

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN
PRIOR TO THE START OF ROADWAY OPERATIONS, THE CONTRACTOR SHALL REFERENCE THE LENGTH OF THE PROJECT ON BOTH SIDES OF THE ROADWAY, IN A MANNER SATISFACTORY TO THE ENGINEER. THE PAVEMENT SHALL BE REFERENCED IN 1000' INCREMENTS, OR IN INCREMENTS ACCEPTABLE TO THE ENGINEER, IN A SEMI-PERMANENT CONDITION

PERMANENT PAVEMENT MARKINGS

THE CONTRACTOR SHALL REFERENCE ALL PAVEMENT MARKINGS INCLUDING AUXILIARY PAVEMENT MARKINGS BEFORE THE START OF CONSTRUCTION, M.O.T. OPERATIONS AND/OR RESURFACING OPERATION. THIS WILL BE NECESSARY ASSURE TO CORRECT PLACEMENT OF MARKINGS IN ORIGINAL LOCATIONS.

PAYMENT FOR THIS OPERATION SHALL BE INCLUDED WITH EACH RESPECTIVE PAVEMENT MARKING ITEM.

WATERWAY IMPACTS

THE CONTRACTOR SHALL NOT BE PERMITTED TO PLACE ANY TYPE OF CONSTRUCTION EQUIPMENT IN THE WATERWAY TO PERFORM ANY OF THE PROPOSED WORK. THE PROJECT THEREFORE HAS NO WATERWAY PERMIT.

NON-USE OF ASBESTOS-CONTAINING MATERIALS

THE CONTRACTOR SHALL AT NO TIME INCORPORATE ANY MATERIALS WHICH ARE COMPOSED OF OR CONTAIN ANY AMOUNT OF ASBESTOS. THE SUBSTITUTION OF MATERIALS WHICH CONTAIN ANY AMOUNTS OF ASBESTOS WILL IN NO CIRCUMSTANCES BE ACCEPTABLE. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF CERTIFICATION ASSERTING THAT NO ASBESTOS CONTAINING MATERIALS WERE USED IN ANY PORTION OF THE CONSTRUCTION.

CONSTRUCTION NOISE

ACTIVITIES AND RESIDENTIAL LAND USE WITHIN 200 FEET OF THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES IN VIOLATION OF LOCAL NOISE ORDINANCES. IN ADDITION, DO NOT OPERATE BETWEEN 7:30 PM AND 7:00 AM ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

MAINTAINING ITS DURING CONSTRUCTION

THE CONTRACTOR SHALL MAINTAIN ALL PREEXISTING OR NEWLY INSTALLED PERMANENT ITS/TRAFFIC DEVICES AND INFRASTRUCTURE DURING CONSTRUCTION ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809.

SEEDING AND MULCHING

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

659, SEEDING AND MULCHING	312 SY
659, REPAIR SEEDING AND MULCHING	16 SY
659, COMMERCIAL FERTILIZER	0.4 TON
659, LIME	0.6 ACRES
659, WATER	1.7 MGAL

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.

ASBESTOS ABATEMENT

AN ASBESTOS SURVEY FOR SFN's 3104923 SCHEDULED FOR RENOVATION WORK WAS CONDUCTED ON 07/29/2025 BY A LICENSED ASBESTOS HAZARD EVALUATION SPECIALIST. THE ASBESTOS SURVEY DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS ON THIS STRUCTURE.

AN ASBESTOS SURVEY FOR SFN's 3104990, 3105008, 3105024, & 3105083 SCHEDULED FOR RENOVATION WORK WAS CONDUCTED ON 08/13/2025 BY A LICENSED ASBESTOS HAZARD EVALUATION SPECIALIST. THE ASBESTOS SURVEY DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS ON ANY OF THESE STRUCTURES.

ELECTRONIC SUBMISSION:

THE CONTRACTOR SHALL SUBMIT ELECTRONICALLY TO OEPA A COMPLETED NOTIFICATION OF DEMOLITION & RENOVATION FORM (NDRF) AND APPLICABLE FEES ALONG WITH THE ASBESTOS SURVEY REPORT. THE COMPLETED NDRF MUST BE SUBMITTED TO OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION AND RENOVATION ACTIVITY. THE CONTRACTOR IS RESPONSIBLE FOR RETAINING AN ELECTRONIC COPY OF THE NDRF (IN PDF FORM) FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND ONE HARD COPY TO THE PROJECT ENGINEER.

(GO TO THE OEPA E-BUSINESS CENTER AND SUBMIT THE DNRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT)

HARD COPY SUBMISSION:

THE CONTRACTOR MAY ELECT TO SUBMIT A HARD COPY OF THE COMPLETED NDRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT TO THE FOLLOWING:

ASBESTOS PROGRAM OHIO EPA, DAPC P.O. BOX 1049 COLUMBUS, OHIO 43216-1049	OR	ASBESTOS PROGRAM OHIO EPA, DAPC 50 W TOWN ST, SUITE 700 COLUMBUS, OHIO 43215
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IF THE CONTRACTOR ELECTS TO SUBMIT A HARD COPY TO OEPA THEY ARE RESPONSIBLE FOR RETAINING A HARD COPY OF THE NDRF FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND A HARD COPY TO THE PROJECT ENGINEER.

BASIS OF PAYMENT
THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

690E71000 ASBESTOS ABATEMENT: WORK INVOLVING ASBESTOS CONTAINING MATERIALS - LUMP SUM

COORDINATION BETWEEN CONTRACTORS
THE CONTRACTOR OF HAM-SR126-VAR (PID 112991) WILL BE REQUIRED TO COORDINATE WORK WITH PROJECT HAM-126-6.86 (PID 110008) AND HAM-126-15.68 (PID 120995).

THE WORK ON PID 110008 INVOLVES RESURFACING SR126 WEST OF INTERSTATE 75. THIS PROJECT IS ANTICIPATED TO TAKE PLACE IN CALENDAR YEAR 2026.

THE WORK ON PID 120995 INVOLVES RESURFACING SR126 FROM SLM 15.652 TO INTERSTATE 71 ALONG WITH MINOR STRUCTURE WORK. THIS PROJECT IS ANTICIPATED TO TAKE PLACE IN CALENDAR YEAR 2026.

WORK AND MOT ON PID 120995 GOVERNS AND CONTROLS.

WORK ON HAM-126-1818 (SFN 3105083 – PLAINFIELD ROAD OVER SR 126) THAT IMPACTS TRAFFIC AND/OR THE SHOULDERS ON SR126 OR THE WORK ON PID 120995 IS NOT PERMITTED TO START UNTIL 10/01/2026 UNLESS PERMISSION IS GRANTED FROM THE PROJECT ENGINEER. THE INTENT IS TO LIMIT THE WORK CONFLICTS IN THE SAME AREAS ON PID 112991 AND PID 120995.

PLEASE BE REMINDED OF THE REQUIREMENTS OF THE CONTRACT, INCLUDING, BUT LIMITED TOO C&MS 105.08.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS.

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

PROJECT CONTROL
VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 12B

MOUNT POINT 2011
HORIZONTAL POSITIONING
REFERENCE FRAME: NAV 83
ELLIPSOID: GRS80

MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO SOUTH ZONE *SPC 3402*
COMBINED SCALE FACTOR: 1.00000
ORIGIN OF COORDINATE

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. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

MIGRATORY BIRD PROTECTION: SWALLOWS
ECOLOGICAL STUDIES IDENTIFIED SWALLOW NESTS ON THE HAM SR-126 14.06 (SFN: 3104923). IF CONSTRUCTION ACTIVITIES WILL OCCUR BETWEEN MAY 1 AND AUGUST 31 ON THIS STRUCTURE, INSPECT THE STRUCTURE FOR EVIDENCE OF AN ACTIVE BIRD NEST CONTAINING AN EGG OR CHICK PRIOR TO STARTING WORK. PROVIDE WRITTEN CONFIRMATION OF THE INSPECTION, INCLUDING A STATEMENT WHETHER AN ACTIVE NEST WAS FOUND, TO THE ENGINEER. IF NO NESTS ARE ENCOUNTERED DURING THE INSPECTION, OR IF ONLY INACTIVE NESTS THAT DO NOT CONTAIN AN EGG OR CHICK ARE ENCOUNTERED, PROCEED WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR MAY REMOVE AND DESTROY INACTIVE NESTS. THE CONTRACTOR MAY INSTALL EXCLUSION MEASURES BETWEEN AUGUST 31 AND MAY 1 TO PREVENT MIGRATORY BIRDS FROM NESTING ON THE STRUCTURE. PROJECTS PERFORMING CONSTRUCTION ACTIVITIES BETWEEN THE DATES OF SEPTEMBER 1 AND APRIL 30 DO NOT REQUIRE AN INSPECTION FOR MIGRATORY BIRDS OR AVOIDANCE MEASURES. IF AN ACTIVE NEST CONTAINING AN EGG OR CHICK IS ENCOUNTERED, AVOID IMPACTS TO THE NEST UNTIL ALL DEVELOPING BIRDS ARE ABLE TO INDEPENDENTLY FLY FROM THE NEST. IF AN ACTIVE NEST CONTAINING AN EGG OR CHICK CANNOT BE AVOIDED, CONTACT THE ENGINEER AT LEAST 4 WEEKS PRIOR DESTROYING AN ACTIVE NEST SO THE DISTRICT ENVIRONMENTAL COORDINATOR (DEC) CAN OBTAIN A DEPREDATION PERMIT FROM THE U.S. FISH AND WILDLIFE SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS AND COMPLETING ALL TASKS RELATED TO OBTAINING THE DEPREDATION PERMIT EXCEPT FOR DIRECT COORDINATION WITH THE MIGRATORY BIRD REGIONAL PERMIT OFFICE. DO NOT PROCEED WITH ACTIVITIES THAT WILL IMPACT AN ACTIVE NEST UNTIL THE DEC CONFIRMS THE DEPREDATION PERMIT IS RECEIVED.

DEMOLITION DEBRIS
THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID DEMOLITION DEBRIS FROM ENTERING THE STREAM OR FALLING ONTO TRAFFIC LANES. ANY MATERIAL THAT DOES FALL INTO THE STREAM OR ONTO TRAFFIC LANES SHALL BE IMMEDIATELY

REMOVED AT THE CONTRACTOR'S EXPENSE.
DAMAGE TO VEHICLES AS A RESULT OF FALLING DEMOLITION DEBRIS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
WHILE PAINTING OR SEALING ANY PORTION OF THE BRIDGE STRUCTURES, AN APPROPRIATE APRON WILL BE UTILIZED TO PREVENT DEBRIS, PAINT OVER SPRAY, AND SEALANTS FROM ENTERING INTO THE STREAMS OR AFFECTING VEHICULAR/PEDESTRIAN TRAFFIC AND/OR PROTECTED AREAS.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E
THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A SOFTSTOP TYPE OF THE MASH 2016 TYPE E TANGENETIAL END TREATMENTS FOR TYPE MGS GUARDRAIL AS LISTED UNDER "PRODUCTS ACCEPTED FOR NEW INSTALLATIONS" ON THE ROADWAY APPROVED PRODUCTS LIST POSTED ON ROADWAY ENGINEERING'S WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS.

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

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH SOLID FLUORESCENT YELLOW REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

WHEN THE FACE OF THE ADJACENT (ATTACHED) GUARDRAIL IS LESS THAN 4' OFFSET FROM THE PROPOSED EDGE LINE, AND PERMITTING SITE CONDITIONS EXIST: THE PROPOSED TYPE E ANCHOR ASSEMBLY SHALL BE INSTALLED AT A CONSISTENT FLARE RATE THROUGH THE FULL LENGTH OF THE SYSTEM. THE FLARE RATE SHALL BE A MAXIMUM OF 25:1 (RESULTING IN A 2' OFFSET). THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE SHOP DRAWINGS, PRODUCT INSTALLATION MANUAL/GUIDANCE, AND AS DIRECTED BY THE ENGINEER.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, (MASH 2016), SOFTSTOP EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

CLEARING AND GRUBBING, AS PER PLAN
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.

REMOVE ANY TREES, BRUSH, OR STUMPS NOT SPECIFICALLY MARKED FOR REMOVAL IF LOCATED UNDER OR WITHIN TWENTY FEET OF THE BRIDGE STRUCTURES. THE REMOVAL OF DEBRIS FROM AROUND THE PIERS AND ABUTMENTS AS DIRECTED BY THE ENGINEER AS WELL AS REMOVAL OF VEGETATION ON STRUCTURES SHALL ALSO BE INCLUDED WITH THIS ITEM FOR PAYMENT. REMOVE ALL VINES GROWING ON THE STRUCTURE(S).

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, AS PER PLAN.

UTILITIES

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

ALTAFIBER
221 E. 4TH STREET, BLDG. 121-900
CINCINNATI, OH 45201
RoadProjects@altafiber.com

CHARTER COMMUNICATIONS
10920 KENWOOD ROAD
BLUE ASH, OH 45242
DL-Southern-Ohio-Outside-Plant@charter.com

CITY OF BLUE ASH
4343 COOPER ROAD
BLUE ASH, OHIO
WILL DAVIS
(513) 745-8536
wdavis@blueash.com

CITY OF CINCINNATI TRAFFIC
801 PLUM STREET, ROOM 320
CINCINNATI, OH 45202
ANDREW CARTER
513-378-6190
Andrew.carter@cincinnati-oh.gov

CITY OF CINCINNATI STORM SEWER
225 WEST GALBRAITH ROAD
CINCINNATI, OH 45215
SmuPlanReview@Cincinnati-Oh.gov

CITY OF CINCINNATI SEWER
4747 SPRING GROVE AVENUE
CINCINNATI, OH 45232
MSDUtilityReview@cincinnati-oh.gov

CITY OF CINCINNATI WATER
4747 SPRING GROVE AVENUE
CINCINNATI, OH 45232
DAN LOUIS
513-352-3723
daniel.louis@gcww.cincinnati-oh.gov

CITY OF READING
1000 MARKET STREET
READING, OH 45215
DARRELL COURTNEY
513-733-5180
dcourtney@readingohio.org

COGENT COMMUNICATIONS
6182 JOHNSON ROAD
FLUSHING, MI 48433
PAUL BECKER
815-557-8416
pbecker@cogentco.com

DUKE ENERGY ELECTRIC
2010 DANA AVE
CINCINNATI, OH 45207
SHANE ERHART
513-508-9609
Shane.Erhart@Duke-Energy.com

DUKE ENERGY GAS/SOUTHERN CROSS
139 EAST 4TH STREET, ROOM 460A
CINCINNATI, OH 45202
OH/KYHouseBill@duke-energy.com

LUMEN
20 N MECHANIC STREET
LEBANON, OH 45036
relocations@lumen.com

MCI
8800 GOVERNOR HILL DRIVE
CINCINNATI, OH 45249
STEPHEN HOWELL
513-839-3486
stephen.howell@verizon.com

ODOT ITS LAB
1606 WEST BROAD STREET
COLUMBUS, OH 43223
614-387-4113
CEN.ITS.LAB@dot.ohio.gov

ODOT D8 TRAFFIC
505 S SR 741
LEBANON, OH 45036
JIM JUDD
513-933-6692
jim.judd@dot.ohio.gov

SOUTHWESTERN OHIO WATER
600 SHEPHERD AVE., SUITE 1
CINCINNATI, OH 45215
MIKE FAVIN
513-489-4844
Mike.Flavin@fuse.net

UNIVERSITY OF CINCINNATI
3000 GLENDORA AVENUE
CINCINNATI, OH 45221
MIKE HOFMANN
513-556-5151
michael.hofmann@uc.edu

WINDSTREAM ENTERPRISES
1925 ENTERPRISE PKWY.
TWINSBURG, OH 44087
DOUGLAS H NELISSE
330-650-7663
doug.nelisse@windstream.com

