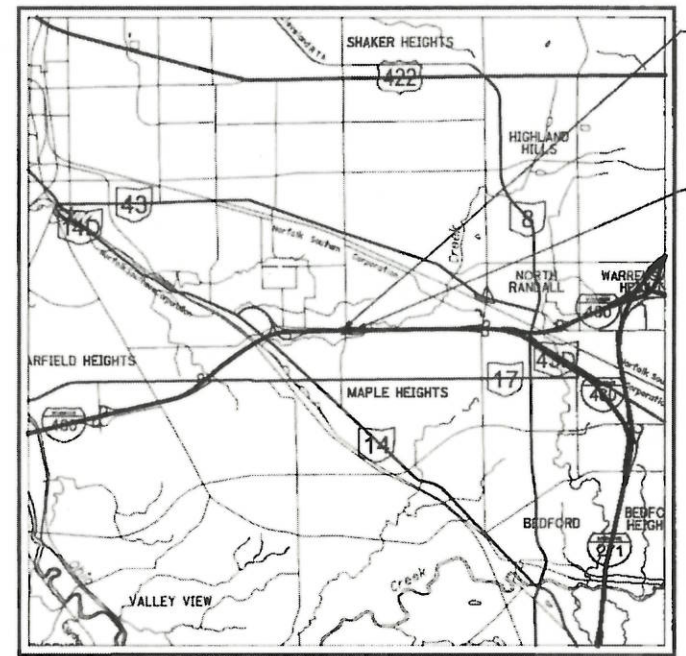


CUY - IR 480-22.41 Deck  
 220394 PID - 114516  
 Dist 12 6/30/2022

Contract Proposal available @  
 www.contracts.dot.state.oh.us

1472-087-AN0

MODEL: Sheet PAPER: 34x22 (in.) DATE: 2022-03-08 TIME: 4:01:10 PM USER: connor.biggins  
 \naasnet\group\cm\K172022\_D12-B4\F17227\_0\_Production\Work\114516\114516\_031001.dgn



LOCATION MAP

LATITUDE: 41°25'30" N LONGITUDE: 81°33'55" W



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

DESIGN DESIGNATION	I.R. 480	C.R. 8 (LEE ROAD)
CURRENT ADT (2023)	170,100	20,800
DESIGN YEAR ADT (2043)	186,700	22,800
DESIGN HOURLY VOLUME (2043)	16,803	2,052
DIRECTIONAL DISTRIBUTION	0.60	0.60
TRUCKS (24 HOUR B&C)	5%	1%
DESIGN SPEED	70 MPH	40 MPH
LEGAL SPEED	60 MPH	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)	03 MINOR ARTERIAL ROAD (URBAN)
NHS PROJECT	YES	NO

DESIGN EXCEPTIONS  
 VERTICAL CLEARANCE 11/08/2021

ADA DESIGN WAIVERS  
 NONE

**UNDERGROUND UTILITIES**  
 Contact Two Working Days Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764  
 (Non members must be called directly)

PLAN PREPARED BY:  
 IBI Group  
 4150 Belden Village Street, Suite 104  
 Canton, OH 44718 USA  
 Phone: 330-491-9000  
 Fax: 330-491-9001

ENGINEER'S SEAL:

SIGNED: *David Earl Buchanan*  
 DATE: 3/1/2022

# STATE OF OHIO

## DEPARTMENT OF TRANSPORTATION

# CUY-480-22.41

### CITIES OF CLEVELAND AND MAPLE HEIGHTS

### CUYAHOGA COUNTY

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STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/21/22	MGS-1.1	7/16/21	SICD-2-14	1/15/21	MT-95.31	7/19/19	MT-105.10	1/17/20	800	05/02/22		
BP-3.2	1/18/19	MGS-2.1	1/19/18			MT-95.45	1/17/20			808	01/18/19		
BP-5.1	1/21/22	MGS-3.1	1/19/18	HL-10.13	4/17/20	MT-95.71	1/17/20	TC-41.20	10/18/13	821	04/20/12		
BP-9.1	1/18/19	MGS-3.2	1/18/13	HL-20.11	1/15/21	MT-95.72	1/17/20	TC-42.20	10/18/13	832	10/19/18		
		MGS-4.3	1/18/13	HL-20.13	4/17/20	MT-95.73	1/17/20	TC-52.10	10/18/13	839	07/16/20		
CB-6	1/21/22			HL-30.11	1/15/21	MT-99.20	4/19/19	TC-52.20	1/15/21	846	04/17/15		
DM-1.1	7/17/20	RM-4.1	1/17/20	HL-30.22	1/15/21	MT-99.30	1/17/20	TC-65.10	1/17/14	908	04/20/12		
DM-1.2	7/16/21	RM-4.2	4/17/20	HL-30.32	4/17/20	MT-100.00	7/16/21	TC-65.11	7/21/17	921	04/20/12		
DM-1.3	7/18/14	RM-4.3	1/21/22	HL-30.41	1/21/22	MT-101.60	1/17/20	TC-72.20	7/20/18	939	01/17/20		
DM-4.3	1/15/16	RM-4.4	7/19/19	HL-40.20	7/17/20	MT-101.70	1/17/20						
DM-4.4	1/15/16			HL-50.11	1/16/15	MT-101.75	1/17/20						
		AS-1-15	7/17/15	HL-50.21	1/15/21	MT-101.80	1/17/20						
F-1.1	7/19/13	AS-2-15	1/18/19	HL-60.11	7/21/17	MT-101.90	7/17/20						
F-2.1	7/20/18	SBR-1-20	7/17/20	HL-60.12	7/16/21	MT-102.10	1/17/20						
		SBR-2-20	1/15/21			MT-102.30	10/16/15						
I-3B 3B1	7/16/21	SICD-1-21	1/21/22	MT-95.30	7/19/19	MT-104.10	10/16/15						

FEDERAL PROJECT NUMBER  
 E220167

RAILROAD INVOLVEMENT  
 NONE

PROJECT DESCRIPTION  
 IMPROVEMENT OF I.R. 480 OVER LEE ROAD (CUY-480-22.41) INCLUDING DECK REPLACEMENT, REHABILITATION OF SUBSTRUCTURE AND ASSOCIATED FULL-DEPTH APPROACH ROADWAY WORK ON I.R. 480 INCLUDING SIDEWALK AND CURB REPAIRS ALONG C.R. 8 (LEE ROAD).

EARTH DISTURBED AREAS  
 PROJECT EARTH DISTURBED AREA: 0.86 ACRES  
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 1.00 ACRES  
 NOTICE OF INTENT EARTH DISTURBED AREA: N/A ACRES  
 NOI NOT REQUIRED (ROUTINE MAINTENANCE PROJECT)

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

2019 SPECIFICATIONS  
 THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

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

APPROVED *[Signature]*  
 DATE 3/15/22 DISTRICT DEPUTY DIRECTOR

APPROVED *Jack Madhankas*  
 DATE 3-9-22 DIRECTOR, DEPARTMENT OF TRANSPORTATION

TITLE SHEET

DESIGN AGENCY	IBI
DESIGNER	MEP
REVIEWER	DEB
PROJECT ID	114516
SHEET TOTAL	1 133

**SEQUENCE OF CONSTRUCTION**

PRE-PHASE  
 SHIFT WESTBOUND LANES TO THE OUTSIDE AND CLOSE EASTBOUND INSIDE SHOULDER. REMOVE MEDIAN BARRIER, INSTALL TEMPORARY DRAINAGE, AND PLACE TEMPORARY PAVEMENT FROM STA. 1182+60 TO STA. 1192+50 AND FROM STA. 1223+60 TO STA. 1233+50. WORK ON THE WESTERN PORTION SHALL BE POSTPONED UNTIL SPRING 2023 IF PROJECT CUY-480-21.30 WB SAFETY (PID 107657) IS STILL ONGOING IN FALL 2022.

WINTER SHUTDOWN 2022-2023  
 RETURN TRAFFIC ON I-480 TO NORMAL CONDITIONS AND PLACE PORTABLE BARRIER TO CLOSE OFF CONTRAFLOW GAPS IN THE MEDIAN BARRIER.

PHASE 1  
 SHIFT WESTBOUND LANES TO THE OUTSIDE. CROSS OVER TWO EASTBOUND LANES AND SHIFT REMAINING TWO EASTBOUND LANES TO THE INSIDE. CONSTRUCT OUTSIDE PORTION OF EASTBOUND BRIDGE.

PHASE 2  
 MAINTAIN WESTBOUND LANE SHIFT AND CONTRAFLOW EASTBOUND LANES FROM PHASE 1. SHIFT REMAINING TWO EASTBOUND LANES TO THE OUTSIDE. CONSTRUCT INSIDE PORTION OF EASTBOUND BRIDGE.

WINTER SHUTDOWN 2023-2024  
 RETURN TRAFFIC ON I-480 TO NORMAL CONDITIONS AND PLACE PORTABLE BARRIER TO CLOSE OFF CONTRAFLOW GAPS IN THE MEDIAN BARRIER.

PHASE 3  
 SHIFT EASTBOUND LANES TO THE OUTSIDE. CROSS OVER TWO WESTBOUND LANES AND SHIFT REMAINING TWO WESTBOUND LANES TO THE INSIDE. CONSTRUCT OUTSIDE PORTION OF WESTBOUND BRIDGE.

PHASE 4  
 MAINTAIN EASTBOUND LANE SHIFT AND CONTRAFLOW WESTBOUND LANES FROM PHASE 3. SHIFT REMAINING TWO WESTBOUND LANES TO THE OUTSIDE. CONSTRUCT INSIDE PORTION OF WESTBOUND BRIDGE.

WINTER SHUTDOWN 2024-2025  
 RETURN TRAFFIC ON I-480 TO NORMAL CONDITIONS AND PLACE PORTABLE BARRIER TO CLOSE OFF CONTRAFLOW GAPS IN THE MEDIAN BARRIER.

PHASE 5  
 SHIFT WESTBOUND LANES TO THE OUTSIDE AND CLOSE EASTBOUND INSIDE SHOULDER. REMOVE OR ABANDON TEMPORARY DRAINAGE. REMOVE TEMPORARY PAVEMENT AND RECONSTRUCT MEDIAN BARRIER.

FINAL PHASE  
 RESURFACE LIMITS OF TEMPORARY MAKINGS AND PLACE FINAL PERMANENT PAVEMENT MARKINGS.

**ITEM 614, MAINTAINING TRAFFIC**

A MINIMUM OF 4 LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED ON IR-480 AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, ITEM 615 ROADS FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEM 614.

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON LEE ROAD BY USE OF THE EXISTING PAVEMENT AND TEMPORARY SURFACES USING ITEM 614, EXCEPT FOR SHORT PERIODS OF TIME WHERE LEE ROAD BELOW THE BRIDGE MAY BE CLOSED AND TRAFFIC DETOURED AS DETAILED ON SHEET 15.

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

CHRISTMAS	FOURTH OF JULY
NEW YEAR'S	LABOR DAY
MEMORIAL DAY	THANKSGIVING

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

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

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE CALUE CONTRACT.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 500 CU. YD.

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.

**TIME LIMITATIONS AND DISINCENTIVES**

1) WORK TO PREPARE THE IR-480 MEDIAN FOR MAINTENANCE OF TRAFFIC MAY BEGIN IN 2022. LANE CLOSURES FOR THIS WORK MAY BE IMPLEMENTED PER THE D12 PERMITTED LANE CLOSURE SCHEDULE AND MOT STANDARD DRAWINGS. PROJECT CUY-480-21.30 WB SAFETY (PID 107657) MAY STILL BE ONGOING ON WESTBOUND IR-480. NO WORK ON THE BRIDGE DECKS (OTHER THAN MAINTENANCE WORK) IS TO BEGIN UNTIL 2023.

2) TRAFFIC SHALL BE SHIFTED TO THE CROSSOVER PATTERN FOR PHASE 1 & PHASE 2 BRIDGE WORK NO EARLIER THAN APRIL 1, 2023. ALL WORK ON THE EASTBOUND SUPERSTRUCTURE SHALL BE COMPLETED AND IR-480 TRAFFIC SHALL BE BACK IN THE NORMAL TRAFFIC CONFIGURATION IN BOTH DIRECTIONS BY THE INTERIM COMPLETION DATE OF SEPTEMBER 30, 2023. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$60,000 PER DAY FOR EACH CALENDAR DAY THE WORK IS NOT DONE BY THE SPECIFIED TIME.

3) TRAFFIC SHALL BE SHIFTED TO THE CROSSOVER PATTERN FOR PHASE 3 & PHASE 4 BRIDGE WORK NO EARLIER THAN APRIL 1, 2024. ALL WORK ON THE WESTBOUND SUPERSTRUCTURE AND LEE ROAD SHALL BE COMPLETED AND IR-480 TRAFFIC SHALL BE BACK IN THE NORMAL TRAFFIC CONFIGURATION IN BOTH DIRECTIONS BY THE INTERIM COMPLETION DATE OF SEPTEMBER 30, 2024. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$60,000 PER DAY FOR EACH CALENDAR DAY THE WORK IS NOT DONE BY THE SPECIFIED TIME.

4) TRAFFIC SHALL BE SHIFTED FOR PHASE 5 MEDIAN WORK NO EARLIER THAN APRIL 15, 2025.

**LANE VALUE CONTRACT**

THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE DESCRIBED CRITICAL LANE/RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD. THE LANE VALUE CONTRACT TABLE IS LOCATED IN THE PLAN GENERAL NOTES. THE DISINCENTIVES WILL BE ASSESSED FOR ALL RESTRICTIONS OF THE CRITICAL WORK.

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLACE.

LANE VALUE CONTRACT TABLE

DESCRIPTION OF CRTICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE PER TIME UNIT PER LANE
ALL LANES OF IR-480 WB	AS PER THE D12 PERMITTED LANE CLOSURE SCHEDULE	EACH MINUTE PER LANE	\$606
ALL LANES OF IR-480 EB	AS PER THE D12 PERMITTED LANE CLOSURE SCHEDULE	EACH MINUTE PER LANE	\$606

**PERMITTED LANE CLOSURES**

ALL LANE CLOSURES MAY ONLY BE IMPLEMENTED AT THE TIMES PERMITTED BY THE "DISTRICT 12 PERMITTED LANE CLOSURE TIMES" LIST, WHICH IS LOCATED ON THE ODOT WEBSITE:

<https://www.dot.state.oh.us/districts/D12/HighwayManagement/Pages/PermittedLaneClosures.aspx>

THE LATEST REVISION, AT 14 DAYS PRIOR TO THE BID DATE, SHALL BE IN EFFECT FOR THIS PROJECT.

NO LANE OR SHOULDER CLOSURES SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED, UNLESS DIRECTED BY THE ENGINEER. SHOULDER CLOSURES SHALL ONLY BE ALLOWED AT THE TIMES SPECIFIED FOR LANE CLOSURES.

