RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	1	20

INDEX

STATE OF RHODE ISLAND

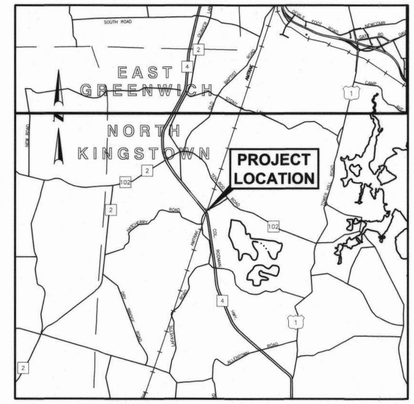
DEPARTMENT OF TRANSPORTATION

PLANS, ELEVATIONS AND SECTIONS OF PROPOSED

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243

TOWN OF NORTH KINGSTOWN
WASHINGTON COUNTY

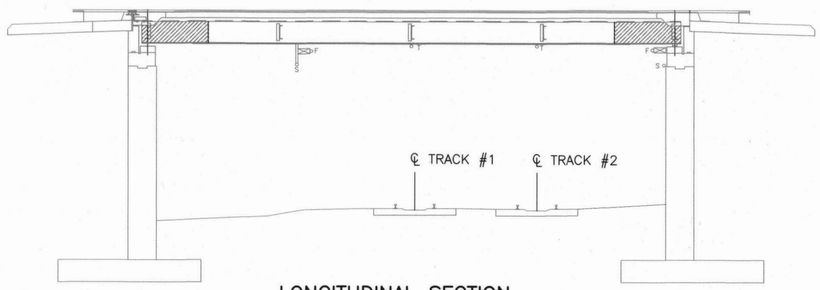
R.I. CONTRACT NO. 2024-CB-018 F.A. PROJECT NO. BHO-BG46 (001)



LOCUS MAP
APPROX. SCALE: 1" = 5,000'

DESIGN DESIGNATIONS

AADT (2024)	57,000 VPD
AADT (2049)	64,500 VPD
D	50%
K	10%
T (PEAK HOUR)	2%
DHV	6,450 VPH
DDHV	3,225 VPH
DESIGN SPEED	60 MPH



LONGITUDINAL SECTION
SCALE: ¼"=1'-0"

HURRICANE EVACUATION ROUTE

This project includes work on a designated Hurricane Evacuation and Diversionary Route as follows:
- Route 4
Refer to Note 18 on Sheet 4

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS

SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, FEBRUARY, 2024, 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.

JOHN M. ST. CYR
No. 7202
REGISTERED PROFESSIONAL ENGINEER (STRUCTURAL)
3/12/24

SCALES OF DRAWINGS
AS SHOWN

BASE OF LEVELS
VERTICAL DATUM - NAVD 88
HORIZONTAL DATUM - NAD 83

GM2 ASSOCIATES, INC.
200 MAIN STREET
PAWTUCKET, RI 02860

Contract Number 2024-CB-018
Volume Number 1 OF 1
Number of Sheet 1
Total Sheets 20

R.I. DEPARTMENT OF TRANSPORTATION

APPROVED
DIRECTOR DIVISION OF PROJECT MANAGEMENT — DATE 3-15-24

APPROVED
CHIEF ENGINEER OF INFRASTRUCTURE — DATE 3-18-24

APPROVED
DIRECTOR — DATE 3-18-24

US DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
ADMINISTRATOR, PROJECT MANAGEMENT — DATE

2606K_V1_001_COVER

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	2	20

LIST OF ABBREVIATIONS

A

ABUTMENT	= ABUT.
ADDITIONAL	= ADD'L
ALTERNATE	= ALT.
ANCHOR BOLT	= A.B.
AND	= &
APPROACH	= APPR.
APPROVED	= APPD.
APPROXIMATE	= APPROX.
AT EACH	= @
AVENUE	= AVE.
AVERAGE	= AVG.

B

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

C

CENTER TO CENTER	= C TO C
CENTERLINE	= ℄
CIRCLE	= CIR.
CLEARANCE	= CLR.
COLUMN	= COL.
CONCRETE	= CONC.
CONDUIT	= COND.
CONNECTION	= CONN.
CONSTRUCTION	= CONST.
CONTRACTION	= CONTR.
COUNTERSINK	= CSK.
COUPLING	= CPLG.
CLASS I CONTROLLED LOW STRENGTH MATERIAL	= CLMS
CUBIC FEET	= CF

D

DETAIL	= DET.
DIAGONAL	= DIAG.
DIAPHRAGM	= DIAPHM.
DIAMETER	= DIA. OR ø
DIMENSION	= DIM.
DOWN	= DN.
DRAWING	= DWG.
DRAIN	= DR.

E

EACH	= EA.
EACH FACE	= EF
EAST	= E.
ELEVATION	= EL. OR ELEV.
EMBEDMENT	= EMBED.
EXISTING	= EXIST.
EXPANSION	= EXP.
EQUAL	= EQ.

F

FAR FACE	= FF
FAR SIDE	= FS
FABRICATE	= FAB.
FACE TO FACE	= F TO F
FEET	= FT.
FLANGE	= FLG.
FLAT HEAD	= F.H.
FOOTING	= FTG.
FORCE MAIN	= FM
FOUNDATION	= FDN.
FURNISH, FABRICATE & ERECT	= F.F.&E.

G

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

H

HEIGHT	= HGT.
HEXAGON	= HEX.
HIGHWAY	= HWY.
HIGH STRENGTH	= HS
HORIZONTAL	= HORIZ.

I

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

J

JOINT	=JT.

L

LENGTH	= LGTH. OR L
LENGTH OF VERTICAL CURVE	= LVC
LEFT	= LT.
LIGHTING	= LTG.
LONG	= LG.
LOAD & RESISTANCE FACTOR DESIGN	= LRFD

M

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

N

NEAR FACE	= NF
NEAR SIDE	= NS
NORTH	= N.
NOT TO SCALE	= NTS
NUMBER	= NO. OR #

O

OBSERVED WATER	= O.W.
ON CENTER	= OC
OPENING	= OPNG.
OUTSIDE DIAMTER	= O.D.
OPTIONAL	= OPT.
OVERHEAD WIRES	= O.H.W.

P

PLATE	= ℙ
PLUS OR MINUS	= ±
POINT OF CURVATURE	= PC
POINT OF VERTICAL CURVATURE	= PVC
POINT OF VERTICAL INTERSECTION	= PVI
POINT OF VERTICAL TANGENCY	= PVT
POINT OF TANGENCY	= PT
POLYVINYL CHLORIDE	= PVC
POUNDS	= LBS.
POUNDS PER SQUARE INCH	= PSI
POUNDS PER SQUARE FOOT	= PSF
PRESTRESSED PRECAST CONCRETE	= P.P.C.
PRECAST CONCRETE	= P.C.
POINT OF APPLIED PROFILE GRADE	= P.G.L.

R

RADIUS	= RAD. OR R
RAILROAD	= RR
REQUIRED	= REQ'D.
REINFORCING	= REINF.
REHABILITATION	= REHAB.
REMOVE & DISPOSE	= R&D
RIGHT	= RT.

S

SECTION	= SECT.
SCHEDULE	= SCH.
SCHEMATIC	= SCHEM.
SHEET	= SHT.
SIDEWALK	= SDWK.
SOUTH	= S.
SPACES	= SP.
STANDARD	= STD.
STATION	= STA.
SYMMETRICAL	= SYM.
STAY IN PLACE	= S.I.P.
SQUARE	= SQ.

T

TOP	= T
TOP AND BOTTOM	= T&B
TOP OF	= T.O.
THICK	= THK.
TYPICAL	= TYP.

U

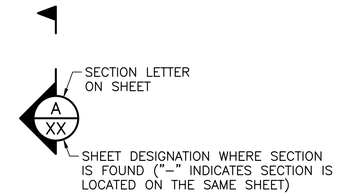
UNLESS NOTED OTHERWISE	= U.N.O.

V

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

W

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



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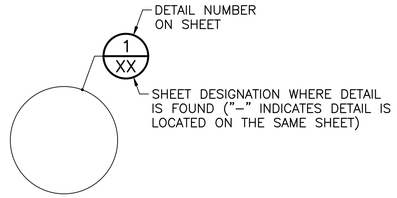

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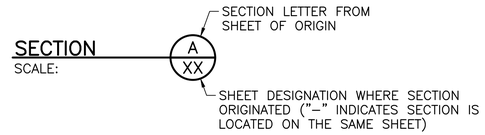

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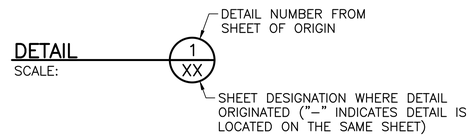


DETAIL TITLE

SECTION & DETAIL DESIGNATIONS

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE:
SHEET:
OF:

SCALE: NONE

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

ABBREVIATIONS

2606K_V1_002_ABBREV

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	3	20

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.	BORINGS
TYPE	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

	EDGE OF PAVEMENT
	BERM
	CURB
	GUARDRAIL
	MAILBOX
NO.	UTILITY POLE
GUY	POLE GUY
	LUMINARE
	SIGN
N(SIZE)SD	SUBDRAIN
(Length Size)	STORMDRAIN
(Length Size)	SANITARY SEWER
N(SIZE)W	WATER MAIN
N(SIZE)G	GAS MAIN
N-#(SIZE)T	TELEPHONE DUCT
N-#(SIZE)E	ELECTRIC DUCT
	PLUG AND CAP PIPE
	ABANDONED UTILITY
	FLARED END SECTION
	HEADWALL
	WATER OR GAS GATE
	CATCH BASIN
	MANHOLE
	HYDRANT
1+00	BASELINE OR CENTERLINE
NEW S.H.L. PLAT NO. XX	STATE HIGHWAY LINE
NEW S.F.L. PLAT NO. XX	STATE FREEWAY LINE
NEW P.E.B.	PERMANENT EASEMENT LINE
NEW T.E.B.	TEMPORARY EASEMENT LINE
	PROPERTY LINE
	CITY OR TOWN LINE
	PAVED WATERWAY
ELEV.	CONTOUR LINE
	OPEN DITCH
	R.I. HIGHWAY BOUND
	STONE BOUND
	RETAINING WALL
	FIELD STONE WALL
NO.	BORINGS
	FENCE
	WOOD OR BRUSH LINE
	TREES
	RIVER OR STREAM
	WETLAND AREA
	BUILDING
	FOUNDATION
	BUILDING TO BE REMOVED
	RAILROAD TRACKS
	CUT AND MATCH
	RIP-RAP
ROADWAY / TOP OF SLOPE	CUT SLOPE
ROADWAY / TOE OF SLOPE	FILL SLOPE
ROCK SHELF / ROCK CUT	ROCK CUT
00.00	SPOT GRADE
ELEV.	AREA GRADED TO DRAIN
	BALED HAY RI STD 9.1.0
	BALED HAY & SILT FENCE RI STD. 9.3.0
	EDGE OF WETLAND
	WETLAND PERIMETER
	AREA SUBJECT TO STORM FLOW
	100-YEAR FLOOD PLAIN
LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE
LIMIT OF CLEARING	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)
7.3.2	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
7.5.1	BITUMINOUS BERM
7.6.0	CURB SETTING DETAIL
8.2.0	BITUMINOUS CONCRETE DITCH
8.3.0	RIP-RAP DITCH
8.4.0	PAVED WATERWAY
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	ROADSIDE GUARDRAIL (GENERAL NOTES, INSTALLATION, POST & OFFSET BLOCK DETAILS)
34.1.1	TYPICAL GUARDRAIL INSTALLATION AT STRUCTURES
34.1.2	STEEL BEAM GUARDRAIL ENCASED POST FOR SHALLOW INSTALLATION
34.1.3	STEEL BEAM GUARDRAIL DEEP POST INSTALLATION
34.1.4	STEEL BEAM GUARDRAIL INSTALLED IN CONCRETE OR HMA SURFACE
34.2.0	STEEL BEAM GUARDRAIL, TL-3
34.2.1	STEEL BEAM GUARDRAIL, TL-2
34.2.2	STEEL BEAM GUARDRAIL DOUBLE FACE ASSEMBLY
34.2.5	STEEL BEAM GUARDRAIL REFLECTORIZED TRIANGULAR DELINEATOR
34.3.0	STEEL BEAM GUARDRAIL APPROACH END TREATMENT
34.3.1	STEEL BEAM GUARDRAIL TERMINAL END SECTION
34.3.2	STEEL BEAM GUARDRAIL ANCHORAGE TRAILING END SECTION
34.3.3	STEEL BEAM GUARDRAIL THRIE BEAM TRANSITION PANEL
34.3.4	STEEL BEAM GUARDRAIL CONNECTION TO NEW END POST
34.3.5	GUARDRAIL CONNECTION TO EXISTING END POST APPROACH END SECTION
34.3.6	GUARDRAIL CONNECTION TO EXISTING END POST TRAILING END SECTION
34.3.7	STEEL BEAM GUARDRAIL TRANSITION TO RIGID BARRIER
34.3.8	MASH GUARDRAIL TRANSITION TO EXISTING GUARDRAIL
34.3.9	STEEL BEAM GUARDRAIL LONG SPAN, TL-3
34.5.3	STEEL THRIE BEAM GUARDRAIL SINGLE FACE
34.5.4	STEEL THRIE BEAM GUARDRAIL DOUBLE FACE
34.5.5	STEEL THRIE BEAM GUARDRAIL LONG SPAN
40.1.0	F SHAPE CONCRETE BARRIER DOUBLE FACE
40.2.0	F SHAPE CONCRETE BARRIER SINGLE FACE
40.2.1	F SHAPE CONCRETE BARRIER WITH CONCRETE SEPARATOR
40.3.0	PRECAST MEDIAN BARRIER TRANSITION UNIT
40.4.0	PRECAST MEDIAN BARRIER FOR LIGHT STANDARD
40.5.0	BARRIER MOUNTED DELINEATOR
40.2.1	SINGLE-FACED PRECAST MEDIAN BARRIER
40.3.0	PRECAST MEDIAN BARRIER TRANSITION UNIT
40.5.0	BARRIER MOUNTED DELINEATOR
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" CLASS 9.5 HMA 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