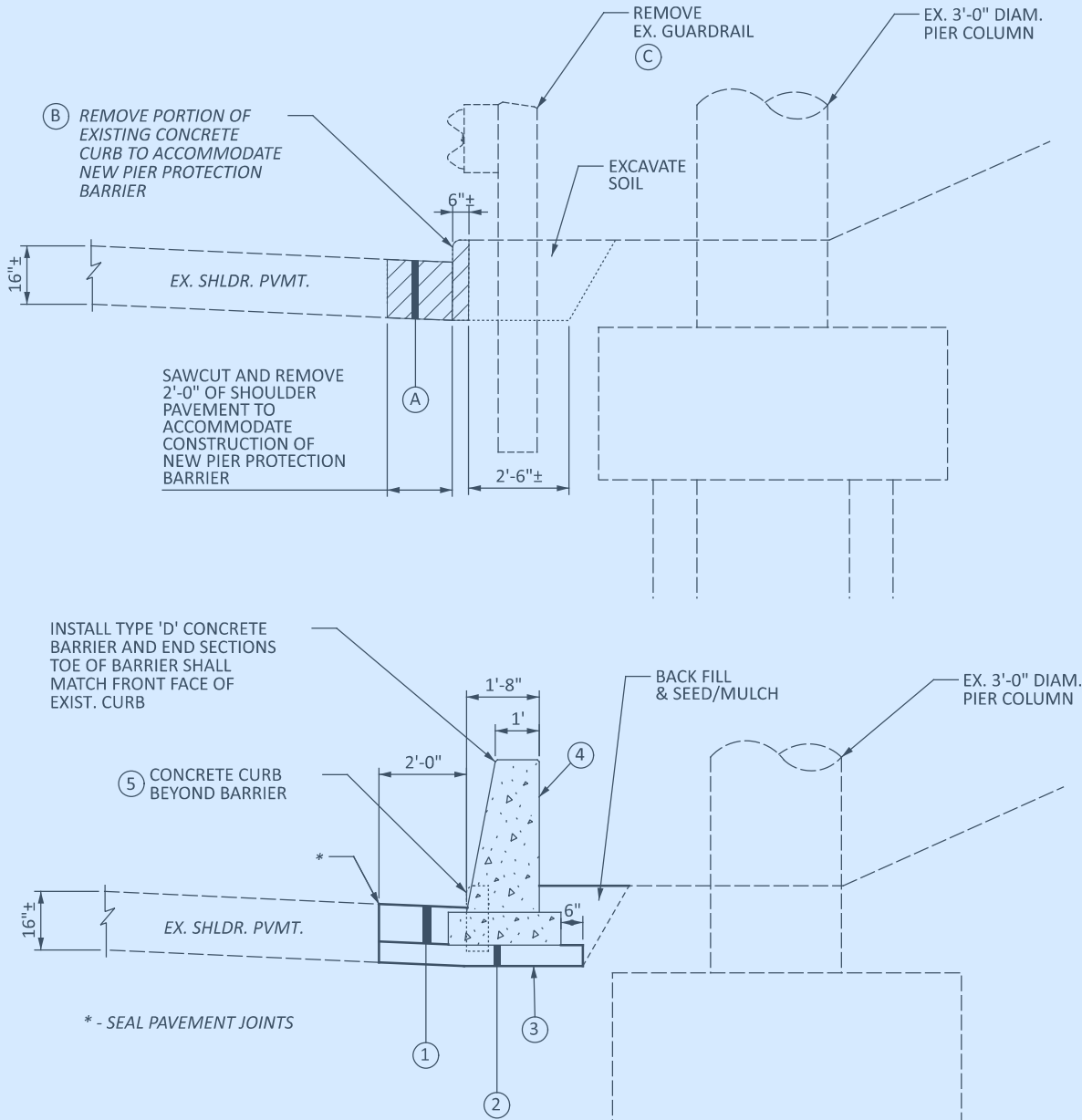
LEGEND

EXISTING

- (A) EX. ASPHALT
- (B) EX. CONCRETE CURB (ROUNDED EDGE)
- (C) EX. TYPE 5 GUARDRAIL

PROPOSED

- (1) ITEM 452 - 10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QS MS
- (2) ITEM 304 - 6" AGGREGATE BASE
- (3) ITEM 204 - SUBGRADE COMPACTION
- (4) CONCRETE BARRIER, SINGLE SLOPE, REINFORCED, TYPE D, AS PER PLAN
- (5) CONCRETE CURB, TYPE 4-C, AS PER PLAN



PAVEMENT TYPICAL SECTION

PIER PROTECTION INSTALLATION ALONG SR 126 BELOW BRIDGE
HAM-SR 128-18.18 (PLAINFIELD RD.)
REFER TO STD. DWG. RM-4.5 & RM-4.6.



SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION
3	5	6	7	9	14							01/NHS						
LUMP													LUMP	201	11001	LS		ROADWAY
				155									155	202	23000	155	SY	CLEARING AND GRUBBING, AS PER PLAN
				698									698	202	32001	698	FT	PAVEMENT REMOVED (ASPHALT)
				600									600	202	38000	600	FT	CURB REMOVED, AS PER PLAN
				2									2	202	42010	2	EACH	GUARDRAIL REMOVED
				18									18	203	10000	18	CY	ANCHOR ASSEMBLY REMOVED, TYPE E
				11									11	203	20000	11	CY	EXCAVATION
																		EMBANKMENT
				275									275	606	15050	275	FT	
				2									2	606	26150	2	EACH	GUARDRAIL, TYPE MGS
				2									2	606	35002	2	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016), SOFTSTOP
				192									192	622	10160	192	FT	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1
				2									2	622	25000	2	EACH	CONCRETE BARRIER, SINGLE SLOPE, TYPE D
				2									2	622	25050	2	EACH	CONCRETE BARRIER END SECTION, TYPE D
																		CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D
312													312	659	10000	312	SY	EROSION CONTROL
16													16	659	14000	16	SY	SEEDING AND MULCHING
0.04													0.04	659	20000	0.04	TON	REPAIR SEEDING AND MULCHING
0.06													0.06	659	31000	0.06	ACRE	COMMERCIAL FERTILIZER
1.7													1.7	659	35000	1.7	MGAL	LIME
													10,000	832	30000	10,000	EACH	WATER
																		EROSION CONTROL
																		DRAINAGE
																		PIPE REMOVED, 24" DIAMETER AND UNDER, AS PER PLAN
																		PAVEMENT
				349									349	204	10000	349	SY	SUBGRADE COMPACTION
				52									52	304	20000	52	CY	AGGREGATE BASE
				155									155	452	14050	155	SY	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS
				42									42	609	24511	42	FT	CURB, TYPE 4-C, AS PER PLAN
																		ENVIRONMENTAL / REMEDIATION
LUMP													LUMP	SPECIAL	69071000	LS		ASBESTOS ABATEMENT: WORK INVOLVING ASBESTOS CONTAINING MATERIALS
																		TRAFFIC CONTROL
				9									9	626	00102	9	EACH	BARRIER REFLECTOR, TYPE 1 (UNI-DIRECTIONAL)
				6									6	626	00110	6	EACH	BARRIER REFLECTOR, TYPE 2 (UNI-DIRECTIONAL)
																		STRUCTURE REPAIR (HAM-126-1406)
																		STRUCTURE REPAIR (HAM-126-1530)
																		STRUCTURE REPAIR (HAM-126-1543)
																		STRUCTURE REPAIR (HAM-126-1555)
																		STRUCTURE REPAIR (HAM-126-1818)
																		MAINTENANCE OF TRAFFIC
		300											300	614	11111	300	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE, AS PER PLAN
			14										14	614	12380	14	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)
			52										52	614	13310	52	EACH	BARRIER REFLECTOR, TYPE 1(UNI-DIRECTIONAL)
			52										52	614	13350	52	EACH	OBJECT MARKER, ONE WAY
	10												10	614	18601	10	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
		2,600											2,600	622	41100	2,600	FT	PORTABLE BARRIER, UNANCHORED
		450											450	614	18030	450	FT	MAINTAINING TRAFFIC, MISC.:PLASTIC WATER-FILLED BARRIER, AS PER PLAN
																		INCIDENTALS
	LUMP												LUMP	614	11000	LS		MAINTAINING TRAFFIC
LUMP													LUMP	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN
													LUMP	624	10000	LS		MOBILIZATION

REF NO.	COUNTY	ROUTE	LOG POINT (STATIONS)		SIDE	202			606			609	622			626		NOTES	SHEET REF
						GUARDRAIL REMOVED	CURB REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE E	GUARDRAIL TYPE MGS	BRIDGE TERMINAL ASSEMBLY, MGS TYPE 1	ANCHOR ASSEMBLY, MGS TYPE E	CURB, TYPE 4-C	CONCRETE BARRIER, TYPE D	CONCRETE BARRIER END SECTION, TYPE D	CONCRETE BARRIER, END ANCHORAGE REINFORCED TYPE D	BARRIER REFLECTOR (TYPE 1) UNI- DIRECTIONAL	BARRIER REFLECTOR (TYPE 2) UNI- DIRECTIONAL		
			FROM	TO		FT	FT	EACH	FT	EACH	EACH	FT	FT	EACH	EACH	EACH	EACH		
GR--1	HAM	126-18.18	195+20.00	198+65.00	LT	300.0	29.0	1	150.0	1	1	19	84	1	1	4	3	PIER PROTECTION ALONG SR 126	
GR--2	HAM	126-18.18	193+02.00	196+51.00	RT	300.0	29.0	1	125.0	1	1	19	108	1	1	5	3	PIER PROTECTION ALONG SR 126	
TOTALS CARRIED TO GENERAL SUMMARY						600.0	58	2	275.0	2	2	38	192	2	2	9	6		

DESCRIPTION	LOG POINT (STA.)		LENGTH OR AVERAGE LENGTH (L)	BEGIN WIDTH	END WIDTH	AVERAGE WIDTH (W)	TOTAL AREA (A = L x W)	202	204	304	452	203	203
	FROM	TO						PAVEMENT REMOVED, ASPHALT SQ YD	SUBGRADE COMPACTION SQ YD	6" AGGREGATE BASE CU YD	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS SQ YD	EXCAVATION CU YD	EMBANKMENT CU YD
S.R. 126													
FULL DEPTH ASPHALT (LT. SHLDR. TO INSTALL PIER PROTECTION & TYPE 4-C CURB)													
PAVEMENT REMOVED	195+18.00	198+65.00	347.00	2.00	2.00	2.00	694.00	77.11					
CONCRETE PAVEMENT	195+18.00	198+65.00	347.00	2.00	2.00	2.00	694.00				77.11		
AGGREGATE BASE	195+18.00	198+65.00	347.00	4.00	4.00	4.00	1388.00			25.70			
SUBGRADE COMPACTION	195+18.00	198+65.00	347.00	4.50	4.50	4.50	1561.50		173.50				
EXCAVATION	195+18.00	198+65.00	347.00	5.50	5.50	5.50	1908.50					58.90	
BACKFILL	195+18.00	198+65.00	347.00	3.50	3.50	3.50	1214.50						37.48
FULL DEPTH ASPHALT (RT. SHLDR. TO INSTALL PIER PROTECTION & TYPE 4-C CURB)													
PAVEMENT REMOVED	193+02.00	196+53.00	351.00	2.00	2.00	2.00	702.00	78.00					
CONCRETE PAVEMENT	193+02.00	196+53.00	351.00	2.00	2.00	2.00	702.00				78.00		
AGGREGATE BASE	193+02.00	196+53.00	351.00	2.00	4.00	4.00	1404.00			26.00			
SUBGRADE COMPACTION	193+02.00	196+53.00	351.00	2.00	4.50	4.50	1579.50		175.50				
EXCAVATION	193+02.00	196+53.00	351.00	5.50	5.50	5.50	1930.50					59.58	
BACKFILL	193+02.00	196+53.00	351.00	3.50	3.50	3.50	1228.50						37.92
TOTALS CARRIED TO GENERAL SUMMARY								155	349	52	155	118	75

NOTES:

1. EARTHWORK AND PAVEMENT QUANTITIES ARE ASSOCIATED WITH PIER PROTECTION BARRIER INSTALLATION.



STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

- BR-1-13 DATED (REVISED) 1/17/14
- BR-2-15 DATED (REVISED) 7/19/24
- EXJ-4-87 DATED (REVISED) 1/19/24
- GSD-1-19 DATED (REVISED) 7/19/24
- PCB-91 DATED (REVISED) 7/17/20
- RB-1-55 DATED (REVISED) 7/19/24
- VPF-1-24 DATED (REVISED) 1/17/25

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):
SS 844 DATED 1/17/25

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2023 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

THIS WORK CONSISTS OF THE REMOVAL OF PORTIONS OF CONCRETE DECKS OR PARAPETS INCLUDING SIDEWALKS, CONCRETE BRIDGE RAILINGS, METAL RAILINGS, DECK JOINTS AND/OR OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, 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 DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT. 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 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 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: THE 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 (PRESTRESSED BOX BEAM, I-BEAM, STEEL BEAM 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, SCUPPER AND 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.

DECK REMOVALS - COMPOSITE DECK DESIGNS STEEL SUPERSTRUCTURES: DUE TO THE PRESENCE OF WELDED STUDS TO THE EXISTING STRUCTURAL STEEL, SUBMIT A DETAILED PROCEDURE OF THE DECK REMOVAL TO THE ENGINEER AT LEAST 7 DAYS BEFORE CONSTRUCTION BEGINS. DEPARTMENT ACCEPTANCE IS NOT REQUIRED. THE PROCEDURE SHALL INCLUDE ALL DETAILS, EQUIPMENT AND METHODS TO BE USED FOR REMOVAL OF THE CONCRETE OVER THE FLANGES AND AROUND THE STUDS. REPLACE OR REPAIR MAIN STEEL AND STUDS 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.

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 CONTRACTOR SHALL ADHERE TO ALL HAMMER WEIGHT RESTRICTIONS NOTED IN THE PLANS. OTHERWISE, THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR 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.

EXISTING WELDED ATTACHMENTS: REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES 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.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS 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, AS PER PLAN. FOR MODIFICATIONS TO OR EXTENSIONS OF EXISTING CONCRETE SUBSTRUCTURE MEMBERS, INCLUDE THE FOLLOWING NOTES IN AN ITEM 202, ASPER PLAN NOTE.

MAXIMUM REMOVAL LIMITS

SOUND THE CONCRETE TO DETERMINE THE LIMITS OF THE CONCRETE TO BE REMOVED AND COMPARE THESE LIMITS TO THE AREAS SHOWN IN THE PLANS. IF NEW AREAS ARE DISCOVERED OR IF THE DIMENSIONS OF THE PLAN AREAS INCREASE BY MORE THAN 25% IN ANY DIRECTION, DOCUMENT THE AREAS AND NOTIFY THE ENGINEER FOR EVALUATION TWO WEEKS PRIOR TO REMOVAL. THE ENGINEER WILL DETERMIN IF PATCHING IN DISCRETE SECTIONS/STAGES IN IS NEEDED OR IF THE INSTALLATION OF TEMPORARY FALSWORK IS REQUIRED.

INSTALLATION OF EXPANSION JOINT SEAL
DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE EXPANSION JOINT SEAL, OBSERVE THE SEATING OF BEAMS ON BEARINGS TO ASSURE THAT THE REQUIREMENTS OF CM&S 516 ARE MET.

PROPOSED WORK

HAM-126-1406 (SFN 3104923) WHICH CARRIES EB SR 126 OVER MILL CREEK.

- ZONE PAINT STRUCTURAL STEEL PER 514 OZEU SPECIFICATIONS. COLOR SHALL BE LIGHT GREEN, FEDERAL COLOR FS-595C-14277 FOR A DISTANCE OF 10 FEET FROM THE EAST EXPANSION JOINT.
- REPLACE EAST ABUTMENT BEARINGS WITH ELASTOMERIC BEARINGS.
- REMOVE BIRDS NEST ATTACHED TO BRIDGE THAT INTERFERE WITH WORK PRIOR TO RESTRICTED NESTING SEASON. INCLUDED WITH ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN FOR PAYMENT.
- CLEAR AND GRUB WITH IN 20 FEET OF THE STRUCTURE.
- RESTRICT PAINTING/SCAFFOLDING FOR THIS STRUCTURE TO SUMMER MONTHS (JUNE 1st THRU SEPTEMBER 15th) AS FLOODWATER REACHES BEAMS REGULARLY.
- REMOVE SMASHED PORTION OF 6” CMP BRIDGE DRAINAGE THAT OUTLETS THROUGH THE SLOPE PROTECTION LEAVING A COPED END. ATTACH AN ANIMAL GUARD JUST WITHIN THE REMAINING FULL SECTION OF THE CMP PIPE.

