

LOCATION MAP

LATITUDE: 39° 43' 05" LONGITUDE: 82° 27' 11"

PORTION TO BE IMPROVED -----

DESIGN DESIGNATION	LOC. 1A	LOC. 1B
FUNCTIONAL CLASSIFICATION	UMC	RMC
OPENING YEAR ADT (2023)	7,200	5,500
DESIGN YEAR ADT (2035)	8,000	6,500
DESIGN HOURLY VOLUME (2035)	800	650
DIRECTIONAL DISTRIBUTION	70%	60%
TRUCKS (24 HOUR B&C)	6%	5%
DESIGN SPEED	45 MPH	55 MPH
LEGAL SPEED	45 MPH	55 MPH
NHS PROJECT	NO	NO

UMC = URBAN MAJOR COLLECTOR
 RMC = RURAL MAJOR COLLECTOR

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVER

NONE

UNDERGROUND UTILITIES
 Contact Two Working Days
 Before You Dig

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

PLAN PREPARED BY:
 OHIO DEPARTMENT OF TRANSPORTATION
 DISTRICT 5 PLANNING & ENGINEERING

STATE OF OHIO
 DEPARTMENT OF TRANSPORTATION

FAI-37-19.14

CITY OF LANCASTER
 PLEASANT, BERNE, AND RUSHCREEK TOWNSHIPS
 FAIRFIELD COUNTY

INDEX OF SHEETS

TITLE SHEET	1
GENERAL NOTES	2-3
MAINTENANCE OF TRAFFIC NOTES	4-5
PAVEMENT DATA	6
SHOULDER DATA	7
EXTRA AREA DATA	8
BRIDGE TREATMENT DATA	9-13
PAVEMENT MARKING DATA	14-15
PLAN SHEETS	16-18
RAISED PAVEMENT MARKER DATA	19
LOCATION SUB-SUMMARIES	20-22
GENERAL SUMMARY	23-24

FEDERAL PROJECT NUMBER
 E150(646)

RAILROAD INVOLVEMENT
 KANAWA RIVER RAILROAD

PROJECT DESCRIPTION

ASPHALT CONCRETE RESURFACING AND RELATED WORK
 ON S.R. 37 IN FAIRFIELD COUNTY INCLUDING BRIDGE
 PATCHING AND SEALING ON VARIOUS STRUCTURES.

PROJECT EARTH DISTURBED AREA = N/A (MAINTENANCE)
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA = N/A
 NOTICE OF INTENT EARTH DISTURBED AREA = N/A

LOCATION	PLAN SPLIT	COUNTY	ROUTE	BEGIN	END	LENGTH MILES	CITY/ VILLAGE
				SLM	SLM		
1A	1	FAI	37	19.14	19.68	0.54	LANCASTER
1B	2	FAI	37	19.68	28.11	8.43	

2019 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.

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

APPROVED Mitch Toland
 DATE 8-19-22 CITY ENGINEER, CITY OF LANCASTER

APPROVED John Z. George
 DATE 8/11/2022 DISTRICT DEPUTY DIRECTOR

APPROVED Jade Matchbanks
 DATE 9-28-2022 DIRECTOR, DEPARTMENT OF TRANSPORTATION

ENGINEER'S SEAL	STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS				
<p>SIGNED: <u>Jason S. Lutz</u> DATE: <u>8/15/2022</u></p>	BP-3.1	1/21/22	TC-41.20	10/18/13	DS-1-92	7/15/22	800	SEE PROPOSAL	
	BP-4.1	7/19/13	TC-42.20	10/18/13			832	10/19/18	
			TC-52.10	10/18/13			874	4/17/20	
	MT-97.10	4/19/19	TC-52.20	1/15/21			961	4/17/20	
	MT-97.12	1/20/17	TC-64.10	7/16/21					
	MT-99.20	4/19/19	TC-65.10	1/17/14					
	MT-101.90	7/17/20	TC-65.11	7/21/17					
	MT-105.10	1/17/20	TC-71.10	7/16/21					