ANY ROADWAY NOT LISTED SHALL NOT HAVE ANY LANE CLOSURES ON WEEKDAYS FROM 6:30AM TO 9:00AM AND 3:00PM TO 6:00PM. CONTACT TROY ONESTI, DISTRICT 12 WORK ZONE TRAFFIC MANAGER, AT (216) 584-2204 IF THERE ARE ANY QUESTIONS.

ALL NOTES ON THE PERMITTED LANE CLOSURE TIMES SHALL BE PART OF THE PROJECT.

DESIGN AGENCY



DESIGNER  
 MEP

REVIEWER  
 DEB 02-25-22

PROJECT ID  
 114516

SHEET TOTAL  
 6 133

REF.	SHEET	STATION TO STATION	614														615		622																			
			WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	BARRIER REFLECTOR, TYPE 1, ONE-WAY	OBJECT MARKER, ONE WAY	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE)	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW)	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT	WORK ZONE GORE MARKING, CLASS II, 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	ROADS FOR MAINTAINING TRAFFIC	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	PORTABLE BARRIER, 50", AS PER PLAN	PORTABLE BARRIER, UNANCHORED	PORTABLE BARRIER, ANCHORED																	
			EACH	EACH	EACH	EACH	EACH	EACH	MILE	MILE	MILE	FT	FT	FT	FT	EACH	LS	SY	FT	FT	FT																	
PHASE 3: I-480 WESTBOUND																																						
WCH-9	58-60	1176+43	1195+50				96										1907																					
WCH-10	58-59	1176+43	1185+00				43										857																					
WEY-2	58-64	1177+48	1237+95				173						1.15																									
WCH-11	58-59	1177+48	1185+00				38										752																					
WEY-3	59-63	1185+00	1229+15			14	178						0.84																									
WEW-4	59-63	1185+00	1229+15				91						0.84																									
WCH-12	59-64	1190+85	1235+55			14	210										4470																					
WEW-5	45-47	1193+85	1220+05			14	132						0.50																									
WLL-4	60-62	1195+50	1221+50			3	19						0.49																									
PB-2	61-62	1206+50	1214+34	1				16	16																													
WCH-13	62-63	1220+05	1227+42				37										737																					
WCH-14	62-63	1221+35	1227+42				31										607																					
WCH-15	62-64	1221+50	1240+95				98										1945																					
PB-3	63	1223+60	1229+16		1			24	24																													
WDW-2	63	1227+42	1232+55																																			
WCH-16	63-64	1229+15	1240+95				59										1180																					
WCH-17	63-64	1229+15	1237+95				44										880																					
WGM-1	63-64	1229+15	1237+95																																			
PHASE 4: I-480 WESTBOUND																																						
WLL-1	55-56	1190+85	1196+60				5						0.11																									
WEY-1	56-59	1193+85	1229+15			14	144																															
WCH-1	56-59	1196+60	1228+05			14	144																															
WEW-1	56-58	1199+60	1220+05			14	104						0.39																									
PB-1	57-58	1206+50	1214+34	1				16	16																													
WCH-2	58	1220+05	1221+80				9										175																					
WDW-1	58-59	1221+80	1228+05																																			
WLL-2	59-60	1228+05	1235+55				7						0.14																									
WCH-3	59	1229+15	1232+55				17										340																					
WINTER SHUTDOWN 2024-2025																																						
							361	88	88	7.28	2.44	2.44					3216	3250																				
PHASE 5																																						
QUANTITIES CARRIED FROM PRE-PHASE																																						
PB-5	27	1204+50	1210+50	4		9	676	174	174	2.94	1.02	1.31					7480	1043																				4350
PB-6	27	1205+50	1211+50	1				12	12																													600
TOTALS THIS SHEET																																						
TOTALS FROM SHEET 11																																						
TOTALS FROM SHEET 12																																						
TOTALS CARRIED TO GENERAL SUMMARY				14	2	210	7637	1156	1156	29.32	29.86	208	80658	14874	700	3	LS	1100	16720	13529	600																	

MAINTENANCE OF TRAFFIC SUBSUMMARY

DESIGN AGENCY

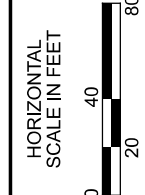
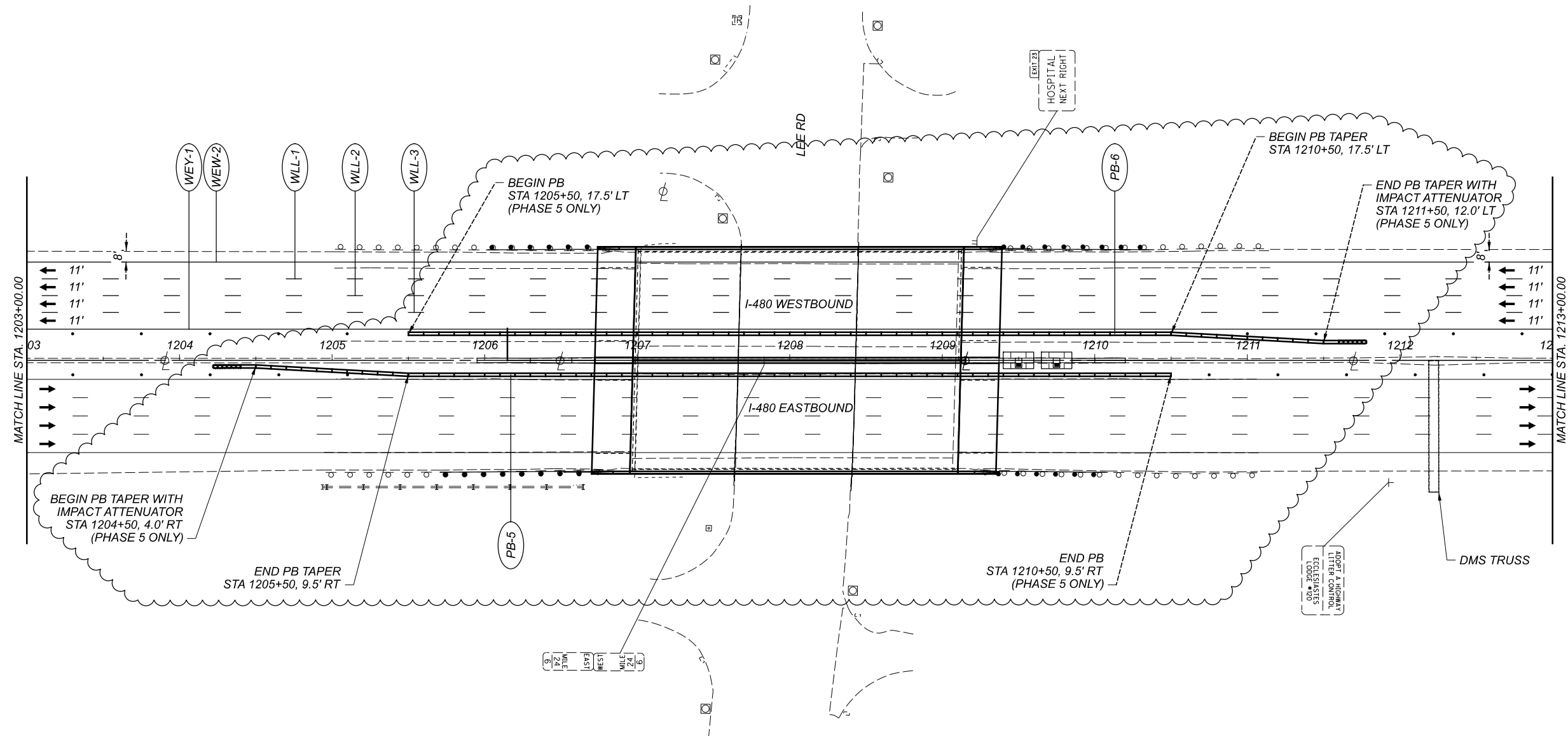
**[BI]**

DESIGNER  
MEP

REVIEWER  
DEB 02-25-22

PROJECT ID  
114516

SHEET TOTAL  
13 133



MAINTENANCE OF TRAFFIC PLAN  
PRE-PHASE & PHASE 5

DESIGN AGENCY



DESIGNER

BSS

REVIEWER

JMB 02-25-22

PROJECT ID


114516

SHEET TOTAL

28 133


SHEET NUM.					PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
88	96	105			01/BRO/BR	EXT	TOTAL				
<b>LIGHTING CONTINUED</b>											
	50				50	625	25400	50	FT	CONDUIT, 2", 725.04	
	1,820				1,820	625	25600	1,820	FT	CONDUIT, 4", 725.04	
	935				935	625	25910	935	FT	CONDUIT CLEANED AND CABLES REMOVED	
	9				9	625	27520	9	EACH	REMOVAL OF LUMINAIRE AND REERECTION	
	1				1	625	29930	1	EACH	MEDIAN JUNCTION BOX	
	9				9	625	32000	9	EACH	GROUND ROD	
	9				9	625	35010	9	EACH	REMOVE AND REERECT EXISTING LIGHT POLE	
	LS				LS	SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING	96
	2				2	625	75500	2	EACH	LIGHT POLE FOUNDATION REMOVED	
	LS				LS	625	98200	LS		LIGHTING, MISC.: REMOVE AND REERECT EXISTING UNDERPASS LIGHTING	96
<b>STRUCTURE OVER 20 FOOT SPAN (CUY-480-2241)</b>											
	LS				LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	104
	533				533	202	22900	533	SY	APPROACH SLAB REMOVED	
	3,854				3,854	202	23500	3,854	SY	WEARING COURSE REMOVED	
	1,007				1,007	202	32800	1,007	SY	CONCRETE SLOPE PROTECTION REMOVED	104
	190				190	203	20000	190	CY	EMBANKMENT	104
	LS				LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
	495				495	503	21100	495	CY	UNCLASSIFIED EXCAVATION	
	252,953				252,953	509	10000	252,953	LB	EPOXY COATED REINFORCING STEEL	
	8,392				8,392	509	30020	8,392	FT	NO. 4 GFRP DEFORMED BARS	
	7,340				7,340	509	30040	7,340	FT	NO. 6 GFRP DEFORMED BARS	
	424				424	510	10001	424	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	104
	8				8	511	33500	8	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	
	1,135				1,135	511	34442	1,135	SY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
	163				163	511	34450	163	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	
	33				33	511	41010	33	CY	CLASS QC1 CONCRETE, PIER ABOVE FOOTINGS	
	1,383				1,383	512	10100	1,383	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	6				6	512	33000	6	SY	TYPE 2 WATERPROOFING	
	646				646	SPECIAL	51271500	646	SY	URETHANE TOP COAT SEALER	104
	10,476				10,476	513	20000	10,476	EACH	WELDED STUD SHEAR CONNECTORS	
	1,231				1,231	514	00050	1,231	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	
	1,231				1,231	514	00056	1,231	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT	
	174				174	516	13600	174	SF	1" PREFORMED EXPANSION JOINT FILLER	
	78				78	516	13900	78	SF	2" PREFORMED EXPANSION JOINT FILLER	
	385				385	516	14020	385	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
	42				42	516	14600	42	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: COMPRESSED FOAM EXPANSION JOINT SEAL	104
	36				36	516	44100	36	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE)(LOAD PLATE 1'-1" x 1'-4" x 1.5" THICK, NEOPRENE 1'-0" x 1'-3" x 2.498" THICK)	
	36				36	516	44100	36	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE)(LOAD PLATE 1'-5" x 1'-5" x 1.5" THICK, NEOPRENE 1'-4" x 1'-4" x 2.948" THICK)	
	LS				LS	516	47000	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE	
	101				101	518	21200	101	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
	292				292	518	40000	292	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
	332				332	518	40012	332	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE	104
	6,680				6,680	SPECIAL	51900100	6,680	SF	COMPOSITE FIBER WRAP SYSTEM	104
	93				93	519	11100	93	SF	PATCHING CONCRETE STRUCTURE	
	818				818	526	25001	818	SY	REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN	130-131
	298				298	526	90010	298	FT	TYPE A INSTALLATION	
	1,007				1,007	601	21000	1,007	SY	CONCRETE SLOPE PROTECTION	104
	430				430	625	25400	430	FT	CONDUIT, 2", 725.04	
	124				124	846	00110	124	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	
<b>TRAFFIC CONTROL</b>											
	404				404	621	00100	404	EACH	RPM	
	404				404	621	54000	404	EACH	RAISED PAVEMENT MARKER REMOVED	
	3				3	630	79610	3	EACH	SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED	
	6				6	630	81000	6	EACH	MAINLINE REFERENCE MARKER	
	4				4	630	84900	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
	2				2	630	86002	2	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
	5.28				5.28	646	10010	5.28	MILE	EDGE LINE, 6"	
	7.92				7.92	646	10110	7.92	MILE	LANE LINE, 6"	
	3,852				3,852	646	10310	3,852	FT	CHANNELIZING LINE, 12"	

GENERAL SUMMARY

DESIGN AGENCY  
  
 DESIGNER  
 BSB  
 REVIEWER  
 DEB 02-25-22  
 PROJECT ID  
 114516  
 SHEET TOTAL  
 79 133

SHEET NUM.							PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.	
6	7	8	9	10	13	88	01/BRO/BR	EXT	TOTAL					
						2,930		646	20504	2,930	FT	TRAFFIC CONTROL CONTINUED		
												MAINTENANCE OF TRAFFIC		
				1,000				519	12300	1,000	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B		
			1,760	240				614	11110	2,000	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
		8,000						614	11630	8,000	FT	INCREASED BARRIER DELINEATION		
					14			614	12380	14	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)		
					2			614	12384	2	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)		
							LS	614	12420	LS		DETOUR SIGNING		
	4							614	12484	4	EACH	WORK ZONE INCREASED PENALTIES SIGN		
				20				614	12500	20	EACH	REPLACEMENT SIGN		
				2				614	12756	2	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM		
					210			614	12800	210	EACH	WORK ZONE RAISED PAVEMENT MARKER		
					7,637			614	12801	7,637	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	8	
500				50				550	614	13000	550	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
					1,156			614	13310	1,156	EACH	BARRIER REFLECTOR, TYPE 1, ONE-WAY		
			80					614	13312	80	EACH	BARRIER REFLECTOR, TYPE 2, ONE-WAY		
			80		1,156			614	13350	1,236	EACH	OBJECT MARKER, ONE WAY		
				12				614	18000	12	EACH	MAINTAINING TRAFFIC, MISC.:WORK ZONE ONE-LANE CLOSURE FOR MAINTENANCE REPAIR	10	
				12				614	18000	12	EACH	MAINTAINING TRAFFIC, MISC.:WORK ZONE TWO-LANE CLOSURE FOR MAINTENANCE REPAIR	10	
					29.32			614	20110	29.32	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT		
					29.86			614	22110	29.86	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT		
					208			614	23200	208	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT		
					80,658			614	23210	80,658	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT		
					14,874			614	24202	14,874	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT		
					700			614	28200	700	FT	WORK ZONE GORE MARKING, CLASS II, 642 PAINT		
					3			614	30200	3	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT		
					LS			LS	615	10000	LS	ROADS FOR MAINTAINING TRAFFIC		
					1,100			615	20000	1,100	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A		
				5				616	10000	5	MGAL	WATER		
			4.5					618	40601	4.5	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	9	
					16,720			622	41011	16,720	FT	PORTABLE BARRIER, 50", AS PER PLAN	10	
					13,529			622	41100	13,529	FT	PORTABLE BARRIER, UNANCHORED		
					600			622	41110	600	FT	PORTABLE BARRIER, ANCHORED		
				108				808	18700	108	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY		
				20				847	30200	20	CY	FULL DEPTH REPAIR		
												INCIDENTALS		
							LS	614	11000	LS		MAINTAINING TRAFFIC		
								619	16020	18	MNTH	FIELD OFFICE, TYPE C		
								623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	5	
								624	10000	LS		MOBILIZATION		

GENERAL SUMMARY

DESIGN AGENCY  
  
 DESIGNER  
 BSB  
 REVIEWER  
 DEB 02-25-22  
 PROJECT ID  
 114516  
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 80 133

**ITEM 625 - SPECIAL, MAINTAIN EXISTING LIGHTING**  
 EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWN UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOT CANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "B" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRICAL SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.

