

- ① - N13°58'47"E
- ② - S74°10'20"E
- ③ - S13°58'47"W
- ④ - S1°16'47"W
- ⑤ - N1°19'53"E
- ⑥ - N85°36'54"E
- ⑦ - N34°02'50"E

- Ⓐ - EX. 195°-90"
- Ⓑ - EX. 200°-36"
- Ⓒ - EX. 292°-96"
- Ⓓ - EX. 462°-42"
- Ⓔ - EX. 87°-27"
- Ⓕ - EX. 103°-21"
- Ⓖ - EX. 99°-18"
- Ⓗ - EX. 261°-36"
- Ⓘ - EX. 335°-36"
- Ⓝ - EX. 199°-24"

**CURVE US24-7**  
 P.I. Sta = 1839+37.46  
 D = 37° 02' 28" (RT)  
 Dc = 2° 00' 00"  
 R = 2,864.79'  
 Ls = 400.00'  
 Theta = 4° 00' 00"  
 LT = 266.73'  
 ST = 133.40'  
 x = 399.81'  
 y = 9.31'  
 k = 199.97'  
 p = 2.33'  
 Dc = 29° 02' 28" (RT)  
 Lc = 1,452.05'  
 Ts = 1,160.43'  
 Es = 158.92'  
 eMAX = 0.066

**CURVE US24-8**  
 P.I. Sta = 1868+77.95  
 D = 35° 01' 23" (LT)  
 Dc = 2° 30' 00"  
 R = 2,291.83'  
 Ls = 465.00'  
 Theta = 5° 48' 45"  
 LT = 310.17'  
 ST = 155.15'  
 x = 464.52'  
 y = 15.71'  
 k = 232.42'  
 p = 3.93'  
 Dc = 23° 23' 53" (LT)  
 Lc = 935.92'  
 Ts = 956.78'  
 Es = 115.49'  
 eMAX = 0.077

**CURVE US24-9**  
 P.I. Sta = 1886+28.24  
 D = 16° 34' 41" (RT)  
 Dc = 2° 30' 00"  
 R = 2,291.83'  
 Ls = 465.00'  
 Theta = 5° 48' 45"  
 LT = 310.17'  
 ST = 155.15'  
 x = 464.52'  
 y = 15.71'  
 k = 232.42'  
 p = 3.93'  
 Dc = 4° 57' 11" (RT)  
 Lc = 198.12'  
 Ts = 566.89'  
 Es = 28.17'  
 eMAX = 0.077

**CURVE SR424C-1**  
 P.I. Sta = 1895+79.78  
 D = 22° 48' 47" (RT)  
 Dc = 1° 30' 00"  
 R = 3,819.72'  
 Ls = 200.00'  
 Theta = 16° 00' 00"  
 LT2 = 127.68'  
 ST2 = 73.46'  
 x2 = 198.29'  
 y2 = 20.25'  
 k2 = 99.74'  
 p2 = 3.77'  
 Dc = 6° 48' 47" (RT)  
 Lc = 454.21'  
 Ts1 = 479.78'  
 Ts2 = 182.09'  
 Es = 30.01'  
 eMAX = 0.041

**CURVE SR424C-2**  
 P.I. Sta = 1902+74.66  
 D = 105° 13' 08" (RT)  
 Dc = 14° 24' 14"  
 R = 397.28'  
 L = 520.45'  
 T = 730.49'  
 E = 257.28'  
 eMAX = 0.060

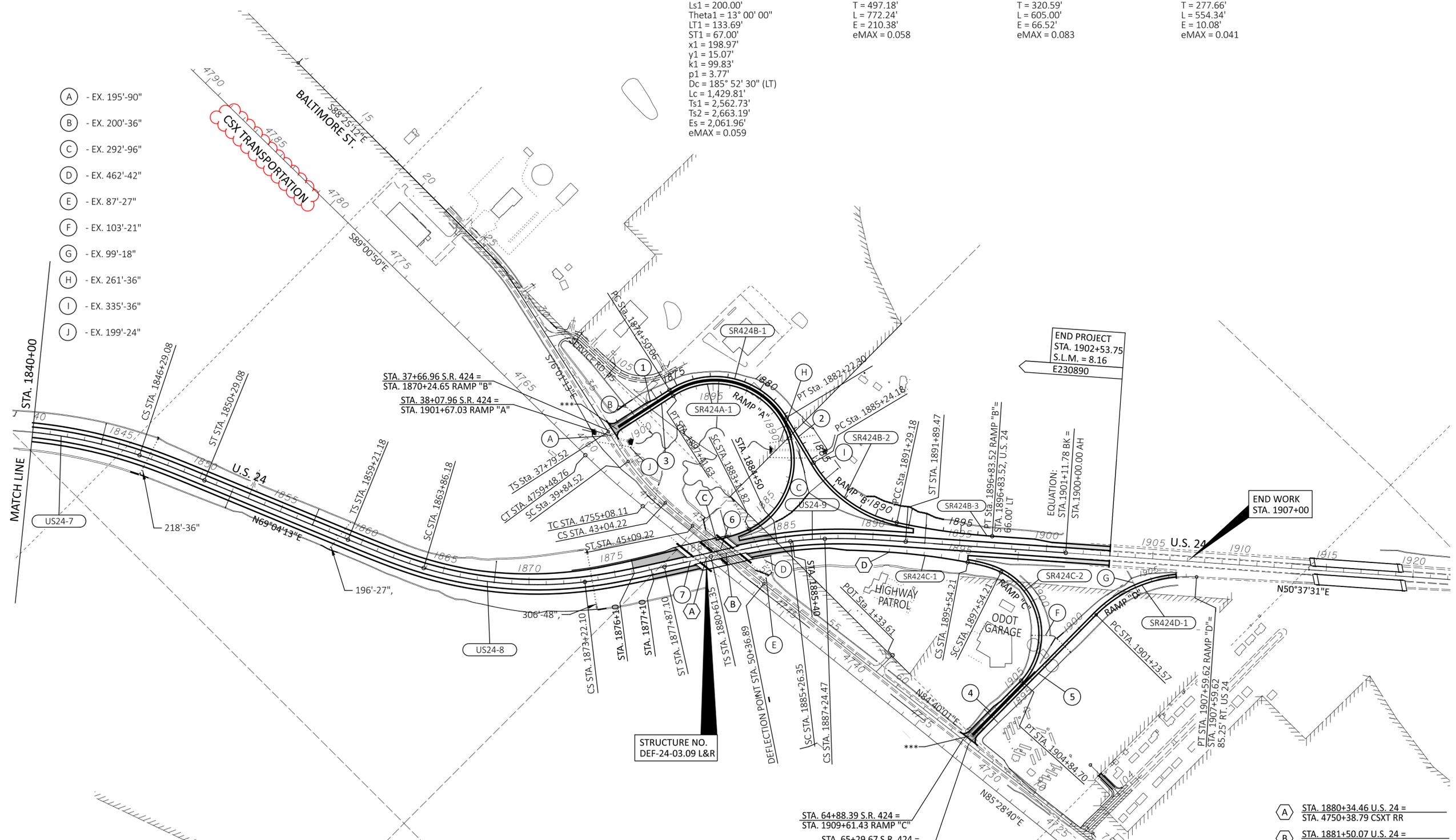
**CURVE SR424D-1**  
 P.I. Sta = 1904+62.78  
 D = 49° 17' 38" (RT)  
 Dc = 7° 45' 00"  
 R = 739.30'  
 T = 339.21'  
 L = 636.05'  
 E = 74.11'  
 eMAX = 0.083

**CURVE SR424A-1**  
 P.I. Sta = 1906+74.55  
 D = 198° 52' 30" (LT)  
 Dc = 13° 00' 00"  
 R = 440.74'  
 Ls1 = 200.00'  
 Theta1 = 13° 00' 00"  
 LT1 = 133.69'  
 ST1 = 67.00'  
 x1 = 198.97'  
 y1 = 15.07'  
 k1 = 99.83'  
 p1 = 3.77'  
 Dc = 185° 52' 30" (LT)  
 Lc = 1,429.81'  
 Ts1 = 2,562.73'  
 Ts2 = 2,663.19'  
 Es = 2,061.96'  
 eMAX = 0.059

**CURVE SR424B-1**  
 P.I. Sta = 1879+47.24  
 D = 91° 44' 32" (RT)  
 Dc = 11° 52' 48"  
 R = 482.29'  
 T = 497.18'  
 L = 772.24'  
 E = 210.38'  
 eMAX = 0.058

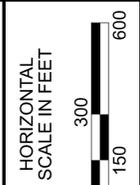
**CURVE SR424B-2**  
 P.I. Sta = 1888+44.78  
 D = 46° 53' 15" (LT)  
 Dc = 7° 45' 00"  
 R = 739.30'  
 T = 320.59'  
 L = 605.00'  
 E = 66.52'  
 eMAX = 0.083

**CURVE SR424B-3**  
 P.I. Sta = 1894+06.84  
 D = 8° 18' 54" (LT)  
 Dc = 1° 30' 00"  
 R = 3,819.72'  
 T = 277.66'  
 L = 554.34'  
 E = 10.08'  
 eMAX = 0.041



- Ⓐ STA. 1880+34.46 U.S. 24 = STA. 4750+38.79 CSXT RR
- Ⓑ STA. 1881+50.07 U.S. 24 = STA. 47+56.73 S.R. 424
- Ⓒ STA. 1881+11.82, 85.26' (LT) U.S. 24 = STA. 1881+11.82 RAMP "A"
- Ⓓ STA. 1891+00.00, 66.00' (RT) U.S. 24 = STA. 1891+00.00 RAMP "C"

**LEGEND**  
 - PAVEMENT REMOVAL AND REPLACEMENT  
 - ASPHALT PAVEMENT TRANSITION  
 \*\*\* SEE RAMP PAVEMENT TRANSITION DETAIL