THIS PLAN SHALL NOT BE ALTERED

GM2

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE:
SHEET:
OF:

SCALE: NOT TO SCALE

REVISIONS NO.	DATE	BY	REVISIONS NO.	DATE	BY
1	6/07	TRB			
2	12/22	RS			

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

STANDARD PLAN SYMBOLS & STANDARD LEGEND

2606K_V1_003_STDSYM

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	4	20

GENERAL NOTES:

1. ANY DAMAGE TO EXISTING PAVEMENT, BRIDGES, DRAINAGE STRUCTURES, DRAINAGE PIPES, INFILTRATION AREAS, ROADSIDE, 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 105.05 OF THE R.I.D.O.T. STANDARD SPECIFICATION, LATEST EDITION. EQUIPMENT AND MATERIAL SHALL NOT BE STORED IN AREAS DESIGNATED FOR STORMWATER INFILTRATION OR OUTSIDE THE L.O.D. WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXISTING CONDITIONS ARE NOT DISTURBED OR OBLITERATED BEFORE SURVEY GROUND CONTROL POINTS ARE LOCATED, VERIFIED, AND DEEMED ADEQUATE FOR CONSTRUCTION LAYOUT. THE CONSTRUCTION LAYOUT SHALL BE PROVIDED IN SUFFICIENT DETAIL, THEREBY ENABLING THE CONTRACTOR TO CONSTRUCT THE PROJECT IN CONFORMITY WITH THE PLANS AND SPECIFICATIONS. SURVEY WILL BE PROVIDED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION ACTIVITIES UNTIL ADEQUATE SURVEY GROUND CONTROL POINTS HAVE BEEN ESTABLISHED, TIED DOWN, AND VERIFIED IN WRITING BY THE CONTRACTOR'S PROFESSIONAL LAND SURVEYOR.

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 DETERMINED BY THE CONTRACTOR TO MEET THE REQUIREMENTS OF SECTION 907.

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 7 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 INCIDENTAL TO THE APPLICABLE PAVEMENT ITEMS.

8. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE SHALL 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 ITS 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.

9. THE CONTRACTOR WILL NOT 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. CLEANING WITH COMPRESSED AIR SHALL ONLY BE ALLOWED WITH THE APPROVAL OF THE ENGINEER.

11. PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS AND SHOP DRAWINGS OR AS 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 SKY-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 MAINTAIN THE SAFE TRAVEL OF THE PUBLIC 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 NEW AND EXISTING DRAINAGE STRUCTURES HAS BEEN PROPERLY ESTABLISHED AND THAT NO ISOLATED DEPRESSIONS REMAIN. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION; ANY CORRECTIVE ACTION 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. IF THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE, AS DESIGNATED ON THE COVERSHEET, THE CONTRACTOR IS ADVISED THAT UPON 12 (TWELVE) HOURS NOTICE THE ROADWAY SHALL BE OPEN TO EVACUEES AND EMERGENCY PERSONNEL. ANY EXTRA WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.

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).

GENERAL NOTES (CONTINUED):

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 ACTION WORK AND/OR SOIL MANAGEMENT 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. THE CONTRACTOR IS REQUIRED TO ADHERE WITH THE 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. THE CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE SWPPP AS SITE CONDITIONS WARRANT. A COPY OF THE SWPPP MUST BE ON-SITE AT ALL TIMES. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS.

2. NO UNDISTURBED AREAS SHALL BE GRUBBED 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 ERODIBLE MATERIAL SHALL ALSO BE SEEDED AND RINGED WITH APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES TO STABILIZE. STOCKPILES OF CONTAMINATED MATERIALS MUST BE PLACED ON TOP OF A POLY-ETHYLENE SHEET AND COVERED AT ALL TIMES UNLESS IT IS AN ACTIVE WORKING PILE.

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. ENVIRONMENTAL DIVISION.

5. SURFACE EROSION CONTROL MATTING 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 CONSTRUCTION OPERATIONS, THE CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL CATCH BASINS AND FLUSHING THE PIPES, AND THEN 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.

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 THE EFFICACY OF THE DRAINAGE SYSTEM. ONCE CONSTRUCTION IS COMPLETED THE CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL CATCH BASINS AND FLUSHING ALL PIPES OF ANY CONSTRUCTION RELATED DEBRIS AT NO ADDITIONAL COST.

11. CATCH BASIN RIM GRADES FOR STRUCTURES NOT IN A TRAVEL LANE 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 STRICTLY ADHERE TO THE PLANS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES FOR OUTLET PROTECTION PRIOR TO CLEANING AND FLUSHING STORM WATER DRAINAGE. SEDIMENT AND 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 STRAW 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 STRAW 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 REMOVED AND INFILTRATION IS REESTABLISHED, FINAL ROADSIDE VEGETATION IS ESTABLISHED AND USE OF TEMPORARY BASINS IS NO LONGER REQUIRED TO COMPLY WITH THE PLANS, SPECIFICATIONS, AND PERMITS. 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 AND COSTS REQUIRED TO RESOLVE SUCH ISSUES IS THE RESPONSIBILITY OF 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 COMPOST FILTER SOCK, STRAW 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 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. ALL COSTS ASSOCIATED WITH ADHERENCE TO THE SWPPP SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEMS. ADDITIONAL SEDIMENT AND EROSION CONTROLS, SHALL BE INSTALLED IN ACCORDANCE WITH THE SWPPP REPORT. THESE ADDITIONAL ITEMS WILL BE PAID AT THE UNIT PRICE FOR THAT BID ITEM.

23. ANY OBSERVATIONS OF ILLICIT CONNECTIONS OR DISCHARGES TO RIDOT'S DRAINAGE NETWORK OR OUTFALLS SHALL BE REPORTED TO THE RIDOT STORMWATER UNIT IMMEDIATELY.

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 AND 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.

9. THE CONTRACTOR SHALL PROVIDE 72-HOUR ADVANCE NOTICE TO THE RIDOT TMC (401-222-2378) FOR WORK AROUND RIDOT OWNED INFRASTRUCTURE (DRAINAGE, LIGHTING, ITS EQUIPMENT, TOLL GANTRIES, COUNTING STATIONS, ETC.). ANY DAMAGE TO THIS INFRASTRUCTURE MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT RIDOT IN ADVANCE, SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE STATE.

THIS PLAN SHALL NOT BE ALTERED

GM2

RI DOT

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE:
SHEET:
OF:

SCALE: NONE

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY
1	4/07	TRB	4	12/22	JRP
2	3/10	RBH			
3	4/14	MLP			

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

STANDARD NOTES -1

2606K_V1_004_STDNOTES001

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	5	20

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. COORDINATE WITH THE R.I.D.O.T. CONSTRUCTION MANAGER PRIOR TO 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.
9. THE CONTRACTOR SHALL PROVIDE CERTIFICATION THAT THERE ARE NO CONTAMINANTS THAT EXCEED THE R.I.D.E.M. PERMISSIBLE LEVELS IN THE SOILS USED AS LOAM OR PLANTABLE SOIL.

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 AND REVISIONS, OF THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS, 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. THE COST FOR DELIVERY IS CONSIDERED INCIDENTAL TO THE WORK.
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. INSULATED 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 AND CABINETS SHALL BE PROGRAMMED AND 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 FLAGPERSONS SHALL BE UTILIZED AS OUTLINED IN SECTIONS 913 & 914 OF THE RI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
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 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. APPROVED 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. FAILURE TO COMPLY WILL RESULT IN AN ASSESSMENT OF A CHARGE AS OUTLINED IN SECTION 937 OF THE RI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THIS PLAN SHALL NOT BE ALTERED

GM2

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE:
SHEET:
OF:

SCALE: NONE

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY
1	4/07	TRB	4	2/22	JRP
2	1/07	TRB			
3	3/10	RBH			

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

STANDARD NOTES - 2

2606K_V1_005_STDNOTES002

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	6	20

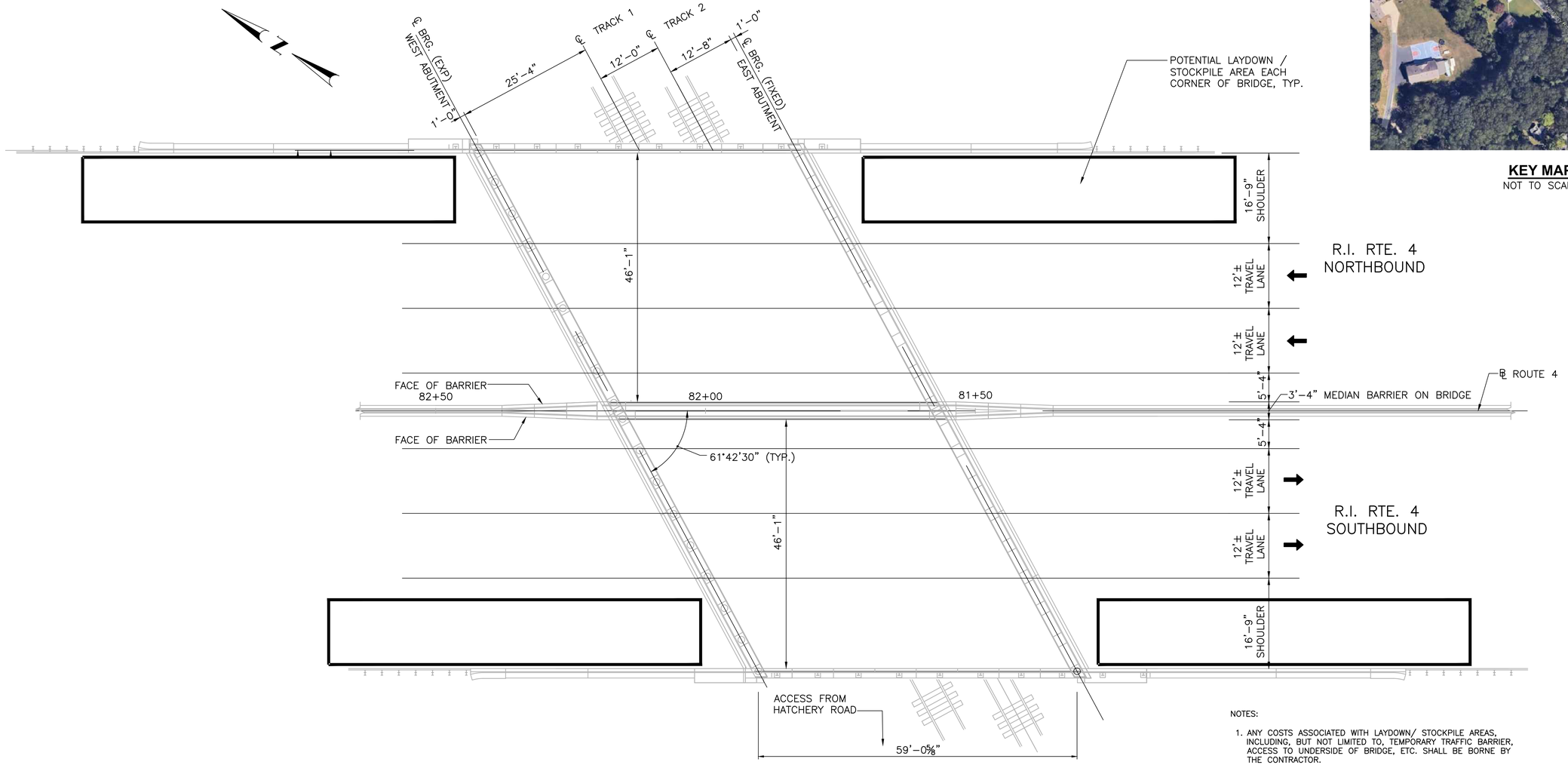
JOB SPECIFIC GENERAL NOTES

1. ALL GRASSED AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REESTABLISHED WITH PLANTABLE SOIL AND TYPE 1 SEED. IF AREAS ARE BEYOND THE WORK LIMITS THEN THE COST SHALL BE BORNE BY THE CONTRACTOR.
2. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS INCLUDING THE CONTRACTOR'S STOCKPILE AREAS WITHIN THE RIGHT-OF-WAY SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR OR RIDOT ON THIS PROJECT SHALL WORK WITHIN THE SAME PROJECTED WORK AREAS AS THE CONTRACTOR. NO SEPARATE LANE CLOSURES WILL BE PAID FOR.
4. SCAFFOLDING REQUIRED TO ACCESS AND PERFORM WORK SHALL NOT BE PAID FOR SEPARATELY BUT RATHER SHALL BE INCIDENTAL TO WORK BEING PERFORMED.