**ITEM 625 - MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS AND STANDARD DRAWINGS THE CONTRACT SHALL ENSURE THE BOLT SPACING FOR THE FOUNDATION MATCHES THE EXISTING BOLT SPACING OF THE EXISTING LIGHT POLES REMOVED WITH THIS PROJECT, WHICH WILL BE REERECTED ON THE FOUNDATION.

FOR LIGHT POLE-8 (AT STATION 1209+15) SEE STANDARD DRAWING HL-20.13 FOR DETAILS AND THE FOLLOWING SHALL APPLY. THE DEPTH FROM THE TOE OF BARRIER TO THE PERMISSIBLE CONSTRUCTION JOINT SHALL BE 1'-3" INSTEAD OF 9", WITH THE WIDTH MATCHING THE APPROACH SLAB MEDIAN BARRIER.

ALL MATERIAL, EQUIPMENT, LABOR, AND INCIDENTALS REQUIRED TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED FOR PAYMENT AT THE CONTRACT PRICE FOR ITEM 625 - MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN.

**ITEM 625 - LIGHTING, MISC.: REMOVE AND REERECT EXISTING UNDERPASS LIGHTING**

THIS WORK SHALL CONSIST OF THE REMOVAL AND REERECTION OF THE EXISTING TOP-MOUNTED AND SIDE-MOUNTED UNDERPASS LUMINAIRES AND APPURTENANCES. BEFORE PERFORMING ANY REMOVALS, POWER TO THE EXISTING LUMINAIRES SHALL BE DISCONNECTED. CONTRACTOR SHALL REMOVE BOTH TOP-MOUNTED AND SIDE-MOUNTED LUMINAIRES AND APPURTENANCES AS SHOWN IN THE PLANS AND SET ASIDE TO BE REERECTED AFTER THE CONSTRUCTION OF THE PIER CAP EXTENSION. ANY ADDITIONAL CONDUIT AND REWIRING NEEDED DUE TO THE LUMINAIRE RELOCATION SHALL BE INCLUDED IN THE LUMP SUM BID. ANY LUMINAIRES DAMAGED DURING REMOVAL SHALL BE REPLACED AT NO ADDITIONAL COST TO THE STATE.


AFTER THE CONSTRUCTION OF THE PIER CAP EXTENSIONS, REERECT TOP-MOUNTED AND SIDE-MOUNTED LUMINAIRES AND APPURTENANCES AT THE LOCATIONS SHOWN IN THE PLAN OR AS DIRECTED BY THE ENGINEER.

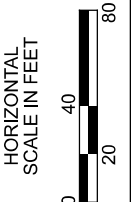
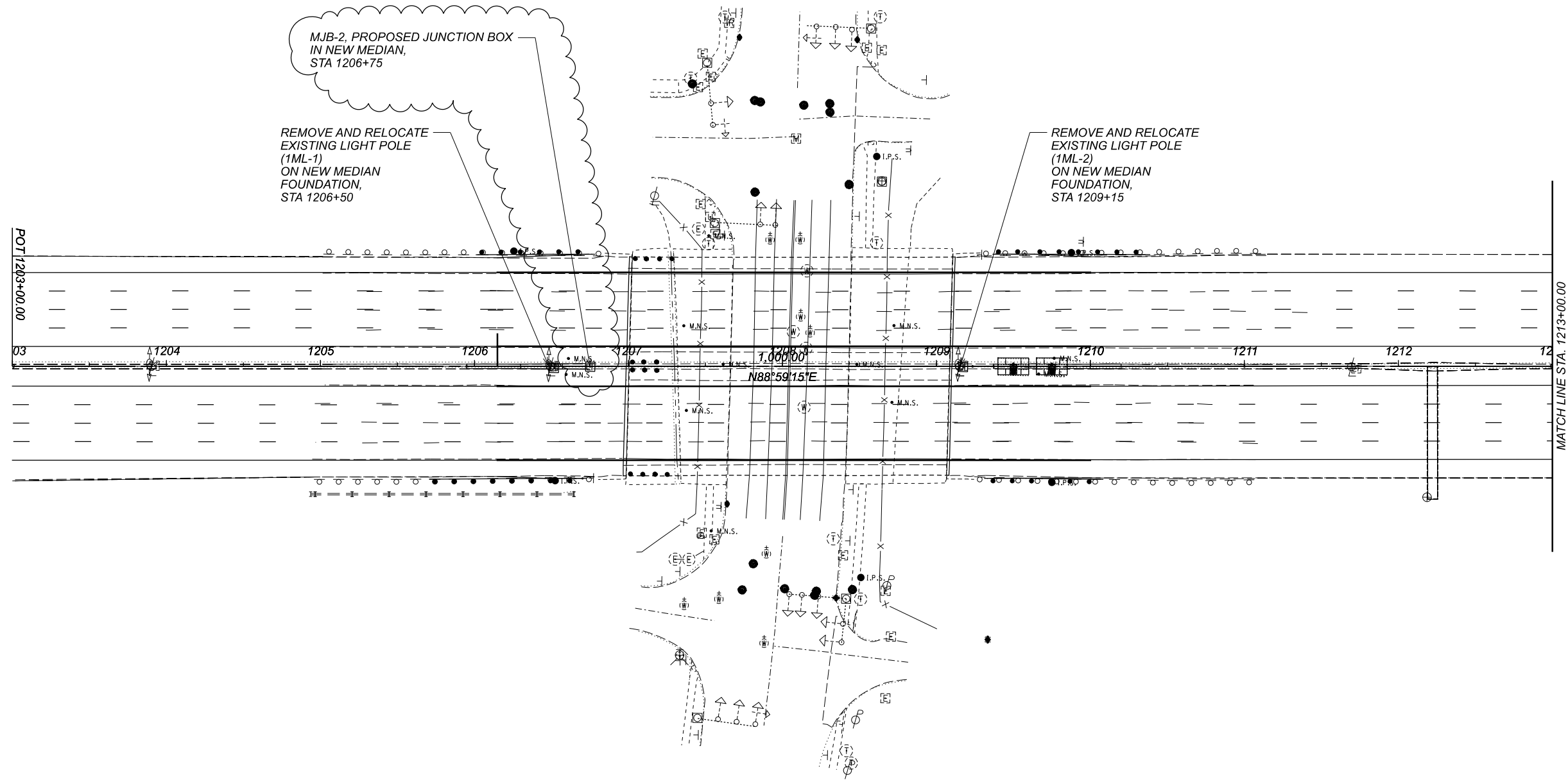
ALL MATERIAL, EQUIPMENT, LABOR, AND INCIDENTALS REQUIRED TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED FOR PAYMENT AT THE LUMP SUM CONTRACT PRICE FOR ITEM 625 - LIGHTING, MISC.: REMOVE AND REERECT EXISTING UNDERPASS LIGHTING.

ITEM	SHEET NO.	SIDE	ROADWAY	STATION	625																		
					CONNECTION, FUSED PULL APART	CONNECTION, UNFUSED PULL APART	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	NO. 10 AWG POLE AND BRACKET CABLE	CONDUIT, 2", 725.04	CONDUIT, 4", 725.04	CONDUIT CLEANED AND CABLES REMOVED	REMOVAL OF LUMINAIRE AND REERECTION	MEDIAN JUNCTION BOX	GROUND ROD	REMOVE AND REERECT EXISTING LIGHT POLE	LIGHT POLE FOUNDATION REMOVED	SPECIAL - MAINTAIN EXISTING LIGHTING	LIGHTING, MISC.: REMOVE AND REERECT EXISTING UNDERPASS LIGHTING				
					EACH	EACH	EACH	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	LUMP	LUMP				
EX. 2RMR-4	97	LT	I-480	1181+60	1	1		460	222			130	100										
2RMR-5	97	LT	I-480	1183+86	1	1	1	470	222			235		1		1							
2RMR-6	97	LT	I-480	1186+18	1	1	1	470	222			235		1		1							
2RMR-7	98	LT	I-480	1188+52	1	1	1	480	222			240		1		1							
2RMR-8	98	LT	I-480	1190+87	1	1	1	540	222			165		1		1							
BRIDGE NO. CUY-480-2241																						LUMP	
MJB-2	99	LT	I-480	1206+75											1								
1ML-1	99	LT	I-480	1206+50	1	1	1	50	222	50				1		1	1	1					
1ML-2	99	LT	I-480	1209+15	1	1	1	50	222			25		1		1	1	1					
1PC-9	100	LT	I-480	1225+76	1	1	1	810	222			405		1		1	1						
MJB-1	101	RT	I-480	1227+77									85		1								
1PC-6	101	LT	I-480	1229+76	1	1	1	530	222			265		1		1	1						
1PC-5	101	LT	I-480	1232+35	1	1	1	530	222			120		1		1	1						
EX. 1PC-4	101	LT	I-480	1234+95	1	1						150											
TOTALS CARRIED TO GENERAL SUMMARY					11	11	9	4,390	1,998	50		1,820	335	9	2	9	9	2	LUMP	LUMP			

CUY-480-22.41

MODEL: Sheet PAPER: 17x11 (in.) DATE: 2022-06-21 TIME: 10:23:37 AM USER: comcor.higgins  
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DESIGN AGENCY  
  
 DESIGNER  
 JAW  
 REVIEWER  
 DEB 02-25-22  
 PROJECT ID  
 114516  
 SHEET  
 TOTAL  
 96 | 133



LIGHTING PLAN  
STA 1203+00 TO STA 1213+00

FOR LIGHTING QUANTITIES, SEE SHEET 96.

DESIGN AGENCY



DESIGNER  
JAW

REVIEWER  
DEB 11-19-21

PROJECT ID  
114516

SHEET	TOTAL
99	133



**STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS**

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-15	REVISED	07-17-15
AS-2-15	REVISED	01-18-19
SBR-1-20	REVISED	07-17-20
SBR-2-20	REVISED	01-15-21
SICD-1-21	DATED	01-15-21
SICD-2-14	REVISED	01-15-21

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:  
 800 DATED 05-02-22  
 846 DATED 04-17-15

**DESIGN SPECIFICATIONS:**

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATION" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2021.

**DESIGN LOADING:**

VEHICULAR LIVE LOAD: HL-93 (SUPERSTRUCTURE)  
 HS-20 (SUBSTRUCTURE)

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/FT<sup>2</sup>

**DESIGN DATA:**

CONCRETE CLASS QC2 -	COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 -	COMPRESSIVE STRENGTH 4 KSI (SUBSTRUCTURE)
REINFORCING STEEL -	MINIMUM YIELD STRENGTH 60 KSI
STRUCTURAL STEEL -	ASTM A36 (EXISTING)

**MONOLITHIC WEARING SURFACE**

MONOLOTHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

**EXISTING STRUCTURE VERIFICATION:**

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02, AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED.

**PROPOSED WORK:**

- REMOVE EXISTING CONCRETE RAILING ON THE BRIDGE DECK AND APPROACH RETAINING WALLS.
- REMOVE EXISTING UNDERPASS LIGHTING AND CONSTRUCT TEMPORARY LIGHTING.
- REMOVE EXISTING 1 1/2" ASPHALT WEARING SURFACE, 2 1/4" MSC OVERLAY, AND 8 1/4" CONCRETE BRIDGE DECK, APPROACH SLABS, AND ABUTMENT BACKWALLS.
- INSTALL SHEAR STUDS TO EXISTING STEEL GIRDER.
- CONSTRUCT PIER CAP EXTENSION AND NEW ELASTOMERIC BEARING ASSEMBLIES.
- FIBER WRAP PIER 1 & PIER 2 COLUMNS AND CAPS.
- CONSTRUCT NEW SEMI-INTEGRAL ABUTMENT END DIAPHRAGMS, CONCRETE BRIDGE DECK, AND APPROACH SLABS.
- CONSTRUCT NEW SINGLE SLOPE CONCRETE PARAPETS ON THE BRIDGE DECK AND APPROACH SLABS.
- REERECT EXISTING UNDERPASS LIGHTING LUMINAIRES AND CONSTRUCT CONDUIT CONNECTION TO EXISTING PULL BOXES.
- SEAL EXPOSED SURFACES WITH EPOXY-URETHANE.

**ASBESTOS NOTIFICATION**

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE STRUCTURE.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT "HTTP://WWW.EPA.OHIO.GOV.ASBESTOS" AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW.

ASBESTOS PROGRAM  
 OHIO EPA, SAPC  
 P.O. BOX 1049  
 COLUMBUS, OH 43216-1049

OR

ASBESTOS PROGRAM  
 OHIO EPA, DAPC  
 50 W. TOWN ST., SUITE 700  
 COLUMBUS, OH 43215

**THE FORM SHALL INCLUDE:**

- THE CONTRACTORS NAME AND ADDRESS
- THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION.
- DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS TO BE USED.
- ALL NECESSARY FEES.

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

**DECK PLACEMENT DESIGN ASSUMPTIONS:**

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.25 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

**ITEM 202. PORTIONS OF STRUCTURE REMOVED. OVER 20 FOOT SPAN. AS PER PLAN:**

THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING CONCRETE BRIDGE RAILINGS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (GIRDERS, CROSS-FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS:  
 BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF THE DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF THE FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS:  
 CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (STEEL GIRDER, ETC.) THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G. FINISHING MACHINE, FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS:  
 REMOVE EXISTING WELDED ATTACHMENTS (E.G. FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

CUT LINE CONSTRUCTION JOINT PREPARATION:  
 SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL:  
 REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE OF THE 18 INCH LIMIT, THE CONTRACTORS MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

**ITEM 202. PORTIONS OF STRUCTURE REMOVED. OVER 20 FOOT SPAN. AS PER PLAN (CONT.):**

MEASUREMENT & PAYMENT:  
 THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVAL ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

**ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN**

PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL WITH AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS EXCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR. ALL WORK SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 510, DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN.

