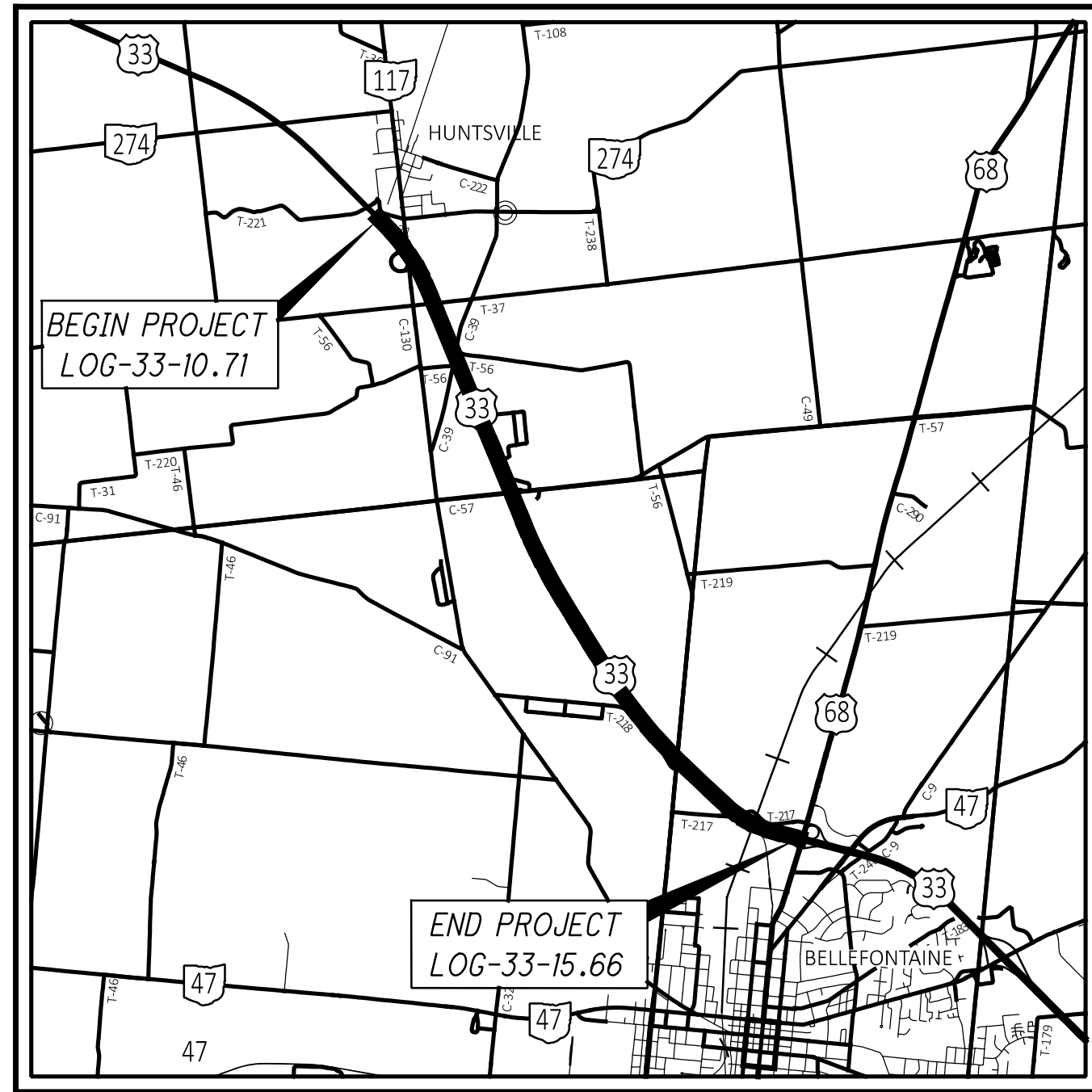


# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

## LOG-33-10.71

### MACARTHUR, HARRISON & LAKE TOWNSHIPS LOGAN COUNTY



**LOCATION MAP**

LATITUDE: 40°24'16" LONGITUDE: 83°47'13"



