTE:

1. ALTERNATE EMBEDMENT LENGTHS OF ADJACENT BARS SO THAT SPLICES DO NOT TERMINATE AT THE SAME LOCATION.
2. SEE DECK SECTIONS AND DETAILS 1 AND 2 SHEETS FOR REINFORCING SECTIONS.



DECK PLAN
SCALE: 1/16" = 1'-0"



NOTES:

1. POUR ① & ② SHALL BE PLACED CONSECUTIVELY. AFTER CONCRETE HAS CURED FOR 72 HOURS, POUR SECTION ③.
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DECK POUR SEQUENCE
SCALE: 1/16" = 1'-0"

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY
1	11/25/19	ETS

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

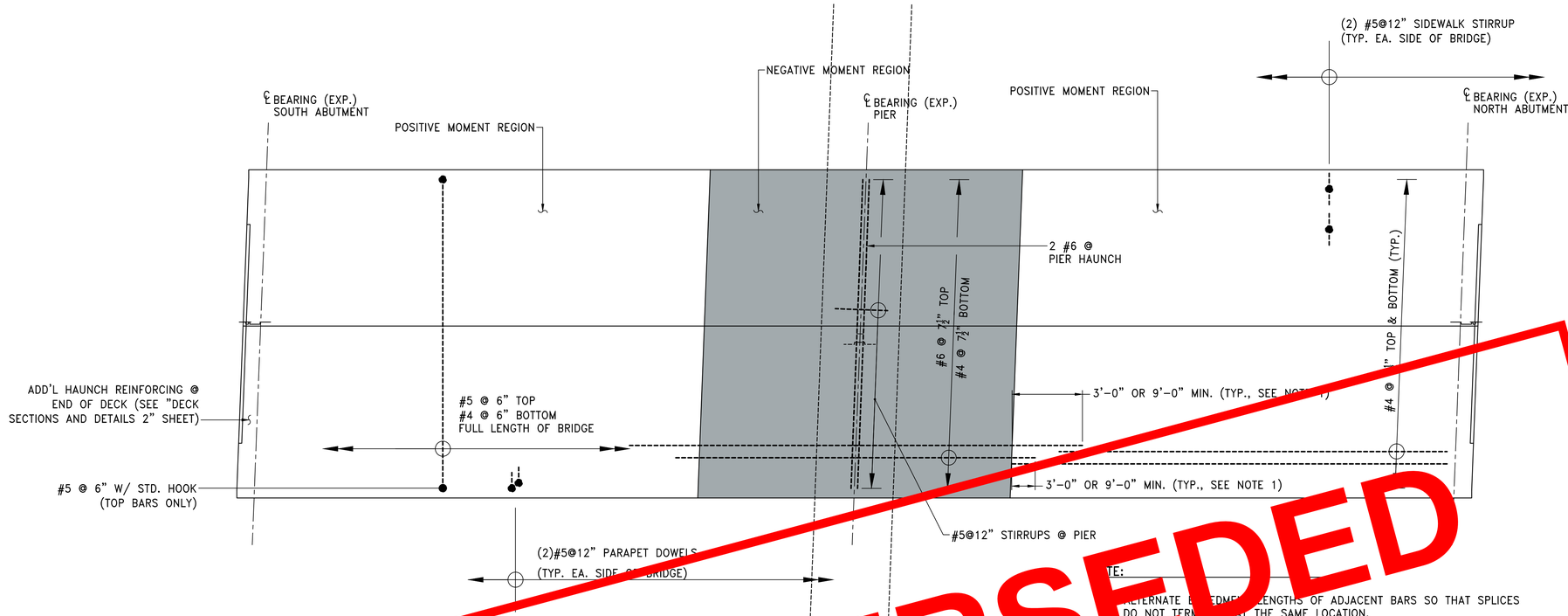
BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

DECK PLAN AND NOTES

CHECKED BY _____ DATE _____ SCALE AS NOTED

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	49	62



DECK REINFORCING PLAN
SCALE: 1/8" = 1'-0"

SUPERSEDED

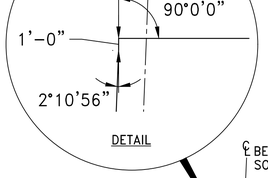
DECK SLAB NOTES:

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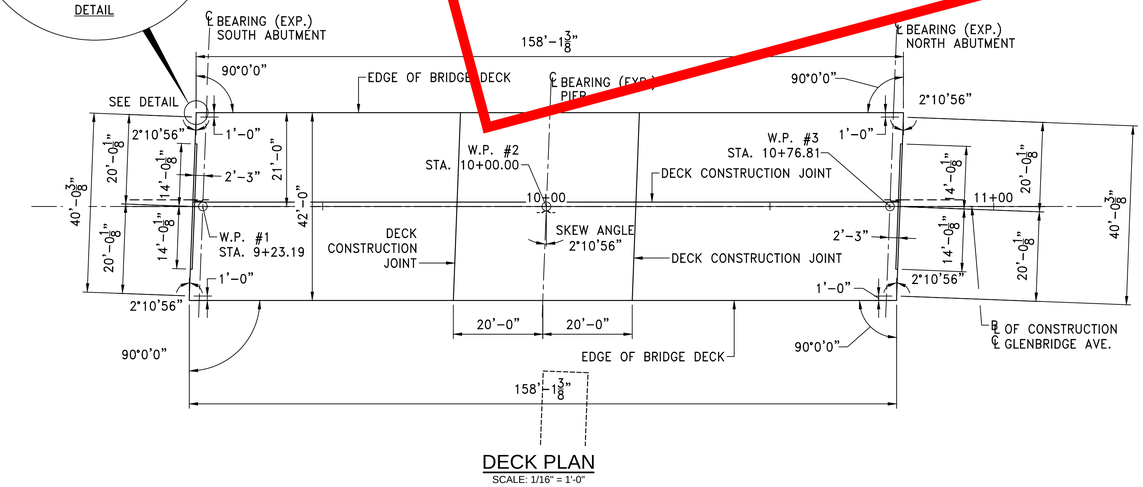
TE:

ALTERNATE E[illegible] LENGTHS OF ADJACENT BARS SO THAT SPLICES DO NOT TERM[illegible] AT THE SAME LOCATION.

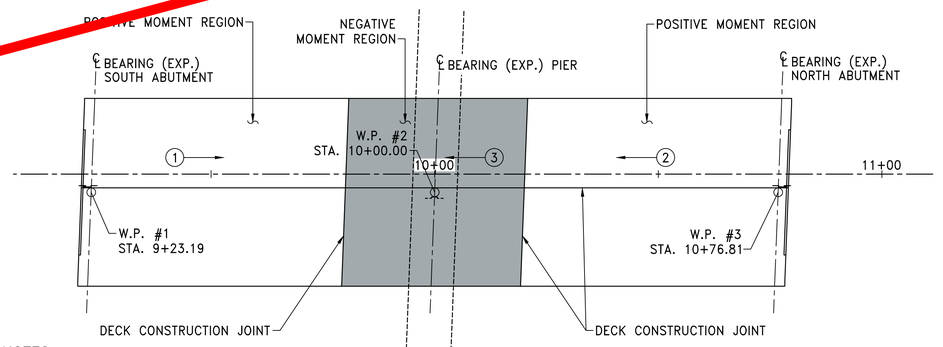
2. [illegible] DECK SECTIONS AND DETAILS 1 AND 2 SHEETS FOR REINFORCING SECTIONS.



DETAIL



DECK PLAN
SCALE: 1/16" = 1'-0"



NOTES:

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SCALE: 1/16" = 1'-0"

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

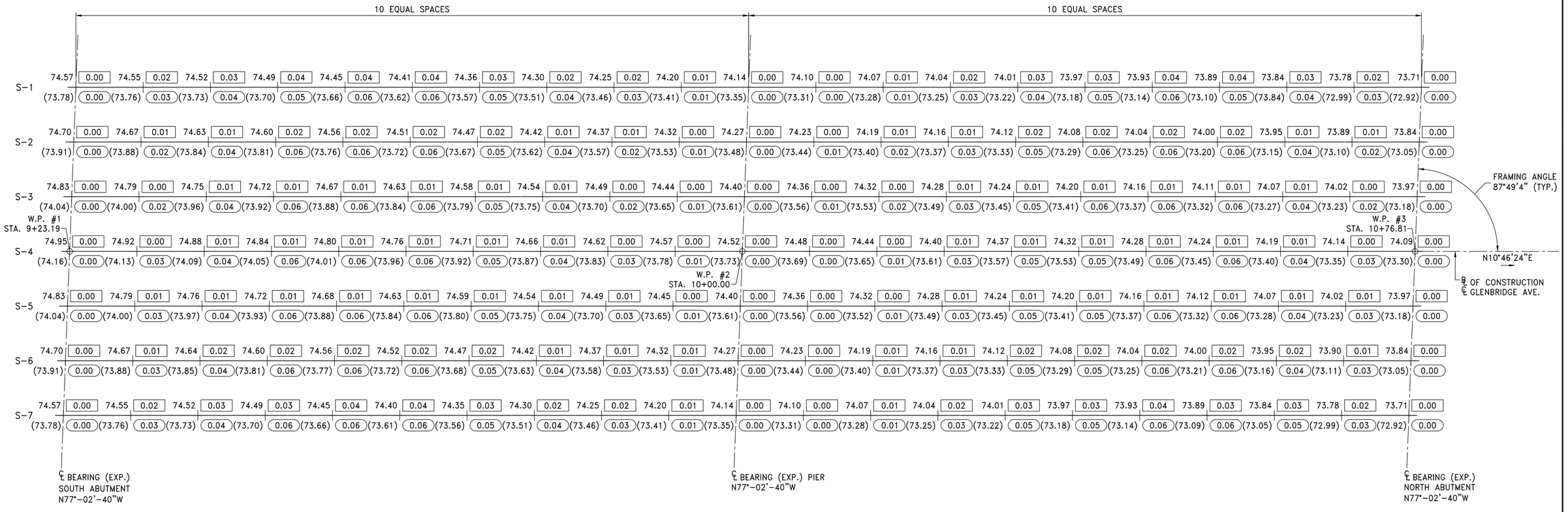
PROVIDENCE COUNTY RHODE ISLAND

DECK PLAN AND NOTES

CHECKED BY _____ DATE _____ SCALE AS NOTED

0013V_V1_049_DECKRDWY

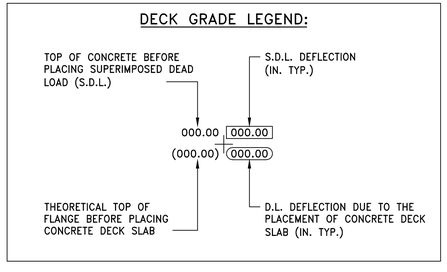
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	50	62



DECK GRADING PLAN

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

DECK GRADE LEGEND:



DECK GRADING NOTES:

1. "S.D.L. DEFLECTION" IS THE DEFLECTION DUE TO THE WEIGHT OF CURBING, SIDEWALK, PARAPET, AND PROTECTIVE SCREEN (CHAIN LINK FENCE).
2. "D.L. DEFLECTION DUE TO THE PLACEMENT OF CONCRETE DECK SLAB" IS THE THEORETICAL DEFLECTION DUE TO THE PLACEMENT OF THE DECK SLAB ONLY.
3. THE TOP OF STEEL ELEVATION WILL BE AFFECTED BY THE POURING OF CONCRETE. THE CONTRACTOR IS TO COMPENSATE FOR THIS CHANGE ACCORDINGLY.

REVISIONS		
NO.	DATE	BY

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8 BLACKSTONE VALLEY PLACE
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401-334-4100

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

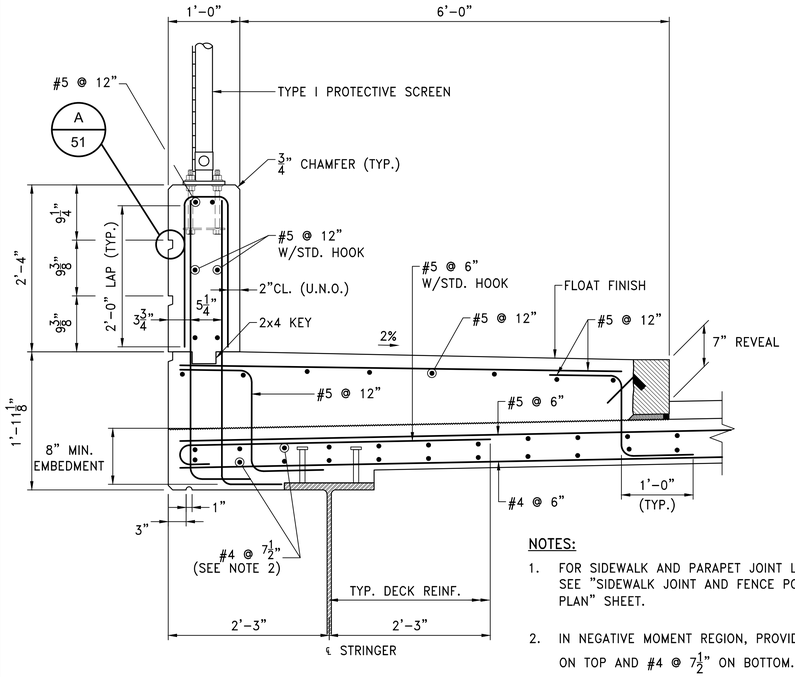
DECK GRADING PLAN

CHECKED BY _____ DATE _____ SCALE 3/16"=1'-0"

0013V_V1_050_DECKGRAD

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	51	62

R-3

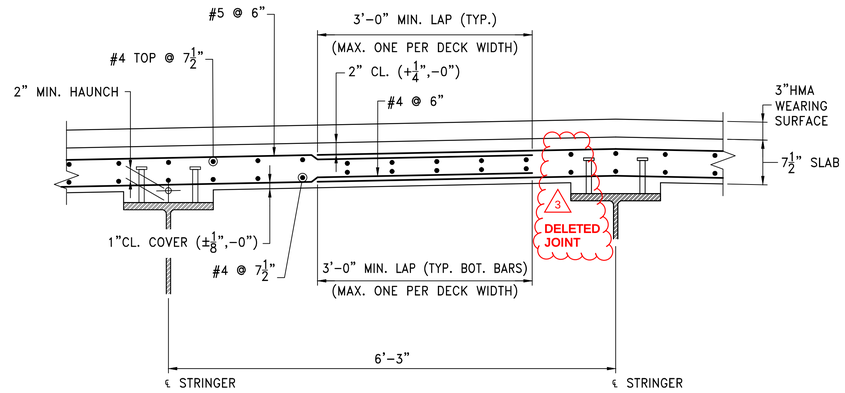


NOTES:

1. FOR SIDEWALK AND PARAPET JOINT LOCATIONS, SEE "SIDEWALK JOINT AND FENCE POST SPACING PLAN" SHEET.
2. IN NEGATIVE MOMENT REGION, PROVIDE #6 @ 7 1/2" ON TOP AND #4 @ 7 1/2" ON BOTTOM.

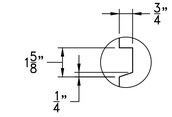
SECTION THRU SIDEWALK

SCALE: 1" = 1'-0"



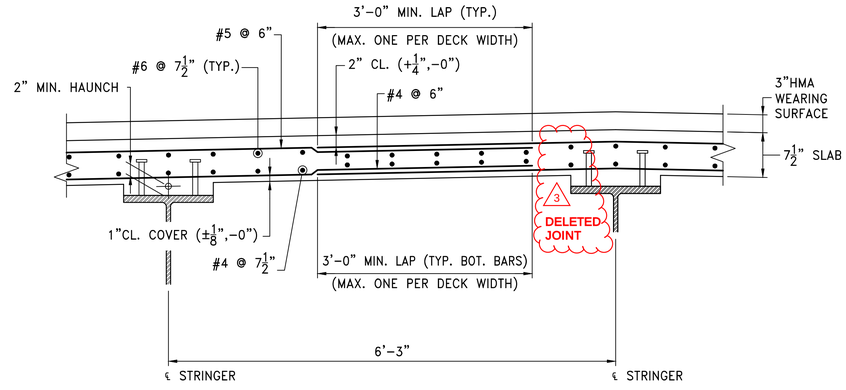
POSITIVE MOMENT REGION DECK REINFORCEMENT

SCALE: 1" = 1'-0"



DETAIL A / 51

SCALE: 3" = 1'-0"



NEGATIVE MOMENT REGION DECK REINFORCEMENT

SCALE: 1" = 1'-0"

NOTES:

1. SEE "DECK POUR SEQUENCE" ON "DECK PLAN AND NOTES" SHEET FOR LIMITS OF NEGATIVE AND POSITIVE MOMENT REGIONS.
2. NEGATIVE MOMENT REGION LONGITUDINAL REINFORCEMENT SHALL EXTEND A MINIMUM OF 3'-0" INTO POSITIVE MOMENT REGIONS.