JOB SPECIFIC MAINTENANCE AND PROTECTION OF TRAFFIC NOTES

1. TEMPORARY CONSTRUCTION SIGNS AND ALL APPLICABLE TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY SECTION OPEN TO TRAFFIC.
2. ANY CONE WEIGHTS REQUIRED ON RI STD. 26.1.0 "FLUORESCENT TRAFFIC CONES" SHALL BE INCIDENTAL TO THE CONTRACT.

KEY MAP
NOT TO SCALE



POTENTIAL LAYDOWN / STOCKPILE PLAN
SCALE: 1"=10'

NOTES:

1. ANY COSTS ASSOCIATED WITH LAYDOWN/ STOCKPILE AREAS, INCLUDING, BUT NOT LIMITED TO, TEMPORARY TRAFFIC BARRIER, ACCESS TO UNDERSIDE OF BRIDGE, ETC. SHALL BE BORNE BY THE CONTRACTOR.
2. SEE KEY PLAN FOR AMTRAK ACCESS POINTS TO WORK AREA.

GM2

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
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OF:

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REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

JOB SPECIFIC PLAN SYMBOLS, LEGEND & NOTES

2606K_V1_006_JSNOTSYM

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	7	20

GENERAL NOTES

1. ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
   - THE AUGUST, 2023 RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
   - THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, NINTH EDITION, 2020, INCLUDING THE LATEST INTERIM REVISIONS.
   - THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
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 NORTH AMERICAN 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 PRECAST CONCRETE.
8. ALL WORKING POINTS ARE SHOWN AT THE CENTERLINES OF BEARINGS OF ABUTMENTS AND CENTERLINES OF PIERS, UNLESS OTHERWISE NOTED.
9. ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL ELEVATIONS, DIMENSIONS, DETAILS, ANGLES, STRUCTURAL MEMBER SIZES, AND LAYOUTS AS SHOWN ON THESE PLANS. THIS PRIOR FIELD VERIFICATION IS ESPECIALLY PERTINENT FOR PRE-FABRICATED STRUCTURAL ITEMS, WORK IN THE VICINITY OF EXISTING UTILITIES, AND FOR EXISTING STRUCTURAL ITEMS TO REMAIN.
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, NINTH EDITION, 2020, INCLUDING ALL INTERIM REVISIONS TO DATE.
- THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL 2007 EDITION INCLUDING ALL REVISIONS TO DATE.
- ALL OTHER APPLICABLE DESIGN SPECIFICATIONS ARE REFERENCED IN SECTION 1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED 2007.
- THE AUGUST, 2023 RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
- IN CASE OF CONFLICT, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL SHALL GOVERN.

2. LOAD MODIFIERS

THE LOAD MODIFIERS FOR THIS PROJECT ARE AS FOLLOWS:

- THE LOAD MODIFIER FOR DUCTILITY SHALL BE TAKEN AS 1.00 FOR ALL LIMIT STATES.
- THE LOAD MODIFIER FOR REDUNDANCY SHALL BE TAKEN AS 1.00 FOR ALL LIMIT STATES.
- THE LOAD MODIFIER FOR OPERATIONAL IMPORTANCE SHALL BE TAKEN AS 1.00.

[CONT.]

DESIGN DATA [CONT.]

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 ZERO.
- 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 1.00.
- THE LOAD FACTOR FOR SETTLEMENT FOR ALL LIMIT STATES SHALL BE TAKEN AS 1.00.

4. LIVE LOADS

- THE DESIGN VEHICULAR LIVE LOAD SHALL BE THE HL-93 DESIGNATION ADJUSTED FOR DYNAMIC LOAD ALLOWANCE AND MULTIPLE PRESENCE FACTOR.

5. TRAFFIC DATA

AADT (2024)	57,000 VPD
AADT (2049)	64,500 VPD
D	50/50
K	10%
T (PEAK HOUR)	2%
DHV	6,450 VPH
DDHV	3,225 VPH
DESIGN SPEED	60 MPH

MATERIALS

STRUCTURAL STEEL:

- AASHTO DESIGNATION M 270, GRADE 50

REINFORCING STEEL:

- AASHTO DESIGNATION M 31, GRADE 60, GALVANIZED

CONCRETE STRENGTHS:

- CLASS HP 3/4" f'c = 5,000 PSI (28 DAYS)

  PEDESTALS AND KEEPER BLOCKS

LUMP SUM BID ITEM NOTES

1. THE CONTRACTOR SHALL NOTE THAT SOME BRIDGE ITEMS ON THIS PROJECT ARE PAID FOR ON A LUMP SUM BASIS OR ARE INCLUDED FOR PAYMENT UNDER OTHER LUMP SUM ITEM(S). IN GENERAL THESE INCLUDE BUT MAY NOT BE LIMITED TO:
   - MOBILIZATION
   - FURNISH, INSTALL, MAINTAIN, AND MOVE TEMPORARY TRAFFIC PROTECTION

   THESE ITEMS SHALL CONFORM TO THE RI STANDARD SPECIFICATIONS, SECTION 109.07 "PARTIAL PAYMENT OF LUMP SUM ITEMS".
2. FOR REQUIREMENTS AND WORK DESCRIBED IN THE CONTRACT DOCUMENTS BUT NOT EXPRESSLY IDENTIFIED TO BE MEASURED SEPARATELY FOR PAYMENT, THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT BID PRICES OF THE ITEMS OF WORK TO WHICH THEY PERTAIN AS LISTED IN THE PROPOSAL.

GM2

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
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OF:

SCALE:

REVISIONS			REVISIONS		
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BRIDGE GROUP 46_R

REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243

NORTH KINGSTOWN RHODE ISLAND

BRIDGE GENERAL NOTES - 1

2606K_V1_007_BRNOTES1

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024–CB–018	2024	8	20

CONCRETE NOTES

1. CLASSES OF CONCRETE SHALL BE HIGH PERFORMANCE CLASS HP AS DESCRIBED IN THE RI STANDARD SPECIFICATIONS AND/OR THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. REFER TO THE "MATERIALS" 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 IN ACCORDANCE WITH SECTION 601 OF THE RI STANDARD SPECIFICATIONS.
3. ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED.
4. 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 SUBSECTION M.05.06 OF THE RI STANDARD SPECIFICATIONS.
5. 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.
6. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL REINFORCING BARS SHALL HAVE MINIMUM COVER OF 2".
7. ALL ANCHOR BOLTS SHALL BE ASTM DESIGNATION A 307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232.
8. 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.
9. THE ENTIRE TOPSIDE SURFACES OF ABUTMENT BEAM SEATS, AS WELL AS VERTICAL FACES OF ABUTMENTS, RETURN WALLS, AND BACKWALLS, SHALL BE PROVIDED WITH A FILM-FORMING SEALER (M12.03.1) CONCRETE SURFACE TREATMENT-PROTECTIVE COATING IN ACCORDANCE WITH SECTION 820 OF THE RI STANDARD SPECIFICATIONS. LIMIT OF COATING ON WALLS SHALL BE TO THE UNDERSIDE OF THE CONCRETE BARRIER.
10. ALL EXPOSED EDGES AND REENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM ¾" CHAMFER.
11. ALL JOINT SEALANT SHALL BE SILICONE. THE COLOR OF THE SEALANT, WHERE EXPOSED, SHALL BE NEUTRAL (LIGHT GRAY OR TAN). COLOR OF THE SEALANT, WHERE NOT EXPOSED, WILL BE AT THE DISCRETION OF THE CONTRACTOR.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATION DURING CONSTRUCTION UNTIL SUCH TIME AS THE SURFACES ARE APPROVED AND ACCEPTED. ANY CONCRETE STAINS OR DISCOLORATION OCCURRING PRIOR TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT AT NO ADDITIONAL COST TO THE STATE.
13. UNLESS OTHERWISE NOTED ON THE PLANS JOINT FILLER IS TO BE PREFORMED, NON-EXPANSIVE, NON-EXTRUDING TYPE IN ACCORDANCE WITH SECTION M.02.11.1 OF THE RI STANDARD SPECIFICATIONS.
14. EMBEDMENT LENGTHS FOR DRILLED AND GROUTED DOWELS SHALL BE IN ACCORDANCE WITH SECTION 819 OF THE RI STANDARD SPECIFICATIONS.

STRUCTURAL STEEL NOTES

1. FRAMING DIMENSIONS ARE GIVEN ALONG CENTERLINES OF GIRDERS AND ALONG CENTERLINES OF BEARINGS ON ABUTMENTS.
2. THE SHOPS FABRICATING THE STRUCTURAL STEEL MUST 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, 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 GRADE 50.
7. 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.
8. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM F3125, GRADE A325, AND THEY SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 824 OF THE RI STANDARD SPECIFICATIONS.
9. WASHERS MEETING ASTM F436 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.
10. WELDING ELECTRODES SHALL HAVE THE SAME CORROSION RESISTANCE AS THE BASE METAL AND SHALL BE FREE OF MOISTURE AT THE TIME OF USE.
11. STRUCTURAL STEEL SHALL BE PREPARED AND PAINTED IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.
12. 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.
13. 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.
14. 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.
15. ALL FILLET WELDS SHALL BE IN ACCORDANCE WITH THE BRIDGE WELDING CODE AASHTO/AWS D1.5 TABLE 2.1 (¼” MINIMUM).
16. PRIOR TO APPLYING TOP COAT OF PAINT, ALL EDGES OF STEEL REPAIR PLATES WITHIN LIMITS OF PAINTING, SHALL BE SEALED WITH A CAULKING APPROVED BY THE PAINT MANUFACTURER, AND PAYMENT SHALL BE INCLUDED UNDER PAINTING PAY ITEM.

PAINTING STRUCTURAL STEEL NOTES

1. PAINTING SHALL CONFORM TO SECTION 825 OF THE RI STANDARD SPECIFICATIONS.
2. TOP COAT COLOR SHALL BE GREEN (SEMI-GLOSS) TO MATCH FEDERAL STANDARD 595 COLOR 24272.
3. PAINTING EFFORT REQUIRED AT BEAM ENDS WILL VARY, DEPENDING ON EXISTING BEAM END CONDITION AS FOLLOWS:
   A. WEST ABUTMENT BEAMS G-1 THRU G-18 ALL HAVE GREEN TOP COAT PAINT FROM 2019 CONTRACT.
   B. EAST ABUTMENT BEAM G-1 THRU G-14 HAVE WHITE PRIMER OR INTERMEDIATE PAINT FROM 2019 CONTRACT.
   C. EAST ABUTMENT BEAM G-14 THRU G-18 HAVE RUSTED BEAM ENDS WITH NO VISIBLE PAINT FROM 2019 CONTRACT.
4. ALL THREE CONDITIONS MENTIONED ABOVE EXHIBIT VARIABLE DEGRESS OF VISIBLE RUST/SECTION LOSS. REGARDLESS OF THE EXISTING BEAM END CONDITION, THE FINAL CONDITION SHALL CONFORM TO REQUIREMENTS OF SECTION 825.

