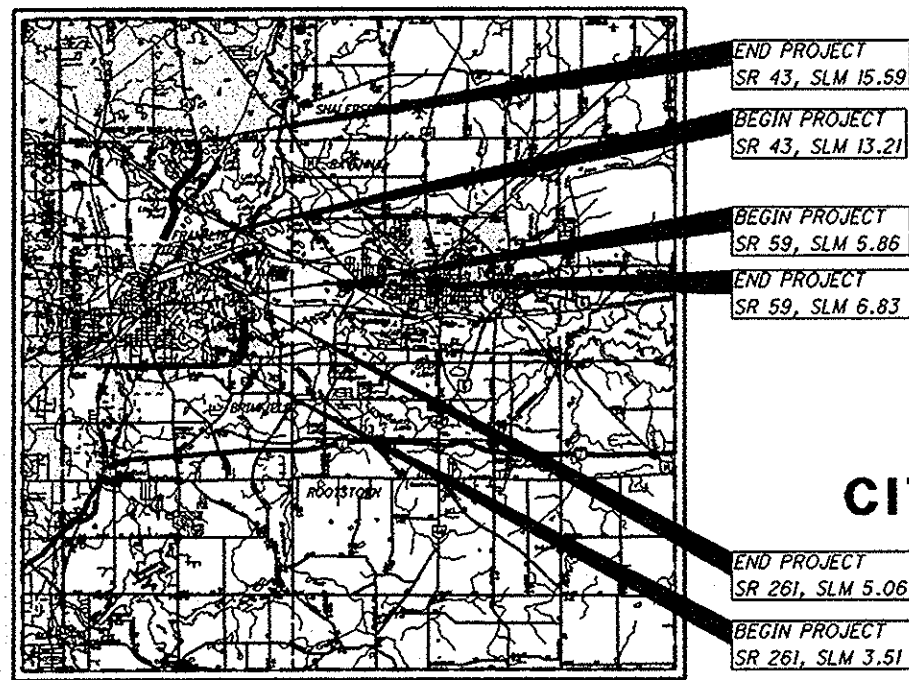


STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

**POR-43/59/261-
13.21/5.86/3.51**

**CITY OF KENT, FRANKLIN TOWNSHIP,
& RAVENNA TOWNSHIP
PORTAGE COUNTY**



LOCATION MAP

LATITUDE: N41°10'24" LONGITUDE: W81°18'48"



PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION:

URBAN PRINCIPAL ARTERIAL

NHS PROJECT

SR 43 SR 59 SR 261
YES YES NO

DESIGN EXCEPTIONS

NONE

INDEX OF SHEETS:

TITLE SHEET	1
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PROJECT DESCRIPTION

IMPROVEMENT TO 2.38 MILES OF SR 43, 0.97 MILES OF SR 59, AND 1.55 MILES OF SR 261 IN PORTAGE COUNTY BY PLANING THE SURFACE AND PLACING AN ASPHALT LAYER. THIS PROJECT ALSO INCLUDES MINOR STRUCTURE REHABILITATION.

PROJECT EARTH DISTURBED AREA: 0.47 ACRES
ESTIMATED CONTRACTOR EDA: N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EDA: N/A (MAINTENANCE PROJECT)

LIMITED ACCESS (SR 261)

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVED THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

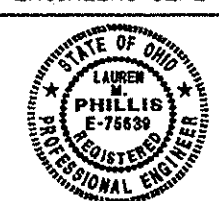
APPROVED
DATE 10-9-13 DISTRICT DEPUTY DIRECTOR

APPROVED
DATE 10-24-13 DIRECTOR, DEPARTMENT OF TRANSPORTATION

UNDERGROUND UTILITIES	
CONTACT BOTH SERVICES CALL TWO WORKING DAYS BEFORE YOU DIG	
CALL 1-800-362-2764 (TOLL FREE)	
OHIO UTILITIES PROTECTION SERVICE NON-MEMBERS MUST BE CALLED DIRECTLY	
OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE CALL: 1-800-925-0988	

PLAN PREPARED BY:
ODOT --- DISTRICT 4
PLANNING & ENGINEERING DEPARTMENT
2088 SOUTH ARLINGTON RD
AKRON, OHIO 44306

ENGINEERS SEAL:



SIGNED: Lauren M. Phillis
DATE: 10-9-13

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	4/20/12	MT-97.10	7/19/13			800-2013 10/18/13	
BP-4.1	7/19/13					821 4/20/12	
BP-5.1	7/19/13	MT-97.12	7/19/13			832 10/18/13	
BP-7.1	10/15/10	MT-99.20	7/19/13			843 4/18/03	
		MT-101.90	7/19/13			846 7/19/13	
DM-1.1	1/18/13	MT-105.10	7/19/13				
MGS-1.1	7/19/13	TC-41.20	1/19/01				
MGS-2.1	7/19/13	TC-42.20	1/21/11				
MGS-4.1	7/19/13	TC-52.10	1/18/13				
MGS-4.2	7/19/13	TC-52.20	1/18/13				
MGS-4.3	1/18/13	TC-65.10	4/20/12				
MGS-5.2	7/19/13	TC-65.11	4/20/12				
MGS-5.3	7/19/13	TC-71.10	10/19/12				
		TC-73.10	4/20/12				
RM-1.1	1/18/13	TC-82.10	1/18/13				

FEDERAL PROJECT NO.
E091(308)

PID NO.
86930

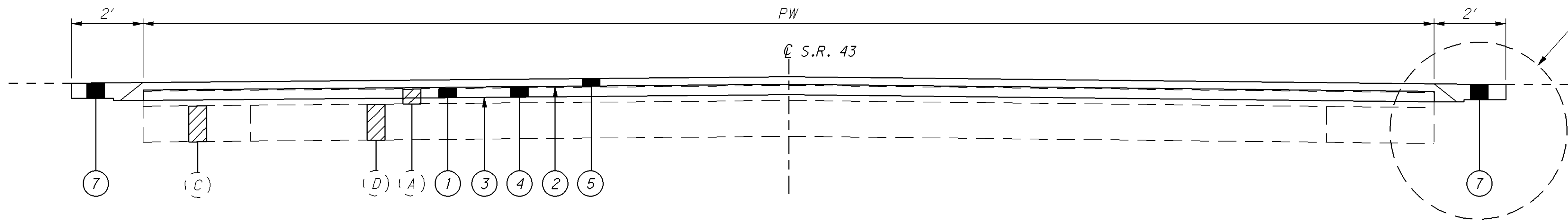
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NORFOLK SOUTHERN

**POR-43/59/261-
13.21/5.86/3.51**

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26

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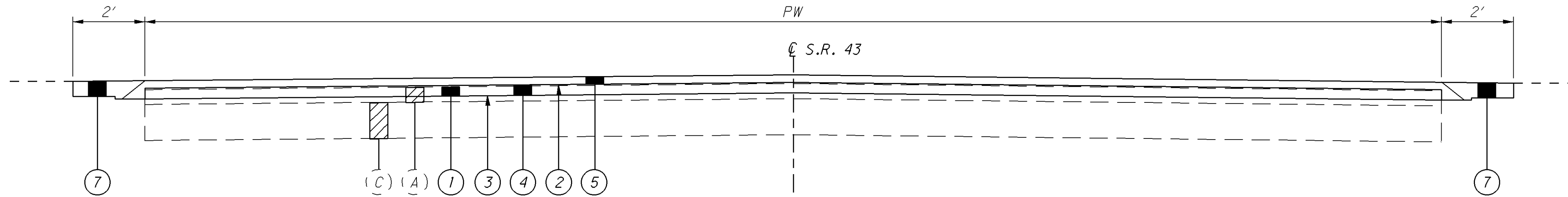


(1) S.R. 43			
S.L.M.		PW	LENGTH
FROM	TO	(FT)	(MILE)
13.21	13.9	29	0.69
13.92	14.21	29	0.29
14.21	14.25	29 TO 43	0.04
14.49	15.59	29	1.10

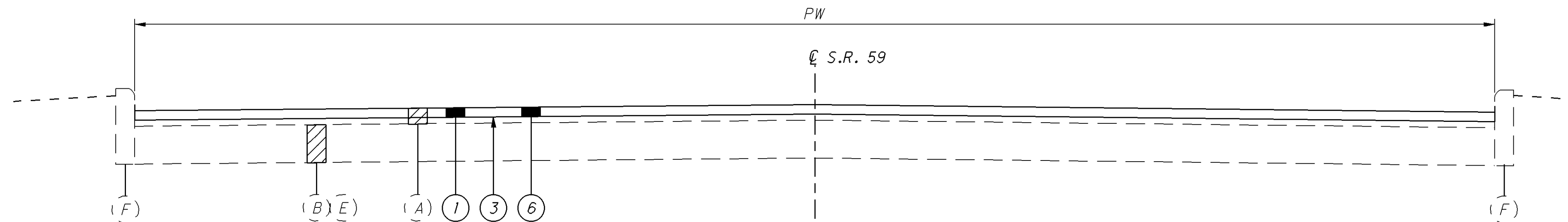
LEGEND

- | | | | |
|---|---|-----|--------------------------------|
| ① | ITEM 254, PAVEMENT PLANING (T = 1½") | (A) | EXISTING ASPHALT CONCRETE |
| ② | ITEM 407, TACK COAT FOR INTERMEDIATE COURSE @ 0.04 GAL/SY | (B) | EXISTING ASPHALT CONCRETE BASE |
| ③ | ITEM 407, TACK COAT @ 0.15 GAL/SY | (C) | EXISTING AGGREGATE BASE |
| ④ | ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22, (T = 1¾") | (D) | EXISTING REINFORCED CONCRETE |
| ⑤ | ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN, (T = 1¼") | (E) | EXISTING RIGID BRICK |
| ⑥ | ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN, (T = 1½") | (F) | EXISTING CURB |
| ⑦ | ITEM 617, COMPACTED AGGREGATE, AS PER PLAN | | |

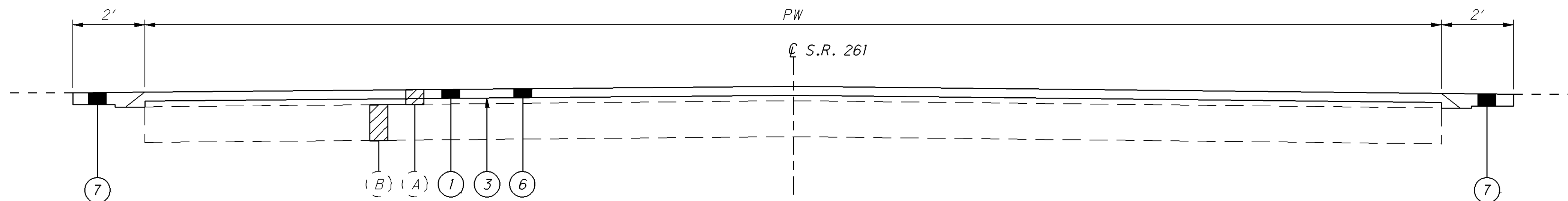
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(2) S.R. 43			
S.L.M.		PW	LENGTH
FROM	TO	(FT)	(MILE)
14.25	14.31	43	0.06
14.35	14.36	43	0.01
14.36	14.39	43 TO 29	0.03
14.39	14.49	29	0.10



(3) S.R. 5			
S.L.M.		PW	LENGTH
FROM	TO	(FT)	(MILE)
5.86	6.05	52	0.19
6.14	6.20	52	0.06
6.20	6.25	52 TO 62	0.05
6.25	6.34	62	0.09
6.34	6.40	62 TO 50	0.06
6.40	6.78	50	0.38
6.78	6.83	50 TO 44	0.05



(4) S.R. 261			
S.L.M.		PW	LENGTH
FROM	TO	(FT)	(MILE)
3.51	3.63	32	0.12
3.63	3.75	32 TO 56	0.12
3.75	3.78	56 TO 69	0.03
3.78	3.85	69	0.07
3.85	3.92	57	0.07
3.92	4.04	57 TO 32	0.12
4.04	4.13	32	0.09
4.13	4.95	32	0.82
4.95	4.99	32 TO 42	0.04
4.99	5.06	42	0.07

SEE SHEET 2 FOR LEGEND

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SAFETY EDGE (ASPHALT CONCRETE)

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANSTECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETY SLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

- TRANSTECH SYSTEMS, INC.
1594 STATE STREET
SCHENECTADY, NY 12304
1-800-724-6306
WWW.TRANSTECHSYS.COM

ADVANT-EDGE PAVING EQUIPMENT LLC
P.O. BOX 9163
NISKAYUNA, NY 12309-0163
518-280-6090
WWW.ADVANTAEDGEPAVING.COM

CARLSON SAFETY EDGE END GATE
18425 50TH AVENUE EAST
TACOMA, WA 98446
253-875-8000

TROXLER ELECTRONIC LABORATORIES, INC.
3008 E. CORNWALLIS RD.
RESEARCH TRIANGLE PARK, NC 27709
1-877-TROXLER
WWW.TROXLERLABS.COM

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN.

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

NOTES:

- 1.) SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).