SCHEMATIC PLAN

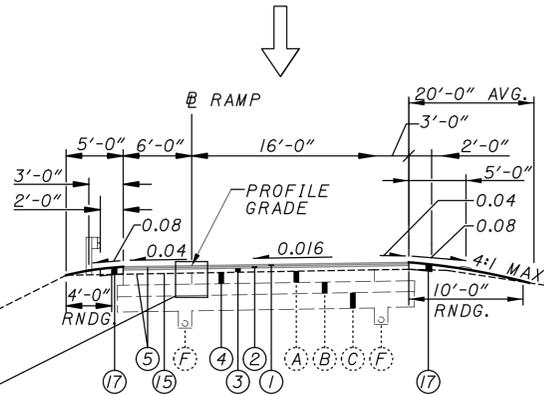
DESIGN AGENCY	
DESIGNER	MJS
REVIEWER	MJM
PROJECT ID	10-13-23
SHEET	117367
TOTAL	P.8
	258

**PROPOSED PAVEMENT LEGEND**

- ① ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (447)
- ② ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5mm, TYPE A (446)
- ③ ITEM 302 - 4" ASPHALT CONCRETE BASE, PG64-22, (449)
- ④ ITEM 321 - 12.5" CRACKING AND SEATING NON-REINFORCED CONCRETE PAVEMENT
- ⑤ ITEM 407 - NON-TRACKING TACK COAT
- ⑥ ITEM 856 - 1.5" BRIDGE DECK WATERPROOFING ASPHALT CONCRETE
- ⑦ ITEM 609 - CURB, MISC.: TYPE 4-A RETROFIT
- ⑧ ITEM 609 - CURB, TYPE 4-C
- ⑨ ITEM 202 - CURB REMOVED
- ⑩ ITEM 609 - CONCRETE MEDIAN
- ⑪ ITEM 202 - CONCRETE MEDIAN REMOVED
- ⑫ ITEM 304 - 3" AGGREGATE BASE
- ⑬ ITEM 302 - 11" ASPHALT CONCRETE BASE COURSE, PG64-22, (449)
- ⑭ ITEM 304 - VARIABLE THICKNESS AGGREGATE BASE
- ⑮ ITEM 407 - TACK COAT, 702.13
- ⑯ ITEM 512 - SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN
- ⑰ ITEM 304 - 7.25" AGGREGATE BASE

**EXISTING PAVEMENT LEGEND**

- Ⓐ 12½" PORTLAND CEMENT CONCRETE PAVEMENT
- Ⓑ ITEM 304 - 6" AGGREGATE BASE
- Ⓒ LIME STABILIZED SUBGRADE (T=16")
- Ⓓ 7" ASPHALT CONCRETE
- Ⓔ 8" ASPHALT CONCRETE
- Ⓕ 6" SHALLOW PIPE UNDERDRAIN
- Ⓖ 4" BASE PIPE UNDERDRAIN
- Ⓗ 8" AGGREGATE BASE
- Ⓙ REINFORCED CONCRETE APPROACH SLABS (T=17")
- Ⓚ AGGREGATE DRAINS
- Ⓛ ITEM 609 - CURB TYPE 4-C
- Ⓜ CURB TYPE 4-A



**RAMP NORMAL SECTION (LEFT) - CRACK AND SEAT**  
(0.016 MAX)

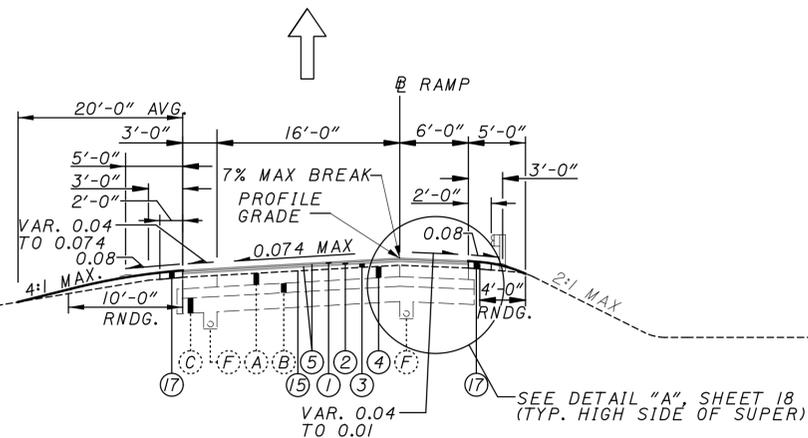
LIMITS:  
 RAMP "A" STA. 1362+92.01 TO STA. 1366+00.65 (U.S. 127) = 308.64 FT  
 RAMP "C" STA. 1376+52.70 TO STA. 1378+66.39 (U.S. 127) = 213.69 FT  
 RAMP "B" STA. 1883+53.70 TO STA. 1884+41.18 (BALTIMORE ST.) = 87.48 FT

**RAMP NORMAL SECTION (RIGHT) - CRACK AND SEAT**  
(0.016 MAX)

LIMITS:  
 RAMP "D" STA. 1896+44.40 TO STA. 1900+40.62 (BALTIMORE ST.) = 396.22 FT

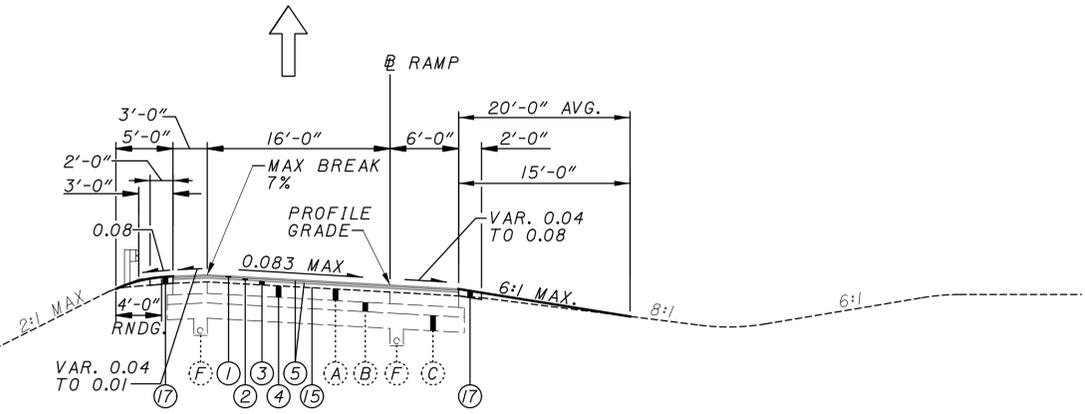
**TURN LANE - CRACK AND SEAT**

LIMITS:  
 RAMP "B" STA. 1367+39.92 TO STA. 1369+21.17 (U.S. 127) = 181.25 FT



**RAMP SUPERELEVATION SECTION (LEFT) - CRACK AND SEAT**  
(0.074 MAX)

LIMITS:  
 RAMP "D" STA. 1371+57.72 TO STA. 1378+01.65 (U.S. 127) = 643.93 FT



**RAMP SUPERELEVATION SECTION (RIGHT) - CRACK AND SEAT**  
(0.08 MAX)

LIMITS:  
 RAMP "B" STA. 1357+73.46 TO STA. 1369+21.17 (U.S. 127) = 1147.71 FT  
 RAMP "D" STA. 1378+01.65 TO STA. 1385+23.53 (U.S. 127) = 721.88 FT  
 RAMP "C" STA. 1891+00.00 TO STA. 1903+96.12 (BALTIMORE ST.) = 1296.12 FT  
 RAMP "D" STA. 1900+40.62 TO STA. 1903+89.11 (BALTIMORE ST.) = 348.49 FT