**ITEM SPECIAL - URETHANE TOP COAT SEALER**

SEAL ON TOP OF POLYMER REINFORCED FIBER WRAP SYSTEM TO PROTECT THE FIBER FROM THE ELEMENTS, SPECIFICALLY UV RADIATION AND TO GIVE THEM THE FINAL AESTHETIC EFFECT. ALL EQUIPMENT, LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO SEAL ALL OF THE AREAS DETAILED IN THE PLANS SHALL BE INCLUDED FOR PAYMENT UNDER ITEM SPECIAL - URETHANE TOP COAT SEALER.

**ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: COMPRESSED FOAM EXPANSION JOINT SEAL**

THIS ITEM CONSISTS OF INSTALLING A COMPRESSED FOAM EXPANSION JOINT SEAL AT THE LOCATIONS DETAILED IN THE PLANS. FURNISH A COMPRESSED FOAM EXPANSION JOINT SEAL SIZED FOR THE NOMINAL JOINT OPENING SHOWN IN THE PLANS SUCH AS METAZEAL BY CHASE CORPORATION, EMSEAL 25V BY EMSEAL JOINT SYSTEMS, LTD., OR EQUAL AS APPROVED BY THE ENGINEER.

INSTALL THE COMPRESSED FOAM EXPANSION JOINT SEAL IN ONE PIECE FOR THE FULL HEIGHT OF VERTICAL EXPANSION JOINTS. FOR MEDIAN BARRIER EXPANSION JOINTS WHERE THE SEAL TURNS HORIZONTAL ACROSS THE TOP OF THE MEDIAN BARRIER, FURNISH A SEAL FABRICATED TO THE REQUIRED SHAPE OR MITER AND BOND THE TOP CORNERS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

PAYMENT FOR ALL EQUIPMENT, LABOR, MATERIALS AND OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK AS DETAILED IN THE PLANS WILL BE MADE UNDER ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: COMPRESSED FOAM EXPANSION JOINT SEAL.

**ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM**

THIS WORK SHALL CONSIST OF PROVIDING AND INSTALLING A FIBER WRAP SYSTEM INCLUDING PREPARATION, WRAPPING THE PIER, AND ALL INCIDENTALS NECESSARY TO COMPLETE THIS WORK PER THE REQUIREMENTS OF PN519. THE INSTALLATION SHALL BE PER THE MANUFACTURER'S REQUIREMENTS. ALL EQUIPMENT, LABOR, MATERIALS, AND INCIDENTALS NECESSARY TO PERFORM THE REQUIRED WORK SHALL BE INCLUDED FOR PAYMENT UNDER ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM.

**REPLACEMENT OF EXISTING CONCRETE SLOPE PROTECTION**

REMOVE AND REPLACE THE EXISTING CONCRETE SLOPE PROTECTION IN FRONT OF BOTH ABUTMENTS FROM THE FACE OF THE EXISTING ABUTMENT BREASTWALL TO THE BACK OF THE EXISTING PAVED DITCH AT THE TOE OF SLOPE. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR THIS WORK:

ITEM 202 - CONCRETE SLOPE PROTECTION REMOVED	1007 SY
ITEM 601 - CONCRETE SLOPE PROTECTION	1007 SY

PRIOR TO REMOVING EXISTING SLOPE PROTECTION ADJACENT TO THE EXISTING PAVED DITCH, MAKE A FULL-DEPTH SAW CUT AT THE REMOVAL LIMIT. INCLUDE ALL RELATED COSTS FOR SAW CUTTING IN THE UNIT PRICE BID FOR ITEM 202 - CONCRETE SLOPE PROTECTION REMOVED.

WHERE VOIDS EXIST BELOW THE EXISTING SLOPE PROTECTION, PLACE EMBANKMENT AS DIRECTED BY THE ENGINEER. REMOVE AND REPLACE ALL EXISTING 6" DIAMETER ABUTMENT DRAINAGE OUTLET PIPES WHERE THE EXISTING PIPE IS DAMAGED BY THE REMOVAL OF THE EXISTING CONCRETE SLOPE PROTECTION OR IS DETERMINED BY THE ENGINEER TO BE DETERIORATED OR OF INSUFFICIENT LENGTH. A SUGGESTED METHOD OF REPLACEMENT IS TO CUT OFF THE EXISTING NON-PERFORATED PIPE 6" FROM THE FACE OF THE ABUTMENT BREASTWALL AND ATTACH A NEW LENGTH OF NON-PERFORATED PIPE WITH A COUPLING. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 203 - EMBANKMENT	190 CY
ITEM 518 - 6" NON-PERFORATED CORRUGATED PLASTIC PIPE	275 FT

STRUCTURE GENERAL NOTES  
 BRIDGE NO. CUY-480-2241  
 I.R. 480 OVER LEE ROAD

SFN	1813404
DESIGN AGENCY	[B]
DESIGNER	CDH
CHECKER	IMF
REVIEWER	
DEB	02-25-22
PROJECT ID	114516
SUBSET	TOTAL
3	32
SHEET	TOTAL
104	133

CUY-480-22.41

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ESTIMATED QUANTITIES

ITEM	EXT.	TOTAL	UNIT	DESCRIPTION	SUPERSTR.	REAR ABUT.	FWD. ABUT.	PIERS.	GENERAL	REF. SHEET
202	11203		LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN						3/32
202	22900	533	SY	APPROACH SLAB REMOVED					533	
202	23500	3,854	SY	WEARING COURSE REMOVED	3,321				533	
202	32800	1,007	SY	CONCRETE SLOPE PROTECTION REMOVED					1,007	3/32
203	20000	190	CY	EMBANKMENT *					190 *	3/32
503	11100		LS	COFFERDAMS AND EXCAVATION BRACING						
503	21100	495	CY	UNCLASSIFIED EXCAVATION		251	244			
509	10000	252,953	LB	EPOXY COATED REINFORCING STEEL	212,162	15,019	15,019	10,753		
509	30020	8,392	FT	NO. 4 GFRP DEFORMED BARS	8,392					
509	30040	7,340	FT	NO. 6 GFRP DEFORMED BARS	7,340					
510	10001	424	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN				424		3/32
511	33500	8	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE		4	4			
511	34446	1,135	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	1,135					
511	34450	163	CY	CLASS CQ2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	163					
511	41010	33	CY	CLASS QC1 CONCRETE, PIER ABOVE FOOTINGS				33		
512	10100	1,383	SY	SEALING OF CONCRETE SURFACES (EPOXY URETHANE)	1,187	99	97			
512	33000	6	SY	TYPE 2 WATERPROOFING		3	3			
SPECIAL	51271500	646	SY	URETHANE TOP COAT SEALER				646		3/32
513	20000	10,476	EACH	WELDED STUD SHEAR CONNECTORS	10,476					
514	00050	1,231	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	1,231					
514	00056	1,231	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT	1,231					
516	13600	174	SF	1" PREFORMED EXPANSION JOINT FILLER	43				131	
516	13900	78	SF	2" PREFORMED EXPANSION JOINT FILLER		24	23		31	
516	14020	385	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL		193	192			
516	14600	42	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: COMPRESSED FOAM EXPANSION JOINT SEAL		10	9		23	3/32
516	44100	36	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (LOAD PLATE 1'-1" x 1'-4" x 1.5" THICK, NEOPRENE 1'-0" x 1'-3" x 2.498" THICK)		18	18			
516	44100	36	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (LOAD PLATE 1'-5" x 1'-5" x 1.5" THICK, NEOPRENE 1'-4" x 1'-4" x 2.948" THICK)				36		
516	47000		LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE						
518	21200	101	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC		51	50			
518	40000	292	FT	6" PERFORATED CORRUGATED PLASTIC PIPE		146	146			
518	40012	332	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE		26	31		275 *	3/32
SPECIAL	51900100	6,680	SF	COMPOSITE FIBER WRAP SYSTEM				6,680		3/32
519	11100	93	SF	PATCHING CONCRETE STRUCTURE				93		
526	25001	818	SY	REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN					818	29-30/32
526	90010	298	FT	TYPE A INSTALLATION					298	
601	21000	1,007	SY	CONCRETE SLOPE PROTECTION					1,007	3/32
625	25400	430	FT	CONDUIT, 2", 725.04					430	
846	00110	124	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM					124	

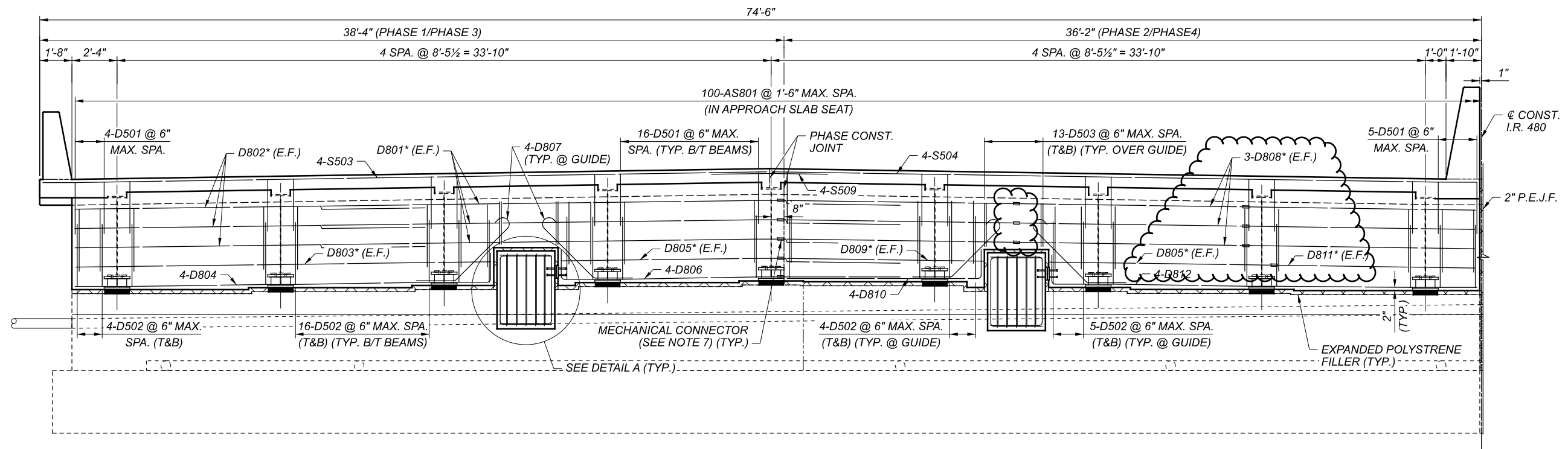
LEGEND:

\* DENOTES ITEM TO BE USED "AS DIRECTED BY THE ENGINEER"

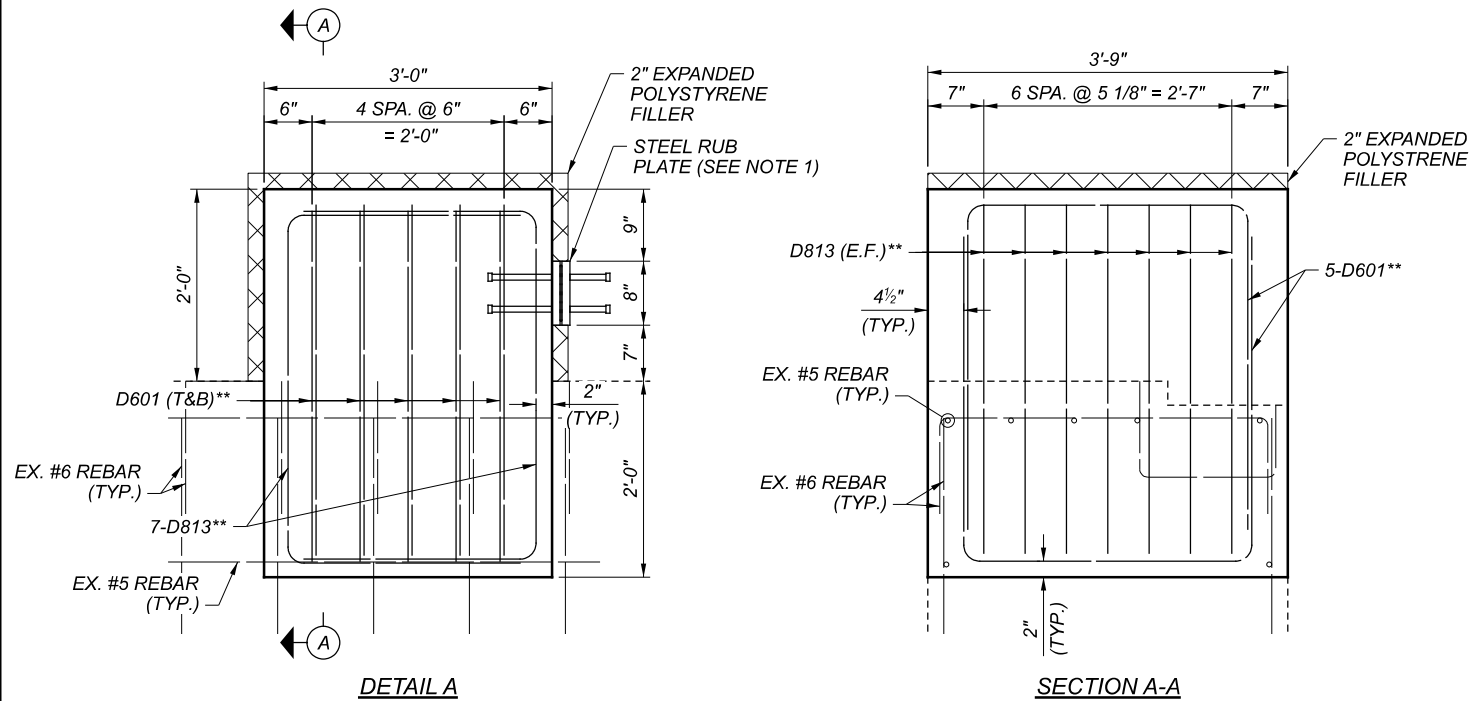
ESTIMATED QUANTITIES  
 BRIDGE NO. CUY-480-2241  
 I.R. 480 OVER LEE ROAD

SFN	1813404
DESIGNER	CDH
CHECKER	IMF
REVIEWER	DEB
DATE	02-25-22
PROJECT ID	114516
SUBSET	4
TOTAL	32
SHEET	105
TOTAL	133





**TYPICAL ABUTMENT DIAPHRAGM ELEVATION**  
 SYMMETRICAL ABOUT @ CONSTRUCTION I.R. 480  
 FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR



LAP SPLICE LENGTH	
#8	5'-4"

**LEGEND:**

- \* - PLACE THE REINFORCING ON NEAR FACE THROUGH HOLES IN STRUCTURAL STEEL.
- \*\* - EXISTING REINFORCEMENT HAS BEEN LOCATED FROM EXISTING PLANS. ADJUST LOCATION OF PROPOSED REINFORCEMENT AS DIRECTED BY ENGINEER TO AVOID CONFLICTS WITH EXISTING REINFORCEMENT.

