

*CUYAHOGA COUNTY*

TITLE SHEET	1
SCHEMATIC PLAN	2
TYPICAL SECTIONS	3-5
GENERAL NOTES	6-8
MAINTENANCE OF TRAFFIC	9-38
GENERAL SUMMARY	39-41
SUBSUMMARIES	42-45
PLAN AND PROFILE	46-50
CROSS-SECTIONS	51-74
SUPERELEVATION TABLE	75
TRAFFIC CONTROL	76-84
LIGHTING	85-93
STRUCTURES OVER 20 FOOT SPAN	
CUI-00071-10.070 SW, SFN 1814258	94-144
CUI-00480-08.710 ES, SFN 1814249	145-147
GEOTECHNICAL PROFILE - STRUCTURE	148-167

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS DESCRIBED ON SHEET P.9 & P.10 AND AS SHOWN ON SHEETS P.17 TO P.20, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

  
John Picuri, P.E., P.S.  
District 12 Deputy Director

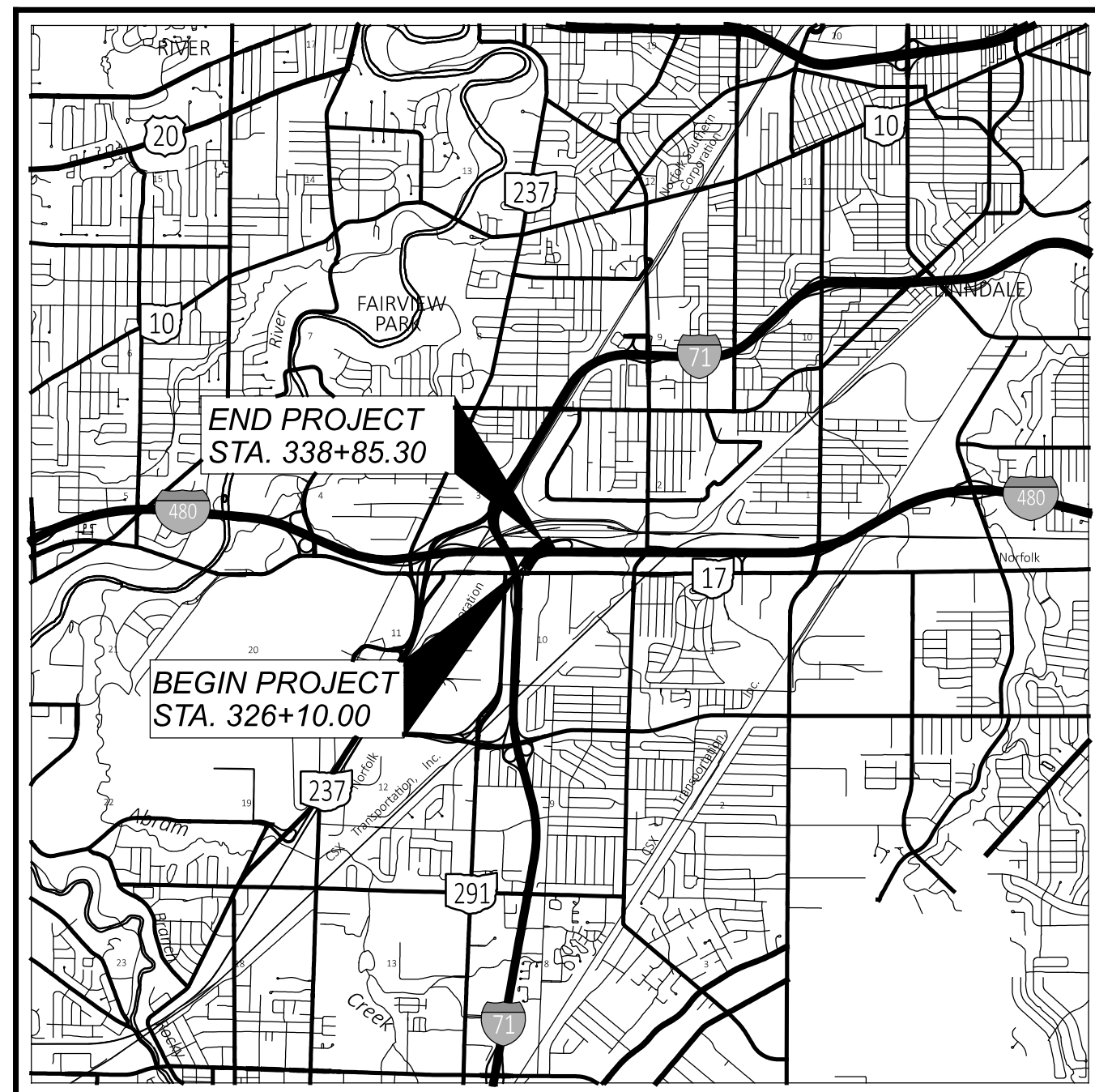
  
Pamela Boratyn  
Director, Department of Transportation

<b>UNDERGROUND UTILITIES</b>
Contact Two Working Days Before You Dig
 <b>OHIO811.org</b> Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764 (Non members must be called directly)

*PLAN PREPARED BY:*

**MOTT M**  
**MACDONALD M**

20445 EMERALD PARKWAY, SUITE 100, CLEVELAND, OHIO 44135  
PHONE: (216) - 535-3640  
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LATITUDE: 41°25'14" LONGITUDE: 81°48'56"



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

CURRENT ADT (2023)	11497
DESIGN YEAR ADT (2043)	11497
DESIGN HOURLY VOLUME (2043)	1098
DIRECTIONAL DISTRIBUTION	100%
TRUCKS (24 HOUR B&C)	2%
DESIGN SPEED	60 MPH
LEGAL SPEED	60 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN INTERSTATE	
NHS PROJECT	YES

*NONE*

*NONE*

ENGINEER'S SEAL FOR ENTIRE PLAN EXCEPT STRUCTURES OVER 20'	ENGINEER'S SEAL FOR STRUCTURES OVER 20' (SFN 1814258)	ENGINEER'S SEAL FOR STRUCTURES OVER 20' (SFN 1814249)
<p>A circular seal for the State of Ohio. The outer ring contains the text "STATE OF OHIO" at the top and "REGISTERED PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The center of the seal contains the text "SCOTT J. PIAZZA" and "E-72277".</p>	<p>A circular seal for the State of Ohio. The outer ring contains the text "STATE OF OHIO" at the top and "REGISTERED PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The center of the seal contains the text "SAMET KARATAS" and "E-90513".</p>	<p>A circular seal for the State of Ohio. The outer ring contains the text "STATE OF OHIO" at the top and "REGISTERED PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The center of the seal contains the text "PATRICK A. TOMAN" and "E-67624".</p>

[illegible]



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.

ROUNDING

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

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	248 CU. YD.
659, REPAIR SEEDING AND MULCHING	112 SQ. YD.
659, INTER-SEEDING	112 SQ. YD.
659, COMMERCIAL FERTILIZER	0.31 TON
659, LIME	0.46 ACRES
659, WATER	12.1 M. GAL.
659, MOWING	15 M. SQ.FT.

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.

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.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 FOR TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: GPS  
MONUMENT TYPE: CONCRETE MONUMENT SET WITH ODOT DISC

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88  
GEOID: GEOID12B

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)  
ELLIPSOID: GRS80  
MAP PROJECTION: Lambert Conformal Conic  
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE  
COMBINED SCALE FACTOR: 0.99989686  
PROJECT ADJUSTMENT FACTOR: 1.00010315  
ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRICT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

ASBESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE BRIDGE SCHEDULED FOR DEMOLITION WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUTION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE.

THE BRIDGE WHICH WAS SURVEYED AND CONTAINED NO ASBESTOS IS: SFN 1814257

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER AT THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL COMPLETE THE FORM AND RETURN IT TO THE DISTRICT CONSTRUCTION ENGINEER ALONG WITH THE PERMIT FEE IF APPLICABLE. THE COMPLETION OF THIS FORM MAY BE PERFORMED AT THE PRECONSTRUCTION MEETING. THE DISTRICT CONSTRUCTION ENGINEER SHALL SUBMIT THE FORM AND CONTRACTORS FEE TO THE OEPA NORTHWEST DISTRICT OFFICE AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF THE DEMOLITION OF THE BRIDGE. THE DISTRICT CONSTRUCTION ENGINEER SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE CONTRACTOR. THE CONTRACTOR SHALL NOT COMMENCE DEMOLITION OF THE STRUCTURE UNTIL THE ABOVE REQUIREMENTS ARE MET.

INFORMATION ON THE FORM WILL INCLUDE:  
-THE CONTRACTORS NAME AND ADDRESS.  
-THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL.  
- A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

A COPY OF THE OEPA FORM IS AVAILABLE FOR INSPECTION AT THE ODOT, DISTRICT 12 OFFICE, AT 5500 TRANSPORTATION BLVD, GARFIELD HEIGHTS, OH 44125

BASIS FOR PAYMENT

THE CONTRACTORS SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE BID ITEM 202 FOR **STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.**

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.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 99-FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND THE ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 10101 Hillwood Parkway Fort Worth, TX 76177 FAX: (817) 222-5920 http://ceaaaa.faa.go	Ohio Department of Transportation Office of Aviation 2829 West Dublin-Granville Road Columbus, Ohio 43235 <a href="mailto:Ohio.airport.protections@dot.ohio.gov">Ohio.airport.protections@dot.ohio.gov</a>
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STAGING AREAS

THERE ARE NO SPECIFIC AREAS GIVEN IN THE PLANS FOR THE CONTRACTOR TO USE AS A STAGING AREA(S). IF THE CONTRACTOR WANTS TO USE AN AREA(S) FOR STAGING, REGARDLESS IF IT FALLS WITHIN THE PROJECT LIMITS OR NOT, THE CONTRACTOR IS TO USE THE RIGHT OF WAY E-PERMITTING SYSTEM AT <https://odhcp.bemcorp.net/Accounts/Account> IN ORDER TO APPLY FOR A PERMIT PER SECTION 107.02 OF THE CMS. FOR SPECIFIC PERMITTING QUESTIONS, THE CONTRACTOR CAN CONTACT THE DISTRICT PERMITTING OFFICE, (MELVIN SAFFORD) AT 216-584-2137, (ANDREW TOMKO) AT 216-584-2195 OR AT DISTRICT12PERMITS@DOT.OHIO.GOV.

IF A PERMIT IS GRANTED, ALL CONDITIONS OF THE PERMIT SHALL BE MET IN ADDITION TO THE REQUIREMENTS OF 104.04 OF THE CMS, AT NO ADDITIONAL COST TO THE STATE. IF THE PROJECT ENGINEER DEEMS THAT ALL THE CONDITIONS OF THE PERMIT WERE NOT MET, THEN 10% OF THE CONTRACT BID AMOUNT FOR MOBILIZATION SHALL BE WITHHELD UNTIL ALL THE CONDITIONS OF THE PERMIT ARE SATISFIED.

ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN

ALL REQUIREMENTS OF C&MS 619 SHALL APPLY EXCEPT AS MODIFIED HEREIN:

THE FIELD OFFICE SHALL BE A SUITE TYPE OFFICE (NO TRAILER OR MODULAR OFFICE) WITH A MINIMUM OF 1,600 SQUARE FEET. THE FLOOR SPACE WILL BE DIVIDED INTO ONE GENERAL OFFICE AREA, NOT LESS THAN FOUR INDIVIDUAL OFFICE AS SEPARATE ENCLOSED ROOMS (NO CUBICLE DIVIDERS WILL BE ACCEPTED).

DESIGN AGENCY	
MOTT MACDONALD	
20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135	
DESIGNER	
SMS	
REVIEWER	
SJP 09/17/25	
PROJECT ID	
114536	
SHEET	TOTAL
P.6	167



ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN (CONT.)

THE CONTRACTOR SHALL FURNISH AND MAINTAIN A BROADBAND INTERNET CONNECTION CAPABLE OF MINIMUM DOWNLOAD SPEEDS OF 1.0 GB/S ALONG WITH A WIRELESS ROUTER THAT SUPPORTS WI-FI STANDARD 802.11AX (WIFI 6) AND A MINIMUM WIRELESS DATA TRANSFER RATE OF 4000 MB/S – ALL FOR THE EXCLUSIVE USE OF THE DEPARTMENT. PROVIDE PRE-WIRED ETHERNET ACCESS FOR ALL INDIVIDUAL OFFICES AND THE GENERAL OFFICE AREA.

REQUESTS FOR ADDITIONAL OFFICE SUPPLIES, PAPER SUPPLIES, COPIER SUPPLIES, AND MAINTENANCE OF COPIER SHALL BE ACCOMODATED IN A TIMELY MANNER AT ANY POINT DURING THE OCCUPANCY OF THE FIELD OFFICE.

THE FIELD OFFICE WILL BE APPROVED IN ADVANCE BY THE ENGINEER AND FULLY OPERATIONAL WITHIN 30 DAYS AFTER THE SIGNING AND EXECUTION OF THE CONTRACT OR PRIOR TO THE START OF ANY CONSTRUCTION WORK, WHICHEVER COMES FIRST.

THE DEPARTMENT WILL MEASURE FIELD OFFICE, TYPE C, AS PER PLAN BY THE NUMBER OF MONTHS THE OFFICE IS MAINTAINED. A PARTIAL MONTH AT THE END OF THE PROJECT WILL BE PAID AS A FULL MONTH.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:

ITEM 619 – FIELD OFFICE, TYPE C, AS PER PLAN ..... 36 MONTHS

ROADWAY

ITEM 622 – BARRIER, MISC.: CONCRETE BARRIER, TYPE B50

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING TYPE B50 CONCRETE BARRIER ACCORDING TO THE DETAILS SHOWN ON P.5 OF THIS PLAN WITH THE FOLLOWING MODIFICATIONS:

1. INSTALL THE NO. 8 DOWEL BARS BETWEEN THE CONCRETE FOUNDATION AND THE CONCRETE BARRIER. THE SIZE, LENGTH AND PLACEMENT OF THE DOWEL BARS SHALL FOLLOW THE DOWELING DETAILS SHOWN FOR THE 32" NORMAL SECTIONS.
2. THE COST OF THE MIN. 9" THICK, 4' WIDE FOUNDATION SHALL BE INCLUDED IN THIS PAY ITEM. ALL COSTS FOR THIS ITEM OF WORK, INCLUDING SAWCUTTING OF EXISTING SHOULDER ASPHALT, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR:  
ITEM 622 - BARRIER, MISC.: CONCRETE BARRIER, TYPE B50.

