

# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

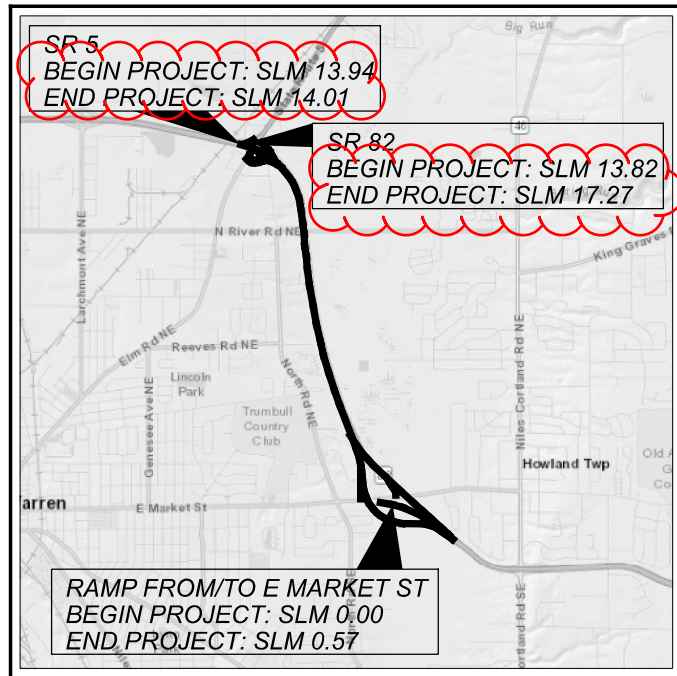
## TRU-5/82-13.94/13.88 PART 1

CITY OF WARREN

BAZETTA AND HOWLAND TOWNSHIPS

TRUMBULL COUNTY

FOR PART 2 SEE TRU-MYRON ST-SIDEWALKS



**LOCATION MAP**

LATITUDE: 41°15'07" N LONGITUDE: 80°46'03" W



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

**DESIGN DESIGNATION**

DESIGN FUNCTIONAL CLASSIFICATION:  
 URBAN OTHER FREEWAY AND EXPRESSWAY  
 NHS PROJECT ----- YES

**DESIGN EXCEPTIONS**

NONE

**ADA DESIGN WAIVERS**

NONE

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

**OHIO811.org**  
 Before You Dig

OHIO 811, 8-1-1, or 1-800-362-2764  
 (Non members must be called directly)

PLAN PREPARED BY:  
 ODOT DISTRICT 4 - CAPITAL PLANNING  
 2088 SOUTH ARLINGTON ROAD  
 AKRON, OHIO 44306

ENGINEER'S SEAL:

SIGNED: Matthew A. Chaney  
 DATE: 1/10/21

**INDEX OF SHEETS:**

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STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/17/20	MGS-1.1	1/19/18	MT-105.10	1/17/20	TC-73.20	1/17/20	800-2019	1/21/22		
BP-4.1	7/19/13	MGS-2.1	1/19/18	MT-110.10	7/19/13	TC-74.10	7/16/21	821	4/20/12		
BP-5.1	7/16/21	MGS-4.3	1/18/13			TC-82.10	7/19/19	832	10/19/18		
BP-7.1	7/17/20			SBR-1-20	7/17/20			843	1/15/16		
BP-9.1	1/18/19	MT-95.30	7/19/19					921	4/20/12		
CS-1-08	1/15/21	MT-95.31	7/19/19	TC-41.20	10/18/13						
		MT-95.45	1/17/20	TC-42.20	10/18/13						
		MT-97.10	4/19/19	TC-41.30	10/18/13						
DM-1.1	7/17/20	MT-98.10	1/17/20	TC-52.10	10/18/13						
DM-1.2	7/16/21	MT-98.20	4/19/19	TC-52.20	1/15/21						
DM-4.3	1/15/16	MT-98.22	1/17/20	TC-61.10	1/17/20						
DM-4.4	1/15/16	MT-98.28	1/17/20	TC-61.30	7/19/19						
		MT-98.29	1/17/20	TC-65.10	1/17/14						
GSD-1-19	1/15/21	MT-99.20	4/19/19	TC-65.11	7/21/17						
GSD-1-96	7/19/02	MT-99.50	1/17/20	TC-71.10	1/19/18						
		MT-101.90	7/17/20	TC-72.20	7/20/18						

**FEDERAL PROJECT NUMBER**

E190(727)

**RAILROAD INVOLVEMENT**

NONE

**PROJECT DESCRIPTION**

RESURFACING OF TRU SR 5 FROM 13.94 TO 14.36 AND TRU SR 82 FROM 13.89 TO 17.36. INCLUDES MINOR BRIDGE WORK.