GM2

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
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DATE:
SHEET:
OF:

SCALE:

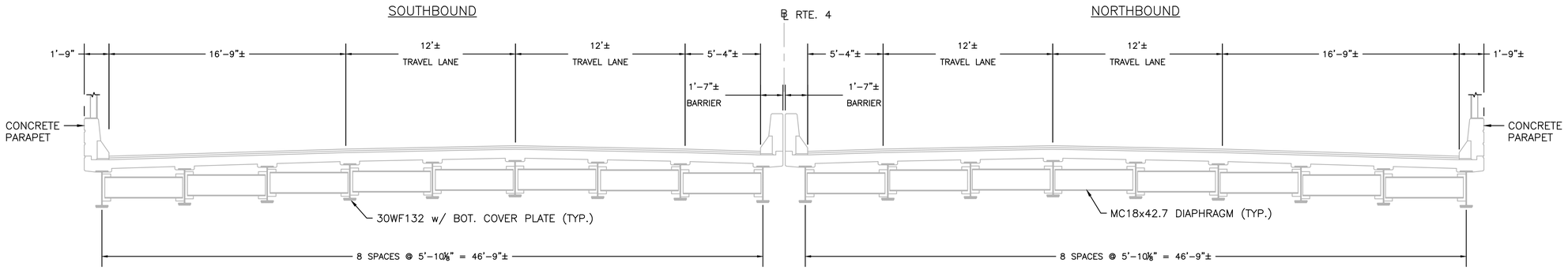
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

BRIDGE GENERAL NOTES - 2

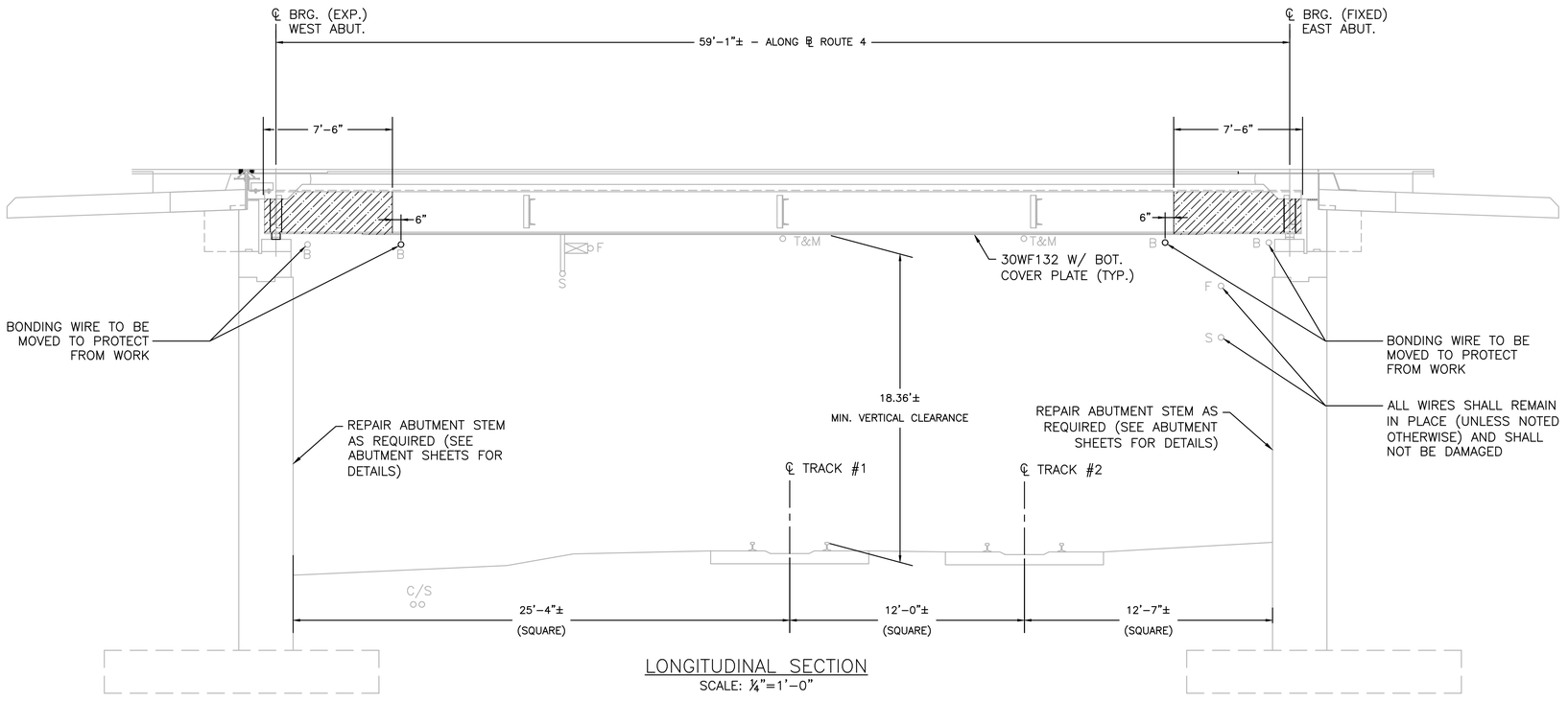
2606K_V1_008_BRNOTES2 (1)

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024–CB–018	2024	9	20



TRANSVERSE SECTION

SCALE: ¼"=1'–0"



LONGITUDINAL SECTION

SCALE: ¼"=1'–0"

LEGEND

S	AMTRAK STATIC WIRE
F	AMTRAK FEEDER WIRE
T&M	AMTRAK TROLLEY AND MESSENGER WIRE
B	AMTRAK BONDING WIRE
C/S	AMTRAK COMMUNICATIONS & SIGNAL

PAINTING NOTES:

1. CLEAN AND PAINT ENDS OF STEEL BEAMS, INCLUDING REPAIR PLATES, COVER PLATES, END DIAPHRAGMS, CONNECTION PLATES, AND BEARINGS.
2. ALL EXISTING STEEL SHALL BE CLEANED AND PRIMED PRIOR TO INSTALLING ANY REPAIR STEEL.
3. SEE LONGITUDINAL SECTION FOR ADDITIONAL PAINTING LIMITS.
4. COLOR OF TOP COAT SHALL BE GREEN TO MATCH EXISTING PAINT AT NORTH END OF GIRDERS.
5. SEE SHEET 10 FOR AREA OF GIRDER J TOP FLANGE AT MIDSPAN REQUIRING CLEANING AND PAINTING.
6. PRIOR TO APPLYING TOP COAT, ALL PLATE EDGES SHALL BE CAULKED WITH A PAINT MANUFACTURER APPROVED CAULKING AND SHALL BE INCLUDED IN COST OF PAINTING.
7. PAINTING SHALL NOT INTERFERE WITH EXISTING OVERHEAD WIRE SUPPORT STRUCTURES ATTACHED TO UNDERSIDE OF BRIDGE. PAINT LIMIT MAY BE MODIFIED IN FIELD TO ADHERE TO THIS REQUIREMENT.

GM2

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE:
SHEET:
OF:

SCALE: ¼"=1'–0"

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R

REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243

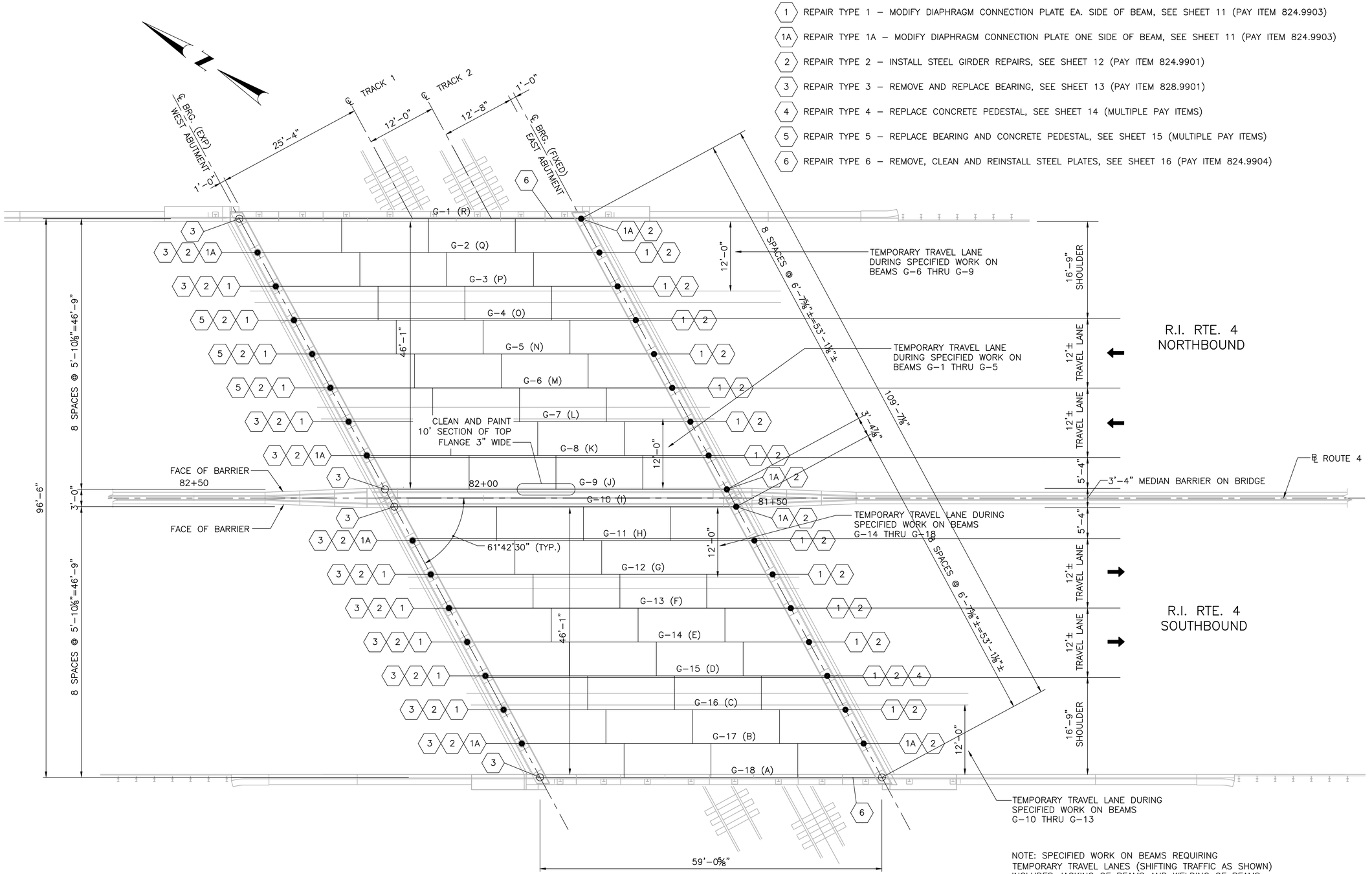
NORTH KINGSTOWN RHODE ISLAND

TYPICAL SECTIONS

2606K_V1_009_BTYPICAL001

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	10	20

1. REPAIR TYPE 1 – MODIFY DIAPHRAGM CONNECTION PLATE EA. SIDE OF BEAM, SEE SHEET 11 (PAY ITEM 824.9903)
1A. REPAIR TYPE 1A – MODIFY DIAPHRAGM CONNECTION PLATE ONE SIDE OF BEAM, SEE SHEET 11 (PAY ITEM 824.9903)
2. REPAIR TYPE 2 – INSTALL STEEL GIRDER REPAIRS, SEE SHEET 12 (PAY ITEM 824.9901)
3. REPAIR TYPE 3 – REMOVE AND REPLACE BEARING, SEE SHEET 13 (PAY ITEM 828.9901)
4. REPAIR TYPE 4 – REPLACE CONCRETE PEDESTAL, SEE SHEET 14 (MULTIPLE PAY ITEMS)
5. REPAIR TYPE 5 – REPLACE BEARING AND CONCRETE PEDESTAL, SEE SHEET 15 (MULTIPLE PAY ITEMS)
6. REPAIR TYPE 6 – REMOVE, CLEAN AND REINSTALL STEEL PLATES, SEE SHEET 16 (PAY ITEM 824.9904)



GENERAL PLAN
SCALE: ⅛"=1'-0"

NOTE: SPECIFIED WORK ON BEAMS REQUIRING TEMPORARY TRAVEL LANES (SHIFTING TRAFFIC AS SHOWN) INCLUDES JACKING OF BEAMS AND WELDING OF BEAMS AT BEARINGS.