TYPICAL SECTIONS

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DESIGN AGENCY



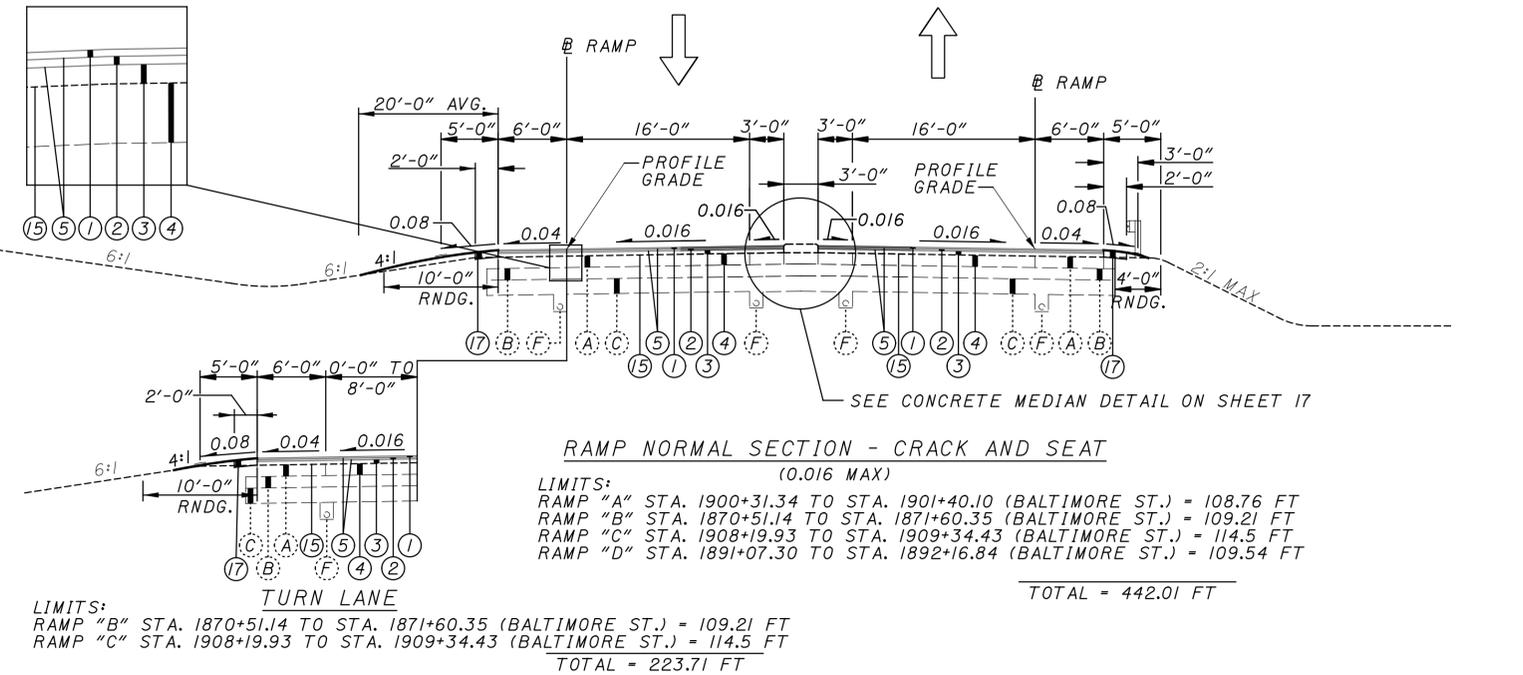
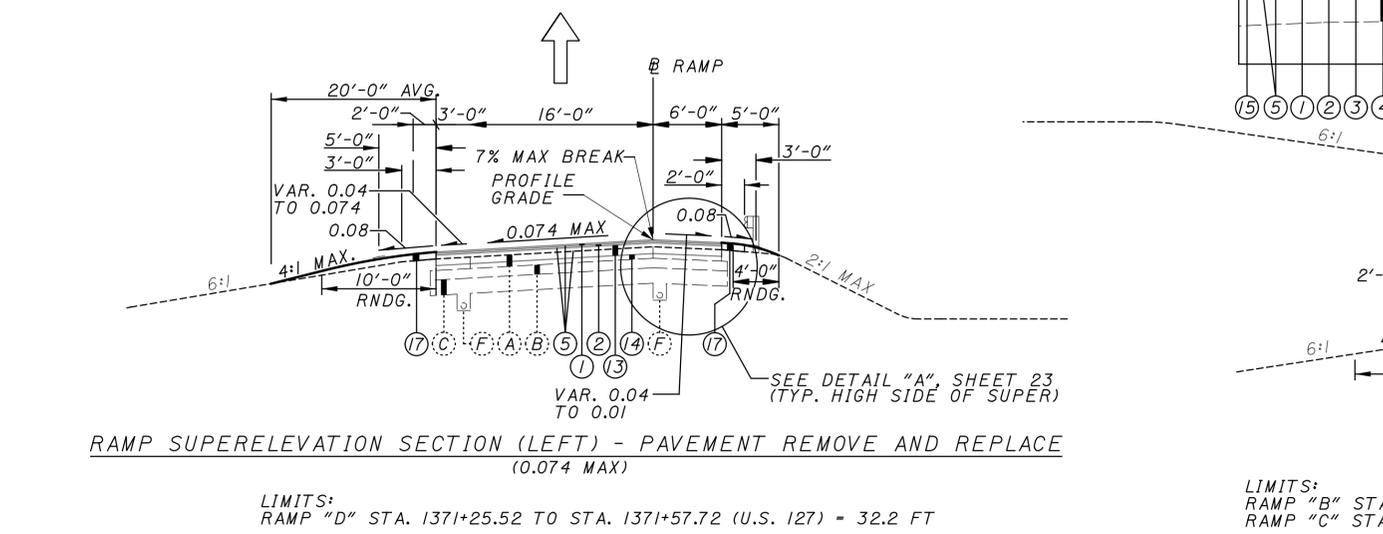
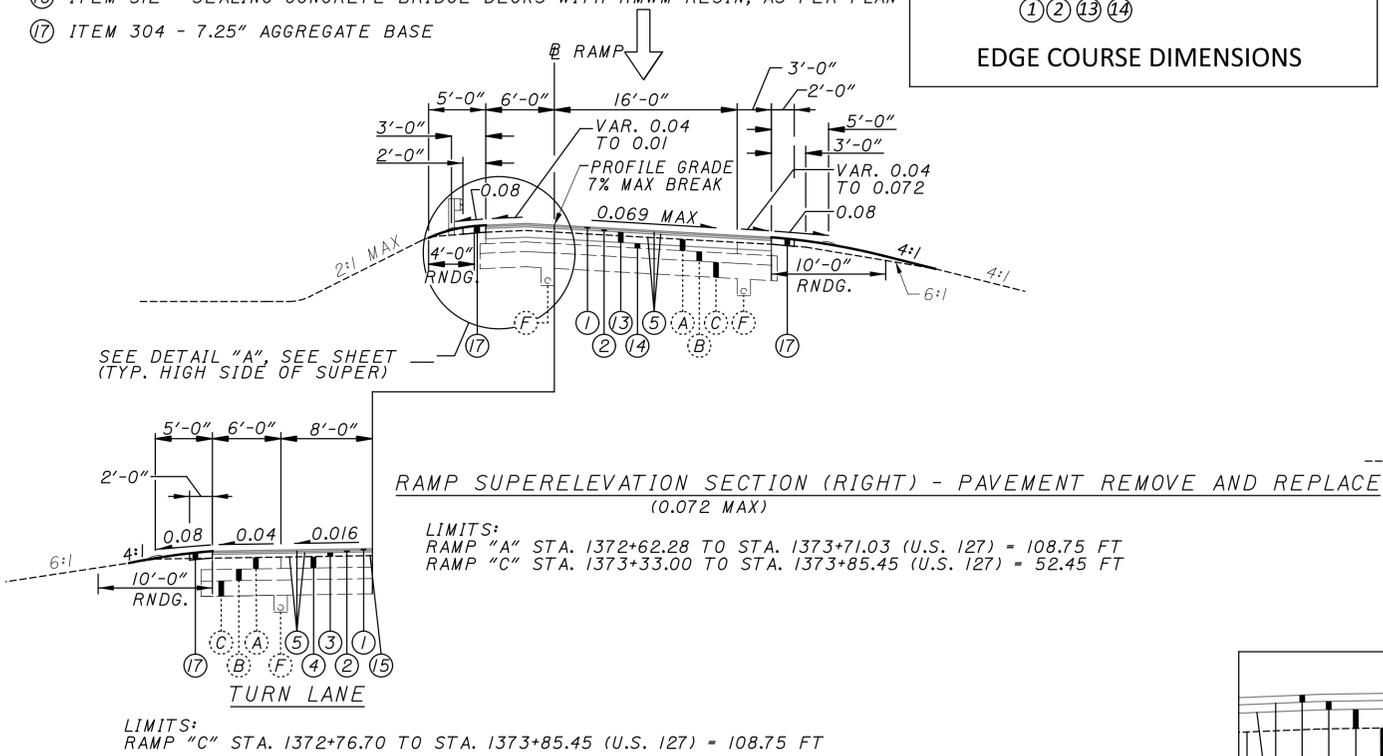
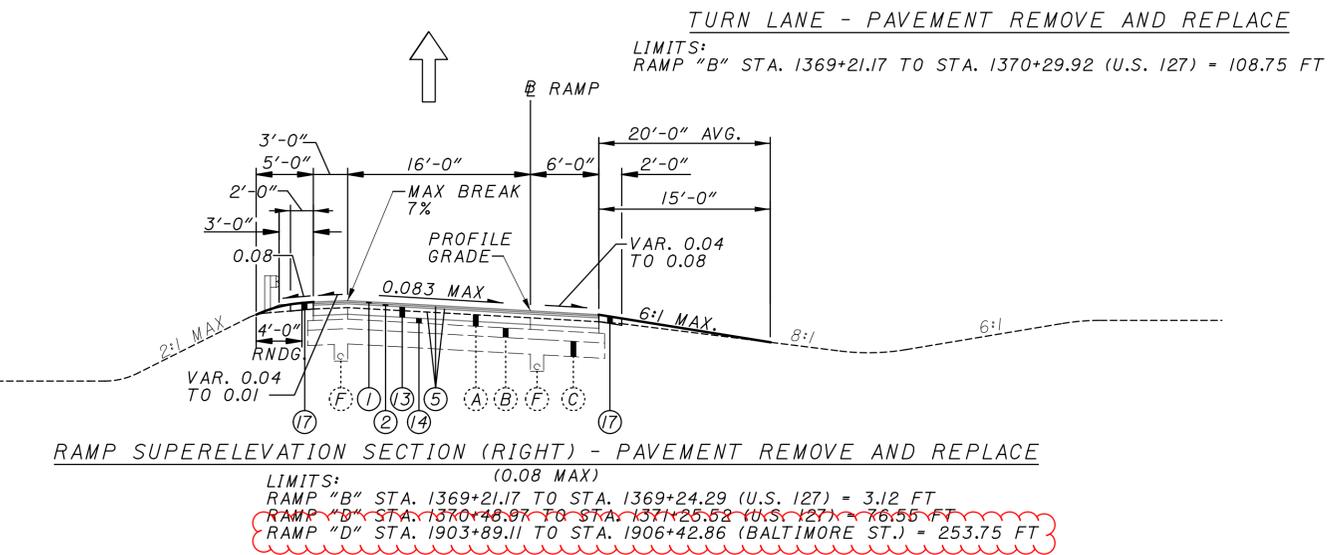
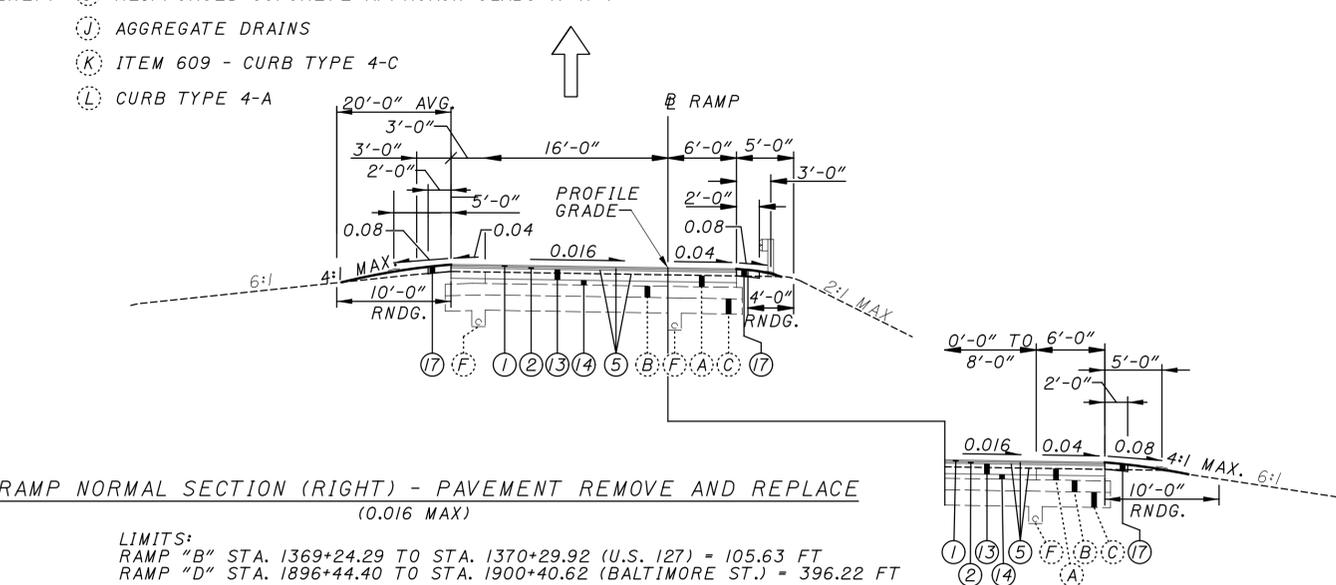
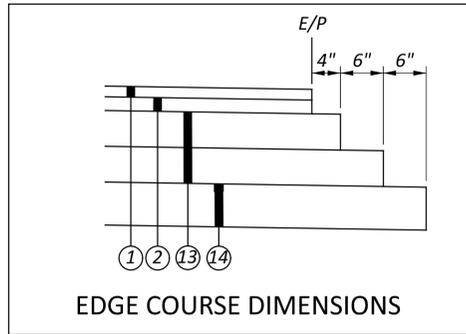
DESIGNER  
 MJS  
 REVIEWER  
 MJM 10-13-23  
 PROJECT ID  
 117367  
 SHEET TOTAL  
 P.16 258