**EARTH DISTURBED AREAS**

PROJECT EDA:	N/A
ESTIMATED CONTRACTOR EDA:	0.25 ACRES
NOTICE OF INTENT EDA:	N/A

**2019 SPECIFICATIONS**

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET 7, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED [Signature]  
 DATE 1/10/22 DISTRICT DEPUTY DIRECTOR

APPROVED \_\_\_\_\_  
 DATE \_\_\_\_\_ DIRECTOR, DEPARTMENT OF TRANSPORTATION

TITLE SHEET

DESIGN AGENCY



DESIGNER

CMW

REVIEWER

MAC 11-29-21

PROJECT ID

101248

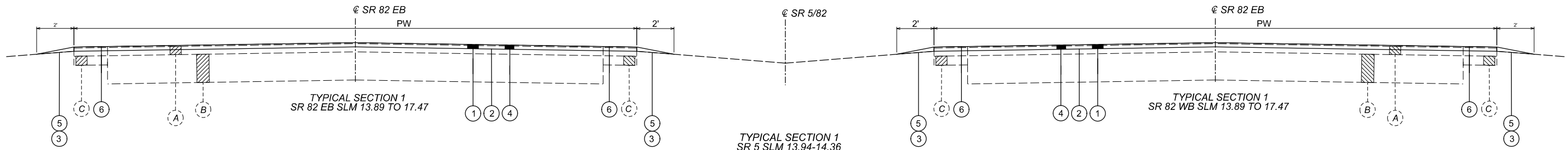
SHEET

TOTAL

P.1 | 17

TRU-5/82-13.94/13.88

MODEL: Sheet PAPER: 17x11 (in.) DATE: 5/2/2022 TIME: 8:37:42 AM USER: sdcdek pwc\ohiodot-pw-bentley.com\shado-pw-02\Documents\01 Active Projects\District 04\Trumbull\101248\400-Engineering\Roadway\Sheets\101248\_GT001.dgn

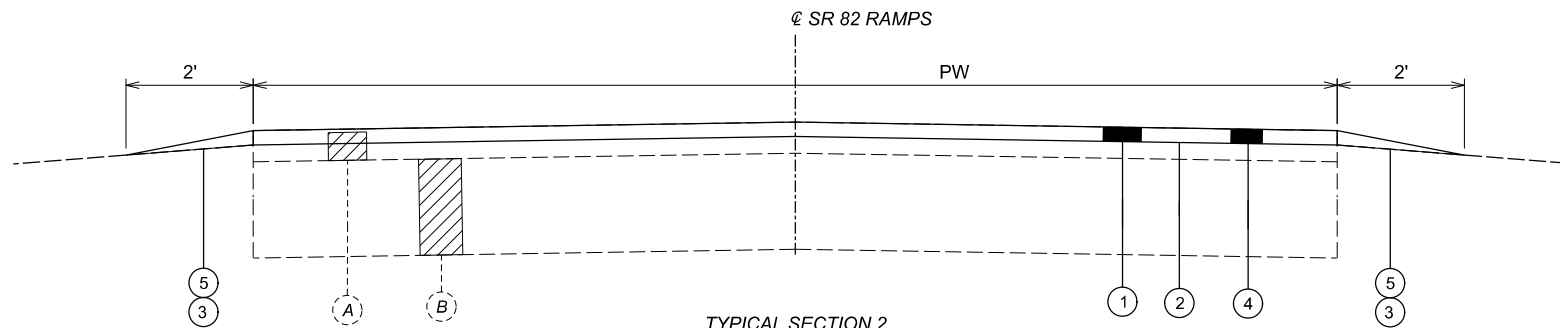


TYPICAL SECTION 1  
 SR 82 EB SLM 13.89 TO 17.47

TYPICAL SECTION 1  
 SR 5 SLM 13.94-14.36  
 SR 82 SLM 13.88 TO 17.47

TYPICAL SECTION 1  
 SR 82 WB SLM 13.89 TO 17.47

ROUTE	SLM		LENGTH (MILES)	PW (FEET)
	FROM	TO		
SR 5 EB	13.94	14.01	0.07	38
SR 82 EB	13.88	16.72	2.84	38
SR 82 EB	16.79	17.14	0.35	38
SR 82 EB	17.19	17.40	0.21	38
SR 82 WB	13.82	15.65	1.83	38
SR 82 WB	15.65	16.55	0.90	48
SR 82 WB	16.55	16.88	0.33	38
SR 82 WB	16.96	17.27	0.31	38