TITLE SHEET

DESIGN AGENCY	
DESIGNER	RMA
REVIEWER	JSL
PROJECT ID	93040
SHEET	1
TOTAL	24

BRIDGE TREATMENTS

FAI-37-1962 - BUTT JOINT AT DECK END, PATCH AND SEAL DECK

FAI-37-2156 - MILL/FILL SURFACE COURSE ONLY

FAI-37-2522 - MILL/ FILL 3.00", REPLACE WATERPROOFING, PATCH BEAM JOINTS OVER PIERS (SEE SHEETS 12-13)

FAI-37-2660 - BUTT JOINT AT APPROACH SLAB, PATCH AND SEAL DECK

FAI-37-2676 - PAVE SAME AS ROADWAY

ITEM 202, PORTION OF STRUCTURE REMOVED, AS PER PLAN (BRIDGE DECK)

ALL CONCRETE REMOVED SHALL BE REMOVED BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE 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 THE REINFORCING STEEL WHICH SHALL BE PRESERVED.

ALL LOCATIONS AND DIMENSIONS TO BE DETERMINED BY THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 202, PORTION OF STRUCTURE REMOVED AS PER PLAN.

ITEM 409, SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS

THIS ITEM SHALL BE USED AT BRIDGE DECK END TRANSVERSE JOINTS RECEIVING AN ASPHALT OVERLAY AND CONSTRUCTED PER CMS 409.03. THE SAW CUT LINE SHOULD MATCH THE BRIDGE DECK END AND MAY BE SKEWED. THE CONTRACTOR SHALL PRE-MARK THE SAW CUT LINE AND OBTAIN APPROVAL FROM THE ENGINEER BEFORE PROCEEDING WITH THE SAW CUT.

ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN (B)

REMOVE ALL FOREIGN MATERIAL AND DEBRIS FROM THE EXISTING JOINT BETWEEN THE APPROACH SLAB AND DECK OR BACKWALL. ANY SPALLS ADJACENT TO THE JOINT LESS THAN OR EQUAL TO 3" SHALL BE CLEANED AND SEALED WITH THIS ITEM. FOR SPALLS GREATER THAN 3" USE ITEMS 202 AND 511 AS DESCRIBED ON THIS SHEET.

AFTER REMOVAL, PERFORM A NEW SAWCUT TO ESTABLISH A ½" WIDE BY 2¼" DEEP JOINT ALONG THIS INTERFACE. ONCE THE JOINT HAS BEEN OPENED OR CREATED, AIRBLAST THOROUGHLY PRIOR TO PLACEMENT OF HOT APPLIED JOINT SEALER PER 705.04, AS DIRECTED BY THE ENGINEER.

DO NOT DISTURB EXPANSION JOINT INSIDE JOINT ARMOR.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN (B)

ITEM SPECIAL, STEEL DRIP STRIP

SEE BRIDGE STANDARD CONSTRUCTION DRAWING DS-1-92 FOR DETAILS:
[HTTPS://WWW.DOT.STATE.OH.US/SCDS/STRUCTURAL/DS-1-92.PDF](https://www.dot.state.oh.us/scds/structural/DS-1-92.pdf)

REMOVAL AND DISPOSAL OF EXISTING STEEL DRIP STRIP SHALL BE INCLUDED IN THE CONTRACT PRICE BID FOR ITEM SPECIAL, STEEL DRIP STRIP.

ITEM 511, CLASS QC2 CONCRETE, BRIDGE DECK, AS PER PLAN

THIS ITEM SHALL CONFORM TO CMS 511 EXCEPT FOR THE FOLLOWING:

PROVIDE PATCHES AT A 4" MINIMUM DEPTH IN LOCATIONS MARKED OUT IN ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (BRIDGE DECK).

TO EXPEDITE WORK, CLASS QC2 CONCRETE WITH AN ACCELERATING ADMIXTURE SIKA RAPID-1 OR ANY APPROVED EQUIVALENT ADMIXTURE SHALL BE USED TO ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH IN 12 HRS. USE A NON-CHLORIDE ACCELERATING ADMIXTURE AND PROVIDE DOCUMENTATION THAT THE MIX WILL PROVIDE THE STRENGTH IN THE SPECIFIED TIME.

TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL AFTER COMPLETION OF A 12 HOUR MINIMUM WET CURE AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 400 PSI.

THE CONTRACTOR MAY, AFTER THE INITIAL 2 HOUR SET UP OF THE CONCRETE, PLACE A STEEL PLATE OVER THE CONCRETE REPAIR IN ORDER TO OPEN ROADWAY TO UNRESTRICTED TRAFFIC. WET BURLAP BEDDING MUST BE PLACED BETWEEN THE STEEL PLATE AND FRESH CONCRETE PATCHED SURFACE. THE CONTRACTOR WILL STILL BE REQUIRED TO PROVIDE A WET CURE FOR THE DURATION OF THE CURE TIME.

INTERNAL CURING ADMIXTURES MAY BE USED IN LIEU OF WET BURLAP AT APPROVAL OF THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 511, CLASS QC2 CONCRETE, BRIDGE DECK, AS PER PLAN

BRIDGE DEDUCTIONS =
 BRIDGE LENGTH + APPROACH SLAB(S) LENGTH X PAVEMENT/SHOULDER WIDTH

BRIDGE TREATMENT DATA


LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	ADDITIONAL PAVEMENT OUTSIDE APPROACH SLABS	DETAIL (SEE SHEETS 10 AND 11)	MAINLINE DEDUCTIONS (CARRIED TO PAVEMENT DATA TABLE)	SHOULDER DEDUCTIONS (CARRIED TO SHOULDER DATA TABLE)	202		254		407		409	441			511	512		516		518				
												PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (BRIDGE DECK)	PAVEMENT PLANING, ASPHALT CONCRETE, 2.25"	PAVEMENT PLANING, ASPHALT CONCRETE, 3.00"	NON-TRACKING TACK COAT @ 0.05 GAL./S.Y.	NON-TRACKING TACK COAT @ 0.08 GAL./S.Y.	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS	S E S S		ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	S E S S		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	CLASS QC2 CONCRETE, BRIDGE DECK, AS PER PLAN	TYPE 3 WATERPROOFING	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	2" DEEP JOINT SEALER, AS PER PLAN (A)	2" DEEP JOINT SEALER, AS PER PLAN (B)	STEEL DRIP STRIP		
												SQ.YD.	SQ.YD.	SQ.YD.	GAL.	GAL.	FT.	INCHES	CU. YD.	INCHES	CU. YD.	CU. YD.	SQ.YD.	SQ.YD.	FT.	FT.	FT.				
1A	FAI-37-1962	66.5	44.0	325.2	25.0	44.0	244.4	2,000.0	1	977.3	162.9	2.0	2,244.4			112.2	179.6		1.00	62.3	1.25	77.9	2.0		325.2	88					
BRIDGE DEDUCTIONS										977.3	162.9																				
SUB-TOTALS															112.2	179.6															
LOCATION 1A TOTALS (CARRIED TO SUB-SUMMARY)												2.0	2,244.4			291.8			62.3		77.9	2.0		325.2	88						
1B	FAI-37-2156	88.0	44.0	430.3	20.0	44.0	195.6	2,000.0	1	1,008.0	252.0		2,195.6			109.8	175.6		1.00	61.0	1.25	76.2			430.3	88					
	FAI-37-2522	184.3	44.0	901.1	25.0	44.0	244.4	1,088.9	2	1,558.1	389.5		2,234.4			111.7	178.8		1.50	93.1	1.50	93.1	920.7					462			
	FAI-37-2660	55.0	36.0	220.0	20.0	36.0	160.0	1,388.9	3	1,586.7	396.7	1.0	1,388.9			69.4	111.1		1.00	49.1	1.25	61.4	1.0		380.0	72	72				
	FAI-37-2676	30.0	36.0	120.0	20.0	36.0	160.0	1,200.0	4	1,173.3	293.3		1,480.0			74.0	118.4	72.0	1.00	41.1	1.25	51.4									
BRIDGE DEDUCTIONS										5,326.1	1,331.5																				
SUB-TOTALS															364.9	583.9															
LOCATION 1B TOTALS (CARRIED TO SUB-SUMMARY)												1.0	5,064.5	2,234.4		948.8		72.0		244.3		282.1	1.0	920.7	810.3	160	72			462	