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

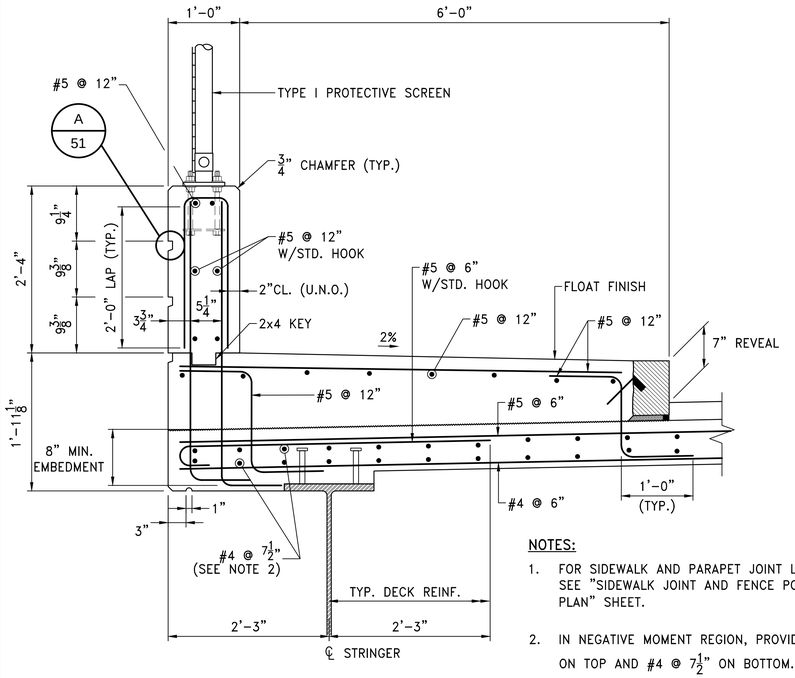
PROVIDENCE COUNTY — RHODE ISLAND

DECK SECTIONS & DETAILS 1

CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS · SCIENTISTS · PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	51	62

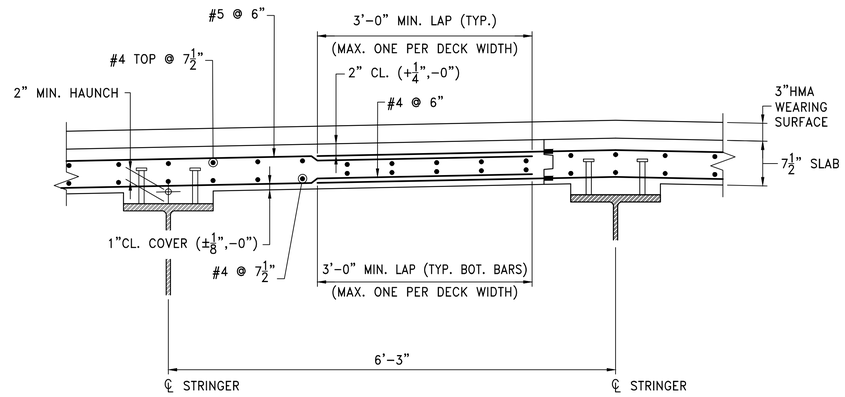


NOTES:

1. FOR SIDEWALK AND PARAPET JOINT LOCATIONS, SEE "SIDEWALK JOINT AND FENCE POST SPACING PLAN" SHEET.
2. IN NEGATIVE MOMENT REGION, PROVIDE #6 @ 7 1/2" ON TOP AND #4 @ 7 1/2" ON BOTTOM.

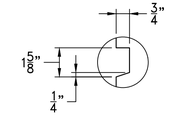
SECTION THRU SIDEWALK

SCALE: 1" = 1'-0"



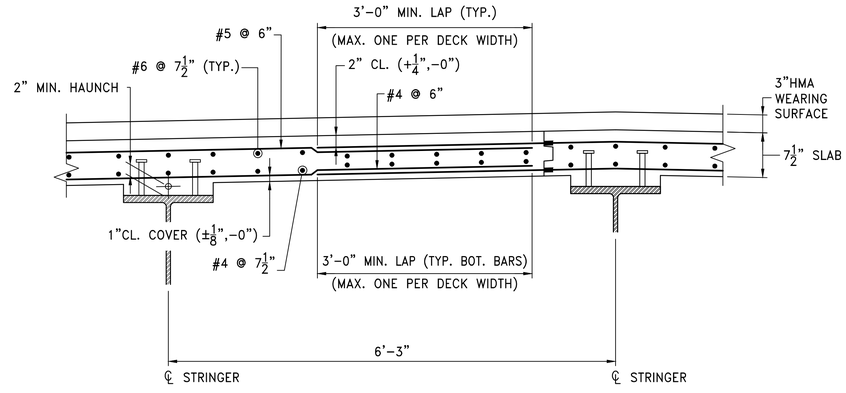
POSITIVE MOMENT REGION DECK REINFORCEMENT

SCALE: 1" = 1'-0"



DETAIL A

SCALE: 3" = 1'-0"



NEGATIVE MOMENT REGION DECK REINFORCEMENT

SCALE: 1" = 1'-0"

NOTES:

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REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

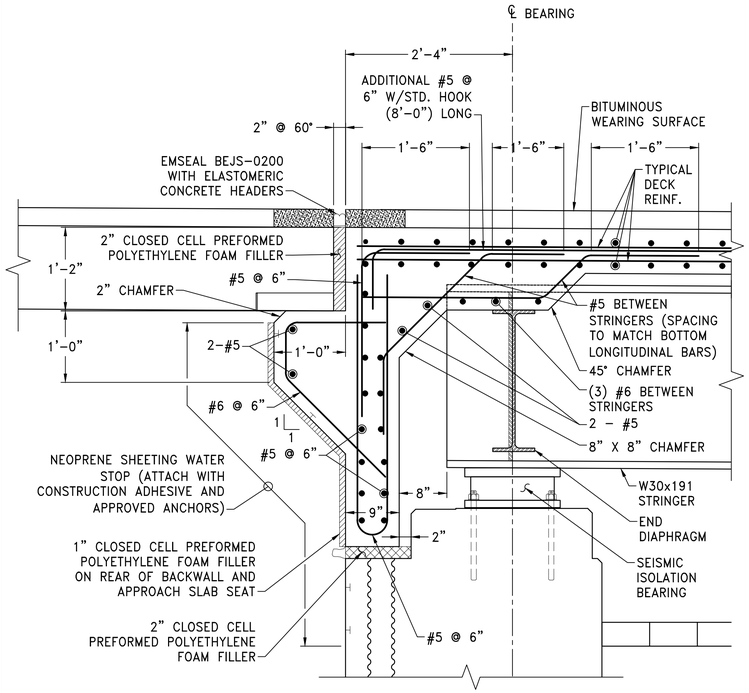
DECK SECTIONS & DETAILS 1

CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
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8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

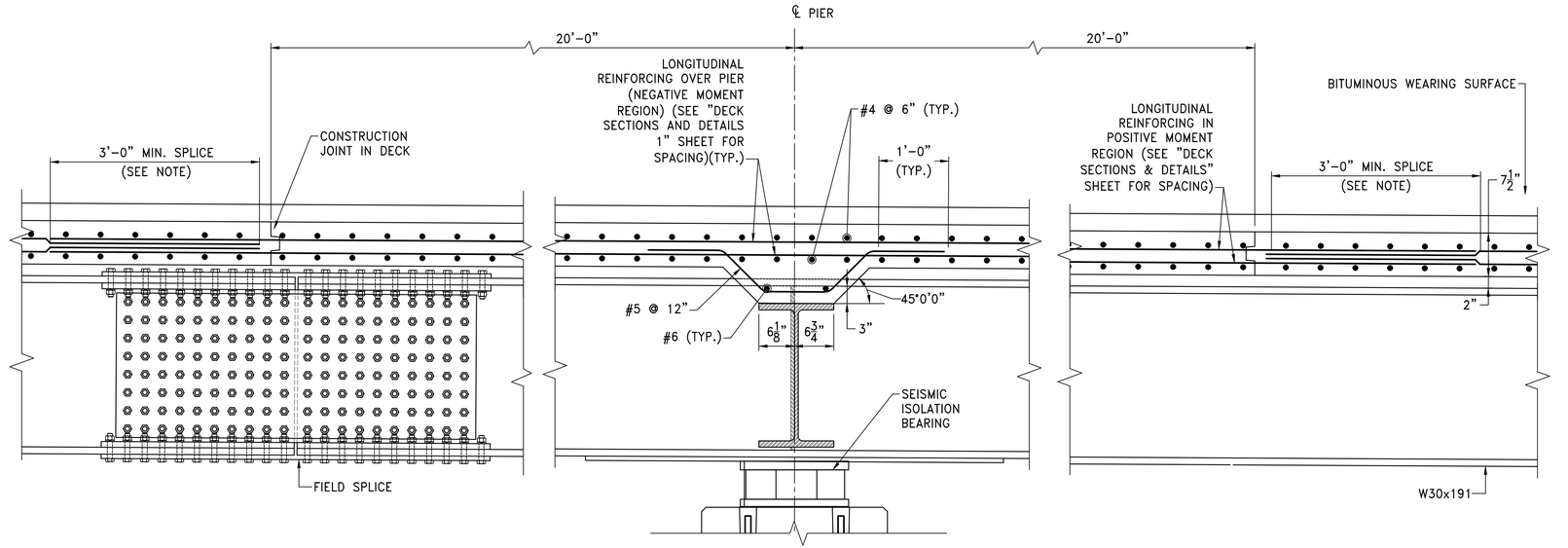
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	52	62

R-3



DECK END SECTION BETWEEN BEAMS

SCALE: 1" = 1'-0"

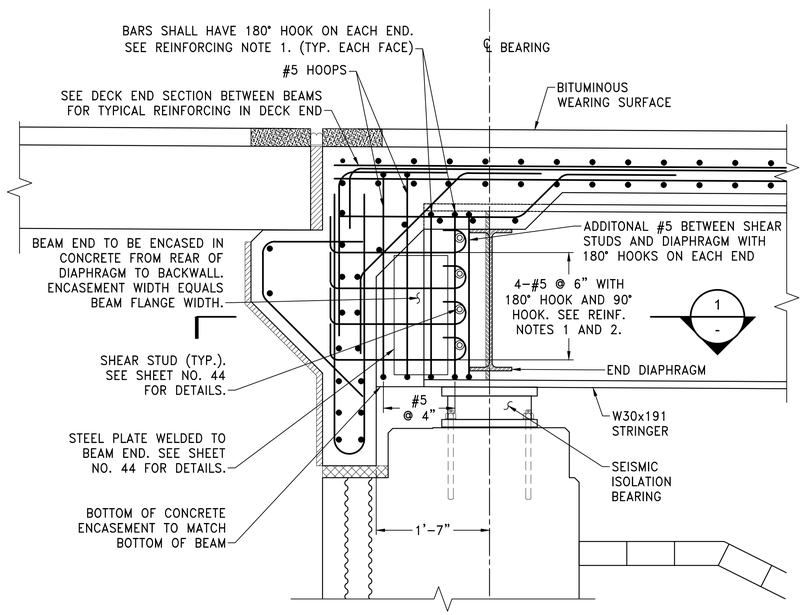


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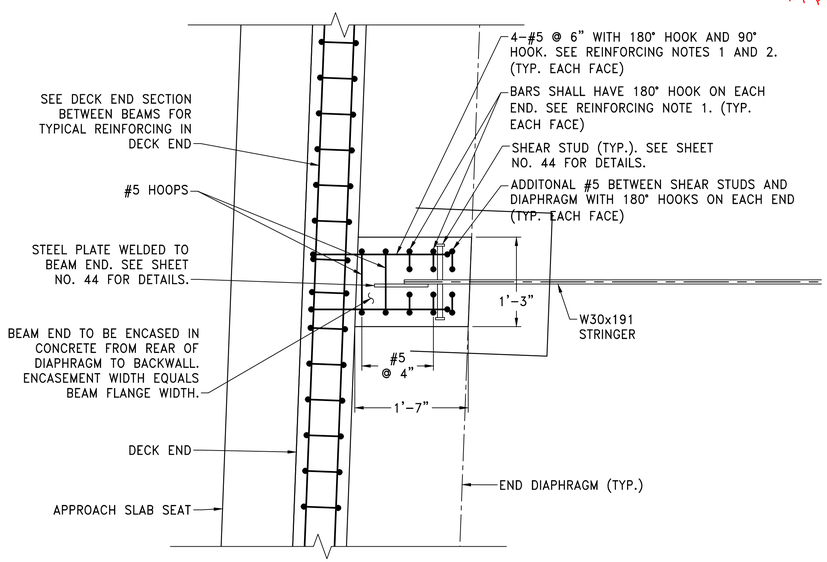
SUPERSTRUCTURE SECTION AT PIER

SCALE: 1" = 1'-0"



DECK END SECTION AT BEAMS

SCALE: 1" = 1'-0"



TYPICAL INTERIOR BEAM END ENCASEMENT SECTION

1 / -

SCALE: 1" = 1'-0"

REINFORCING NOTES:

1. ALL 90° AND 180° HOOKS SHOWN FOR THE BEAM END ENCASEMENT SHALL USE A STANDARD STIRRUP BEND DIAMETER OF 2.50" AND ALL 90° HOOKS SHALL USE A STANDARD STIRRUP LEG LENGTH OF 6".
2. THE 90° AND 180° HOOKS SHALL BE HOOKED SNUG AROUND THE HORIZONTAL REINFORCING IN THE BACKWALL AND SHEAR STUDS ON THE BEAM END.
3. CLEAR COVER FOR THE BACKWALL AND BEAM END CONCRETE IS 2".

3

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

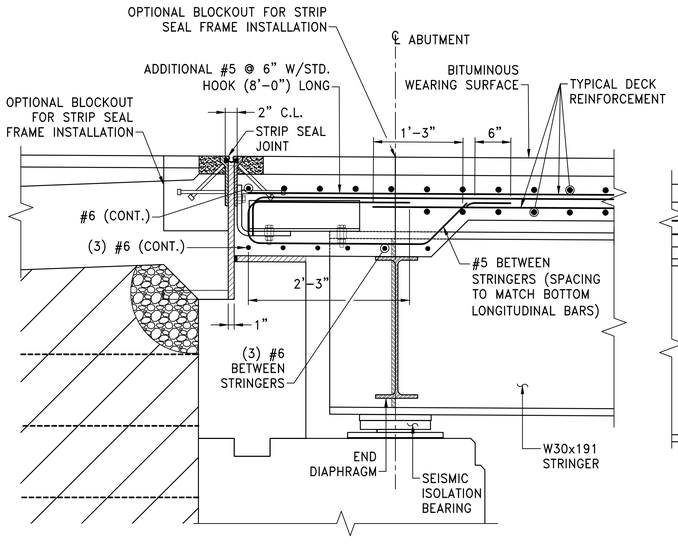
PROVIDENCE COUNTY — RHODE ISLAND

DECK SECTIONS & DETAILS 2

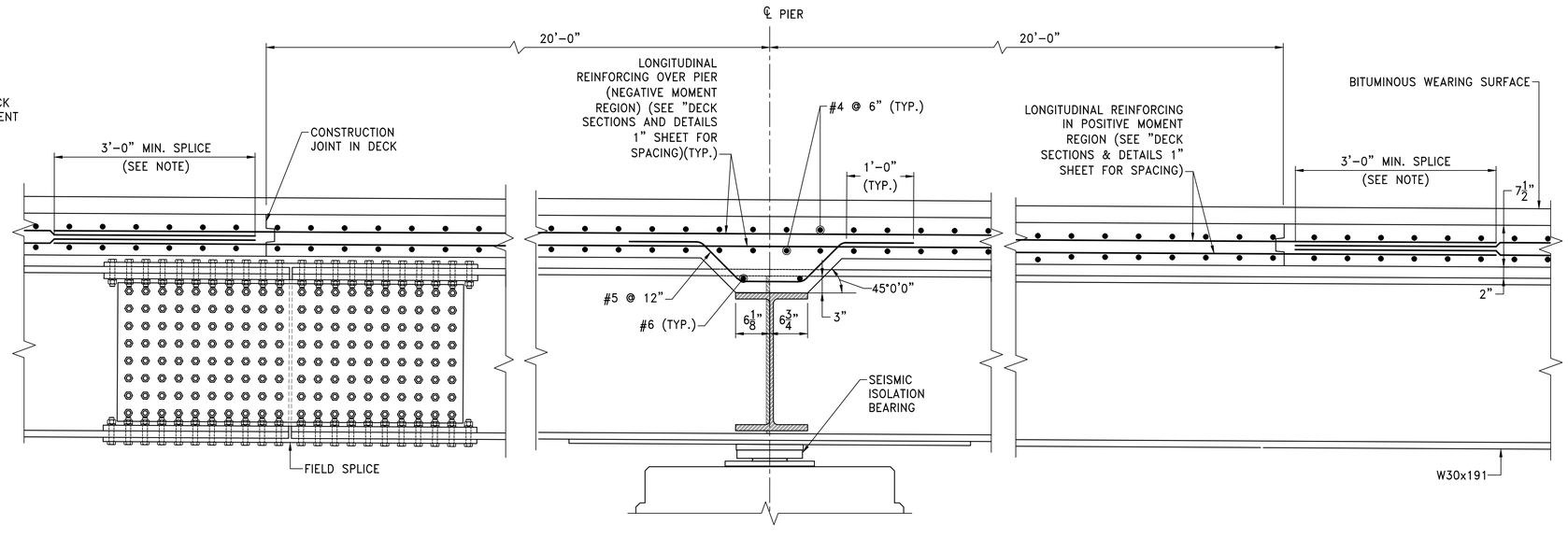
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