**PROPOSED PAVEMENT LEGEND**

- ① ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (447)
- ② ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5mm, TYPE A (446)
- ③ ITEM 302 - 4" ASPHALT CONCRETE BASE, PG64-22, (449)
- ④ ITEM 321 - 12.5" CRACKING AND SEATING NON-REINFORCED CONCRETE PAVEMENT
- ⑤ ITEM 407 - NON-TRACKING TACK COAT
- ⑥ ITEM 856 - 1.5" BRIDGE DECK WATERPROOFING ASPHALT CONCRETE
- ⑦ ITEM 609 - CURB, MISC.: TYPE 4-A RETROFIT
- ⑧ ITEM 609 - CURB, TYPE 4-C
- ⑨ ITEM 202 - CURB REMOVED
- ⑩ ITEM 609 - CONCRETE MEDIAN
- ⑪ ITEM 202 - CONCRETE MEDIAN REMOVED
- ⑫ ITEM 304 - 3" AGGREGATE BASE
- ⑬ ITEM 302 - 11" ASPHALT CONCRETE BASE COURSE, PG64-22, (449)
- ⑭ ITEM 304 - VARIABLE THICKNESS AGGREGATE BASE
- ⑮ ITEM 407 - TACK COAT, 702.13
- ⑯ ITEM 512 - SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN
- ⑰ ITEM 304 - 7.25" AGGREGATE BASE

**EXISTING PAVEMENT LEGEND**

- Ⓐ 12½" PORTLAND CEMENT CONCRETE PAVEMENT
- Ⓑ ITEM 304 - 6" AGGREGATE BASE
- Ⓒ LIME STABILIZED SUBGRADE (T=16")
- Ⓓ 7" ASPHALT CONCRETE
- Ⓔ 8" ASPHALT CONCRETE
- Ⓕ 6" SHALLOW PIPE UNDERDRAIN
- Ⓖ 4" BASE PIPE UNDERDRAIN
- Ⓗ 8" AGGREGATE BASE
- Ⓘ REINFORCED CONCRETE APPROACH SLABS (T=17")
- Ⓝ AGGREGATE DRAINS
- Ⓚ ITEM 609 - CURB TYPE 4-C
- Ⓛ CURB TYPE 4-A



PAU/DEF-24-12.30/0.00

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TYPICAL SECTIONS

DESIGN AGENCY	
DESIGNER	MJS
REVIEWER	MJM
PROJECT ID	10-13-23
SHEET	117367
TOTAL	258

**ROUNDING**

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

**UTILITIES**

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER, OR ADJACENT TO, THE WORK AREA.

**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.

**EXISTING PLANS**

EXISTING PLANS ENTITLED PAU/DEF-24-12.30/0.00 MAY BE INSPECTED IN THE ODOT DISTRICT 1 OFFICE IN LIMA.

**PROFILE AND ALIGNMENT**

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. (PREVIOUS CONSTRUCTION PLANS, PROJECT NO.24336, SHOWING THE ORIGINAL ALIGNMENT AND PROFILE, ARE AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 1 OFFICE). PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY (WITH A UNIFORM THICKNESS OF 7.25 INCHES IN AREAS OF CRACK AND SEAT. THE OVERLAY ADDED TO MAINLINE U.S. 24 BRIDGES WILL BE A UNIFORM THICKNESS OF 3 INCHES.

**PART-WIDTH CONSTRUCTION**

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

**SEEDING AND MULCHING**

SEEDING AND MULCHING CALCULATIONS			
659	SOIL ANALYSIS TEST	5	EA
	(42577)(1/1000)		
659	REPAIR SEEDING AND MULCHING	19,179	SY
	(383577)(5/100)		
659	INTER-SEEDING	19,179	SY
	(383577)(5/100)		
659	COMMERCIAL FERTILIZER	54.37	TON
	(402756)(9)(1/1000)(30)(1/2000)		
659	LIME	79.25	ACRES
	(383577)(1/4840)		
659	WATER	2071.32	M GAL
	(2)(383577)(9)(1/1000)(300)(1/1000)		
659	MOWING	4560993	M SF
	(4560993)(25/100)(4)		
651	TOPSOIL STOCKPILED	37607	CY
	(383577)(4" DEPTH/36) - 5013 CY		
652	PLACING STOCKPILED TOPSOIL	37607	CY
	(383577)(4" DEPTH/36) - 5013 CY		
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>			

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

THE QUANTITY FOR MOWING IS BASED ON PERFORMING THE FOLLOWING OPERATION TWO (2) TIMES PER SEASON:

MOW THE ENTIRE MEDIAN AND 30' OFF THE OUTSIDE SHOULDERS IN BOTH DIRECTIONS WITHIN THE PROJECT LIMITS.

**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.

**TEMPORARY SEDIMENT AND EROSION CONTROL**

THE FOLLOWING ITEMS HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO PERFORM THIS ITEM OF WORK:

ITEM 832, EROSION CONTROL = 100,000 EACH

**ITEM 606 - GUARDRAIL, TYPE MGS, AS PER PLAN**  
**ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS, AS PER PLAN**  
**ITEM 606 - GUARDRAIL, BARRIER DESIGN, TYPE MGS, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF ITEM 606, THESE ITEMS REQUIRE STEEL POSTS AND COMPOSITE OR POLYMER ALTERNATIVE BLOCKOUTS. THE BLOCKOUTS SHALL BE FROM THE APPROVED PRODUCTS LIST THAT IS MAINTAINED BY THE OFFICE OF ROADWAY ENGINEERING AND INSTALLED PER CMS 606 AND ALL PERTINENT STANDARD DRAWINGS. ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING STEEL POSTS AND APPROVED ALTERNATIVE MGS BLOCKOUTS SHALL BE INCLUDED IN THE UNIT BIDS FOR ITEM 606, GUARDRAIL, TYPE MGS, AS PER PLAN, ITEM 606, GUARDRAIL, TYPE MGS WITH LONG POSTS, AS PER PLAN AND ITEM 606, GUARDRAIL, BARRIER DESIGN, TYPE MGS, AS PER PLAN.

**ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)**

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, MGS 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.

**ITEM 606 - MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF ITEM 606 AND STANDARD CONSTRUCTION DRAWING MGS-3.1, THIS ITEM REQUIRES THE USE OF STEEL POSTS. ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING STEEL POSTS SHALL BE INCLUDED IN THE UNIT BID FOR ITEM 606, MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1

**ITEM 606 - IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY ONE OF THE TYPE 1 IMPACT ATTENUATORS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL), EACH, AND SHALL INCLUDE ALL LABOR,

TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED TRANSITIONS, HARDWARE, REFLECTIVE SHEETING AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**POST CONSTRUCTION STORM WATER TREATMENT**

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

**VEGETATED FILTER STRIP**

THIS PLAN UTILIZES VEGETATED FILTER STRIPS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 670, SLOPE EROSION PROTECTION 45,111 SY  
 ITEM 659, TOPSOIL 5013 CY

**ITEM 659 - TOPSOIL**

THE FOLLOWING QUANTITY IS PROVIDED TO BE USED IN AREAS WHERE THE EXISTING TOPSOIL IS DEEMED USUABLE FOR VEGETATION GROWTH BY THE ENGINEER:

ITEM 659, TOPSOIL 2500 CY

**ENVIRONMENTAL COMMITMENT**

1. THE CONTRACTOR SHALL NOT DISCHARGE TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER, FUELS OR DEBRIS OF ANY KIND TO THE MAUMEE RIVER, ITS TRIBUTARIES, OR DRAINAGE WAYS. IF REFUELING OF IMMOBILE EQUIPMENT IS NECESSARY WITHIN THE FLOODPLAIN OR NEAR ANY TRIBUTARY DRAINAGE WAYS, DITCHES, OR STREAM, THE CONTRACTOR SHALL PROVIDE SECONDARY CONTAINMENT WITH ENOUGH CAPACITY TO COMPLETELY CONTAIN AND COLLECT ALL POTENTIAL LIQUID WASTES IN THE EVENT OF A SPILL.