PORTION TO BE IMPROVED

ROUTE	LOCATION	ADT	TRUCKS
LOG-33	SLM 10.71 TO 15.66	18,650	3,450

**DESIGN EXCEPTIONS**

NONE

**ADA DESIGN WAIVERS**

NONE

**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)

PLAN PREPARED BY:  
ODOT DISTRICT 7 - ENGINEERING  
1001 ST. MARYS AVE.  
SIDNEY, OHIO

**INDEX OF SHEETS:**

TITLE SHEET	1
TYPICAL SECTIONS	2
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STRUCTURES	12

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/19/24			800	1/19/24
BP-9.1	1/18/19	MT-101.90	7/17/20	807	1/21/22
CB-5	7/19/24	MT-104.10	1/19/24	808	1/18/19
DM-4.3	1/15/16	MT-105.10	1/17/20	821	4/20/12
DM-4.4	1/15/16			832	7/21/23
				850	7/21/23
MT-95.30	7/19/19	TC-41.20	10/18/13		
MT-95.50	7/21/17	TC-42.20	10/18/13	908	10/20/17
MT-98.10	1/17/20	TC-52.10	10/18/13	921	4/20/12
MT-98.11	1/17/20	TC-52.20	1/15/21		
MT-98.20	4/19/19				
MT-98.22	1/17/20	TC-65.10	1/17/14		
MT-98.29	1/17/20	TC-65.11	1/19/24		
MT-98.30	7/16/21	TC-71.10	4/21/23		
MT-99.20	4/19/19	TC-72.20	7/21/23		
MT-101.60	4/21/23	TC-73.20	7/21/23		

**FEDERAL PROJECT NUMBER**

E200 (253)

**RAILROAD INVOLVEMENT**

NONE

**PROJECT DESCRIPTION**

THIS PROJECT CONSISTS OF MICROSURFACING OF USR 33 IN LOGAN COUNTY.

**PROJECT LOCATIONS**

PARTICIPATION 1 = 01/NHS/05  
LOG-33-SLM 10.71 TO 15.66

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA: NA\*  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: NA\*  
NOTICE OF INTENT EARTH DISTURBED AREA: NA\*

\* MAINTENANCE PROJECT

**LIMITED ACCESS**

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

**2023 SPECIFICATIONS**

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

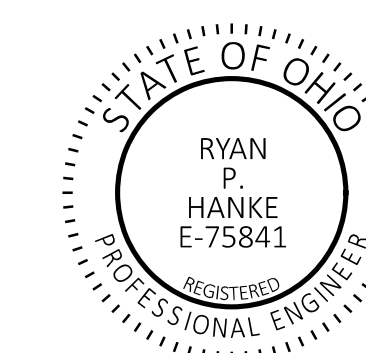
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

John W. O'Brien  
District 07 Deputy Director

Jack Marchbanks, PhD  
Director, Department of Transportation

**ENGINEER'S SEAL**

ROADWAY



LOG-33-10.71

DESIGN AGENCY



DESIGNER  
TMK

REVIEWER  
RPH 4-18-24

PROJECT ID  
107476

SHEET TOTAL  
P.1 12

LOG-33-10.71

MODEL: Sheet PAPER: 34x22 (in.) DATE: 10/10/2024 TIME: 11:10:03 AM USER: krapke p:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 07\Logan\107476\400-Engineering\Roadway\Sheets\107476\_GT001.dgn



**ALIGNMENT AND PROFILE**

THE WORK PROPOSED BY THIS PROJECT CONSISTS OF MICROSURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT.