CHECKED BY _____ DATE _____ SCALE AS NOTED

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	52	62



TYPICAL HAUNCH DETAIL AT ABUTMENT END
SCALE: 1" = 1'-0"



NOTE:

1. ALTERNATE EMBEDMENT LENGTHS OF ADJACENT BARS SO THAT SPLICES DO NOT TERMINATE AT THE SAME LOCATION.

SUPERSTRUCTURE SECTION AT PIER
SCALE: 1" = 1'-0"

REVISIONS		
NO.	DATE	BY

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

DECK SECTIONS & DETAILS 2

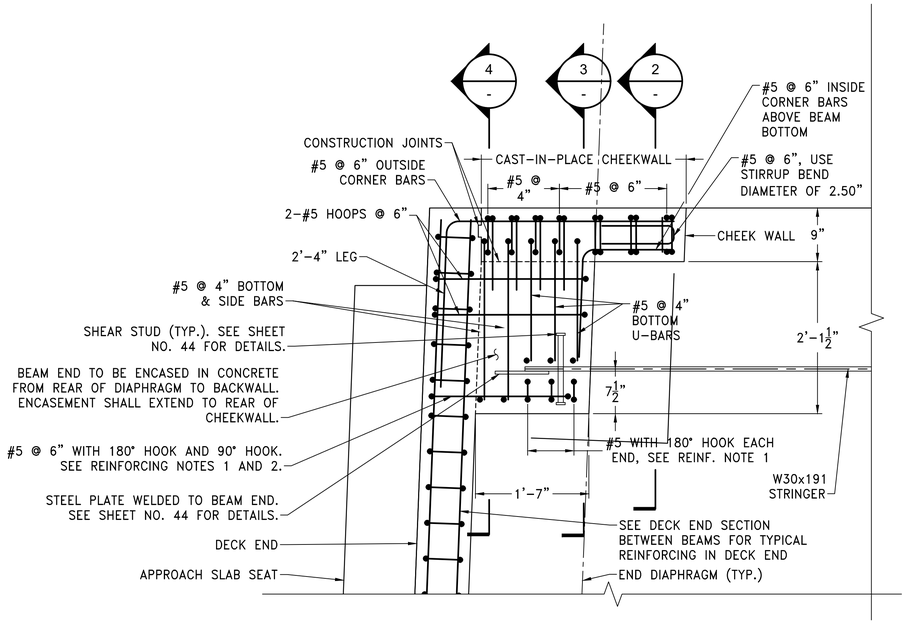
CHECKED BY _____ DATE _____ SCALE AS NOTED

0013V_V1_052_DECKXSEC002

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	52B	62

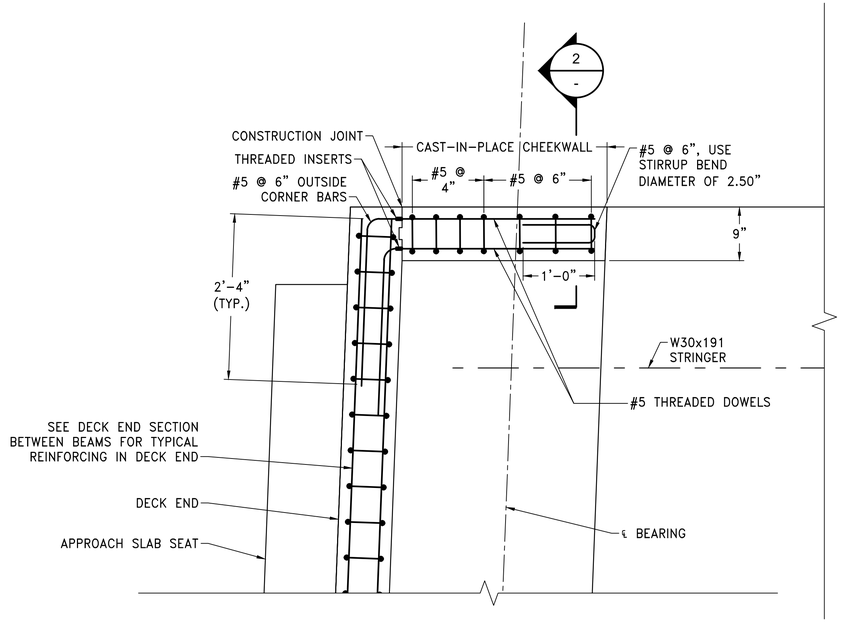
R-3

3



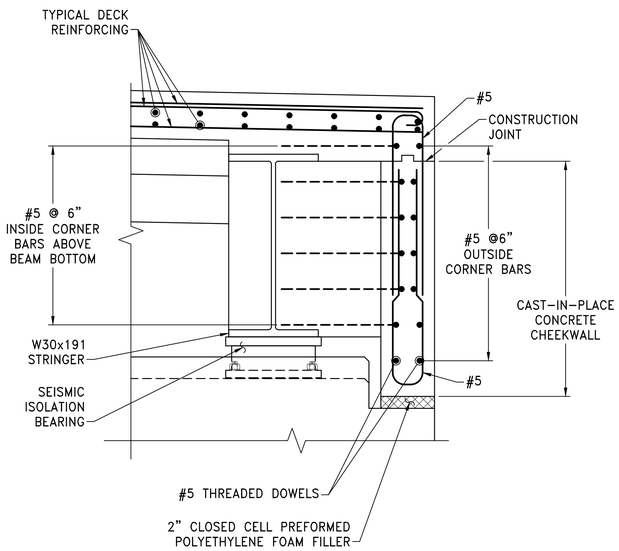
TYPICAL EXTERIOR BEAM END ENCASEMENT AND CHEEK WALL PLAN ABOVE BEAM BOTTOM

SCALE: 1" = 1'-0"

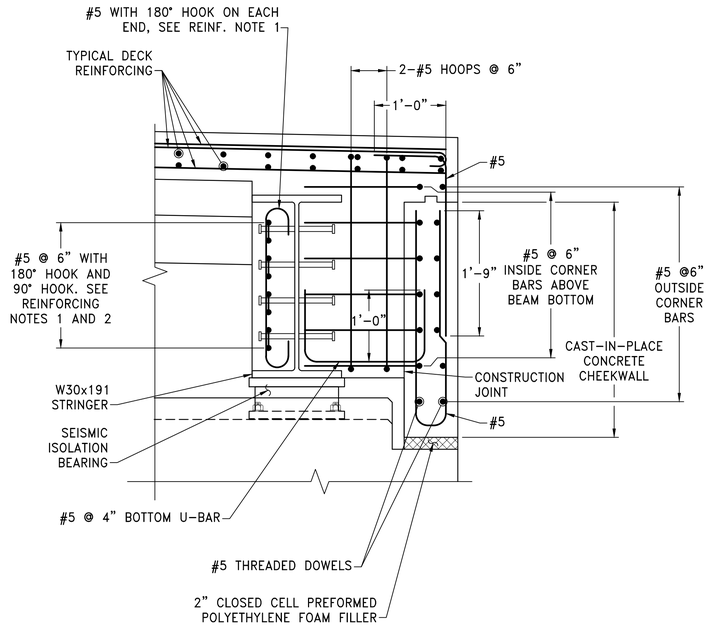


TYPICAL CHEEK WALL PLAN BELOW BEAM BOTTOM

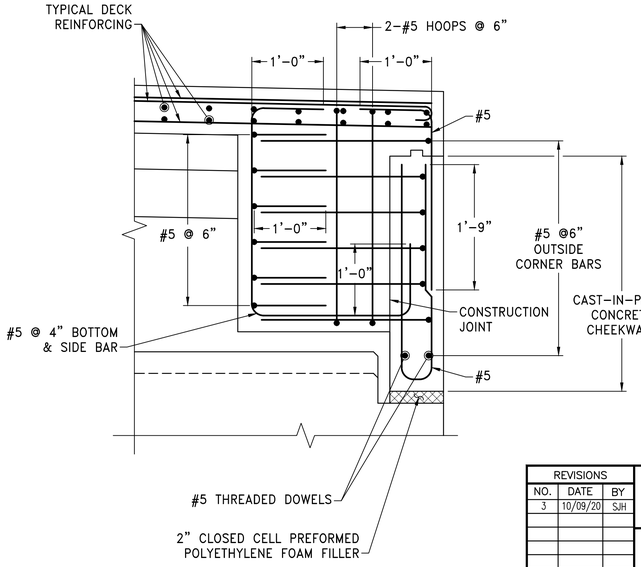
SCALE: 1"= 1'-0"



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



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



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

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

DECK SECTIONS & DETAILS 3

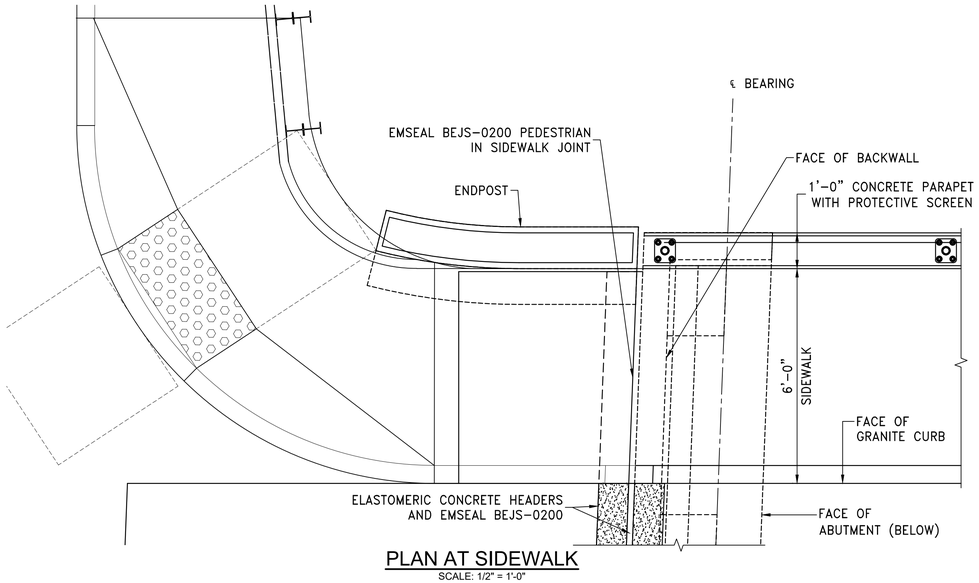
CHECKED BY _____ DATE _____ SCALE AS NOTED

CHA
227 WEST EXCHANGE STREET
SUITE 101
PROVIDENCE, RI 02903

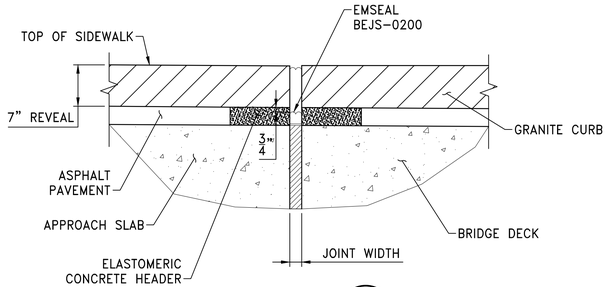
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	53	62

R-3

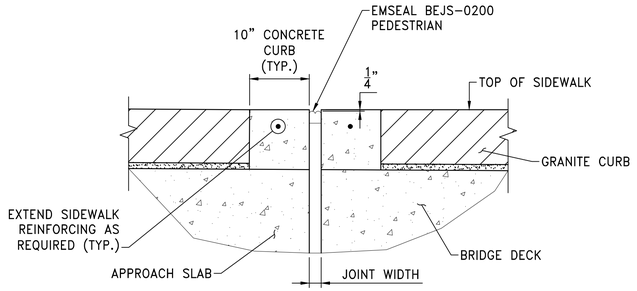
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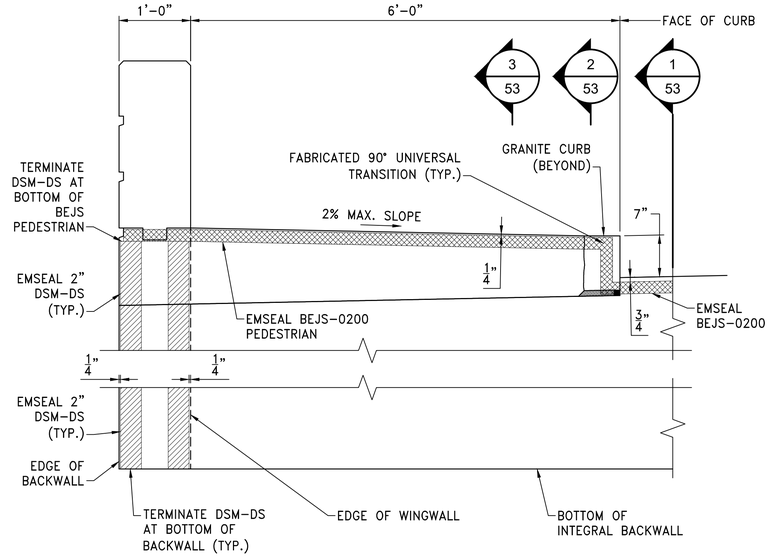
PLAN AT SIDEWALK
SCALE: 1/2" = 1'-0"



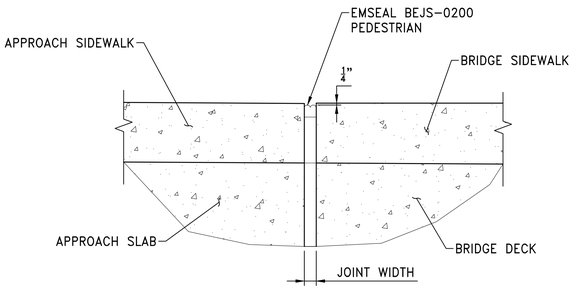
SECTION 1/53



SECTION 2/53



SECTION AT SIDEWALK
SCALE: 1" = 1'-0"



SECTION 3/53

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

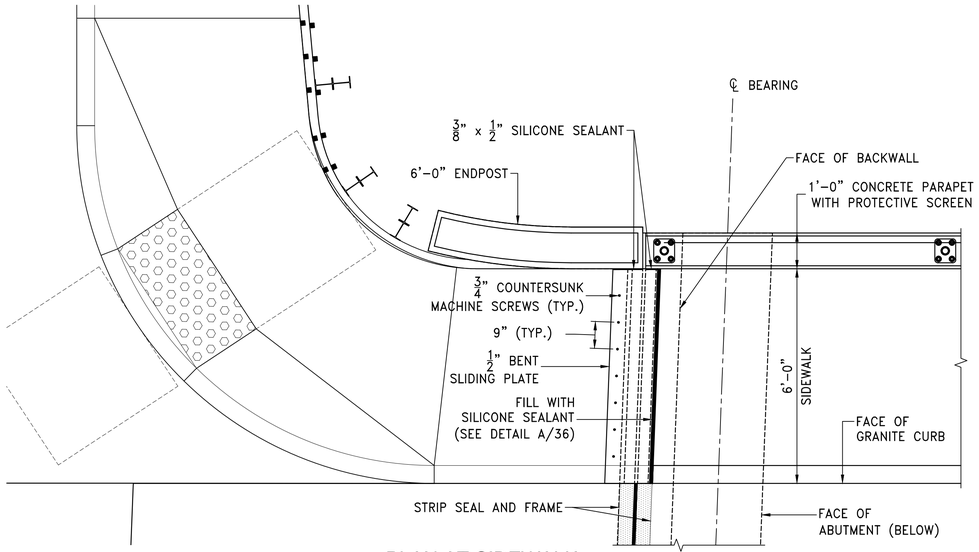
PROVIDENCE COUNTY — RHODE ISLAND

SIDEWALK DETAILS 1

CHECKED BY _____ DATE _____ SCALE AS NOTED

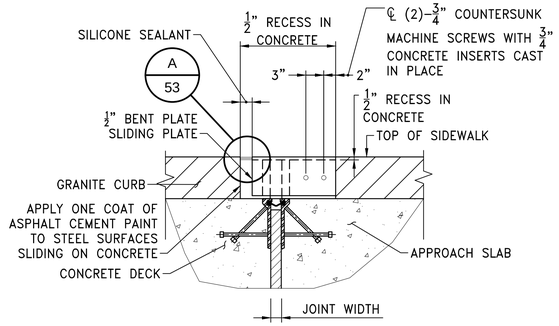
CHA
227 WEST EXCHANGE STREET
SUITE 101
PROVIDENCE, RI 02903