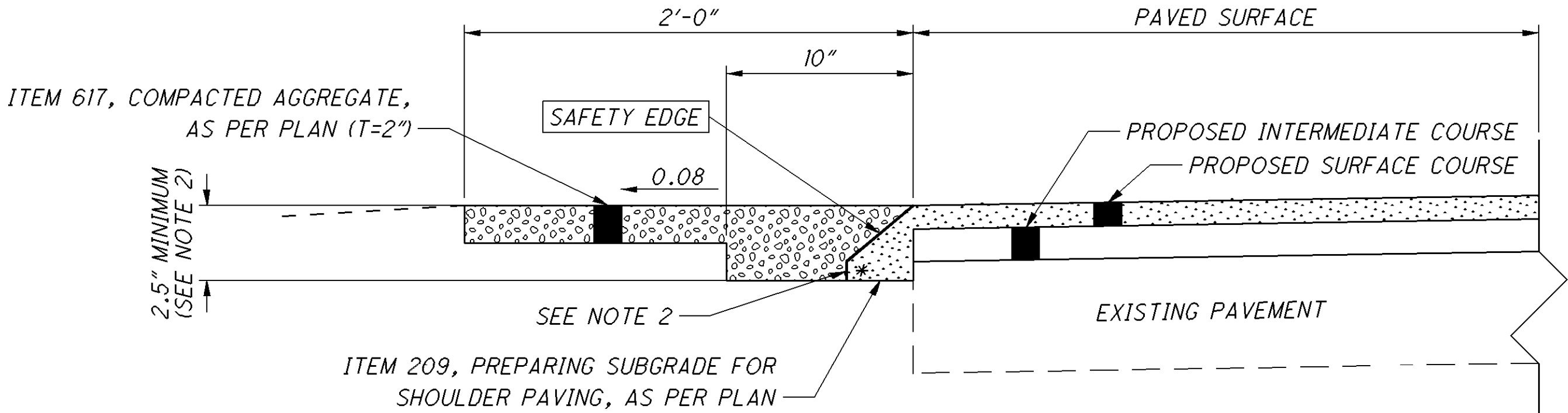
2.) CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6". CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6".

3.) BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.

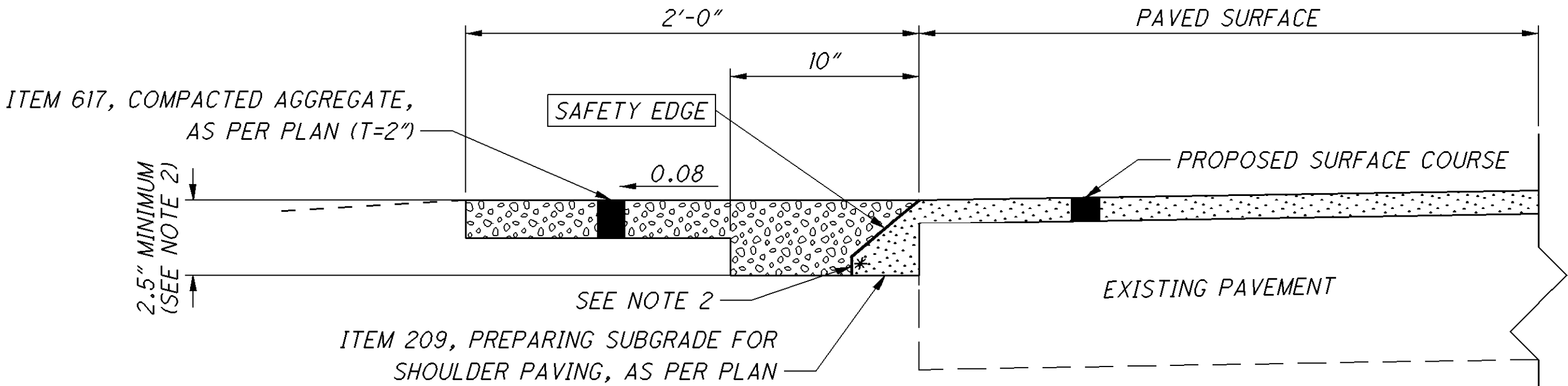
* 40° MAX

ESTIMATED QUANTITIES

ROUTE	SAFETY EDGE THICKNESS (IN.)	S.L.M TO S.L.M.				SIDE	209	448
							PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN
SR 43	3	13.21	TO	13.90	L/R	72.9	9.99	
SR 43	3	13.92	TO	14.31	L/R	41.2	5.64	
SR 43	3	14.35	TO	15.59	L/R	130.9	17.94	
SR 261	2.5	3.51	TO	3.85	L/R	35.9	3.46	
SR 261	2.5	3.85	TO	4.13	L/R	29.6	2.85	
SR 261	2.5	4.13	TO	5.06	L/R	98.2	9.46	
TOTALS CARRIED TO GENERAL SUMMARY							409	50



SAFETY EDGE DETAIL FOR 2 COURSE OVERLAY



SAFETY EDGE DETAIL FOR 1 COURSE OVERLAY

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UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEAD-QUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
OGPUPS 1-800-925-0988
ODOT 330-786-3145 KEN GREENE

LOCATIONS OF THE UTILITIES LISTED BELOW ARE OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AT&T The Ohio Bell Telephone Co. ATTN: Jerry Smith 50 W. Bowery St. 4th Floor Akron, OH 44308 330-384-8557	Dominion East Ohio Gas ATTN: Mary Long 320 Springside Drive Suite 320 Akron, OH 44333 330-664-2409 888-504-0126 Fax
Ohio Edison ATTN: David L. Miller 1910 W. Market Street Building #1 Akron, OH 44313 330-436-4055	Portage County Water Resources ATTN: John G. Evans 449 South Meridian Street P.O. Box 1217 Ravenna, OH 44266-1217 330-297-3670 330-297-3689 Fax
Time Warner Cable ATTN: Dennis Thomson 8385 Bavaria Road Macedonia, Ohio 44056 330-963-3620 ext. 216-555-1170	Utility Pipeline Ltd. ATTN: Robert Wentzel 5900 Mayfair Road, NW North Canton, OH 44720 330-498-9130 330-498-9137 Fax

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS [AT LEAST 3 DAYS PRIOR TO PERFORMING THE WORK CONTACT THE TRAFFIC OFFICE AT 330-786-3147 TO CONFIRM THE WIDTHS]:

ROUTE	S.L.M. TO S.L.M.	LANE WIDTH
43	13.21 - 15.59	12'
59	5.86 - 6.83	12'
261	3.51 - 5.06	12'

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

DRIVEWAYS (SR-59)

THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE A DIFFERENCE IN ELEVATION BETWEEN THE MAINLINE ASPHALT SURFACE COURSE AND THE EXISTING DRIVEWAYS ON SR 59. IF APPROVED BY THE ENGINEER, AN ASPHALT WEDGE WITH A WIDTH OF APPROX 2' MAY BE PLACED EITHER ON THE ROADWAY SHOULDER OR DRIVEWAY DEPENDENT UPON WHICH SIDE IS HIGH. A QUANTITY OF MAINLINE SURFACE COURSE ASPHALT HAS BEEN PROVIDED IN THE CALCULATIONS AND GENERAL SUMMARY TO PERFORM THIS ITEM OF WORK.

INTERSECTIONS (SR-59 & SR-261)

SR 59 AND SR 261 INTERSECTIONS WILL BE RESURFACED 2 FT. BEYOND THE EDGE LINE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE OR WITH THE MAINLINE PAVEMENT IF THIS CAN BE ACCOMPLISHED WITHOUT CHANGING THE VELOCITY AND DIRECTION OF THE PAVER. USE THE SAME ASPHALT CONCRETE AS THE MAINLINE PAVEMENT. PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT. ANY GRADING OR PRIME NECESSARY TO ACCOMPLISH THIS WORK SHALL BE INCLUDED IN THE COST OF THE PERTINENT BID ITEM.

INTERSECTIONS (SR-43)

SR 43 INTERSECTIONS WILL BE RESURFACED 25 FT. BEYOND THE EDGE LINE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. A BUTT JOINT, AS PER STANDARD CONSTRUCTION DRAWING BP-3.1, SHALL BE USED TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT. USE THE SAME ASPHALT CONCRETE AS THE MAINLINE PAVEMENT UNLESS SHOWN OTHERWISE ON THE ASPHALT CONCRETE CALCULATIONS SHEET. ANY GRADING OR PRIME NECESSARY TO ACCOMPLISH THIS WORK SHALL BE INCLUDED IN THE COST OF THE PERTINENT BID ITEM.

ITEM 203 - EXCAVATION (FOR PAVEMENT REPAIR) (SR-43)

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF ALL UNSUITABLE MATERIAL BY EXCAVATING THE EXISTING SUBGRADE AND SUBBASE AS SHOWN IN THE DETAILS OR AS DIRECTED BY THE ENGINEER. EXACT LIMITS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

203, EXCAVATION (FOR PAVEMENT REPAIR), 17 CU YD

LINEAR GRADING (SR-43 & SR-261)

SHOULDER WIDTH BEYOND THE LIMITS OF THE COMPACTED AGGREGATE WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE ND WILL BE PERFORMED ONLY IN THE AREAS NECESSARY. GRADING WILL BE ACCOMPLISHED BY THE REMOVAL OF, OR ADDITION OF MATERIAL TO PROVIDE A 0.08 POSITIVE SLOPE. EXCESS MATERIAL WILL BE WINDROWED ON THE SHOULDER. THE GRADED AREAS WILL BE COMPACTED TO A SUFFICIENT DENSITY TO PREVENT EROSION UNTIL SEEDING AND MULCHING IS PERFORMED. ALL EXCESS MATERIAL WILL BE REMOVED FROM THE BERMS AND WILL BE DISPOSED OF OFF THE PROJECT BY THE CONTRACTOR.

SEEDING AND MUCHING, FERTILIZER AND LIME WILL BE PERFORMED WITHIN A PERIOD NOT TO EXCEED 10 DAYS AFTER THE LINEAR GRADING.

THE QUANTITY OF ITEM 209 IS NOT PERMITTED TO BE INCREASED. REDUCTIONS IN QUANTITIES ARE PERMITTED AS DETERMINED BY THE PROJECT ENGINEER.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID ITEM. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

SR-43
209, LINEAR GRADING, 243 STA
659, SEEDING AND MULCHING, 13500 SQ YD
659, COMMERCIAL FERTILIZER, 1.83 TON
659, LIME, 2.79 ACRES
659, WATER, 73 M. GAL.

SR-261
209, LINEAR GRADING, 161 STA
659, SEEDING AND MULCHING, 8946 SQ YD
659, COMMERCIAL FERTILIZER, 1.21 TON
659, LIME, 1.86 ACRES
659, WATER, 49 M. GAL.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (SR-43)

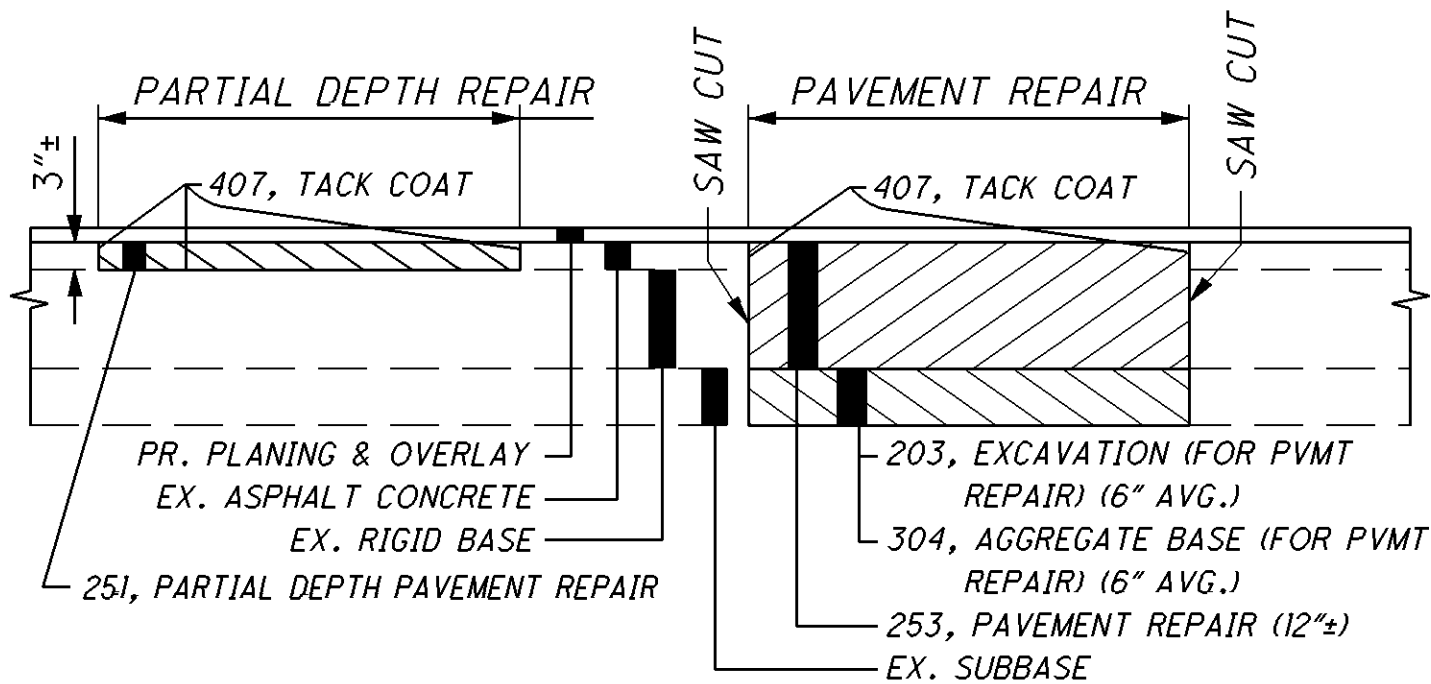
A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS ON SR 43 EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 448 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE 1 PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

251, PARTIAL DEPTH PAVEMENT REPAIR, 100 SQ. YD.