BRIDGE TREATMENT DATA

FAI-37-19.14

MODEL: Sheet PAPER: 34x22 (in.) DATE: 11/14/2022 TIME: 8:57:26 AM USER: jlutz1 pvc:\ohio\dot-pw-bentley.com\ohio\dot-pw-02\Documents\01 Active Projects\District 05\Fairfield\93040\400-Engineering\Roadway\Sheets\93040_G0004.dgn

DESIGN AGENCY



DESIGNER
RMA

REVIEWER
JSL 08/01/22

PROJECT ID
93040

SHEET TOTAL
9 | 24

LOCATION 1B SHEET TOTALS										ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
		4	5		9		12	13						
					431					512	10300	431	SY	STRUCTURE REPAIR (FAI-37-2156) SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN
								1.0		202	11301	1.0	CY	STRUCTURE REPAIR (FAI-37-2522) PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SUPERSTRUCTURE)
								1.0		511	53012	1.0	CY	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE
					921					512	33010	921	SY	TYPE 3 WATERPROOFING
								91		516	31011	91	FT	2" DEEP JOINT SEALER, AS PER PLAN (C)
								91		516	31200	91	FT	SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS
					462					518	22300	462	FT	SPECIAL - STEEL DRIP STRIP
														STRUCTURE REPAIR (FAI-37-2660)
					1.0					202	11301	1.0	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (BRIDGE DECK)
					1.0					511	34445	1.0	CY	CLASS QC2 CONCRETE, BRIDGE DECK, AS PER PLAN
					380					512	10300	380	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN
					72					516	31011	72	FT	2" DEEP JOINT SEALER, AS PER PLAN (B)
														MAINTENANCE OF TRAFFIC
			16							614	11110	16	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
	44									614	12460	44	EACH	WORK ZONE MARKING SIGN
	9									614	13000	9	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
			8.43							614	21100	8.43	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT
			8.43							614	21550	8.43	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT
			435							614	23200	435	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT
			435							614	23680	435	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT
			60							614	26200	60	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT
			60							614	26610	60	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT



LOCATION TOTALS		PLAN SPLITS				ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1A	1B	01/S<2/PV/LANC	02/STR/PV	03/STR/BR	04/S<2/BR						
2.0					2.0	202	11301	2.0	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (BRIDGE DECK)	9
2.0					2.0	511	34445	2.0	CY	CLASS QC2 CONCRETE, BRIDGE DECK, AS PER PLAN	9
325					325	512	10300	325	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
	431			431		512	10300	431	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
	1.0			1.0		202	11301	1.0	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SUPERSTRUCTURE)	12
	1.0			1.0		511	53012	1.0	CY	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	12
	921			921		512	33010	921	SY	TYPE 3 WATERPROOFING	
	91			91		516	31011	91	FT	2" DEEP JOINT SEALER, AS PER PLAN (C)	13
	91			91		516	31200	91	FT	SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS	13
	462			462		518	22300	462	FT	SPECIAL - STEEL DRIP STRIP	9
	1.0			1.0		202	11301	1.0	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	9
	1.0			1.0		511	34445	1.0	CY	CLASS QC2 CONCRETE, BRIDGE DECK, AS PER PLAN	9
	380			380		512	10300	380	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
	72			72		516	31011	72	FT	2" DEEP JOINT SEALER, AS PER PLAN (B)	9
	16		16			614	11110	16	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
4	44	4	44			614	12460	48	EACH	WORK ZONE MARKING SIGN	
4	9	4	9			614	13000	13	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
0.54	8.43	0.54	8.43			614	21100	8.97	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
0.54	8.43	0.54	8.43			614	21550	8.97	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
	435		435			614	23200	435	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
	435		435			614	23680	435	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
	60		60			614	26200	60	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
	60		60			614	26610	60	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
		LS	LS	LS	LS	614	11000		LS	MAINTAINING TRAFFIC	
		LS	LS	LS	LS	623	10000		LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING	
		LS	LS	LS	LS	624	10000		LS	MOBILIZATION	