GM2

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

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OF:

SCALE:

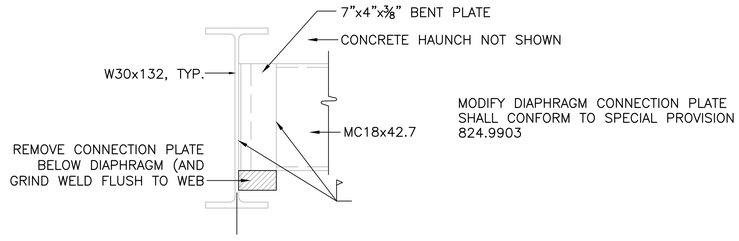
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

GENERAL PLAN

2606K_V1_010_GENERAL

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	11	20



TYPE 1 REPAIR DETAIL
MODIFY DIAPHRAGM CONNECTION PLATE
SCALE: 1"=1'-0"

GM2

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DEPARTMENT OF TRANSPORTATION

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SCALE:

REVISIONS			REVISIONS		
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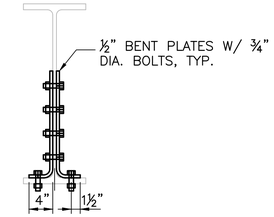
BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

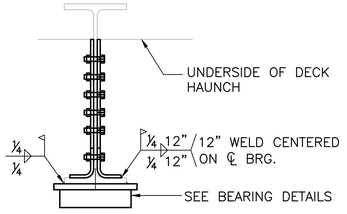
REPAIR TYPE 1 DETAILS

2606K_V1_011_STLDETL01

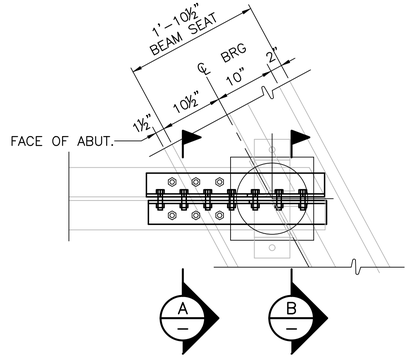
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024–CB–018	2024	12	20



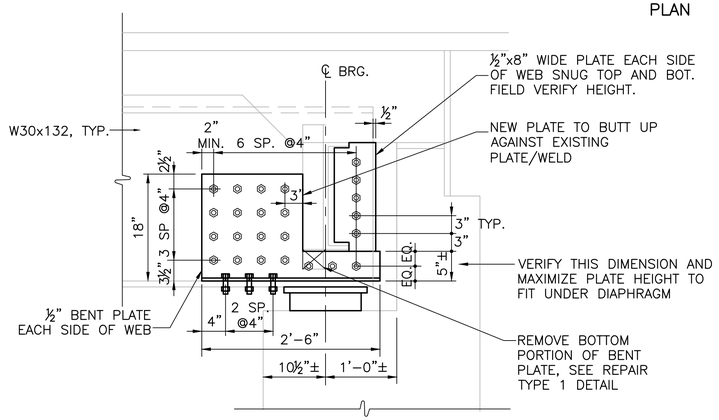
SECTION A
SCALE: 1"=1'–0"



SECTION B
SCALE: 1"=1'–0"



PLAN



SECTION SHOWN AT NEW BEARING, EXISTING BEARING SIMILAR

SECTION AT WEST ABUTMENT

TYPE 2 REPAIR DETAIL
STEEL REPAIR PLATES
SCALE: 1"=1'–0"

STRUCTURAL STEEL REPAIR NOTES:

1. ALL STRUCTURAL STEEL REPAIRS SHALL BE PERFORMED IN ACCORDANCE WITH THESE DETAILS AND SPECIAL PROVISION CODE 824.9901 – STEEL GIRDER REPAIRS.
2. PRIOR TO STARTING ANY OF THE STEEL REPAIR WORK, ALL EXISTING STEEL WITHIN PAINTING LIMITS SHALL BE PREPARED AND PRIMED IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS. CONTRACTOR SHALL TAKE CARE AS TO NOT REMOVE SOUND STEEL.
3. AFTER PRIMING, THE CONTRACTOR SHALL VERIFY DIMENSIONS REQUIRED TO PREPARE SHOP DRAWINGS. THESE DIMENSIONS INCLUDE, BUT ARE NOT LIMITED TO, THE DISTANCE UNDER DIAPHRAGM AS SHOWN IN DETAIL, AND THE END OF WEB PLATES DIMENSIONS, PRIOR TO SUBMITTING SHOP DRAWINGS. ANY MODIFICATIONS AS A RESULT OF THESE MEASUREMENTS SHALL BE REFLECTED IN THE INITIAL SHOP DRAWING SUBMITTAL.
4. NEW STRUCTURAL STEEL USED FOR STEEL REPAIR WORK SHALL BE PRIMED IN THE SHOP.
5. GIRDER G–10 AT THE WEST ABUTMENT SHALL HAVE TWO MISSING BOLTS INSTALLED IN EXISTING REPAIR PLATES AT BOTTOM FLANGE. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK BUT RATHER SHALL BE INCIDENTAL TO SIMILAR ITEMS IN THE CONTRACT.
6. ALL BEARING TO GIRDER WELDS (EACH SIDE OF BEARING) AT THE EAST ABUTMENT WHICH EXHIBIT CRACKING AND/OR IMPACTED RUST SHALL BE CLEANED, GROUND SMOOTH, AND REWELDED WITH ¼" FILLET WELD. PAYMENT SHALL BE INCLUDED UNDER ITEM 824.9901.
7. NO WELDING SHALL BE DONE UNDER LIVE TRAFFIC.
8. ANY BOLTS THAT PASS THROUGH AN EXISTING HOLE CAUSED BY THE DETERIORATION OF THE STEEL, OR WHERE EXISTING DETERIORATED STEEL HAS BEEN REMOVED SHALL BE PROVIDED WITH A PLATE WASHER OF A THICKNESS EQUAL TO THE ORIGINAL THICKNESS OF THE EXISTING MATERIAL. THIS WASHER SHALL BE PLACED WITHIN THE HOLE BETWEEN THE PROPOSED REPAIR PLATES. PAYMENT SHALL BE INCIDENTAL TO THE REPAIR.

GM2

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DEPARTMENT OF TRANSPORTATION

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SCALE:

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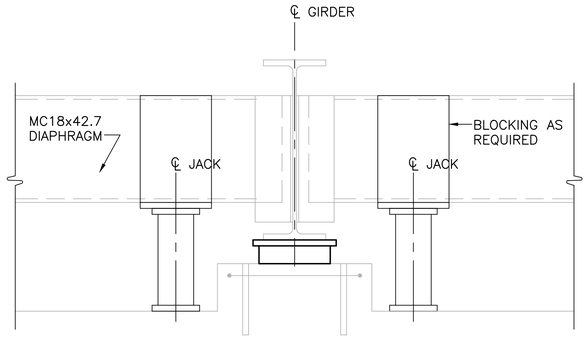
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

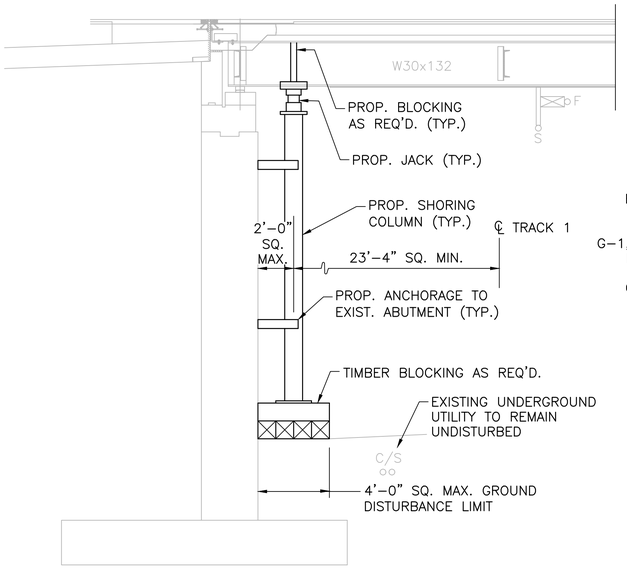
REPAIR TYPE 2 DETAILS

2606K_V1_012_STLDETL02

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	13	20



TYPE 2



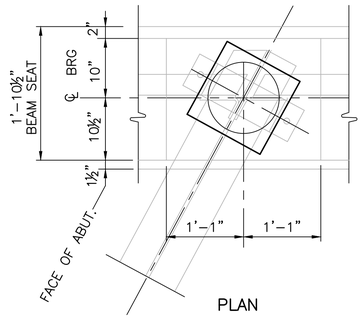
TYPE 1

NOTE:

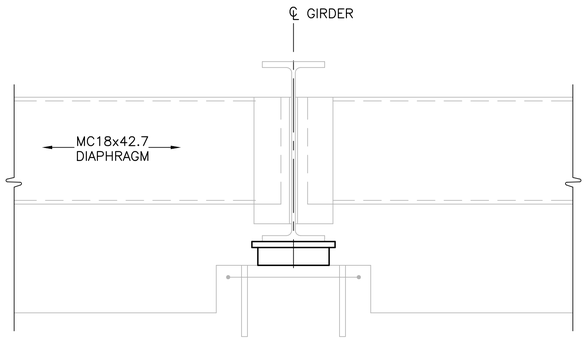
1. DETAILS SHOWN ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACTUAL TEMPORARY JACKING & SHORING DESIGN AND DETAILING WHICH SHALL CONFORM TO SPECIAL PROVISION CODE 824.9902.
2. TYPE 1 SHORING WILL NOT BE ALLOWED ON THE EAST ABUTMENT.
3. THE BEARING CAPACITY OF EXISTING GROUND SURFACE IS UNKNOWN AND WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TEMPORARY JACKING & SHORING SCHEMATICS

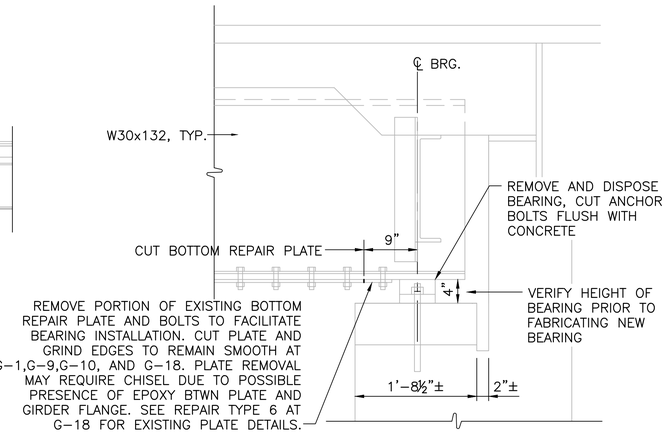
NOT TO SCALE



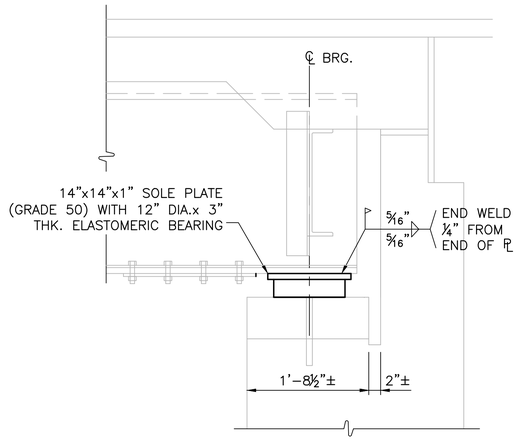
PLAN



ELEVATION



EXISTING SECTION



PROPOSED SECTION

TYPE 3 REPAIR DETAIL REPLACE BEARING

SCALE: 1"=1'-0"

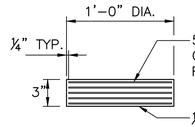
UNFACTORED BEAM REACTIONS		
LOAD DESIGNATION	LOAD VALUE (KIPS)	
	INTERIOR BEAM	EXTERIOR BEAM
DC	27	28
DW	7	7
LL	63	43

DC = DEAD LOAD OF STRUCTURAL COMPONENTS

DW = DEAD LOAD OF WEARING SURFACE

LL = HL-93 LOADING WITH DYNAMIC LOAD ALLOWANCE (IM)

LOADS ARE AT CENTERLINE OF BEARING, FOR SHORING COLUMN, LOADS SHALL BE MULTIPLIED BY 1.06.



ELASTOMERIC BEARING PAD

SCALE: 1½"=1'-0"

BEARING NOTES:

1. ELASTOMER SHALL HAVE A SHEAR MODULUS OF .160 KSI.
2. STEEL LAMINATES SHALL CONFORM TO ASTM A 1011 GRADE 36.
3. THE COMPRESSIVE DESIGN LOAD ON THE BEARING PAD IS 93.00 KIPS. THE COMPRESSIVE DESIGN STRESS IS THE RESULT OF DIVIDING THE COMPRESSIVE DESIGN LOAD BY THE AREA OF THE PAD AND IS EQUAL TO .82 KSI.
4. ELASTOMERIC BEARING PAD SHALL NOT BE VULCANIZED TO THE SOLE PLATE.