2. ANY AND ALL CONSTRUCTION DEBRIS, EARTHEN DEBRIS, EXCESS ASPHALT OR CONCRETE, WOOD DEBRIS FROM CLEARING, EXCESS FILL MATERIAL, AND TRASH SHOULD BE DISPOSED OF AT AN APPROVED UPLAND SITE OR LAND FILL ABOVE THE FEMA 100-YEAR FLOOD ELEVATIONS. DISPOSAL OF ANY SUCH MATERIALS WITHIN 1000 FEET OF THE MAUMEE RIVER IS PROHIBITED.

3. THE CONTRACTOR SHALL KEEP ALL IDLE EQUIPMENT, FUELS LUBRICANTS, AND ANY STORAGE FOR/OF POTENTIALLY TOXIC OR HAZARDOUS MATERIALS OUT OF THE FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA AND NOT WITHIN 1000 FEET OF THE MAUMEE RIVER.

4. IN ACCORDANCE WITH ORC 3750.06, REPORTABLE SPILLS MUST BE REPORTED TO THE LOCAL FIRE DEPARTMENT AND THE OHIO SPILL LINE (1-800-282-9378).

**REVIEW OF DRAINAGE FACILITIES**

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

**EXISTING SUBSURFACE DRAINAGE**

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.



**DELINEATION OF PORTABLE AND PERMANENT BARRIER**

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

ESTIMATED QUANTITIES FOR BARRIER REFLECTORS AND OBJECT MARKERS ARE INCLUDED IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

**MAINTAINING TRAFFIC NEAR RUMBLE STRIPS**

TRAFFIC IS NOT PERMITTED TO RUN ON OR CROSS OVER ANY RUMBLE STRIPS AT ANY TIME. RUMBLE STRIPS MUST BE FILLED WHEN THEY CONFLICT WITH THE MAINTENANCE OF TRAFFIC LANE CONFIGURATION. THIS INCLUDES LOCATIONS OF LANE SHIFTS ENTERING AND EXITING A WORK ZONE, AS WELL AS, CONFLICTING RUMBLE STRIPS AT THE ENTRANCE AND EXIT RAMPS. THE RUMBLE STRIPS SHALL BE FILLED OR ELIMINATED BY PLANING AND PAVING TO PROVIDE A SMOOTH RIDE TO THE SATISFACTION OF THE PROJECT ENGINEER. ONCE TRAFFIC IS RETURNED TO THE FINAL LANE CONFIGURATION, RUMBLE STRIPS THAT WERE REMOVED IN ANY EXISTING PAVEMENT NOT BEING RECONSTRUCTED OR RESURFACED, SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION TO THE SATISFACTION OF THE ENGINEER.

THE FOLLOWING ARE ESTIMATED LOCATIONS OF RUMBLE STRIP REMOVAL AND REPLACEMENT. THE ACTUAL LIMITS MAY VARY.

PHASE 1: EASTBOUND OUTSIDE SHOULDER  
STA. 1337+50 TO 1342+50 = 500 FT  
U.S. 127 RAMP B = 100 FT  
U.S. 127 RAMP D = 350 FT  
BALTIMORE ST. RAMP C = 100 FT  
STA. 1911+00 TO 1916+00 = 500 FT

PHASE 1: WESTBOUND OUTSIDE SHOULDER  
STA. 1917+50 TO 1922+50 = 500 FT  
BALTIMORE ST. RAMP B = 100 FT  
BALTIMORE ST. RAMP A = 350 FT  
U.S. 127 RAMP C = 100 FT  
U.S. 127 RAMP A = 350 FT  
STA. 1344+00 TO 1349+00 = 500 FT

FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS THAT REQUIRE RUMBLE STRIP REMOVAL AND REPLACEMENT. THE QUANTITIES ARE BASED ON AN AVERAGE WIDTH OF 3 FEET.

- ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, 1½" = 485 SY
- ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 1½" = 335 SY
- ITEM 407 - NON TRACKING TACK COAT = 81 GAL
- ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 = 48 CY

NOTE THAT THE CONFLICTING RUMBLE STRIPS IN THE EXISTING CONCRETE WEST OF THE BEGIN PROJECT LIMITS SHALL NOT BE MILLED OUT. THESE RUMBLES ARE TO BE FILLED AND SUBSEQUENTLY RESTORED BACK TO THE PRECONSTRUCTION CONDITION TO THE SATISFACTION OF THE ENGINEER.

**EARTHWORK FOR MAINTAINING TRAFFIC**

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY.

EXCAVATION FOR MAINTAINING TRAFFIC 763 CU. YD.  
EMBANKMENT FOR MAINTAINING TRAFFIC 600 CU. YD.

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED.

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS SHALL BE IN ADVANCE OF LANE CLOSURES AND EXIT RAMP CLOSURES. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT. THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 56 SNMT

ESTIMATING 4 PCMS FOR 13 MONTHS (LANE CLOSURES)  
4 PCMS FOR 1 MONTH (EXIT RAMP CLOSURES)

**ITEM 441 - ASPHALT CONCRETE, MISC.: PAVEMENT FOR MOT TRANSITIONS**

THIS ITEM IS PROVIDED TO BUILD PAVEMENT TRANSITIONS AND/OR WEDGES FOR MAINTENANCE OF TRAFFIC. THESE TRANSITIONS AND/OR WEDGES ARE TO MAINTAIN TRAFFIC TO AND FROM THE INTERCHANGE RAMPS DURING PHASE 2 OF CONSTRUCTION. THE INTENT OF THESE TRANSITIONS IS TO PROVIDE A PAVEMENT TRANSITION FROM FINISHED INTERMEDIATE COURSE TO THE EXISTING CONCRETE SURFACES.

THE WORK CONSISTS OF PROVIDING, MAINTAINING, AND SUBSEQUENTLY REMOVING THE PAVEMENT FOR MOT TRANSITIONS. THE ASPHALT MATERIAL USED CAN BE ANY OF THE ASPHALT CONCRETE PAVEMENTS SPECIFIED IN THESE PLANS EXCEPT FOR ITEM 302 - ASPHALT CONCRETE BASE, PG64-22. THE PAVEMENT SLOPE FOR THE TRANSITIONS SHALL NOT EXCEED 4% IN ANY DIRECTION.

PAYMENT FOR THE ABOVE-MENTIONED WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 441 - ASPHALT CONCRETE, MISC.: PAVEMENT FOR MOT TRANSITIONS, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIALS, INCLUDING TACK COAT AND SEALING OF JOINTS.

AN ESTIMATED QUANTITY OF 350 CY HAS BEEN PROVIDED IN THE GENERAL SUMMARY. THIS ESTIMATE QUANTITY IS BASED ON AN ESTIMATED AREA OF 1,200' X 16' FOR 2 RAMP TRANSITIONS.

**SEQUENCE OF CONSTRUCTION**

PART WIDTH CONSTRUCTION WILL BE REQUIRED TO COMPLETE THE PAVEMENT WORK ON THIS PROJECT. SEE THE MAINTENANCE OF TRAFFIC TYPICAL SECTION ON SHEET 22 FOR DETAILS. IT IS NECESSARY TO ADD ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A ALONG THE MEDIAN SHOULDER IN AREAS OF PAVEMENT REMOVAL AND REPLACEMENT IN ORDER TO MAINTAIN ONE (1) - TEN (10) FOOT LANE WITH TWO (2) FOOT SHOULDERS WHILE THE DRIVING LANE AND OUTSIDE SHOULDERS ARE CONSTRUCTED.

PRIOR TO PHASE 1, THE RUMBLE STRIPS IN THE OUTSIDE SHOULDER THAT WILL CONFLICT WITH TRAFFIC IN PHASE 1 SHALL BE REMOVED BY MILLING AND FILLING. ALSO, PRIOR TO SHIFTING TRAFFIC TO THE OUTSIDE SHOULDER, THE EXISTING BERM SHALL BE BROUGHT UP FLUSH WITH THE EXISTING CONCRETE SURFACE.

PHASE 1:

CLOSE THE LEFT LANE IN BOTH EASTBOUND AND WESTBOUND DIRECTIONS OF U.S. 24 PER MT-95.30/MT-95.40.

SHIFT TRAFFIC 6' ONTO THE OUTSIDE SHOULDER PER MT-102.10. AFTER SHIFTING, TRAFFIC WILL STRADDLE THE RUMBLE STRIPS ON THE OUTSIDE SHOULDER.

COMPLETE WORK UP TO THE INTERMEDIATE COURSE ON THE LEFT LANE AND MEDIAN SHOULDER IN BOTH EASTBOUND AND WESTBOUND DIRECTIONS OF U.S. 24.

PLACE ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A NECESSARY FOR PHASE 2.

PHASE 2:

CLOSE THE RIGHT LANES IN BOTH EASTBOUND AND WESTBOUND DIRECTIONS OF U.S. 24 PER MT-95.30/MT-95.40.

SHIFT TRAFFIC 4' ONTO THE INSIDE SHOULDER AND ITEM - 615 PAVEMENT, PER MT-102.10.