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	53	62

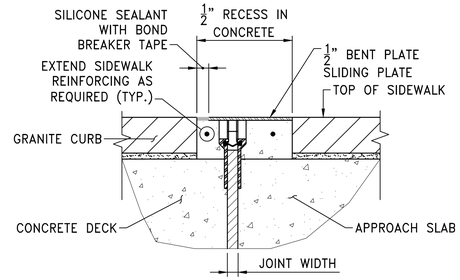


PLAN AT SIDEWALK

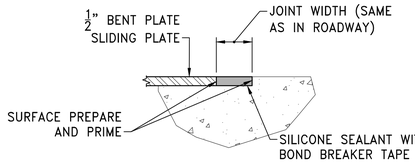
SCALE: 1/2" = 1'-0"



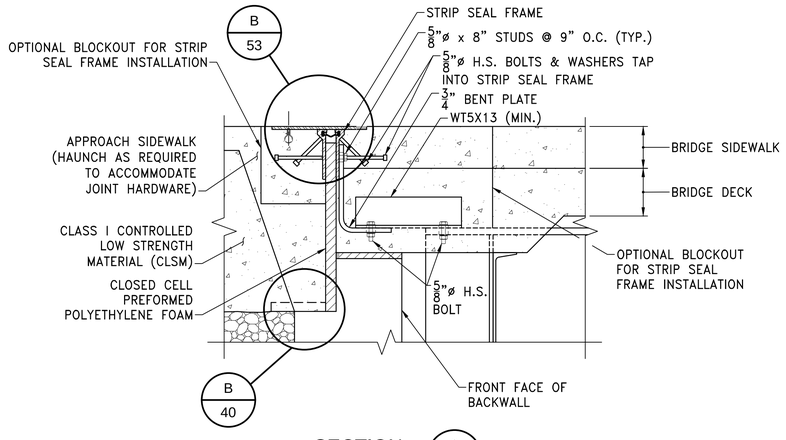
SECTION 1/53



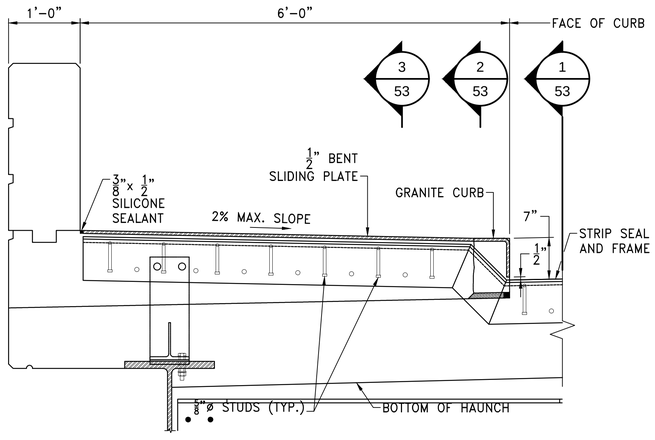
SECTION 2/53



DETAIL A/53

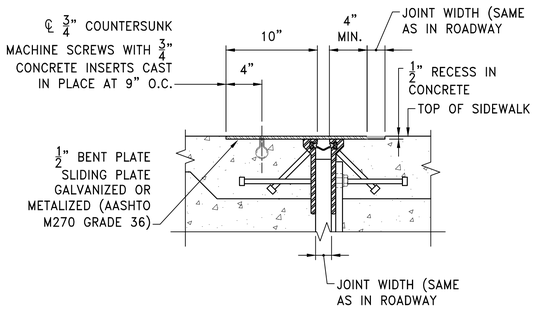


SECTION 3/53



SECTION AT SIDEWALK

SCALE: 1" = 1'-0"



DETAIL B/53

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

SIDEWALK DETAILS 1

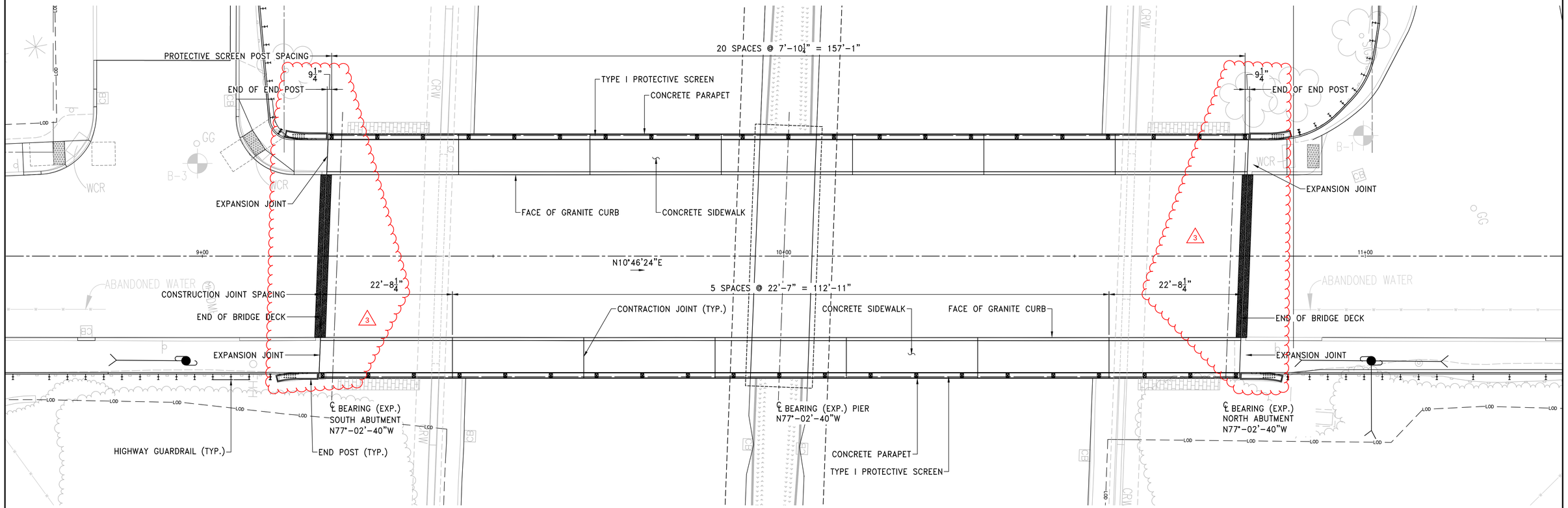
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
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8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

0013V_V1_053_SIDEWALK001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	54	62

R-3



RAIL POST SPACING PLAN

SCALE: 1/8" = 1'-0"

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

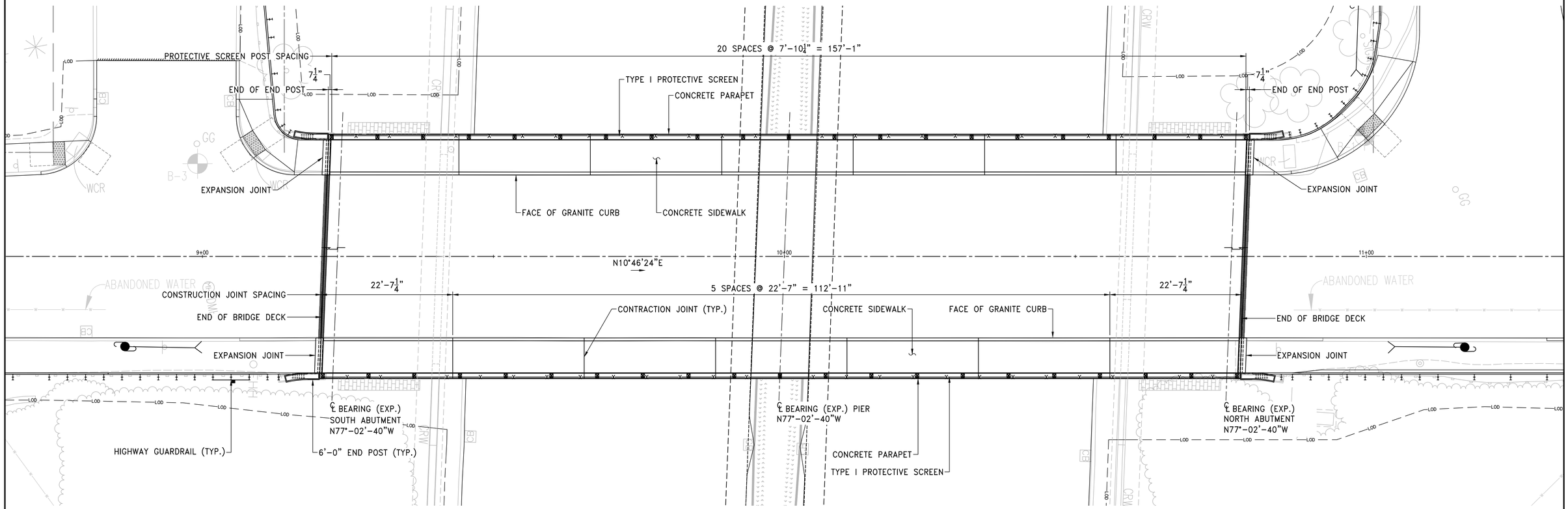
PROVIDENCE COUNTY RHODE ISLAND

SIDEWALK JOINT & FENCE POST SPACING PLAN

CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	54	62



RAIL POST SPACING PLAN

SCALE: 1/8" = 1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

SIDEWALK JOINT & FENCE POST SPACING PLAN

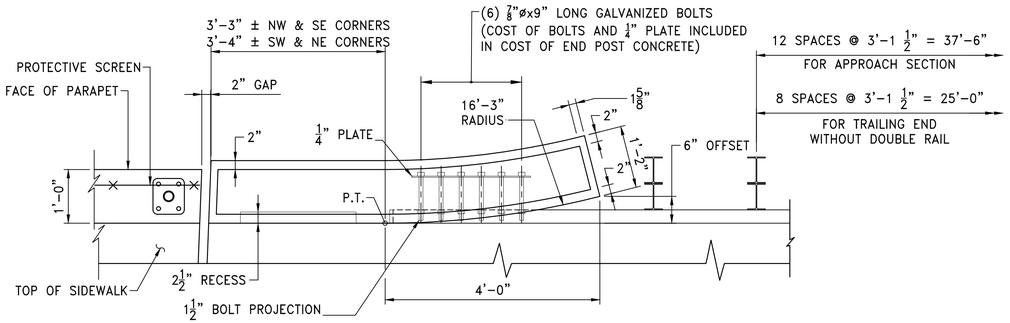
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

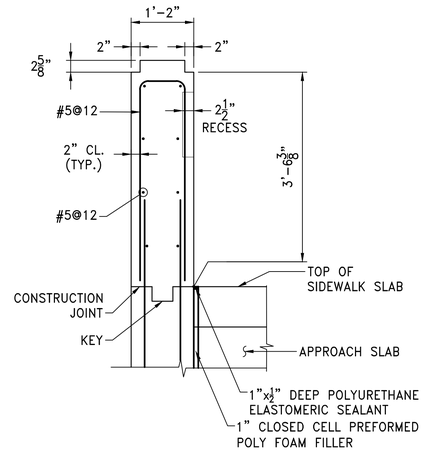
0013V_V1_054_SIDEWALK002

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	55	62

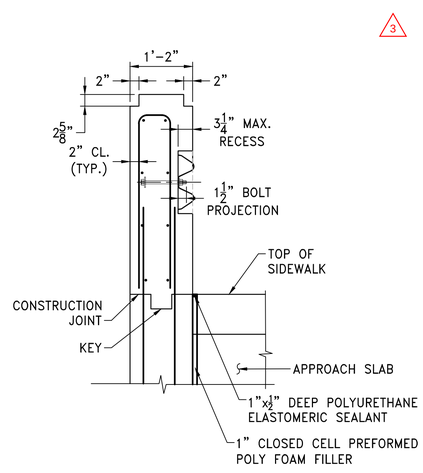
R-3



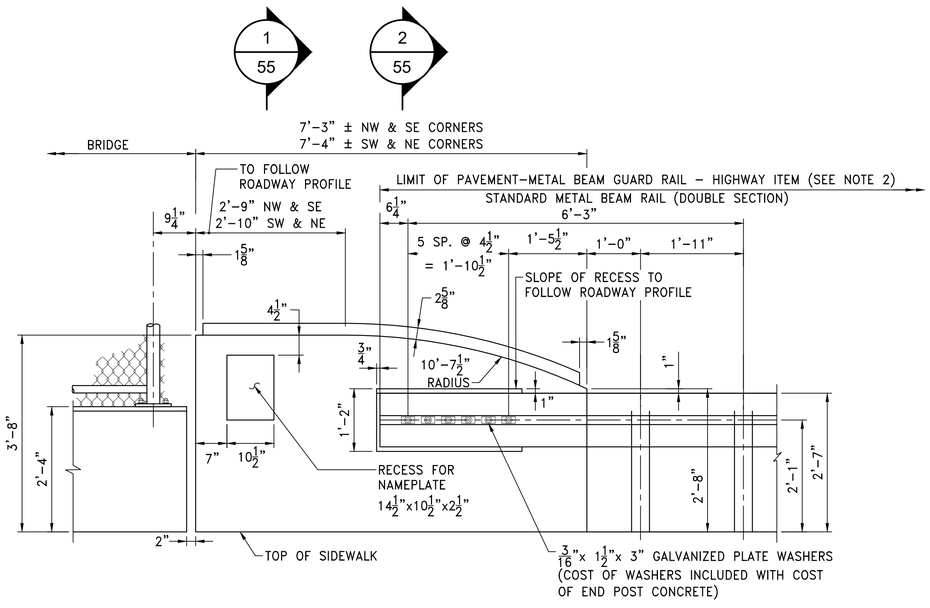
PLAN
SCALE: 3/4" = 1'-0"



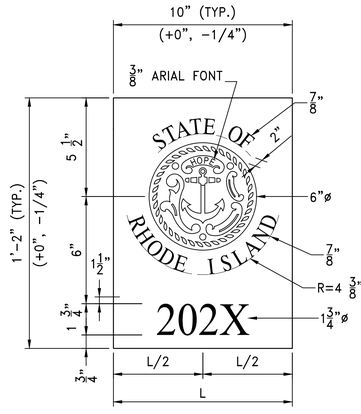
SECTION 1/55
SCALE: 3/4" = 1'-0"



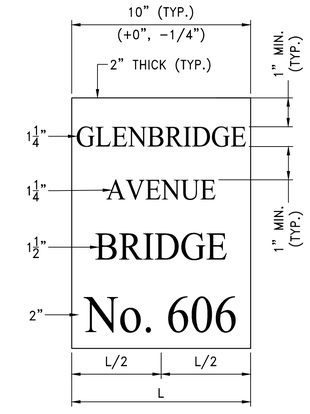
SECTION 1/55
3/4" = 1'-0"



DETAIL OF END POST
ELEVATION
SCALE: 3/4" = 1'-0"



STATE SEAL TABLET



BRIDGE NAME TABLET

NOTE:
ALL FONT STYLES ARE TO BE TIMES NEW ROMAN, UNLESS NOTED OTHERWISE.