**EQUIPMENT CALIBRATION**

THE CONTRACTOR SHALL CALIBRATE THE MIXING EQUIPMENT AS PER 421.07. THIS CALIBRATION SHALL BE PERFORMED DURING NORMAL BUSINESS HOURS - MONDAY THROUGH FRIDAY, FROM 7:00 AM TO 5:00 PM.

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN**

THE PAVEMENT REPAIRS SHALL BE IN ACCORDANCE WITH ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, WITH THE FOLLOWING ADDITIONS:

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. THE AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE AND SAWED OR MILLED TO A NEAT LINE. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE REPLACEMENT MATERIAL SHALL BE ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449) PG70-22M.

THE ESTIMATED PAVEMENT REPAIR AREAS SHALL BE A MINIMUM OF 4 FEET IN WIDTH. THE DEPTH SHALL BE 4 INCHES OR AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN  
 1000 SY

**MICROSURFACING UNDER LOG-33-0671 (SR 117 BRIDGE OVER USR 33)**

IN ORDER TO PRESERVE SOME VERTICAL CLEARANCE, THE LEVELING COURSE ON USR 33 SHALL BE SUSPENDED UNDER AND 100' BEFORE AND AFTER THIS STRUCTURE. THE SURFACE COURSE SHALL BE PLACED THROUGH THIS AREA.

**ITEM 611 CATCH BASIN, RECONSTRUCTED TO GRADE, AS PER PLAN  
 ITEM 611 CATCH BASIN, NO. 5**

THERE ARE THIRTY FOUR (34) CATCH BASINS LISTED IN THE TABLE BELOW THAT EITHER NEED TO BE REPLACED OR RECONSTRUCTED TO GRADE. THE ENGINEER WILL DESIGNATE AT WHICH LOCATIONS THE CATCH BASIN IS TO BE REPLACED AND AT WHICH LOCATIONS THE CATCH BASIN IS TO BE RECONSTRUCTED.

THE CONTRACTOR SHALL RECONSTRUCT TEN (10) OF THE CATCH BASINS AS PER CMS 611.10C AND AS DIRECTED BY THE ENGINEER. CONCRETE APRON REPLACEMENTS SHALL ALSO BE INCLUDED WITH THIS PAY ITEM. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 611 - CATCH BASIN, RECONSTRUCTED TO GRADE,  
 AS PER PLAN 24 EACH

THE CONTRACTOR SHALL REPLACE TWENTY FOUR (24) OF THE CATCH BASINS. THIS REPLACEMENT INCLUDES REMOVING THE EXISTING CATCH BASIN AND 4" OF THE EXISTING OUTLET PIPE AND INSTALLING THE NEW CATCH BASIN AND PIPE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 202 - PIPE REMOVED, 24" AND UNDER 96 FEET  
 ITEM 202 - CATCH BASIN REMOVED 24 EACH  
 ITEM 611 - 15" CONDUIT, TYPE C 96 FEET  
 ITEM 611 - CATCH BASIN, NO. 5 24 EACH

SLM	LOCATION	SLM	LOCATION
10.90	MEDIAN	13.60	MEDIAN
11.20	MEDIAN	13.80	MEDIAN
11.30	MEDIAN	14.02	MEDIAN
11.70	MEDIAN	14.16	MEDIAN
11.86	MEDIAN	14.31	MEDIAN
11.89	MEDIAN	14.40	MEDIAN
11.90	MEDIAN	14.50	MEDIAN
12.09	MEDIAN	14.65	MEDIAN
12.25	MEDIAN	14.73	MEDIAN
12.27	MEDIAN	14.80	MEDIAN
12.29	MEDIAN	14.90	MEDIAN
12.30	MEDIAN	15.19	MEDIAN
12.50	MEDIAN	15.20	MEDIAN
12.60	MEDIAN	15.27	MEDIAN
13.30	MEDIAN	15.37	RIGHT
13.49	MEDIAN	15.52	MEDIAN
13.50	MEDIAN	15.60	MEDIAN