ITEM 253 - PAVEMENT REPAIR (SR-43)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED PAVEMENT FULL DEPTH ON SR 43 AND PLACING 12"x 301 ASPHALT CONCRETE BASE, PG64-22. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

253, PAVEMENT REPAIR, 100 SQ YD
255, FULL DEPTH PAVEMENT SAWING, 608 FT



ITEM 304 - AGGREGATE BASE (FOR PAVEMENT REPAIR) (SR-43)

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER TO BACKFILL AREAS WHICH WERE EXCAVATED UNDER ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

304, AGGREGATE BASE (FOR PAVEMENT REPAIR), 17 CU YD

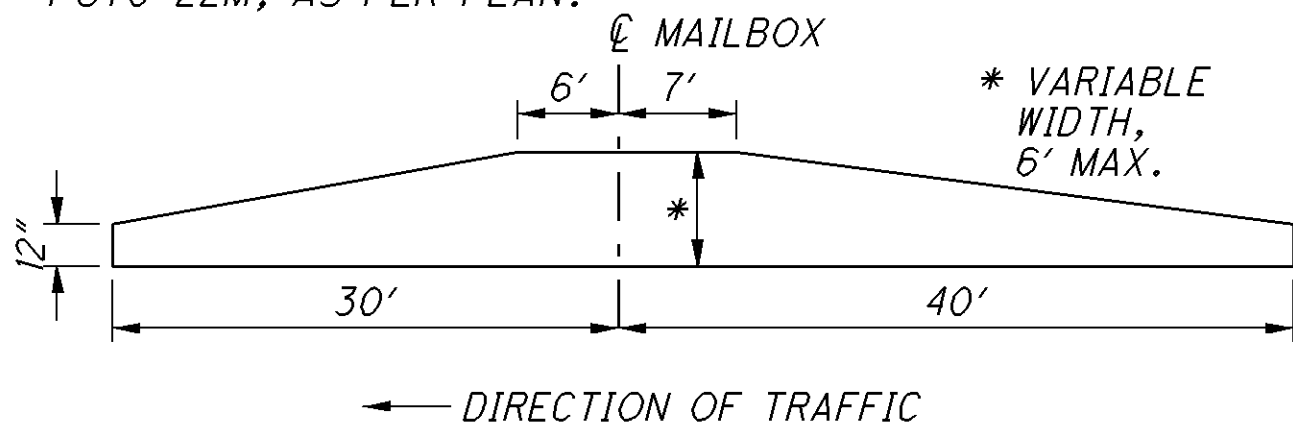
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PAVED MAILBOX APPROACHES (SR-43)

ALL EXISTING MAIL BOX APPROACHES WILL BE PAVED WITH ASPHALT CONCRETE AS PER TYPICAL SHOWN OR AS NEAR AS PRACTICAL. AGGREGATE APPROACHES SHALL HAVE A 2 IN. MIN. THICKNESS; IMPROVED APPROACHES SHALL HAVE A 2 IN. MIN. THICKNESS. THE CONTRACTOR SHALL HAVE THE OPTION OF PAVING THE MAILBOX APPROACHES WITH EITHER THE PAVING OF THE DRIVEWAYS OR THE PAVING OF THE MAINLINE AND SHOULDERS. PAYMENT SHALL BE AS FOLLOWS:

1. SHOULD THE CONTRACTOR ELECT TO PAVE THE MAILBOX APPROACHES WITH THE DRIVEWAYS THEN ALL GRADING, TACK, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED FOR THE CONTRACTOR TO LAYOUT AND CONSTRUCT THE MAILBOX APPROACHES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS).

2. SHOULD THE CONTRACTOR ELECT TO PAVE THE MAILBOX APPROACHES WITH THE MAINLINE AND SHOULDERS, THEN ALL GRADING, TACK, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE MAILBOX APPROACHES SHALL BE INCLUDED IN THE UNIT BID FOR ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN.



ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF PAVING ALL EXISTING DRIVEWAYS THAT DO NOT HAVE A CURB CUT OR ARE NOT PAVED AS AN INTERSECTION AS SHOWN ON THE ASPHALT CONCRETE PLAN SHEET. DRIVEWAYS ARE TO BE PAVED A DISTANCE OF 10 FT. FROM THE EDGE OF PAVED SHOULDER UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DRIVEWAYS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. ASPHALT CONCRETE AVERAGE THICKNESSES SHALL BE 2 IN. FOR AGGREGATE DRIVEWAYS (UNIMPROVED) AND 1 IN. FOR IMPROVED DRIVEWAYS. AGGREGATE DRIVEWAYS SHALL BE GRADED PRIOR TO PAVING SUCH THAT SURFACE DRAINAGE DOES NOT ENCROACH UPON THE PAVED SHOULDER. THE MAXIMUM PAVED WIDTH SHALL NOT EXCEED THAT ALLOWED FOR THROAT AND RADIUS FOR UNCURBED DRIVEWAYS AS PER STANDARD DRIVE DESIGN MANUAL. ALL GRADING, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE DRIVEWAYS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN.

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM 606 - ANCHOR ASSEMBLY, MSG TYPE B

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

THE FACE OF THE TYPE B IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE B, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING REFLECTIVE SHEETING AND ALL RELATED HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 606 - ANCHOR ASSEMBLY, MSG TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

CURB RAMPS / DETECTABLE WARNINGS

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, INSTALLATION OF THE CURB RAMPS / DETECTABLE WARNINGS WILL BE PERFORMED PRIOR TO MAINLINE RESURFACING.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1 1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO.200	0-13

ITEM 623 - MONUMENT ASSEMBLY, AS PER PLAN

ADJUSTABLE MONUMENT ASSEMBLIES AS SHOWN ON STANDARD CONSTRUCTION DRAWING RM-1.1 WILL BE PLACED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. THE CONTRACTOR WILL BE PROVIDED A LOCATION LIST OF EXISTING MONUMENTATION WHICH IS TO BE REPLACED WITH NEW ADJUSTABLE MONUMENT BOX ASSEMBLIES AT THE PRE-CONSTRUCTION MEETING. THIS LIST MAY INCLUDE BOTH EXPOSED AND BURIED MONUMENTATION AND MAY ALSO INCLUDE SOME TIES TO AID IN RECOVERY. PAYMENT FOR THE REMOVAL OF ANY EXISTING MONUMENT ASSEMBLIES SHALL ALSO BE INCLUDED IN THIS ITEM. QUANTITY THAT WILL BE CARRIED TO THE GENERAL SUMMARY:

623, MONUMENT ASSEMBLY, AS PER PLAN, 5 EACH
(SR 43, 4 EACH, SR 59, 1 EACH)

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MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. A MINIMUM OF ONE TEN FOOT LANE BI-DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

4. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

5. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED OR PROTECTED AS PER STANDARD CONSTRUCTION DRAWING MT-101.90.

6. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES RURAL OR ONE (1) MILE URBAN.

8. ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.

9. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.

10. A QUANTITY OF 30 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.

11. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

12. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGN HAS BEEN INCLUDED IN THE PLAN. THIS QUANTITY SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING SIGNS: W8-1 [BUMP], W6-3 [TWO-WAY TRAFFIC], W8-H13 [NO EDGE LINES], R4-1 [DO NOT PASS], R4-2 [PASS WITH CARE], W8-11 [UNEVEN LANES], W8-15 [GROOVED PAVEMENT]. THESE QUANTITIES SHALL BE AS PER 614.04.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

SR-43
PHASE I & PHASE II - PLANED SURFACE AND INTERMEDIATE COURSE
614, WORK ZONE CENTER LINE, CLASS II, 4.76 MILE
614, WORK ZONE CHANNELIZING LINE, CLASS I, 804 FT
614, WORK ZONE MARKING SIGN, 9 EACH

PHASE III - SURFACE COURSE
614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT 2.38 MILE
614, WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT 402 FT

TO BE USED AS DIRECTED BY THE ENGINEER
614, WORK ZONE EDGE LINE, CLASS III, 4.76 MILE

SR-59
PHASE I - PLANED SURFACE
614, WORK ZONE CENTER LINE, CLASS II, 1.03 MILE
614, WORK ZONE LANE LINE, CLASS II, 1.84 MILE
614, WORK ZONE STOP LINE, CLASS I, 72 FT
614, WORK ZONE CHANNELIZING LINE, CLASS I, 480 FT
614, WORK ZONE MARKING SIGN, 9 EACH

PHASE II - SURFACE COURSE
614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT 1.03 MILE
614, WORK ZONE LANE LINE, CLASS III, 642 PAINT 1.84 MILE
614, WORK ZONE STOP LINE, CLASS III, 642 PAINT 72 FT
614, WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT 480 FT

SR-261
PHASE I - PLANED SURFACE
614, WORK ZONE CENTER LINE, CLASS II, 1.55 MILE
614, WORK ZONE STOP LINE, CLASS I, 100 FT
614, WORK ZONE CHANNELIZING LINE, CLASS I, 1014 FT
614, WORK ZONE MARKING SIGN, 6 EACH

PHASE II - SURFACE COURSE
614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT 1.55 MILE
614, WORK ZONE STOP LINE, CLASS III, 642 PAINT 100 FT
614, WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT 1014 FT

TO BE USED AS DIRECTED BY THE ENGINEER
614, WORK ZONE EDGE LINE, CLASS III, 3.10 MILE

WINTER TRAFFIC LIMITATIONS

ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC BETWEEN NOVEMBER 15 AND APRIL 1. NOVEMBER 14 SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE AND DISINCENTIVES OF \$1,000 SHALL BE ASSESSED FOR EACH CALENDAR DAY THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR MAY CLOSE LANES PRIOR TO APRIL 1 WITH WRITTEN APPROVAL FROM THE DISTRICT CONSTRUCTION ENGINEER.

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$3000 FOR EACH HOUR THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REP- RESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

ITEM 632 - DETECTOR LOOP, AS PER PLAN

THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE (330-786-3146) THREE WORKING DAYS PRIOR TO ANY PLANING OR TRENCHING AT THE INTERSECTIONS OF:

SR 59 @ BRANDY LAKE
SR 59 @ SR 261
SR 261 @ SUMMIT RD

LOOP DETECTORS DISTURBED BY PAVEMENT PLANING OR TRENCHING SHALL BE ABANDONED IN PLACE. THE LOOP DETECTOR WIRE WILL BE CUT INTO THE PAVEMENT AFTER THE PROPOSED SURFACE COURSE HAS BEEN PLACED. ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHALL BE THE POWERHEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE AS SPECIFIED BELOW. THE LOCATION OF THESE LOOPS SHALL BE SUCH THAT THE POWERHEAD IS LOCATED AT THE STOP LINE, NOT PAST IT. ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10 AND THE LOOP SHALL BE PLACED AT THE SAME LOCATION AS THE EXISTING LOOPS.


THE QUANTITIES LISTED BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY. THE NEW LOOP DETECTOR WIRES SHALL BE RUN INTO THE EXISTING CONTROL BOX OR THE EXISTING PULLBOX. INCLUDED IN THIS ITEM IS THE POURED EPOXY TYPE CABLE SPLICE KIT (CONFORMING TO 725.15E) THAT MUST BE USED IN MAKING THESE CONNECTIONS. ALL NECESSARY MATERIAL, LABOR, SPLICE KITS AND EQUIPMENT SHALL BE INCIDENTAL TO PAYMENT OF THESE ITEMS.

632 DETECTOR LOOP, AS PER PLAN, 15 EACH

SR 59 AND BRANDY LAKE RD
(3 EACH, ANGULAR DESIGN DETECTION)
(1 EACH, RECTANGULAR, 25')

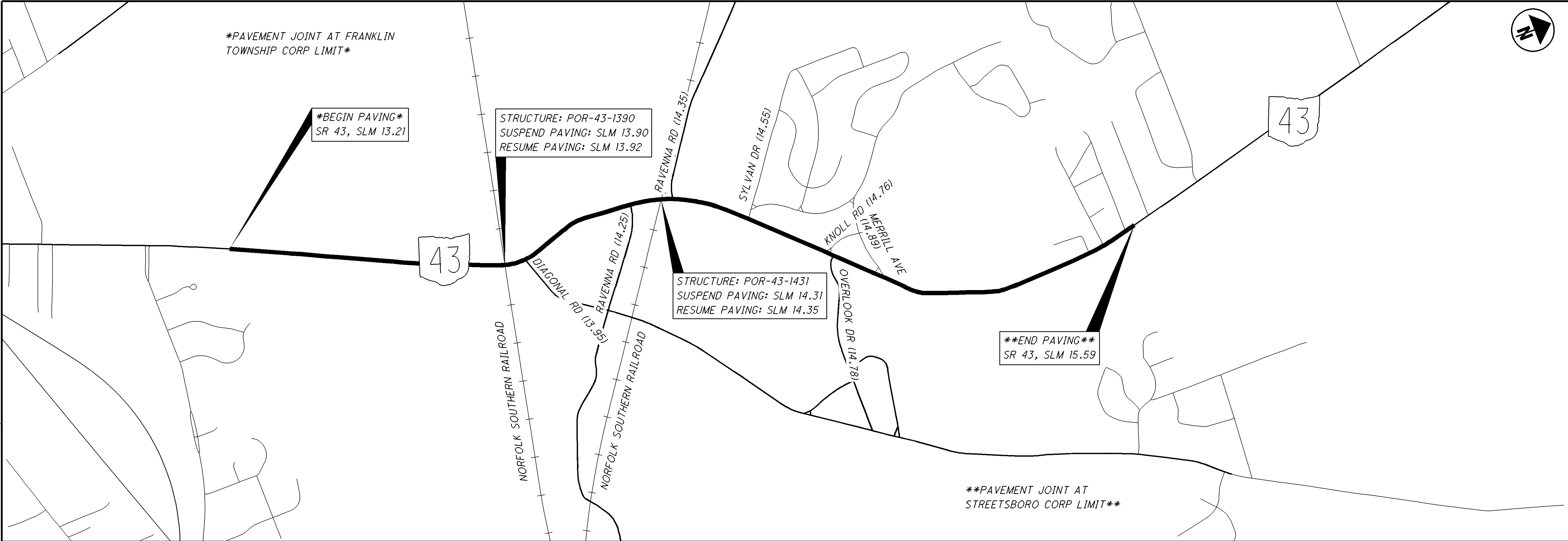
SR 59 AND SR 261
(2 EACH, POWERHEAD, 20')
(2 EACH, ANGULAR DESIGN DETECTION)