GRANITE IDENTIFICATION TABLETS (NAMEPLATES)
NOT TO SCALE

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

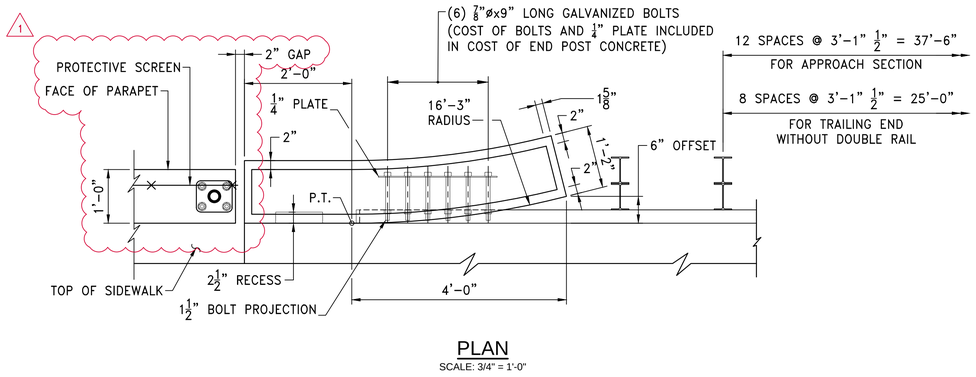
PROVIDENCE COUNTY RHODE ISLAND

END POST DETAILS

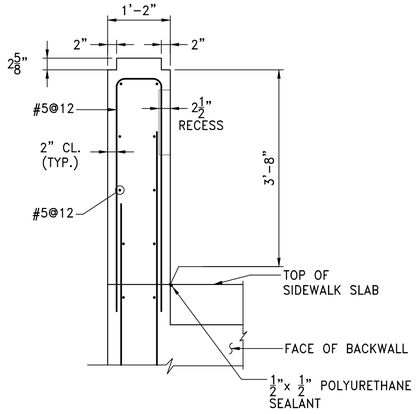
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	55	62

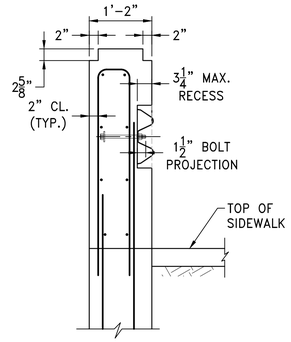


PLAN
SCALE: 3/4" = 1'-0"



SECTION
SCALE: 3/4" = 1'-0"

1
55

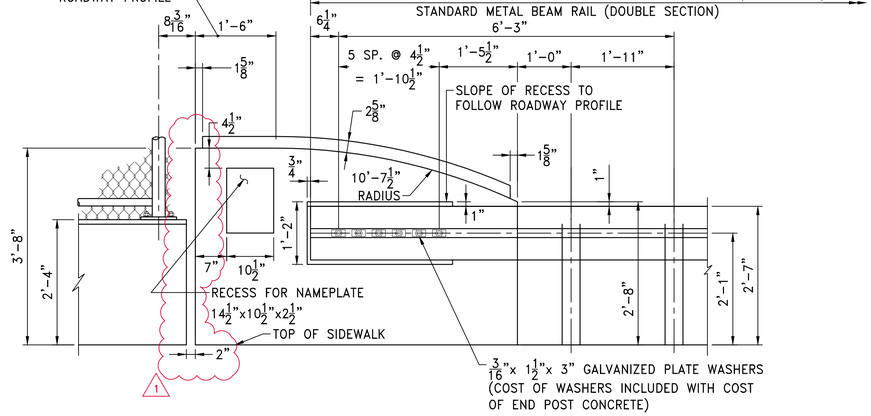


SECTION
3/4" = 1'-0"

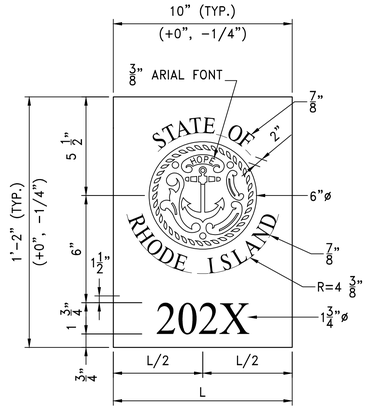
2
55

1
55

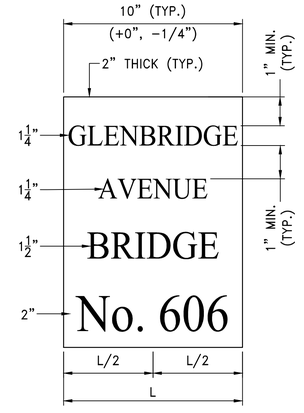
2
55



DETAIL OF 6 FOOT END POST ELEVATION
SCALE: 3/4" = 1'-0"



STATE SEAL TABLET



BRIDGE NAME TABLET

NOTE:
ALL FONT STYLES ARE TO BE TIMES NEW ROMAN, UNLESS NOTED OTHERWISE.

GRANITE IDENTIFICATION TABLETS (NAMEPLATES)
NOT TO SCALE

REVISIONS		
NO.	DATE	BY
1	11/25/19	ETS

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

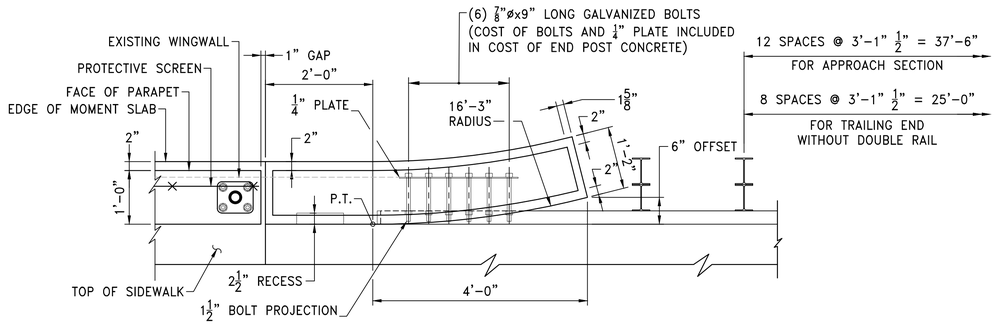
BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

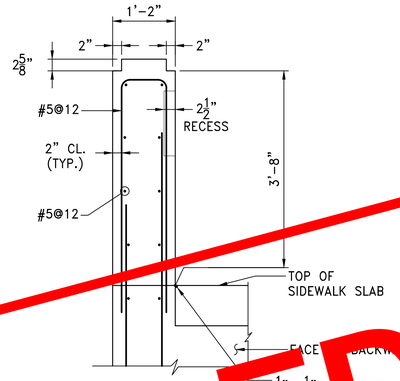
END POST DETAILS

CHECKED BY _____ DATE _____ SCALE AS NOTED

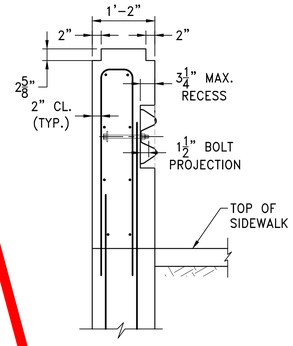
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	55	62



PLAN
SCALE: 3/4" = 1'-0"



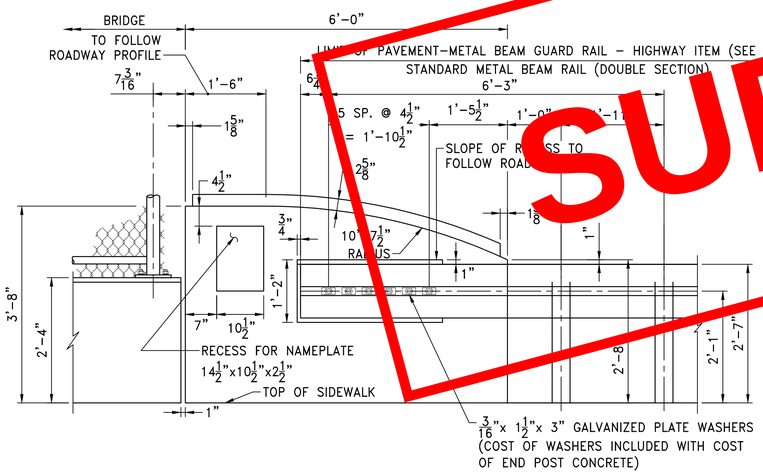
SECTION
SCALE: 3/4" = 1'-0"



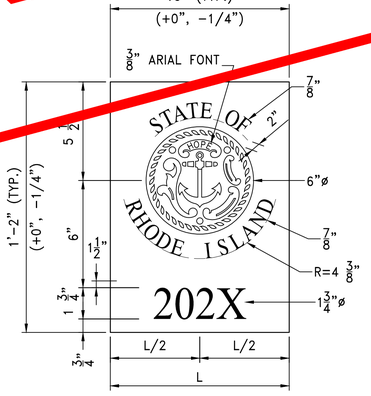
SECTION
3/4" = 1'-0"

1 55

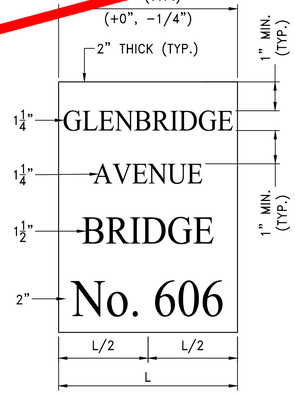
2 55



DETAIL OF 6 FOOT END POST
ELEVATION
SCALE: 3/4" = 1'-0"



STATE SEAL TABLET



BRIDGE NAME TABLET

NOTE:
ALL FONT STYLES ARE TO BE TIMES NEW ROMAN, UNLESS NOTED OTHERWISE.

GRANITE IDENTIFICATION TABLETS (NAMEPLATES)
NOT TO SCALE

SUPERSEDED

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

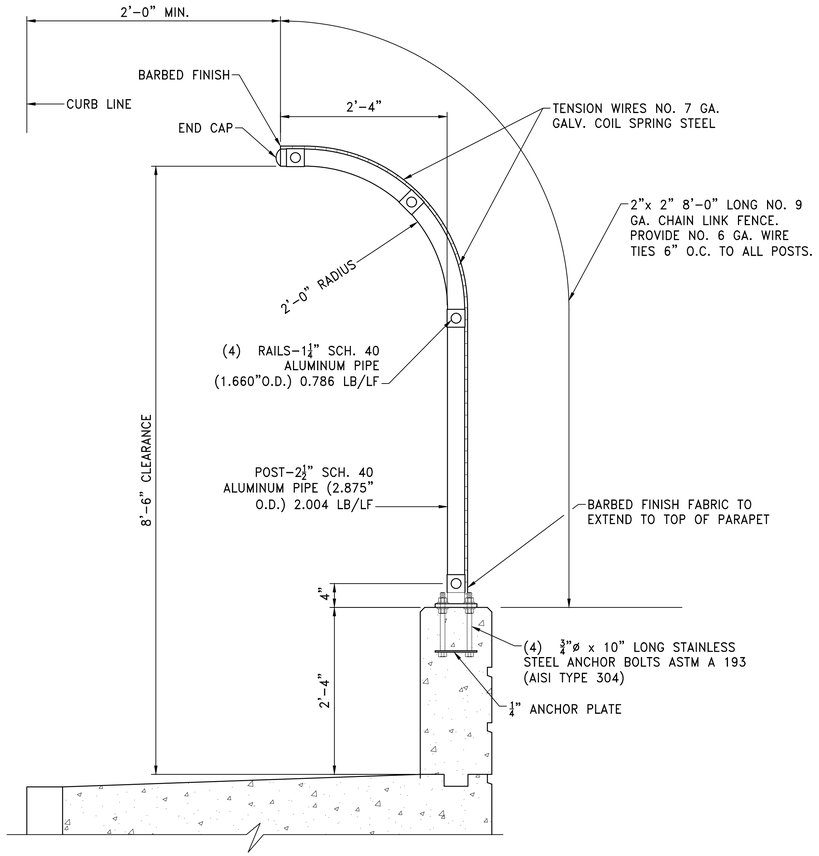
PROVIDENCE COUNTY RHODE ISLAND

END POST DETAILS

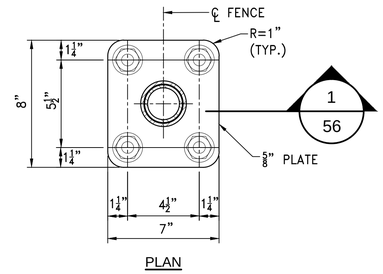
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	56	62

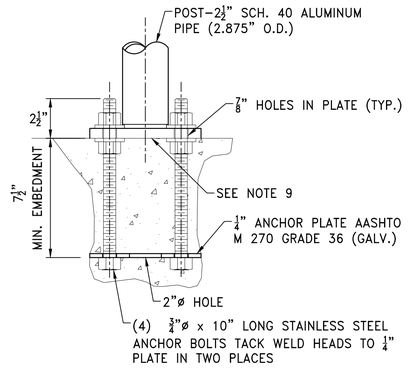


TYPE 1 PROTECTIVE SCREEN (CHAIN LINK FENCE)



PLAN

BASE PLATE

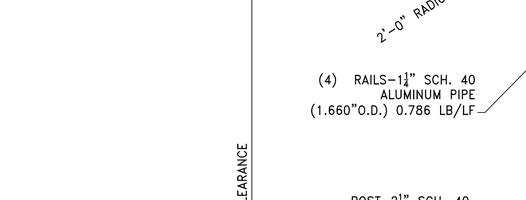


ELEVATION

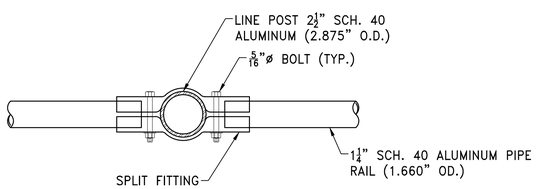
ANCHOR DETAIL

NOTES:

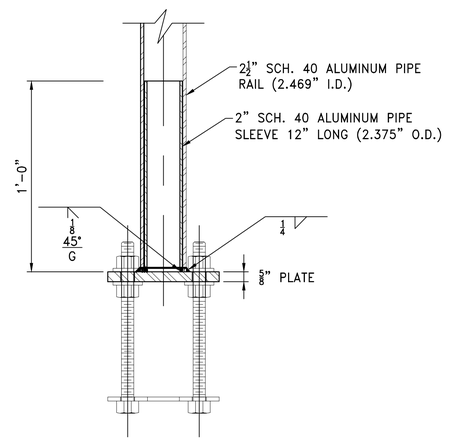
1. ALL POSTS SHALL BE SET VERTICAL UNLESS OTHERWISE SPECIFIED.
2. MAXIMUM POST SPACING SHALL BE 8'-0".
3. POSTS, RAILS, TENSION BARS, RAIL SPLICES, WASHERS AND POST CONNECTION CLAMPS SHALL BE ALUMINUM ALLOY 6061-T6 ASTM DESIGNATION B 221.
4. THE ALUMINUM FABRIC SHALL BE ALUMINUM ALLOY 6061-T89-94 ASTM DESIGNATION B 221, NO. 9 GAUGE (0.148" DIAMETER).
5. THE WIRE TIES SHALL BE ALUMINUM ALLOY 1100-H-18 NO. 6 GAUGE (0.194" DIAMETER).
6. THE TENSION BANDS SHALL BE ALUMINUM ALLOY 6063-T5 ASTM DESIGNATION B 221.
7. THE BOLTS SHALL BE STAINLESS STEEL ASTM DESIGNATION A 193 (AISI TYPE 304) Fy = 30 KSI.
8. THE NUTS SHALL BE STAINLESS STEEL ASTM DESIGNATION A 194.
9. THE PORTIONS OF THE ALUMINUM BASE PLATES TO BE IN CONTACT WITH THE CONCRETE PARAPET AND THE STEEL ANCHOR BOLTS SHALL BE THOROUGHLY COATED WITH AN APPROVED ALUMINUM IMPREGNATED CAULKING COMPOUND.
10. THE ALUMINUM BASE PLATES SHALL BE ALUMINUM ALLOY 6061-T6 ASTM DESIGNATION B 221.