HAM-126-1530 (SFN 3104990) WHICH CARRIES GALBRAITH RD AND SIDEWALK OVER SR 126

- PAINT STRUCTURAL STEEL WITH PER 514 OZEU SPECIFICATIONS. COLOR SHALL BE LIGHT GREEN, FEDERAL COLOR FS-595C-14277.
- REPLACE ABUTMENT BEARINGS WITH ELASTOMERIC BEARINGS.
- PATCH DETERIORATED PORTIONS OF CONCRETE SUBSTRUCTURE AND CONCRETE BARRIER WITH 519 PATCHING. FOR AREAS LARGER THAN 5 SQ FEET, INCLUDE ANODE PER SS 844. ON DETERIORATED PIER COLUMNS AREAS, WRAP THE CIRCUMFERENCE OF THE PIER COLUMN TO 2 FEET ABOVE THE REPAIR AREA (UNLESS SURFACE IS OBSTRUCTED BY BARRIER, CAP, ETC.) WITH FIBER REINFORCED POLYMER (FRP). ADDITIONALLY, WRAP THE TOP 2 FEET OF ALL SINGLE PIER COLUMNS.
- SEAL CONCRETE SURFACES ON THE SUPERSTRUCTURE, PIERS, AND ABUTMENTS WITH EPOXY URETHANE SEALER. SEAL BRIDGE SIDEWALK WITH NON-EPOXY.
- CLEAR AND GRUB WITH IN 20 FEET OF THE STRUCTURE.
- PATCH TOP OF ABUTMENT BACKWALLS PER PROPOSAL NOTE 512, TYPE B.
- REPAIR CRACKED WELDS IN THE REAR AND FORWARD EXPANSION JOINT ARMOR AND/OR GLAND RETAINERS USING FULL PENETRATION WELDS.

HAM-126-1543 (SFN 3105008) WHICH CARRIES A RAMP FROM WESTBOUND SR 126 TO GALBRAITH RD OVER SR 126

- PAINT STRUCTURAL STEEL WITH PER 514 OZEU SPECIFICATIONS. COLOR SHALL BE LIGHT GREEN, FEDERAL COLOR FS-595C-14277.
- REPLACE ABUTMENT BEARINGS WITH ELASTOMERIC BEARINGS.
- PATCH DETERIORATED PORTIONS OF CONCRETE SUBSTRUCTURE WITH 519 PATCHING. FOR AREAS LARGER THAN 5 SQ FEET, INCLUDE ANODE PER SS 844. ON DETERIORATED PIER COLUMNS AREAS, WRAP THE CIRCUMFERENCE OF THE PIER COLUMN TO 2 FEET ABOVE THE REPAIR AREA (UNLESS SURFACE IS OBSTRUCTED BY BARRIER, CAP, ETC.) WITH FIBER REINFORCED POLYMER (FRP).
- SEAL CONCRETE SURFACES ON THE SUPERSTRUCTURE, PIERS, AND ABUTMENTS WITH EPOXY-URETHANE SEALER.
- CLEAR AND GRUB WITH IN 20 FEET OF THE STRUCTURE.

HAM-126-1555 (SFN 3105024) WHICH CARRIES KNOLLCREST DRIVE OVER SR 126

- PAINT STRUCTURAL STEEL WITH PER 514 OZEU SPECIFICATIONS. COLOR SHALL BE LIGHT GREEN, FEDERAL COLOR FS-595C-14277.
- REPLACE ABUTMENT BEARINGS WITH ELASTOMERIC BEARINGS.
- PATCH DETERIORATED PORTIONS OF CONCRETE SUBSTRUCTURE WITH 519 PATCHING. FOR AREAS LARGER THAN 5 SQ FEET, INCLUDE ANODE PER SS 844. ON DETERIORATED PIER COLUMNS AREAS, WRAP THE CIRCUMFERENCE OF THE PIER COLUMN TO 2 FEET ABOVE THE REPAIR AREA WITH FIBER REINFORCED POLYMER (FRP) UNLESS SURFACE IS OBSTRUCTED BY BARRIER, CAP, ETC.)
- SEAL CONCRETE SURFACES ON THE SUPERSTRUCTURE, PIERS, AND ABUTMENTS WITH EPOXY URETHANE SEALER.
- CLEAR AND GRUB WITH IN 20 FEET OF THE STRUCTURE.
- PLUG OPEN UTILITY CONDUITS WITH GROUT.

HAM-126-1818 (SFN 3105083) WHICH CARRIES PLAINFIELD RD OVER SR 126

- PAINT STRUCTURAL STEEL WITH PER 514 OZEU SPECIFICATIONS. COLOR SHALL BE LIGHT BLUE, FEDERAL COLOR FS-595C-15526.
- REPLACE PORTIONS OF THE BARRIER THAT ARE DETERIORATED ON BOTH SIDES WITH FULL THICKNESS CONCRETE. PATCH DETERIORATED AREAS OF THE CONCRETE BARRIER THAT ARE ONLY DETERIORATED ON ONE SIDE, AND DETERIORATED PORTIONS OF THE SUBSTRUCTURE WITH 519 PATCHING. FOR AREAS LARGER THAN 5 SQ FEET, INCLUDE ANODE PER SS 844. ON DETERIORATED PIER COLUMNS AREAS, WRAP THE CIRCUMFERENCE OF THE PIER COLUMN TO 2 FEET ABOVE THE REPAIR AREA WITH FIBER REINFORCED POLYMER (FRP) UNLESS SURFACE IS OBSTRUCTED BY BARRIER, CAP, ETC.
- PROTECT EXISTING PIER COLUMNS (LOCATED WITHIN 5' OF SR 126 CURB) WITH CONCRETE BARRIER.
- SEAL CONCRETE SURFACES ON THE SUPERSTRUCTURE, PIERS, AND ABUTMENTS WITH EPOXY URETHANE SEALER.
- REPLACE THE DAMAGE SIDEWALK AROUND THE NORTH EAST WINGWALL.
- REPLACE SECTIONS OF DAMAGED ALUMINUM RAILING ON THE EAST SIDE OF THE BRIDGE. REPLACE MISSING BOLTS AND WASHERS FOR THE RAILING ANCHOR BOLTS ON THE NORTHEAST WINGWALL.
- CLEAR AND GRUB WITHIN 20 FEET OF THE STRUCTURE, EXCEPT THAT THE MULCHED/LANDSCAPED AREAS SHALL NOT BE DISTURBED.
- WORK AT THIS BRIDGE SHALL NOT BEGIN UNTIL 10/1/26. REFER TO "COORDINATION BETWEEN CONTRACTORS" NOTE ON SHEET 3.

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/OR 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 IN THE FIELD.

SFN		3104923	
DESIGN AGENCY			
DESIGNER		CHECKER	
CAH		GTF	
REVIEWER			
RSK 07-07-25			
PROJECT ID			
112991			
SUBSET		TOTAL	
2		2	
SHEET		TOTAL	
11		57	

ITEM 510, DOWEL HOLES, AS PER PLAN:

INSTALL GALVANIZED DOWEL BARS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR BLACK REBAR PUBLISHED IN THE ICC-ES REPORTS LISTED BELOW.

THE HOLES FOR THE ADHESIVE ANCHORS SHALL BE DRILLED WITH A HAMMER DRILL AND CARBIDE BIT. PRIOR TO THE INSTALLATION OF THE ANCHORS, THE HOLES SHALL BE CLEANED AND DRIED IN A MANNER CONSISTENT WITH THE MANUFACTURER'S REQUIREMENTS FOR DRY CONCRETE.

SELECT FROM ONE OF THE FOLLOWING APPROVED PRODUCTS:

HILTI HIT-HY 200 ADHESIVE ANCHORS
ICC-ES REPORT ESR-3187)

DEWALT PURE110+ EPOXY ADHESIVE ANCHOR SYSTEM
(ICC-ES REPORT ESR-3298)

SIMPSON STRONG-TIE SET-3G EPOXY ADHESIVE ANCHORS
ICC-ES REPORT ESR-4057)

ATC ULTRABOND HS-1CC ADHESIVE ANCHOR SYSTEM
(ICC-ES REPORT ESR-4094)

THE MANUFACTURER'S INSTALLATION INSTRUCTION PUBLISHED IN THE ICC-ES REPORTS FOR ACCEPTABLE PRODUCTS ARE AVAILABLE AT:

<https://icc-es.org/evaluation-report-program/>

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY- URETHANE)

EPOXY-URETHANE SEALING OF THE STRUCTURE AS SHOWN IN THE PLANS SHALL BE COMPLETED IMMEDIATELY AFTER THE BRIDGE REPAIRS ARE COMPLETED. SEALING COLOR SHALL BE FEDERAL COLOR 17778 (LIGHT NEUTRAL).

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR A DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS CONTACT AREAS SHALL MEET THE REQUIREMENTS OF CM&S 516.07B. IF THIS REQUIREMENT IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE PROPER SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

SCUPPER, MISC.: DEBRIS REMOVAL

REMOVE ALL DIRT AND DEBRIS FROM SCUPPERS TO ENSURE POSITIVE DECK DRAINAGE. DIRT AND DEBRIS THAT IS COLLECTED SHALL BE DISPOSED OF PROPERLY. ENSURE THAT REMOVED MATERIAL WILL NOT FALL ONTO TRAFFIC.

ITEM 844 - GALVANIC ANODES PROTECTION, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 519, INSTALL GALVANIC ANODES IN REPAIR AREAS 5 SQUARE FEET IN SIZE OR GREATER. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND/GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.

THE GALVANIC ANODE SIZE AND SPACING IS BASED ON ACHIEVING A CURRENT DENSITY FOR THE EXTREMELY HIGH CORROSION RISK CATEGORY WITH A 20 YEAR INSTALLATION. SUPPLY ANODES WITH A MINIMUM CORE OF 160 GRAMS OF ZINC. DISTRIBUTE ANODES AT 12" ON CENTER MAX. (2 ANODES MINIMUM PER SELECTED REPAIR AREA).

DESIGN YEAR FOR THE INSTALLATION IS 2025.

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW REINFORCING STEEL OF THE SAME SIZE AND COATING AT NO COST TO THE DEPARTMENT.

ITEM 509 - UNCOATED STEEL REINFORCING

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

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

BRIDGE RAILING REMOVED, AS PER PLAN

REMOVE EXISTING RAILING AS NEEDED TO PERFORM PARAPET REPAIRS. ONCE REPAIRS ARE COMPLETED, RE-INSTALL RAILING. PROVIDE

ITEM 519 - COMPOSITE FIBER REINFORCED POLYMER WRAP (FRP)

PRIOR TO APPLICATION OF THE CONCRETE SEALER, CONCRETE PATCHES ON THE EXTERIOR OF THE BRIDGE SUPERSTRUCTURE THAT ARE LOCATED OVER TRAFFIC LANES AND SHOULDERS SHALL BE COVERED WITH ONE LAYER OF CARBON COMPOSITE FIBER REINFORCED POLYMER WRAP (FRP). THE FRP SHALL EXTEND 12" BEYOND THE PATCH LIMITS.

ONE LAYER OF CARBON COMPOSITE FRP SHALL ALSO BE APPLIED TO CONCRETE PATCHES AT BRIDGE PIERS AS SHOWN IN THE PLANS. FRP SHALL WRAP THE ENTIRE CIRCUMFRENCE OF THE PIER COLUMNS EXCEPT WHERE THERE ARE CONFLICTS WITH EXISTING CONCRETE BARRIER.

ITEM 519 - COMPOSITE FIBER REINFORCED POLYMER WRAP (FRP) - cont'd

WHENEVER POSSIBLE. HOWEVER, THE FRP SHALL NOT EXTEND BELOW THE TOP OF CONCRETE BARRIER PIER PROTECTION IF IMMEDIATELY ADJACENT TO OR ENCASING THE PIER COLUMN. THE FRP SHALL NOT EXTEND BELOW THE GROUND LINE IF CONCRETE BARRIER PIER PROTECTION IS NOT IMMEDIATELY ADJACENT TO THE PIER COLUMN.

FRP SHALL ADHERE TO THE REQUIREMENTS OF PN 519. THE FRP IS CONSIDERED NON-STRUCTURAL AND IS PROVIDED FOR CONTAINMENT ONLY. NO STRESS REQUIREMENTS SHALL APPLY. THE CONTRACTOR MAY CHOOSE THE ORIENTATION THAT THE FRP SHALL BE APPLIED TO THE CONCRETE. THE FRP SHALL BE COVERED WITH EPOXY-URETHANE SEALER WITHIN THIRTY (30) CALENDAR DAYS.

ITEM 517 - ALUMINUM RAILING, AS PER PLAN

REPLACE EXISTING DAMAGED RAILING WITH NEW RAILING IF POSSIBLE. ODOT ACKNOWLEDGES THAT THERE IS LIMITED AVAILABLE MANUFACTURING FOR TYPE 'C' DOUBLE TUBE PEDESTRIAN RAILING PER OLD CONSTRUCTION STANDARD A-1-57. IF NEW MANUFACTURING IS NOT POSSIBLE, ODOT WILL ACCEPT SALVAGED RAILING IN GOOD CONDITION OR REFURBISHMENT OF THE EXISTING RAILING BACK TO GOOD CONDITION.

REPLACEMENT MATERIAL SHALL BE AS FOLLOWS:

CAST ALUMINUM POSTS SHALL BE A356 (PREVIOUSLY ASTM SG70B). ALL RAILING TUBES SHALL END WITH A CAP. RAILING SHALL BE IN LENGTHS OF NOT LESS THAN TWO PANELS ON ABUTMENTS AND AT ENDS OF SUPERSTRUCTURES AND NOT LESS THAN THREE PANELS ELSEWHERE. MINIMUM RAILING THICKNESS SHALL BE 3/16". THE EXTREME OUTER SURFACE OF CAST RAILING POSTS SHALL BE GIVEN A 60 GRIT FINISH.

FOR REFURBISHMENT, RE-SHAPING AND WELDING OF BENT OR SALVAGED PORTIONS OF RAILING BACK TO GOOD CONDITION SHALL BE ALLOWED.

REPLACE MISSING ANCHOR BOLT NUTS AND WASHERS.

MATERIAL, EQUIPMENT, LABOR AND ANY MISCELANEOUS ITEMS REQUIRED FOR REMOVAL, STORAGE AND RE-ERECTION OF END SECTIONS OF EXISTING ALUMINUM RAILING AS WELL AS COMPLETE REPLACEMENT AND/OR REFURBISHMENT OF DAMAGED RAILING SECTIONS WHERE SHOWN SHALL BE INCLUDED WITH ITEM 517 - ALUMINUM RAILING, AS PER PLAN FOR PAYMENT.

ITEM 513 - STRUCTURAL STEEL, MISC.: REMOVE AND RE-ERECT CROSSFRAME MEMBERS

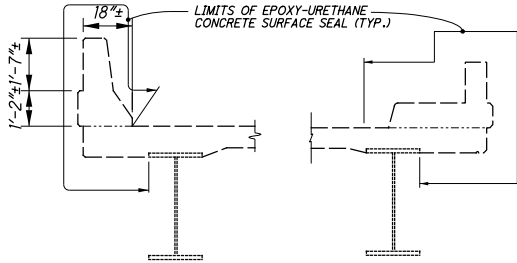
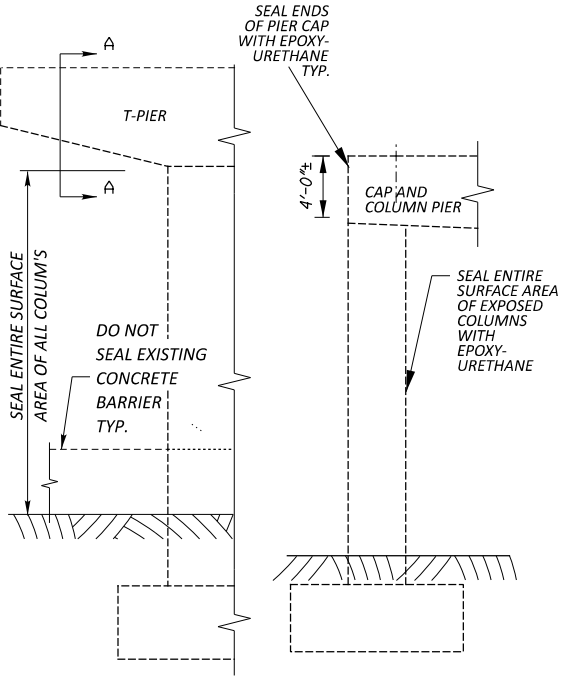
REMOVE BOTTOM INTERMEDIATE CROSSFRAME MEMBERS ATTACHED TO THE BEARING STIFFENERS AS NEEDED TO MAKE ROOM FOR INSTALLATION OF NEW BEARING ANCHOR BOLTS. RE-ATTACH THE EXISTING CROSSFRAME MEMBERS USING 5/16" FILLET WELDS.