COMPLETE WORK UP TO THE INTERMEDIATE COURSE ON THE RIGHT LANE, OUTSIDE SHOULDER AND RAMPS TO AND FROM U.S. 127 AND BALTIMORE STREET.

PHASE 3:

PLACE SURFACE COURSE, FINAL PAVEMENT MARKINGS, AND RUMBLE STRIPS.



SHEET NUM.																PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
20	23	24	25	26	28A	38	40	41	41A	188	189	195	248	252	256	01/NHS/04	EXT	TOTAL				
<b>ROADWAY</b>																						
LS																LS	201	11000	LS		CLEARING AND GRUBBING	
						34,522										34,522	202	23000	34,522	SY	PAVEMENT REMOVED	
						561										561	202	30600	561	SY	CONCRETE MEDIAN REMOVED	
									3,680							3,680	202	32000	3,680	FT	CURB REMOVED	
								18,312.5								18,312.5	202	38001	18,312.5	FT	GUARDRAIL REMOVED, AS PER PLAN	21
								2,200								2,200	202	38201	2,200	FT	GUARDRAIL REMOVED FOR REUSE, AS PER PLAN	21
								175								175	202	38301	175	FT	GUARDRAIL REMOVED, BARRIER DESIGN, AS PER PLAN	21
								1								1	202	42010	1	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
								15								15	202	42040	15	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
								16								16	202	42050	16	EACH	ANCHOR ASSEMBLY REMOVED, TYPE B	
								21								21	202	47000	21	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
								2								2	202	47800	2	EACH	IMPACT ATTENUATOR REMOVED	
						45										45	203	10000	45	CY	EXCAVATION	
						34,063										34,063	203	20000	34,063	CY	EMBANKMENT	
								225								225	606	15051	225	FT	GUARDRAIL, TYPE MGS, AS PER PLAN	20
								18,050								18,050	606	15101	18,050	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS, AS PER PLAN	20
								175								175	606	15551	175	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS, AS PER PLAN	20
								2,200								2,200	606	16561	2,200	FT	GUARDRAIL REBUILT, TYPE MGS WITH LONG POSTS, AS PER PLAN	21
								16								16	606	26050	16	EACH	ANCHOR ASSEMBLY, MGS TYPE B (MASH 2016)	
								1								1	606	26150	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	
								15								15	606	26550	15	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
								11								11	606	35003	11	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1, AS PER PLAN	20
								9								9	606	35103	9	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2, AS PER PLAN	20
								1								1	606	35010	1	EACH	BRIDGE TERMINAL ASSEMBLY REBUILT, TYPE 1	
								2								2	606	60012	2	EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	
																LS	623	50000	LS		PRECONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
																LS	623	51000	LS		POST CONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
								116								116	626	00110	116	EACH	BARRIER REFLECTOR, TYPE 2 (ONE WAY)	
								169								169	626	00110	169	EACH	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL)	
<b>EROSION CONTROL</b>																						
																37,607	651	10000	37,607	CY	TOPSOIL STOCKPILED	
																37,607	652	10000	37,607	CY	PLACING STOCKPILED TOPSOIL	
																5	659	00100	5	EACH	SOIL ANALYSIS TEST	
																7,513	659	00300	7,513	CY	TOPSOIL	
																383,577	659	10000	383,577	SY	SEEDING AND MULCHING	
																19,179	659	14000	19,179	SY	REPAIR SEEDING AND MULCHING	
																19,179	659	15000	19,179	SY	INTER-SEEDING	
																54.37	659	20000	54.37	TON	COMMERCIAL FERTILIZER	
																79.25	659	31000	79.25	ACRE	LIME	
																2,071.32	659	35000	2,071.32	MGAL	WATER	
																4,560,993	659	40000	4,560,993	MSF	MOWING	
																45,111	670	00500	45,111	SY	SLOPE EROSION PROTECTION	
																LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
																LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
																LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
																100,000	832	30000	100,000	EACH	EROSION CONTROL	
<b>DRAINAGE</b>																						
									10							10	611	98630	10	EACH	CATCH BASIN ADJUSTED TO GRADE	
									5							5	611	98631	5	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	21
<b>PAVEMENT</b>																						
																65,921	302	56000	65,921	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
																13,872	304	20000	13,872	CY	AGGREGATE BASE	
																487,062	321	17501	487,062	SY	CRACKING AND SEATING NON-REINFORCED CONCRETE PAVEMENT, AS PER PLAN	21
																29,224	407	13900	29,224	GAL	TACK COAT, 702.13	
																64,915	407	20000	64,915	GAL	NON-TRACKING TACK COAT	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER  
MJS

REVIEWER  
MJM 10-13-23

PROJECT ID  
117367

SHEET TOTAL  
P.33 258





SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	621	621	621	621	642	642	644	644	644	644	644	644	644	807	807	807	807	807	850	850				
					RPM, YELLOW/YELLOW	RPM, WHITE/RED	RPM, YELLOW/RED	RAISED PAVEMENT MARKER REMOVED	EDGE LINE, 6", TYPE 1	CENTER LINE, TYPE 1	CHANNELIZING LINE, 12"	CHANNELIZING LINE, 8"	STOP LINE	TRANSVERSE/DIAGONAL LINE, YELLOW	TRANSVERSE/DIAGONAL LINE, WHITE	RAILROAD SYMBOL MARKING	LANE ARROW	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6", YELLOW	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6", WHITE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)				
		FROM TO			EACH	EACH	EACH	EACH	MILE	MILE	FT	FT	FT	FT	FT	EACH	EACH	MILE	MILE	MILE	FT	FT	MILE	MILE				
																		YL	WL	LL	CL							
244	YL-128	Baltimore St RAMP B	1870+50	1879+00	LT			10	10									0.1						0.1				
	YL-129	Baltimore St RAMP A	1893+30	1901+48	LT													0.15						0.15				
	WL-200	Baltimore St RAMP B	1870+50	1879+00	RT			11	11															0.1				
	WL-201	Baltimore St RAMP A	1893+30	1901+48	RT																			0.15				
	CL-43	Baltimore St RAMP B	1872+79	1870+93	RT		6		6		186										186			0.03				
	LA-45	Baltimore St RAMP B	1871+22		RT																							
	LA-46	Baltimore St RAMP B	1871+22		RT																							
	LA-47	Baltimore St RAMP B	1872+38		RT																							
	LA-48	Baltimore St RAMP B	1872+38		RT																							
	SL-15	Baltimore St RAMP B	1870+93	1870+93																								
245	YL-130	Baltimore St RAMP C	1879+00	1886+00	LT			17	17									0.13						0.13				
	YL-131	Baltimore St RAMP D	1879+00	1890+00	LT			18	18															0.21				
	WL-204	Baltimore St RAMP C	1879+00	1886+00	RT																			0.13				
	WL-205	Baltimore St RAMP D	1879+00	1890+00	RT																			0.21				
246	YL-132	Baltimore St RAMP C	1900+00	1909+42	LT			41	41															0.18				
	YL-133	Baltimore St RAMP D	1900+00	1909+42	LT																			0.18				
	WL-206	Baltimore St RAMP C	1900+00	1909+42	RT			11	11															0.18				
	WL-207	Baltimore St RAMP D	1900+00	1909+42	RT																			0.18				
	CL-44	Baltimore St RAMP C	1907+20	1909+00	RT		6		6												180			0.03				
	LA-49	Baltimore St RAMP C	1908+70		RT																							
	LA-50	Baltimore St RAMP C	1908+70		RT																							
	LA-51	Baltimore St RAMP C	1907+50		RT																							
	LA-52	Baltimore St RAMP C	1907+50		RT																							
	SL-16	Baltimore St RAMP C	1909+00		RT																							
TOTALS CARRIED FROM SHEET 179						111	94	205	0.3	0.22		458	91					1.88	2.23	1.14	2189	866	2.77	0.33				
TOTALS CARRIED FROM SHEET 180						179	20	199						182				10	3.15	2.92	1.99	2814	1633	8.36	0.34			
TOTALS CARRIED FROM SHEET 181						176		176		0.12		30							2.26	1.96	2.26	1532		6.49	0.28			
TOTALS CARRIED FROM SHEET 182						172		149		0.07		81			322	7	5		1.78	2.43	2.25	1242		6.46	0.24			
TOTALS CARRIED FROM SHEET 183						116		116		0.07	529	24							1.32	1.45	1.34	1624		2.84				
TOTALS CARRIED FROM SHEET 184						245		245			332											3.68	3.68	3.68	11.04			
TOTALS CARRIED FROM SHEET 185						169		169		0.06		24										2.26	2.37	2.25	1100	6.88	0.22	
TOTALS CARRIED FROM SHEET 186						270		270														4.14	4.14	4.14	12.42			
TOTALS CARRIED FROM SHEET 187						38	209	26	273													2.45	2.45	2.16	3639	1847	7.42	0.68
TOTALS CARRIED FROM SHEET 188							12	108	120		186		48					8						366		1.90	0.06	
TOTALS CARRIED TO GENERAL SUMMARY						38	1659	248	1922	0.30	0.54	1047	458	298	182	958	21	36		23.87	24.58	21.21	14506	4346	66.58	2.15		