SR 261 AND SUMMIT RD
(7 EACH, ANGULAR DESIGN DETECTION)



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SLM RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	202	254	407	407	448	448	448	617									
					WEARING COURSE REMOVED		PAVEMENT PLANING, ASPHALT CONCRETE (T = 1 1/2')			TACK COAT @ 0.15 GAL/SY		TACK COAT FOR INTERMEDIATE COURSE @ 0.04 GAL/SY		ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 (T = 1 3/4")		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN (T = 1 1/4")		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN (T = 2")		COMPACTED AGGREGATE, AS PER PLAN					
SR 43					FT	FT	SQ YD	SQ YD	SQ YD		SQ YD		GALLON		GALLON		CU YD		CU YD		CU YD				
13.21	TO	13.90	1	L/R	3643.20	29.00	11739.20			11739.20	1760.88	469.57	570.66	407.61		89.96									
13.92	TO	14.21	1	L/R	1531.2	29.00	4933.87			4933.87	740.08	197.35	239.84	171.31		37.81									
14.21	TO	14.25	1	L/R	211.20	36.00	844.80			844.80	126.72	33.79	41.07	29.33		5.21									
14.25	TO	14.31	2	L/R	316.80	43.00	1513.60			1513.60	227.04	60.54	73.58	52.56		7.82									
14.35	TO	14.36	2	L/R	52.80	43.00	252.27			252.27	37.84	10.09	12.26	8.76		1.30									
14.36	TO	14.39	2	L/R	158.40	36.00	633.60			633.60	95.04	25.34	30.80	22.00		3.91									
14.39	TO	14.49	2	L/R	528.00	29.00	1701.33			1701.33	255.20	68.05	82.70	59.07		13.04									
14.49	TO	15.59	1	L/R	5808.00	29.00	18714.67			18714.67	2807.20	748.59	909.74	649.81		143.41									
INTERSECTIONS																									
13.21	TO	15.59			25.00	VARIES		1478.00	1478.00		221.70	59.12	71.85	51.32											
MAILBOX APPROACHES																									
13.21	TO	15.59			4.00	VARIES		1470.00							81.67										
DRIVEWAYS																									
13.21	TO	15.59			10.00	VARIES		2267.00							125.94										
SUBTOTALS									1478.00	0.00	40333.33	0.00	6271.70	0.00	1672.45	0.00	2032.50	0.00	1451.78	0.00	207.61	0.00	302.46	0.00	0.00
TOTALS CARRIED TO GENERAL SUMMARY									1478	0	40334	0	6272	0	1673	0	2033	0	1452	0	208	0	303	0	0

CALCULATED
MMS
CHECKED
LMP

PAVEMENT CALCULATION SUBSUMMARY (SR 43)

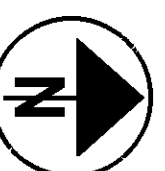
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13.21 / 5.86 / 3.51

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CALCULATED	MMS	CHECKED	LMP
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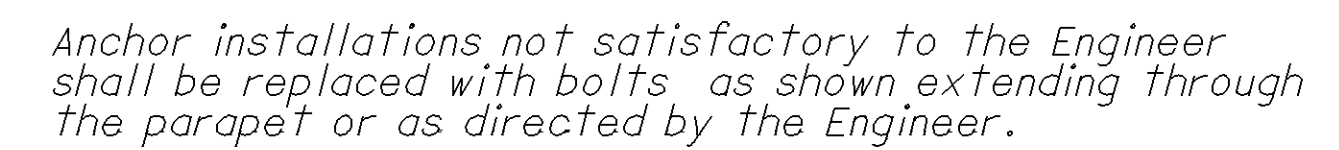
**POR-43 / 59 / 261-
13.21 / 5.86 / 3.51**



<div style="text-align: center;"> <div>12</div> <div>26</div> </div>	POR-43 / 59 / 261 - 13.21 / 5.86 / 3.51	PAVEMENT CALCULATION SUBSUMMARY (SR 261)		
		<div style="display: flex; justify-content: space-between;"> <div>CALCULATED</div> <div>MMS</div> <div>CHECKED</div> <div>LMP</div> </div>		
		Empty row for data entry		

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	<div style="display: flex; justify-content: space-around; font-weight: bold; font-size: 0.8em;"> CALCULATED MMS </div>		
	<div style="display: flex; justify-content: space-around; font-weight: bold; font-size: 0.8em;"> CHECKED LMP </div>		

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; flex-direction: column; justify-content: center; align-items: center;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="width: 100%;"></div> </div> <div style="text-align: center;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="width: 100%;"></div> </div> </div>	POR-43 / 59 / 261- 13.21 / 5.86 / 3.51	GUARDRAIL SUBSUMMARY	CALCULATED MMS CHECKED LMP

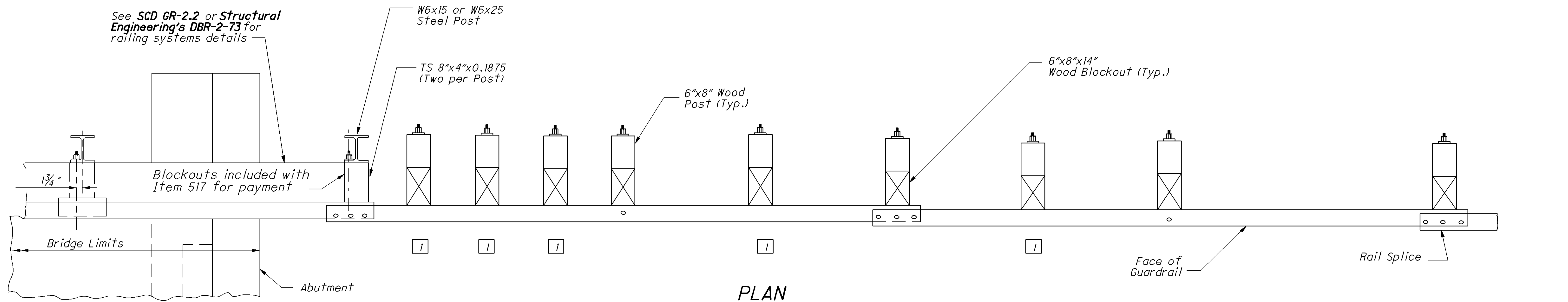


The diagram illustrates a cross-section of a road shoulder and embankment. A dashed line represents the 'Existing Ground' surface, which slopes downward at a '0.04 Slope Rate'. A solid line represents the 'Embankment' slope, which is steeper, labeled as '4:1'. A 'Type 6 Curb' is shown as a vertical structure. The curb is 12 inches high, indicated by a vertical dimension line labeled '12"'. The curb is 300 units wide, indicated by a horizontal dimension line labeled '300'. The curb is positioned on the 'Existing Shoulder' area, which is the flat ground to the left of the embankment.

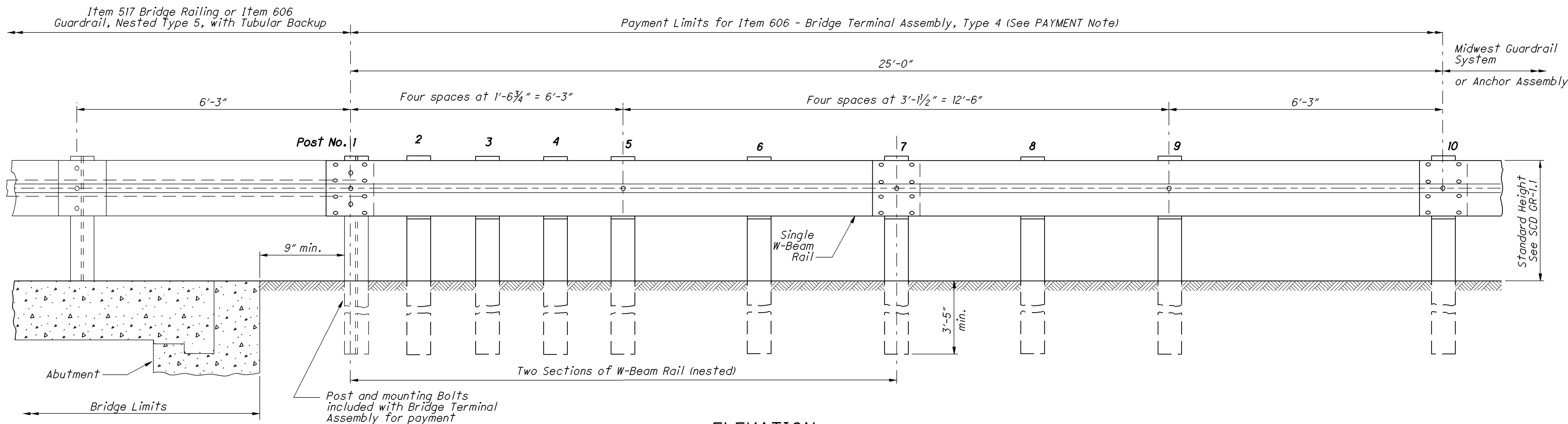


All metric dimensions
(in brackets []) are
in millimeters unless
otherwise noted.

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PLAN



ELEVATION

NOTES

GENERAL: For additional details, see **SCD GR-1.1**.

APPLICATION: The Type 4 Bridge Terminal Assembly shall connect Type 5 Guardrail runs to Type 5 Guardrail with Tubular Backup or To Deep Beam Bridge Guardrail (as shown on **Structural Engineering SCD DBR-2-73**).

DETAIL INFORMATION: The first post off the bridge shall be steel (W6x15 or W6x25). All holes in the off-structure end of the approach panel rail section spanning the abutment are slotted $\frac{1}{4}$ "x2 $\frac{1}{2}$ ". Tighten the bolts as specified for expansion joints in Item 606.05.

POSTS: Posts may be set in drilled holes or driven to grade. See **SCD GR-1.1** for additional Post embedment details. Guardrail is not attached to certain posts (see **LEGEND**).

WOOD POSTS - Use square sawed pressure treated wood as specified in CMS 110.14 and fabricated with square ends. Bore bolt holes and trim the tops of posts, if required after the posts are set.

STEEL POSTS - are allowed as an alternate. Use W6x9 or W6x8.5 in lieu of the 6"x8" wood post. Use same post material through-out assembly.

BLOCKOUTS: Use wood blockouts only. Steel or plastic blockouts are not permitted. Notched wood blockouts are used with steel posts.

FLARED GUARDRAIL: Start Standard Guardrail Flares as shown on **SCD GR-5.1** at or beyond Post No. 10; however, the flare may begin at Post No. 7.

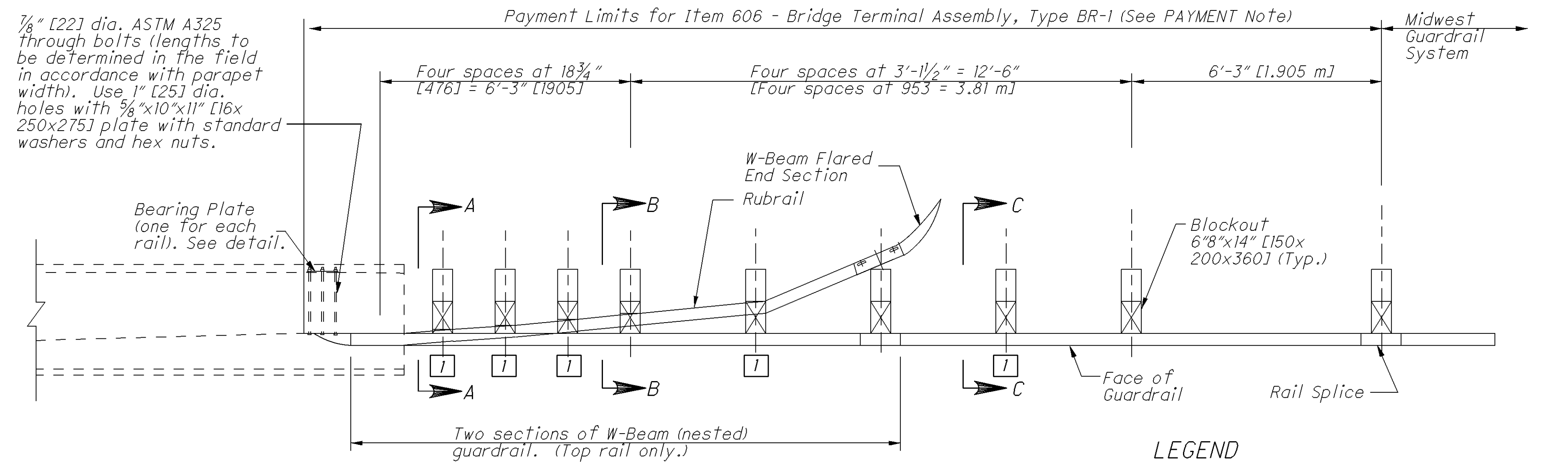
PAYMENT: Item 606 - Bridge Terminal Assembly, Type 4, Each, shall include the cost of all components including additional and different size posts, extra rail, embankment, connectors, anchors and other hardware, etc.

The TS 8"x4" spacers and tubular backup rail extending to the first post off the bridge is included with **Item 517 - Railing**, or **Item 606 - Guardrail, Nested Type 5 with Tubular Backup**, for payment.