**NOTES:**

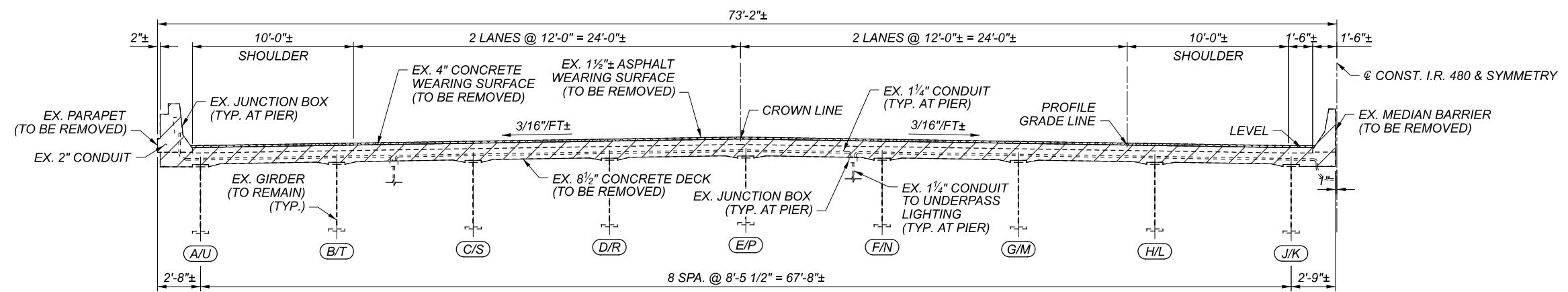
1. STEEL RUB PLATE SHALL BE LOCATED ON THE NORTH SIDE OF THE DIAPHRAGM GUIDE AT BOTH THE REAR AND FORWARD ABUTMENTS. STUDS SHALL BE 3/4"x8" END WELDED STUDS ON THE FACE INSIDE OF THE DIAPHRAGM GUIDE AND 3/4"x5" END WELDED STUD ON THE FACE EXPOSED TO THE DIAPHRAGM.
2. FOR ADDITIONAL NOTES AND DETAILS, SEE ODOT STD. DWGS. SICD-1-21 AND SICD-2-14.
3. PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS OF AN INDIVIDUAL PHASE WITH THE DECK CONCRETE.
4. VERTICAL REINFORCING STEEL TO BE PLACED PARALLEL TO @ CONSTRUCTION I.R. 480. HORIZONTAL REINFORCING STEEL TO BE PLACED PARALLEL TO @ BEARING.
5. FOR ABUTMENT AND DIAPHRAGM SECTIONS, SEE SHEET 12/32.
6. FOR REINFORCING STEEL LIST, SEE SHEET 31/32.
7. MECHANICAL CONNECTORS PER THE REQUIREMENTS OF CMS 509 SHALL BE USED FOR ALL NO. 8 BARS AT THE PHASE CONSTRUCTION JOINT. THE CONTRACTOR SHALL HAVE THE OPTION TO LAP SPLICE THE NO. 8 BARS ON THE FRONT FACE (BRIDGE SIDE) OF THE DIAPHRAGM PER THE DIAGRAM ON SHEET 31/32 AT NO ADDITIONAL COST TO THE STATE. ALL EQUIPMENT, LABOR, MATERIALS AND OTHER INCIDENTALS NECESSARY TO INSTALL THE MECHANICAL CONNECTORS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 509 - EPOXY COATED REINFORCING STEEL.
8. FOR PHASE CONSTRUCTION DETAILS, SEE SHEET 5/32 THROUGH 7/32.

**TYPICAL ABUTMENT DIAPHRAGM ELEVATION**  
 BRIDGE NO. CUY-480-2241  
 I.R. 480 OVER LEE ROAD

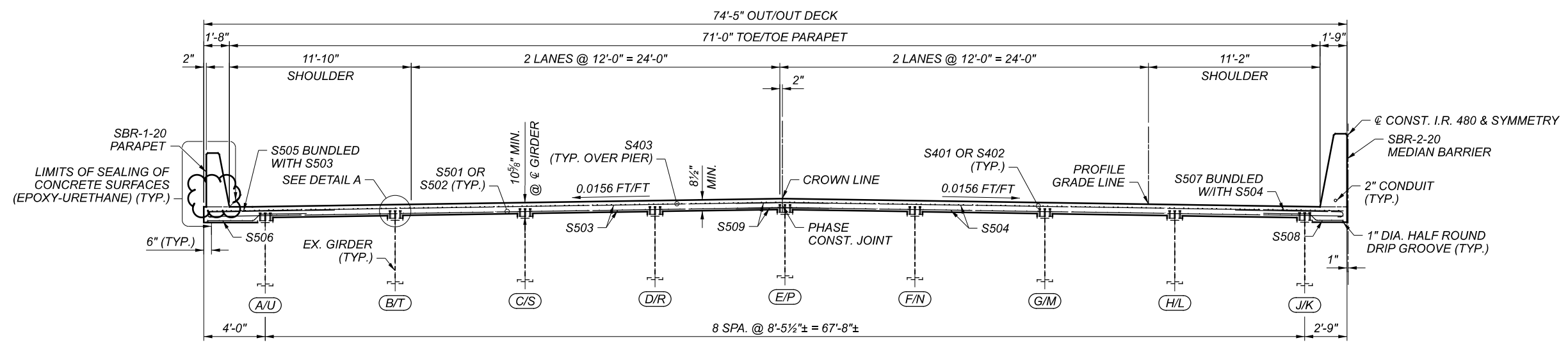
SFN	1813404
DESIGN AGENCY	[B]
DESIGNER	CDH
CHECKER	IMF
REVIEWER	DEB
PROJECT ID	114516
SUBSET	18
TOTAL	32
SHEET	119
TOTAL	133

CUY-480-22.41

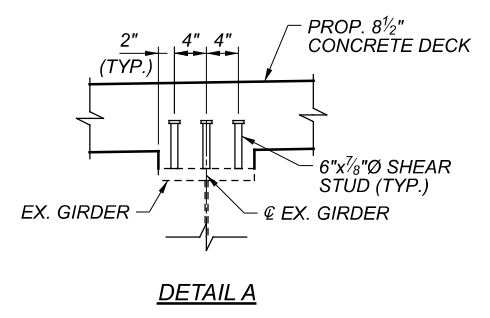
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**EXISTING TRANSVERSE SECTION**  
 HALF OF STRUCTURE SHOWN,  
 BRIDGE SYMMETRICAL ABOUT C.I.R. 480



**PROPOSED TRANSVERSE SECTION**  
 HALF OF STRUCTURE SHOWN,  
 BRIDGE SYMMETRICAL ABOUT C.I.R. 480



**DETAIL A**

**LEGEND:**

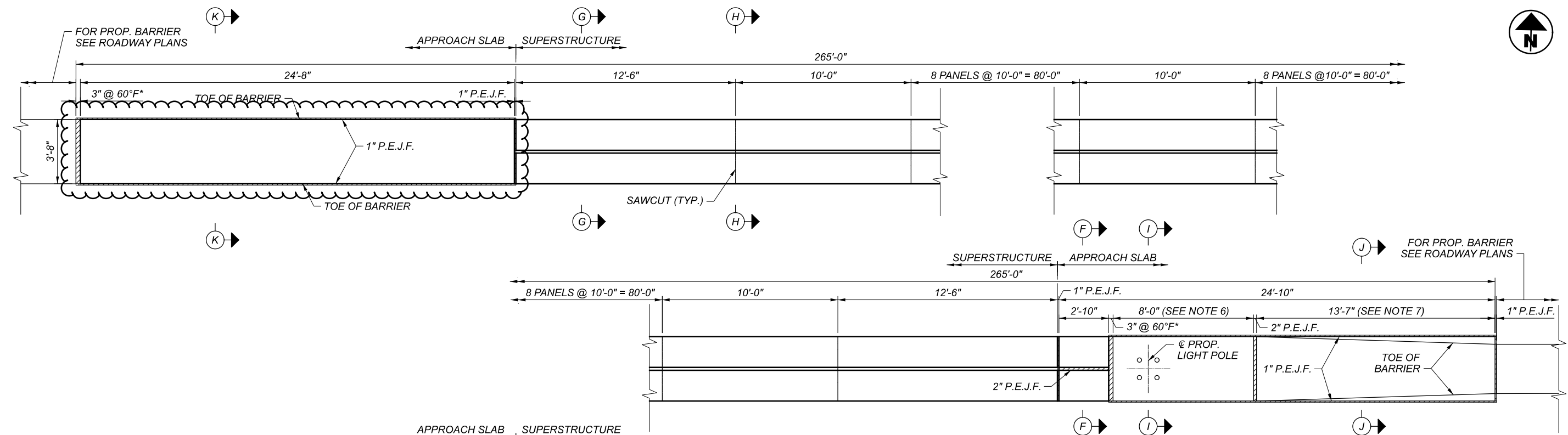
- (X/Y) - WB GIRDER / EB GIRDER
- [Cross-hatched box] - ITEM 202 - WEARING COURSE REMOVED
- [Diagonal hatched box] - ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

**NOTES:**

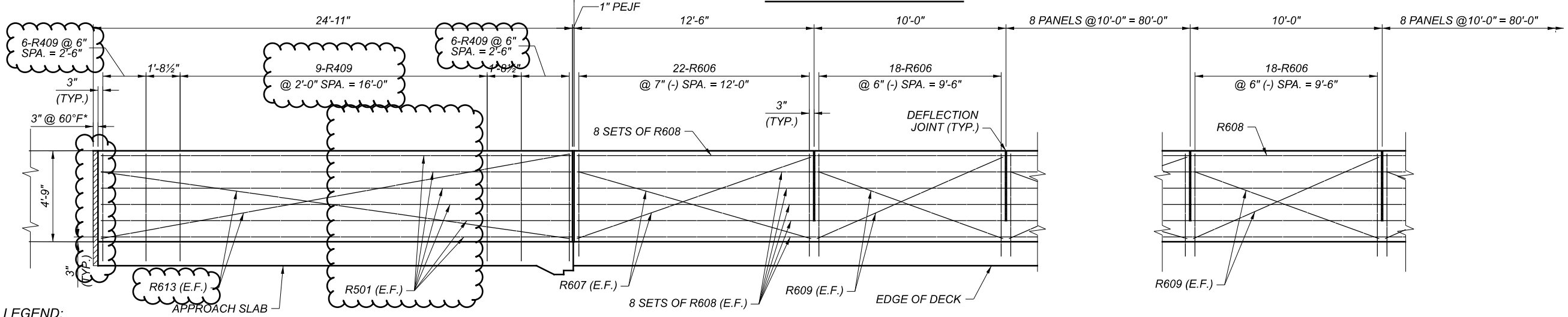
1. THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH OF 3 7/8 INCHES AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISH GRADE.  
  
THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.
2. FOR DECK REINFORCING DETAILS, SEE SHEET 17/32.
3. FOR BARRIER REINFORCING DETAILS, SEE SHEETS 25/32 THROUGH 28/32.
4. FOR PHASE CONSTRUCTION DETAILS, SEE SHEETS 5/32 THROUGH 7/32.

**TRANSVERSE SECTION**  
**BRIDGE NO. CUY-480-2241**  
**I.R. 480 OVER LEE ROAD**

SFN	1813404
DESIGN AGENCY	[B]
DESIGNER	CDH
CHECKER	IMF
REVIEWER	DEB
PROJECT ID	114516
SUBSET	19
TOTAL	32
SHEET	120
TOTAL	133



MEDIAN BARRIER PLAN VIEW

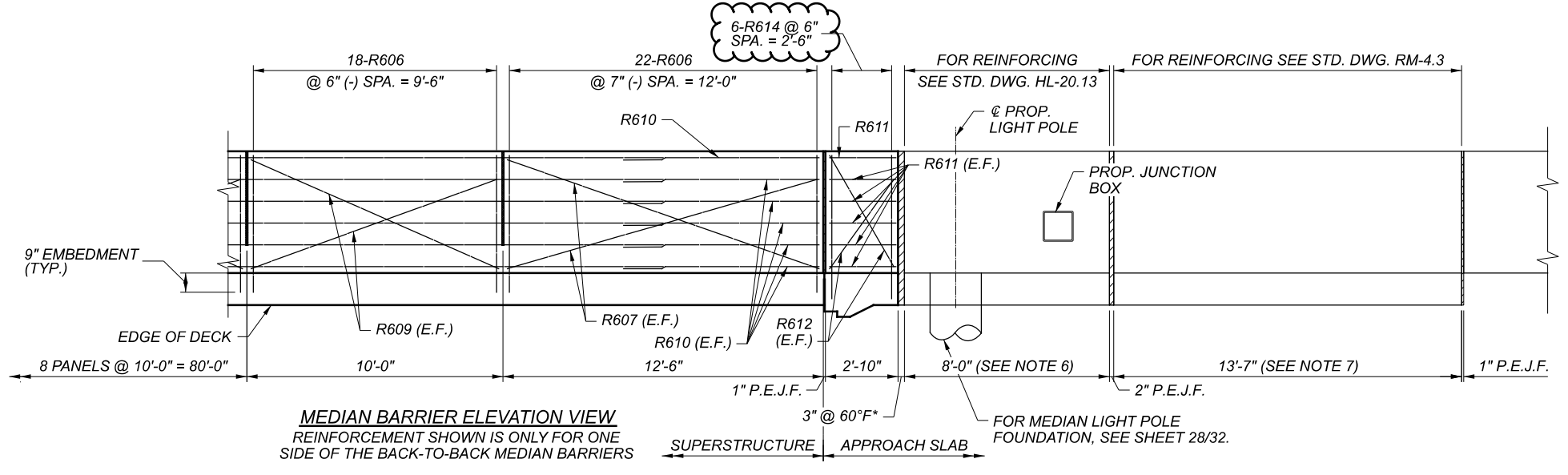


LEGEND:

\* INSTALL EXPANDED POLYSTYRENE WITH COMPRESSED FOAM EXPANSION JOINT SEAL FROM TOE OF BARRIER TO TOE OF BARRIER ALONG PERIMETER OF JOINT.