NOTES:

1. BEARINGS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH THESE DETAILS AND SPECIAL PROVISION CODE 828.9901.
2. BEAMS SHALL BE JACKED AND SHORED TO FACILITATE BEARING REPLACEMENT IN ACCORDANCE WITH THE SCHEMATICS SHOWN AND SPECIAL PROVISION CODE 824.9902.
3. IF CONCRETE BEAMSEAT UNDER NEW BEARING AND/OR UNDER TEMPORARY JACK REQUIRES REPAIR, IT SHALL BE PAID FOR UNDER ITEM 817.2142. REPAIR SHALL BE MADE AND ALLOWED TO CURE PRIOR TO INSTALLING NEW BEARING AND/OR JACK.
4. PAYMENT FOR REMOVAL OF PORTIONS OF EXISTING REPAIR PLATES TO FACILITATE NEW BEARING INSTALLATION AS DESIGNATED WILL NOT BE PAID FOR SEPARATELY BUT RATHER INCLUDED IN 828.9901.
5. BEARINGS SHALL BE INSTALLED WITH AMBIENT TEMPERATURE BETWEEN 50 AND 75 DEGREES FARENHEIGHT. IF BEARINGS ARE INSTALLED OUTSIDE OF THIS TEMPERATURE WINDOW, THE BEAMS SHALL BE JACKED AND THE BEARINGS RECENTERED WHEN THE TEMPERATURE RETURNS TO THIS WINDOW. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS RECENTERING.
6. AFTER THE BEARING ASSEMBLY IS IN ITS FINAL POSITION, THE SOLE PLATE SHALL BE WELDED TO THE BEAM.

GM2

RI DOT

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
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SCALE:

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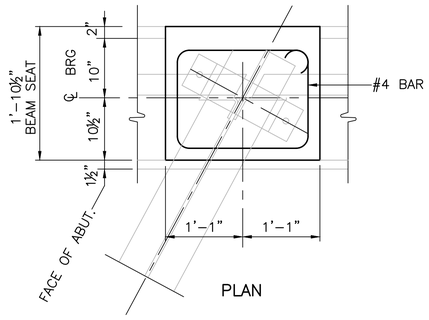
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

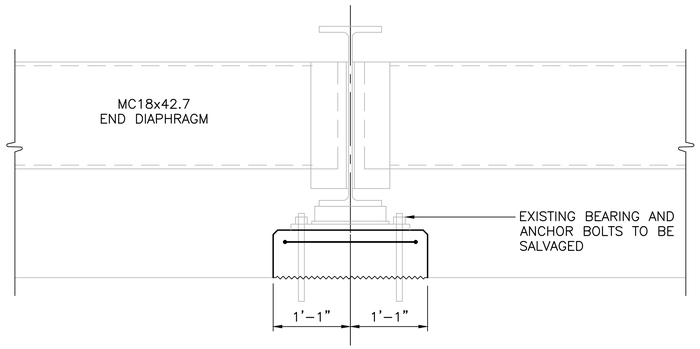
REPAIR TYPE 3 DETAILS

2606K_V1_013_STLDETL03

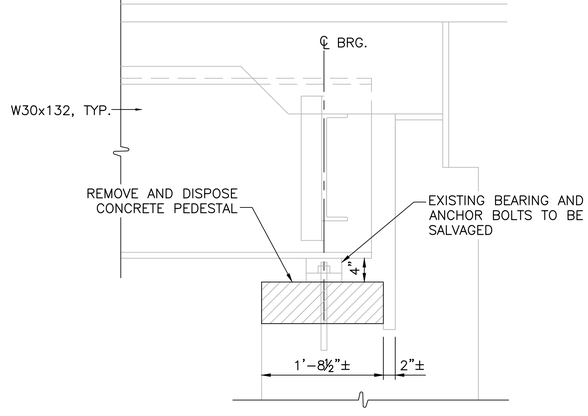
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024–CB–018	2024	14	20



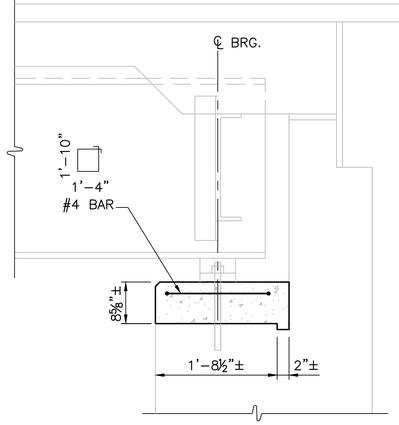
PLAN



ELEVATION



EXISTING SECTION



PROPOSED SECTION

NOTES:

1. PEDESTALS SHALL BE REPLACED AS DETAILED AND PAID FOR UNDER APPLICABLE PAY ITEMS AS LISTED IN THE PROPOSAL.
2. BEAM SHALL BE JACKED AND SHORED IN ACCORDANCE WITH DETAILS AND NOTES ON SHEET 13 TO FACILITATE PEDESTAL REPLACEMENT.
3. CONTRACTOR TO ENSURE NEW PEDESTAL IS CAST SNUG UNDER EXISTING BEARING WITH UNIFORM CONTACT WITHOUT VOIDS.
4. PEDESTAL CONCRETE SHALL ACHIEVE A COMPRESSIVE STRENGTH OF 3000 PSI BEFORE LOWERING JACKS AND TRANSFERING LOAD FROM GIRDER.

TYPE 4 REPAIR DETAIL
REPLACE PEDESTAL
SCALE: 1"=1'–0"

GM2

RI DOT
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

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SHEET:
OF:

SCALE:

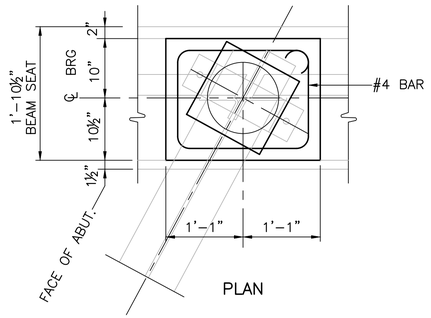
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

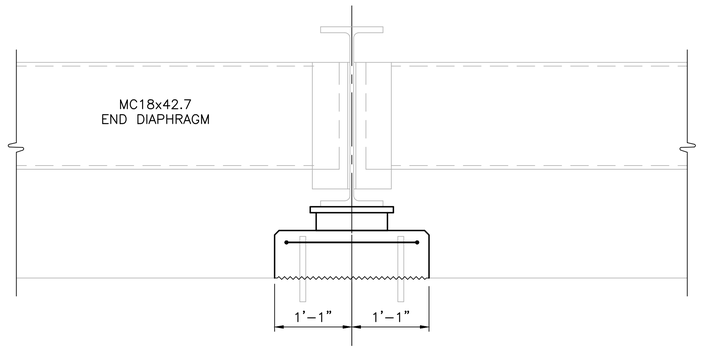
REPAIR TYPE 4 DETAILS

2606K_V1_014_STLDETL04

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	15	20



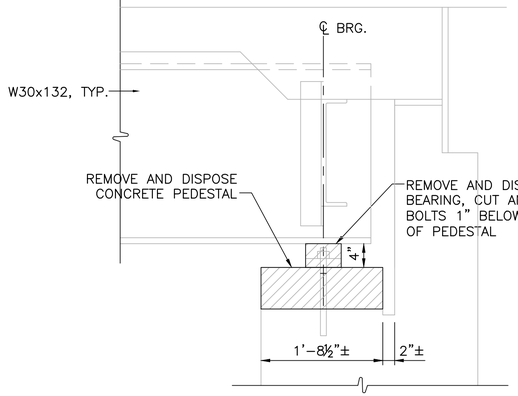
PLAN



ELEVATION

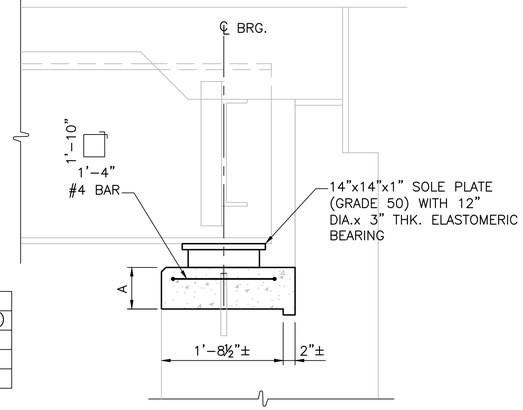
NOTES:

1. SEE SHEET 13 FOR TYPICAL BEARING NOTES, INCLUDING JACKING AND SHORING REQUIREMENTS.
2. SEE SHEET 14 FOR TYPICAL PEDESTAL NOTES.



EXISTING SECTION

HEIGHT OF PEDESTAL "A"		
BEAM NO.	ABUT. NO.	"A"(FT)
G-4(O)	2 (WEST)	.59
G-10(I)	2 (WEST)	.63



PROPOSED SECTION

TYPE 5 REPAIR DETAIL - REPLACE BEARING AND PEDESTAL

SCALE: 1"=1'-0"

	GM2		RI DOT RHODE ISLAND DEPARTMENT OF TRANSPORTATION		DESIGNED BY:
					CHECKED BY:
					DATE:
					SHEET:
					OF:

SCALE:

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R

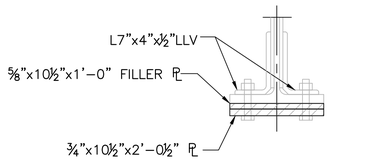
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243

NORTH KINGSTOWN RHODE ISLAND

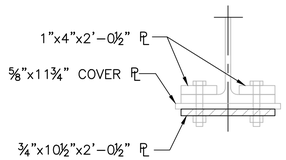
REPAIR TYPE 5 DETAILS

2606K_V1_015_STLDETL05

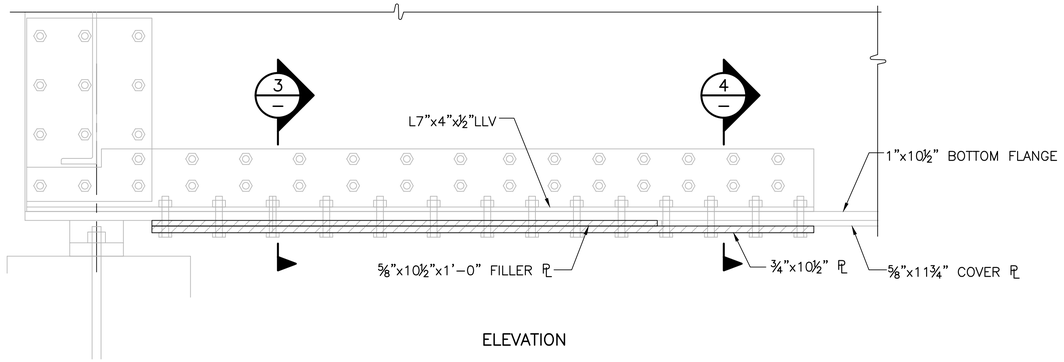
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	16	20



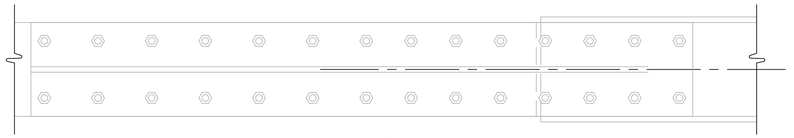
SECTION 3/–



SECTION 4/–

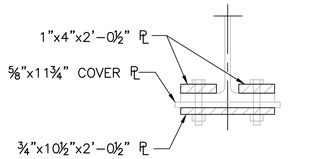


ELEVATION

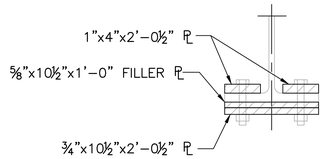


PLAN

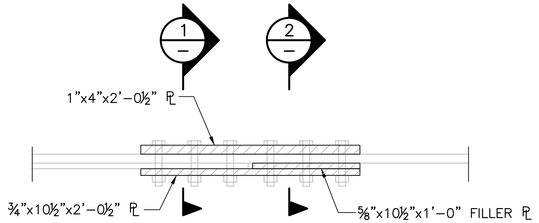
G-18 LOCATION



SECTION 1/–

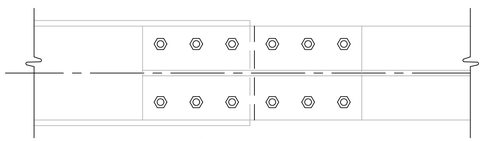


SECTION 2/–



NOTE: ALL PLATES TO BE REMOVED, CLEANED, AND RE-INSTALLED ARE GALVANIZED.

ELEVATION



PLAN

G-1 LOCATION

NOTES:

1. REMOVE, CLEAN, AND REINSTALL STEEL PLATES SHALL CONFORM TO SPECIAL PROVISION CODE 824.9904.
2. NO EXTRA PAYMENT WILL BE MADE FOR CLEANING AND PAINTING GALVANIZED PLATES.
3. REMOVAL OF PLATES MAY REQUIRE CHISELING DUE TO POSSIBLE PRESENCE OF EPOXY.
4. ALL BOLTS ARE ¾" DIA. AND SHALL BE REPLACED WITH NEW BOLTS.
5. EPOXY PASTE SHALL BE USED BETWEEN ALL INTERFACES TO ENSURE WATER TIGHT DETAIL WITHOUT VOIDS OR OPEN SEAMS.
6. ALL EDGE JOINTS BTWN PLATES SHALL CAULKED PRIOR TO PAINTING.