LEGEND

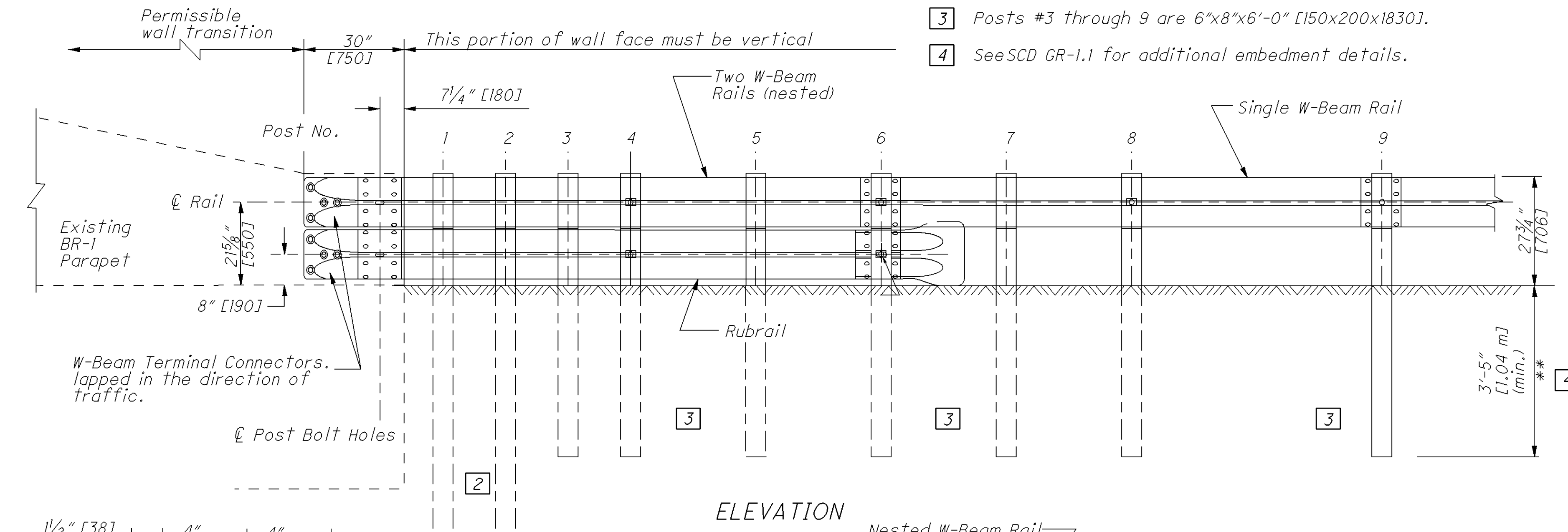
- 1 Guardrail is not attached to posts at Posts 2, 3, 4, 6, and 8. Blockout is fastened to post with standard Post Bolt.

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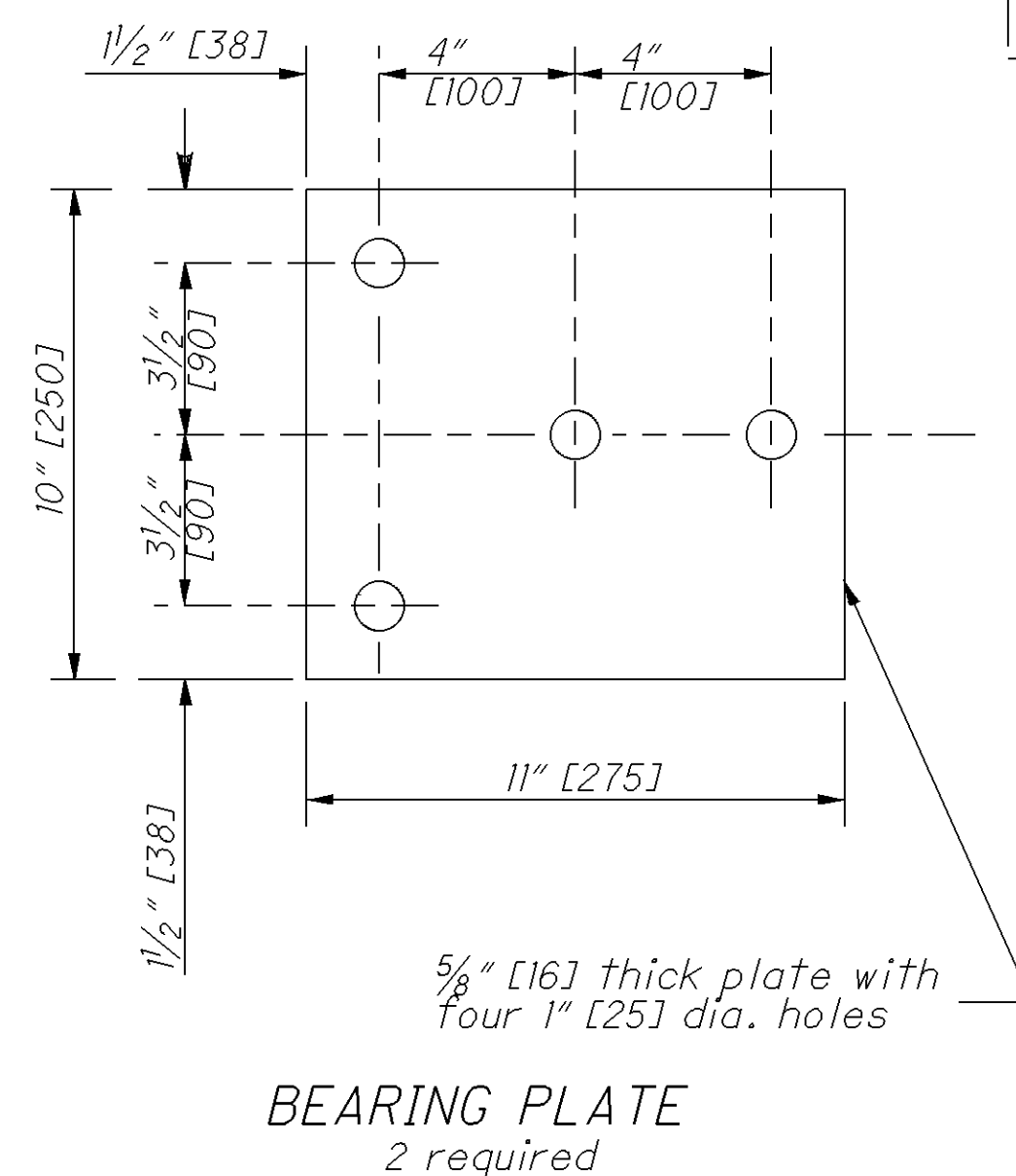


PLAN

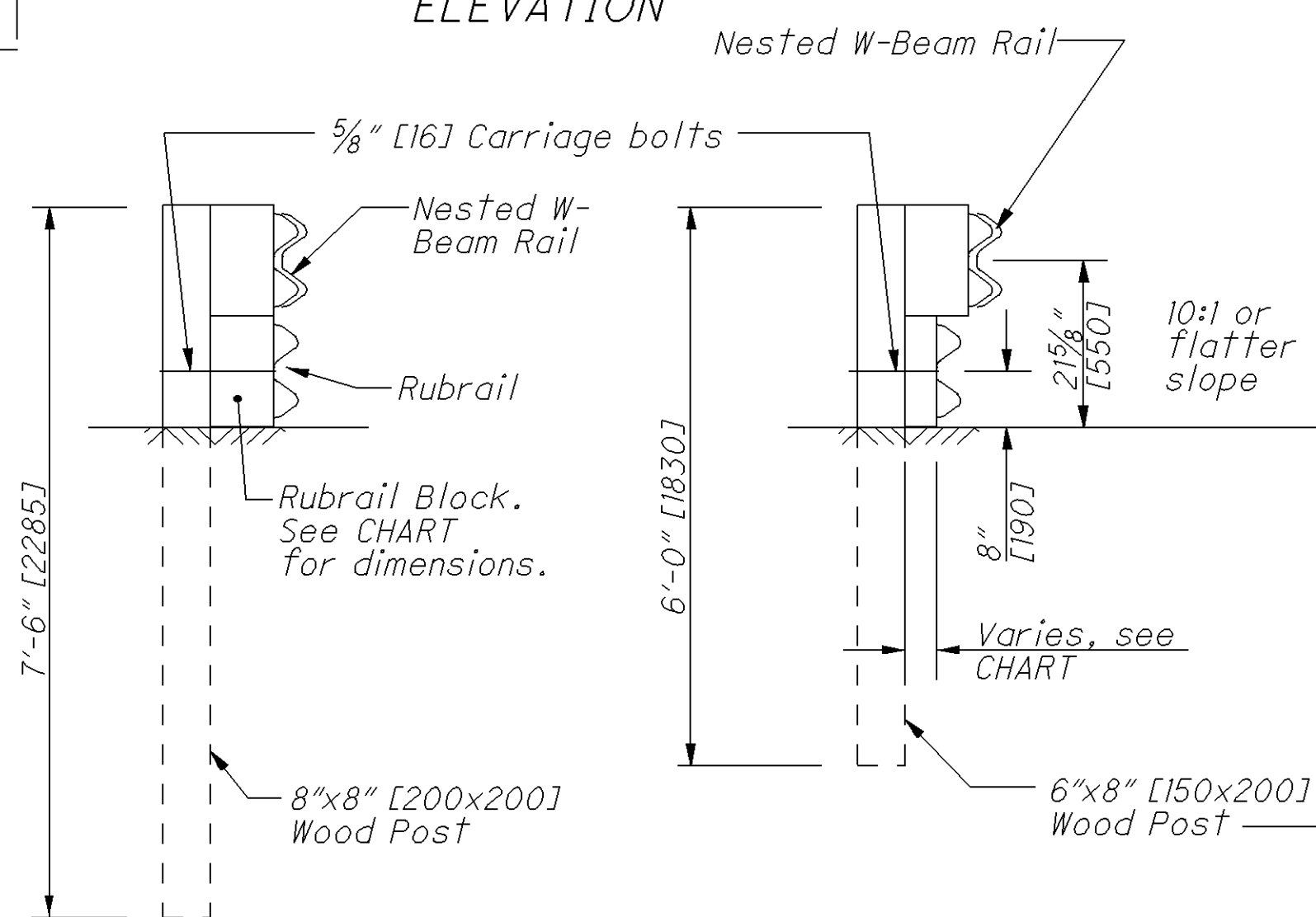
- LEGEND**
- 1 Guardrail not attached to Posts. Blockout fastened to Post with Standard Post Bolt.
 - 2 Posts #1 and 2 are 8"x8"x7'-6" [150x200x2300].
 - 3 Posts #3 through 9 are 6"x8"x6'-0" [150x200x1830].
 - 4 See SCD GR-1.1 for additional embedment details.