TYPICAL SECTION 2  
 APPLIES TO ALL RAMPS FROM  
 SR82 SLM 13.88-17.47

TYPICAL SECTION 2		
RAMP	LENGTH (MILES)	AW (FEET)
ELM RD TO W SR 82	0.36	23
W SR 82 TO ELM RD	0.32	22
ELM RD TO E SR 82	0.41	24
E SR 82 TO ELM RD	0.34	24
E SR 82 TO E MARKET ST	0.28	23
E MARKET ST TO W SR 82	0.33	20

LEGEND

- 1 ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (T = 1.5")
- 2 ITEM 407, NON-TRACKING TACK COAT @ 0.05 GAL/SY
- 3 ITEM 408, PRIME COAT, AS PER PLAN @ 0.4 GAL/SY
- 4 ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5mm TYPE A (447), AS PER PLAN (T = 1.5")

- 5 ITEM 617, COMPACTED AGGREGATE, AS PER PLAN (T=2")
- 6 ITEM 618, RUMBLE STRIPS (ASPHALT CONCRETE)

- A EXISTING ASPHALT SURFACE COURSE (3.75")
- B EXISTING REINFORCED CONCRETE BASE (10")
- C EXISTING AGGREGATE BASE
- D EXISTING ASPHALT SURFACE COURSE (3.5")
- E EXISTING REINFORCED CONCRETE BASE (9")
- F EXISTING CURB TYPE 6
- G EXISTING GUARDRAIL



**UTILITIES**

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

CENTURY LINK / LUMEN  
 ATTN: ALAN PETERS  
 3801 ELM RD.  
 WARREN, OH 44483  
 330-841-1309 (O), 330-219-3306 (C)  
 Alan.L.Peters@lumen.com  
 relocations@lumen.com

DIVERSIFIED GAS & OIL PLC  
 ATTN: JEFF SHEPHERD  
 PIPELINE TECHNICIAN  
 1026A COOKSON AVE. SE  
 NEW PHILADELPHIA, OH 44663  
 740-485-1839 (C)  
 jshepherd@dgoc.com

CITY OF NILES PROJECT MANAGER / PUBLIC UTILITIES  
 INFRASTRUCTURE COORDINATOR  
 ATTN: KEVIN ROBINSON  
 34 W STATE ST.  
 NILES, OH 44446  
 330-550-9000 ext. 1171 (O) 330-717-0872 (C)  
 KRobertson@thecityofniles.com

CITY OF WARREN (WATER DEPARTMENT)  
 ATTN: GREG DELLIMUTI  
 540 LAIRD AVE.  
 WARREN, OH 44484  
 330-841-2702  
 gdellimuti@warren.org

DOMINION EAST OHIO  
 ATTN: MICAH RISACHER  
 320 SPRINGSIDE DRIVE, SUITE 320  
 AKRON, OH 44333  
 330-664-2638  
 Micah.J.Risacher@dominionenergy.com  
 relocation@dominionenergy.com

OHIO EDISON  
 ATTN: BRIAN MULICHAK  
 730 SOUTH AVE.  
 YOUNGSTOWN, OH 44502  
 330-261-0073 (C)  
 bmulichak@firstenergycorp.com

TRUMBULL COUNTY SANITARY ENGINEER  
 ATTN: SCOTT VERNER  
 842 YOUNGSTOWN-KINGSVILLE RD.  
 VIENNA, OH 44473  
 330-675-7787  
 severner@co.trumbull.oh.us

**LINEAR GRADING**

AREAS WHERE THE SHOULDER IS HIGHER THAN THE EDGE OF PAVEMENT WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE. THIS WORK WILL ONLY BE PERFORMED IN AREAS NECESSARY AND WILL NOT BE PERFORMED ON THE ENTIRE PROJECT. AREAS FOR THE WORK WILL BE MARKED BY THE PROJECT ENGINEER. UNDER NO CIRCUMSTANCES WILL THIS WORK BE PERFORMED CONCURRENTLY WITH ANY OTHER OPERATION.

GRADING WILL BE ACCOMPLISHED BY THE REMOVAL OF MATERIAL TO PROVIDE A 0.08 POSITIVE SLOPE. THE GRADED AREAS WILL BE COMPACTED TO A SUFFICIENT DENSITY TO PREVENT EROSION UNTIL SEEDING AND MULCHING IS PERFORMED. ALL EXCESS MATERIAL WILL BE REMOVED FROM THE BERMS AND WILL BE DISPOSED OF OFF THE PROJECT BY THE CONTRACTOR.

