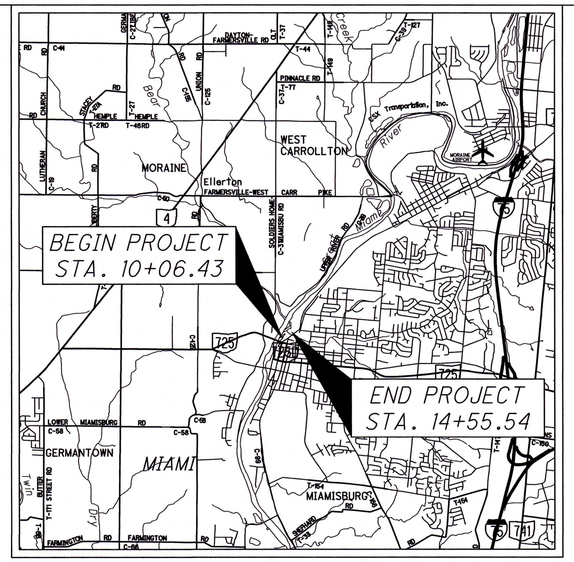
MIAMI CONSERVANCY DISTRICT

MOT SYCAMORE CREEK BRIDGE

GREAT MIAMI RECREATION TRAIL BRIDGE OVER SYCAMORE CREEK

CITY OF MIAMISBURG
MONTGOMERY COUNTY



LOCATION MAP

LATITUDE: 39° 38′ 50.00″ LONGITUDE: -84° 17′ 10.76″

0 1 2 3 4

SCALE IN MILES

N

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

INDEX OF SHEETS:

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STRUCTURE MOT SYCAMORE CREEK	13-20

THE MIAMI CONSERVANCY DISTRICT

PROJECT DESCRIPTION

REMOVAL AND REPLACEMENT OF THE BRIDGE CARRYING THE GREAT MIAMI RIVER RECREATION TRAIL. IMPROVEMENTS INCLUDE REPLACING THE PIERS, ABUTMENTS, BEAMS, BRIDGE SURFACE AND SAFETY FENCE.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.41 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.13 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: N/A
(NOI NOT REQUIRED)

2023 SPECIFICATIONS

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

FEDERAL PROJECT NO. **E250(022)**

PID NO. **115176**

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT **NONE**

MOT SYCAMORE CREEK BRIDGE REPLACEMENT

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

PREPARED BY:

WOOLPERT
4454 IDEA CENTER BLVD
DAYTON, OH 45430
937.461.5660
FAX: 937.461.0743

ENGINEERS SEAL:

STATE OF OHIO
PATRICK J. PLEWS
71422
REGISTERED PROFESSIONAL ENGINEER
11/5/24

STANDARD CONSTRUCTION DRAWINGS							
BP-3.1	01/19/24	DS-1-92	07/15/22				
MT-101.60	04/21/23	PSBD-2-07	07/20/18				
MT-110.10	07/19/13						
		RM-5.2	07/21/23				
		DBR-2-73	07/19/02				

SUPPLEMENTAL SPECIFICATIONS	
800	07/19/24
832	07/19/24

SPECIAL PROVISIONS	
OEPA DEMO	10/18/24
WPC	12/30/24 (PROVISIONAL)

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE ADDITIONAL CLOSINGS TO TRAFFIC. PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED Donald P. O'Connor
DATE 11/06/2024 MCD CHIEF ENGINEER