ITEM 622 – CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING TYPE D CONCRETE BARRIER ACCORDING TO THE CMS AND STANDARD CONSTRUCTION DRAWING RM-4.5 WITH THE FOLLOWING MODIFICATIONS:

1. PROVIDE A 9" THICK CONCRETE FOUNDATION WITH AN APPROXIMATE WIDTH OF 2.5' AS SHOWN IN THE TYPICAL SECTIONS.

ALL COSTS FOR THIS ITEM OF WORK, INCLUDING SAWCUTTING OF EXISTING SHOULDER ASPHALT, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN.

ITEM 202 – CONCRETE BARRIER REMOVED, AS PER PLAN

REMOVAL OF THE EXISTING CONCRETE BARRIER FOUNDATION SHALL BE INCLUDED IN THIS ITEM OF WORK. THE CONTRACTOR MAY ELECT TO SAWCUT THE PAVEMENT AT THE BARRIER FOUNDATION EDGE PRIOR TO THE CONCRETE BARRIER AND CONCRETE BARRIER FOUNDATION REMOVAL AS TO PREVENT ADJACENT PAVEMENT FROM BEING DISTURBED. REMOVAL OF THE EXISTING CONDUIT AND DISTRIBUTION CABLE SHALL ALSO BE INCLUDED IN THIS ITEM.

ALL COSTS FOR THIS ITEM OF WORK, INCLUDING SAWCUTTING, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 202 - CONCRETE BARRIER REMOVED, AS PER PLAN.

ITEM 606 - ANCHOR ASSEMBLY, MGS 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 MANUFACTERER'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 GROUND.

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 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.

PAVEMENT

ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1,(449), (UNDER GUARDRAIL), AS PER PLAN.

HERBICIDE SHALL BE EPA APPROVED FOR PAVING UNDER GUARDRAIL. IT SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S INSTRUCTIONS.

EACH SUCCESSFUL BIDDER MUST BE LICENSED BY THE OHIO DEPARTMENT OF AGRICULTURE AS A COMMERCIAL APPLICATOR AND ALL PERSONS INVOLVED IN THE ACTUAL SPRAYING SHALL BE LICENSED AS COMMERCIAL OPERATORS IN THE APPROPRIATE SPRAY CATEGORY.

HERBICIDE LABEL, MATERIAL SAFETY DATA SHEET AND COPY OF APPLICATORS LICENSES SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION PRIOR TO COMMENCING WORK.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO A DEPTH OF 3" AND A MAXIMUM WIDTH OF 4' USING ONE OF THE FOLLOWING METHODS:

- METHOD A:
- 1.SET GUARDRAIL POSTS
- 2.PLACE ITEM 441

- METHOD B:
- 1.PLACE ITEM 441
- 2.BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
- 3.SET GUARDRAIL POSTS
- 4.PATCH AROUND POSTS.

THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN. THE FOLLOWING ESTIMATED QTY'S ARE CARRIED TO GENERAL SUMMARY:

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	25 CY
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ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN

THIS ITEM OF WORK SHALL BE USED TO PREPARE PROPOSED AND EXISTING GUARDRAIL RUNS FOR PAVING UNDER GUARDRAIL, INCLUDING THE REMOVAL AND DISPOSAL OF EXISTING ASPHALT UNDER GUARDRAIL.

A SAWCUT WILL BE PERFORMED, WHEN APPLICABLE, TO ASSIST THE REMOVAL OF EXISTING ASPHALT UNDER GUARDRAIL AND MINIMIZE DAMAGE TO EXISTING SHOULDER ASPHALT. PAYMENT FOR SAWCUTTING WILL BE INCLUDED IN THE BID PRICE FOR ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN.

FILL ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS AND ANCHOR ASSEMBLIES WITH GRANULAR MATERIAL. DO NOT USE FILL MATERIAL CONTAINING SOD. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER AND SHALL BE COMPACTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE IS INCLUDED IN THE APPLICABLE GUARDRAIL ITEM.

RESHAPE AND COMPACT SUBGRADE TO ENSURE POSITIVE DRAINAGE. ESTABLISH A CROSS-SLOPE OF 0.042 (HALF INCH PER FOOT). GRADE TO A MAXIMUM WIDTH OF 6' TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE TRAVEL LANES.

ALL COLLECTED DEBRIS AND TOPSOIL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN SECTION 105.17 OF THE CMS.

IN AREAS WHERE ASPHALT UNDER GUARDRAIL WILL NOT BE REPLACED, THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 AND PLACED TO GRADE AS APPROVED BY THE ENGINEER. SEED AND MULCH THESE AREAS ACCORDING TO SECTION 659.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE WORK.

IN AREAS WHERE ASPHALT UNDER GUARDRAIL WILL NOT BE REPLACED, THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 AND PLACED TO GRADE AS APPROVED BY THE ENGINEER. SEED AND MULCH THESE AREAS ACCORDING TO SECTION 659.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE WORK.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN 9 STA

SHOULDER RESTORATION ON IR-480.

THE REMOVAL AND CONSTRUCTION OF PIER 2 MAY REQUIRE THE MEDIAN/ADJACENT SHOULDERS TO BE REBUILT. CONTRACTOR MAY ELECT TO SAWCUT THE PAVEMENT AT THE EDGE OF PAVEMENT PRIOR TO THE PIER REMOVAL AS TO PREVENT ADJACENT PAVEMENT FROM BEING DISTURBED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG64-22 (THICKNESS = 1.5")	7 CY
ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448), (THICKNESS = 1.75")	8 CY
ITEM 302 - ASPHALT CONCRETE BASE, PG64-22, (449) (THICKNESS = 8.5", 2 LIFTS REQUIRED)	40 CY
ITEM 304 - AGGREGATE BASE (THICKNESS = 10")	48 CY
ITEM 202 - PAVEMENT REMOVED	164 SY
ITEM 605 - 6" UNDERDRAIN	184 LF
ITEM 204 - SUBGRADE COMPACTION	164 SY
ITEM 407 - NON-TRACKING TACK COAT	13 GAL



**ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING**  
CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.

3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE FOLLOWING ESTIMATED QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE PROVIDED:

ITEM 204 - EXCAVATION OF SUBGRADE	100 CY
ITEM 204 - GRANULAR MATERIAL, TYPE B	100 CY
ITEM 204 - GEOTEXTILE FABRIC	300 SY
ITEM 204 - PROOF ROLLING	1 HOUR

**TEMPORARY MINIMUM VERTICAL CLEARANCE**

THE TEMPORARY MINIMUM VERTICAL CLEARANCE OVER ROADWAYS AND SHOULDERS SHALL NOT BE LESS THAN 15'-0" FOR STRUCTURE CUY-71-10.07 SW, SFN 1814258 AND NOT LESS THAN 16'-6" FOR STRUCTURE CUY-480-08.71 ES, SFN 1814249.

**NOTIFICATION OF MINIMUM VERTICAL CLEARANCE REDUCTION**

THE CONTRACTOR SHALL NOTIFY THE SPECIAL HAULING PERMITS SECTION OF THE OHIO DEPARTMENT OF TRANSPORTATION AT HAULING.PERMITS@DOT.OHIO.GOV AND THE ENGINEER OF ANY TEMPORARY REDUCTION OF VERTICAL CLEARANCE. THE NOTIFICATION SHALL BE GIVEN AT LEAST 14 DAYS PRIOR TO REDUCING THE VERTICAL CLEARANCE OF A BRIDGE AND SHALL INCLUDE THE FOLLOWING INFORMATION:

1. STATE PROJECT NUMBER
2. PID
3. SFN
4. BRIDGE NUMBER
5. LOCATION MAP
6. DIRECTION OF REDUCED VERTICAL CLEARANCE. FOR EXAMPLE:
  - BIDIRECTIONAL
  - CARDINAL (NORTH OR EAST)
  - NON-CARDINAL (SOUTH OR WEST)
7. TEMPORARY VERTICAL CLEARANCE
8. ESTIMATED/ACTUAL START AND END DATES OF THE REDUCTION
9. CONTRACTOR'S CONTACT NAME AND TELEPHONE NUMBER
10. ENGINEER'S NAME AND TELEPHONE NUMBER
11. ANY OTHER INFORMATION REQUESTED BY THE SPECIAL HAULING PERMITS SECTION

THE CONTRACTOR SHALL INFORM THE SPECIAL HAULING PERMITS SECTION OF THE OHIO DEPARTMENT OF TRANSPORTATION AND THE ENGINEER WITHIN 14 DAYS AFTER RESTORING THE VERTICAL CLEARANCE OF A BRIDGE TO ITS ORIGINAL VERTICAL CLEARANCE.

THE ABOVE REQUIREMENTS SHALL BE CONSIDERED INCIDENTAL TO THE WORK THAT CAUSES THE REDUCTION IN THE VERTICAL CLEARANCE.

**ITEM 204 - PROOF ROLLING**

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING	4 HOURS
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**ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN**

PER CMS 623.04 AND 623.05, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING MONUMENT ASSEMBLIES, SURVEY CORNERS AND SURVEY CONTROL PRIOR TO BEGINNING ANY WORK AND AFTER PROJECT COMPLETION (IF APPLICABLE). A PRE-INSPECTION REPORT IS TO BE SUBMITTED PRIOR COMMENCEMENT OF WORK AND POST-CONSTRUCTION REPORT SUBMITTED PRIOR TO OR IN CONJUNCTION WITH THE FINAL INSPECTION TO THE DISTRICT SURVEY OPERATIONS MANAGER. EXISTING MONUMENTATION SHALL BE PRESERVED AND PERPETUATED THROUGHOUT THE PROJECT.

THE DEPARTMENT'S STANDARDIZED VERIFICATION REPORT TEMPLATE CAN BE FOUND AT THE FOLLOWING LOCATION:  
[HTTPS://WWW.DOT.STATE.OH.US/DIVISIONS/CONSTRUCTIONMGT/DOCUMENTS](https://www.dot.state.oh.us/divisions/constructionmgt/documents)

AFTER COMPLETION OF ALL WORK, BUT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, AN OHIO PROFESSIONAL SURVEYOR SHALL DETERMINE THE MINIMUM VERTICAL CLEARANCES OF ALL EXISTING AND NEW BRIDGES WITHIN THE PROJECT LIMITS. AT A MINIMUM, MEASUREMENTS SHALL BE TAKEN ALONG EACH FASCIA BEAM AT THE EDGE OF SHOULDERS, EDGE LINES, LANE LINES, AND CROWN OF THE ROADWAY BELOW. THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM SHALL BE USED, WHERE APPLICABLE, TO DOCUMENT THE MEASUREMENTS. WHERE THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM IS NOT APPLICABLE, THE MEASUREMENTS SHALL BE DOCUMENTED ON A CONTRACTOR-DEVELOPED FORM THAT CLOSELY RESEMBLES THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM AND ACCURATELY DEPICTS THE BRIDGE AND THE LANE AND SHOULDER CONFIGURATION OF THE ROADWAY THAT PASSES BELOW THE BRIDGE. THE COMPLETED FORM SHALL BEAR THE STAMP OR SEAL OF THE OHIO PROFESSIONAL SURVEYOR WHO HAS TAKEN THE MEASUREMENTS AND SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM CAN BE DOWNLOADED FROM THE FOLLOWING FTP SITE:  
<https://ftp.dot.state.oh.us/pub/Contracts/Attach/CTY-XXXXXX>

ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.



SUGGESTED SEQUENCE OF CONSTRUCTION

PHASE 1 CONSTRUCTION

PHASE 1 SHALL CONSIST OF THE REMOVAL OF PORTIONS OF THE BRIDGE, CONSTRUCTION OF THE SUPPORT STRUCTURES FOR THE WIDENED BRIDGE DECK TO THE EAST OF THE EXISTING SUPPORT STRUCTURES, PLACEMENT OF NEW STEEL BEAMS AND CONSTRUCTION OF THE BRIDGE DECK FOR THE WIDENED INSIDE SHOULDER.

PHASE 1 TRAFFIC; IR-71

RAMP TRAFFIC WILL BE MAINTAINED ON THE EXISTING PAVEMENT, SHIFTED TO THE WEST (OUTSIDE) SHOULDER OF THE EXISTING STRUCTURE AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. DURING THE REMOVAL AND PLACEMENT OF BEAMS AND DURING THE CONCRETE DECK POUR, IR-71 RAMP TO BE CLOSED AND TRAFFIC DETOURED AS SHOWN IN THE PLANS.

PHASE 1A TRAFFIC; IR-480

ALL LANES OF BOTH EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL BE SHIFTED TO THE INSIDE SHOULDER(S) TO ALLOW FOR THE SUBSTRUCTURE WORK TO PIERS 1 AND 3, AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. LANE SHIFTS PER SCD MT-102.10 MAY BE UTILIZED TO PROVIDE LATERAL CLEARANCE FROM THESE SUBSTRUCTURE ELEMENTS.

PHASE 1 TRAFFIC; IR-480 CLOSURES

IR-480 TO BE CLOSED OVERNIGHT, 10:00 PM TO 5:00 AM, DURING BEAM REMOVAL AND BEAM PLACEMENT OPERATIONS AS SHOWN IN THE PLANS. EASTBOUND AND WESTBOUND CLOSURES OF IR-480 SHOULD NOT COINCIDE.

PHASE 1B TRAFFIC; IR-480

ALL LANES OF BOTH EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL BE SHIFTED TO THE OUTSIDE SHOULDER(S) TO ALLOW FOR THE SUBSTRUCTURE WORK TO PIER 2. AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. LANE SHIFTS PER SCD MT-102.10 MAY BE UTILIZED TO PROVIDE LATERAL CLEARANCE FROM THE SUBSTRUCTURE ELEMENTS.

CONTRACTOR TO UTILIZE IR-480 PHASE 1B TRAFFIC CONFIGURATION ON IR-480 REQUIRED DURING WINTER MONTHS, OCTOBER 15 THROUGH APRIL 1.

PHASE 2 CONSTRUCTION

PHASE 2 SHALL CONSIST OF THE REMOVAL OF THE REMAINDER OF THE EXISTING BRIDGE, PLACEMENT OF NEW STEEL BEAMS AND CONSTRUCTION OF THE BRIDGE DECK, INCLUDING THE CLOSURE POUR. IR-480 MEDIAN WALL AND CONCRETE BARRICADE REPLACEMENT WILL ALSO BE COMPLETED DURING THIS TIME.

PHASE 2 TRAFFIC; IR-71

RAMP TRAFFIC WILL BE SHIFTED TO THE NEWLY CONSTRUCTED INSIDE SHOULDER OF THE BRIDGE AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. DURING THE REMOVAL AND PLACEMENT OF BEAMS AND DURING THE CONCRETE DECK POUR, IR-71 RAMP TO BE CLOSED AND TRAFFIC DETOURED AS SHOWN IN THE PLANS.