NOTES:

- FOR ADDITIONAL BARRIER DETAILS, SEE STANDARD DRAWINGS SBR-2-20 AND HL-20.13.
- MINIMUM LAP SPLICE LENGTH NO. 6 = 4'-0"
- FOR BARRIER SECTION DETAILS, SEE SHEET 28/32.
- FOR REINFORCING STEEL LIST, SEE SHEET 31/32.
- FOR TRANSVERSE SECTION, SEE SHEET 19/32.
- ALL MATERIALS, LABOR, EQUIPMENT AND OTHER INCIDENTALS REQUIRED TO CONSTRUCT THE MEDIAN LIGHT POLE BARRIER, FOUNDATION, AND WIRING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 625 - MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN. SEE SHEET 96/133 FOR ADDITIONAL NOTES.
- ALL MATERIALS, LABOR, EQUIPMENT, AND OTHER INCIDENTALS REQUIRED TO CONSTRUCT THE MEDIAN END ANCHORAGE BARRIER SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, AS PER PLAN. SEE SHEET 5/133 FOR ADDITIONAL NOTES.
- ALL MATERIAL, LABOR, EQUIPMENT, AND OTHER INCIDENTALS REQUIRED TO CONSTRUCT THE MEDIAN BARRIER ON THE APPROACH SLAB, EXCLUDING THE GFRP BARS, SHALL BE PAID FOR UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN.

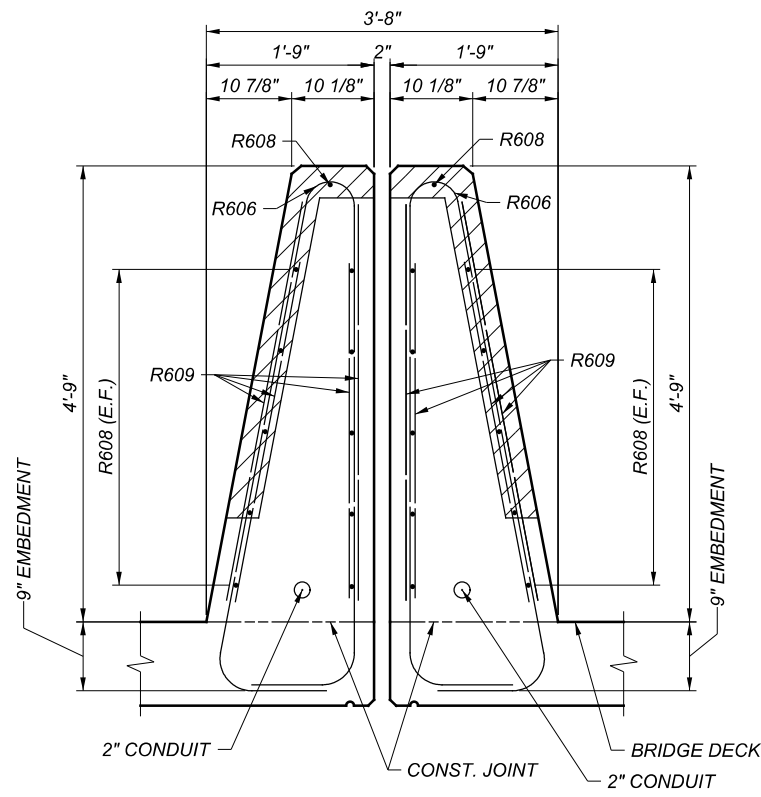


MEDIAN BARRIER ELEVATION VIEW  
REINFORCEMENT SHOWN IS ONLY FOR ONE SIDE OF THE BACK-TO-BACK MEDIAN BARRIERS

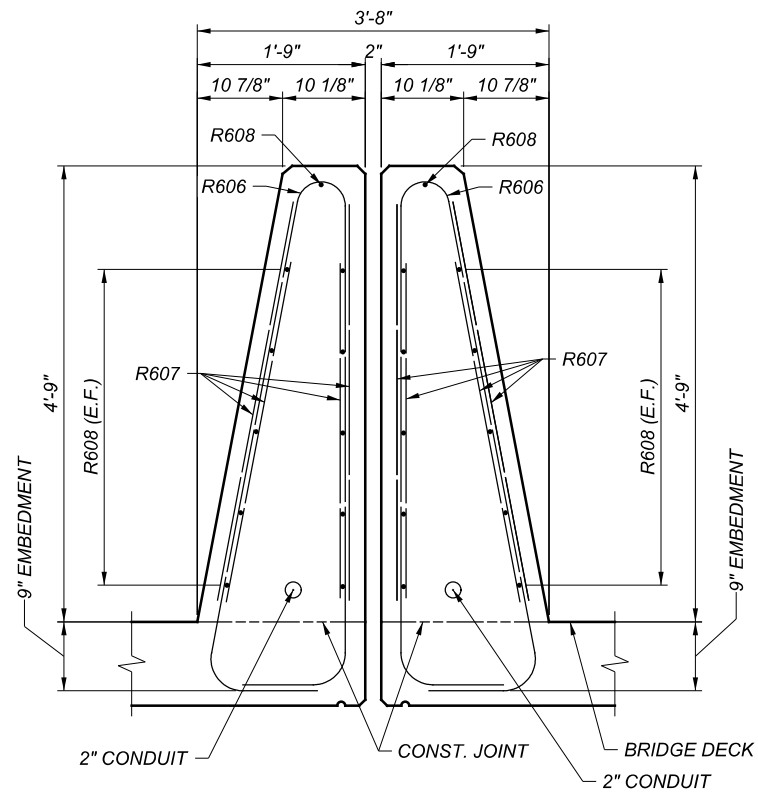


MEDIAN BARRIER PLAN AND ELEVATION  
BRIDGE NO. CUY-480-2241  
I.R. 480 OVER LEE ROAD

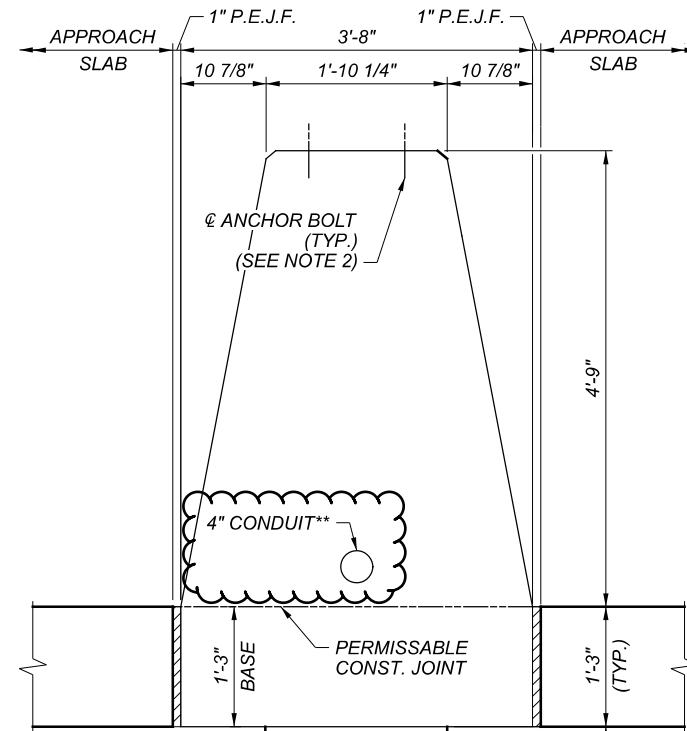
SFN	1813404
DESIGN AGENCY	[B]
DESIGNER/CHECKER	KCS / IMF
REVIEWER	DEB
PROJECT ID	114516
SUBSET	27
TOTAL	32
SHEET	128
TOTAL	133



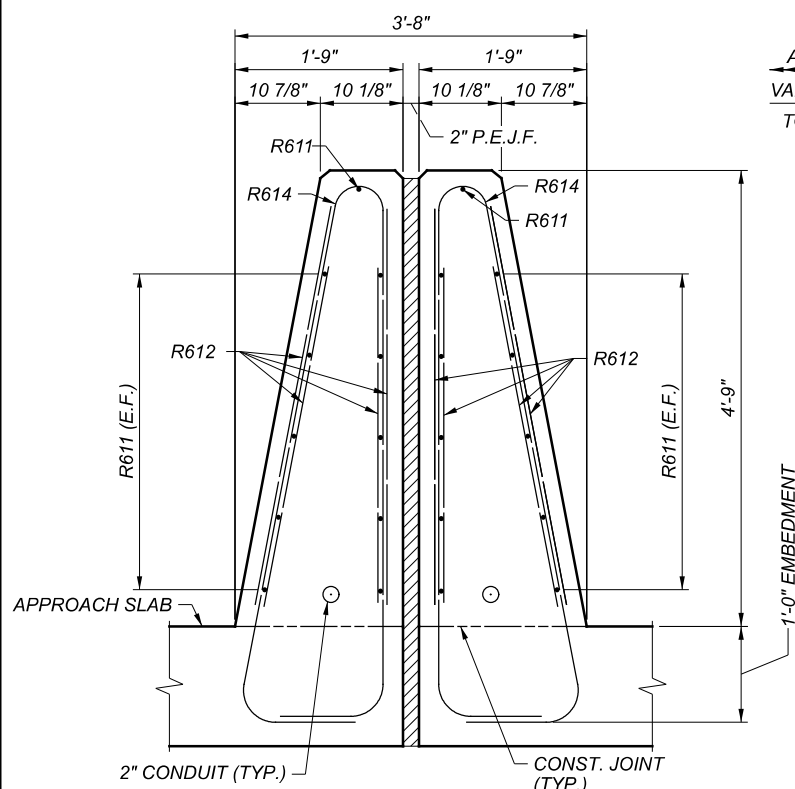
SECTION H-H



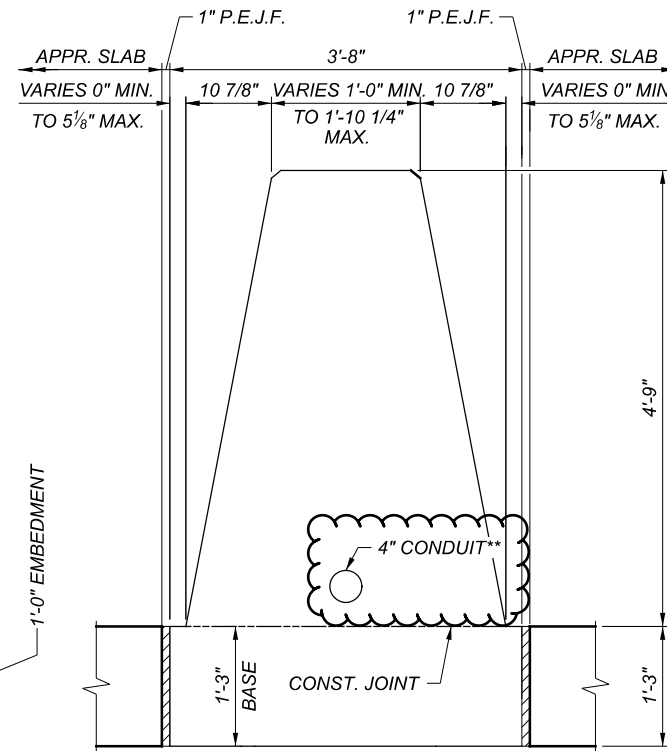
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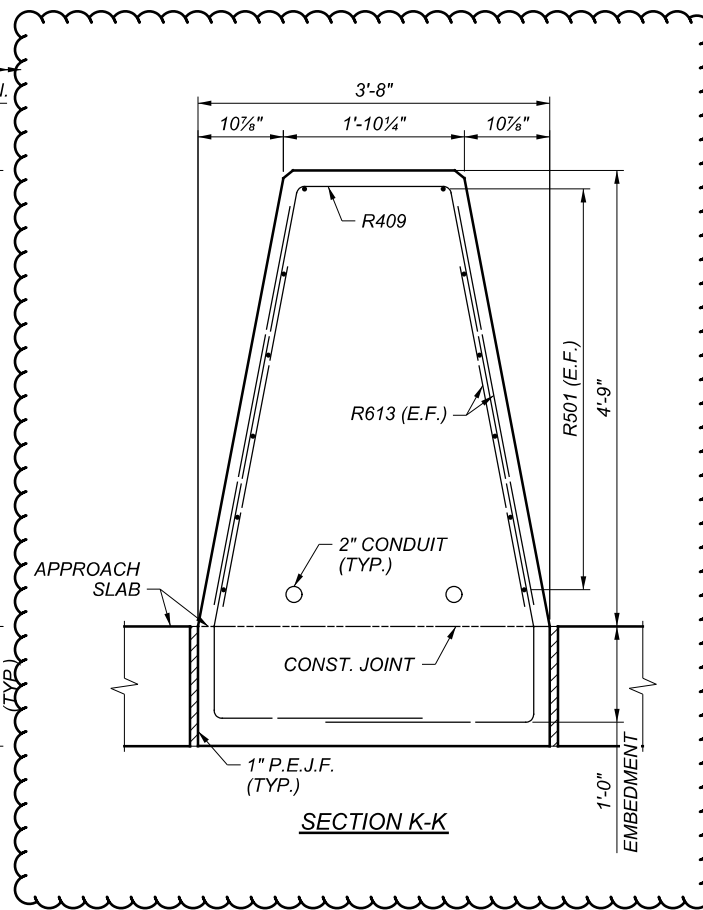
SECTION I-I  
 FOR REINFORCEMENT AND OTHER  
 DETAILS, SEE STD. DWG. HL-20.13