ITEM 513 - STRUCTURAL STEEL, MISC.: WELD CRACKED EXPANSION JOINT ARMOR

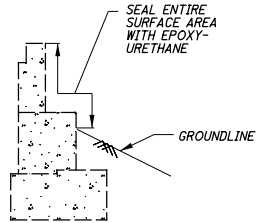
RECONNECT CRACKED PORTIONS OF EXISTING EXPANSION JOINT ARMOR OR RETAINERS USING COMPLETE PENETRATION WELDS.

LEVELING OF BEARING SEAT

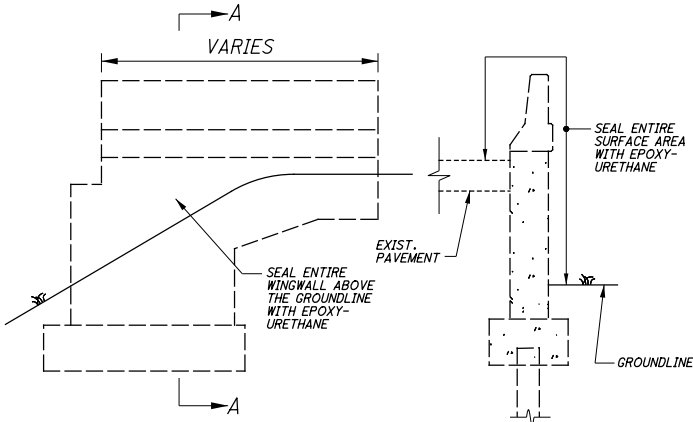
PRIOR TO INSTALLING THE REPALCEMENT BEARINGS, THE CONTRACTOR SHALL ENSURE THAT THE EXISTING BEARING SEATS ARE LEVEL. IF NOT, THE CONTRACTOR SHALL LEVEL THE CONCRETE BEARING SEAT EITHER BY GRINDING OR BY APPLICATION OF A TROWELABLE MORTAR PER SS843. THE CONTRACTOR SHALL TAKE INTO ACCOUNT A LEVEL BEARING SEAT WHEN DETERMINING THEIR MEASUREMENTS FOR THE HEIGHT OF THE PROPOSED HP SECTION. THE BEARING SEAT SHALL BE LEVEL FOR THE ENTIRE WIDTH OF THE BEARING SEAT AND FOR A DIMENSION 2" PAST THE END OF THE MASONRY PLATE ALONG THE LENGTH OF THE ABUTMENT/PIER. ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTALS REQUIRED TO COMPLETE THIS TASK SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511 - CONCRETE, MISC.: LEVELING OF BEARING SEAT (EACH).



LIMITS OF SUPERSTRUCTURE CONCRETE SEALING



TYPICAL ABUTMENT SEALING LIMITS



TYPICAL WINGWALL SEALING LIMITS

SECTION A-A

STRUCTURE REPAIR (HAM-126-1406) (SFN: 3104923)					(100% 01/NHS FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP		LUMP		11
510	10001	14	EACH	DOWEL HOLES WITH NON-SHRINK, NON-METALLIC GROUT, AS PER PLAN	14				12
511	81300	7	EACH	CONCRETE, MISC.: LEVELING BEARING SEAT	7				
513	10200	582	LB	STRUCTURAL STEEL MEMBERS, LEVEL UP			582		
513	95020	LS	LUMP	STRUCTURAL STEEL, MISC.: REMOVE AND RE-ERECT CROSSFRAME MEMBERS			LUMP		12
514	00050	2945	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			2,945		
514	00056	2945	SF	FIELD PAINTING EXISTING STRUCTURAL STEEL, PRIME COAT			2,945		
514	00060	2945	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			2,945		
514	00066	2945	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			2,945		
514	00504	2	MNHR	GRINDING FINs, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			2		
514	10000	2	EACH	FINAL INSPECTION REPAIR			2		
516	43400	7	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (16" DIAMETER x 4.33" TALL WITH 17" DIAMETER x 1.5" LOAD PLATE AND 19"x25"x1.5" MASONRY PLATE)			7		
516	47001	LS	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LUMP		12
518	12500	10	EACH	SCUPPER, MISC: DEBRIS REMOVAL			10		12

STRUCTURE REPAIR (HAM-126-1530) (SFN: 3104990)					(100% 01/NHS FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP		LUMP		11
510	10001	24	EACH	DOWEL HOLES WITH NON-SHRINK, NON-METALLIC GROUT, AS PER PLAN	24				12
511	81300	12	EACH	CONCRETE, MISC.: LEVELING BEARING SEAT	12				
512	10050	245	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			217	28	
512	10100	2281	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	724	370	853	334	12
512	74000	2281	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	724	370	853	334	
513	10200	912	LB	STRUCTURAL STEEL MEMBERS, LEVEL UP			912		
513	95020	LS	LUMP	STRUCTURAL STEEL, MISC.: REMOVE AND RE-ERECT CROSSFRAME MEMBERS			LUMP		12
513	95020	LS	LUMP	STRUCTURAL STEEL, MISC.: WELD CRACKED EXPANSION JOINT ARMOR			LUMP		12
514	00050	52512	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			52,512		
514	00056	52512	SF	FIELD PAINTING EXISTING STRUCTURAL STEEL, PRIME COAT			52,512		
514	00060	52512	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			52,512		
514	00066	52512	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			52,512		
514	00504	39	MNHR	GRINDING FINs, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			39		
514	10000	23	EACH	FINAL INSPECTION REPAIR			23		
516	43300	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (16" DIAMETER x 3.63" WITH 17" DIAMETER x 1.5" LOAD PLATE AND 19"x25"x1.5" MASONRY PLATE)			12		
516	47001	LS	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LUMP		12
519	00100	1152	SF	COMPOSITE FIBER WRAP SYSTEM		1152			12
519	11101	241	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	68	150	23		12
519	12300	14	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	14				
844	20001	15	EACH	GALVANIC ANODE PROTECTION, AS PER PLAN	5	10			12


STRUCTURE REPAIR (HAM-126-1543) (SFN: 3105008)					(100% 01/NHS FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP		LUMP		11
510	10001	16	EACH	DOWEL HOLES WITH NON-SHRINK, NON-METALLIC GROUT, AS PER PLAN	16				12
511	81300	8	EACH	CONCRETE, MISC.: LEVELING BEARING SEAT	8				
512	10100	1058	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	198	276	584		12
512	74000	1058	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	198	276	584		
513	10200	608	LB	STRUCTURAL STEEL MEMBERS, LEVEL UP			608		
513	95020	LS	LUMP	STRUCTURAL STEEL, MISC.: REMOVE AND RE-ERECT CROSSFRAME MEMBERS			LUMP		12
514	00050	13148	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			13,148		
514	00056	13148	SF	FIELD PAINTING EXISTING STRUCTURAL STEEL, PRIME COAT			13,148		
514	00060	13148	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			13,148		
514	00066	13148	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			13,148		
514	00504	16	MNHR	GRINDING FINs, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			16		
514	10000	6	EACH	FINAL INSPECTION REPAIR			6		
516	44100	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12" DIAMETER x 2.37" TALL WITH 14" DIAMETER x 1.5" LOAD PLATE AND 19.375"x19.125"x1.5" MASONRY PLATE)			8		
516	47001	LS	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LUMP		12
519	00100	387	SF	COMPOSITE FIBER WRAP SYSTEM		387			
519	11101	152	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	29	123			12
844	20001	10	EACH	GALVANIC ANODE PROTECTION, AS PER PLAN	4	6			12

STRUCTURE REPAIR (HAM-126-1555) (SFN: 3105024)					(100% 01/NHS FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP		LUMP		11
202	70000	12	FT	FILL AND PLUG EXISTING CONDUIT	12				12
510	10001	20	EACH	DOWEL HOLES WITH NON-SHRINK, NON-METALLIC GROUT, AS PER PLAN	20				12
511	81300	10	EACH	CONCRETE, MISC.: LEVELING BEARING SEAT	10				
512	10100	1267	SY	SEALING OF CONCRETE SURFACES (EPOXYURETHANE)	192	361	714		
512	74000	1267	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	192	361	714		
513	10200	760	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF			760		
513	95020	LS	LUMP	STRUCTURAL STEEL, MISC.: REMOVE AND RE-ERECT CROSSFRAME MEMBERS			LUMP		12
514	00050	20901	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			20,901		
514	00056	20901	SF	FIELD PAINTING EXISTING STRUCTURAL STEEL, PRIME COAT			20,901		
514	00060	20901	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			20,901		
514	00066	20901	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			20,901		
514	00504	25	MNHR	GRINDING FINs, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			25		
514	10000	9	EACH	FINAL INSPECTION REPAIR			9		
516	44101	10	EACH	ELASTOMERIC BEARING WITH STEEL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (13"x13" x 2.77" TALL WITH 14"x14"x 1.5" LOAD PLATE AND 14"x23"x1.5" MASONRY PLATE)			10		
516	47001	LS	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LUMP		12
519	00100	321	SF	COMPOSITE FIBER WRAP SYSTEM		321			12
519	11101	130	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	35	95			12
519	12300	5	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	5				
844	20001	6	EACH	GALVANIC ANODE PROTECTION, AS PER PLAN		6			12

STRUCTURE REPAIR (HAM-126-1818) (SFN: 3105083)					(100% 01/NHS FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP		LUMP		11
202	38501	20	FT	BRIDGE RAILING REMOVED, AS PER PLAN			20		12
202	75267	25	FT	VANDAL PROTECTION FENCE REMOVED AND RESET, AS PER PLAN			25		12
511	34410	1	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE			1		
512	10050	230	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			174	56	
512	10100	687	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	272		293	122	12
512	74000	793	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	272		399	122	
514	00050	21844	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			21,844		
514	00056	21844	SF	FIELD PAINTING EXISTING STRUCTURAL STEEL, PRIME COAT			21,844		
514	00060	21844	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			21,844		
514	00066	21844	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			21,844		
514	00504	29	MNHR	GRINDING FINs, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			29		
514	10000	10	EACH	FINAL INSPECTION REPAIR			10		
517	75001	20	FT	RAILING, ALUMINUM, AS PER PLAN			20		12
519	00100	66	SF	COMPOSITE FIBER WRAP SYSTEM			66		12
519	11101	621	SY	PATCHING CONCRETE STRUCTURE, AS PER PLAN	75	2	385	159	12

STRUCTURE QUANTITIES - 2
BRIDGE No.: VARIES

SFN
VARIES

DESIGN AGENCY


DESIGNER
CAH

CHECKER
GTF

REVIEWER
RSK 07-07-25

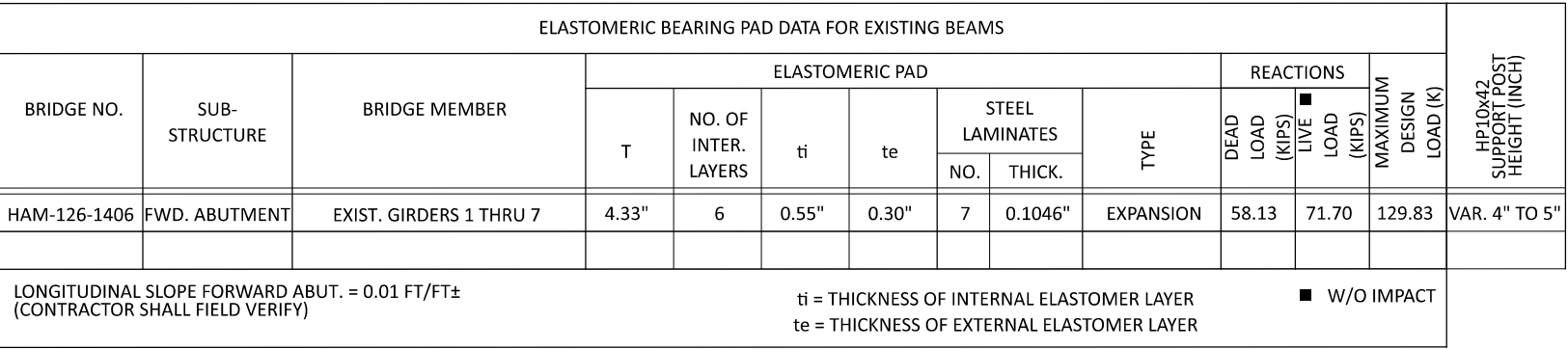
PROJECT ID
112991

SUBSET
2

TOTAL
2

SHEET
14

TOTAL
57



1. STEEL BEARING PLATES AND MASONRY PLATE SHALL BE A709 GRADE 50. LOAD AND MASONRY PLATES AND HP SECTION SHALL BE PAINTED SIMILAR TO THE GIRDERS. PAYMENT INCLUDED IN ITEM 514.
2. THE ELASTOMER FOR THE ELASTOMERIC BEARINGS SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
3. THE STEEL LOAD PLATE AND MASONRY PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
4. SEE SHEET 10 FOR QUANTITIES AND SHEET 13 FOR FRAMING PLAN.
5. THE CONTRACTOR SHALL VERIFY THAT THERE IS A SMOOTH TRANSITION FROM THE APPROACH SLAB AND ABUTMENT BACKWALL ONTO THE DECK AT EACH END OF THE BRIDGE ONCE THE BEARING WORK IS COMPLETED.
6. WELDING OF THE LOAD PLATE TO THE HP SECTION SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMERIC BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
7. LONGITUDINAL ROADWAY SLOPE SHALL BE ACCOMODATED THROUGH BEVEL OF THE ENTIRE TOP OF THE HP SUPPORT SECTIONS.
8. IN ADDITION TO THE REQUIREMENTS OF 516 AND THE DETAILS SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE AND INSTALL ANY NECESSARY SHIMS TO PROVIDE A SNUG FIT BETWEEN THE BEARING DEVICE AND BEARING SEAT. ANY BEARING SHIMS PROVIDED SHALL BE THE SAME MATERIAL AS THE PROPOSED STEEL LOAD PLATE. SHIM PLATE FOOT PRINT SHALL MATCH THE ELASTOMERIC BEARING PAD DIMENSIONS TO ALLOW FOR FIELD WELDING TO THE LOAD PLATE USING 5/16" FILLET WELD AROUND THE ENTIRE PERIMETER OF THE SHIM PLATE.

THE CONTRACTOR SHALL ASSURE THAT ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS OR BEARING DEVICES ARE FLOATING. PRIOR TO BEARING PLACEMENT THE CONTRACTOR SHALL GRIND SMOOTH ALL EXISTING WELDS ON THE BOTTOM FLANGE OF THE GIRDER.
9. THE GIRDER SEAT HEIGHTS LISTED IN THE PLANS ARE PROVIDED FOR INFORMATION PURPOSES ONLY AND SHALL BE CONSIDERED TENTATIVE. THE CONTRACTOR IS REQUIRED TO FIELD VERIFY THE EXISTING BOTTOM OF GIRDER AND GIRDER SEAT ELEVATIONS PRIOR TO THE JACKING OPERATIONS. THE CONTRACTOR IS TO SUBMIT THE VERIFIED ELEVATIONS TO THE DISTRICT 8 ENGINEER PRIOR TO THE JACKING OPERATIONS. APPROVAL OF THE ELEVATIONS IS NOT REQUIRED.