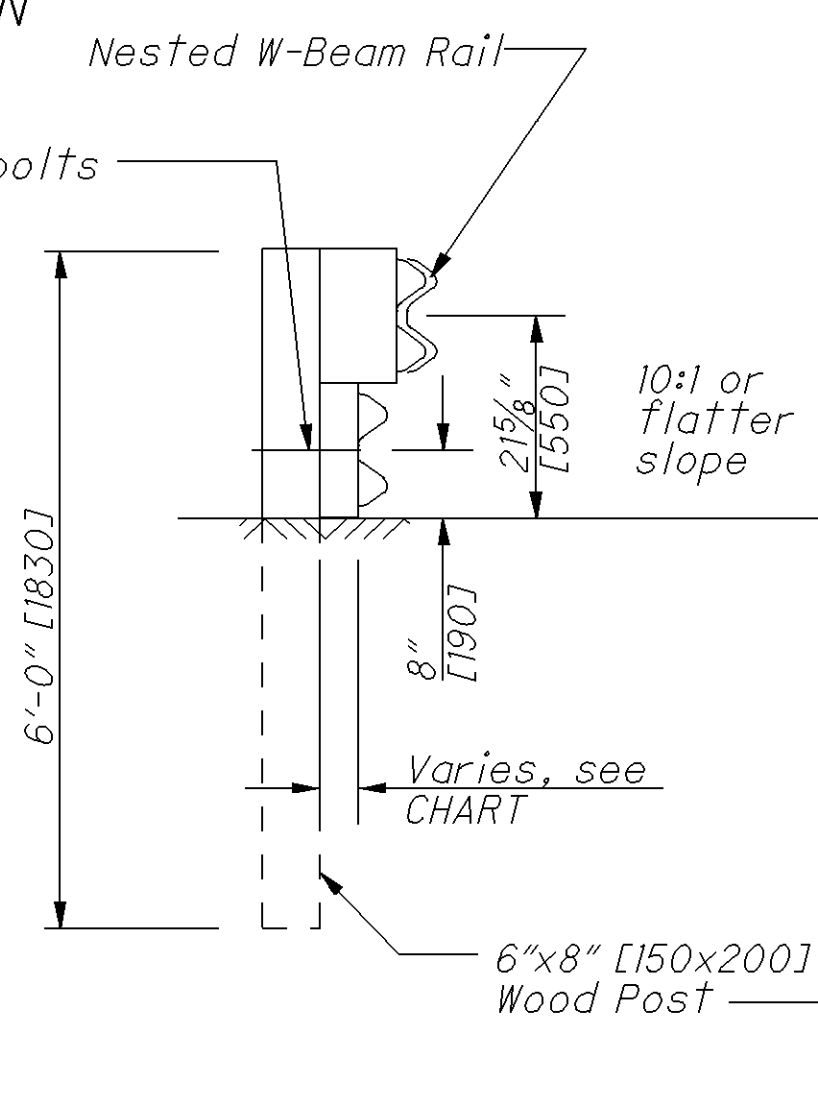
ELEVATION



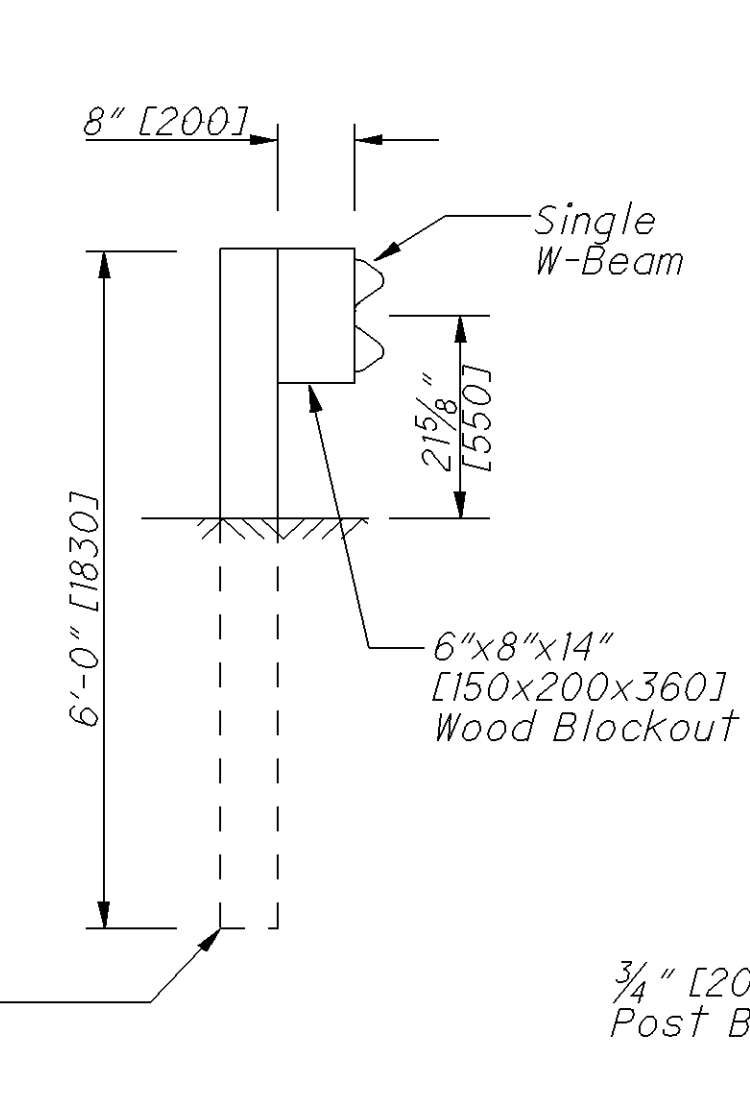
BEARING PLATE
2 required



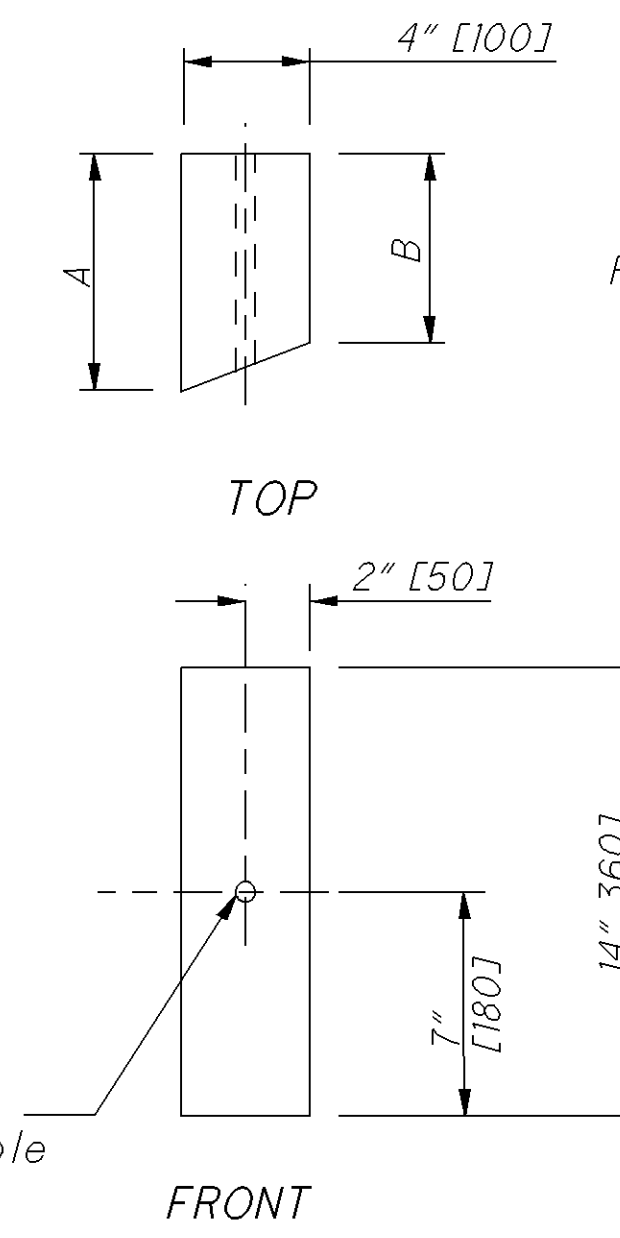
SECTION A-A



SECTION B-B



SECTION C-C



WOOD BLOCK FOR RUBRAIL

NOTES

GENERAL: This design is intended to be used to upgrade bridge terminal assemblies utilizing 27" [786] BR-1 Bridge parapets in effect from 1979 to 1989. This assembly design is approved to NCHRP Report 350, Test Level 3.

This guardrail transition is only appropriate for connection to a vertical concrete end; it should not be connected directly to a concrete safety shape or single slope shape. If attached to a vertical concrete wall (other than a parapet), the wall must be adequately reinforced to resist the lateral and longitudinal forces transmitted through the terminal connectors. If the height of the vertical connection is 32" [813], use Bridge Terminal Assembly, Type I (SCD GR-3.1).

This design utilizes a lower rail (rubrail), and it cannot be used if there is a curb present.

RUBRAIL: The rubrail is a 12'-6" [3.81 m] standard 12 ga. W-Beam rail element. The last 3' [1 m] of the rubrail may be shop bent to facilitate field installation. Field drill rubrail hole at Post 6.

POST ATTACHMENTS: Posts No. 1, 2, 3, 4 and 6 require an additional 1" [25] dia. hole to attach the lower block and/or rubrail.

Do not bolt nested W-Beam or Rubrail to Posts and Blockouts on Posts No. 1, 2, 3, 5 and 7. Bolt blockouts directly to posts at those locations.

Center drill wood block for rubrails to sit squarely on Posts 1 through 4. Secure blocks to Posts No. 1, 2, & 3 with 5/8" [16] carriage bolts. See WOOD BLOCK FOR RUBRAIL Detail.

Use Wood posts only. Steel or plastic blockouts are not permitted. Use of rectangular plate washers is optional.

GUARDRAIL CONNECTION: At least one 12'-6" [3.81 m] section of Standard W-Beam Guardrail must be present before attaching any End Anchors. See SCD GR-2.1 for standard guardrail details.

PAYMENT: Item 606 - Bridge Terminal Assembly, Type BR-1, Each, includes the cost of all components including additional and different size of posts and blockouts, nested rail and rubrail, Bearing Plates, End Section and Connectors, and other hardware.



All metric dimensions (in brackets []) are in millimeters unless otherwise noted.

RUBRAIL BLOCK CHART		
POST	A	B
1	6 1/2" [164]	6 1/4" [158]
2	5 1/8" [131]	4 7/8" [125]
3	3 1/8" [99]	3 5/8" [93]
4	2 5/8" [67]	2 3/8" [61]
5	No Block	No Block

EDGE LINE																	GENERAL SPEC: 640		
																	MATERIAL TYPE: 646		
CTY	ROUTE	TRUE LOG	FROM		TRUE LOG	TO		WHITE EDGE LINE			YELLOW EDGE LINE			COMMENTS					
								TOTAL	HIGHWAY	RAMP	TOTAL	HIGHWAY	RAMP						
POR	43	13.21	KENT CORP		15.59	STREETSBORO CORP		4.76	4.76										
POR	261	3.51	0.34 MILE WEST OF KENT CORP		3.85	JCT. SUMMIT ST		0.68	0.68										
POR	261	3.85	JCT. SUMMIT ST		4.13	KENT CORP		0.56	0.56										
POR	261	4.13	KENT CORP		5.06	JCT. SR 59		1.86	1.86										
TOTAL								7.86	7.86										
LANE LINE																			
CTY	ROUTE	TRUE LOG	FROM		TRUE LOG	TO		TOTAL MILES	4" LANE LINE		COMMENTS								
									DASHED	SOLID									
POR	59	5.86	JCT. MENOUGH RD		6.02	BEGIN 4 LANES		0.22											
POR	59	6.02	BEGIN 4 LANES		6.83	RAVENNA CORP		1.62											
TOTAL								1.84											
CENTER LINE																			
CTY	ROUTE	TRUE LOG	FROM		TRUE LOG	TO		TOTAL MILES	EQUIVALENT SOLID LINE		COMMENTS								
POR	43	13.21	KENT CORP		15.59	STREETSBORO CORP		2.38	4.76										
POR	59	5.86	JCT. MENOUGH RD		6.83	RAVENNA CORP		1.03	2.19										
POR	261	3.51	0.34 MILE WEST OF KENT CORP		3.85	JCT. SUMMIT ST		0.34	0.90										
POR	261	3.85	JCT. SUMMIT ST		4.13	KENT CORP		0.28	0.86										
POR	261	4.13	KENT CORP		5.06	JCT. SR 59		0.93	0.67										
TOTAL								4.96	9.37										
AUXILIARY																			
CTY	ROUTE LOCATION	TRUE LOG	CHANNEL LINE	STOP LINE	CROSS WALK LINES	TRANSVERSE DIAGONAL LINES		ISLAND MARKING	SYMBOL MARKINGS			LANE ARROWS				WORD ON PVMT ONLY		DOTTED LINES	COMMENTS
						WHITE	YELLOW		RxR	SCHOOL		TURN LEFT	TURN RIGHT	THRU	COMB.	ONLY			
										FT	FT					FT	72"		
POR	SR 43 @ FRANKLIN ELEM.	13.185										1							
POR	SR 43 @ RAVENNA RD	14.100	402					71				7							
POR	SR 59 @ MENOUGH RD	5.854	165					150				3							
POR	SR 59 @ BRADY LAKE	6.302	315	72	280							5							
POR	SR 59 @ 6.71	6.710										2							
POR	SR 261 @ SUMMIT ST	3.851	724	60				312				7	4	3					
POR	SR 261 @ SR 59	5.048	290	40								4	4						
TOTAL			1896	172	280			533			3	26	8	3					

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PAVEMENT MARKING SUBSUMMARY

POR-43 / 59 / 261 - 13.21 / 5.86 / 3.51

19 / 26

PAVEMENT MARKING SUBSUMMARY

POR-43 / 59 / 261 -
13.21 / 5.86 / 3.51

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS):
843 DATED 4/18/03
846 DATED 7/19/13

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRAN-SPORTATION OFFICIALS, 17TH EDITION, INCLUDING THE 2002 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

PROPOSED WORK - POR-43-1390 (OVER NS RAILROAD NOT IN USE)

- REMOVE EXISTING ASPHALT CONCRETE OVERLAY AND REPLACE WITH TYPE 3 WATERPROOFING AND AN ASPHALT CONCRETE OVERLAY ON THE DECK AND APPROACH SLABS.
- PATCH ALL UNSOUND AREAS OF SUBSTRUCTURE AND MSE WALLS
- INSTALL EXPANSION JOINTS USING POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM
- EPOXY-URETHANE SEALING OF CONCRETE SURFACES, ABUTMENTS, PARAPETS, AND WING WALLS.
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE.
- NEW STRUCTURE IDENTIFICATION SIGNS.

PROPOSED WORK - POR-43-1431 (OVER NS RAILROAD)

- PATCH EXISTING CONCRETE WEARING SURFACE OF THE DECK.
- SEAL WEARING SURFACE WITH SRS CONCRETE TREATMENT.
- REMOVE AND REPLACE ASPHALT ON APPROACH SLABS.
- PAINT STRUCTURAL STEEL WITH OZEU PAINT SYSTEM.
- PATCH ALL UNSOUND AREAS OF CONCRETE PARAPETS, AND SUBSTRUCTURE.
- REPAIR CONCRETE CURB.
- CLEAN OUT AND EXTEND EXISTING SCUPPERS.
- EPOXY-URETHANE SEALING OF CONCRETE SURFACES, ABUTMENTS, CURBS, PARAPETS, WING WALLS, AND PIERS.
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE.
- NEW STRUCTURE IDENTIFICATION SIGNS.

PROPOSED WORK - POR-59-0605 (OVER NS RAILROAD)

- PATCH EXISTING CONCRETE WEARING SURFACE, TOP OF BACKWALLS, AND APPROACH SLABS.
- SEAL WEARING SURFACE AND APPROACH SLABS WITH SRS CONCRETE TREATMENT.
- REPAIR TRANSITIONS BETWEEN STRUCTURE SIDEWALK AND APPROACH SIDEWALK.
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE.
- NEW STRUCTURE IDENTIFICATION SIGNS AND OBJECT MARKERS.

PROPOSED WORK - POR-261-0403 (BIKEWAY BRIDGE)

- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE.
- INSTALL STRUCTURE IDENTIFICATION SIGNS.