SECTION F-F



SECTION J-J  
 FOR REINFORCEMENT AND OTHER  
 DETAILS, SEE STD. DWG. RM-4.3



SECTION K-K

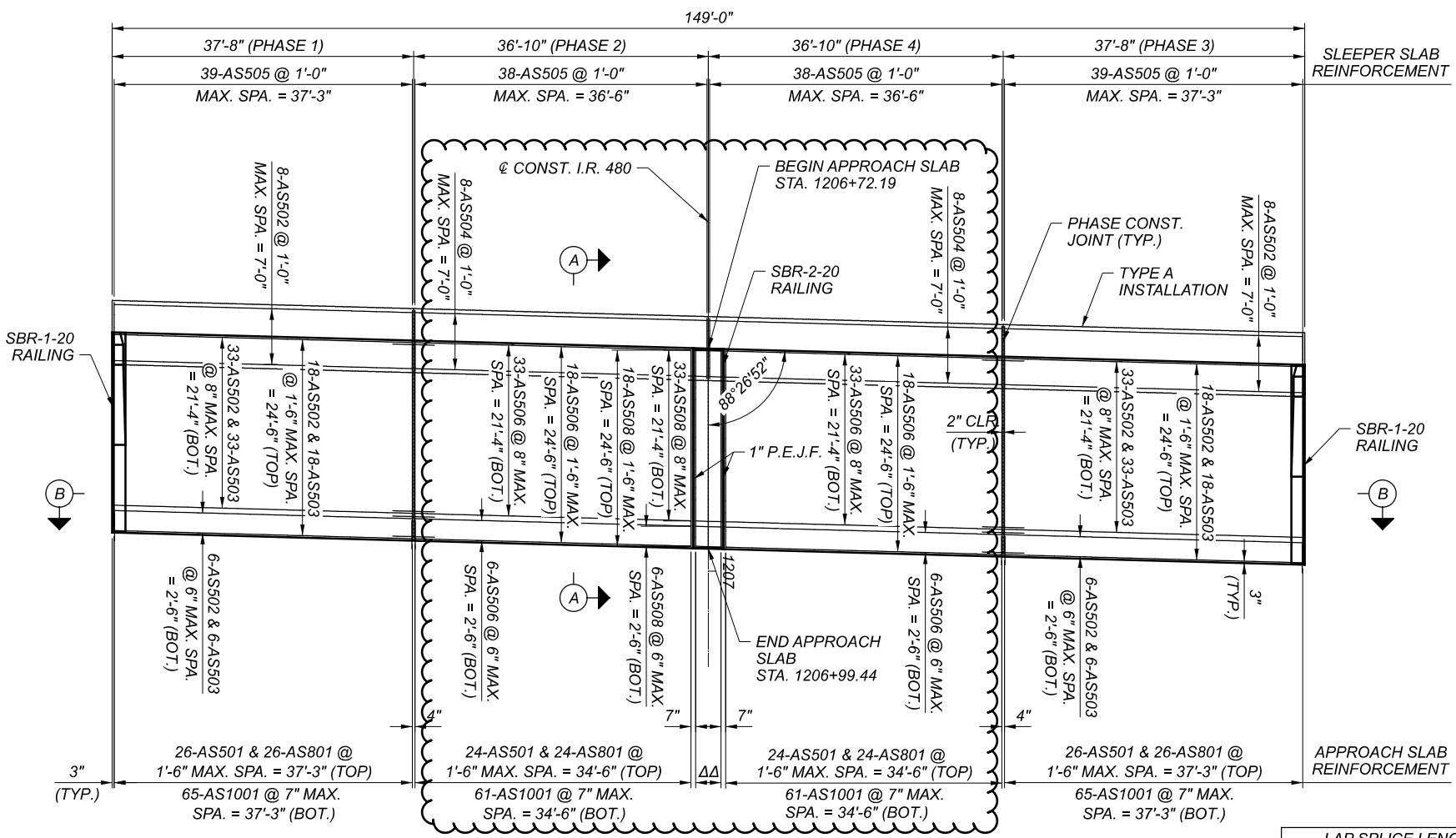
**LEGEND:**

- \* - DIMENSION OF CONSTANT BARRIER SLOPE WIDTH
- \*\* - SEE LIGHTING PLANS FOR QUANTITY

**NOTES:**

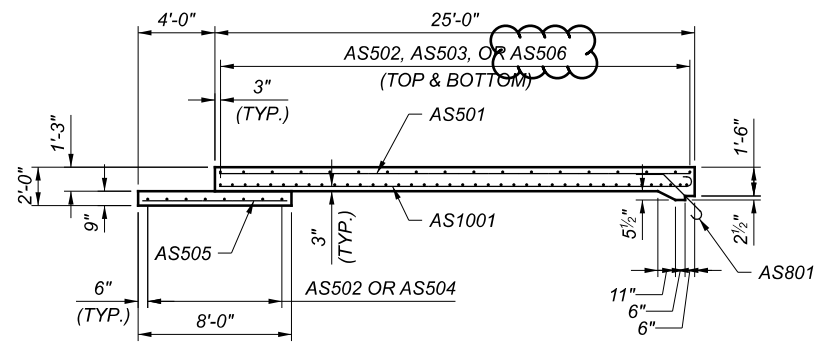
1. FOR ADDITIONAL BARRIER DETAILS AND NOTES, SEE STANDARD DRAWING SBR-2-20.
2. PROPOSED ANCHOR BOLT SPACING SHALL MATCH SPACING OF EX. BASE DIMENSIONS.
3. FOR BARRIER PLAN AND ELEVATION, SEE SHEET 27/32.
4. FOR REINFORCING STEEL LIST, SEE SHEET 31/32.
5. FOR TRANSVERSE SECTION, SEE SHEET 19/32.





REAR APPROACH SLAB PLAN

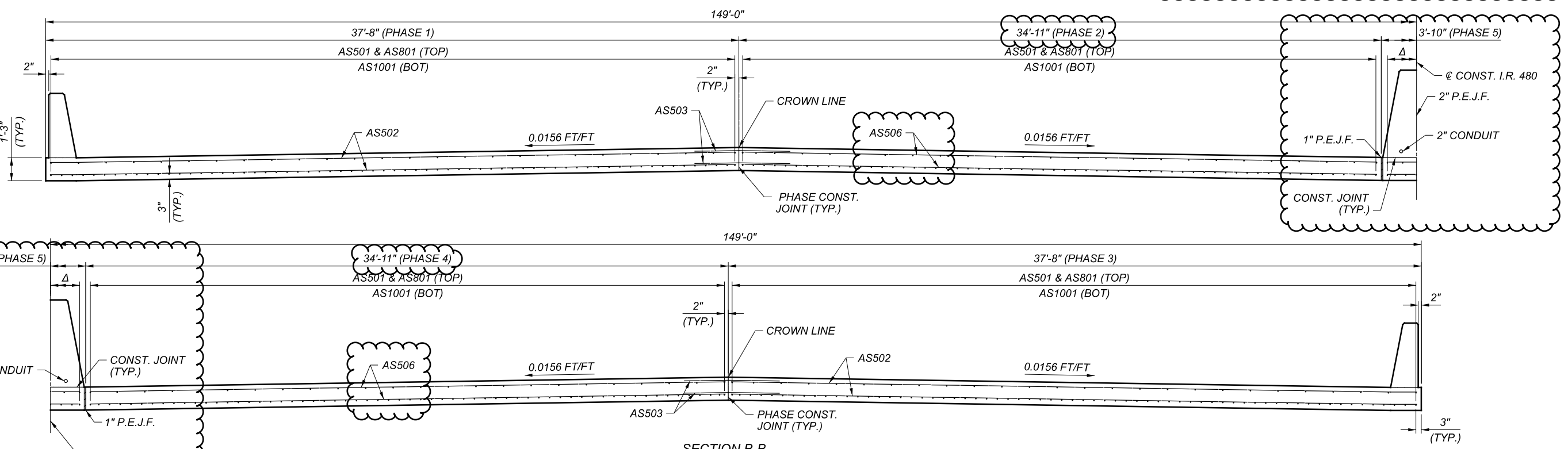
LAP SPLICE LENGTH	
#5	3'-1"
#8	5'-4"
#10	8'-2"



SECTION A-A

NOTES:

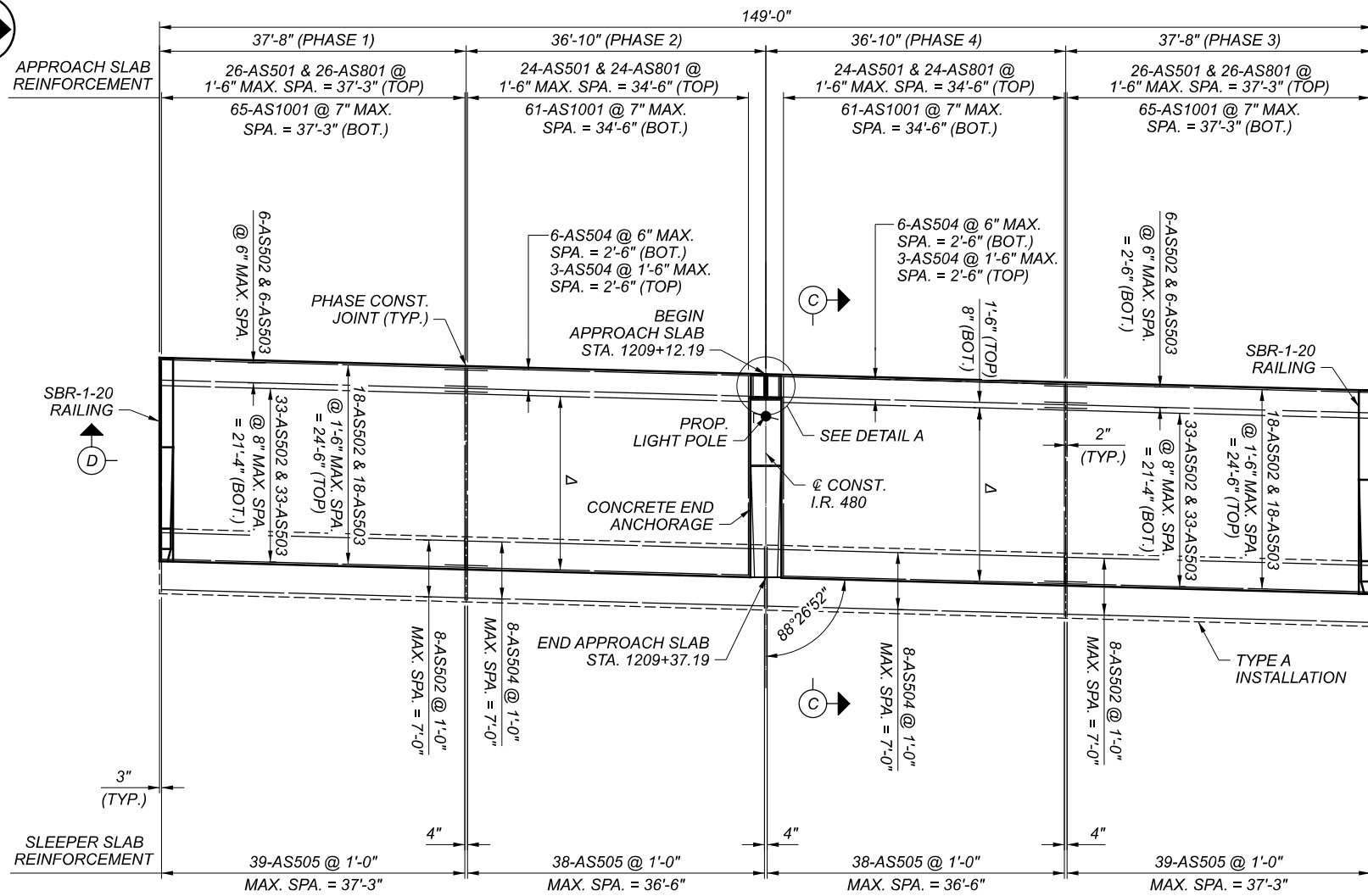
- Δ AS501 & AS801 (TOP)  
AS1001 (BOTTOM)
  - ΔΔ 4-AS501 & 4-AS501 @ 1'-6" MAX. SPA. = 3'-2" (TOP)  
7-AS1001 @ 7" MAX. SPA. = 3'-2" (BOTTOM)
- NOTES:
1. FOR ADDITIONAL NOTES AND DETAILS, SEE STANDARD DRAWING AS-1-15 AND AS-2-15
  2. FOR REINFORCING LIST SEE SHEET 31/32.
  3. FOR BARRIER DETAILS SEE SHEETS 25/32 THROUGH 28/32.
  4. LONGITUDINAL BAR SPACINGS ARE MEASURED PERPENDICULAR TO  $\phi$  I.R. 480 AND TRANSVERSE BARS ARE MEASURED ALONG  $\phi$  I.R. 480.
  5. PROVIDE A 20" WIDE X 3" THICK POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM AT THE PAVEMENT END OF THE APPROACH SLAB PER AS-2-15 AND SUPPLEMENTAL SPECIFICATION 846. ALL MATERIALS, LABOR, EQUIPMENT, AND OTHER INCIDENTALS REQUIRED TO CONSTRUCT THE POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM SHALL BE PAID FOR UNDER ITEM 846 - POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM.



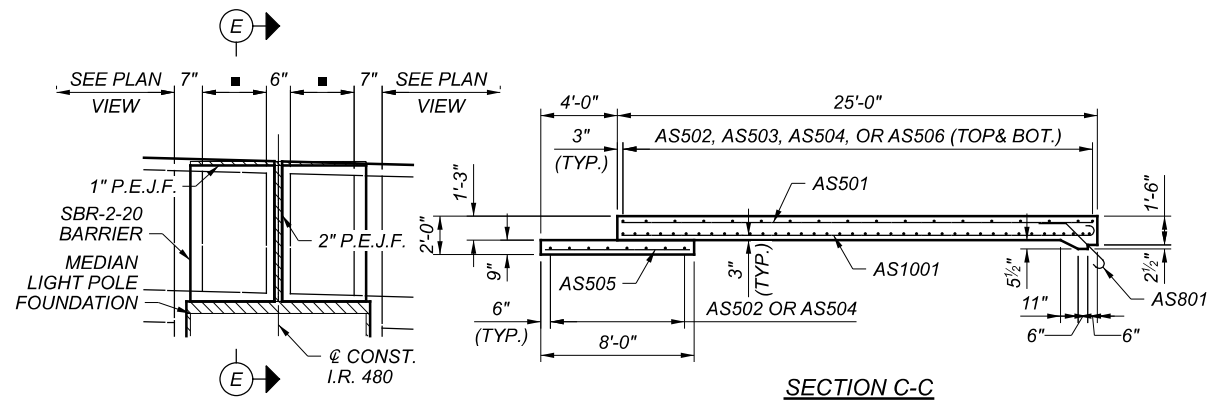
SECTION B-B

(LOOKING UPSTATION)  
BARRIER REINFORCEMENT NOT SHOWN FOR CLARITY

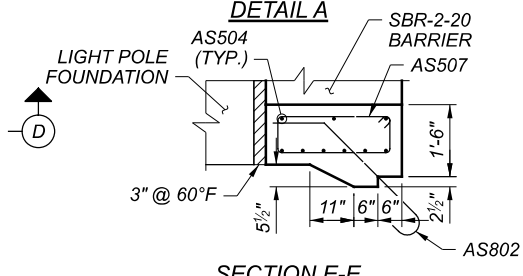
SFN	1813404
DESIGN AGENCY	[B]
DESIGNER/CHECKER	KCS IMF
REVIEWER	DEB
PROJECT ID	114516
SUBSET	29
TOTAL	32
SHEET	130
TOTAL	133