THE CONTRACTOR IS TO DETERMINE THE HEIGHT OF PROPOSED HP SECTION BY SUBTRACTING THE LOAD PLATE, MASONRY PLATE AND ELASTOMERIC BEARING THICKNESS FROM THE CONTRACTOR MEASURED DIFFERENCE BETWEEN BOTTOM OF EXISTING GIRDER ELEVATION AND EXISTING GIRDER SEAT ELEVATION AT EACH BEARING LOCATION. ANY SHIMS NEEDED AS A RESULT OF THE CONTRACTOR'S ERROR WILL BE PROVIDED AT THE CONTRACTOR'S EXPENSE AND WILL NEED TO BE APPROVED BY THE ENGINEER. IF REQUIRED, ONLY ONE BEARING SHIM WILL BE ALLOWED PER BEARING AND MUST BE INSTALLED ABOVE THE LOAD PLATE.
10. ALL COSTS FOR MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS (i.e. SURVEY, ETC.) NECESSARY TO FURNISH AND INSTALL THE LAMINATED ELASTOMERIC BEARINGS WITH VULCANIZED LOAD PLATES SHALL BE INCLUDED IN THE UNIT BID PRICE FOR PAYMENT. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - ELASTOMERIC BEARING PADS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), A PER PLAN.
11. REMOVE AND RE-ATTACH INTERMEDIATE CROSSFRAMES AS NEEDED IF THEY INTERFERE WITH BEARING INSTALLATION.
12. THE HP SECTION AND SOLE PLATE ARE PAID FOR UNDER ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL OF.
13. VERIFY THAT ABUTMENT BEAM SEATS ARE LEVEL. PERFORM CORRECTIONS AS NEEDED.



NOTES:

1. PATCH EXISTING CONCRETE AS SHOWN PER CMS 519.
PATCHING AREA PIER 2 = 62 SF * 1.50 = 93 SF
PATCHING AREA PIER 3 = 34 SF * 1.50 = 51 SF
TOTAL = 144 SF
PATCHING QUANTITY INCREASED 150% TO ACCOUNT FOR ADDITIONAL DETEIORATION PRIOR TO CONSTRUCTION.
2. WRAP TOP 2 FEET OF INDIVIDUAL PIER COLUMNS WITH FIBER REINFORCED POLYMER.
AREA = 2' * (PI * 3') * 12 COLUMNS = 226 SF

WRAP PATCHED PIER COLUMNS =
PIER 2 AREA = (8' + 4') * (PI * 3') = 113 SF
PIER 3 AREA = (9' + 4') * (PI * 3') = 123 SF

WRAP 'T' PIER COLUMNS WITH COMPOSITE FRP.
PIER 2 AREA = 9' * 18' PERIMETER = 162 SF
PIER 3 AREA = 4' * 18' PERIMETER = 72 SF

TOTAL FRP = 696 SF

3. FOR CONCRETE PATCHING AREAS GREATER THAN 5 SF (NOTED AS " * "), PLACE ONE GALVANIC ANODE AT EACH REPAIR AREA (UNLESS NOTED OTHERWISE) PER SS 844 FOR MODERATE CORROSION.

GALVANIC ANODES FOR PIER 2 = 6 EACH
GALVANIC ANODES FOR PIER 3 = 3 EACH
TOTAL GALVANIC ANODES = 9 EACH
4. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
5. PERFORM ONLY THE WORK AS INDICATED IN THE FRAMED TEXT AND/OR DESCRIBED IN THE GENERLA NOTES.

6. CONCRETE PATCHING SHALL BE RESTRICTED TO EXPOSING ONLY ONE QUARTER OF THE PIER COLUMN AT A TIME TO MAINTAIN STRUCTURAL INTEGRITY.

PROJECT NO.	STATE	PROJECT	637
2	OHIO		127

HAM-75-9.93
HAM-126-13.00SIDE WALK COLUMNS
(NOT IN PLANS)

3' THK. PIER

2'x8' (*)
PLACE 2
GALVANIC
ANODES

6'-0"±

1'x3'

3.5'x4' (*)
PLACE 1
GALVANIC
ANODES9'-0"± WRAP
PIER COLUMN
WITH
COMPOSITE
FRP

EX. GROUND

PIER 2

PIER 3

3' THK. PIER




EX. TOP OF
CONCRETE
BARRIER2'x3' (*)
INSTALL 1
GALVANIC
ANODE4'-0"± WRAP
PIER COLUMN
WITH
COMPOSITE
FRP

6'-0"±

2'x2'

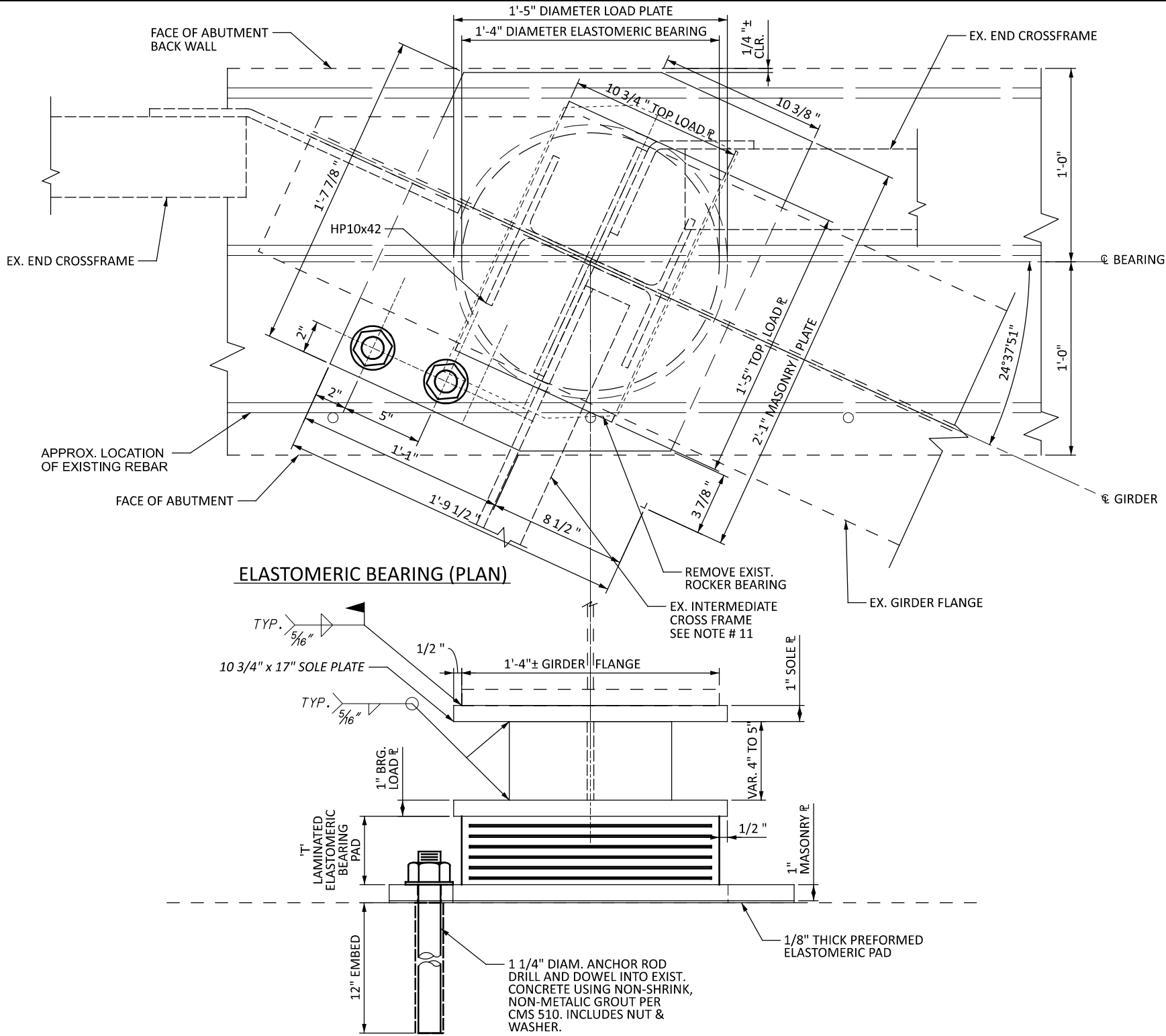
EX. GROUND			
GROHN, & ASSOCIATES, INC. 9/15			
ENGINEERS ARCHITECTS			
CINCINNATI			
PIERS 2 & 3			
BRIDGE NO. HAM-126-1483			
S.R. 126 UNDER			
GALBRAITH ROAD			
HAMILTON COUNTY STA. 11+25.11 TO STA. 15+15.41			
DESIGNED	DRAWN	TRACED	CHECKED
G.T.S.	B.C.S.	RLS	BALKE
DATE	DATE	DATE	REV. 7/82

LEGEND

	FIBER REINFORCED POLYMER WRAP
	LOOKING UP STATION
	LOOKING DOWN STATION

PIER 2 & 3 DETAILS
BRIDGE No.: HAM-126-1530
SR 126 UNDER GALBRAITH RD.SFN
3104990
DESIGN AGENCY

DESIGNER	CHECKER
CAH	GTF
REVIEWER	
RSK 07-07-25	
PROJECT ID	
112991	
SUBSET	TOTAL
8	12
SHEET	TOTAL
27	57



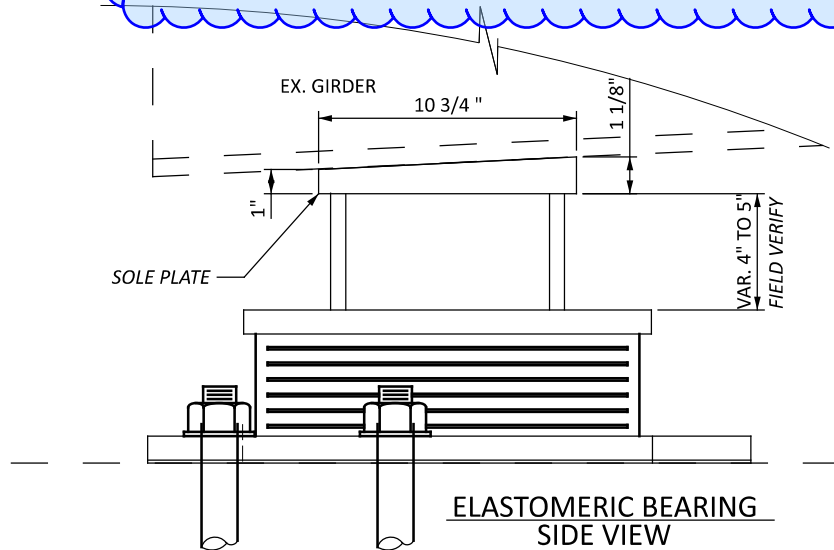
ELASTOMERIC BEARING PAD DATA FOR EXISTING BEAMS													HP10x42 SUPPORT POST HEIGHT (INCH)
BRIDGE NO.	SUB- STRUCTURE	BRIDGE MEMBER	ELASTOMERIC PAD						REACTIONS			MAXIMUM DESIGN LOAD (K)	
			T	NO. OF INTER. LAYERS	ti	te	STEEL LAMINATES		TYPE	DEAD LOAD (KIPS)	LIVE LOAD (KIPS)		
							NO.	THICK.					
HAM-126-1530	REAR ABUTMENT	EXIST. BEAMS 1 THRU 6	3.63"	5	0.55"	0.25"	6	0.1046"	EXPANSION	37.56	70.5	108.06	
HAM-74-1292R	FWD. ABUTMENT	EXIST. BEAMS 1 THRU 6	3.63"	5	0.55"	0.25"	6	0.1046"	EXPANSION	53.65	75.70	129.35	VAR. 5" TO 6"
LONGITUDINAL SLOPE EACH ABUT. = 0.0556 FT/FT± (CONTRACTOR SHALL FIELD VERIFY)					ti = THICKNESS OF INTERNAL ELASTOMER LAYER te = THICKNESS OF EXTERNAL ELASTOMER LAYER						■ W/O IMPACT		

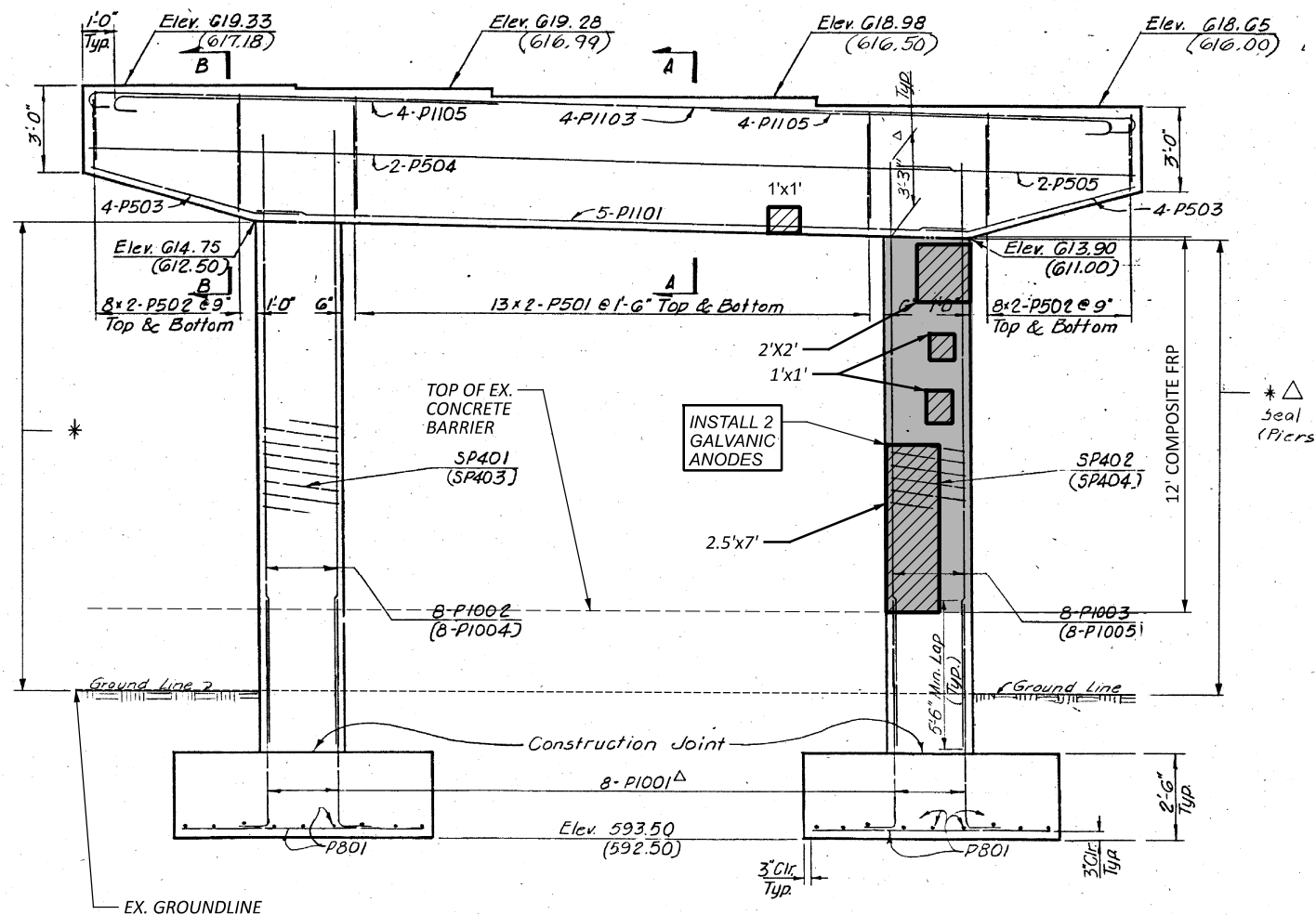
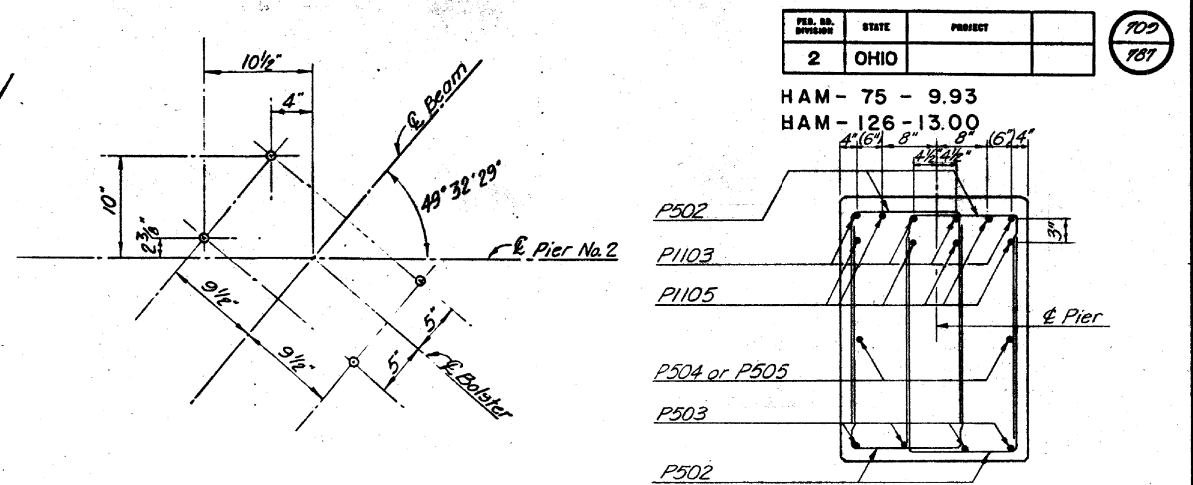
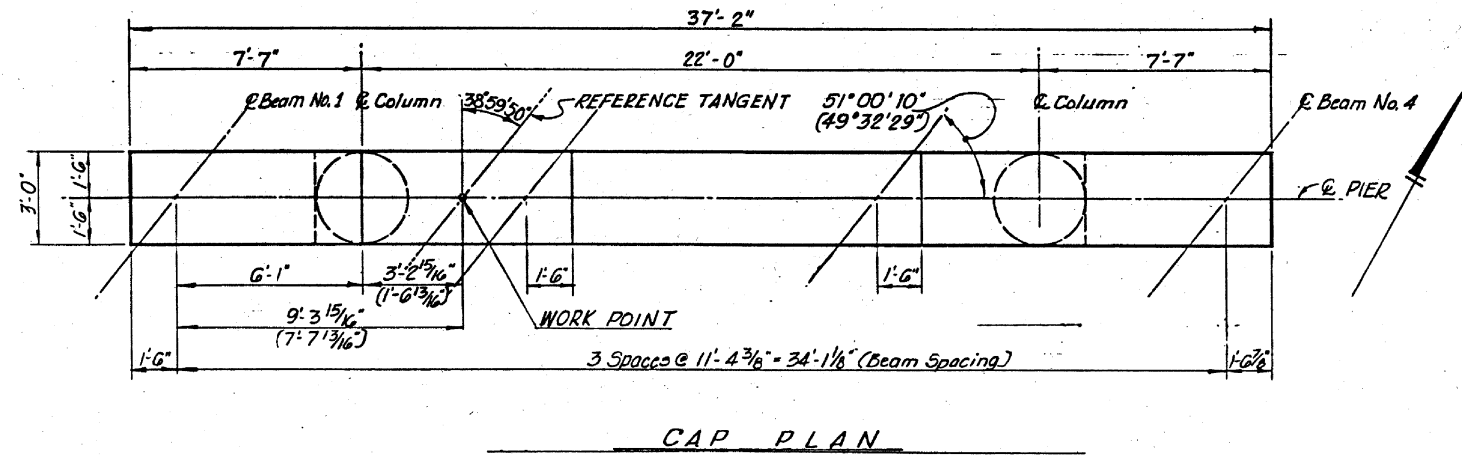
NOTES:

- STEEL FOR BEARING LOAD PLATE AND MASONRY PLATE SHALL BE A709 GRADE 50. LOAD AND MASONRY PLATES AND HP SECTION SHALL BE PAINTED SIMILAR TO THE GIRDERS. PAYMENT INCLUDED IN ITEM 514.
- THE ELASTOMER FOR THE ELASTOMERIC BEARINGS SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
- THE STEEL LOAD PLATE AND MASONRY PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
- SEE SHEET 2 OF 15 FOR QUANTITIES AND SHEET 10 OF 15 FOR FRAMING PLAN.
- THE CONTRACTOR SHALL VERIFY THAT THERE IS A SMOOTH TRANSITION FROM THE APPROACH SLAB AND ABUTMENT BACKWALL ONTO THE DECK AT EACH END OF THE BRIDGE ONCE THE BEARING WORK IS COMPLETED.
- WELDING OF THE LOAD PLATE TO THE HP SECTION SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMERIC BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
- LONGITUDINAL ROADWAY SLOPE SHALL BE ACCOMODATED THROUGH BEVEL OF THE ENTIRE TOP OF THE HP SUPPORT SECTIONS.
- IN ADDITION TO THE REQUIREMENTS OF 516 AND THE DETAILS SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE AND INSTALL ANY NECESSARY SHIMS TO PROVIDE A SNUG FIT BETWEEN THE BEARING DEVICE AND BEARING SEAT. ANY BEARING SHIMS PROVIDED SHALL BE THE SAME MATERIAL AS THE PROPOSED STEEL LOAD PLATE. SHIM PLATE FOOT PRINT SHALL MATCH THE ELASTOMERIC BEARING PAD DIMENSIONS TO ALLOW FOR FIELD WELDING TO THE LOAD PLATE USING 5/16" FILLET WELD AROUND THE ENTIRE PERIMETER OF THE SHIM PLATE.

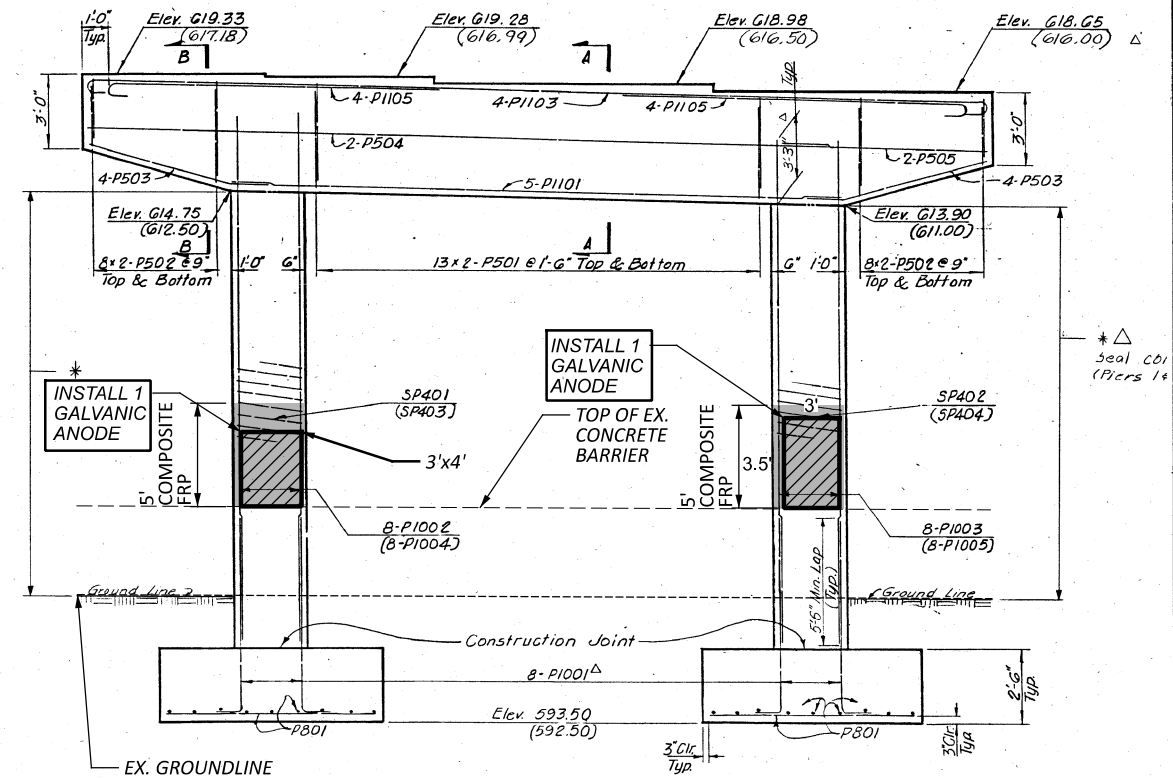
THE CONTRACTOR SHALL ASSURE THAT ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS OR BEARING DEVICES ARE FLOATING. PRIOR TO BEARING PLACEMENT THE CONTRACTOR SHALL GRIND SMOOTH ALL EXISTING WELDS ON THE BOTTOM FLANGE OF THE GIRDER.
- THE GIRDER SEAT HEIGHTS LISTED IN THE PLANS ARE PROVIDED FOR INFORMATION PURPOSES ONLY AND SHALL BE CONSIDERED TENTATIVE. THE CONTRACTOR IS REQUIRED TO FIELD VERIFY THE EXISTING BOTTOM OF GIRDER AND GIRDER SEAT ELEVATIONS PRIOR TO THE JACKING OPERATIONS. THE CONTRACTOR IS TO SUBMIT THE VERIFIED ELEVATIONS TO THE DISTRICT 8 ENGINEER PRIOR TO THE JACKING OPERATIONS. APPROVAL OF THE ELEVATIONS IS NOT REQUIRED.

THE CONTRACTOR IS TO DETERMINE THE HEIGHT OF PROPOSED HP SECTION BY SUBTRACTING THE LOAD PLATE, MASONRY PLATE AND ELASTOMERIC BEARING THICKNESS FROM THE CONTRACTOR MEASURED DIFFERENCE BETWEEN BOTTOM OF EXISTING GIRDER ELEVATION AND EXISTING GIRDER SEAT ELEVATION AT EACH BEARING LOCATION. ANY SHIMS NEEDED AS A RESULT OF THE CONTRACTOR'S ERROR WILL BE PROVIDED AT THE CONTRACTOR'S EXPENSE AND WILL NEED TO BE APPROVED BY THE ENGINEER. IF REQUIRED, ONLY ONE BEARING SHIM WILL BE ALLOWED PER BEARING AND MUST BE INSTALLED ABOVE THE LOAD PLATE.
- ALL COSTS FOR MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS (i.e. SURVEY, ETC.) NECESSARY TO FURNISH AND INSTALL THE LAMINATED ELASTOMERIC BEARINGS WITH VULCANIZED LOAD PLATES SHALL BE INCLUDED IN THE UNIT BID PRICE FOR PAYMENT. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - ELASTOMERIC BEARING PADS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN.
- REMOVE AND RE-ATTACH INTERMEDIATE CROSSFRAMES AS NEEDED IF THEY INTERFERE WITH BEARING INSTALLATION.
- THE HP SECTION AND SOLE PLATE ARE PAID FOR UNDER ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL OF.
- VERIFY THAT ABUTMENT BEAM SEATS ARE LEVEL. PERFORM CORRECTIONS AS NEEDED.





ELEVATION PIER 1
LOOKING UP STATION OR FACING 126 EB



ELEVATION PIER 2
PIER 2 LOOKING DOWN STATION FROM 126 WB

LEGEND

- 519 PATCHING OF CONCRETE STRUCTURE
- FIBER REINFORCED POLYMER WRAP

NOTES:

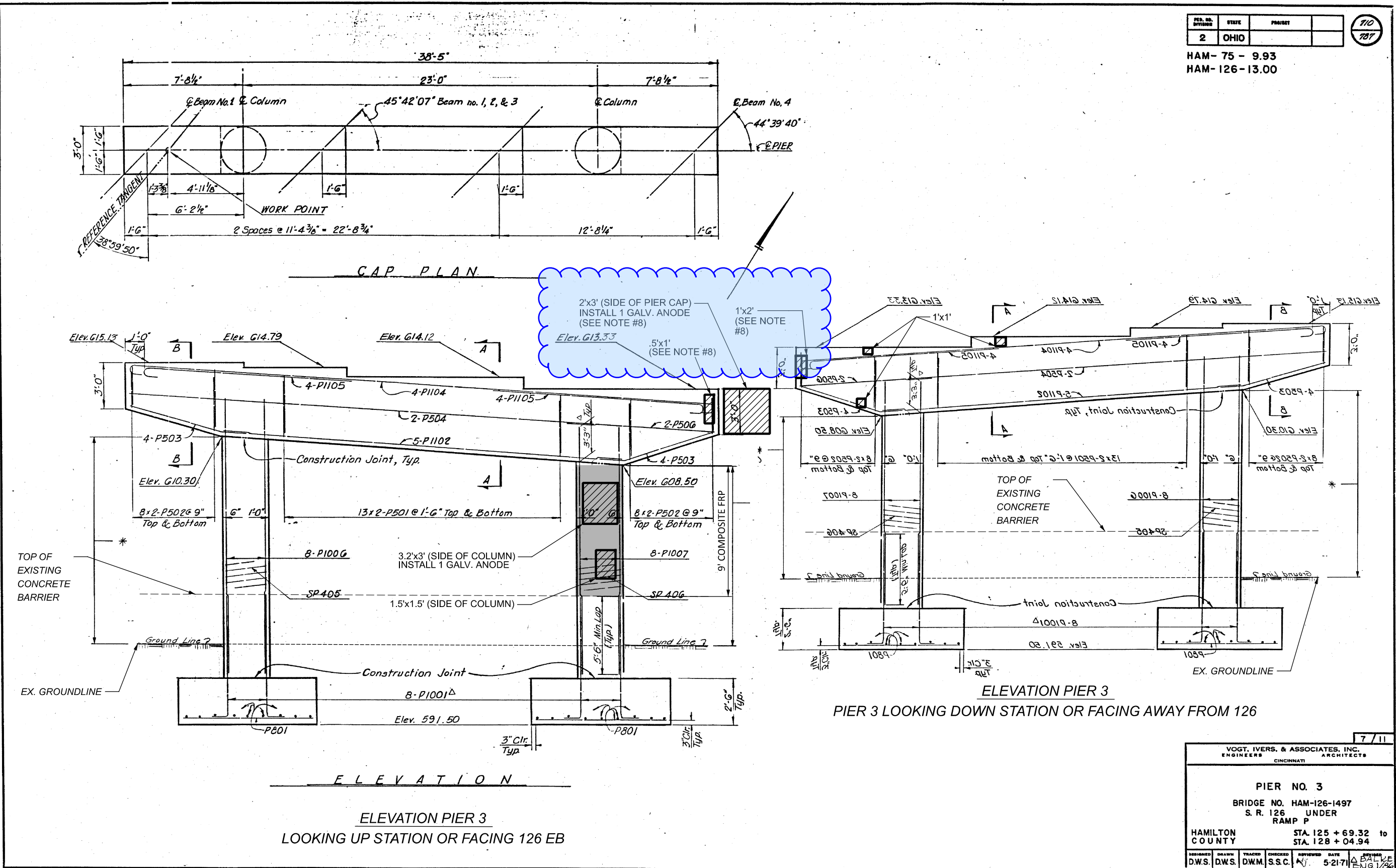
- DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
- PERFORM ONLY THE WORK AS INDICATED IN THE FRAMED TEXT AND/OR DESCRIBED IN THE GENERLA NOTES.
- WRAP REPAIRED PIER COLUMN WITH ONE LAYER OF COMPOSITE FIBER WRAP.
- SEAL ALL EXPOSED PIER CONCRETE EXCEPT TOP OF PIER CAP WITH EPOXY-URETHANE.
- PATCH EXISTING CONCRETE AS SHOWN PER CMS 519.
PATCHING AREA PIER 1 = 25 SF * 1.50 = 38 SF
PATCHING AREA PIER 2 = 23 SF * 1.50 = 35 SF
TOTAL = 73 SF
PATCHING QUANTITY INCREASED 150% TO ACCOUNT FOR ADDITIONAL DETERIORATION PRIOR TO CONSTRUCTION.
- WRAP PATCHED PIER COLUMNS =
PIER 1 AREA = (5') * (PI * 3') = 48 SF
PIER 2 AREA = (5') * (PI * 3') = 48 SF
TOTAL FRP = 96 SF
- TOTAL QUANTITY OF GALVANIC ANODES = 4 EACH
- CONCRETE PATCHING SHALL BE RESTRICTED TO EXPOSING ONLY ONE QUARTER OF THE PIER COLUMN AT A TIME TO MAINTAIN STRUCTURAL INTEGRITY.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00

PIERS NO. 1 & NO. 2
BRIDGE NO. HAM-126-1497
S. R. 126 UNDER
RAMP P
HAMILTON COUNTY STA. 125 + 69.32 to STA. 128 + 04.94

DESIGNED: DWS. DRAWN: DWS. TRACED: DWM. CHECKED: S.S.C. DATE: 5-21-71 BY: A. BALVE



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 AND/OR DESCRIBED IN THE GENERLA NOTES.
3. WRAP REPAIRED PIER COLUMNS WITH ONE LAYER OF COMPOSITE FIBER WRAP.
4. SEAL ALL EXPOSED PIER CONCRETE EXCEPT TOP OF PIER CAP WITH EPOXY-URETHANE.
5. TOTAL CONCRETE PATCHING = 40 S.F. * 150% = 60 S.F.