PHASE 2A TRAFFIC; IR-480

EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL REMAIN IN THE SAME LOCATION AS PHASE 1B, WITH ALL LANES SHIFTED TO THE OUTSIDE SHOULDER(S) TO ALLOW FOR COMPLETION OF THE WORK AT PIER 2 AND MEDIAN WALL.

PHASE 2B TRAFFIC; IR-480

EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL RETURN TO THE SAME LOCATION AS PHASE 1A WITH ALL LANES SHIFTED TO THE INSIDE SHOULDER(S) TO ALLOW FOR COMPLETION OF SUBSTRUCTURE WORK TO PIERS 1 AND 3.

PHASE 2 TRAFFIC; IR-480 CLOSURES

IR-480 TO BE CLOSED OVERNIGHT, 10:00 PM TO 5:00 AM, DURING BEAM REMOVAL AND BEAM PLACEMENT OPERATIONS AS SHOWN IN THE PLANS. EASTBOUND AND WESTBOUND CLOSURES OF IR-480 SHOULD NOT COINCIDE.

PHASE 3 CONSTRUCTION

PHASE 3 SHALL CONSIST OF PAINTING THE BRIDGE STEEL SUPERSTRUCTURES SFN 1814258 AND SFN 1814249 ON PORTIONS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS.

PHASE 3 TRAFFIC; IR-480

TRAFFIC TO REMAIN IN PLACE FOLLOWING PHASE 2B. SHORT TERM LANE CLOSURES, AS PER THE PLCS, MAY BE ENACTED TO COMPLETE PAINTING OPERATIONS. LANE CLOSURES PER SCD MT-95.30 AND MT-98.11. CONTRACTOR TO VERIFY PLCS SCHEDULE PRIOR TO SUBMITTING TRAFFIC CONTROL PLAN.

PHASE 4 CONSTRUCTION

PHASE 4 SHALL CONSIST OF PAINTING THE BRIDGE STEEL SUPERSTRUCTURES ON THE REMAINING PORTIONS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS.

PHASE 4 TRAFFIC; IR-480

TRAFFIC TO BE RESET TO PERMANENT STRIPING LOCATIONS. SHORT TERM LANE CLOSURES, AS PER THE PLCS, MAY BE ENACTED TO COMPLETE PAINTING OPERATIONS. LANE CLOSURES PER SCD MT-95.30 AND MT-98.11. CONTRACTOR TO VERIFY PLCS SCHEDULE PRIOR TO SUBMITTING TRAFFIC CONTROL PLAN.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
START OF CONSTRUCTION	N/A	14 CALENDAR DAYS PRIOR TO TRAFFIC PATTERN CHANGES IMPLEMENTATION.

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

ITEM 614 - MAINTAINING TRAFFIC

ON THE IR-71 RAMP TO WESTBOUND IR-480, A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES - EXCEPT AS NOTED IN THE DETOUR PLANS - BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 502 STRUCTURE FOR MAINTAINING TRAFFIC, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, ITEM 615 ROADS FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410 AND 614.

ON IR-480, A MINIMUM OF 3 LANES EASTBOUND AND 4 LANES WESTBOUND SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT; WITH THE EXCEPTION OF THE DETOUR PLANS AND SHORT TERM AND PAINTING OPERATIONS.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD CLOSURES	≥ 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	>12 HOURS & <2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	≤ 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER	5 M. GAL.
ITEM 616, CALCIUM CHLORIDE	0.5 TON

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 SPECIAL EVENTS:

NEW YEAR'S (OBSERVED)	GENERAL/REGULAR ELECTION DAY
THANKSGIVING	MEMORIAL DAY
CHRISTMAS (OBSERVED)	FOURTH OF JULY (OBSERVED)
LABOR DAY	

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

DAY OF HOLIDAY OR SPECIAL 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
TUESDAY (GEN./REG. ELECTION)	5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

NEWLY CONSTRUCTED LANE ADDITIONS, ONCE COMPLETED AND INITIALLY OPENED TO TRAFFIC, SHALL BE OPEN TO TRAFFIC DURING ALL SUBSEQUENT DESIGNATED HOLIDAYS AND SPECIAL EVENTS, AND RELATED PERIODS OF TIME, SPECIFIED ABOVE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

PERMITTED LANE CLOSURE SCHEDULE (PLCS)

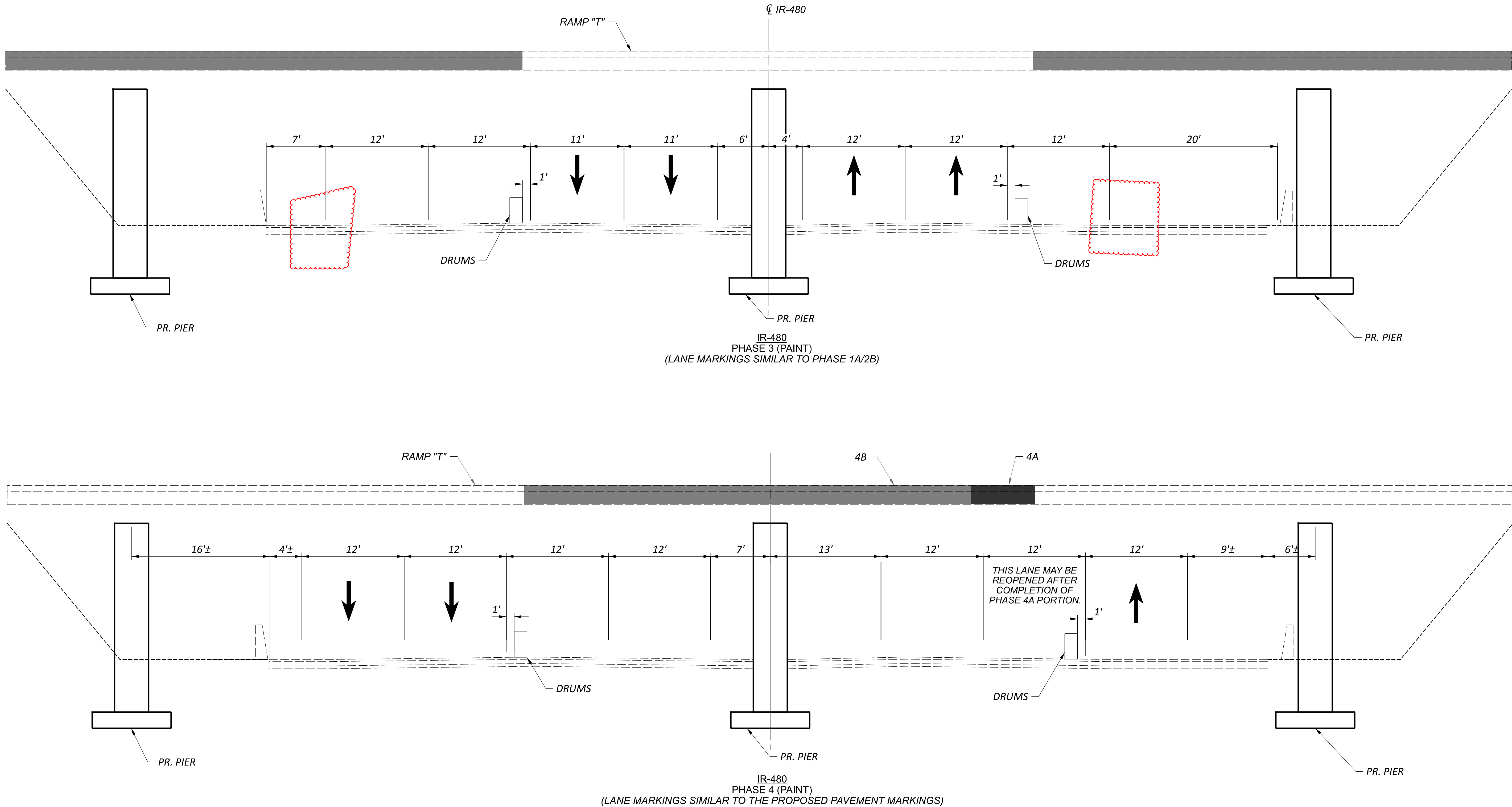
LANE CLOSURE(S) SHALL CONFORM TO THE PLCS. PUBLISHED PLCS INFORMATION CAN BE FOUND ON THE ODOT WEBSITE AT: [HTTPS://WWW.TRANSPORTATION.OHIO.GOV/WPS/PORTAL/GOV/ODOT/WORKING/DATA-TOOLS/RESOURCES/PERMITTED-LANE-](https://www.transportation.ohio.gov/wps/portal/gov/odot/working/data-tools/resources/permited-lane)

THE MONTHLY PUBLISHED SCHEDULES REQUIRED TO BE USED, FOR EACH PLCS SEGMENT WITHIN THE PROJECT AREA, ARE THOSE THAT COMPRISE THE CONSECUTIVE 12-MONTH PERIOD BEGINNING 15 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE AND ENDING 4 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE. THESE SAME 12 MONTHS APPLY FOR THE LIFE OF THE PROJECT AND SHALL BE APPLIED TO EACH RESPECTIVE MONTH OF CONSTRUCTION (MONTH OF LANE CLOSURE(S) SHALL MATCH MONTH OF PLCS USED). LANE CLOSURE(S) IN PLACE FOR MULTIPLE MONTHS SHALL ALWAYS COMPLY WITH THE CURRENT RESPECTIVE MONTH.









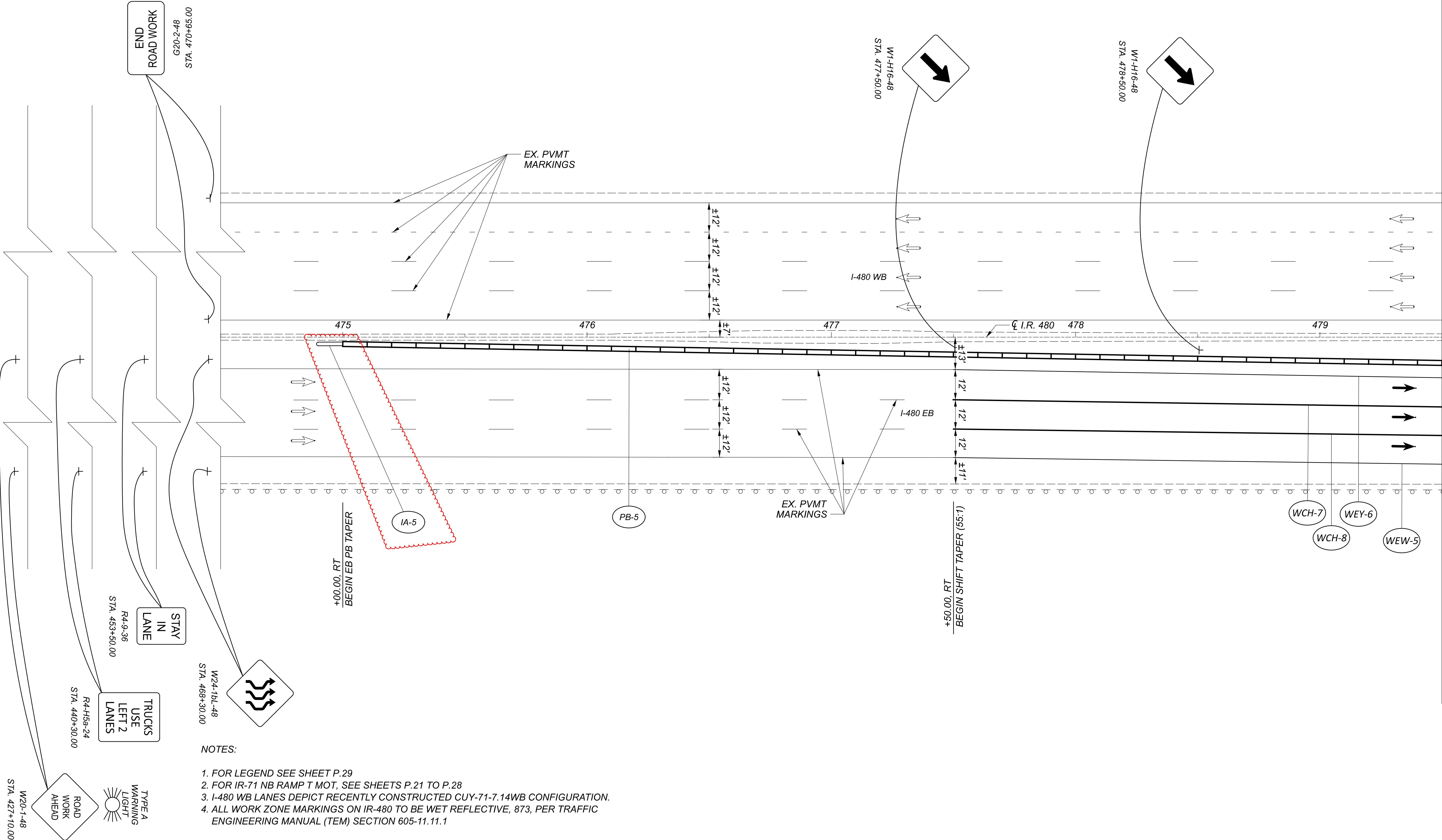
LEGEND

- AREA TO BE PAINTED
- DIRECTION OF TRAFFIC

NOTES:

- THE WORK IN PHASE 3 AND 4 CONSISTS OF PAINTING THE STEEL SUPERSTRUCTURE FOR SFN. 1814258 AND SFN 1814249.
- SINGLE AND DOUBLE LANE CLOSURES ON IR-480 DURING PLC ONLY TO COMPLETE WORK.  
WB IR-480 MAY BE REDUCED TO 2-LANES FROM 6:30 PM UNTIL 6:30 AM DAILY.  
EB IR-480 MAY BE REDUCED TO 1-LANE FROM 10:30 PM UNTIL 4:30 AM DAILY.  
EB IR-480 MAY BE REDUCED TO 2-LANES FROM 6:30 PM UNTIL 5:30 AM DAILY.
- TYPICALS REPRESENT CLOSURES PER PLC.
- LANE CLOSURES PER SCD MT 95.30.