John W. O'Brien
John W. O'Brien
District 07 Deputy Director

Pamela Boratyn
Pamela Boratyn
Director, Department of Transportation

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SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS		7 TO 12	14																
																		ROADWAY	
														201	11000	LS		CLEARING AND GRUBBING	
314														202	23000	314	SY	PAVEMENT REMOVED	
79		65												203	10000	144	CY	EXCAVATION	
144		292												203	20000	436	CY	EMBANKMENT	
1,232														204	10000	1,232	SY	SUBGRADE COMPACTION	
31														204	13000	31	CY	EXCAVATION OF SUBGRADE	
																		EROSION CONTROL	
			27											601	32204	27	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	
231														659	00300	231	CY	TOPSOIL	
1,139														659	10001	1,139	SY	SEEDING AND MULCHING, AS PER PLAN	3
104														659	14000	104	SY	REPAIR SEEDING AND MULCHING	
104														659	15000	104	SY	INTER-SEEDING	
0.29														659	20000	0.29	TON	COMMERCIAL FERTILIZER	
0.43														659	31000	0.43	ACRE	LIME	
12														659	35000	12	MGAL	WATER	
LS														832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
LS														832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
LS														832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
8,200														832	30000	8,200	EACH	EROSION CONTROL	
																		PAVEMENT	
142														304	20000	142	CY	AGGREGATE BASE	
35														407	10000	35	GAL	TACK COAT	
18														441	70000	18	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
36														441	70300	36	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	
																		STRUCTURE OVER 20 FOOT SPAN (MOT-SYCAMORE)	
														202	11001	LS		STRUCTURE REMOVED, AS PER PLAN	14
														503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
														503	21300	LS		UNCLASSIFIED EXCAVATION	
														505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
			160											507	00500	160	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	
			200											507	00550	200	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	
			6,084											509	10000	6,084	1 LB	EPOXY COATED STEEL REINFORCEMENT	
			24											511	31610	24	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
			11											511	44110	11	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	
			15											511	46510	15	CY	CLASS QC1 CONCRETE, FOOTING	
			49											512	10100	49	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
			5											515	12040	5	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-36, 59'-0"	
			27											516	13600	27	SF	1" PREFORMED EXPANSION JOINT FILLER	
			44											516	14020	44	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
			20											516	43100	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE), 1 1/2" THICK	
			124											517	76300	124	FT	RAILING, MISC.: WOOD FENCE WITH STEEL POSTS	14
			25											518	21200	25	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
			124											SPECIAL	51822300	124	FT	STEEL DRIP STRIP	
			44											518	40000	44	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
			48											518	40010	48	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
			1											523	20000	1	EACH	DYNAMIC LOAD TESTING	
																		INCIDENTALS	
														614	11000	LS		MAINTAINING TRAFFIC	
														619	16000	6	MNTH	FIELD OFFICE, TYPE A	
														623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
														624	10000	LS		MOBILIZATION	

NOTE: PARTICIPATION SPLIT = 100% 01/BRF/28

REVISION DESCRIPTION	DATE
1 REVISION 1: ABUTMENT STEEL MOD.	01/23/2025

THE MIAMI CONSERVANCY DISTRICT

SYCAMORE CREEK BRIDGE REPLACEMENT

GENERAL SUMMARY

DATE: 10/7/2024

DRAWN BY: NAB

MCD NUMBER: 115176

SHEET: 4 of 20

Layout Tab Name: 4 GENERAL SUMMARY, Images: MCD_H-1Color_Black_Primary.jpg: MCD_logo.JPG: , Xrefs: 104015_BP001.dwg
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REFER TO THE FOLLOWING STANDARD DRAWINGS:

DS-1-92	REVISED 7/15/2022
PSBD-2-07	REVISED 7/20/2018
RM-5.2	REVISED 7/21/2023
DBR-2-73	REVISED 7/19/2002

DESIGN SPECIFICATIONS:

THE STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (2020) AND THE ODOT BRIDGE DESIGN MANUAL (2020), DATED 01/19/2024.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING:

PEDESTRIAN LIVE LOAD, 90 PSF OR H-15
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF

DESIGN STRESSES:

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH = 4.5 KSI (SUPERSTRUCTURE)

CONCRETE FOR PRESTRESSED BOX BEAMS:
COMPRESSIVE STRENGTH (FINAL) = 8.0 KSI
COMPRESSIVE STRENGTH (RELEASE) = 6.0 KSI

PRESTRESSING STRANDS - ASTM A416
ULTIMATE STRENGTH = 270 KSI
As = 0.167 SQ. IN.
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)
MODULUS OF ELASTICITY = 28,500 KSI

REINFORCING STEEL - GRADE 60, MINIMUM YIELD STRENGTH 60 KSI

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL

2 1/2" CONCRETE COVER

STEEL DRIP STRIP

MONOLITHIC WEARING SURFACE:

MONOLITHIC 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 FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID 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.