6. TOTAL QUANTITY OF GALVANIC ANODES - 2 EACH

7. CONCRETE PATCHING SHALL BE RESTRICTED TO EXPOSING ONLY ONE QUARTER OF THE PIER COLUMN AT A TIME TO MAINTAIN STRUCTURAL INTEGRITY.

8. PROVIDE TEMPORARY BEAM SUPPORT AT BEAM #4 TO CARRY THE BEAM DEAD AND LIVE LOAD REACTIONS PRIOR TO PERFORMING CONCRETE PATCHING OF THE PIER CAP AT THAT LOCATION.

LEGEND



- 519 PATCHING OF CONCRETE STRUCTURE



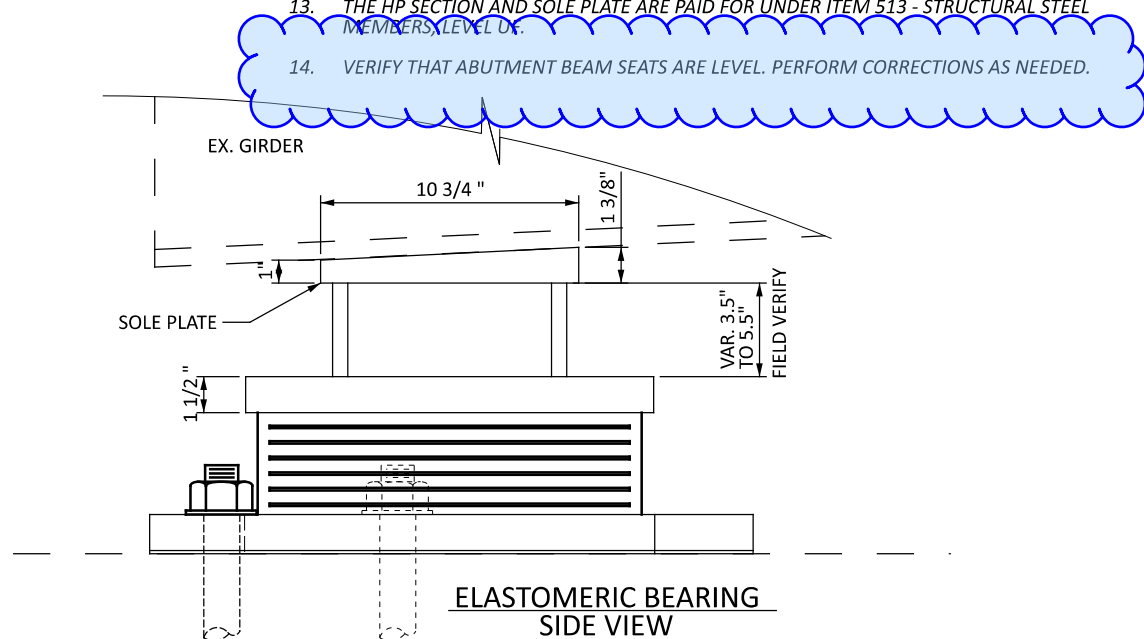
DIMENSION 'A'		
	REAR ABUTMENT	FORWARD ABUTMENT
BEAM 1	51°00'00"	42°15'39"±
BEAM 2	51°00'00"	40°40'55"±
BEAM 3	51°00'00"	37°54'50"±
BEAM 4	51°00'00"	36°34'33"±

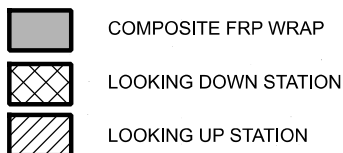
ELASTOMERIC BEARING PAD DATA FOR EXISTING BEAMS													HP10x42 SUPPORT POST HEIGHT (INCH)
BRIDGE NO.	SUB- STRUCTURE	BRIDGE MEMBER	ELASTOMERIC PAD							REACTIONS		MAXIMUM DESIGN LOAD (K)	
			T	NO. OF INTER. LAYERS	ti	te	STEEL LAMINATES		TYPE	DEAD LOAD (KIPS)	LIVE LOAD (KIPS)		
							NO.	THICK.					
HAM-126-1543	REAR ABUTMENT	EXIST. BEAMS 1 THRU 4	2.37"	4	0.40"	0.25"	5	0.1046"	EXPANSION	29.00	58.50	87.50	VAR. 5" TO 6"
HAM-126-1543	FWD. ABUTMENT	EXIST. BEAMS 1 THRU 4	2.37"	4	0.40"	0.25"	5	0.1046"	EXPANSION	29.00	58.50	87.50	VAR. 5" TO 6"
LONGITUDINAL SLOPE EACH ABUT. = 0.0344 FT/FT± (CONTRACTOR SHALL FIELD VERIFY)					ti = THICKNESS OF INTERNAL ELASTOMER LAYER te = THICKNESS OF EXTERNAL ELASTOMER LAYER					W/O IMPACT			

1. THE STEEL FOR BEARING LOAD PLATE AND MASONRY PLATE SHALL BE A709 GRADE 50. LOAD AND MASONRY PLATES AND HP SECTION SHALL BE PAINTED SIMILAR TO THE GIRDERS. PAYMENT INCLUDED IN ITEM 514.
2. THE ELASTOMER FOR THE ELASTOMERIC BEARINGS SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
3. THE STEEL LOAD PLATE AND MASONRY PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
4. SEE SHEET 10 FOR QUANTITIES AND SHEET 32 FOR FRAMING PLAN.
5. THE CONTRACTOR SHALL VERIFY THAT THERE IS A SMOOTH TRANSITION FROM THE APPROACH SLAB AND ABUTMENT BACKWALL ONTO THE DECK AT EACH END OF THE BRIDGE ONCE THE BEARING WORK IS COMPLETED.
6. WELDING OF THE LOAD PLATE TO THE HP SECTION SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMERIC BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
7. LONGITUDINAL ROADWAY SLOPE SHALL BE ACCOMODATED THROUGH BEVEL OF THE ENTIRE TOP OF THE HP SUPPORT SECTIONS. CONTRACTOR SHALL FIELD VERIFY.
8. IN ADDITION TO THE REQUIREMENTS OF 516 AND THE DETAILS SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE AND INSTALL ANY NECESSARY SHIMS TO PROVIDE A SNUG FIT BETWEEN THE BEARING DEVICE AND BEARING SEAT. ANY BEARING SHIMS PROVIDED SHALL BE THE SAME MATERIAL AS THE PROPOSED STEEL LOAD PLATE. SHIM PLATE FOOT PRINT SHALL MATCH THE ELASTOMERIC BEARING PAD DIMENSIONS TO ALLOW FOR FIELD WELDING TO THE LOAD PLATE USING 5/16" FILLET WELD AROUND THE ENTIRE PERIMETER OF THE SHIM PLATE.

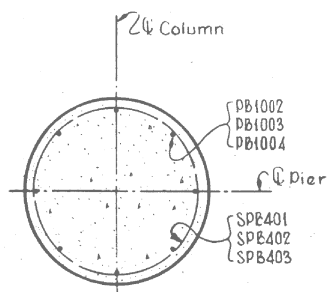
THE CONTRACTOR SHALL ASSURE THAT ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS OR BEARING DEVICES ARE FLOATING. PRIOR TO BEARING PLACEMENT THE CONTRACTOR SHALL GRIND SMOOTH ALL EXISTING WELDS ON THE BOTTOM FLANGE OF THE GIRDER.
9. THE GIRDER SEAT HEIGHTS LISTED IN THE PLANS ARE PROVIDED FOR INFORMATION PURPOSES ONLY AND SHALL BE CONSIDERED TENTATIVE. THE CONTRACTOR IS REQUIRED TO FIELD VERIFY THE EXISTING BOTTOM OF GIRDER AND GIRDER SEAT ELEVATIONS PRIOR TO THE JACKING OPERATIONS. THE CONTRACTOR IS TO SUBMIT THE VERIFIED ELEVATIONS TO THE DISTRICT 8 ENGINEER PRIOR TO THE JACKING OPERATIONS. APPROVAL OF THE ELEVATIONS IS NOT REQUIRED.

THE CONTRACTOR IS TO DETERMINE THE HEIGHT OF PROPOSED HP SECTION BY SUBTRACTING THE SOLE PLATE, LOAD PLATE, MASONRY PLATE AND ELASTOMERIC BEARING THICKNESS FROM THE CONTRACTOR MEASURED DIFFERENCE BETWEEN BOTTOM OF EXISTING GIRDER ELEVATION AND EXISTING GIRDER SEAT ELEVATION AT EACH BEARING LOCATION. ANY SHIMS NEEDED AS A RESULT OF THE CONTRACTOR'S ERROR WILL BE PROVIDED AT THE CONTRACTOR'S EXPENSE AND WILL NEED TO BE APPROVED BY THE ENGINEER. IF REQUIRED, ONLY ONE BEARING SHIM WILL BE ALLOWED PER BEARING AND MUST BE INSTALLED ABOVE THE LOAD PLATE.
10. ALL COSTS FOR MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS (i.e. SURVEY, ETC.) NECESSARY TO FURNISH AND INSTALL THE LAMINATED ELASTOMERIC BEARINGS WITH VULCANIZED LOAD PLATES SHALL BE INCLUDED IN THE UNIT BID PRICE FOR PAYMENT. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - ELASTOMERIC BEARING PADS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN.
11. CONTRACTOR SHALL FIELD VERIFY DIMENSION 'A' PRIOR TO BEARING FABRICATION.
12. REMOVE AND RE-ATTACH INTERMEDIATE CROSSFRAMES AS NEEDED IF THEY INTERFERE WITH BEARING INSTALLATION.
13. THE HP SECTION AND SOLE PLATE ARE PAID FOR UNDER ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 0.
14. VERIFY THAT ABUTMENT BEAM SEATS ARE LEVEL. PERFORM CORRECTIONS AS NEEDED.

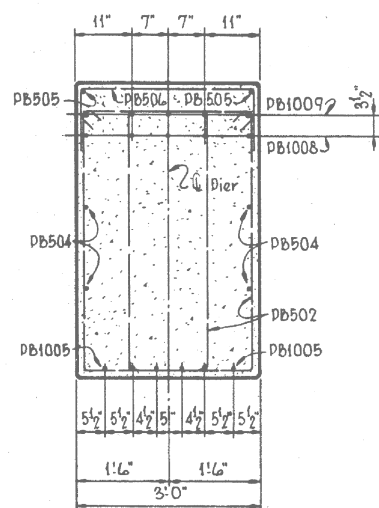




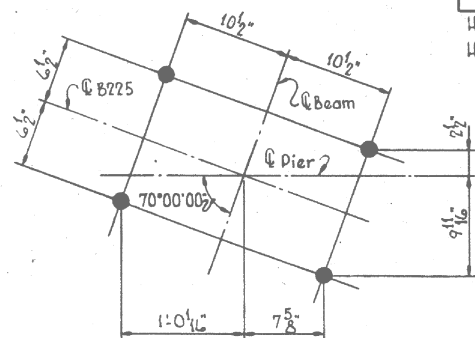
1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE FRAMED TEXT AND/OR DESCRIBED IN THE GENERAL NOTES.



SECTION A-A



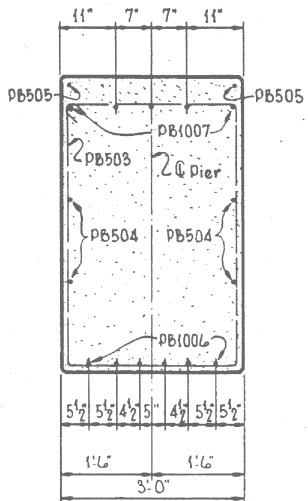
SECTION B-B



ANCHOR BOLT LAYOUT

NOTES

1. Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.
2. For additional NOTES, see sheet 5/13. Δ
3. For location of pier mounted luminaires and other lighting details, see Lighting Plans.
4. Footing shall extend a minimum of 3' into bedrock. However, if the low point of the surface of the bedrock occurs 2' or more above plan elevation, the footings may be raised, after approval by the Director, but to an elevation not higher than @24.00. Stepping of individual footings shall not be permitted.



SECTION C-C

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO		


HAM-75-9.93.

HAM-126-13.00

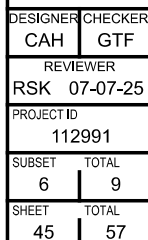
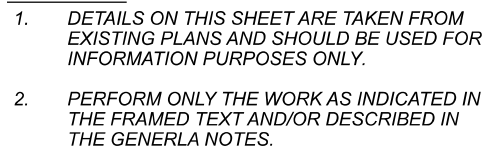
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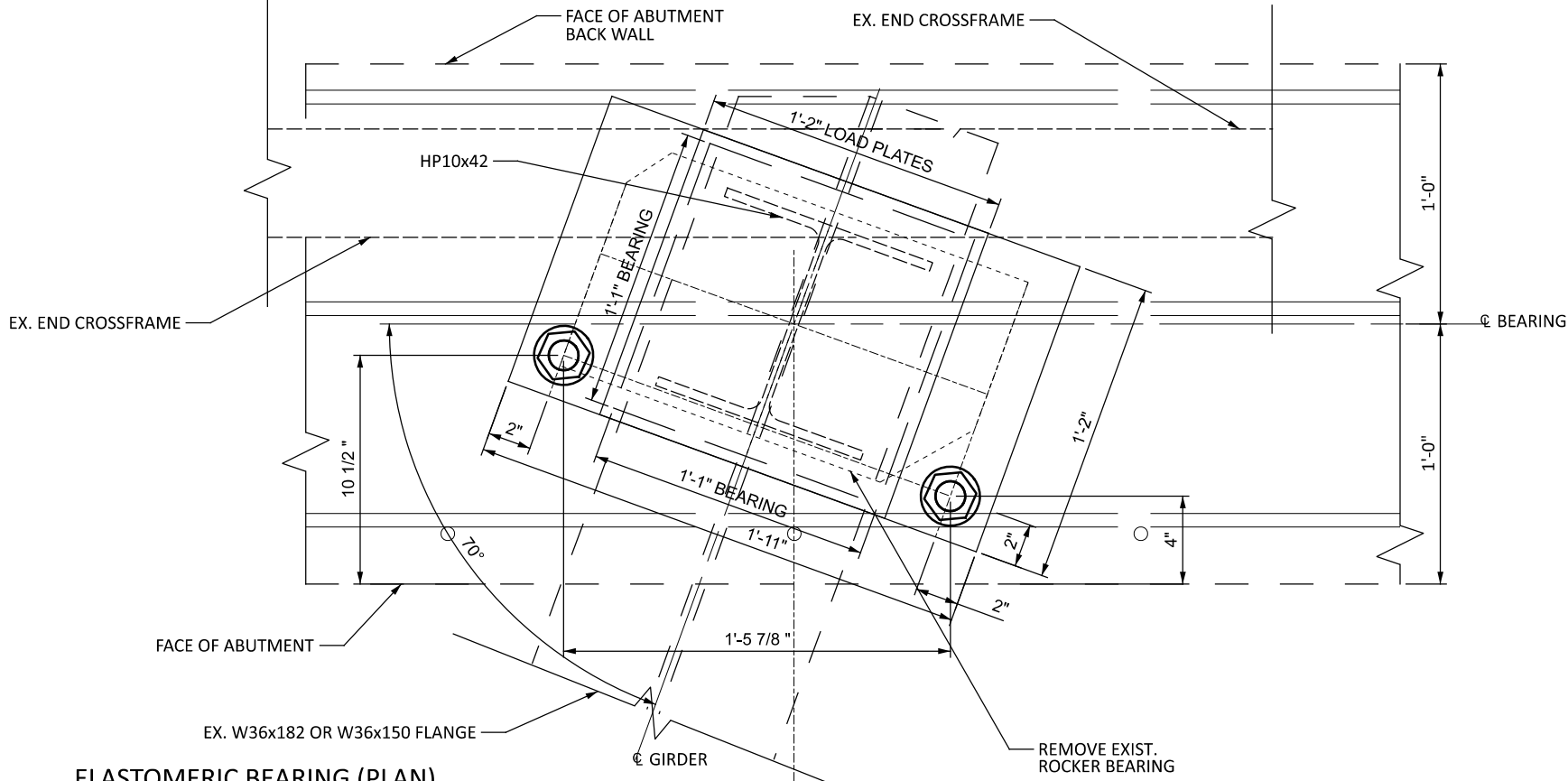
787