TRAFFIC CONTROL  
SUBSUMMARY

DESIGN AGENCY



DESIGNER  
TAB

REVIEWER  
MJM 10-13-23

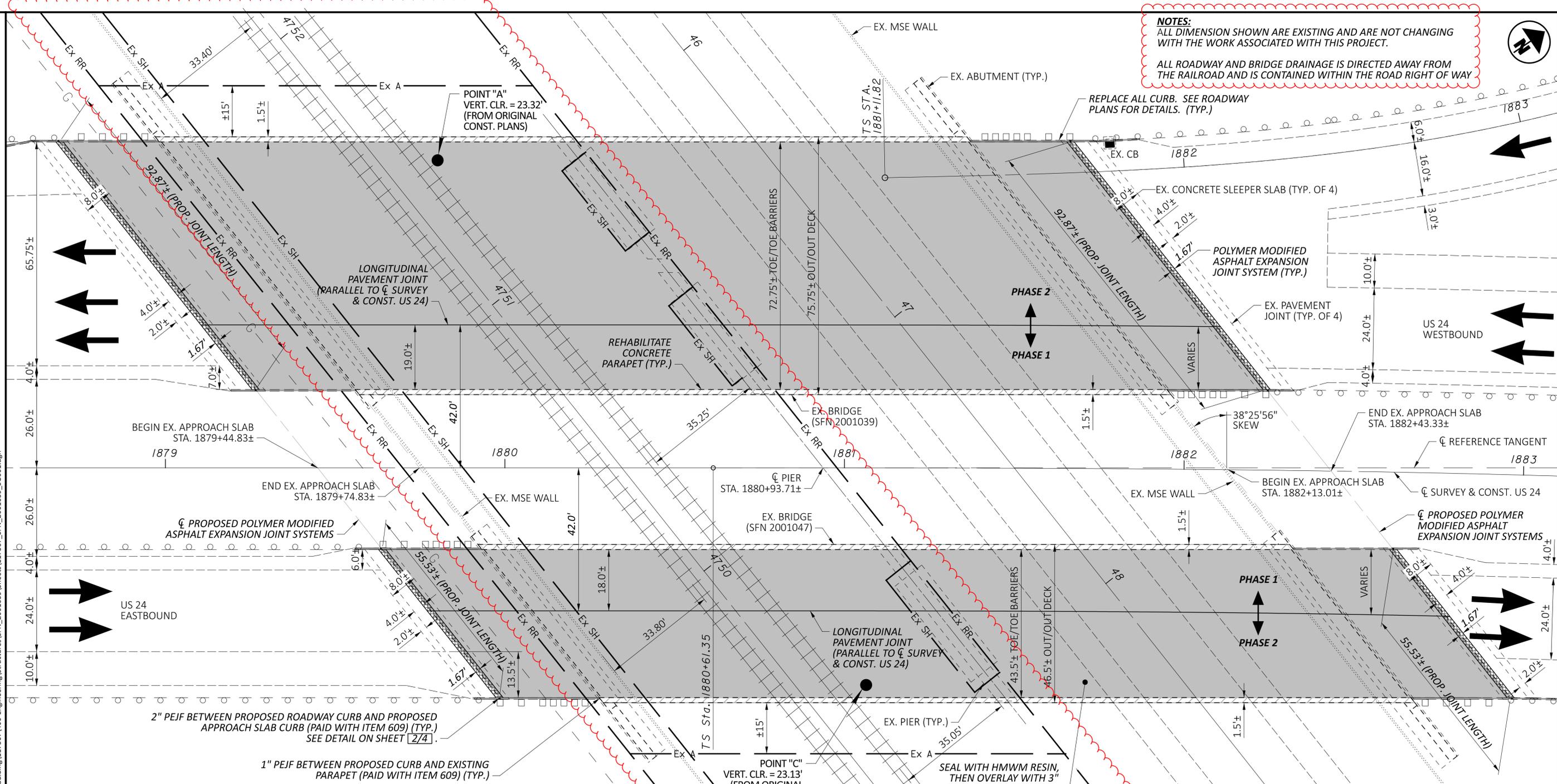
PROJECT ID  
117367

SUBSET TOTAL  
10 17

SHEET TOTAL  
P.188 258

PAU/DEF-24-12.30/0.00

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 2/14/2024 TIME: 1:12:36 PM USER: mmueller  
 pw:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01\Active Projects\District 01\Paulling\117367\400-Engineering\Structures\SFN\_2001039\_Sc001.dgn



**NOTES:**  
 ALL DIMENSION SHOWN ARE EXISTING AND ARE NOT CHANGING WITH THE WORK ASSOCIATED WITH THIS PROJECT.  
 ALL ROADWAY AND BRIDGE DRAINAGE IS DIRECTED AWAY FROM THE RAILROAD AND IS CONTAINED WITHIN THE ROAD RIGHT OF WAY

**EXISTING STRUCTURES**

**TYPE:** TWO-SPAN COMPOSITE PRESTRESSED CONCRETE I-BEAMS WITH REINFORCED CONCRETE DECK, MODIFIED SEMI-INTEGRAL ABUTMENTS, AND MSE WALLS

**SPANS:** 116.0'± - 116.0'±  $\bar{C}$  BEARINGS TO  $\bar{C}$  PIER ALONG REFERENCE TANGENT

**ROADWAY:** 72.75'± (WB), 43.5'± (EB) TOE/TOE BARRIERS

**LOADING:** HS-25 AND ALTERNATE MILITARY LOADING FUTURE WEARING SURFACE = 60 PSF

**SKEW:** 38°25'56"± RF WITH  $\bar{C}$  REFERENCE TANGENT

**WEARING SURFACE:** MONOLITHIC CONCRETE

**APPROACH SLABS:** MODIFIED AS-1-81, 30.0'± LONG

**ALIGNMENT:** TANGENT/SPIRAL

**SUPERELEVATION:** VARIES (NORMAL CROWN TO TRANSITION)

**STRUCTURE FILE NUMBERS:** LEFT: 2001039 RIGHT: 2001047

**DATE BUILT:** 2009

**DISPOSITION:** TO BE REHABILITATED

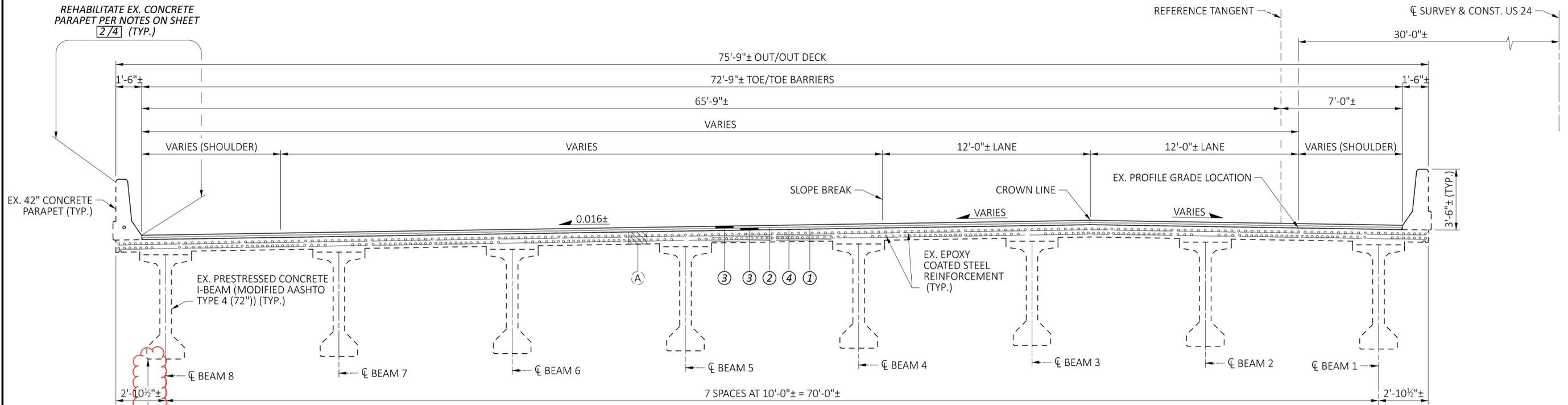
**PROPOSED REHABILITATION OF STRUCTURES**

EXISTING STRUCTURES TO BE REHABILITATED AS FOLLOWS:

LEGEND	DESCRIPTION
	- CONCRETE PARAPETS: REMOVE EXISTING COATING AS DETAILED, PATCH AND/OR REPAIR WITH EPOXY INJECTION PER PLAN NOTE, RECOAT WITH EPOXY-URETHANE SEALER AS DETAILED
	- RECONSTRUCT CURBS ON APPROACH SLABS (AND ALONG ROADWAY) AS DETAILED IN ROADWAY PLANS
	- PREPARE TOP SURFACE OF APPROACH SLABS AND BRIDGE DECK, SEAL ENTIRE TOP SURFACE OF APPROACH SLABS AND BRIDGE DECK WITH HMWM RESIN
	- CONSTRUCT 3" BRIDGE DECK WATERPROOFING ASPHALT CONCRETE, IN TWO 1.5" LIFTS, OVER THE APPROACH SLABS AND BRIDGE DECK
	- CONSTRUCT A POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM WHERE EACH APPROACH SLAB AND THE ADJACENT ASPHALT ROADWAY PAVEMENT JOIN