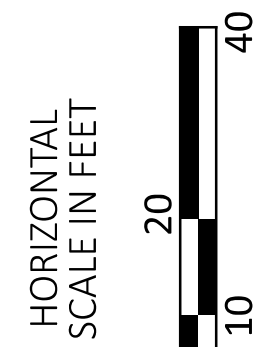
NOTES:

1. FOR LEGEND SEE SHEET P.29
2. FOR IR-71 NB RAMP T MOT, SEE SHEETS P.21 TO P.28
3. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14WB CONFIGURATION.
4. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1



MAINTENANCE OF TRAFFIC - I-480 - PHASES 1B, 2A  
STA 474+50.00 TO STA 479+50.00

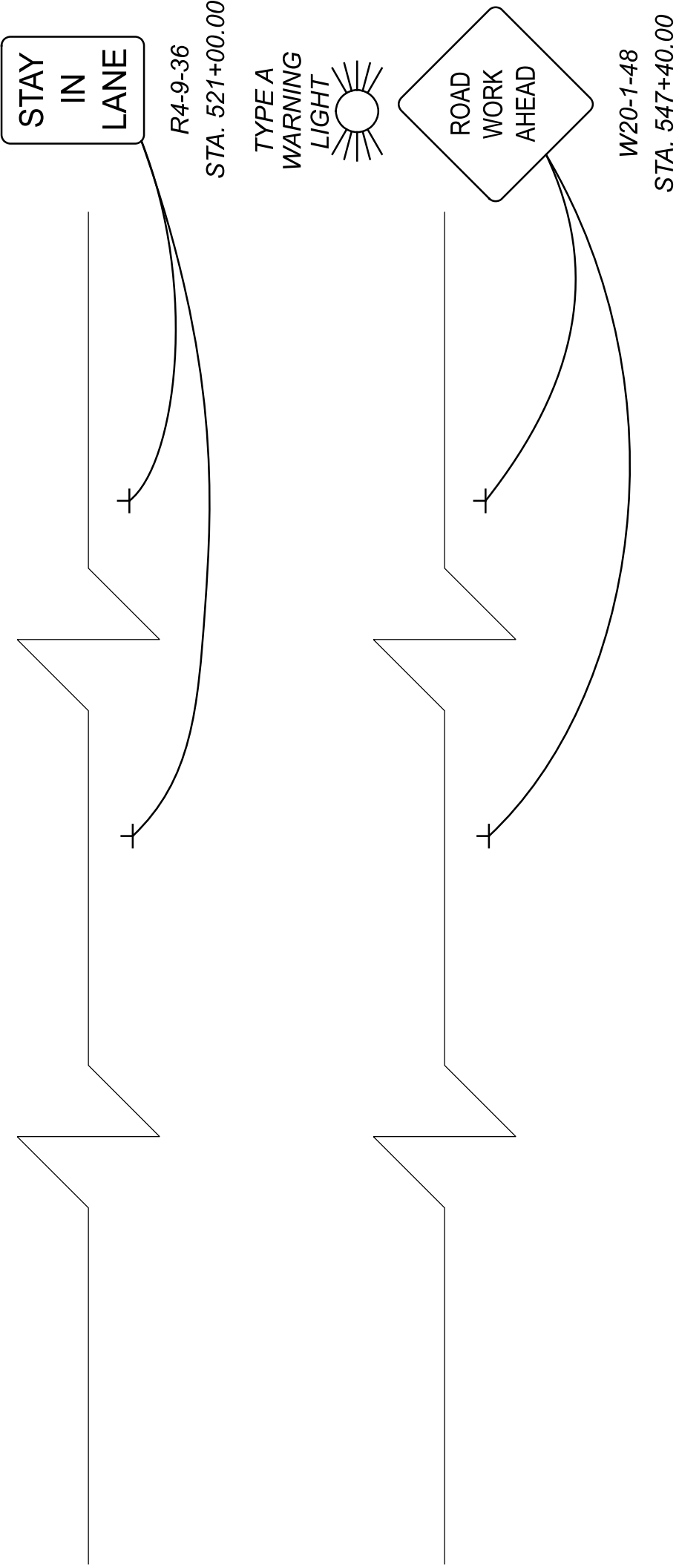
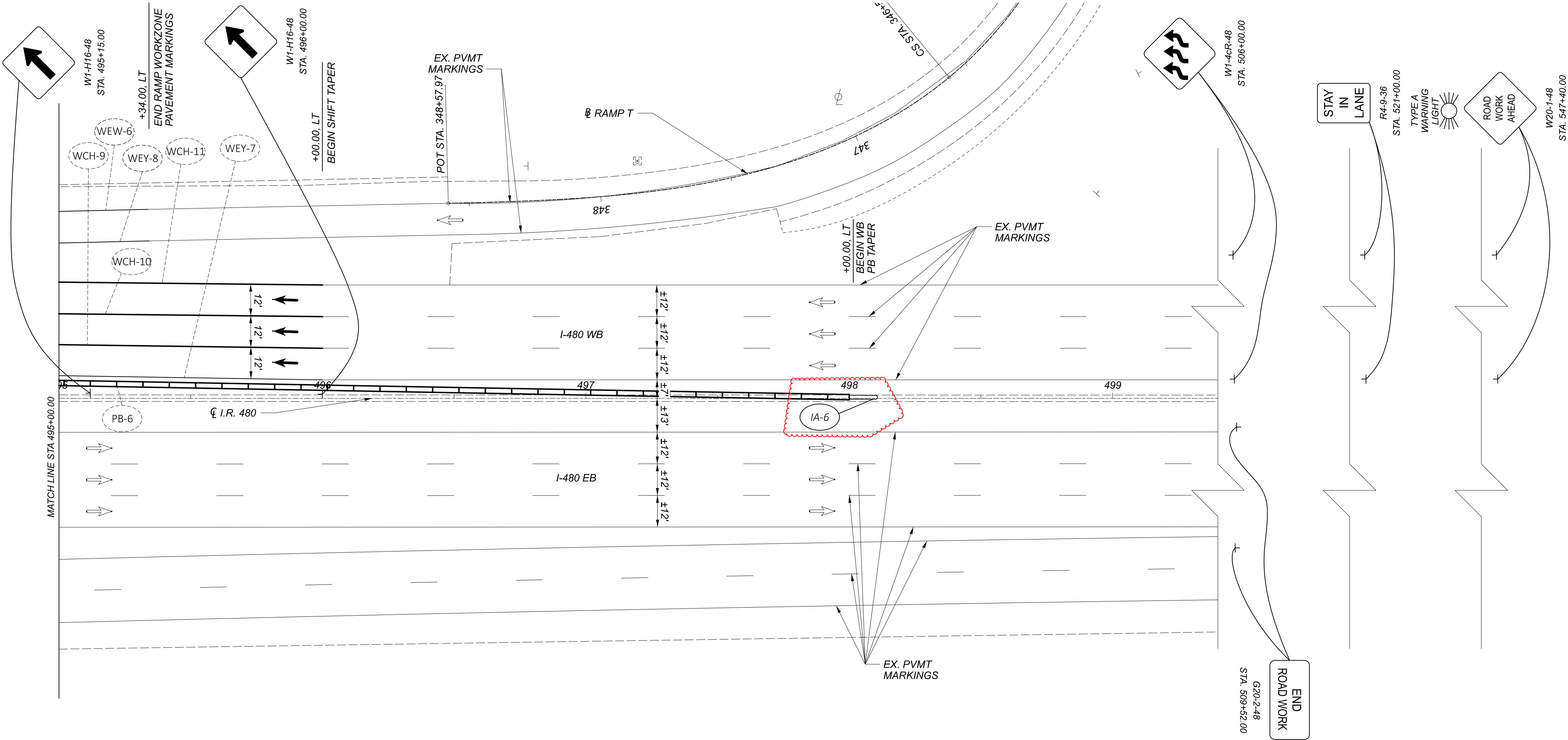
DESIGN AGENCY	
<b>M M</b> <b>MOTT MACDONALD</b>	
20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135	
DESIGNER	
SMS	
REVIEWER	
SJP 09/17/25	
PROJECT ID	
114536	
SHEET	TOTAL
P.34	167





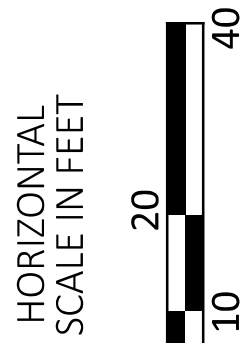
NOTES:

- 1. FOR LEGEND, SEE SHEET P.29
- 2. FOR IR-71 NB RAMP T MOT, SEE SHEETS P.21 TO P.28
- 3. I-480 WB LANES DEPICT RECENTLY CONSTRUCTED CUY-71-7.14 WB CONFIGURATION
- 4. ALL WORK ZONE MARKINGS ON IR-480 TO BE WET REFLECTIVE, 873, PER TRAFFIC ENGINEERING MANUAL (TEM) SECTION 605-11.11.1



MAINTENANCE OF TRAFFIC - I-480 - PHASES 1B, 2A  
STA 495+00.00 TO STA 499+40.00

DESIGN AGENCY	
MOTT MACDONALD	
20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135	
DESIGNER	
SMS	
REVIEWER	
SJP 09/17/25	
PROJECT ID	
114536	
SHEET	TOTAL
P.38	167





CUY-71-10.07 SW

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: /15/2026 TIME: 1:45:45 PM USER: PIA61677  
www://mtdt-use-pw-bentley.com:mtdt-use-pw-20/20Documents/607106271-ODOT CUY-071-10-07 SW/CUY-071-10-07 SW/114536/400-Engineering/Roadway/Sheets/114536\_GG001.dgn

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## GENERAL SUMMARY

The logo for Mott MacDonald is displayed, featuring a large 'M' and 'M' with the company name 'MOTT MACDONALD' in a bold, sans-serif font. Below the logo, the company's address is listed: '20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135'. Further down, the roles 'DESIGNER' and 'REVIEWER' are specified, followed by the initials 'SJP' and the date '09/17/25'. At the bottom, a table shows 'PROJECT ID' as '114536', 'SHEET' as 'P.39', and 'TOTAL' as '167'.



SHEET NUM.								PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
42		76		86		99		01/BRO	02/IMS						
														LIGHTING	
				10				10		625	00450	10	EACH	CONNECTION, FUSED PULL APART	
				15				15		625	00480	15	EACH	CONNECTION, UNFUSED PERMANENT	
				2				2		625	10490	2	EACH	LIGHT POLE, CONVENTIONAL, DESIGN A15B40	
				3				3		625	10490	3	EACH	LIGHT POLE, CONVENTIONAL, DESIGN AT15B40	
				2				2		625	10614	2	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE	86
				3				3		625	14000	3	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
				5				5		625	18200	5	EACH	BRACKET ARM, 15'	
				3,834				3,834		625	23302	3,834	FT	NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE	
				750				750		625	23400	750	FT	NO. 10 AWG POLE AND BRACKET CABLE	
				668				668		625	25400	668	FT	CONDUIT, 2", 725.04	
				580				580		625	25402	580	FT	CONDUIT, 2", 725.05	
				5				5		625	26252	5	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED) TYPE II, 125W	
				768				768		625	29002	768	FT	TRENCH, 24" DEEP	
				2				2		625	29900	2	EACH	JUNCTION BOX, HL-30.31	
				3				3		625	30700	3	EACH	PULL BOX, 725.08, 18"	
				2				2		625	31510	2	EACH	PULL BOX REMOVED	
				5				5		625	32000	5	EACH	GROUND ROD	
				768				768		625	36010	768	FT	UNDERGROUND WARNING/MARKING TAPE	
				1				1		625	39520	1	EACH	PULL BOX CLEANED	86
				5				5		625	75400	5	EACH	LIGHT POLE REMOVED	
				3				3		625	75500	3	EACH	LIGHT POLE FOUNDATION REMOVED	
26								26		626	00110	26	EACH	TRAFFIC CONTROL	
		40						40		630	02100	40	FT	BARRIER REFLECTOR, TYPE 2, (BI-DIRECTIONAL)	
		29						29		630	03100	29	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
		35						35		630	80100	35	SF	GROUND MOUNTED SUPPORT, NO. 3 POST	
		5						5		630	86002	5	EACH	SIGN, FLAT SHEET	
														REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
		0.38						0.38		646	10010	0.38	MILE	EDGE LINE, 6"	
		123						123		646	10310	123	FT	CHANNELIZING LINE, 12"	
		715						715		646	10620	715	FT	CHEVRON MARKING	
		1.21						1.21		807	12010	1.21	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"	
		1.23						1.23		807	12110	1.23	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	
		1,738						1,738		807	12310	1,738	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12"	
		633						633		807	12430	633	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12"	
														STRUCTURE OVER 20 FOOT SPAN (SFN 1814258)	
						LS		LS		202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	92
						87		87		202	22900	87	SY	APPROACH SLAB REMOVED	
						LS		LS		503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	92
						1,540		1,540		503	21100	1,540	CY	UNCLASSIFIED EXCAVATION	
						LS		LS		505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
						6,705		6,705		507	00100	6,705	FT	STEEL PILES HP10X42, FURNISHED	
						6,100		6,100		507	00150	6,100	FT	STEEL PILES HP10X42, DRIVEN	
						555		555		507	92201	555	FT	PREBORED HOLES, AS PER PLAN	93
						287,336		287,336		509	10000	287,336	LB	EPOXY COATED STEEL REINFORCEMENT	
						14,644		14,644		509	30020	14,644	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
						564		564		511	34446	564	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
						137		137		511	34450	137	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	
						177		177		511	41012	177	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS	
						253		253		511	44112	253	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	
						422		422		511	46512	422	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
						1,647		1,647		512	10100	1,647	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
						70		70		512	10300	70	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
						91		91		512	33000	91	SY	TYPE 2 WATERPROOFING	
						771,146		771,146		513	10300	771,146	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5	
						9,048		9,048		513	20000	9,048	EACH	WELDED STUD SHEAR CONNECTORS	

GENERAL SUMMARY

DESIGN AGENCY

M

M

MOTT  
MACDONALD

20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135

DESIGNER

SMS

REVIEWER

SJP 09/17/25

PROJECT ID

114536

SHEET

P.40

TOTAL

167



MODEL Sheet: PAPERSIZE: 34x22 (in.) DATE: 1/5/2026 TIME: 1:49:56 PM USER: PIA81677  
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DESIGN AGENCY	
<b>M</b>	<b>M</b>
<b>MOTT MACDONALD</b>	
20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135	
DESIGNER	
<b>SMS</b>	
REVIEWER	
<b>SJP</b>	<b>09/17/25</b>
PROJECT ID	
<b>114536</b>	
SHEET	TOTAL
<b>P.41</b>	<b>167</b>