**SPEED MEASUREMENT MARKINGS**

USR 33 EB SLM 11.28 TO 12.28  
 USR 33 WB SLM 11.71 TO 12.71

PLACE A SERIES OF SPEED MEASUREMENT MARKINGS ON THE ROADWAY TO ASSIST IN THE ENFORCEMENT OF SPEED REGULATIONS. EACH SPEED MEASUREMENT MARKING SHALL CONSIST OF ONE WHITE TRANSVERSE 24-INCH LINE MEASURED IN THE DIRECTION OF TRAVEL AND 4 FEET IN LENGTH. THE MARKINGS SHALL BE PLACED AT ONE-QUARTER MILE INTERVALS FOR A MINIMUM OF 1 MILE ALONG THE ROADWAY, AT LOCATIONS AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. SPEED MEASUREMENT MARKINGS SHOULD AVOID BEING LOCATED IN THE VICINITY OF A TAPER, ENTRANCE RAMP OR EXIT RAMP.

ON MULTILANE HIGHWAYS WITH SHOULDER WIDTHS OF AT LEAST 6 FEET, CENTER THE SPEED MEASUREMENT MARKING ENTIRELY ON THE SHOULDER. IF THE SHOULDER WIDTH IS LESS THAN 6 FEET, CENTER THE MARKING ON THE EDGE LINE SUCH THAT IT EXTENDS 2 FEET ON EITHER SIDE. TO ASSURE VISIBILITY OF THE MARKINGS AND REDUCE PARALLAX ERRORS, FOR EACH DIRECTION UTILIZING AN AIR SPEED CHECK ZONE, A SET OF TWO MARKINGS (LEFT AND RIGHT SIDE) SHALL BE USED AT EACH ONE-QUARTER MILE INTERVAL.

ON TWO-LANE ROADWAYS, ONE MARKING SHOULD BE USED AT EACH ONE-QUARTER MILE INTERVAL AND INSTALLED ACROSS THE CENTER LINE SUCH THAT IT EXTENDS 2 FEET ON EITHER SIDE.

THE MARKINGS SHALL BE LAID OUT BY A REGISTERED SURVEYOR. ON SECTIONS WITH CURVES, THE MARKINGS ON THE INSIDE OF THE CURVE SHALL MEET THE REQUIRED ONE-QUARTER MILE INTERVALS. MARKINGS ON THE OUTSIDE OF THE CURVE SHALL BE DIRECTLY ACROSS FROM THE MARKINGS ON THE INSIDE OF THE CURVE, NOT STAGGERED. A RECORD IS TO BE KEPT AND ONE ORIGINAL SIGNED AND SEALED DOCUMENT IS TO BE SENT TO THE DISTRICT TRAFFIC ENGINEER AND ONE COPY IS TO BE SENT TO THE DISTRICT CONSTRUCTION ENGINEER.

MATERIALS, EQUIPMENT AND APPLICATION SHALL BE ACCORDING TO THE TYPE OF PAVEMENT MARKING MATERIAL USED.

PAYMENT WILL BE FOR EACH 24-INCH-WIDE BY 4 FEET LONG MARKING AND SHALL INCLUDE THE PAVEMENT MARKING MATERIAL USED AND THE SURVEYING WORK. THE FOLLOWING QUANTITIES HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE PAVEMENT MARKING SUMMARY FOR MARKINGS ON BOTH THE INSIDE AND OUTSIDE SHOULDERS OF IR 70 EASTBOUND.

ITEM 646 SPEED MEASUREMENT MARKING, 20 EACH

**PAVEMENT MARKINGS**

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DOCUMENT THE LAYOUT OF THE EXISTING PAVEMENT MARKINGS INCLUDING EXISTING LANE AND SHOULDER WIDTHS IN A LOG AND SUBMIT TO THE DEPARTMENT FOR ACCEPTANCE. THE DEPARTMENT WILL NOT ALLOW THE CONTRACTOR TO PERFORM ANY PAVEMENT WORK FUNCTIONS (MILLING, OVERLAY, ETC.) UNTIL ACCEPTANCE OF THE SUBMITTED EXISTING MARKING LOG.