RAM SPLICE DETAIL



DETAIL OF POST CONNECTION



SECTION 1/56

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

PROTECTIVE SCREEN

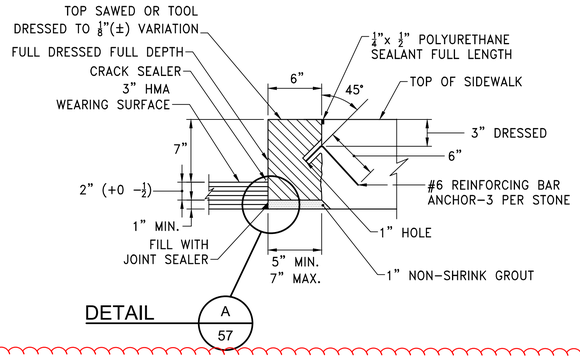
CHECKED BY _____ DATE _____ SCALE AS NOTED

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

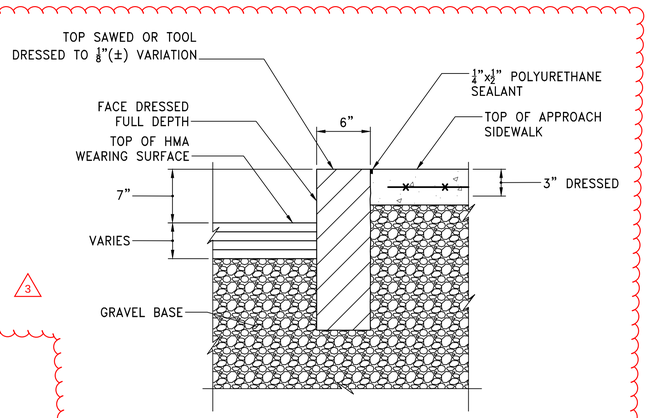
0013V_V1_056_PROTSCRDETL

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	57	62

R-3

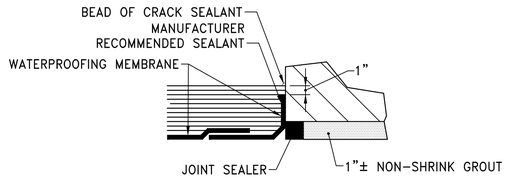


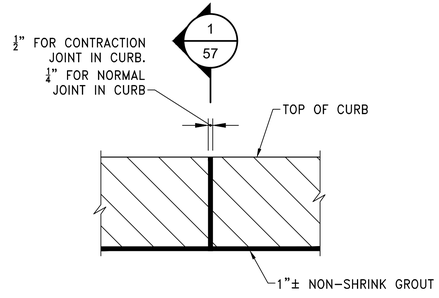
6"x 9" VERTICAL FACE GRANITE CURB (BITUMINOUS WEARING SURFACE) ON BRIDGE AND ON APPROACH SLABS



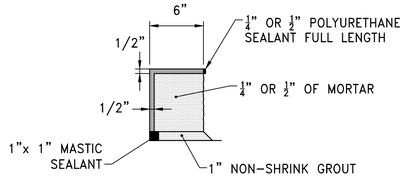
△3

6"x 18" GRANITE CURB BEYOND APPROACH SLAB





ELEVATION AT FACE OF CURB



CURB NOTES

1. FOR CUTTING TOLERANCES ON GRANITE CURB SEE R.I. STANDARD SPECIFICATION M-09.05.
2. STRAIGHT CURB SHALL BE FURNISHED IN LENGTHS OF NOT LESS THAN 6 FEET OR GREATER THAN 10 FEET. (5 FOOT LENGTHS MAY BE ALLOWED UNDER UNUSUAL CIRCUMSTANCES, BUT ONLY WITH THE APPROVAL OF THE BRIDGE ENGINEER).
3. CURB WHICH IS SET ON A RADIUS BETWEEN 160 FEET AND 300 FEET MAY BE FURNISHED STRAIGHT IN LENGTHS NOT TO EXCEED 6 FEET.
4. CURB TO BE SET ON A RADIUS OF 160 FEET OR LESS SHALL BE CUT TO THE CURVE REQUIRED.

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

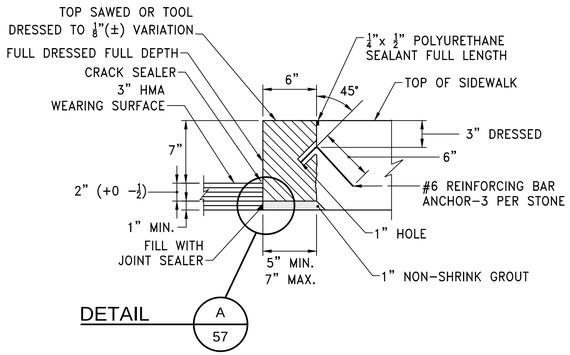
BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

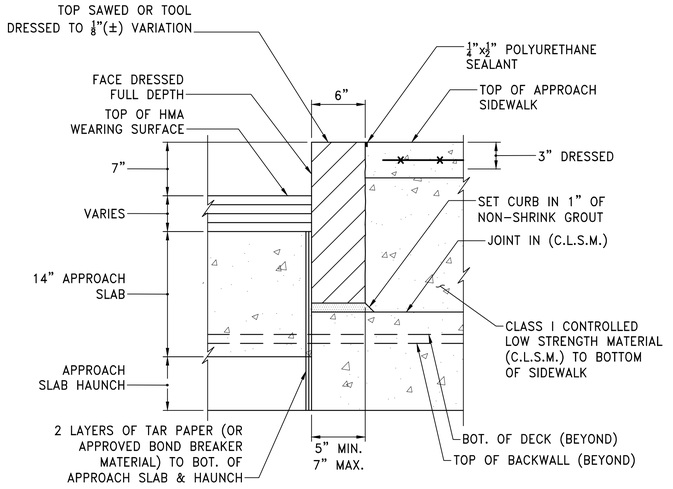
CURB DETAILS

CHECKED BY _____ DATE _____ SCALE 1-1/2"=1'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	57	62



6"x 9" VERTICAL FACE GRANITE CURB (BITUMINOUS WEARING SURFACE)

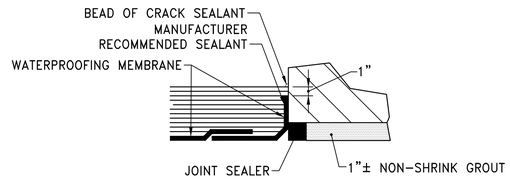


NOTE

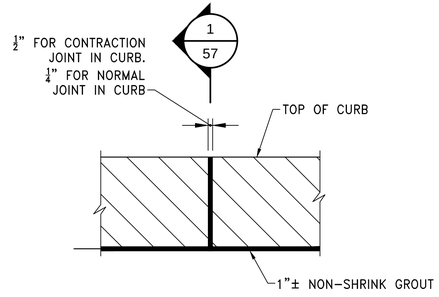
1. BEYOND LIMITS OF APPROACH SLAB, THE CURB AND APPROACH SLAB SIDEWALK ARE SET ON A GRAVEL BASE.

CURB NOTES

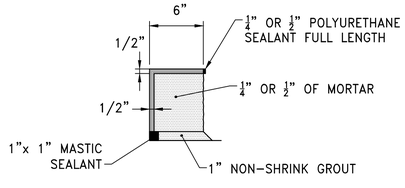
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2. STRAIGHT CURB SHALL BE FURNISHED IN LENGTHS OF NOT LESS THAN 6 FEET OR GREATER THAN 10 FEET. (5 FOOT LENGTHS MAY BE ALLOWED UNDER UNUSUAL CIRCUMSTANCES, BUT ONLY WITH THE APPROVAL OF THE BRIDGE ENGINEER).
3. CURB WHICH IS SET ON A RADIUS BETWEEN 160 FEET AND 300 FEET MAY BE FURNISHED STRAIGHT IN LENGTHS NOT TO EXCEED 6 FEET.
4. CURB TO BE SET ON A RADIUS OF 160 FEET OR LESS SHALL BE CUT TO THE CURVE REQUIRED.
5. CLASS I C.L.S.M. SHALL BE PAID FOR UNDER ITEM 800.9901.



6"x 18" GRANITE CURB AT ABUTMENT BACKWALL



ELEVATION AT FACE OF CURB



REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY — RHODE ISLAND

CURB DETAILS

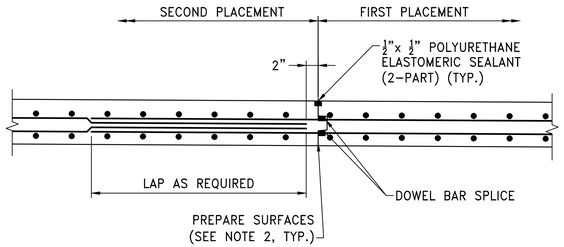
CHECKED BY _____ DATE _____ SCALE 1-1/2"=1'

PARE CORPORATION
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401-334-4100

0013V_V1_057_CURBDETL

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	58	62

R-3



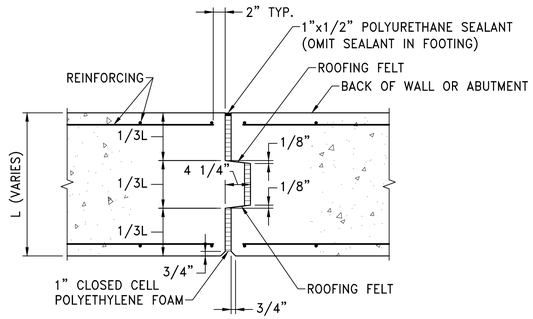
TRANSVERSE CONSTRUCTION JOINT DETAIL IN DECK SLAB WITH DOWEL SPLICERS

NOTES:

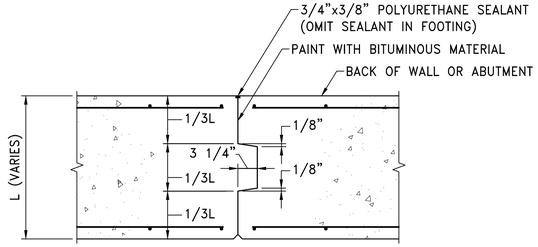
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2. THE SURFACE OF THE PREVIOUSLY CAST CONCRETE SHALL BE BLAST CLEANED, ROUGHENED, WETTED WITH CLEAN WATER, AND THEN FLUSHED WITH A MORTAR COMPOSED OF EQUAL PARTS OF THE CEMENT AND SAND SPECIFIED FOR THE NEW CONCRETE, BEFORE NEW CONCRETE IS PLACED ADJACENT THERETO. NEW CONCRETE SHALL BE PLACED BEFORE MORTAR HAS TAKEN INITIAL SET.
3. DOWEL BAR SPLICERS SHALL BE USED WHERE USE OF LAP SPLICES IS NOT FEASIBLE.
4. SEE "DECK SECTIONS & DETAILS 1" & "DECK SECTIONS & DETAILS 2" FOR REINFORCING DETAILS.

△3

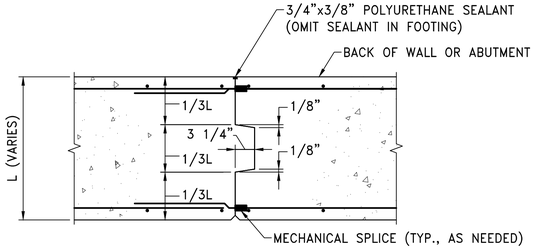
DELETED DETAIL



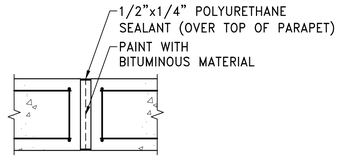
EXPANSION JOINT IN WALLS AND ABUTMENTS



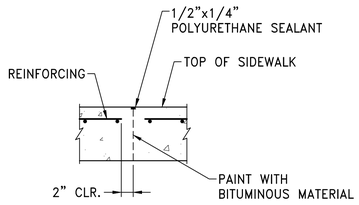
CONTRACTION JOINT IN WALLS AND ABUTMENTS



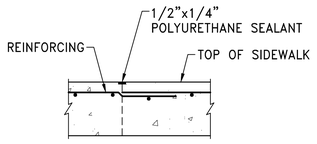
CONSTRUCTION JOINT IN WALLS, ABUTMENTS, PIER CAP, PIER FOOTING & APPROACH SLABS



CONTRACTION JOINT IN PARAPET

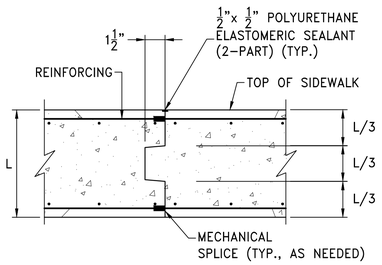


CONTRACTION JOINT



CONTRUCTION JOINT

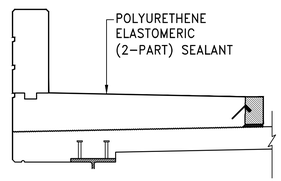
JOINTS IN SIDEWALK



CONSTRUCTION JOINT IN DECK △3

△3

DELETED DETAIL



PARAPET AND SIDEWALK CONTRACTION JOINT SEALANT LIMIT

REVISIONS		
NO.	DATE	BY
3	10/09/20	SJH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

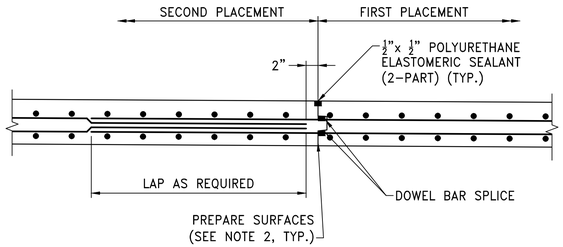
PROVIDENCE COUNTY — RHODE ISLAND

TYPICAL JOINT DETAILS

CHECKED BY _____ DATE _____ SCALE N.T.S.

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

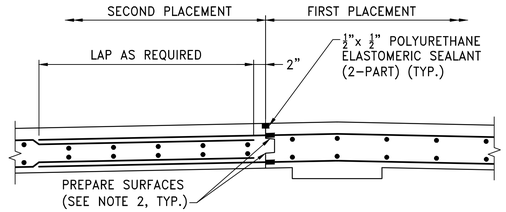
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	58	62



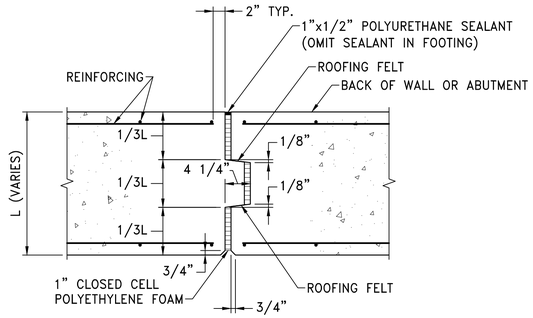
TRANSVERSE CONSTRUCTION JOINT DETAIL IN DECK SLAB WITH DOWEL SPLICERS

NOTES:

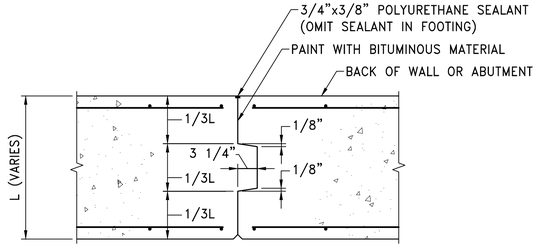
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3. DOWEL BAR SPLICERS SHALL BE USED WHERE USE OF LAP SPLICES IS NOT FEASIBLE.
4. SEE "DECK SECTIONS & DETAILS 1" & "DECK SECTIONS & DETAILS 2" FOR REINFORCING DETAILS.



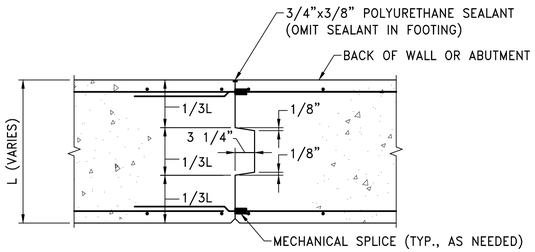
LONGITUDINAL CONSTRUCTION JOINT DETAIL IN DECK SLAB & APPROACH SLAB



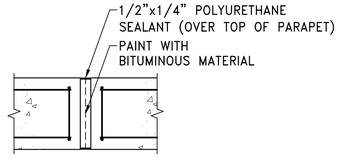
EXPANSION JOINT IN WALLS AND ABUTMENTS



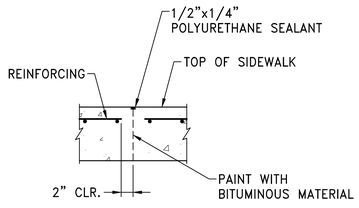
CONTRACTION JOINT IN WALLS AND ABUTMENTS