## GENERAL SUMMARY



EARTHWORK QUANTITIES								
STA	CUT	FILL	ADD'L CUT FOR BENCHING	ADD'L FILL FOR BENCHING	TOTAL CUT	TOTAL FILL	203	
							EXCAVATION	EMBANKMENT
	SQ FT	SQ FT	SQ FT	SQ FT	SQ FT	SQ FT	CU YD	CU YD
326+00.00	0	0			0	0		
326+10.00	10	1			10	1	2	0
326+25.00	10	1			10	1	6	1
326+50.00	12	1			12	1	10	1
326+75.00	13	1			13	1	12	1
327+00.00	14	1			14	1	13	1
327+25.00	14	2			14	2	13	1
327+50.00	16	2			16	2	14	2
327+75.00	18	3			18	3	16	2
328+00.00	19	5			19	5	17	4
328+25.00	18	20	95	92	113	112	61	54
328+50.00	48	25	87	77	135	102	115	99
328+75.00	42	35	104	91	146	126	130	106
329+00.00	40	55	114	109	154	164	139	134
329+25.00	36	109	241	234	277	343	200	235
329+42.45	34	153	176	172	210	325	157	216
329+60.76	38	272	317	311	355	583	192	308
329+81.00	19	310	271	263	290	573	242	433
333+80.28	20	6			20	6		
334+10.28	35	6			35	6	31	7
334+47.80	32	120	185	182	217	302	175	214
334+75.00	33	151	183	181	216	332	218	319
335+00.00	33	99	152	150	185	249	186	269
335+25.00	35	83	87	86	122	169	142	193
335+33.40	38	92	72	71	110	163	36	52
335+50.00	16	64	57	52	73	116	56	86
335+75.00	15	73	94	88	109	161	85	128
336+00.00	15	78	93	86	108	164	101	150
336+25.00	15	71	116	108	131	179	111	159
336+50.00	15	61	114	104	129	165	120	159
336+75.00	13	49	80	71	93	120	103	132
337+00.00	12	38	81	78	93	116	86	109
337+25.00	13	17	59	53	72	70	76	86
337+50.00	13	16	74	71	87	87	74	73
337+75.00	13	11	43	43	56	54	66	65
338+00.00	12	2			12	2	31	26
338+28.89	11	0			11	0	12	1
338+50.00	14	0			14	0	10	0
338+75.00	9	0			9	0	11	0
338+85.30	0	0			0	0	0	0
339+00.00	0	0			0	0	0	0
339+25.00	0	0			0	0	0	0
Slope Between Rear Abutment to Pier 1							386	0
Slope Between Pier 3 to Forward Abutment							1581	0
TOTALS CARRIED TO GENERAL SUMMARY							5033	3826

SEEDING QUANTITIES			
STA	WIDTH	SF	SY
326+00.00	0		
326+10.00	6	30	3
326+25.00	6	90	10
326+50.00	6	150	17
326+75.00	6	150	17
327+00.00	6	150	17
327+25.00	7	163	18
327+50.00	8	188	21
327+75.00	10	225	25
328+00.00	13	288	32
328+25.00	25	475	53
328+50.00	27	650	72
328+75.00	28	688	76
329+00.00	36	800	89
329+25.00	52	1100	122
329+42.45	60	977	109
329+60.76	82	1300	144
329+81.00	54	1376	153
333+80.28	9		
334+10.28	7	240	27
334+47.80	37	825	92
334+75.00	44	1102	122
335+00.00	39	1038	115
335+25.00	33	900	100
335+33.50	31	272	30
335+50.00	24	454	50
335+75.00	27	638	71
336+00.00	29	700	78
336+25.00	31	750	83
336+50.00	29	750	83
336+75.00	25	675	75
337+00.00	23	600	67
337+25.00	16	488	54
337+50.00	23	488	54
337+75.00	20	538	60
338+00.00	10	375	42
338+28.89	6	231	26
338+50.00	5	116	13
338+75.00	5	125	14
338+85.30	0	0	0
339+00.00	0	0	0
339+25.00	0	0	0
TOTALS CARRIED TO GENERAL SUMMARY			2233

EARTHWORK SUBSUMMARY



ESTIMATED QUANTITIES						CALC.	DATE	CHK'D	DATE
						JMR	09/2025	LAG	09/2025
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GENERAL	SHEET REF.
202	11003	LS	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					3/51
202	22900	87	SY	APPROACH SLAB REMOVED			87		
503	11101	LS	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					3/51
503	21100	1,540	CY	UNCLASSIFIED EXCAVATION	1,160	380			
505	11100	LS	LS	PILE DRIVING EQUIPMENT MOBILIZATION					
507	00100	6,705	FT	STEEL PILES HP10X42, FURNISHED	4,095	2,610			
507	00150	6,100	FT	STEEL PILES HP10X42, DRIVEN	3,780	2,320			
507	92201	555	FT	PREBORED HOLES, AS PER PLAN	555				4/51
509	10000	287,336	LB	EPOXY COATED STEEL REINFORCEMENT	46,284	73,433	167,619		
509	30020	14,644	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			14,644		
511	34447	564	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			564		4/51
511	34450	137	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			137		
511	41012	177	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		177			
511	44112	253	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	253				
511	46512	422	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	422				
512	10100	1,647	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	210	510	927		
512	10300	70	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN				70	
512	33000	91	SY	TYPE 2 WATERPROOFING	91				
513	10300	771,146	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5			771,146		
513	20000	9,048	EACH	WELDED STUD SHEAR CONNECTORS			9,048		
514	00060	34,727	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			34,727		
514	00066	34,727	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			34,727		
516	11210	153	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL				153	
516	44101	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11 IN x 18 IN x 2.1284 IN) (PTFE)	12				4/51
516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (15 IN x 24 IN x 2.7784 IN)		6			
516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (16 IN x 24 IN x 2.9084 IN)		6			
516	44200	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (17 IN x 26 IN x 3.0884 IN)		6			
518	20000	226	SY	PREFABRICATED GEOCOMPOSITE DRAIN	226				
518	40000	202	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	202				
518	40010	98	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	98				
526	30010	327	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")				327	
526	90010	154	FT	TYPE A INSTALLATION				154	
601	20000	656	SY	CRUSHED AGGREGATE SLOPE PROTECTION				656	

ESTIMATED QUANTITIES  
BRIDGE NO. CUY-71-10.07 SW  
IR-71 NB RAMP TO IR-480 WB

SFN  
1814258

DESIGN AGENCY  
M M  
MOTT  
MACDONALD  
20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135

DESIGNER  
LLB

CHECKER  
SK

REVIEWER  
JMR 09/17/25

PROJECT ID  
114536

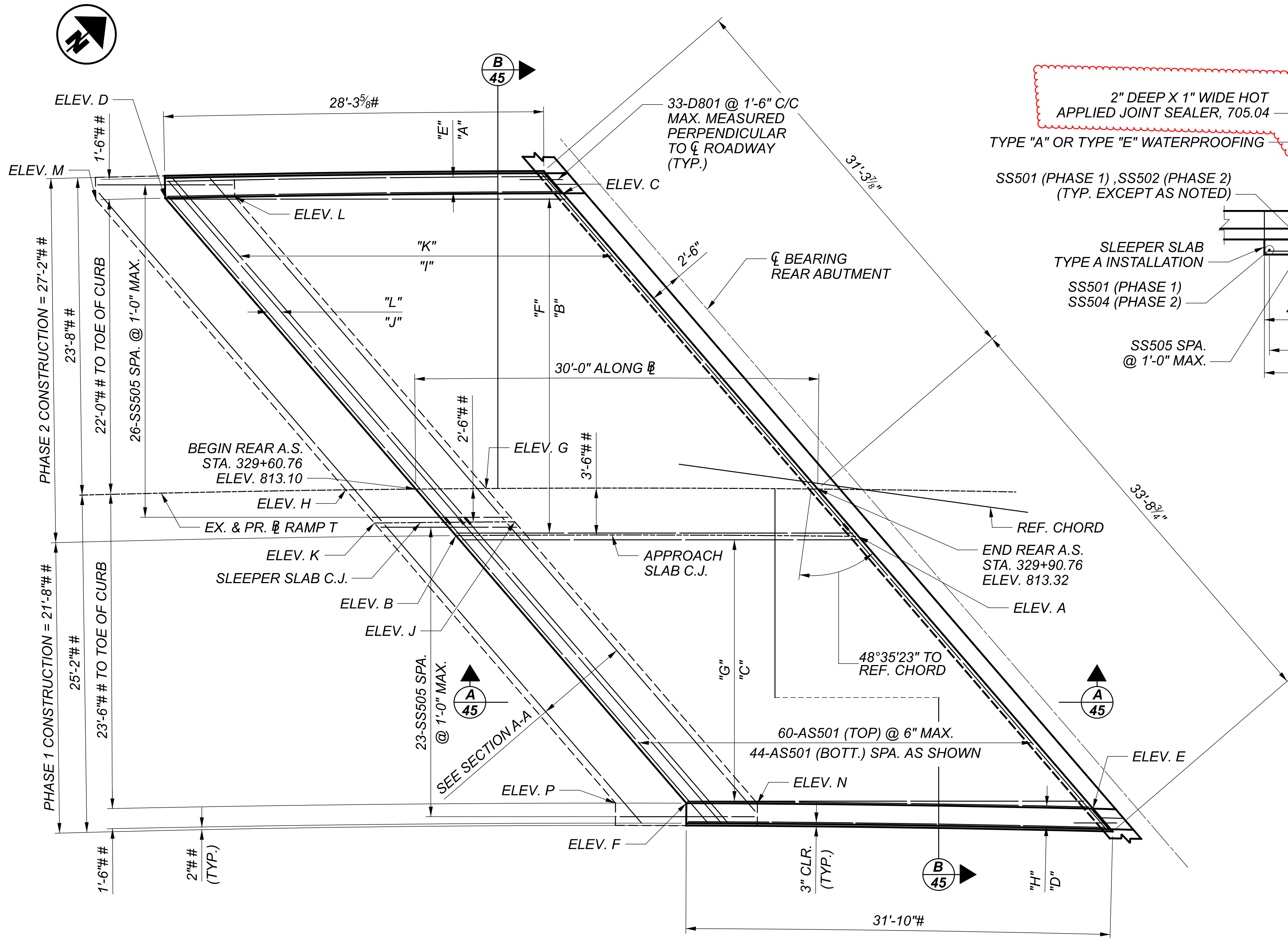
SUBSET  
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TOTAL  
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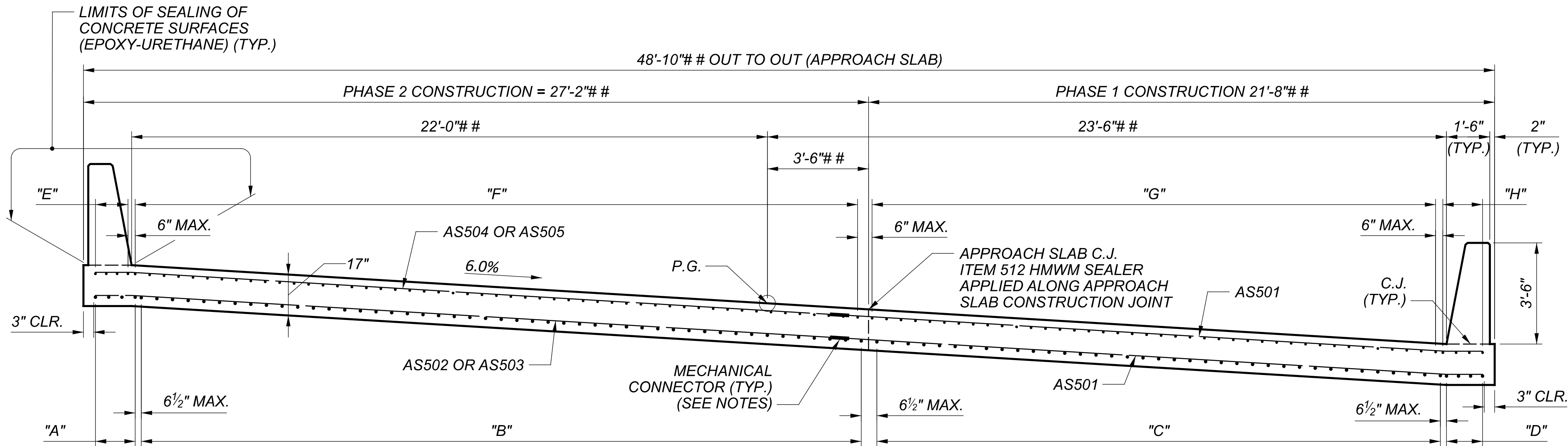
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P.99

TOTAL  
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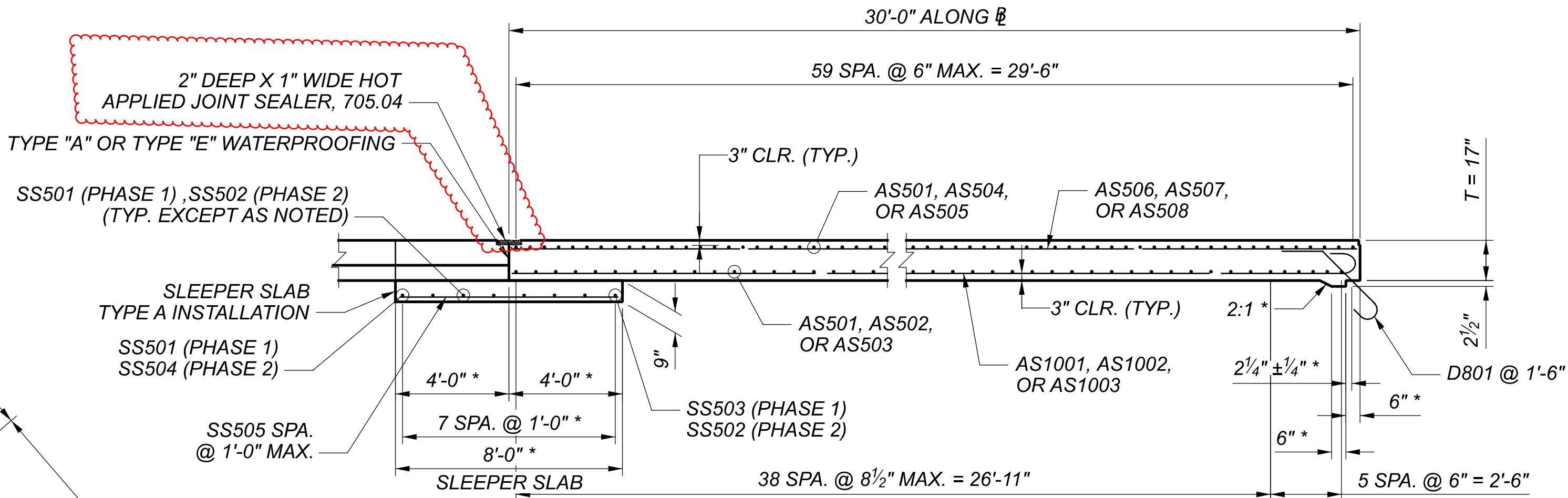


REAR APPROACH SLAB PLAN



SECTION B-B

(OTHER REINFORCEMENT NOT SHOWN FOR CLARITY)



SECTION A-A

LEGEND:

- # - DIMENSION MEASURED ALONG THE LEFT OR RIGHT EDGE OF APPROACH SLAB
- ## - DIMENSION MEASURED RADIALLY
- \* - NORMAL TO JOINT

NOTES:

- EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL COUPLER ATTACHMENT.
- SEE STRUCTURE NOTES FOR REQUIREMENTS FOR CHAMFER, CONCRETE COVER, AND REINFORCING STEEL LAP AND DEVELOPMENT LENGTHS.
- MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.