FORWARD APPROACH SLAB PLAN



SECTION C-C



SECTION E-E

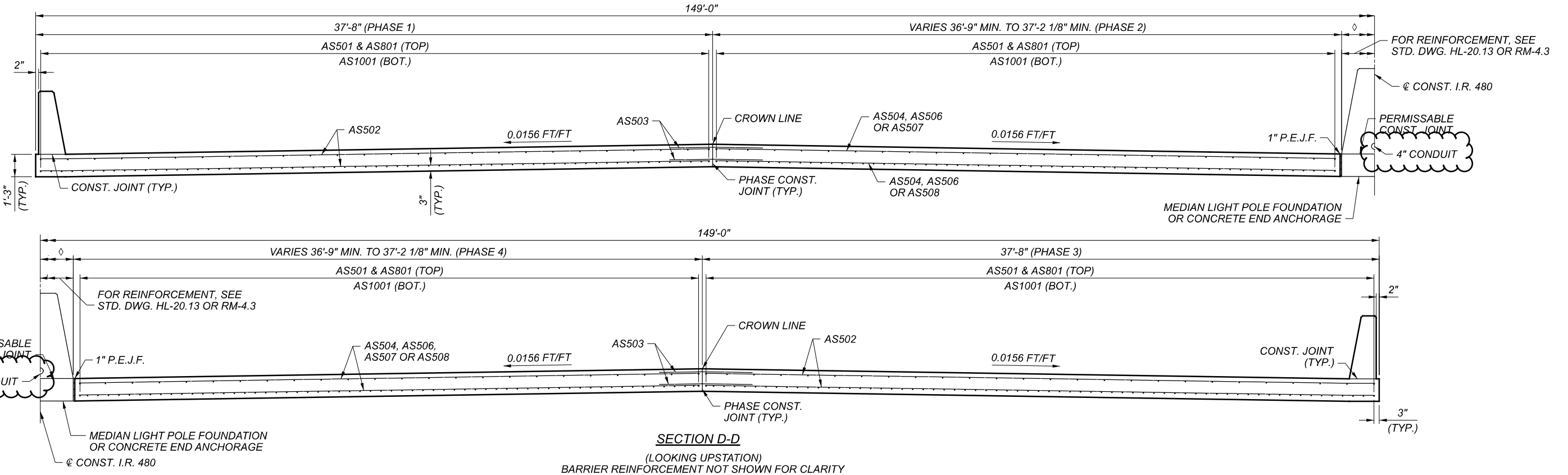
LAP SPLICE LENGTH	
#5	3'-1"
#8	5'-4"
#10	8'-2"

LEGEND:

- - 2-AS507 @ 1'-6" MAX. SPA. = 1'-4"  
2-AS802 @ 1'-6" MAX. SPA. = 1'-4"
- Δ - 15-AS506 @ 1'-6" MAX. SPA. = 20'-6" (TOP)  
33-AS506 @ 8" MAX. SPA. = 21'-4" (BOT.)
- ◇ - VARIES 2'-9 1/4" MIN. TO 3'-8" MAX.

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE STANDARD DRAWING AS-1-15 AND AS-2-15.
2. FOR REINFORCING LIST SEE SHEET 31/32.
3. FOR BARRIER DETAILS SEE SHEET 25/32 THROUGH 28/32.
4. LONGITUDINAL BAR SPACINGS ARE MEASURED PERPENDICULAR TO  $\phi$  I.R. 480 AND TRANSVERSE BARS ARE MEASURED ALONG  $\phi$  I.R. 480.
5. PROVIDE A 20" WIDE X 3" THICK POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM AT THE PAVEMENT END OF THE APPROACH SLAB PER AS-2-15 AND SUPPLEMENTAL SPECIFICATION 846. ALL MATERIALS, LABOR, EQUIPMENT, AND OTHER INCIDENTALS REQUIRED TO CONSTRUCT THE POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM SHALL BE PAID FOR UNDER ITEM 846 - POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM.



SECTION D-D

(LOOKING UPSTATION)  
BARRIER REINFORCEMENT NOT SHOWN FOR CLARITY

CUY-480-22.41

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 2022-06-22 TIME: 3:47:24 PM USER: comor.higgins (usaeast.higgroup.com) [CM127052\_D12-BH-FY227.0\_Product] (Workspaces\SFN1813404\Sheets\114516\_SF1813404\_S1M002.dgn)

FORWARD APPROACH SLAB DETAILS  
BRIDGE NO. CUY-480-2241  
I.R. 480 OVER LEE ROAD

SFN	1813404
DESIGN AGENCY	[B]
DESIGNER/CHECKER	KCS IMF
REVIEWER	DEB
PROJECT ID	114516
SUBSET	30
TOTAL	32
SHEET	131
TOTAL	133

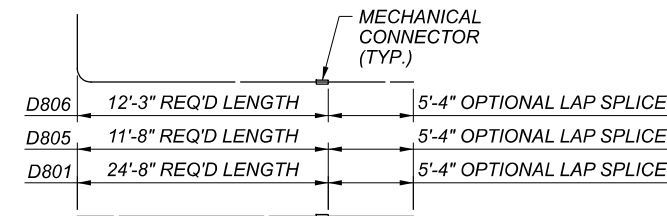


MARK	NUMBER		LENGTH	WEIGHT	TYPE	DIMENSIONS					
	TOTAL					A	B	C	D	E	R
<b>ABUTMENT DIAPHRAGM</b>											
D501	548		7'-10"	4477	2	2'-8"	2'-9"	2'-8"			
D502	944		9'-8"	9518	2	3'-3"	3'-5"	3'-3"			
D503	208		7'-8"	1663	2	2'-3"	3'-5"	2'-3"			
D601	80		10'-5"	1252	2	3'-8"	3'-5"	3'-8"			
D801♦	24		24'-0"	1538	STR						
D802	24		18'-1"	1159	STR						
D803	8		21'-5"	457	STR						
D804	16		22'-0"	968	1	1'-6"	21'-5"				
D805♦	16		11'-8"	498	STR						
D806♦	16		13'-7"	577	1	1'-6"	12'-3"				
D807	64		6'-8"	1153	18	4'-0"	1'-5"	1'-5"			
D808♦	72		11'-11"	2291	STR						
D809	8		10'-2"	217	STR						
D810	16		11'-4"	484	1	1'-6"	10'-0"				
D811♦	8		10'-5"	222	STR						
D812	16		23'-4"	997	1	1'-6"	22'-0"				
D813	112		8'-7"	2567	2	2'-8"	3'-8"	2'-8"			
<b>TOTAL</b>				30038							

MARK	NUMBER		LENGTH	WEIGHT	TYPE	DIMENSIONS					
	TOTAL					A	B	C	D	E	R
<b>PIER</b>											
P501	212		7'-6"	1658	3	2'-8"	0'-9"				
P502	424		2'-8"	1179	1	1'-10"	1'-0"				
P1101	48		19'-7"	4994	STR						
P1102	24		22'-11"	2922	STR						
<b>TOTAL</b>				10753							

MARK	NUMBER		LENGTH	WEIGHT	TYPE	DIMENSIONS					
	TOTAL					A	B	C	D	E	R
<b>DECK</b>											
S401	1176		30'-0"	23567	STR						
S402	168		22'-2"	2488	STR						
S403	1200		21'-0"	16834	STR						
S501	1428		30'-0"	44682	STR						
S502	204		28'-0"	5958	STR						
S503	856		37'-2"	33183	STR						
S504	856		36'-5"	32513	STR						
S505	856		8'-10"	7886	16	8'-3"					
S506	856		6'-11"	6175	37	3'-0"	0'-6"	0'-6"	3'-0"		
S507	856		7'-7"	6770	16	7'-0"					
S508	856		5'-8"	5059	37	1'-9"	0'-6"	0'-6"	3'-0"		
S509	856		6'-0"	5357	STR						
<b>TOTAL</b>				190472							

MARK	NUMBER		LENGTH	WEIGHT	TOTAL NO. 4 LENGTH	TOTAL NO. 6 LENGTH	TYPE	DIMENSIONS					
	TOTAL							A	B	C	D	E	R
<b>RAILING</b>													
R401*	24		5'-1"		122'-8"		STR						
R402*	24		6'-4"		152'-0"		25	2'-6"	2'-5"	1'-5"	0'-1½"	0'-5"	
R403*	200		10'-0"		2000'-0"		STR						
R404*	16		10'-11"		174'-8"		STR						
R405*	48		13'-3"		636'-0"		STR						
R406*	16		12'-6"		200'-0"		STR						
R407*	132		30'-0"		3960'-0"		STR						
R408*	44		26'-4"		1147'-8"		STR						
R409	21		16'-11"	237			36	1'-0"	1'-0"	3'-4"	1'-7"	4'-7"	
R501	12		24'-5"	306			STR						
R601	16		4'-4"	104			1	1'-0"	3'-6"				
		8 SERIES	4'-4"						3'-6"				
R602	OF		TO	628			1	1'-0"	TO		0'-1"		
	11		5'-2"						4'-4"				
R603	48		7'-8"	553			38	1'-0"	1'-5"	1'-0"	0'-9"	0'-7"	
R604	518		7'-4"	3962			23	0'-11"	3'-3"	3'-0"		0'-3"	
R605	470		7'-2"	5059			38	0'-9"	1'-5"	1'-0"	0'-9"	0'-7"	
R606	772		13'-3"	10669			35	0'-9"	1'-5"	1'-0"	4'-7"	0'-3"	
R607**	16		12'-6"		200'-0"		STR						
R608**	176		30'-0"		5280'-0"		STR						
R609**	152		10'-0"		1520'-0"		STR						
R610**	22		6'-8"		146'-8"		STR						
R611**	22		2'-6"		55'-0"		STR						
R612**	8		5'-0"		40'-0"		STR						
R613**	4		24'-6"		98'-0"		STR						
R614	12		13'-9"	172			35	1'-0"	1'-6"	1'-0"	4'-7"	0'-2"	
<b>TOTAL</b>				21690	8392'-4"	7339'-8"							



**OPTIONAL LAP SPLICE DIAGRAM**  
 IF ELECTED, ADD THE OPTIONAL LAP SPLICE LENGTH TO THE LENGTH SHOWN IN THE REINFORCING STEEL LIST

**LEGEND:**

- \* DENOTES GFRP BAR TO BE INCLUDED WITH ITEM 509 - NO. 4 GFRP DEFORMED BARS FOR PAYMENT.
- \*\* DENOTES GFRP BAR TO BE INCLUDED WITH ITEM 509 - NO. 6 GRFP DEFORMED BARS FOR PAYMENT.
- ♦ DENOTES EPOXY COATED REINFORCING STEEL BAR REQUIRING A MECHANICAL CONNECTOR. OPTIONAL LAP SPLICES MAY BE PROVIDED AS SHOWN IN THE OPTIONAL LAP SPLICE DIAGRAM WHERE SPECIFIED IN THE PLANS.

**NOTES:**

1. THE BAR SIZE IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
3. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
4. REFER TO CMS 509.05 FOR STANDARD BEND DIMENSIONS.
5. FOR ADDITIONAL REINFORCING STEEL LISTS AND BAR BENDING DIAGRAMS, SEE SHEET 32/32.

**REINFORCING STEEL LIST**  
**BRIDGE NO. CUY-480-2241**  
**I.R. 480 OVER LEE ROAD**

SFN 1813404

DESIGN AGENCY



DESIGNER/CHECKER

CDH IMF

REVIEWER

DEB 02-25-22

PROJECT ID

114516

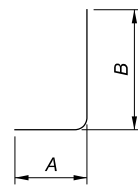
SUBSET TOTAL

31 32

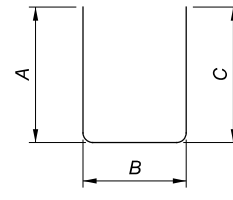
SHEET TOTAL

132 133

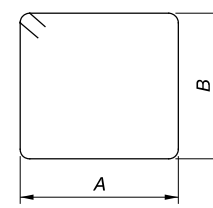
MARK	NUMBER		LENGTH	WEIGHT	TYPE	DIMENSIONS					
	TOTAL					A	B	C	D	E	R
APPROACH SLABS											
AS501	204		24'-6"	5213	STR						
AS502	260		37'-4"	10124	STR						
AS503	228		6'-6"	1546	STR						
AS504	50		36'-5"	1899	STR						
AS505	260		37'-4"	10124	STR						
AS506	210		34'-7"	7575	STR						
AS507	260		37'-4"	10124	STR						
AS508	57		3'-2"	188	STR	2'-4"	0'-9"				
AS801	204		5'-2"	2814	18	3'-0"	1'-0"	1'-0"			
AS802	4		4'-10"	52	18	3'-0"	0'-9"	0'-9"			
AS1001	511		25'-11"	56986	16	24'-6"					
TOTAL				88724							



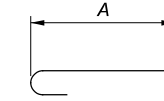
TYPE-1



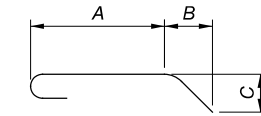
TYPE-2



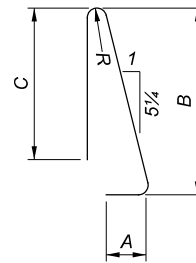
TYPE-3



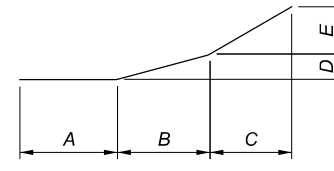
TYPE-16



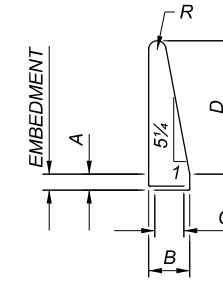
TYPE-18



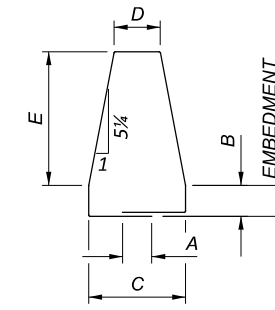
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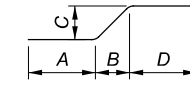
TYPE-25



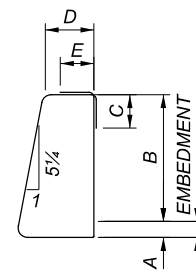
TYPE-35



TYPE-36



TYPE-37



TYPE-38

**NOTES:**

- FOR ADDITIONAL REINFORCING STEEL LISTS AND NOTES, SEE SHEET 31/32.
- APPROACH SLAB REINFORCING STEEL LIST IS PROVIDED FOR INFORMATION ONLY. ALL REINFORCING STEEL REQUIRED FOR APPROACH SLABS IS INCLUDED FOR PAYMENT WITH ITEM 526 - REINFORCED CONCRETE APPROACH SLABS, T = 15", AS PER PLAN.

REINFORCING STEEL LIST  
 BRIDGE NO. CUY-480-2241  
 I.R. 480 OVER LEE ROAD

SFN 1813404

DESIGN AGENCY



DESIGNER CHECKER  
 CDH IMF

REVIEWER  
 DEB 02-25-22

PROJECT ID  
 114516

SUBSET TOTAL  
 32 32

SHEET TOTAL  
 133 133