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 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 IN.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

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

PER THE AASHTO MANUAL "GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS, SECOND EDITION", THE MAXIMUM VERTICAL DEFLECTION FOR FALSEWORK SHALL NOT EXCEED 1/240 OF THEIR SPAN UNDER THE DEAD LOAD OF THE CONCRETE ONLY.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 213 KIPS PER PILE FOR THE ABUTMENT PILES. THE ABUTMENT PILES INCLUDE AN ADDITIONAL 4 KIPS PER PILE OF ULTIMATE BEARING VALUE DUE TO THE POSSIBILITY OF LOSING 2.16 FT. OF FRICTIONAL RESISTANCE DUE TO SCOUR.

ABUTMENT PILES:

12" CAST-IN-PLACE REINFORCED CONCRETE PILES, 25 FEET LONG, ORDER LENGTH (REAR). GRADE 3, 45 KSI.

12" CAST-IN-PLACE REINFORCED CONCRETE PILES, 25 FEET LONG, ORDER LENGTH (FORWARD). GRADE 3, 45 KSI.

1 DYNAMIC LOAD TESTING ITEM.

PROVIDE PLAIN CYLINDRICAL CASINGS WITH A MINIMUM PILE WALL THICKNESS OF 0.25 INCH FOR THE CAST-IN-PLACE REINFORCED CONCRETE PILES.

PILE DRIVING CONSTRAINTS:

THE MAXIMUM RATED ENERGY OF THE HAMMER USED TO INSTALL THE PILES SHALL BE 23,000 FOOT-POUNDS. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED 31,500 POUNDS PER SQUARE INCH.

ABUTMENT CONCRETE:

DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION UNTIL THE PRESTRESSED CONCRETE BOX BEAMS HAVE BEEN ERECTED.

ITEM 202, STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

THIS WORK CONSISTS OF THE REMOVAL OF THE EXISTING BRIDGE STRUCTURE FOR THE GREAT MIAMI RECREATIONAL TRAIL. REMOVE EXISTING SUPERSTRUCTURE IN ITS ENTIRETY. REMOVE EXISTING ABUTMENTS AND WINGWALLS TO TOP OF FOOTING. EXISTING FOOTING IS TO BE REMOVED AS NEEDED TO AVOID INTERFERENCE WITH PROPOSED ABUTMENT AND PILES.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR ITEM 202: STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 517, RAILING, MISC: WOOD FENCE WITH STEEL POSTS:

THIS WORK CONSISTS OF FURNISHING AND INSTALLATION OF A MODIFIED RM-5.2 BIKEWAY RAILING AS INDICATED IN THESE PLANS. PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT LINEAR FOOT PRICE FOR ITEM 607 - FENCE, MISC.: WOOD FENCE AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. GALVANIZE ALL RAILING POSTS, PLATES AND HARDWARE IN ACCORDANCE WITH 711.02.

ABBREVIATIONS:

ABUT.	- ABUTMENT
APPR.	- APPROACH
℄	- BASELINE
BOT.	- BOTTOM
BRG(S)	- BEARING(S)
B.T.A.	- BRIDGE TERMINAL ASSEMBLY
BTW.	- BETWEEN
℄	- CENTERLINE
C/C	- CENTER TO CENTER
CIP	- CAST IN PLACE
C.J.	- CONSTRUCTION JOINT
CLR.	- CLEAR
CONST.	- CONSTRUCTION
DIA.	- DIAMETER
EA.	- EACH
E.F.	- EACH FACE
ELEV.	- ELEVATION
EST.	- ESTIMATED
EX.	- EXISTING
F.A.	- FORWARD ABUTMENT
F.F.	- FAR FACE
F/F	- FACE TO FACE
FWD.	- FORWARD
INCR.	- INCREMENT
MAX.	- MAXIMUM
MIN.	- MINIMUM
M.O.T.	- MAINTENANCE OF TRAFFIC
N.F.	- NEAR FACE
NO.	- NUMBER
NPCPP	- NON-PERFORATED CORRUGATED PLASTIC PIPE
OPT.	- OPTIONAL
PCPP	- PERFORATED CORRUGATED PLASTIC PIPE
P/G	- PROFILE GRADE
PROP.	- PROPOSED
PVMT.	- PAVEMENT
R.A.	- REAR ABUTMENT
REQ'D	- REQUIRED
SPA.	- SPACES
STA.	- STATION
SUPER.	- SUPERSTRUCTURE
TEMP.	- TEMPORARY
T/S	- TOE OF SLOPE
T/T	- TOE TO TOE
TYP.	- TYPICAL
VC	- VERTICAL CURVE