DENOTES PLATE TO BE REMOVED, CLEANED AND RE-INSTALLED

TYPE 6 REPAIR DETAIL - REMOVE, CLEAN, AND RESET REPAIR PLATES

SCALE: 1½"=1'-0"

GM2

RI DOT

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE:
SHEET:
OF:

SCALE:

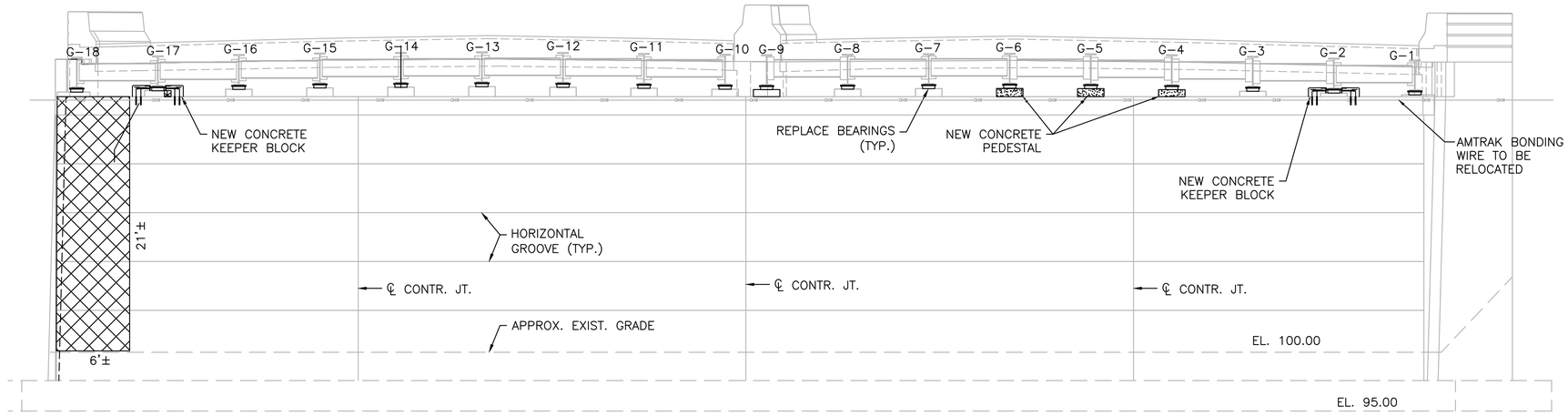
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

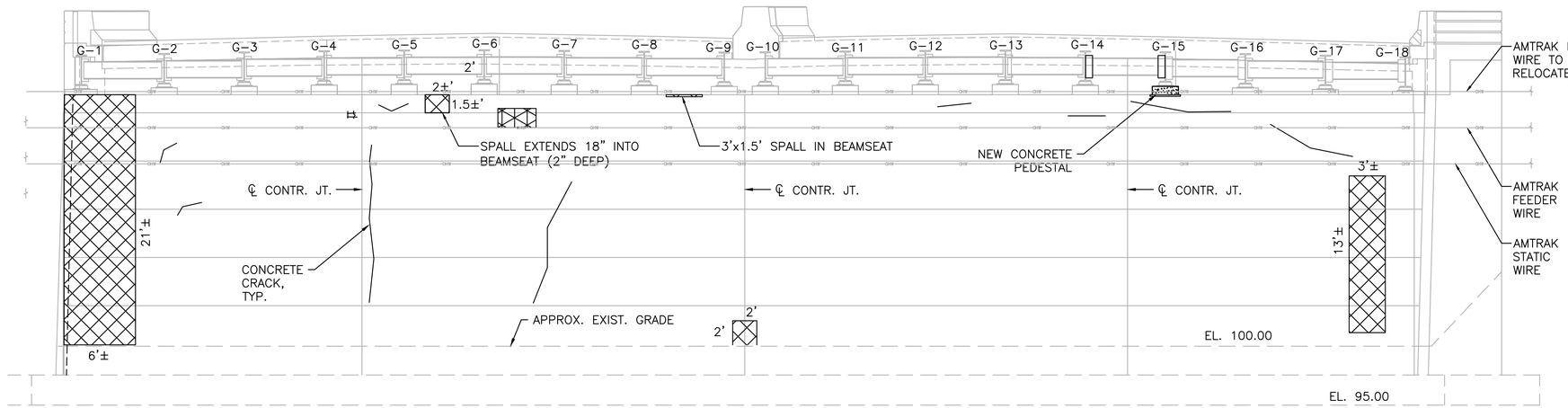
REPAIR TYPE 6 DETAILS

2606K_V1_016_STLDETL06

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024-CB-018	2024	17	20



WEST ABUTMENT – ELEVATION
SCALE: 3/16"=1'-0"

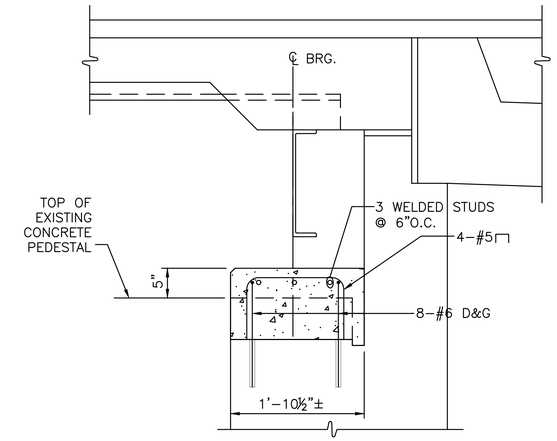


EAST ABUTMENT – ELEVATION
SCALE: 3/16"=1'-0"

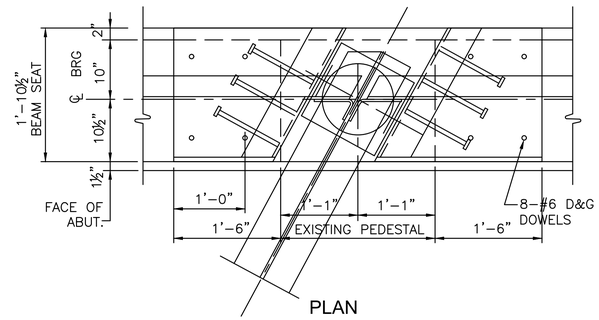
LEGEND

DENOTES CONCRETE REPAIR AREA, SEE SHEET 18 FOR DETAILS.

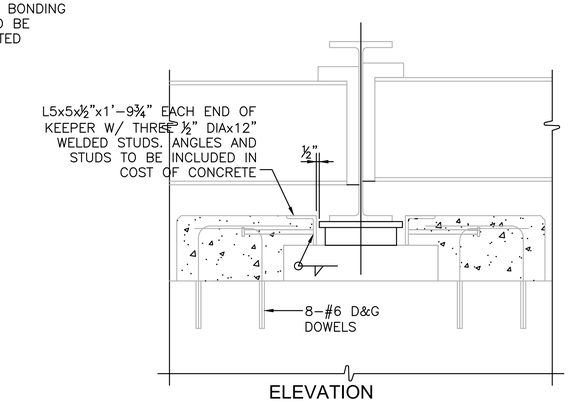
DENOTES CRACK, SEE SHEET 18 FOR NOTES.



SECTION



PLAN



ELEVATION

NOTE: KEEPER BLOCK CONCRETE SHALL BE PAID FOR UNDER ITEM 808.0506.

CONCRETE KEEPER BLOCK DETAILS
SCALE: 1"=1'-0"

NOTE: SEE SHEETS 14 AND 15 FOR PEDESTAL REPAIR DETAILS.

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

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SHEET:
OF:

SCALE: 3/16"=1'-0"
0 1 2 3 4 5 10

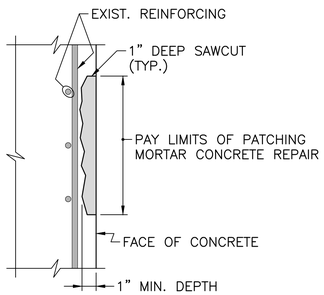
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

ABUTMENT REPAIR DETAILS

2606K_V1_017_CONCREP01

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024–CB–018	2024	18	20

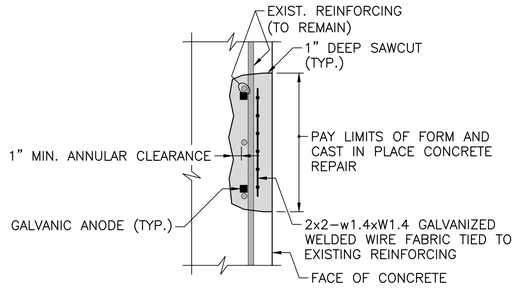


NOTE:

THIS REPAIR INTENDED FOR AREAS WHERE NO MORE THAN ONE–HALF OF THE REBAR SURFACE IS EXPOSED AND THE SURROUNDING CONCRETE IS SOUND.

PATCHING MORTAR CONCRETE REPAIR DETAIL

NOT TO SCALE



NOTE:

THIS REPAIR INTENDED FOR AREAS WHERE MORE THAN ONE–HALF OF THE REBAR SURFACE IS EXPOSED. BARS HAVING LOST 1/4 OR MORE OF THEIR ORIGINAL DIAMETER SHALL BE SUPPLEMENTED BY NEW BARS PLACED PARALLEL TO EXISTING REINFORCING.

FORM AND CAST IN PLACE CONCRETE REPAIR DETAIL

NOT TO SCALE

CONCRETE REPAIR NOTES

1. ALL CONCRETE REPAIR WORK SHALL BE IN ACCORDANCE WITH SECTIONS 817 AND 836 OF THE RI STANDARD SPECIFICATIONS.
2. REPAIR AREAS SHOWN WITHIN THESE PLANS ARE APPROXIMATE AND THE MAGNITUDE AND TYPE OF ACTUAL REPAIR SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.
3. CRACKS THAT ARE .02 INCHES OR GREATER IN WIDTH SHALL BE REPAIRED BY EPOXY-RESIN BASED ADHESIVE INJECTION. CRACKS LESS THAN THIS SHALL NOT BE REPAIRED.
4. WHERE A CRACK REPAIR OVERLAPS WITH A PATCHING MORTAR OR FORM AND CAST IN PLACE CONCRETE REPAIR, THE EPOXY INJECTION SHALL BE PERFORMED AFTER REMOVAL OF ALL DETERIORATED CONCRETE AND BEFORE THE PATCHING MORTAR OR CONCRETE IS PLACED.
5. THE CONTRACTOR SHALL PROVIDE A FINISHED REPAIR SURFACE TO MATCH THE EXISTING ADJACENT CONCRETE FINISH.
6. PAYMENT FOR SUPPLEMENTAL REINFORCING WILL BE INCLUDED UNDER ITEM CODE 810.0210. PAYMENT FOR GALVANIZED WELDED WIRE FABRIC AND THE GALVANIC ANODES WILL BE INCLUDED IN THE COST OF THE REPAIR.
7. GALVANIC ANODES SHALL BE SPACED EVENLY WITHIN REPAIR AREA AT A MAXIMUM SPACING OF 24" IN BOTH DIRECTIONS .

GM2

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
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OF:

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REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R

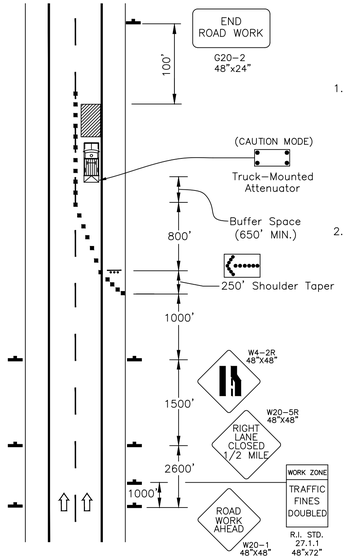
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243

NORTH KINGSTOWN RHODE ISLAND

CONCRETE REPAIR DETAILS

2606K_V1_018_CONCREP02

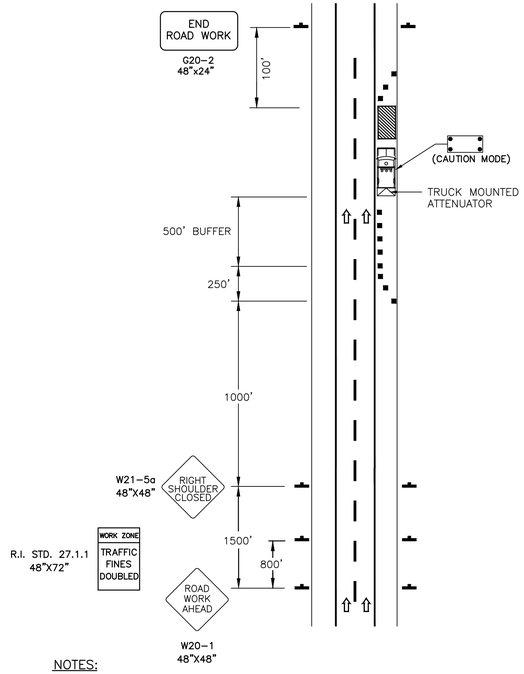
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024–CB–018	2024	19	20



NOTES

1. THIS INFORMATION ALSO SHALL BE USED WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN ON A DIVIDED HIGHWAY. IN THIS CASE, THE LEFT LANE CLOSED SIGNS AND THE CORRESPONDING LANE ENDS SIGN SHALL BE SUBSTITUTED.
2. WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TTC ZONE, ADDITIONAL TTC DEVICES SHALL BE PLACED AS NEEDED.