SHEET REFERENCES:

- SEE SHEET 17/51 FOR THE BARRIER ELEVATIONS AND DETAILS.

STANDARD CONSTRUCTION DRAWINGS:

- REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:  
AS-1-15  
AS-2-15  
SBR-1-20

ELEVATIONS	
MARK	ELEV.
T/ APPROACH SLAB	
ELEV. A	813.13
ELEV. B	812.92
ELEV. C	814.51
ELEV. D	814.25
ELEV. E	812.01
ELEV. F	811.85
T/ SLEEPER SLAB	
ELEV. G	811.73
ELEV. H	811.63
ELEV. J	811.59
ELEV. K	811.50
ELEV. L	812.87
ELEV. M	812.77
ELEV. N	810.38
ELEV. P	810.46

LEGEND	BAR MARK	LOCATION	NO. OF SETS	SPACING
"A"	AS1003 (SERIES)	BOTTOM	4	6 1/2" MAX.
"B"	AS1001	BOTTOM	47	6 1/2" MAX.
"C"	AS1001	BOTTOM	37	6 1/2" MAX.
"D"	AS1002 (SERIES)	BOTTOM	4	6 1/2" MAX.
"E"	AS508 (SERIES)	TOP	4	6" MAX.
"F"	AS506	TOP	51	6" MAX.
"G"	AS506	TOP	40	6" MAX.
"H"	AS507 (SERIES)	TOP	4	6" MAX.
"I"	AS502 (SERIES)	BOTTOM	42	AS SHOWN
"J"	AS503 (SERIES)	BOTTOM	2	AS SHOWN
"K"	AS504 (SERIES)	TOP	57	6" MAX.
"L"	AS505 (SERIES)	TOP	3	6" MAX.



NOTES:

1. EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL CONNECTOR ATTACHMENT.
2. SEE STRUCTURE NOTES FOR REQUIREMENTS FOR CHAMFER, CONCRETE COVER, AND REINFORCING STEEL LAP AND DEVELOPMENT LENGTHS.
3. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.

SHEET REFERENCES:

1. SEE SHEET 47/51 FOR THE BARRIER ELEVATIONS AND DETAILS.

STANDARD CONSTRUCTION DRAWINGS:

1. REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:  
AS-1-15  
AS-2-15  
SBR-1-20

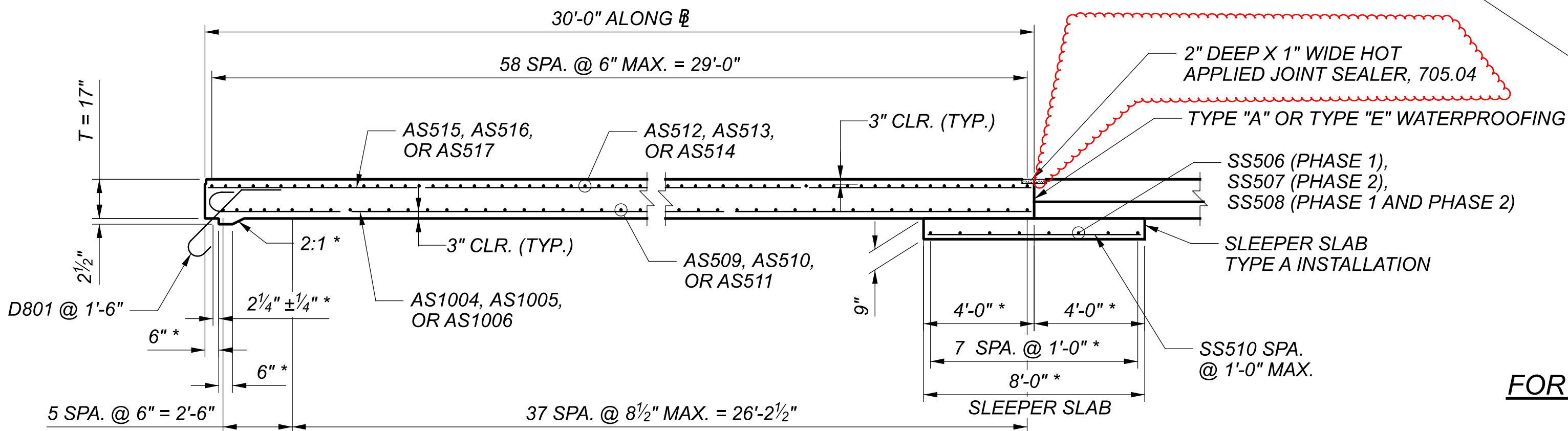
LEGEND:

# - DIMENSION MEASURED ALONG THE LEFT OR RIGHT EDGE OF APPROACH SLAB

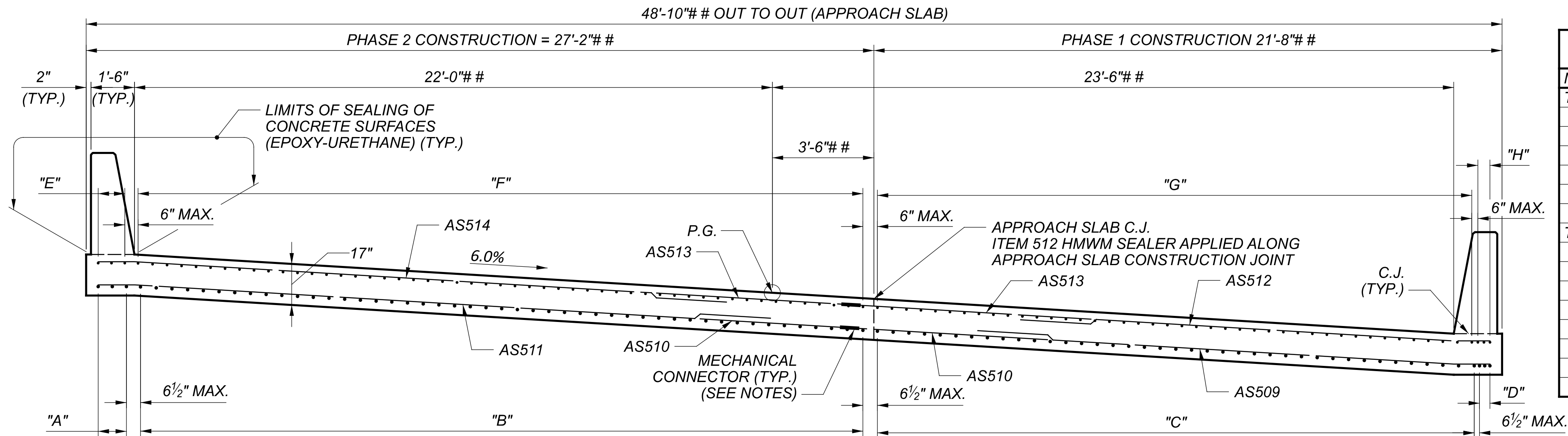
## - DIMENSION MEASURED RADIALLY

\* - NORMAL TO JOINT

REQ'D LAP LENGTH	
	HORIZONTAL
#5	2'-5"



SECTION A-A



SECTION B-B

(OTHER REINFORCEMENT NOT SHOWN FOR CLARITY)

ELEVATIONS	
MARK	ELEV.
T/ APPROACH SLAB	
ELEV. A	807.75
ELEV. B	806.71
ELEV. C	810.42
ELEV. D	809.54
ELEV. E	805.50
ELEV. F	804.38
T/ SLEEPER SLAB	
ELEV. G	805.95
ELEV. H	805.43
ELEV. J	805.67
ELEV. K	805.14
ELEV. L	808.34
ELEV. M	807.89
ELEV. N	803.23
ELEV. P	802.69

LEGEND	BAR MARK	LOCATION	NO. OF SETS	SPACING
"A"	AS1006 (SERIES)	BOTTOM	3	6 1/2" MAX.
"B"	AS1004	BOTTOM	47	6 1/2" MAX.
"C"	AS1004	BOTTOM	39	6 1/2" MAX.
"D"	AS1005 (SERIES)	BOTTOM	3	6 1/2" MAX.
"E"	AS515 (SERIES)	TOP	3	6" MAX.
"F"	AS516	TOP	51	6" MAX.
"G"	AS516	TOP	42	6" MAX.
"H"	AS517 (SERIES)	TOP	3	6" MAX.
"I"	AS509	BOTTOM	43	AS SHOWN
"J"	AS510	BOTTOM	43	AS SHOWN
"K"	AS511	BOTTOM	43	AS SHOWN
"L"	AS512	TOP	58	6" MAX.
"M"	AS513	TOP	59	6" MAX.
"N"	AS514	TOP	59	6" MAX.