ESTIMATED QUANTITIES

CALC BY: BTR DATE: 5/13/2024
CHECK BY: PES DATE: 5/14/2024

ITEM	EXT	QUANTITY	UNIT	DESCRIPTION
202	11001	1	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING
503	21300	1	LS	UNCLASSIFIED EXCAVATION
505	11100	1	LS	PILE DRIVING EQUIPMENT MOBILIZATION
507	00500	160	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN
507	00550	200	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED
509	10000	6,084	LB	EPOXY COATED STEEL REINFORCEMENT
511	31610	24	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE
511	44110	11	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING
511	46510	15	CY	CLASS QC1 CONCRETE, FOOTING
512	10100	49	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
515	12040	5	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-36, 59'-0"
516	13600	27	SF	1" PREFORMED EXPANSION JOINT FILLER
516	14020	44	FT	SEMI-INTEGRAL EXPANSION JOINT SEAL
516	43100	20	EACH	ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES ONLY (NEOPRENE), 1 1/2" THICK
517	76300	124	FT	RAILING, MISC.: WOOD FENCE WITH STEEL POSTS
518	21200	25	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC
518	22300	124	FT	SPECIAL - STEEL DRIP STRIP
518	40000	44	FT	6" PERFORATED CORRUGATED PLASTIC PIPE
518	40010	48	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS
523	20000	1	EACH	DYNAMIC LOAD TESTING
601	32204	27	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC

DATE	REVISION DESCRIPTION
01/23/2025	1 REVISION 1: ABUTMENT STEEL MOD.