MARKINGS SHALL BE REPLACED IN KIND EXCEPT WHERE EXISTING MARKINGS DO NOT MEET THE CURRENT STANDARD CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL COORDINATE AND CORROBORATE THE PROPOSED LAYOUT OF ALL PAVEMENT MARKINGS PER APPLICABLE STANDARD CONSTRUCTION DRAWINGS WITH ODOT.

NO PERMANENT PAVEMENT MARKINGS OR RAISED PAVEMENT MARKERS SHALL BE PLACED UNTIL THE ODOT PROJECT ENGINEER HAS APPROVED THE LOCATION AND/OR LAYOUT OF THE WORK ZONE PAVEMENT MARKINGS.

**PAVEMENT MARKINGS ON INTERSECTING ROADWAYS**

THE EDGE LINE SHALL BE CONTINUED AROUND ALL RADII TO MATCH THE EXISTING EDGE LINE OF THE INTERSECTING ROUTE. IF THE INTERSECTING ROUTE HAS A CENTER LINE MARKING, THE CENTER LINE SHALL BE RE-STRIPED OVER THE AREA OF RESURFACING.

**COOPERATION WITH RAILROAD (CSX TRANSPORTATION)**

THE CONTRACTOR SHALL COORDINATE ALL WORK ON, OVER OR ADJACENT TO THE RAILROAD WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL CONTACT THE FOLLOWING, AT LEAST 30 DAYS IN ADVANCE, IN ORDER TO COORDINATE THE NECESSARY WORK. UNDER NO CIRCUMSTANCES SHALL THERE BE ANY WORK PERFORMED WITHIN THE RAILROAD RIGHT-OF-WAY WITHOUT THE PROPER WRITTEN AUTHORIZATION AND/OR FLAGGING PROTECTION FROM THE RAILROAD. SEE "PAVING AT RAILROAD CROSSINGS" NOTE FOR ADDITIONAL DETAILS.

IF ANY ISSUE OR INCIDENT OCCURS WITHIN THE CSXT ROW, PLEASE CONTACT THE CSXT PUBLIC SAFETY COORDINATION CENTER AT 800-232-0144.

EROSION CONTROL DEVICES SHALL BE LOCATED A MINIMUM OF 15 FEET FROM CENTERLINE OF RAILROAD TRACKS.