ITEM 201, CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN

REMOVE ALL OF THE ASPHALT CONCRETE ON STRUCTURE(S) POR-043-1390. THICKNESS VARIES WITH A MINIMUM THICKNESS OF 2½". MILLING OR OTHER MECHANICAL METHOD OF ASPHALT DECK REMOVAL MAY BE PERFORMED TO WITHIN ½"± OF THE TOP OF THE EXISTING PRESTRESSED CONCRETE BOX BEAMS. THE LAST ½"± OF ASPHALT CONCRETE TO BE REMOVED AND THE WATERPROOFING WILL BE REMOVED USING A NONDESTRUCTIVE METHOD SUCH AS HAND SCRAPING. THE CONTRACTOR WILL USE CAUTION IN REMOVING THE REMAINING ASPHALT AND WATERPROOFING TO ENSURE NO DAMAGE OCCURS TO THE PRESTRESSED CONCRETE BOX BEAMS. ANY DAMAGE TO THE BOX BEAMS WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR THIS ITEM WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND ANY INCIDENTALS REQUIRED TO PERFORM THIS WORK. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD FOR ITEM 202, WEARING COURSE REMOVED, AS PER PLAN.

ITEM 514 - PAINTING OF STRUCTURAL STEEL

THE COLOR FOR THE FINISHED COAT OF STRUCTURE POR-43-1431 WILL CONFORM TO FEDERAL COLOR NUMBER 15526 (BLUE).

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN

DESCRIPTION: THIS ITEM CONSISTS OF SURFACE PREPARATION OF STRUCTURAL STEEL PREVIOUSLY COATED WITH AN EXISTING PAINT SYSTEM. THE SURFACE PREPARATION WILL BE PERFORMED ACCORDING TO THIS NOTE FOR THE STEEL UTILITY SUPPORTS WITHIN 3 INCHES OF EXISTING UTILITIES AND/OR EXISTING LIGHTING HARDWARE. AREAS OUTSIDE THESE LIMITS WILL BE PREPARED UNDER ITEM 514, SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL.

GENERAL: C&MS 514.05 THROUGH 514.10 AND 514.13.D APPLY UNLESS MODIFIED BY THESE NOTES.

WASHING EXISTING PAINTED SURFACES: CLEAN SURFACES TO BE COATED WITH LOW PRESSURE WATER CLEANING TO REMOVE ALL DIRT, DEBRIS, ANIMAL EXCREMENT, SALT CONTAMINANTS AND OTHER ACCUMULATED FOREIGN MATERIAL IN ACCORDANCE WITH SSPC-SPI2 (LP WC), LOW PRESSURE WATER CLEANING. THE PRESSURE WASHER SHALL BE CAPABLE OF ACHIEVING AT LEAST 2000 POUNDS PER SQUARE INCH AT THE NOZZLE. WHEN USING THE POWER WASHING EQUIPMENT, THE NOZZLE SHALL BE MAINTAINED NO MORE THAN 10 INCHES FROM THE SURFACE. SUPPLY AND USE POTABLE WATER. PROVIDE TO THE ENGINEER A LETTER OF WRITTEN ACCEPTANCE FOR ANY BIODEGRADABLE DETERGENTS OR CLEANERS USED IN CONJUNCTION WITH THIS METHOD. COLLECT AND CONTAIN WATER AND DEBRIS REMOVED DURING WASHING OPERATIONS ABOVE WATER FEATURES IN CONFORMANCE WITH C&MS 514.08 AND C&MS 514.13.D FOR ANY DEBRIS. CREATE SETTLEMENT COLLECTION BASINS AND STRAIN ALL WASH WATER ABOVE LAND FEATURES AS NECESSARY TO PRODUCE VISIBLY CLEAR WATER AND COMPLY WITH CMS 514.08 AND C&MS 514.13.D FOR ANY DEBRIS.

SURFACE PREPARATION: AFTER THE PRESSURE WASHED SURFACE HAS DRIED, REMOVE EXISTING PAINT COATING TO CONTRACT LIMITS OR AS DIRECTED BY THE ENGINEER ACCORDING TO: SSPC-SP 11, POWER TOOL CLEANING TO BARE METAL, AS SHOWN ON THE PICTORIAL SURFACE PREPARATION STANDARDS FOR PAINTING STEEL SURFACES SHOWN IN SSPC-VIS 3; SSPC SP6, COMMERCIAL BLAST CLEANING, AS SHOWN ON THE PICTORIAL SURFACE PREPARATION STANDARDS FOR PAINTING STEEL SURFACES SHOWN IN SSPC-VIS 1; OR SSPC SPI2 UHP WJ-4, ULTRAHIGH-PRESSURE WATER JETTING, AS SHOWN ON THE PICTORIAL SURFACE PREPARATION STANDARDS FOR PAINTING STEEL SURFACES SHOWN IN SSPC-VIS 4. SUPPLY BLAST WATER CONTAINING A COMMERCIALLY AVAILABLE RUST INHIBITOR AT A DOSAGE THAT PREVENTS FLASH RUSTING FOR 12 HOURS AND DOCUMENTED AS ACCEPTABLE TO THE COATING'S MANUFACTURER. THE ENGINEER WILL USE THE SSPC-VIS 1, SSPC-VIS 3 OR SSPC-VIS 4 TO DETERMINE THE ACCEPTANCE OF THE SURFACE PREPARATION. FEATHER THE EXISTING PAINT TO ROUGHEN A MINIMUM OF 1/2 INCH OF THE EXISTING PAINT. CONTAIN AND DISPOSE OF WASTE GENERATED BY THE CLEANING ACCORDING TO C&MS 514.13.D.

BASIS OF PAYMENT: THE DEPARTMENT WILL PAY FOR THIS WORK ON THE LUMP SUM PRICE BID FOR THE WORK.

ITEM 515 - HIGH EARLY STRENGTH KEY-WAY GROUT

KEY-WAY GROUT WILL BE EXAMINED FOR VISIBLE DETERIORATION AFTER THE REMOVAL OF THE ASPHALT CONCRETE OVERLAY AND WATERPROOFING. ANY GROUT DETERMINED TO BE REPLACED BY THE PROJECT ENGINEER WILL BE REMOVED BY ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN AND THE GROUT WILL BE REPLACED USING ITEM 515, HIGH EARLY STRENGTH KEY-WAY GROUT.

PAYMENT FOR THIS ITEM WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND ANY INCIDENTALS REQUIRED TO PERFORM THIS WORK. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER FOOT FOR ITEM 515, HIGH EARLY STRENGTH KEY-WAY GROUT.

ITEM 518 - SCUPPER MISC.: CLEANOUT

THIS WORK WILL CONSIST OF REMOVING ALL DEBRIS FROM ON TOP AND INSIDE OF THE SCUPPERS. SCUPPER CLEANOUT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 518, SCUPPER MISC.: CLEANOUT. THIS PRICE WILL INCLUDE THE COST FOR LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 601 - TIED CONCRETE BLOCK MAT, TYPE 1
ITEM 611 - PRECAST REINFORCED CONCRETE OUTLET

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER.

- 601, TIED CONCRETE BLOCK MAT, TYPE 1, 4 SQ YD
- 611, PRECAST REINFORCED CONCRETE OUTLET, 2 EACH

ITEM 202 - WALK REMOVED
ITEM 304 - AGGREGATE BASE
ITEM 608 - 4" CONCRETE WALK

THESE ITEMS OF WORK WILL BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER TO REPLACE THE EXISTING FORWARD LEFT AND REAR LEFT CONCRETE WALK THAT HAS DROPPED LOWER THAN THE CONCRETE WALK ON STRUCTURE POR-59-0605.

DESIGN AGENCY ODOT --- DISTRICT 4 PLANNING & ENGINEERING	REVIEWED DATE	8-14-13
	DRAWN	MMS
	DESIGNED	MMS
	CHECKED	
	LMP	
STRUCTURE GENERAL NOTES POR-43-1390, POR-43-1431, POR-59-0605, & POR-261-0403 SFN: 6701213, 6701264, 6701841, & 6705111		
PID No. 86930		
1 / 7		
20 26		

SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR

THIS ITEM WILL BE USED TO REPAIR THE DETERIORATED FACE OF THE CURB ON THE BRIDGE DECK AND/OR APPROACH SLABS. THIS WORK WILL BE PERFORMED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE STRUCTURES AND AS MODIFIED HEREIN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR AND WILL BE PAID FOR PER FOOT.

STRUCTURE IDENTIFICATION SIGNS

STRUCTURE IDENTIFICATION SIGNS (I-H25a) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:

- POR-43-1390 (2 APPROACHES)
- POR-43-1431 (2 APPROACHES)
- POR-261-0403 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

- ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
- ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
- ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

CORRECTING BRIDGE IDENTIFICATION SIGN NUMBERS:

SOME OF THE EXISTING BRIDGE NUMBER SIGNS HAVE INCORRECT BRIDGE NUMBERS ON THEM. THE FOLLOWING BRIDGE NUMBERS ARE THE CORRECT ONES AND WILL BE USED ON THE NEW BRIDGE IDENTIFICATIONS SIGNS.

STRUCTURE POR-43-1390 (SFN:6701213) THE EXISTING SIGN SHOWS 13.75. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 13.90.

STRUCTURE POR-43-1431 (SFN:6701264) THE EXISTING SIGN SHOWS 14.15. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 14.31.

OBJECT MARKERS AND STRUCTURE IDENTIFICATION SIGNS

OBJECT MARKERS WILL BE PLACED ON EACH APPROACH OFF THE LEFT AND RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. ONE OM-3L AND ONE OM-3R WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND SHALL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 10.5 FT IN LENGTH.

STRUCTURE IDENTIFICATION SIGNS (I-H25a) WILL BE INSTALLED ON THE SAME POST AND DIRECTLY BELOW THE OBJECT MARKER OFF THE RIGHT SHOULDER ON EACH APPROACH. A QUANTITY OF ONE SIGN WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:
POR-59-0605 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

- ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 - SIGN, FLAT SHEET, 6 SQ FT
- ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 21 FT
- ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 3 EACH
- ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 2 EACH

2

7

21

26

POR-43-59-261-13.21/5.86/3.51

PID No. 86930

STRUCTURE GENERAL NOTES

POR-43-1390, POR-43-1431, POR-59-0605, & POR-261-0403
SFN: 6701213, 6701264, 6701841, & 6705111

DESIGNED
MMS

CHECKED
LMP

DRAWN
MMS

REVISED

REVIEWED
LMP

STRUCTURE FILE NUMBER

DATE
8-14-13

DESIGN AGENCY
ODOT --- DISTRICT 4
PLANNING & ENGINEERING

I:\Projects\POR\86930_43-59-261-13.21-5.86-3.51\86930\structures\POR043_1390C\sheets\043_1390CGN001.dgn 08-OCT-2013 3:04PM mstipeti

ITEM SPECIAL - TACK COAT, TRACKLESS TACK

ITEM SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH A TRACKLESS TACK ASPHALT EMULSION.

ALTERNATE PRODUCTS TO BE USED MUST BE ON FILE WITH THE NEW PRODUCT ENGINEER AT THE TIME OF THE ADVERTISEMENT DATE OF THE PROJECT PLANS. PLEASE CONTACT BRAD YOUNG, ODOT NEW PRODUCT ENGINEER, 614-351-2882.

THIS WORK IS CONSIDERED AN EXPERIMENTAL CONSTRUCTION FEATURE FOR EVALUATION OF PRODUCTS THAT ARE ON FILE WITH THE NEW PRODUCT ENGINEER.

MEET ALL REQUIREMENTS OF ODOT 407 TACK COAT IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRED BY THE CONTRACT, EXCEPT AS NOTED BELOW.

A MANUFACTURER'S REPRESENTATIVE MUST BE AT THE PROJECT SITE DURING THE FIRST TWO DAYS OF APPLICATION OF TRACKLESS TACK.

MATERIAL: IF USING BLACKLIDGE TRACKLESS TACK THE MATERIAL WILL CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	AASHTO T59	15	100
STORAGE STABILITY, 24 HRS, %	AASHTO T59	--	1
STORAGE STABILITY, 5 DAYS, %	AASHTO T59	--	5
RESIDUE BY DISTILLATION, %	AASHTO T59	50	--
OIL DISTILLATE, %	AASHTO T59	--	1
SIEVE TEST, %	AASHTO T59	--	0.30
TEST ON RESIDUE			
PENETRATION, @ 25°C,	AASHTO T49	--	20
SOFTENING POINT RANGE DEG C	AASHTO T53	65	--
SOLUBILITY, %	AASHTO T44	97.5	--
ORIGINAL BINDER DSR@82°C G*/SIN 8,10 RAD/SEC	AASHTO T315	1.00	--

FOR TRACKLESS TACK OTHER THAN BLACKLIDGE TRACKLESS TACK, THE MATERIAL WILL CONFORM TO THE PHYSICAL PROPERTIES SUPPLIED BY THE NEW PRODUCT ENGINEER FOR THE TESTS LISTED BELOW:

PARAMETER	TEST METHOD
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	AASHTO T59
STORAGE STABILITY, 24 HRS, %	AASHTO T59
STORAGE STABILITY, 5 DAYS, %	AASHTO T59
RESIDUE BY DISTILLATION, %	AASHTO T59
OIL DISTILLATE, %	AASHTO T59
SIEVE TEST, %	AASHTO T59
TEST ON RESIDUE	
PENETRATION, @ 25°C,	AASHTO T49
SOFTENING POINT RANGE DEG C	AASHTO T53
SOLUBILITY, %	AASHTO T44
ORIGINAL BINDER DSR@82°C G*/SIN 8,10 RAD/SEC	AASHTO T315

NOTE: TRACKLESS TACK SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC.