THE MIAMI CONSERVANCY DISTRICT

SYCAMORE CREEK BRIDGE REPLACEMENT

STRUCTURE GENERAL NOTES

DATE: 10/7/2024 DESIGNED: BTR CHECKED: PES REVIEWED: PJP

MCD NUMBER: 115176

SHEET: 14 of 20

Layout Tab Name: 14 STRUCTURE GENERAL NOTES, Images: MCD_H-1Color_Black_Primary.jpg: MCD_logo.JPG: 391130243E.png: MCD_H-1Color_Black_Primary.jpg: MCD_logo.JPG: , Xrefs: 10015218_BS100.dwg; 10015218_BS001.dwg; 10015218_TPO.dwg
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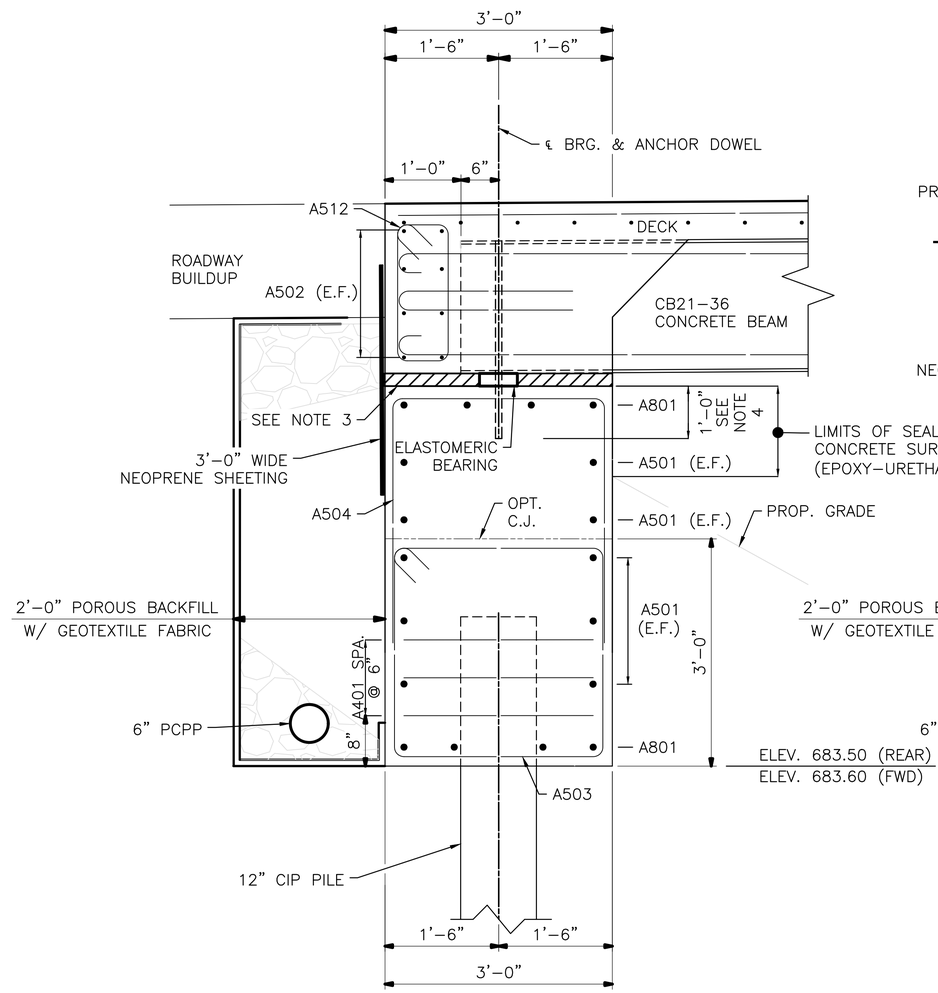
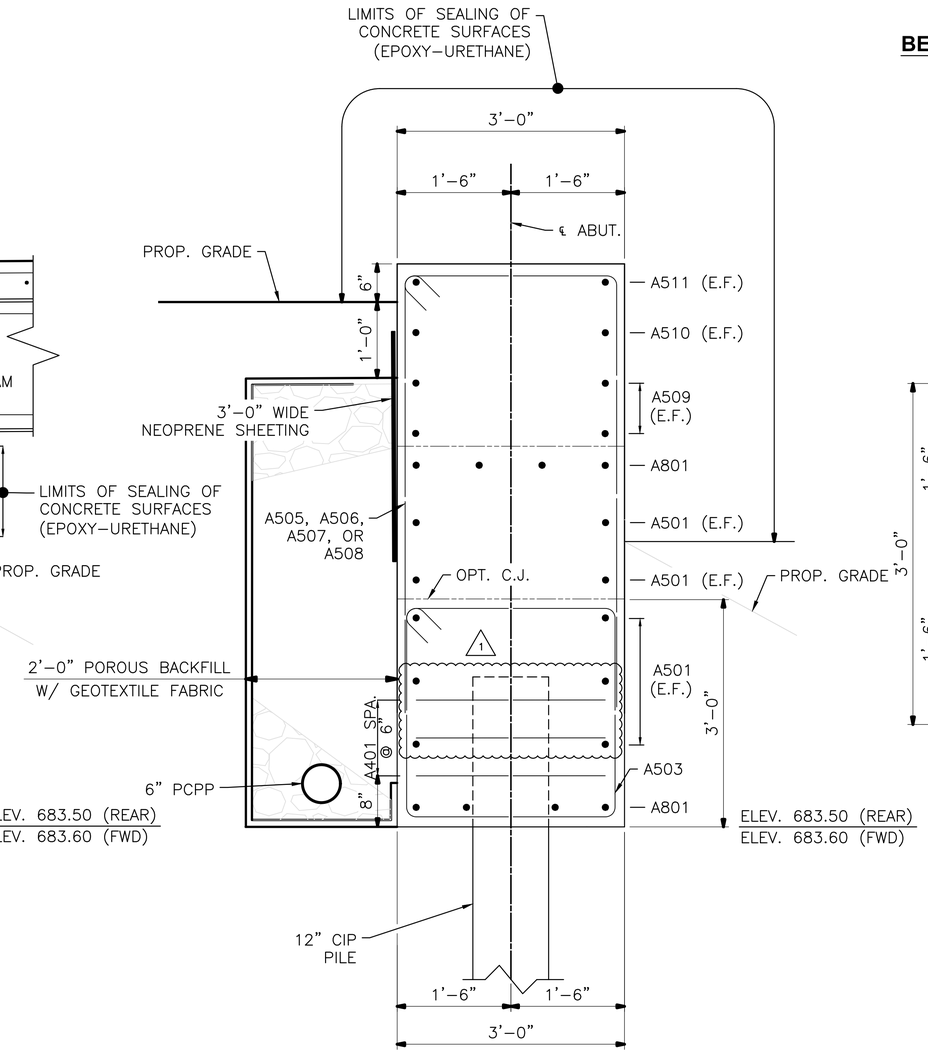