CSX TRANSPORTATION  
 CROSSING LOCATION: LOG-33-15.32

DESIGN AGENCY




DESIGNER	TMK
REVIEWER	
RPH	4-18-24
PROJECT ID	107476
SHEET	TOTAL
P.3	12



SHEET NUM.												PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.						
3	5	6	8	9	10	11	01/NHS/05	ITEM	EXT	TOTAL														
<b>ROADWAY</b>																								
96							96	202	35100	96	FT	PIPE REMOVED, 24" DIAMETER AND UNDER												
24							24	202	58100	24	EACH	CATCH BASIN REMOVED												
<b>DRAINAGE</b>																								
96							96	611	06100	96	FT	15" CONDUIT, TYPE C												
24							24	611	98300	24	EACH	CATCH BASIN, NO. 5												
10							10	611	98635	10	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	3											
<b>PAVEMENT</b>																								
1,000							1,000	251	01021	1,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN	3											
			222,252				222,252	421	10010	222,252	SY	MICROSURFACING, SURFACE COURSE												
			155,801				155,801	421	10020	155,801	SY	MICROSURFACING, LEVELING COURSE												
			12,000				12,000	423	00250	12,000	SY	CRACK SEALING, TYPE IV												
					27.63		27.63	850	10010	27.63	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)												
					4,820		4,820	850	10110	4,820	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)												
					5,545		5,545	850	10130	5,545	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)												
<b>TRAFFIC CONTROL</b>																								
						667	667	621	00100	667	EACH	RPM												
						667	667	621	54000	667	EACH	RAISED PAVEMENT MARKER REMOVED												
				0.03			0.03	642	00300	0.03	MILE	CENTER LINE, TYPE 1												
				0.18			0.18	642	30030	0.18	MILE	REMOVAL OF PAVEMENT MARKING, CENTER LINE, TYPE 1												
				17.78			17.78	642	30030	17.78	MILE	REMOVAL OF PAVEMENT MARKING, EDGE LINE, 6", TYPE 1												
				9.7			9.7	642	30030	9.7	MILE	REMOVAL OF PAVEMENT MARKING, LANE LINE, 6", TYPE 1												
				5,893			5,893	643	30000	5,893	FT	REMOVAL OF PAVEMENT MARKING, CHANNELIZING LINE, 12"												
				4,820			4,820	643	30000	4,820	FT	REMOVAL OF PAVEMENT MARKING, DOTTED LINE												
				57			57	643	30000	57	FT	REMOVAL OF PAVEMENT MARKING, STOP LINE												
				66			66	643	30000	66	FT	REMOVAL OF PAVEMENT MARKING, TRANSVERSE/DIAGONAL LINE												
				4			4	643	30020	4	EACH	REMOVAL OF PAVEMENT MARKING, LANE ARROW												
				20			20	643	30020	20	EACH	REMOVAL OF PAVEMENT MARKING, SPEED MEASUREMENT MARKING												
					348		348	646	10310	348	FT	CHANNELIZING LINE, 12"												
					57		57	646	10400	57	FT	STOP LINE												
					66		66	646	10600	66	FT	TRANSVERSE/DIAGONAL LINE												
					4		4	646	20300	4	EACH	LANE ARROW												
					400		400	646	20510	400	FT	DOTTED LINE, 12"												
					20		20	646	20710	20	EACH	SPEED MEASUREMENT MARKING												
					17.78		17.78	807	14010	17.78	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"												
					9.7		9.7	807	14110	9.7	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"												
					0.15		0.15	807	14200	0.15	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CENTER LINE												
					5,545		5,545	807	14310	5,545	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"												
					4,820		4,820	807	14410	4,820	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"												
<b>MAINTENANCE OF TRAFFIC</b>																								
	200						200	614	11110	200	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE												
		4					4	614	18601	4	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6											
				0.09			0.09	614	21550	0.09	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT												
				1,044			1,044	614	23690	1,044	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT												
				171			171	614	26610	171	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT												
				12			12	614	30650	12	EACH	WORK ZONE ARROW, CLASS III, 642 PAINT												
				0.45			0.45	614	98000	0.45	MILE	WORK ZONE PAVEMENT MARKING, MISC.: WORK ZONE CENTER LINE, CLASS I, 807 PAINT	9											
				53.34			53.34	614	98000	53.34	MILE	WORK ZONE PAVEMENT MARKING, MISC.: WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	9											
				29.1			29.1	614	98000	29.1	MILE	WORK ZONE PAVEMENT MARKING, MISC.: WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	9											
				16,635			16,635	614	98100	16,635	FT	WORK ZONE PAVEMENT MARKING, MISC.: WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	9											
				14,460			14,460	614	98100	14,460	FT	WORK ZONE PAVEMENT MARKING, MISC.:WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	9											
		10					10	808	18700	10	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY												
<b>INCIDENTALS</b>																								
							LS	614	11000	LS		MAINTAINING TRAFFIC												
							LS	624	10000	LS		MOBILIZATION												

GENERAL SUMMARY

DESIGN AGENCY  
  
 DESIGNER  
**TMK**  
 REVIEWER  
 RPH 4-18-24  
 PROJECT ID  
 107476  
 SHEET TOTAL  
 P.7 | 12