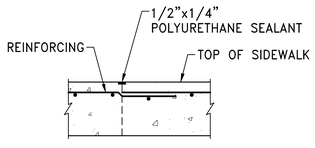
CONSTRUCTION JOINT IN WALLS, ABUTMENTS, PIER CAP, PIER FOOTING & APPROACH SLABS



CONTRACTION JOINT IN PARAPET

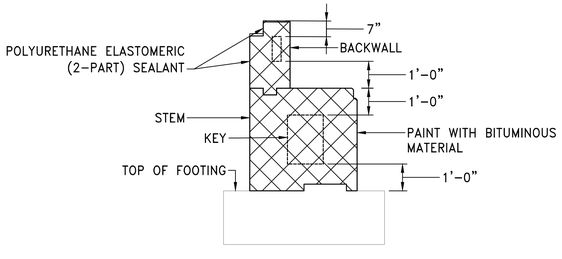


CONTRACTION JOINT

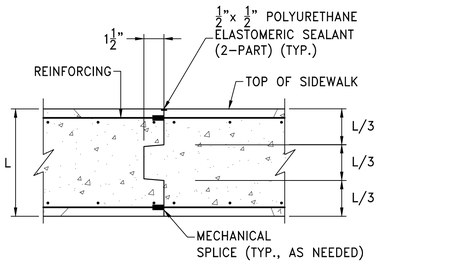


CONTRUCTION JOINT

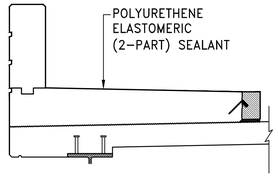
JOINTS IN SIDEWALK



TYPICAL SECTIONS THROUGH ABUTMENT JOINTS



CONSTRUCTION JOINT IN DECK AND APPROACH SLAB



PARAPET AND SIDEWALK CONTRACTION JOINT SEALANT LIMIT

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

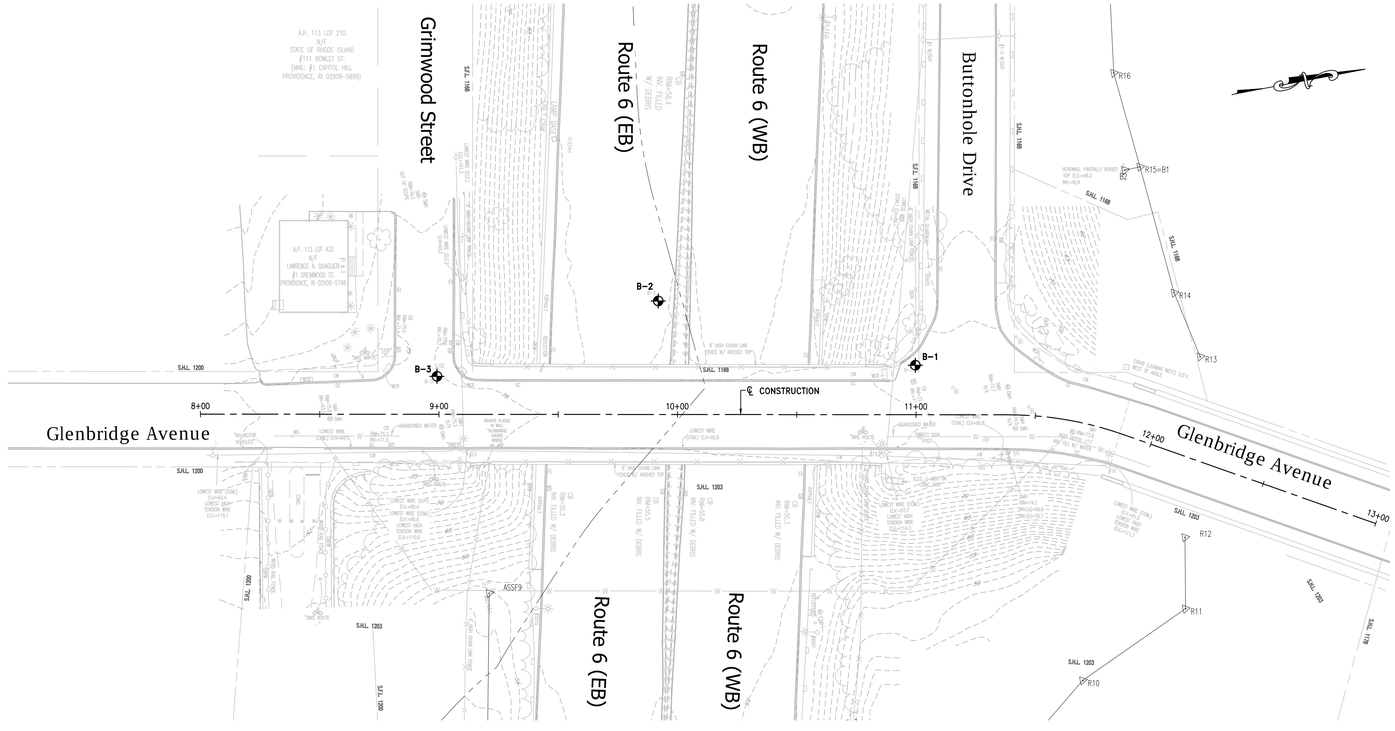
PROVIDENCE COUNTY — RHODE ISLAND

TYPICAL JOINT DETAILS

CHECKED BY _____ DATE _____ SCALE N.T.S.

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	59	62



Scale: 1"=30'

0 15' 30' 60'

Geologic - Earth Exploration, Inc.

7 Sherwood Drive, Norfolk, MA 02056
TEL (508) 384 4434 FAX (508) 384 4452

CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B1
PAGE 1 OF 3

File #: 18121
Date Started: 9/12/18
Date Completed: 9/13/18
Driller: C. O'Donnell
Site Rep.: B. Mahoney

CASING	SAMPLER	CORE BARREL
TYPE HW	SS	
SIZE 4"/3"	1 3/8"	
HAMMER 140#	140#	---
FALL 30"	30"	---

Surface Elevation:
Station:
Groundwater level readings
Date 9/13/2018 Depth 30.1'
Date Depth

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
		0.0					Top 6" Asphalt
	S-1	0.5-2.5	24	7	16-17-17-12		S-1 Moist dense light brown silty fine to medium SAND, little fine to medium Gravel, trace Silt
	S-2	2.5-4.5	24	18	14-16-12-10		S-2 Dry medium dense brown fine SAND, little medium to coarse Sand, trace Silt and Cobbles
5	S-3	4.5-6.5	24	6	12-9-9-12		S-3 Dry medium dense brown fine SAND, trace medium Sand, fine Gravel and Silt
	S-4	6.5-8.5	24	6	7-9-9-10		S-4 Dry medium dense brown fine SAND, little Silt and fine Gravel
10	S-5	9.0-11.0	24	6	7-7-10-7		S-5 Moist medium dense brown fine SAND, little fine Gravel, trace medium Sand and Silt
15	S-6	14.0-16.0	24	0	6-11-10-10		S-6 No recovery
20	S-7	19.0-21.0	24	7	19-15-12-12		S-7 Moist medium dense brown fine SAND, some Cobbles, trace medium Sand and Silt
25	S-8	24.0-26.0	24	7	22-30-45-61		S-8 Dry very dense brown fine to coarse SAND and fine Gravel, little Cobbles, trace Silt
	S-9	29.0-31.0	24	0	21-14-19-24		S-9 No recovery

Ground Surface to _____ used _____ then _____

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

Notes:
1. The stratification lines represent the approximate boundary between soil types. The transition may be gradual.
2. Water level readings were made in the drill hole during or at the completion of drilling. The water level may fluctuate over time.

Remarks: All soil descriptions are made in the field by the Drilling Foreman. No laboratory analyses were performed for this purpose.

B_SAL_RI\RI_GLENBRIDGE_AVE_PROVIDENCE_RI.GPJ_GEOLOGIC.GDT_11/20/18

Geologic - Earth Exploration, Inc.

7 Sherwood Drive, Norfolk, MA 02056
TEL (508) 384 4434 FAX (508) 384 4452

CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B1
PAGE 2 OF 3

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
						34.0	
35	S-10	34.0-36.0	24	4	33-69-80-69		S-10 Wet very dense light brown fine to coarse SAND and fine to medium GRAVEL, trace Silt
40	S-11	39.0-41.0	24	9	16-19-23-24		S-11 Wet hard light brown SILT, some fine Sand
45	S-12	44.0-46.0	24	14	11-12-17-23		S-12 Wet very stiff light brown SILT, some fine SAND
50	S-13	49.0-51.0	24	14	7-8-9-10		S-13 Wet stiff light brown SILT, trace fine Sand
55	S-14	54.0-56.0	24	14	13-17-18-18		S-14 Wet dense gray fine SAND, little Silt
60	S-15	59.0-61.0	24	19	3-8-8-8		S-15 Wet very stiff gray SILT, trace fine Sand
65	S-16	64.0-66.0	24	20	4-8-9-6		S-16 Wet very stiff gray SILT, trace fine Sand

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

Notes:
1. The stratification lines represent the approximate boundary between soil types. The transition may be gradual.
2. Water level readings were made in the drill hole during or at the completion of drilling. The water level may fluctuate over time.

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B_SAL_RI\RI_GLENBRIDGE_AVE_PROVIDENCE_RI.GPJ_GEOLOGIC.GDT_11/20/18

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7 Sherwood Drive, Norfolk, MA 02056
TEL (508) 384 4434 FAX (508) 384 4452

CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B1
PAGE 3 OF 3

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
70	S-17	69.0-71.0	24	19	17-23-37-40		S-17 Wet hard gray SILT, trace fine Sand
75	S-18	74.0-76.0	24	15	8-12-27-26		S-18 Wet hard gray SILT, trace fine Sand
80	S-19	79.0-81.0	24	20	10-22-27-25		S-19 Wet hard gray SILT, trace fine Sand
85	S-20	84.0-86.0	24	24	12-21-26-27		S-20 Top 12" Wet dense brown fine SAND, trace Silt Bottom 12" Wet gray hard SILT, trace fine Sand
						86.0	Bottom of exploration at 86.0'
90							
95							
100							

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

Notes:
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2. Water level readings were made in the drill hole during or at the completion of drilling. The water level may fluctuate over time.

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B_SAL_RI\RI_GLENBRIDGE_AVE_PROVIDENCE_RI.GPJ_GEOLOGIC.GDT_11/20/18

BORING LOCATION CHART*		
BORING	STATION	OFFSET
B-1	10+99.67	20.72 LT.
B-2	9+91.84	47.60 LT.
B-3	8+99.16	15.93 LT.

*LOCATIONS ARE APPROXIMATE

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

PROVIDENCE COUNTY RHODE ISLAND

BORING LOCATION PLAN

CHECKED BY _____ DATE _____ SCALE AS NOTED

0013V_V1_059_BORING LOCATION PLAN

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	60	62

Geologic - Earth Exploration, Inc.

7 Sherwood Drive, Norfolk, MA 02056
TEL (508) 384 4434 FAX (508) 384 4452

CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B2
PAGE 1 OF 3

File #: 18121
Date Started: 9/19/18
Date Completed: 9/21/18
Driller: C. O'Donnell
Site Rep.: B. Mahoney

	CASING	SAMPLER	CORE BARREL
TYPE	HW/NW	SS	
SIZE	4"/3"	1 3/8"	
HAMMER	300#	140#	---
FALL	24"	30"	---

Surface Elevation:
Station:
Groundwater level readings
Date 9/19/2018 Depth 6'
Date Depth

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
		0.0					Top 6" Asphalt 6"-18" Concrete
10	S-1	9.0-11.0	24	13	14-18-21-27		S-1 Moist very stiff tan SILT, little fine Sand
15	S-2	14.0-16.0	24	12	13-16-19-20		S-2 Wet dense tan/orange fine SAND and SILT
20	S-3	19.0-21.0	24	4	9-16-11-10		S-3 Wet very stiff brown/gray SILT and fine SAND, little fine Gravel
25	S-4	24.0-26.0	24	14	7-7-8-10		S-4 Wet stiff brown/gray SILT, some fine Sand
	S-5	29.0-31.0	24	19	9-8-6-7		S-5 Wet stiff brown/gray SILT, some fine SAND

Ground Surface to _____ used _____ then _____

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

Notes:
1. The stratification lines represent the approximate boundary between soil types. The transition may be gradual.
2. Water level readings were made in the drill hole during or at the completion of drilling. The water level may fluctuate over time.

Remarks: All soil descriptions are made in the field by the Drilling Foreman. No laboratory analyses were performed for this purpose.

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CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B2
PAGE 2 OF 3

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
35	S-6	34.0-36.0	24	20	2-3-3-5		S-6 Wet medium stiff gray SILT, little fine Sand
40	S-7	39.0-41.0	24	21	5-5-3-5		S-7 Similar to S-6
45	S-8	44.0-46.0	24	18	4-5-7-7		S-8 Similar to S-6 except stiff
50	S-9	49.0-51.0	24	18	4-4-8-7		S-9 Similar to S-6 except stiff
55	S-10	54.0-56.0	24	20	4-5-7-6		S-10 Similar to S-6 except stiff
60	S-11	59.0-61.0	24	10	14-17-21-19		S-11 Wet dense tan/white fine SAND, some Silt
65	S-12	64.0-66.0	24	1	28-27-19-19		S-12 Similar to S-11

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

Notes:
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CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B2
PAGE 3 OF 3

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
70	S-13	69.0-71.0	24	12	18-18-25-38		S-13 Similar to S-11
75	S-14	74.0-76.0	24	14	9-15-16-21		S-14 Wet very stiff gray SILT, some fine SAND
80	S-15	79.0-81.0	24	13	14-11-9-13		S-15 Wet medium dense tan/white fine SAND, some Silt and Cobbles
						82.7	Possible Bedrock
						84.0	Bottom of exploration at 84.0'

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

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CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B3
PAGE 1 OF 4

File #: 18121
Date Started: 9/14/18
Date Completed: 9/18/18
Driller: C. O'Donnell
Site Rep.: B. Mahoney

	CASING	SAMPLER	CORE BARREL
TYPE	HW/NW	SS	
SIZE	4"/3"	1 3/8"	
HAMMER	300#	140#	---
FALL	24"	30"	---

Surface Elevation:
Station:
Groundwater level readings
Date 9/17/2018 Depth 32'
Date Depth

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
		0.0					Top 6" Blacktop 6" - 12" Ballast Stone
	S-1	1.0-3.0	24	13	22-31-22-19		S-1 Dry very dense brown fine to coarse SAND and GRAVEL, FILL
	S-2	3.0-5.0	24	4	12-15-8-6		S-2 Broken Asphalt, FILL
5	S-3	5.0-7.0	24	7	8-4-2-3		S-3 Moist loose brown fine to coarse SAND, trace Silt, FILL
	S-4	7.0-9.0	24	7	6-9-4-4		S-4 Moist medium dense brown medium GRAVEL, trace fine Sand and Silt, FILL
	S-5	9.0-11.0	24	0	11-6-5-8		S-5 No recovery
10							
15	S-6	14.0-16.0	24	6	10-7-5-5		S-6 Dry medium dense brown fine to medium SAND, trace fine Gravel and Silt
	S-7	19.0-21.0	24	4	9-8-9-6		S-7 Moist medium dense brown fine to medium SAND, little coarse Sand and Silt, trace fine Gravel and Asphalt, FILL
20						23.0	At 23' Brown orange silt noted in wash
25	S-8	24.0-26.0	24	8	15-13-13-11		S-8 Wet medium dense orange medium to coarse SAND, little fine Sand and Gravel, trace Silt
	S-9	29.0-31.0	24	11	11-12-14-17		S-9 Wet very stiff orange SILT, some fine Sand

Ground Surface to _____ used _____ then _____

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

Notes:
1. The stratification lines represent the approximate boundary between soil types. The transition may be gradual.
2. Water level readings were made in the drill hole during or at the completion of drilling. The water level may fluctuate over time.

Remarks: All soil descriptions are made in the field by the Drilling Foreman. No laboratory analyses were performed for this purpose.

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CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B3
PAGE 2 OF 4

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
35	S-10	34.0-36.0	24	16	7-8-12-13		S-10 Wet very stiff light brown SILT, some fine Sand
40	S-11	39.0-41.0	24	18	8-7-12-11		S-11 Wet very stiff light brown SILT, some fine Sand
45	S-12	44.0-46.0	24	20	18-22-21-20		S-12 Wet hard gray to light and dark brown SILT, some fine Sand
50	S-13	49.0-51.0	24	16	9-10-14-15		S-13 Wet very stiff olive to brown SILT, little fine Sand
55	S-14	54.0-56.0	24	12	14-20-23-22		S-14 Wet hard olive to brown SILT, some fine SAND
60	S-15	59.0-61.0	24	13	11-16-27-21		S-15 Wet hard olive SILT, trace fine Sand
65	S-16	64.0-66.0	24	19	10-7-15-17		S-16 Wet very stiff olive SILT, trace fine Sand

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

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CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B3
PAGE 3 OF 4

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
70	S-17	69.0-71.0	24	14	6-12-20-22		S-17 Wet hard olive SILT, trace fine SAND
75	S-18	74.0-76.0	24	13	11-21-28-22		S-18 Wet hard olive SILT, some fine Sand
80	S-19	79.0-81.0	24	16	8-13-19-23		S-19 Wet hard gray SILT, little fine Sand
						83.0	
85	S-20	84.0-86.0	24	20	17-19-41-23		S-20 Wet very dense gray fine SAND, some Silt
90	S-21	89.0-91.0	24	19	10-21-27-22		S-21 Wet dense gray fine SAND, some Silt
						93.0	
95	S-22	94.0-96.0	24	14	10-14-14-12		S-22 Wet very stiff gray SILT, some fine SAND
						97.0	
100	S-23	99.0-100.8	21	16	29-42-65 -100/3		S-23 Wet hard dark gray SILT, some fine Sand and Cobbles

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

Notes:
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CLIENT: Pare Corporation
PROJECT: Glenbridge Avenue Bridge No. 06061
LOCATION: Glenbridge Ave, Providence RI

BORING #: B3
PAGE 4 OF 4

Depth ft	Sample No.	Depth ft	Pen. in	Rec. in	Blows/6"	Strata Change ft	Sample Description
105	S-24	104.0-106.0	24	12	31-48-69-79		S-24 Similar to S-23 except gray
	S-25	109.0-109.3	3	2	100/3		S-25 Similar to S-23
110	C-1	110.0-113.0	36	24	5-5-5 min/ft		C-1 Boulder from 109.3' to 111.0'
						112.0	Top of Bedrock 112'
115	C-2	113.0-118.0	60	50	4-3-4-3-3 min/ft		C-2 Hard, gray SANDSTONE inter-laminated with Silt stone 1-2 mm, 45°, fresh to slightly weathered with Quartz veins, RQD = 95%
						118.0	Bottom of exploration at 118.0'
120							
125							
130							
135							