FORWARD APPROACH SLAB PLAN & SECTIONS

BRIDGE NO. CUY-71-10.07 SW

IR-71 NB RAMP TO IR-480 WB

SFN

1814258

DESIGN AGENCY

MOTT MACDONALD

20445 EMERALD PKWY

SUITE 100

CLEVELAND, OH 44135

DESIGNER

JTW

CHECKER

JMR

REVIEWER

SK

09/17/25

PROJECT ID

114536

SUBSET

46

TOTAL

51

SHEET

P.139

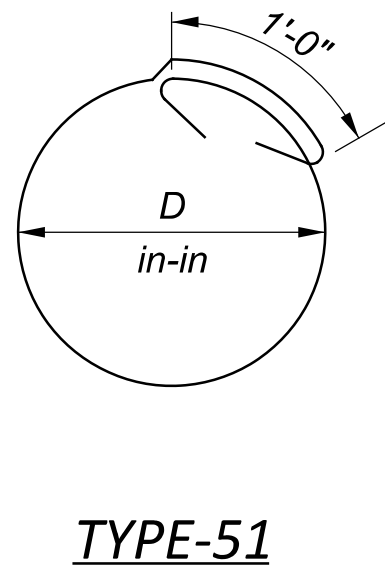
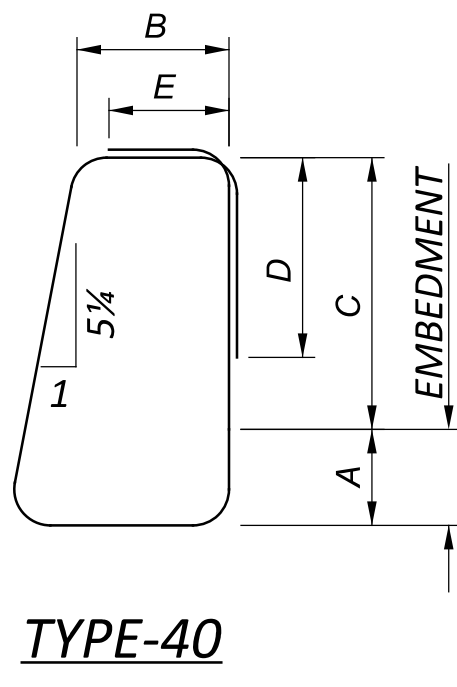
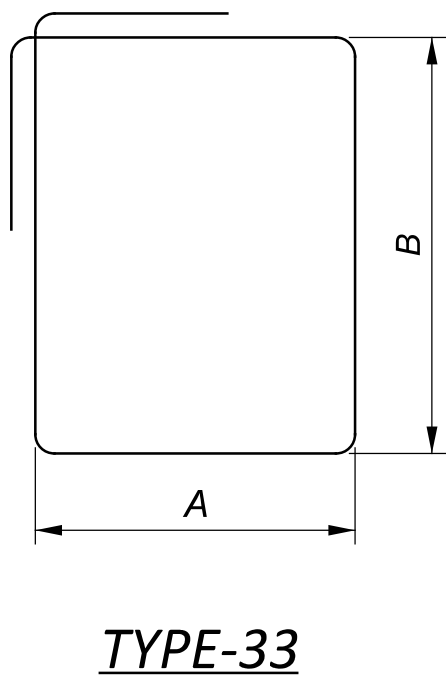
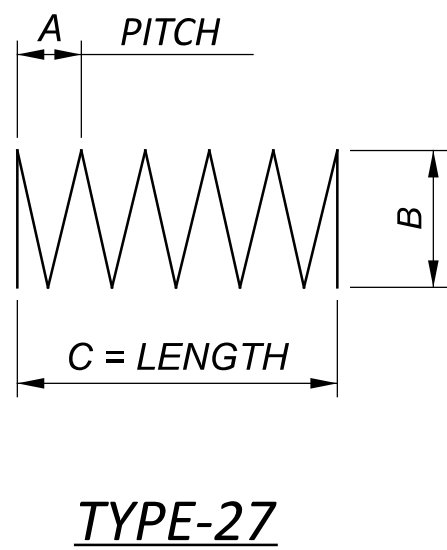
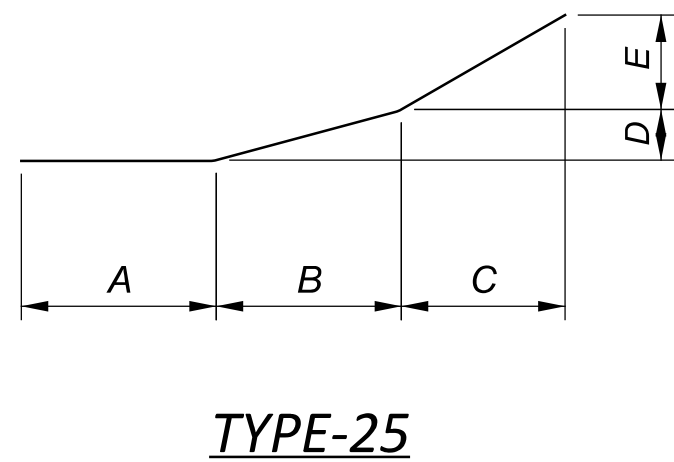
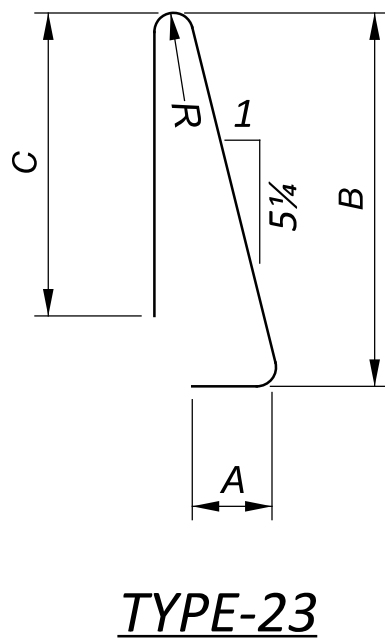
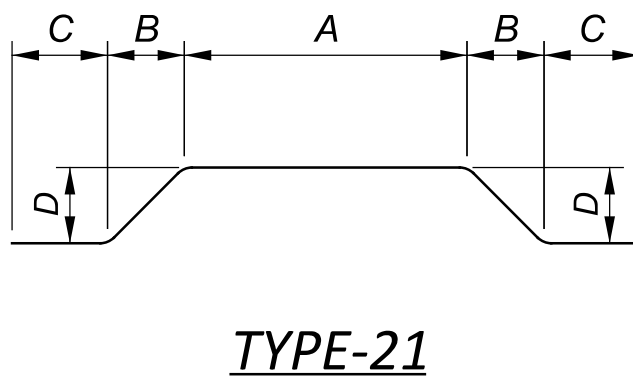
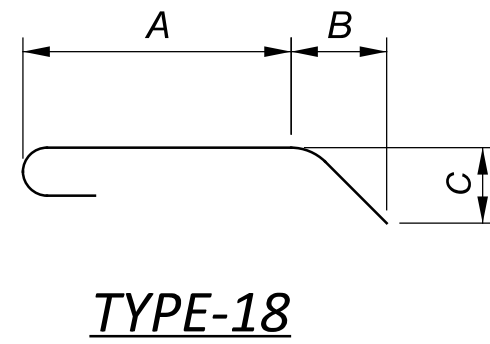
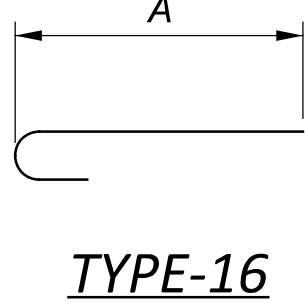
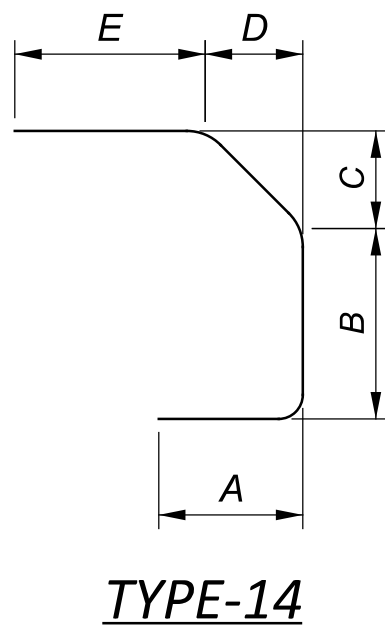
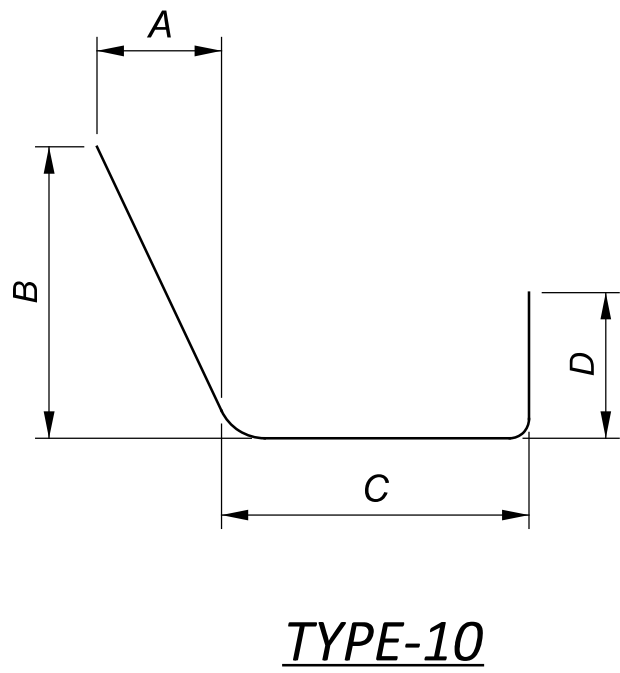
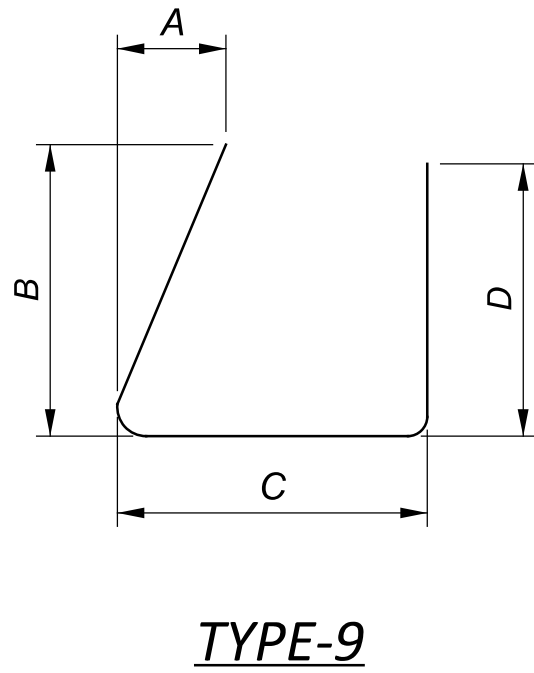
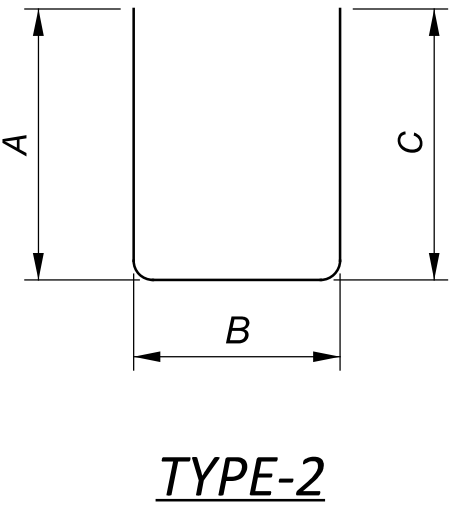
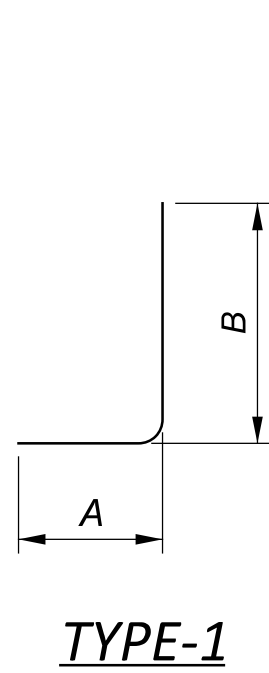
TOTAL

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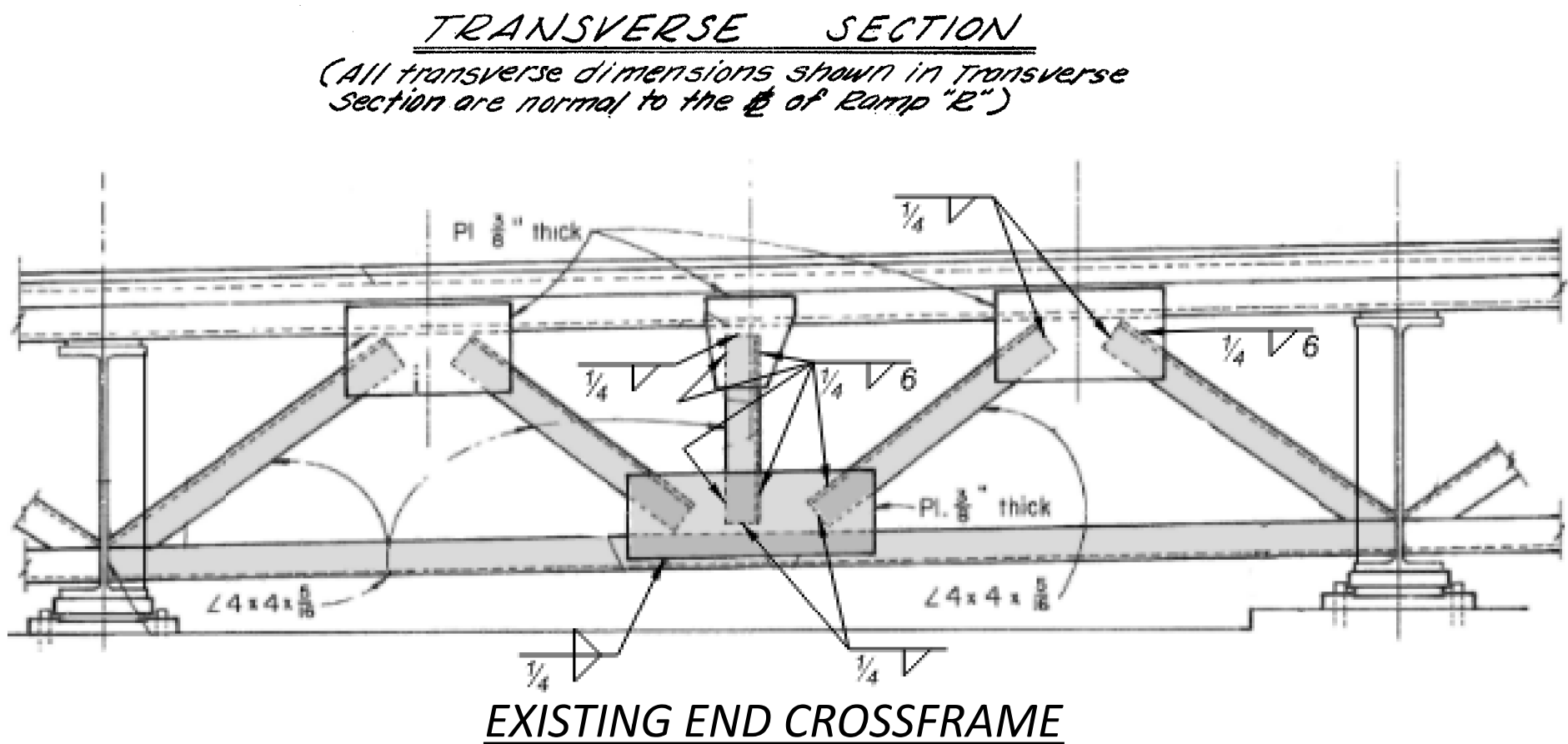
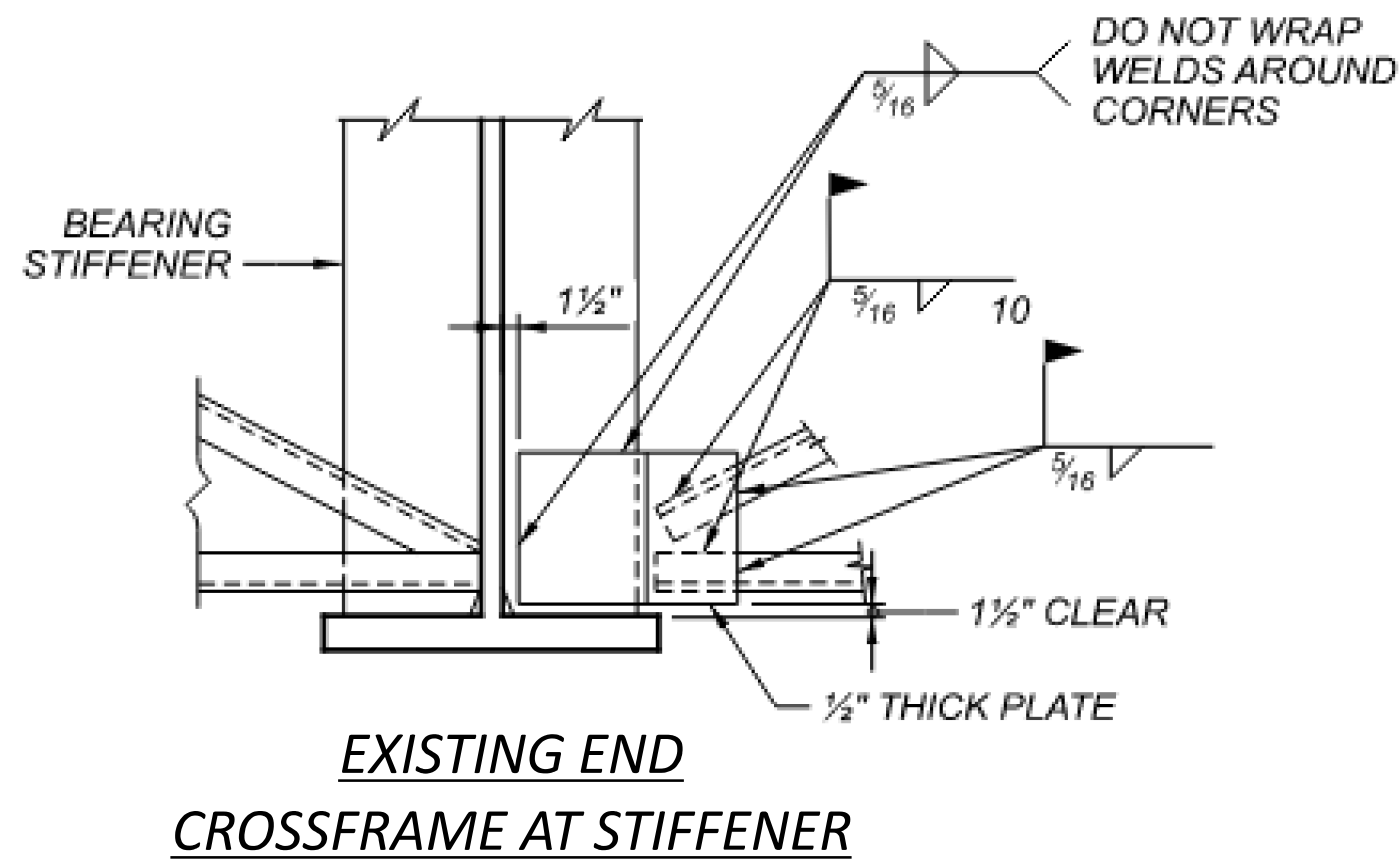
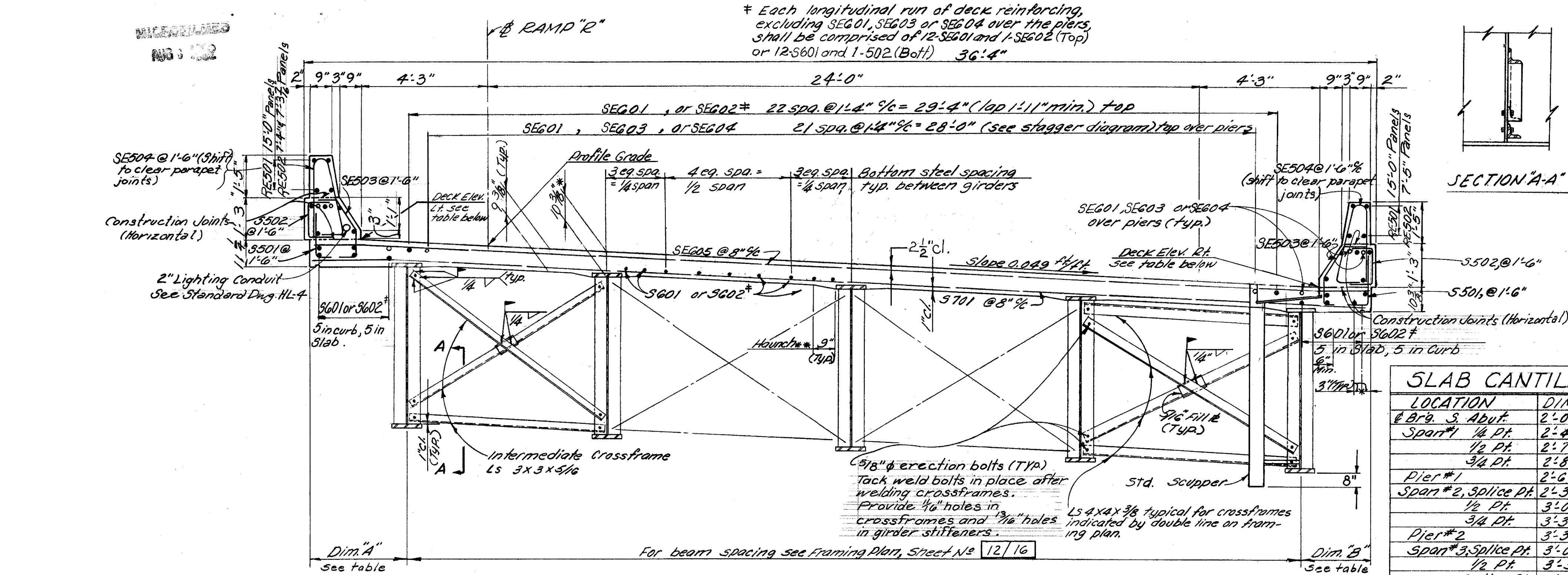
MARK	NUMBER			LENGTH	WEIGHT LBS.	TYPE	DIMENSIONS						
	PHASE 1	PHASE 2	TOTAL				A	B	C	D	E	R	INC.
REAR APPROACH SLAB (FOR REFERENCE ONLY)													
*AS501	104		104	29'- 6"	3,200	STR							
*AS502		1	1	34'- 0"									
		S.O.	S.O.	T O	1,513	STR							5/16"
*AS503		42	42	35'- 1"									
		1	1	32'- 2"									
*AS504		S.O.	S.O.	T O	68	STR							1'-2"
		2	2	33'- 4"									
*AS505		1	1	34'- 0"									
		S.O.	S.O.	T O	2,054	STR							1/4"
*AS506		57	57	35'- 1"									
		1	1	32'- 2"									
*AS507		S.O.	S.O.	T O	103	STR							9 1/2"
		3	3	33'- 9"									
AS508	40	51	91	29'- 6"	2,800	STR							
	1		1	29'- 7"									
AS509	S.O.		S.O.	T O	127	STR							6 5/16"
	4		4	31'- 2"									
AS510		1	1	28'- 1"									
		S.O.	S.O.	T O	120	STR							4 11/16"
		4	4	29'- 3"									
AS1001	37	47	84	30'- 11"	11,175	16	29'- 6"						
	1		1	31'- 3"			29'- 10"						
AS1002	S.O.		S.O.	T O	549	16	T O						5 5/16"
	4		4	32'- 7"			31'- 2"						
AS1003		1	1	29'- 6"			28'- 1"						
		S.O.	S.O.	T O	518	16	T O						4 11/16"
		4	4	30'- 8"			29'- 3"						
SS501	7		7	29'- 4"	214	STR							
SS502		7	7	33'- 7"	245	STR							
SS503	1		1	28'- 3"	29	STR							
SS504		1	1	32'- 3"	34	STR							
SS505	23	26	49	10'- 0"	511	STR							
					23,260	TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL							