ACCEPTANCE AND SAMPLING OF MATERIALS: FOR ALL TRACKLESS TACK SUPPLY CERTIFIED TEST DATA FROM AN INDEPENDENT LABORATORY TO THE ENGINEER AND TO THE DISTRICT LABORATORY SHOWING THE TRACKLESS TACK SUPPLIED WAS TESTED FOR AND MEETS THE PROPERTIES SUPPLIED BY THE NEW PRODUCT ENGINEER.

DURING CONSTRUCTION, ODOT PERSONNEL WILL SAMPLE AND SUPPLY TO THE DISTRICT TEST LAB A MINIMUM OF 2 QUARTS OF TRACKLESS TACK SAMPLED FROM THE DISTRIBUTOR ON THE FIRST DAY OF APPLICATION. CLEARLY MARK ON THE SAMPLES THE MANUFACTURER'S NAME, PROJECT NUMBER, AND THE WORDS "TRACKLESS TACK".

ADDITIONAL SAMPLING OF BLACKLIDGE TRACKLESS TACK WILL FOLLOW THE REQUIREMENTS OF ITEM 407. FOR ALTERNATE TRACKLESS TACK MATERIAL, 2 QUARTS OF MATERIAL WILL BE SAMPLED EACH DAY THE MATERIAL IS USED.

EQUIPMENT: SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF PREVIOUSLY USED MATERIAL CHARGE IS DIFFERENT THAN THE PROPOSED MATERIAL.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE TRACKLESS TACK WITH A DISTRIBUTOR. IF TRACKLESS TACK IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO

APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ENSURE ALL NOZZLES AND SPRAY PATTERNS ARE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. PLACE THE ANGLE OF THE NOZZLE AT A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.1 GALLONS PER SQUARE YARD. DO NOT DILUTE TRACLESS TACK. RECOMMENDED APPLICATION TEMPERATURE IS 160°F TO 180° F. DO NOT EXCEED 180°F. THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE THE QUANTITY, RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TRACKLESS TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

PERFORMANCE OF TRACKLESS TACK: FOR ANY TRACKLESS TACK USED SUPPLY DATA FOR SHEAR AND TENSILE BOND STRENGTH ACCORDING TO METHODS DESCRIBED IN VIRGINIA TRANSPORTATION RESEARCH COUNCIL REPORT VTRC 09-R21. RANDOMLY TAKE 6-4 INCH DIAMETER CORES FROM THE PROJECT AND PERFORM 3 SHEAR AND 3 TENSILE BOND STRENGTH TESTS. BE SURE CORES TAKEN INCLUDE BOTH AN ASPHALT LAYER ABOVE AND ASPHALT LAYER BELOW THE TRACKLESS TACK LAYER.

DETERMINE THE TIME TO SET FOR THE MATERIAL TO BECOME TRACKLESS. THE ENGINEER WILL REPORT ANY ISSUES WITH EXCESSIVE TIME TO SET, OR AFTER SET ISSUES WITH STICKINESS, OR PICKUP OF THE TACK TO THE DET AND NEW PRODUCT ENGINEER, BRAD YOUNG 614-351-2882.

IF THE CERTIFIED TEST DATA FAILS TO MEET THE LAB TESTING CRITERIA, OR FIELD SAMPLES FAIL TO MEET THE LAB TEST CRITERIA, OR THE TRACKLESS TACK FAILS TO PERFORM SATISFACTORILY IN THE FIELD, AS NOTED ABOVE, THE CONTRACTOR WILL BE REQUIRED TO REPLACE AND SUPPLY BLACKLIDGE TRACKLESS TACK FOR THE REMAINDER OF THE PROJECT AT NO COST TO THE DEPARTMENT.

ANY FAILING EXPERIMENTAL TRACKLESS TACK PRODUCT WILL BE REMOVED FROM THE NEW PRODUCT ENGINEER'S LIST.

IN THE EVENT THE PRODUCT FAILS TO PERFORM TO THE SATISFACTION OF THE DEPARTMENT, THE MANUFACTURER MAY PERFORM THE FOLLOWING ITEMS IN ORDER TO BE CONSIDERED FOR FUTURE EXPERIMENTAL CONSTRUCTION FEATURE PROJECTS:

1. SUBMIT IN WRITING TO THE DEPARTMENT THE REASON(S) WHY PRODUCT FAILED TO PERFORM

AND DETAIL CHANGES THAT WILL BE MADE TO ELIMINATE THE CAUSE(S) OF FAILURE, AND

2. PROPOSE CHANGES TO THE PRODUCT'S SPECIFICATIONS, AND

3. SUBMIT SAMPLES OF THE REDEVELOPED PRODUCT TO THE LABORATORY FOR TESTING TO THE NEW SPECIFICATIONS, AND

4. DEMONSTRATE TO THE DEPARTMENT SUCCESSFUL USE OF THE MATERIAL ON AT LEAST ONE NON-ODOT PROJECT.

WHEN THE ABOVE ITEMS ARE COMPLETED TO THE DEPARTMENT'S SATISFACTION, THE REDEVELOPED AND FIELD TESTED PRODUCT MAY BE PUT BACK ON FILE WITH THE NEW PRODUCT ENGINEER AND EVALUATED ON FUTURE ODOT PROJECTS USING THE EXPERIMENTAL CONSTRUCTION FEATURE PROCESS.

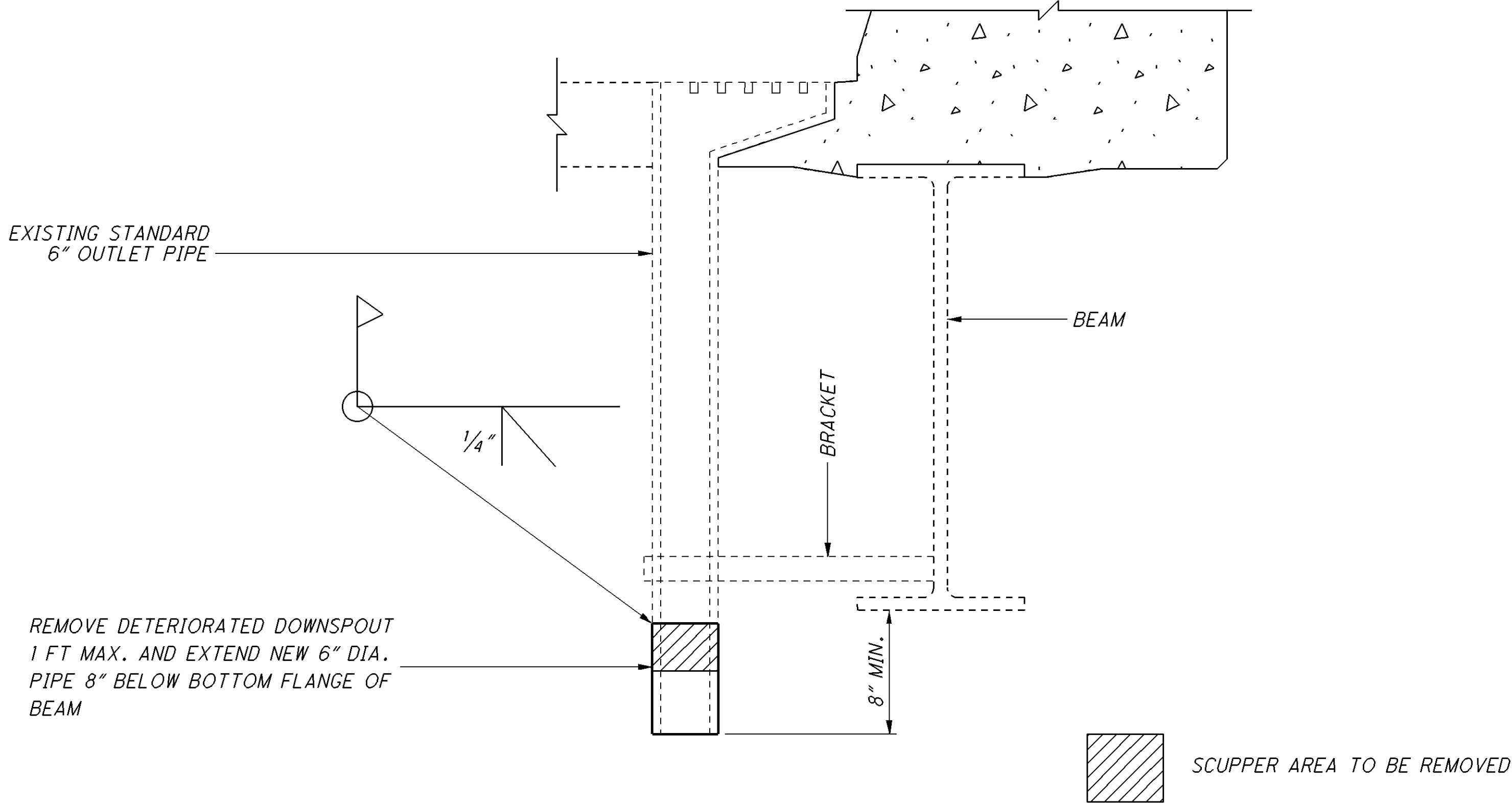
CALC: MMS DATE: 8/2/2013
CHECKED: LMP DATE: 8/14/2013

ESTIMATED QUANTITIES												
BRIDGE NO. / STRUCTURE FILE NO.								ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET
POR-43-1390 SFN 6701213 (05/NHS/BR)	POR-43-1431 SFN 6701264 (04/BRO/BR)		POR-59-0605 SFN 6701841 (05/NHS/BR)		POR-261-0403 SFN 6705111 (06/S>2/BR)							
LUMP	LUMP		LUMP		LUMP			201	11000		CLEARING AND GRUBBING	
LUMP								202	11201		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	1/7
160	134							202	23500	SQ YD	WEARING COURSE REMOVED	
200								202	23501	SQ YD	WEARING COURSE REMOVED, AS PER PLAN	1/7
			80					202	30000	SQ FT	WALK REMOVED	
			1					304	20000	CU YD	AGGREGATE BASE	
54	20							SPEC	40720500	GALLON	TACK COAT, TRACKLESS TACK	3/7
15								SPEC	40720510	GALLON	TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE	3/7
22								448	46050	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	
13	7							448	46905	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN	
380	1168							512	10100	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	724		2612					512	10400	SQ YD	TREATING OF CONCRETE BRIDGE DECK WITH SRS	
216								512	33010	SQ YD	TYPE 3 WATERPROOFING	
380	1168							512	74000	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	
	LUMP							514	00100		SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	
	LUMP							514	00101		SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN	
	LUMP							514	00200		FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT	
	LUMP							514	00300		FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	
	LUMP							514	00400		FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	
	16							514	00504	MAN HOUR	GRINDING FINs, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL	
	7							514	10000	EACH	FINAL INSPECTION REPAIR	
60								515	30000	FT	HIGH EARLY STRENGTH KEYWAY GROUT	
	12							518	12500	EACH	SCUPPER, MISC.:CLEANOUT	1/7
	12							518	12901	EACH	SCUPPER, LENGTHENING, AS PER PLAN	6/7
150	215							519	11101	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	1/7
	76							SPEC	51911720	FT	PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR	2/7
	4		14					SPEC	51912304	SQ YD	PATCHING CONCRETE BRIDGE DECK - TYPE C	
			4					601	21050	SQ YD	TIED CONCRETE BLOCK MAT, TYPE 1	
			80					608	10000	SQ FT	4" CONCRETE WALK	
			2					611	99710	EACH	PRECAST REINFORCED CONCRETE OUTLET	
15	15		42		15			630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
2	2		2		2			630	80100	SQ FT	SIGN, FLAT SHEET, 730.20	
			12					630	80100	SQ FT	SIGN, FLAT SHEET	
2	2		6		2			630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
2	2		4		2			630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
100	150							843	50000	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
73								846	00100	FT	POLYMER MODIFIED ASPHALT EXPANSION JOINT	



SUPERSTRUCTURE DETAILS

SCUPPER LENGTHENING DETAIL



NOTES:

1. THE PIPE EXTENSIONS WILL BE WELDED IN PLACE AFTER THE EXISTING SURFACE HAS BEEN ABRASIVE BLASTED TO A SA-1.
2. ADDITIONAL LENGTH OF SCUPPER PIPE TO BE REPLACED IS TO BE DETERMINED BY THE PROJECT ENGINEER.
3. ALL NEW SCUPPER EXTENSIONS MUST BE COMPLETE AND IN PLACE BEFORE COMMENCING WITH PAINT OPERATIONS.
4. IF ADDITIONAL INFORMATION IS REQUIRED, EXPIRED STD. DWG. SD-1-69 IS AVAILABLE UPON REQUEST.
5. THIS WORK WILL BE PAID FOR AT THE UNIT BID PRICE FOR ITEM 518 - SCUPPER, LENGTHENING, AS PER PLAN. THIS PRICE WILL INCLUDE THE COST OF LABOR, MATERIALS, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

DETAIL A
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE

DETAIL B
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET

DETAIL C
CONCRETE DECK WITH
DEFLECTOR PARAPET

DETAIL D
PRESTRESSED BOX BEAM DECK
WITH DEFLECTOR PARAPET

DETAIL E
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE

DETAIL F
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET

DETAIL G
CONCRETE DECK WITH
DEFLECTOR PARAPET

DETAIL H
PRESTRESSED BOX BEAM DECK
WITH OVER THE SIDE DRAINAGE

DETAIL I
PRECAST REINFORCED
CONCRETE BOX CULVERT

NOTES:

- EPOXY-URETHANE SEALER SHALL BE USED UNLESS SHOWN OTHERWISE
- DETAILS E, F, G AND H ALSO APPLY TO CONCRETE SLAB BRIDGES