SEEDING AND MUNCHING, FERTILIZER AND LIME WILL BE PERFORMED WITHIN A PERIOD NOT TO EXCEED 10 DAYS AFTER THE LINEAR GRADING.

THE QUANTITY OF ITEM 209 IS NOT PERMITTED TO BE INCREASED. REDUCTIONS IN QUANTITIES ARE PERMITTED AS DETERMINED BY THE PROJECT ENGINEER.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID ITEM. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:  
 209, LINEAR GRADING, 802 STA.  
 659, SEEDING AND MULCHING, 22,279 SQ YD  
 659, COMMERCIAL FERTILIZER, 3.00 TON  
 659, LIME, 4.61 ACRES  
 659, WATER, 120.30 M. GAL.

**ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN**

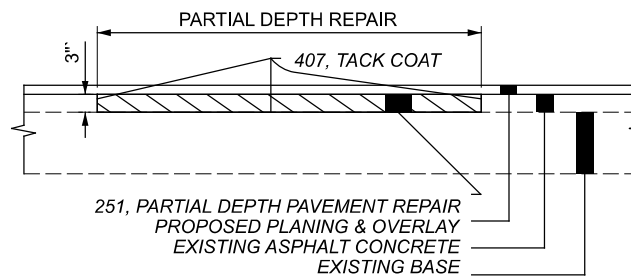
IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1- 1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)**

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. PAVEMENT REPAIRS WILL BE MARKED IN THE FIELD BY THE PROJECT ENGINEER ACCORDING TO CMS 251.02. MINIMUM WIDTH IS 2'. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 5 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:  
 SR 82 SLM 13.89-17.47  
 251, PARTIAL DEPTH PAVEMENT REPAIR (441), 5,000 SQ. YD.



**CATCH BASIN ADJUSTED TO GRADE**

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

611, CATCH BASIN ADJUSTED TO GRADE, 2 EACH

**BARRIER REFLECTORS**

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS DIRECTED BY THE ENGINEER FOR INSTALLING/REPLACING BARRIER REFLECTORS ON ALL EXISTING BARRIER RUNS WITHIN THE PROJECT LIMITS.

626, BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL), 210 EACH

**ITEM 408 - PRIME COAT, AS PER PLAN**

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (447), AS PER PLAN**

THE REQUIREMENTS OF 442 AND 446 WILL APPLY; DEVIATIONS FROM THESE ARE AS FOLLOWS:

THE PERCENTAGE OF RECLAIMED MATERIAL PROPOSED FOR USE WILL BE INCLUDED IN THE MIX DESIGN PROCESS TO ESTABLISH THE JOB MIX FORMULA (JMF) IN ACCORDANCE WITH 401.04.

MATERIALS: THE MATERIALS SHALL BE:  
 AGGREGATES 703.05\*

\*THE VIRGIN COARSE AGGREGATE PORTION OF THE MIXTURE WILL CONTAIN 50% AIR COOLED BLAST FURNACE SLAG (ACBFS) AND MEET THE REQUIREMENTS OF 703.05.

USE AN NDES OF 50, AN NMAX OF 75 AND THE COMBINATION OF NEW AGGREGATES, NEW ASPHALT BINDER, AND RECLAIMED MATERIAL SHALL BE AS REQUIRED TO PRODUCE A COMPOSITION CONTAINING A MINIMUM OF 6.0% NEW ASPHALT BINDER RESULTING IN A MINIMUM TOTAL BINDER OF 6.5%.

703.05 DO NOT USE ANY FINE OR COARSE AGGREGATE WITH A 'SR' OR 'SRH' DESIGNATION ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

[add the following where traffic data is not provided in the plan]

THE CONTRACTOR SHALL USE THE APPROPRIATE COUNTY, ROUTE AND SECTION TO OBTAIN TRAFFIC DATA, TO BE USED IN THE DESIGN OF THE JMF, AT THIS WEB SITE LOCATION:

<http://www.odotonline.org/techservapps/traffmonit/countinformation/default.htm>

**PROFILE AND ALIGNMENT**

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

**PAVEMENT MARKING DETAILS**

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING. FOR ANY LOCATIONS THAT PAVEMENT MARKING DETAILS HAVE NOT BEEN MADE AVAILABLE TO THE CONTRACTOR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PUT BACK NEW PAVEMENT MARKINGS IN THE ORIGINAL LOCATIONS.