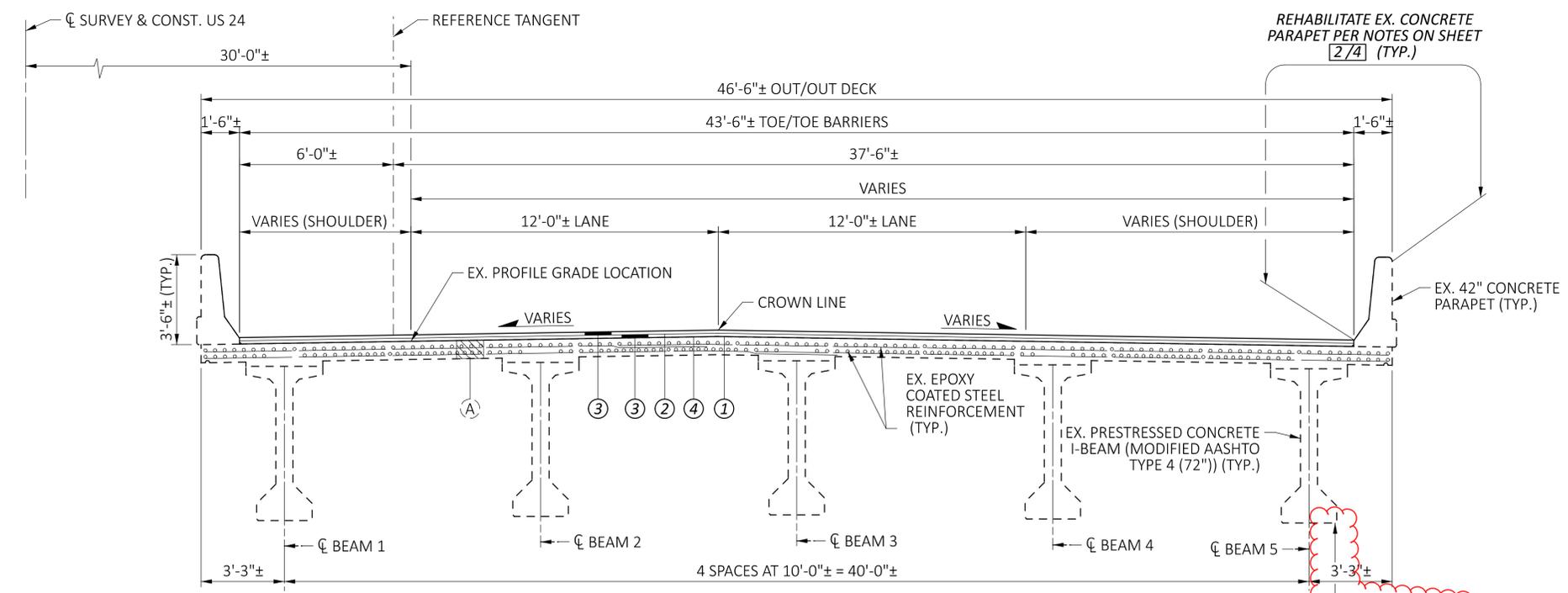
**GENERAL PLAN**  
 BRIDGE NO. DEF-00024-03.090 L & R  
 US 24 OVER RAILROAD AND CR 424 (BALTIMORE STREET)

SFN	2001039 (LT)
SFN	2001047 (RT)
DESIGN AGENCY	
DESIGNER	RTH
CHECKER	MJS
REVIEWER	
MJM	10-13-23
PROJECT ID	117367
SUBSET	1
TOTAL	4
SHEET	P.255
TOTAL	258



**TRANSVERSE SECTION - WESTBOUND - SFN 2001039 (LT)**

POINT "A"  
 VERT. CLR. = 23.32'  
 TO TOP OF RAIL  
 (FROM ORIGINAL  
 CONST. PLANS)



**TRANSVERSE SECTION - EASTBOUND - SFN 2001047 (RT)**

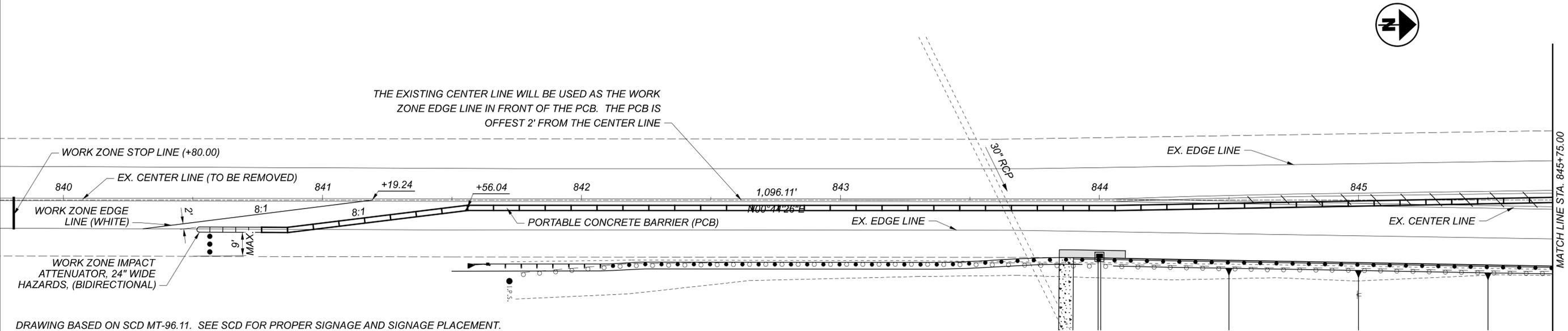
**NOTE:**  
 ALL DIMENSION SHOWN ARE EXISTING AND ARE NOT CHANGING  
 WITH THE WORK ASSOCIATED WITH THIS PROJECT.

POINT "C"  
 VERT. CLR. = 23.13'  
 TO TOP OF RAIL  
 (FROM ORIGINAL  
 CONST. PLANS)

- LEGEND:**
- (A) 8 1/2" ± EXISTING CONCRETE DECK THICKNESS
  - (1) ITEM 512 - SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN
  - (2) ITEM 407 - NON-TRACKING TACK COAT
  - (3) ITEM 856 - 1 1/2" BRIDGE DECK WATERPROOFING ASPHALT CONCRETE
  - (4) ITEM 407 - TACK COAT, 702.13

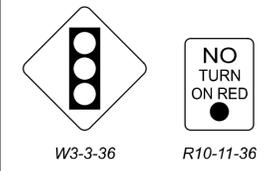
**SUPERSTRUCTURE DETAILS (TRANSVERSE SECTIONS)**  
 BRIDGE NO. DEF-00024-03.090 L & R  
 US 24 OVER RAILROAD AND CR 424 (BALTIMORE STREET)

SFN	2001039 (LT)
SFN	2001047 (RT)
DESIGN AGENCY	
DESIGNER	RTH
CHECKER	MJS
REVIEWER	MJM
PROJECT ID	10-13-23
PROJECT ID	117367
SUBSET	4
TOTAL	4
SHEET	P.258
TOTAL	258



DRAWING BASED ON SCD MT-96.11. SEE SCD FOR PROPER SIGNAGE AND SIGNAGE PLACEMENT.

NOTE: ON RAMP B (US 24 EB EXIT 13), THE EXISTING DUAL ADVANCED STOP AHEAD WARNING SIGNS SHALL BE REMOVED, STORED, AND REPLACED WITH SIGNAL AHEAD WARNING SIGNS (W3-3) WHILE THE SIGNALS ARE IN PLACE. THE EXISTING DUAL STOP SIGNS SHALL BE COVERED OR REMOVED AND STORED, WHILE THE DO NOT ENTER SIGNS ON THE BACK OF THE STOP SIGNS SHALL REMAIN IN PLACE AND UNCOVERED. ALSO, INSTALL A NO TURN ON RED SIGN (R10-11). ALL SIGNAGE ON THE RAMP SHALL BE RETURNED TO EXISTING CONFIGURATIONS WHEN THE WORK IS COMPLETED AND THE SIGNALS ARE REMOVED. ALL WORK MENTIONED ABOVE, INCLUDING ALL LABOR, MATERIALS, AND EQUIPMENT NEEDED, SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN.



**WORK ZONE MARKINGS**

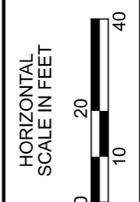
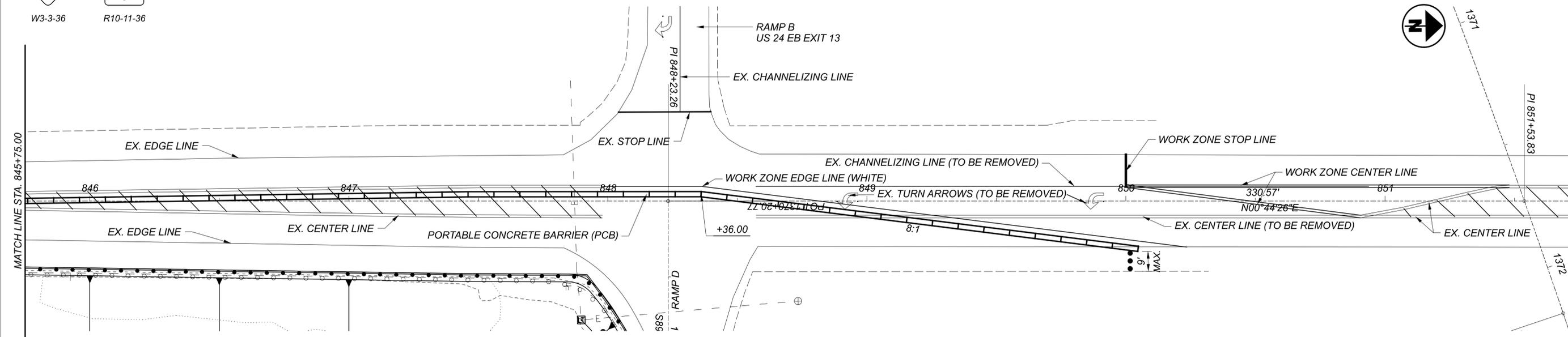
THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED IN THESE PLANS FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF C&MS 614.11.

- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I = 0.06 MI
- ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I = 0.05 MI
- ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I = 24 FT

**FINAL MARKINGS**

THE FOLLOWING ESTIMATED QUANTITIES FOR PERMANENT PAVEMENT MARKINGS HAVE BEEN CARRIED TO THE GENERAL SUMMARY DUE TO THE REMOVAL OF THE EXISTING MARKINGS FOR MOT.

- ITEM 642 - CENTER LINE, TYPE 1 = 0.07 MI
- ITEM 644 - CHANNELIZING LINE, 8" = 235 FT
- ITEM 644 - LANE ARROW = 2 EACH



MAINTENANCE OF TRAFFIC PLAN  
PLAN

DESIGN AGENCY



DESIGNER	KCO
REVIEWER	MJM
PROJECT ID	01-03-23
SHEET	117367
TOTAL	P.10 / 60