Proportions Used		Cohesive Consistency Blows/ft			Cohesionless Density Blows/ft		Sample Type
Trace	0 to 10%	0-2	Very Soft	9-15 Stiff	0-10	Loose	UP = Fixed Piston
Little	10 to 20%	3-4	Soft	16-30 V-Stiff	10-30	M-Dense	UT = Shelby Tube
Some	20 to 35%	5-8	M-Stiff	31+ Hard	30-50	Dense	OE = Open End Rod
And	35 to 50%				50+	V-Dense	" = 300# hammer

Notes:
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Remarks: All soil descriptions are made in the field by the Drilling Foreman. No laboratory analyses were performed for this purpose.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16A
FOS, GLO, PVD, SCI, SMI

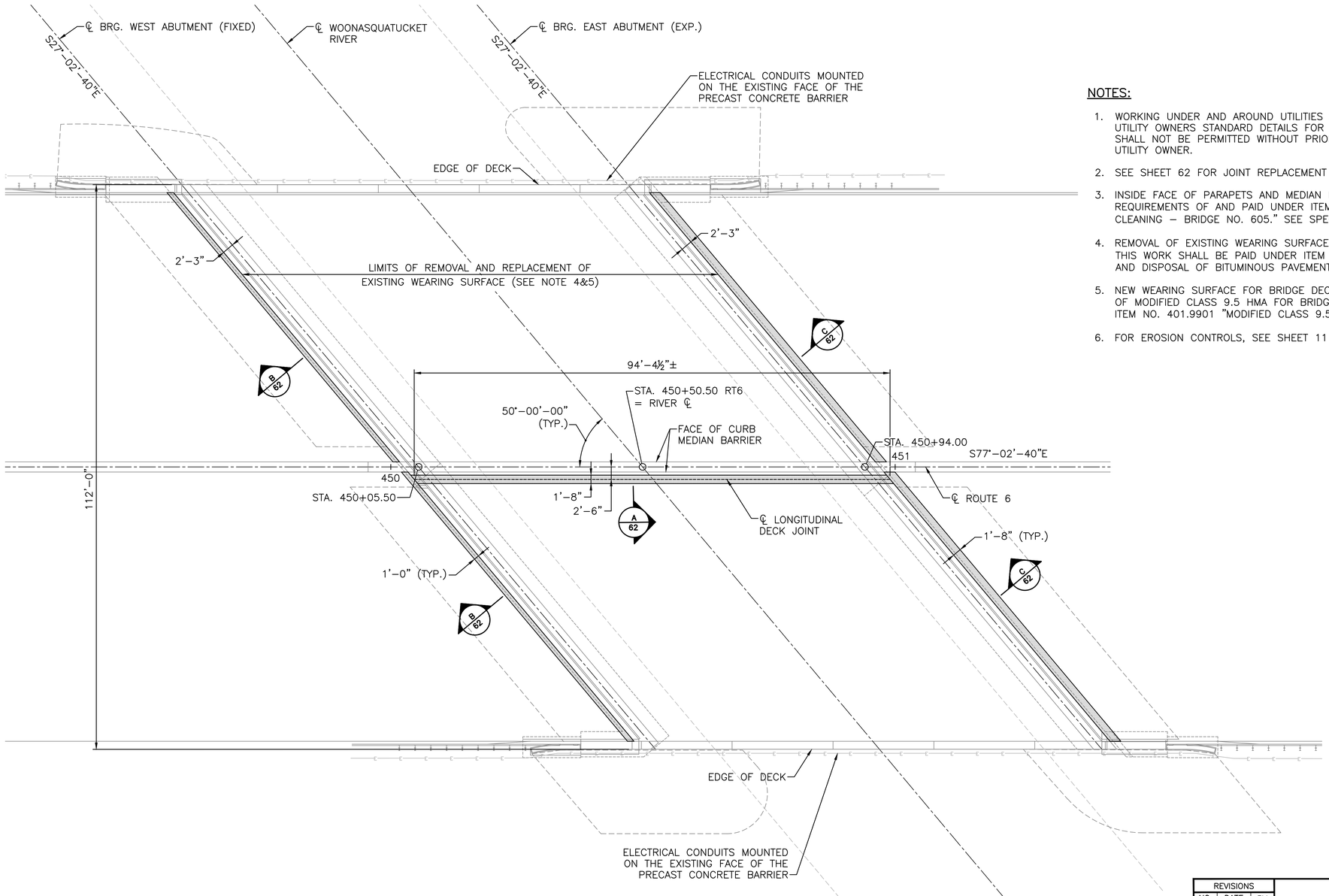
PROVIDENCE COUNTY RHODE ISLAND

BORING LOGS

CHECKED BY _____ DATE _____ SCALE N.T.S.

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0606(001) BRO-PRES(006)	2019	61	62



DECK PLAN
SCALE: 3/32"=1'-0"

NOTES:

1. WORKING UNDER AND AROUND UTILITIES SHALL BE PERFORMED ACCORDING TO UTILITY OWNERS STANDARD DETAILS FOR PROTECTION. RELOCATION OF UTILITIES SHALL NOT BE PERMITTED WITHOUT PRIOR PERMISSION OF THE ENGINEER AND UTILITY OWNER.
2. SEE SHEET 62 FOR JOINT REPLACEMENT NOTES.
3. INSIDE FACE OF PARAPETS AND MEDIAN BARRIER SHALL BE WASHED PER THE REQUIREMENTS OF AND PAID UNDER ITEM 820.9902 "HIGH PRESSURE WATER CLEANING – BRIDGE NO. 605." SEE SPECIAL PROVISIONS.
4. REMOVAL OF EXISTING WEARING SURFACE SHALL BE TO A DEPTH OF 1 1/2". THIS WORK SHALL BE PAID UNDER ITEM NO. 839.0100 "PARTIAL DEPTH REMOVAL AND DISPOSAL OF BITUMINOUS PAVEMENT FROM CONCRETE BRIDGE DECK.
5. NEW WEARING SURFACE FOR BRIDGE DECK SHALL CONSIST OF (1) 1 1/2" LIFT OF MODIFIED CLASS 9.5 HMA FOR BRIDGE DECKS AND SHALL BE PAID UNDER ITEM NO. 401.9901 "MODIFIED CLASS 9.5 HMA FOR BRIDGE DECKS."
6. FOR EROSION CONTROLS, SEE SHEET 11 "DRAINAGE AND UTILITY PLAN NO. 2."

LEGEND:

REMOVE AND REPLACE ASPHALTIC DECK JOINTS

PHINEAS N. FOWLER
No. 9788
REGISTERED PROFESSIONAL ENGINEER
CIVIL
6/26/19

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REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE GROUP 16B

PROVIDENCE, RHODE ISLAND

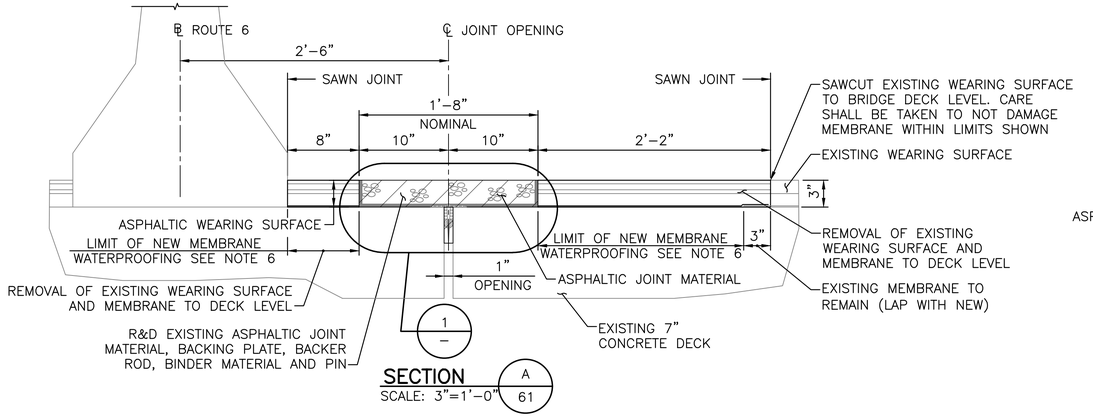
BRIDGE NO. 605 U.S ROUTE 6
OVER WOONASQUATUCKET RIVER; PROVIDENCE, RI

DECK PLAN

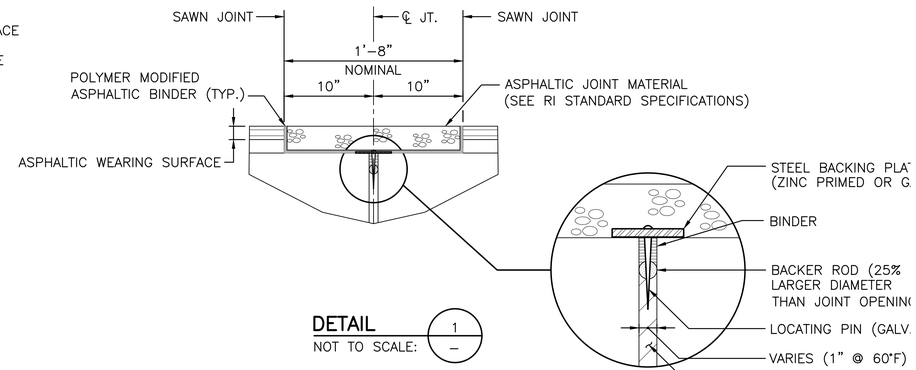
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605 DECK PLAN.DWG

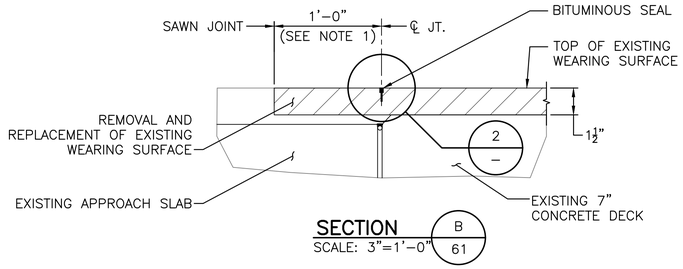
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	RI	BRO-0606(001) BRO-PRES(006)	2019	62	62



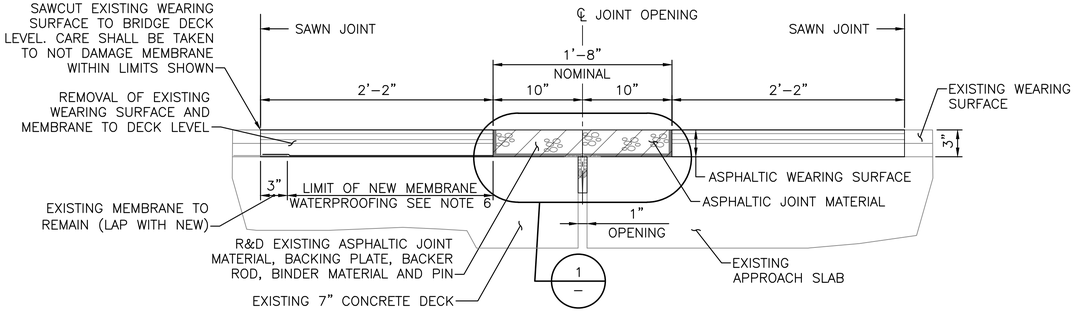
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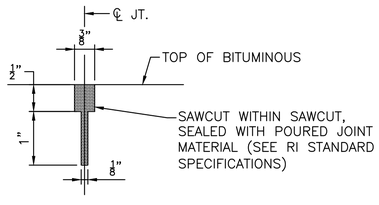
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SECTION B / 61
SCALE: 3"=1'-0"



SECTION C / 61
SCALE: 3"=1'-0"



SAW & SEAL DETAIL 2 / –
NOT TO SCALE:

SEQUENCE OF WORK:

STEP 1: CONTRACTOR SHALL PERFORM AN EXPLORATION AT THE GUTTER LINE AT EACH END OF JOINT AND THE CROWN AT THE BEGINNING AND END OF THE BRIDGE. A MINIMUM OF SIX REPRESENTATIVE DEPTH MEASUREMENTS SHALL BE TAKEN AT THESE LOCATIONS TO DETERMINE THE DEPTH OF PAVEMENT AND THE LOCATION OF THE DECK ENDS (CENTERLINE OF PROPOSED JOINT) BEFORE PROCEEDING TO STEP 2. MEASUREMENT AND EXPLORATION SHALL BE CONSIDERED INCIDENTAL TO ITEM NO. 823.1750.

STEP 2: SAWCUT BITUMINOUS PAVEMENT ON BOTH SIDES OF EXISTING JOINT FOR PAVEMENT CUT-OUT. EACH SAWCUT LINE SHALL BE 3' FROM THE CENTERLINE OF EXISTING JOINT. SAWCUT SHALL NOT DAMAGE EXISTING DECK OR APPROACH SLAB.

STEP 3: REMOVE EXISTING PAVEMENT MATERIAL, MEMBRANE WATERPROOFING AND JOINT MATERIAL WITHIN THE LIMITS SHOWN.

STEP 4: REPAIR SURFACE OF DECK AND APPROACH SLAB AS REQUIRED AND INSTALL MEMBRANE TO THE TOP OF THE DECK WITHIN THE LIMITS SHOWN. INSTALL BOND BREAKER BEFORE REPAVING TO THE LIMITS OF THE NEW ASPHALTIC PLUG JOINT.

STEP 5: PLACE TACK COAT ON VERTICAL EDGE OF PAVEMENT ALONG SAWCUT LINES. INSTALL TEMPORARY BACKER ROD FLUSH WITH THE BRIDGE DECK AND APPROACH SLAB TO BE INCLUDED FOR PAYMENT UNDER ITEM 823. 1750.

STEP 6: PLACE MODIFIED CLASS 9.5 HMA FOR BRIDGE DECKS IN THE JOINT CUT-OUT.

STEP 7: CUT PAVEMENT FULL DEPTH, 10" EACH SIDE OF CENTER OF JOINT, AND REMOVE ALL PAVEMENT MATERIAL AND BOND BREAKER BETWEEN SAWCUTS.

STEP 8: INSTALL PROPOSED ASPHALTIC PLUG EXPANSION JOINT SYSTEM.

JOINT REPLACEMENT NOTES:

1. PLACE TACK COAT ON VERTICAL EDGE OF PAVEMENT ALONG SAWCUT LINES. COST OF WORK SHALL BE INCLUDED UNDER ITEM NO. 403.0300 "ASPHALT EMULSION TACK COAT."
2. SAWCUTS FOR REMOVAL OF BITUMINOUS WEARING SURFACE SHALL BE PAID FOR UNDER ITEM 932.0200 "FULL-DEPTH SAWCUT OF BITUMINOUS PAVEMENT." SAWCUTS FOR INSTALLATION OF ASPHALTIC EXPANSION JOINT SYSTEM SHALL BE INCLUDED UNDER ITEM 823.1750 ASPHALTIC EXPANSION JOINT SYSTEM."
3. AN EXISTING BACKER ROD AND JOINT SEALANT SHALL BE COMPLETELY REMOVED PRIOR TO INSTALLING NEW JOINT SEAL.
4. COST OF REMOVAL OF EXISTING BITUMINOUS WEARING SURFACE, ASPHALTIC EXPANSION JOINT SYSTEM, BOND BREAKER, AND WATERPROOFING MEMBRANE SHALL BE INCLUDED IN ITEM 839.0200 "FULL DEPTH REMOVAL AND DISPOSAL OF BITUMINOUS PAVEMENT FORM CONCRETE BRIDGE DECKS."
5. FULL DEPTH WEARING SURFACE IN VICINITY OF JOINTS SHALL BE REPLACED WITH (2) 1 1/2" LIFTS OF MODIFIED CLASS 9.5 HMA FOR BRIDGE DECKS.
6. NEW WATERPROOFING MEMBRANE SHALL BE HEAT APPLIED PRE-FABRICATED MEMBRANE AS DEFINED BY SECTION 813.01.5 OF THE STANDARD SPECIFICATIONS AND SHALL BE PAID UNDER ITEM NO. 813.0200 "PREFORMED WATERPROOFING MEMBRANE."

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PROVIDENCE, RHODE ISLAND

BRIDGE NO. 605 U.S. ROUTE 6
OVER WOONASQUATUCKET RIVER, PROVIDENCE, RI

ROADWAY JOINTS

CHECKED BY JPM DATE 06/26/19 SCALE AS NOTED

605 ROADWAY JOINTS.DWG