SECTION A



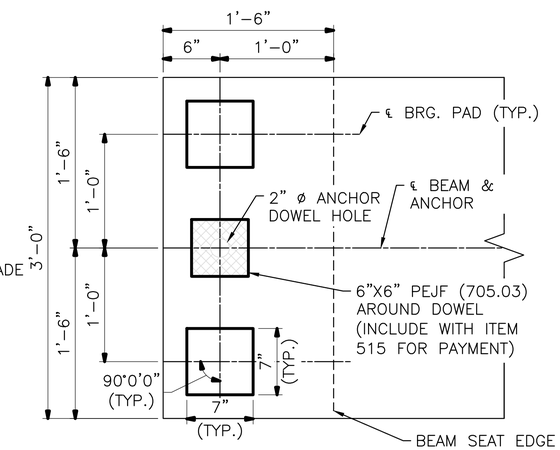
SECTION B

BEARING NOTES

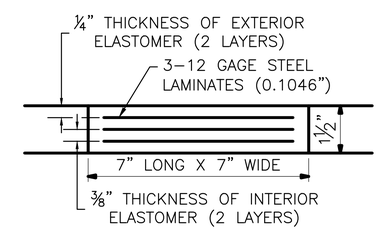
THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER, THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG–TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.

INTERNAL STEEL LAMINATE THICKNESS = 0.1046 INCHES.

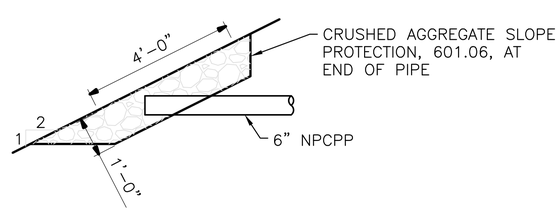
BEARING SERVICE LOAD RESISTANCE REACTIONS (PER PAD)
DEAD LOAD = 14.0 KIPS
LIVE LOAD = 7.4 KIPS
DESIGN LOAD = 21.4 KIPS



BEARING PAD LAYOUT



BEARING PAD DETAIL



ABUTMENT DRAIN OUTLET DETAIL

NOTES:

1. SEE SHEET 15/20 FOR ABUTMENT PLAN AND ELEVATION AND LOCATION OF SECTION A & SECTION B.
2. PROVIDE A 2½" DEEP SHEAR KEY CENTERED IN THE BEAM END. THE SHEAR KEY SHALL BE 13½" TALL AND 38" WIDE.
3. PROVIDE EXPANDED POLYSTYRENE FILLER ALONG BEAM SEAT. QUANTITY AND PAYMENT SHALL BE INCLUDED WITH SUPERSTRUCTURE CONCRETE.
4. 1¼" ANCHOR DOWEL HOLES IN ABUTMENTS TO BE FILLED WITH NON–SHRINK, NON–METALLIC GROUT ACCORDING TO CMS 705.20.
5. ACCURATELY PLACE REINFORCING STEEL WITHIN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES.
6. SEE ODOT SCD PSBD–2–07 FOR ADDITIONAL BOX BEAM DETAILS.

DATE	REVISION DESCRIPTION
01/23/2025	1 REVISION 1: ABUTMENT STEEL MOD.