VOGT, IVERS, & ASSOCIATES, INC.					6/13
ENGINEERS			ARCHITECTS		
CINCINNATI					
PIER 2					
BRIDGE NO. HAM-126-1516					
S.R. 126, RAMP D & RAMP Q UNDER					
KNOLLCEST DRIVE					
HAMILTON COUNTY			STA. 3+83.51 to		
			STA. 6+78.77		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
AV	QWM	—	E.F.F.		
				Δ	REVISED
				ENGS.	1/28

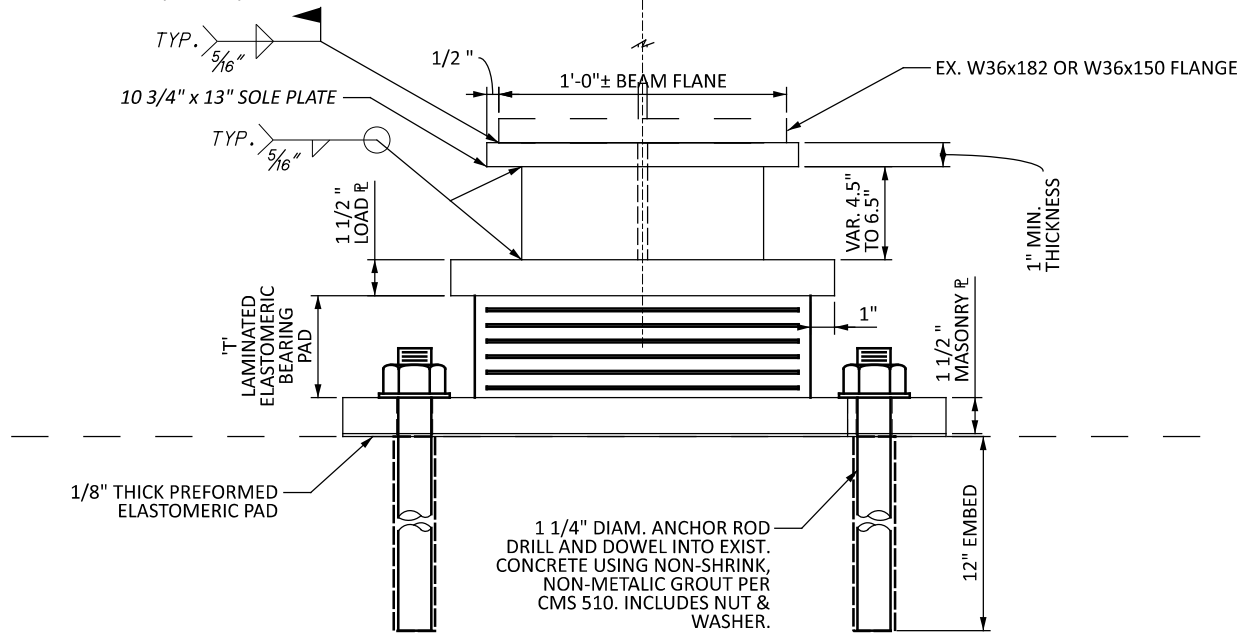
SFN		3105024	
DESIGN AGENCY			
			
DESIGNER		CHECKER	
CAH		GTF	
REVIEWER			
RSK 07-07-25			
PROJECT ID			
112991			
SUBSET		TOTAL	
5		9	
SHEET		TOTAL	
44		57	

PIER 2 PLAN
BRIDGE No. HAM-126-1555
SR 126 UNDER KNOLLCREST RD.





ELASTOMERIC BEARING (PLAN)



ELASTOMERIC BEARING (FRONT VIEW)

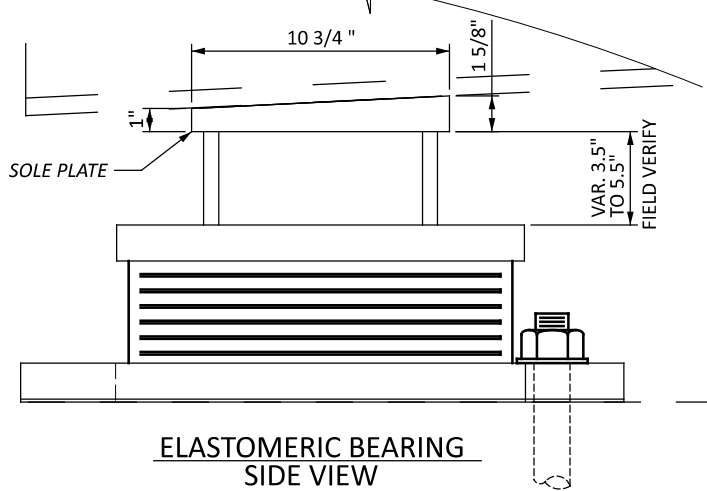
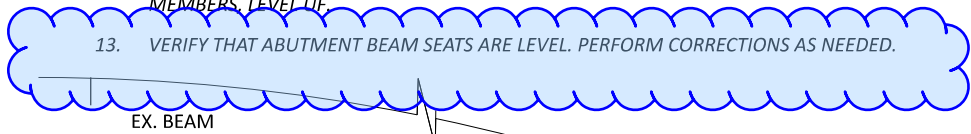
ELASTOMERIC BEARING PAD DATA FOR EXISTING BEAMS													HP10x42 SUPPORT POST HEIGHT (INCH)
BRIDGE NO.	SUB- STRUCTURE	BRIDGE MEMBER	ELASTOMERIC PAD						REACTIONS		MAXIMUM DESIGN LOAD (K)		
			T	NO. OF INTER. LAYERS	ti	te	STEEL LAMINATES		TYPE	DEAD LOAD (KIPS)		LIVE LOAD (KIPS)	
							NO.	THICK.					
HAM-126-1555	REAR ABUTMENT	EXIST. BEAMS 1 THRU 4	2.77"	4	0.50"	0.25"	5	0.1046"	EXPANSION	32.20	64.10	96.30	
HAM-126-1555	FWD. ABUTMENT	EXIST. BEAMS 1 THRU 4	2.77"	4	0.50"	0.25"	5	0.1046"	EXPANSION	23.60	59.50	83.10	VAR. 4.5" TO 6.5"
LONGITUDINAL SLOPE EACH ABUT. = 0.06 FT/FT± (CONTRACTOR SHALL FIELD VERIFY)			ti = THICKNESS OF INTERNAL ELASTOMER LAYER te = THICKNESS OF EXTERNAL ELASTOMER LAYER						■ W/O IMPACT				

NOTES:

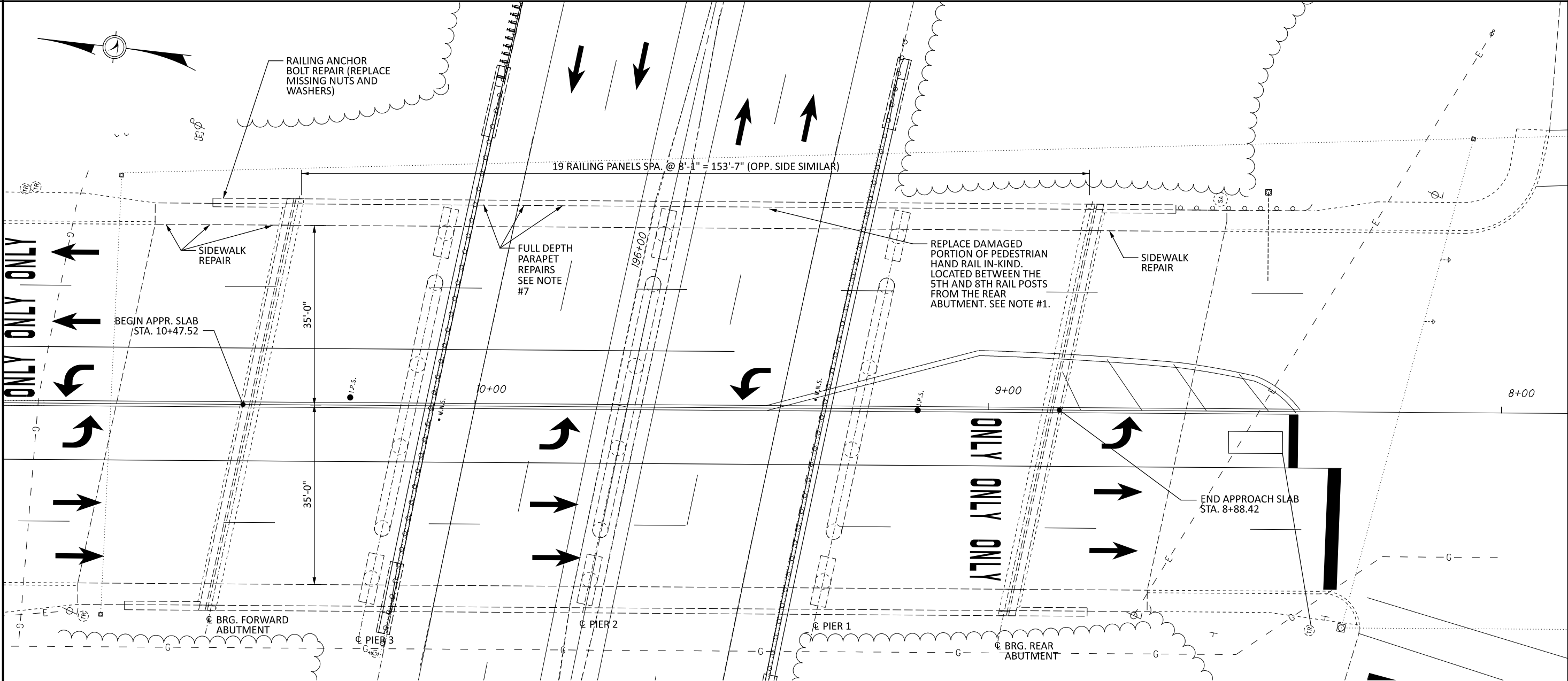
- STEEL FOR BEARING LOAD PLATE AND MASONRY PLATE SHALL BE A709 GRADE 50. LOAD AND MASONRY PLATES AND HP SECTION SHALL BE PAINTED SIMILAR TO THE GIRDERS. PAYMENT INCLUDED IN ITEM 514.
- THE ELASTOMER FOR THE ELASTOMERIC BEARINGS SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
- THE STEEL LOAD PLATE AND MASONRY PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
- SEE SHEET 11 FOR QUANTITIES AND SHEET 41 FOR FRAMING PLAN.
- THE CONTRACTOR SHALL VERIFY THAT THERE IS A SMOOTH TRANSITION FROM THE APPROACH SLAB AND ABUTMENT BACKWALL ONTO THE DECK AT EACH END OF THE BRIDGE ONCE THE BEARING WORK IS COMPLETED.
- WELDING OF THE LOAD PLATE TO THE HP SECTION SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMERIC BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
- LONGITUDINAL ROADWAY SLOPE SHALL BE ACCOMODATED THROUGH BEVEL OF THE ENTIRE TOP OF THE HP SUPPORT SECTIONS. CONTRACTOR SHALL FIELD VERIFY.
- IN ADDITION TO THE REQUIREMENTS OF 516 AND THE DETAILS SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE AND INSTALL ANY NECESSARY SHIMS TO PROVIDE A SNUG FIT BETWEEN THE BEARING DEVICE AND BEARING SEAT. ANY BEARING SHIMS PROVIDED SHALL BE THE SAME MATERIAL AS THE PROPOSED STEEL LOAD PLATE. SHIM PLATE FOOT PRINT SHALL MATCH THE ELASTOMERIC BEARING PAD DIMENSIONS TO ALLOW FOR FIELD WELDING TO THE LOAD PLATE USING 5/16" FILLET WELD AROUND THE ENTIRE PERIMETER OF THE SHIM PLATE.

THE CONTRACTOR SHALL ASSURE THAT ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS OR BEARING DEVICES ARE FLOATING. PRIOR TO BEARING PLACEMENT THE CONTRACTOR SHALL GRIND SMOOTH ALL EXISTING WELDS ON THE BOTTOM FLANGE OF THE GIRDER.
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- ALL COSTS FOR MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS (i.e. SURVEY, ETC.) NECESSARY TO FURNISH AND INSTALL THE LAMINATED ELASTOMERIC BEARINGS WITH VULCANIZED LOAD PLATES SHALL BE INCLUDED IN THE UNIT BID PRICE FOR PAYMENT. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - ELASTOMERIC BEARING PADS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN.
- CONTRACTOR SHALL FIELD VERIFY DIMENSION 'A' PRIOR TO BEARING FABRICATION.
- THE HP SECTION AND SOLE PLATE ARE PAID FOR UNDER ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UP.
- VERIFY THAT ABUTMENT BEAM SEATS ARE LEVEL. PERFORM CORRECTIONS AS NEEDED.



ELASTOMERIC BEARING
SIDE VIEW



DAMAGED PEDESTRIAN HANDRAIL

NOTES:

- REPAIR/REPLACE PORTIONS OF THE EXISTING CONCRETE PARAPETS AS SHOWN. EXISTING REBAR SHALL REMAIN IN PLACE FOR REUSE.

REMOVE AND RE-INSTALL RAILING AND VANDAL FENCE AS NEEDED FOR PARAPET REPAIRS.
- REMOVE ALL EXISTING PARAPET AND SIDEWALK CONCRETE SEALER. APPLY NON-EPOXY SEALER TO SIDEWALK AND APPLY EPOXY-URETHANE SEALER TO PARAPETS.

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.

SPANS: 30'-0", 42'-6", 45'-6", 36'-6"
ROADWAY: 44'-0" F/F CURBS, WITH TWO 4'-0" WIDE SIDEWALKS
LOADING: HS20-44 AND THE ALT. MILITARY LOADING
SKEW: 11°-46'-00" L.F.
WEARING SURFACE:
APPROACH SLABS: 25' LONG
ALIGNMENT: TANGENT
CROWN: 0.016 FT/FT
STRUCTURAL FILE NUMBER: 3105083
DATE BUILT: 1963, BRIDGE REHAB & WIDENING 1992
DISPOSITION: BRIDGE PAINTING AND MINOR REPAIRS
DECK AREA: SF
COORDINATES: LATITUDE N39° 13' 33"
LONGITUDE W84° 23' 38"

SITE PLAN
BRIDGE No. HAM-126-1818
S.R. 126 UNDER PLAINFIELD RD.

SFN	
3105083	
DESIGN AGENCY	
DESIGNER	CHECKER
CAH	GTF
REVIEWER	
RSK 07-07-25	
PROJECT ID	
112991	
SUBSET	TOTAL
1	9
SHEET	TOTAL
49	57