TYPICAL LANE CLOSURE



NOTES:

1. SHOULDER CLOSED SIGNS SHOULD BE USED ON LIMITED–ACCESS HIGHWAYS WHERE THERE IS NO OPPORTUNITY FOR DISABLED VEHICLES TO PULL OFF THE ROADWAY.
2. IF DRIVER CANNOT SEE A PULL–OFF AREA BEYOND THE CLOSED SHOULDER, INFORMATION REGARDING THE LENGTH OF THE SHOULDER CLOSURE SHOULD BE PROVIDED IN FEET OR MILES AS APPROPRIATE.

TYPICAL SHOULDER CLOSURE

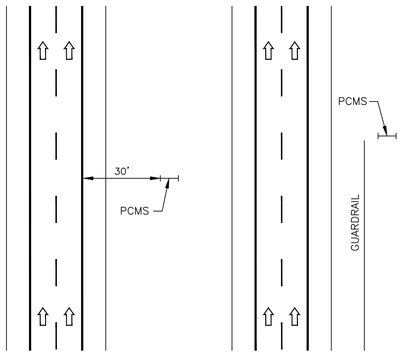
NOTES:

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. WHERE A SIDE STREET OR RAMP INTERSECTS THE WORK ZONE, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH PART 6 OF THE MUTCD.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN A RHODE ISLAND STANDARD 26.2.0 BARRICADE WITH APPROPRIATE MARKINGS AT EACH LOCATION WHERE ADJUSTMENT TO UTILITY STRUCTURES HAVE BEEN MADE UNTIL RESURFACING WORK HAS BEEN PERFORMED. OTHER TYPES OF PROTECTIVE DEVICES MAY BE USED IF APPROVED BY THE ENGINEER.
7. R.I. STD. 26.1.0 CONES SHALL BE USED WHEN TRAFFIC CONTROL SET–UP IS UTILIZED ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY REMOVED AT THE END OF THE WORKDAY. R.I. STD. 26.2.0 SHALL BE USED WHEN A TRAFFIC CONTROL SET–UP WILL REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT..
8. THE SIZES OF ALL DIAMOND SHAPED ADVANCE WARNING SIGNS SHALL BE 36"X36", UNLESS OTHERWISE NOTED.
9. MAXIMUM SPACING OF THE CHANNELIZATION DEVICES IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN A TANGENT SECTION IS EQUAL IN FEET TO TWO TIMES THE SPEED LIMIT IN MPH.
10. IF THE WORK SPACE EXTENDS ACROSS A CROSSWALK, THE CROSSWALK SHOULD BE CLOSED USING THE INFORMATION AND DEVICES SHOWN IN SIDEWALK DETOUR.

CONE SPACING	
TAPER	TANGENT
25'	50'

LEGEND

- CHANNELIZING DEVICE
  - TRAFFIC CONE (R.I. STD. 26.1.0)
  - DRUM BARRICADE (R.I. STD. 26.2.0)
- SIGN ON PORTABLE SIGN SUPPORT
- TYPE III BARRICADE
- FLASHING ARROW BOARD
- TRAFFIC PERSON
- WORK SPACE
- DIRECTION OF TRAVEL
- WORK VEHICLE
- TRUCK–MOUNTED ATTENUATOR
- ARROW PANEL

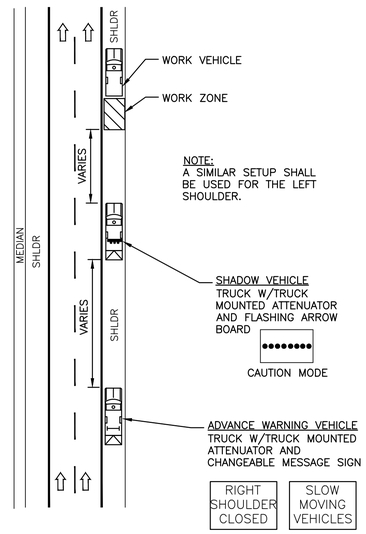


TYPICAL NEAR GUARDRAIL

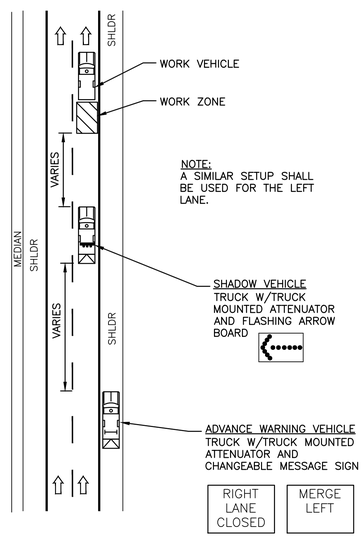
PCMS LOCATION DETAILS

NOTES

1. PCMS SHALL BE USED ON MAJOR ROADS IN EACH DIRECTIONS OF TRAFFIC.
2. PCMS SHALL BE IMPLEMENTED 2 WEEKS PRIOR START OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL 2 WEEKS AFTER CONSTRUCTION IS COMPLETE.
3. PCMS MESSAGE WILL VARY AT THE DIRECTION OF THE ENGINEER.



TYPICAL MOBILE OPERATION SHOULDER CLOSURE ON MULTI-LANE HIGHWAY



TYPICAL MOBILE OPERATION LANE CLOSURE ON MULTI-LANE HIGHWAY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

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DATE:
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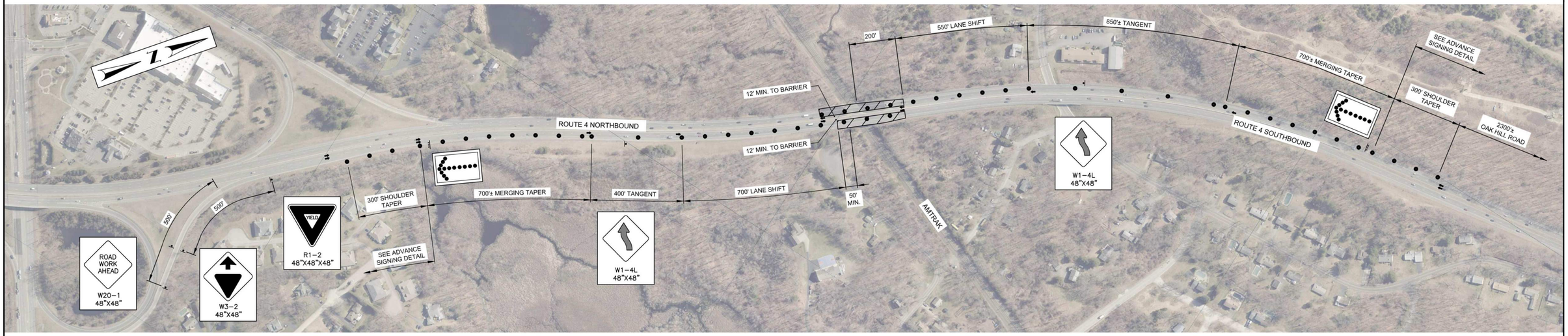
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46_R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

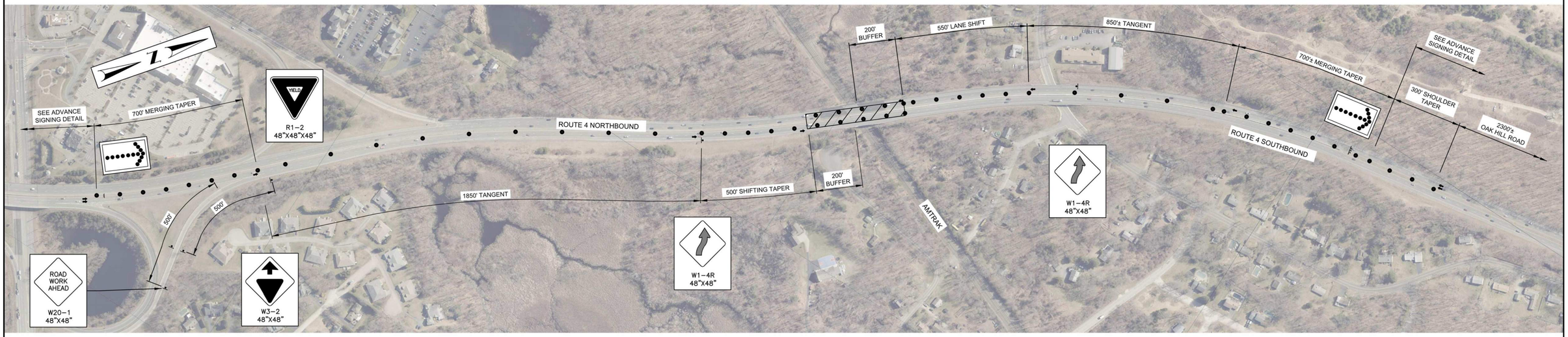
MAINTENANCE & PROTECTION OF TRAFFIC PLAN - 1

2606K_V1_019_TCONTROL002

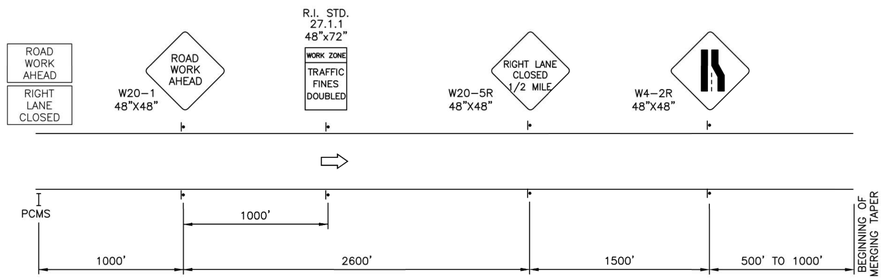
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2024–CB–018	2024	20	20



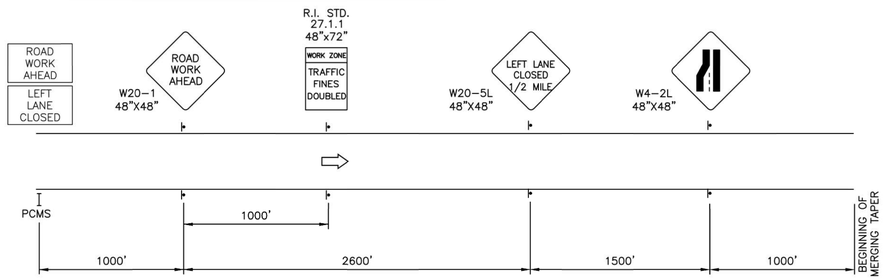
RIGHT LANE CLOSURE AND LANE SHIFT



LEFT LANE CLOSURE AND LANE SHIFT



ADVANCE SIGNING DETAIL RIGHT LANE CLOSURE
N.T.S.



ADVANCE SIGNING DETAIL LEFT LANE CLOSURE
N.T.S.

LEGEND

- CHANNELIZING DEVICE TRAFFIC CONE (R.I. STD. 26.1.0) DRUM BARRICADE (R.I. STD. 26.2.0)
- SIGN ON PORTABLE SIGN SUPPORT
- TYPE III BARRICADE
- FLASHING ARROW BOARD
- TRAFFIC PERSON
- WORK SPACE
- DIRECTION OF TRAVEL
- WORK VEHICLE
- TRUCK–MOUNTED ATTENUATOR
- ARROW PANEL
- PORTABLE CHANGEABLE MESSAGE SIGN

CONE SPACING	
TAPER	TANGENT
50'	100'

GM2

RI DOT

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE:
SHEET:
OF:

SCALE: 1"=200'
GRAPHIC SCALE 100 0 50 100 200 400

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

BRIDGE GROUP 46R
REPAIRS OF LAFAYETTE RAILROAD BRIDGE NO. 243
NORTH KINGSTOWN RHODE ISLAND

MAINTENANCE & PROTECTION OF TRAFFIC PLAN - 2

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