THE MIAMI CONSERVANCY DISTRICT

SYCAMORE CREEK BRIDGE REPLACEMENT

ABUTMENT SECTION

DATE: 10/7/2024
DESIGNED: BTR
CHECKED: PES
REVIEWED: PJP

MCD NUMBER: 115176

SHEET: 16 of 20

Layout Tab Name: 16 ABUTMENT SECTION, Images: MCD_H-1Color_Black_Primary.jpg: MCD_logo.JPG: 39113C0243E.png: MCD_H-1Color_Black_Primary.jpg: MCD_logo.JPG: , Xrefs: 10015218_BS001.dwg
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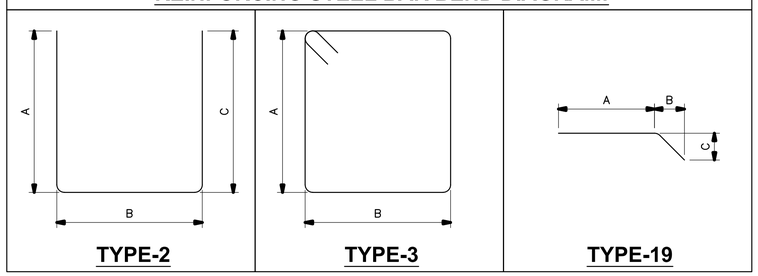
ABUTMENTS														
BAR MARK	MAT'RL TYPE	TOTAL REAR ABUTMENT	TOTAL FORWARD ABUTMENT	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
A401	ECSR	12	12	24	9'-6"	153	3	2'-6"	2'-0"					
A501	ECSR	10	10	20	21'-6"	449	ST.							
A502	ECSR	8	8	16	16'-5"	274	ST.							
A503	ECSR	24	24	48	10'-7"	530	3	2'-6"	2'-6"					
A504	ECSR	16	16	32	11'-9"	393	2	4'-9"	2'-6"	4'-9"	1			
A505	ECSR	4	4	8	16'-5"	137	2	7'-1"	2'-6"	7'-1"				
A506	ECSR	2	2	4	15'-7"	66	2	6'-8"	2'-6"	6'-8"				
A507	ECSR	2	2	4	14'-9"	62	2	6'-3"	2'-6"	6'-3"				
A508	ECSR	2	2	4	13'-11"	59	2	5'-10"	2'-6"	5'-10"				
A509	ECSR	8	8	16	2'-2"	37	ST.							
A510	ECSR	4	4	8	1'-6"	13	ST.							
A511	ECSR	4	4	8	2'-8"	23	19	4"	2'-1"	1'-2"				
A512	ECSR	17	17	34	5'-5"	193	3	8"	1'-9"					
A801	ECSR	8	8	16	21'-6"	919	ST.							
					TOTAL =	3308	LBS							

1

SUPERSTRUCTURE												
BAR MARK	MAT'RL TYPE	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
S601	ECSR	82	14'-8"	1807	ST.							
S602	ECSR	20	32'-3"	969	ST.							
			TOTAL =	2776	LBS							

REINFORCING STEEL BAR BEND DIAGRAM:



NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED IN THE BAR MARK COLUMN. THE FIRST DIGIT AFTER THE LETTERS WHERE THREE DIGITS ARE USED, AND THE FIRST TWO AFTER THE LETTERS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, A501 IS A NO. 5 BAR IN THE ABUTMENT. A LEGEND OF DESCRIPTORS IS GIVEN BELOW:

   A = ABUTMENT S = SUPERSTRUCTURE

2. BAR DIMENSIONS SHOWN ARE OUT–TO–OUT UNLESS OTHERWISE NOTED.
3. "R" INDICATED RADIUS, UNLESS OTHERWISE NOTED.
4. ST. INDICATES A STRAIGHT BAR.
5. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
6. MATERIALS LEGEND, ESCR = EPOXY COATED STEEL REINFORCEMENT.

DATE	REVISION DESCRIPTION
01/23/2025	1 REVISION 1: ABUTMENT STEEL MOD.

THE MIAMI CONSERVANCY DISTRICT

SYCAMORE CREEK BRIDGE REPLACEMENT

REINFORCING STEEL LIST

DATE: 10/7/2024
DESIGNED: BTR
CHECKED: PES
REVIEWED: PJP

MCD NUMBER: 115176

SHEET: 20 of 20

Layout Tab Name: 20 REINFORCING STEEL LIST, Images: MCD_H-1Color_Black_Primary.jpg: MCD_logo.JPG: 391113C0243E.png: MCD_H-1Color_Black_Primary.jpg: MCD_logo.JPG: , Xrefs: 10015218_BS100.dwg: 10015218_BS001.dwg: 10015218_TP0.dwg
Last Saved By:Sechrist, 1/23/2025 4:02:56 PM
G:\DE\Clients\OH_MiamiConservancyDistrict\10015218_SycamoreCreekBridge\4.0 Disciplines\Structures\SFN_Sycamore\Sheets\10015218_SL001.dwg Plotted By:Sechrist, Paige Plotted:January 23, 2025, 4:03:27 PM