MARK	NUMBER			LENGTH	WEIGHT LBS.	TYPE	DIMENSIONS						
	PHASE 1	PHASE 2	TOTAL				A	B	C	D	E	R	INC.
FORWARD APPROACH SLAB (FOR REFERENCE ONLY)													
AS509	43		43	31'- 6"	1,413	STR							
*AS510	43	43	86	12'- 0"	1,076	STR							
AS511		43	43	38'- 7"	1,730	STR							
AS512	59		59	28'- 4"	1,744	STR							
*AS513	59	59	118	15'- 0"	1,846	STR							
AS514		59	59	35'- 8"	2,195	STR							
		1	1	29'- 7"									
AS515		S.O.	S.O.	T O	94	STR							6"
		3	3	30'- 7"									
AS516	42	51	93	29'- 4"	2,845	STR							
	1		1	28'- 5"									
AS517	S.O.		S.O.	T O	92	STR							1'-1"
	3		3	30'- 7"									
AS1004	39	47	86	30'- 9"	11,379	16	29'- 4"						
	1		1	29'- 10"			28'- 5"						
AS1005	S.O.		S.O.	T O	390	16	T O						4 1/2"
	3		3	30'- 7"			29'- 2"						
		1	1	31'- 0"			29'- 7"						
AS1006		S.O.	S.O.	T O	407	16	T O						6"
		3	3	32'- 0"			30'- 7"						
SS506	8		8	34'- 6"	288	STR							
SS507		8	8	39'- 6"	330	STR							
SS508	8	8	16	10'- 0"	167	STR							
SS510	23	26	49	13'- 5"	686	STR							
					26,682	TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL							



\* DENOTES BAR REQUIRING MECHANICAL CONNECTOR. BAR DIMENSIONS GIVEN ARE TO THE CENTER OF MECHANICAL CONNECTOR.





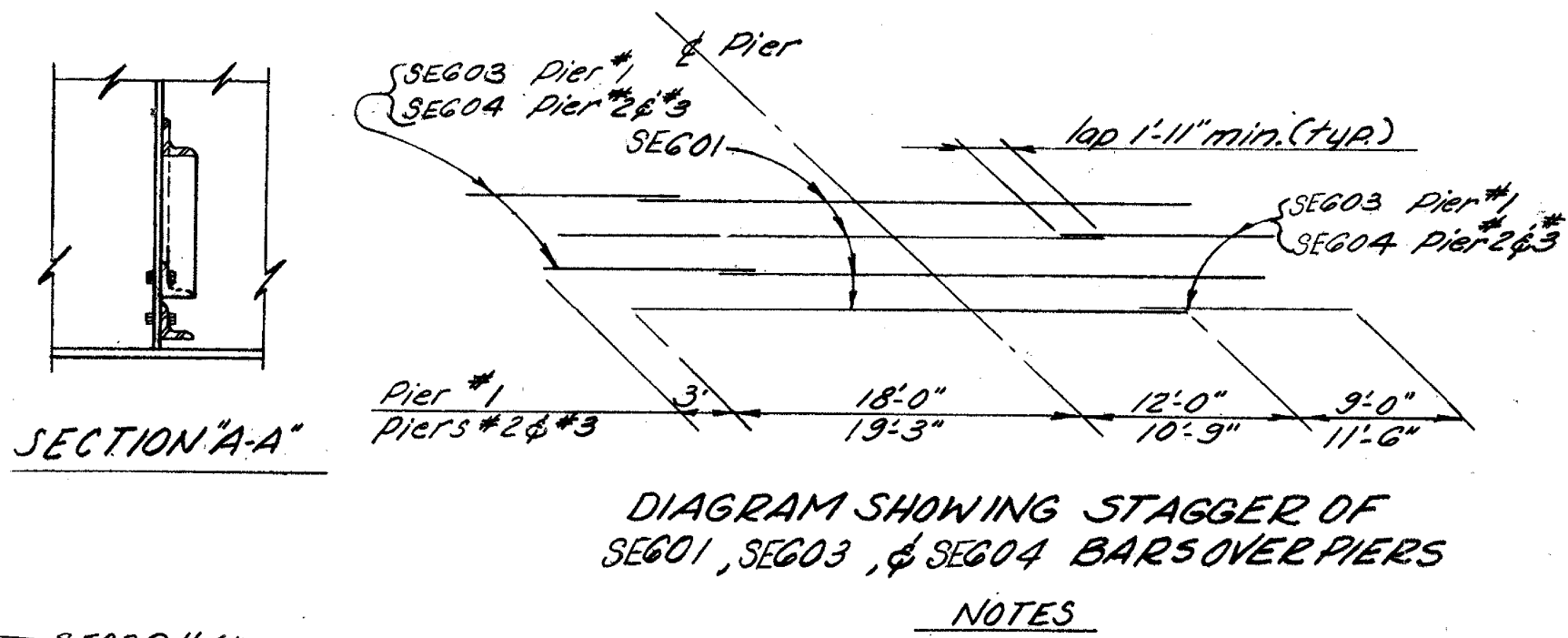
**STRUCTURE GENERAL NOTES:**  
**STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:**  
REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:  
800 DATED 7-16-21

**BRIDGE NO. CUY-480-09.69**  
**PROPOSED WORK:**  
CLEAN AND PAINT THE STRUCTURAL STEEL.

**ITEM 514- FIELD PAINTING**  
THE CONTRACTOR SHALL NOT OVERSPRAY ONTO THE CONCRETE SUPERSTRUCTURE COMPONENTS OR CONCRETE SUBSTRUCTURE COMPONENTS (E.G. DECK, RAILING, BACKWALLS, ABUTMENT, AND PIERS). THE PAINTING SHALL BE CONFINED TO THE STRUCTURAL STEEL COMPONENTS.  
CUY-480-08.69, SFN 181249:  
THE COLOR OF THE FINISH COAT SHALL BE AMS-STD-595A COLOR NO. 16440 (LIGHT GRAY, GLOSS) FOR ALL STEEL SURFACES.  
THE CONTRACTOR SHALL PROVIDE A DRAWDOWN CARD AS SPECIFIED IN CMS 708.02 FOR EACH OF THE URETHANE FINISH COAT COLORS.  
ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE APPROPRIATE 514 ITEM BID PRICES.

CUY-480-08.69; RAMP "R" OVER I-480; SFN 1814249			
ITEMS	QTY	UNIT	DESCRIPTION
514	31,400	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL
514	31,400	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL (PRIME COAT)
514	31,900	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL (INTERMEDIATE COAT)
514	31,900	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL (FINISH COAT)
514	29	MAN HOUR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL
514	21	EACH	FINAL INSPECTION REPAIR
ALL QUANTITIES CARRIED TO GENERAL SUMMARY.			
CALCULATED:		TSR	7/10/2024
CHECKED:		RHC	7/15/2024

**EXISTING VERTICAL CLEARANCE:**  
THE EXISTING MINIMUM VERTICAL CLEARANCES OF SFN 1814129 ARE 19.7' FOR IR-480EB AND 17.6' FOR IR-480-WB.



SLAB CANTILEVERS		
LOCATION	DIM "A"	DIM "B"
# Brg. S. Abut.	2'-0"	2'-10 1/2"
Span #1 1/4 Pt.	2'-4 3/4"	1'-9 3/4"
1/2 Pt.	2'-7 1/2"	1'-10 3/4"
3/4 Pt.	2'-8 1/8"	2'-1 1/8"
Pier #1	2'-6 3/4"	2'-7 1/4"
Span #2, Splice Pt.	2'-3"	3'-3"
1/2 Pt.	3'-0 1/4"	2'-6 3/4"
3/4 Pt.	3'-3 3/8"	2'-4 1/4"
Pier #2	3'-3 1/4"	2'-5 3/4"
Span #3, Splice Pt.	3'-0"	2'-10 1/8"
1/2 Pt.	3'-3"	2'-7 1/2"
Splice Pt.	3'-0"	2'-11"
Pier #3	3'-2 1/2"	2'-6 1/2"
Span #4, 1/4 Pt.	3'-2 3/8"	2'-5"
1/2 Pt.	3'-0 5/8"	2'-5 1/2"
3/4 Pt.	2'-9 1/8"	2'-7 3/8"
# Brg. N. Abut.	2'-4"	3'-0"

**NOTES**  
\* This dimension is from the top of the slab to the top of the web of the girder and is the nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per sec. 511.19 of the construction and materials specifications.  
\*\* A typical haunch width of 9" shall be used for computing quantities of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.  
Longitudinal reinforcing steel shall be field cut as necessary to avoid interference with scuppers.  
Transverse slab bars shall be field bent below safety curb as required. Cost of field bending shall be included in Item 509 for Payment.  
Scuppers shall be in accordance with Standard Drawing SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".  
For Scupper Details see Standard Drawing SD-1-69.  
For additional Railing Details see Standard Drawing BR-1-67.  
For details of pilaster anchor bolts and pilaster see Standard Drawings HL-3 & HL-4.

**NOTES**  
1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.  
2. PERFORM ONLY THE WORK AS INDICATED IN THE FRAMED TEXT, ESTIMATED QUANTITIES AND/OR AS DESCRIBED IN THE GENERAL NOTES.

TRANSVERSE SECTION AND ESTIMATED QUANTITIES  
CUY-480-08.71 ES  
RAMP "R" OVER I-480

SFN 1814249	
DESIGN AGENCY	
DESIGNER	CHECKER
TSR	RHC
REVIEWER	
PAT 07-18-24	
PROJECT ID 114536	
SUBSET	TOTAL
1	3
SHEET	TOTAL
P.145	167