**PAVEMENT MARKING LANE WIDTHS**

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS:

ROUTE	S.L.M. TO	S.L.M.	LANE WIDTH
SR 5 EB	13.94	14.01	12'
SR 82 EB	13.88	14.40	12'
SR 82 WB	13.82	17.27	12'

DESIGN AGENCY



DESIGNER

CMW

REVIEWER

MAC 11-29-21

PROJECT ID

101248

SHEET TOTAL

P.4 17

SHEET NUM.								PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	5	6	9	10	11	12	15	01/NHS/PV	02/NHS/BR	03/NHS/BR						
<b>ROADWAY</b>																
802								802			209	60200	802	STA	LINEAR GRADING	
<b>EROSION CONTROL</b>																
22,279								22,279			659	10000	22,279	SY	SEEDING AND MULCHING	
3								3			659	20000	3	TON	COMMERCIAL FERTILIZER	
4.61								4.61			659	31000	4.61	ACRE	LIME	
120.3								120.3			659	35000	120.3	MGAL	WATER	
								3,000			832	30000	3,000	EACH	EROSION CONTROL	
<b>DRAINAGE</b>																
2								2			611	98630	2	EACH	CATCH BASIN ADJUSTED TO GRADE	
<b>PAVEMENT</b>																
5,000								5,000			251	01000	5,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
			177,104	21,376				198,480			254	01000	197,671	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5")	
			8,813	1,069				9,882			407	20000	9,882	GAL	NON-TRACKING TACK COAT @ 0.05 GAL/SY	
			8,201	564				8,765			408	10001	8,765	GAL	PRIME COAT, AS PER PLAN @ 0.4 GAL/SY	
			4,754	753				5,507			441	00100	5,507	CY	ANTI-SEGREGATION EQUIPMENT	
			7,345	891				8,236			442	10301	8,236	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN (T=1.5")	
			1,231	85				1,316			617	10101	1,316	CY	COMPACTED AGGREGATE, AS PER PLAN (T = 2")	
			71,492	6,336				77,828			618	40100	77,828	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
<b>TRAFFIC CONTROL</b>																
							1,057	1,057			621	00100	1,057	EACH	RPM	
210							845	845			621	54000	845	EACH	RAISED PAVEMENT MARKER REMOVED	
								210			626	00110	210	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)	
							19.46	19.46			642	00104	19.46	MILE	EDGE LINE, 6", TYPE 1	
							8.7	8.7			642	00204	8.7	MILE	LANE LINE, 6", TYPE 1	
							3,450	3,450			642	00404	3,450	FT	CHANNELIZING LINE, 12", TYPE 1	
							5,200	5,200			642	01510	5,200	FT	DOTTED LINE, 6", TYPE 1	
							64	64			646	10400	64	FT	STOP LINE	
							25	25			646	20300	25	EACH	LANE ARROW	
<b>STRUCTURE REPAIRS</b>																
															FOR TRU-5-1410L ESTIMATED QUANTITIES	
															FOR TRU-5-1413R ESTIMATED QUANTITIES	
															FOR TRU-82-1473 ESTIMATED QUANTITIES	
															FOR TRU-82-1625 ESTIMATED QUANTITIES	
															FOR TRU-82-1674R ESTIMATED QUANTITIES	
															FOR TRU-82-1705L ESTIMATED QUANTITIES	
															FOR TRU-82-1711CR ESTIMATED QUANTITIES	
															FOR TRU-82-1716R ESTIMATED QUANTITIES	
<b>MAINTENANCE OF TRAFFIC</b>																
250								250			614	11110	250	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		LUMP						LUMP			614	12420	LS		DETOUR SIGNING	
40								40			614	12460	40	EACH	WORK ZONE MARKING SIGN	
		16						16			614	18601	16	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	
9.2								9.2			614	20110	9.2	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
9.2								9.2			614	20560	9.2	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
20.32								20.32			614	22360	20.32	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
3,450								3,450			614	23200	3,450	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
3,450								3,450			614	23680	3,450	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
64								64			614	26200	64	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
64								64			614	26610	64	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
<b>INCIDENTALS</b>																
								LUMP			614	11000	LS		MAINTAINING TRAFFIC	
								6			619	16010	6	MNTH	FIELD OFFICE, TYPE B	
								LUMP			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
								LUMP			624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

CMW

REVIEWER

MAC 11-29-21

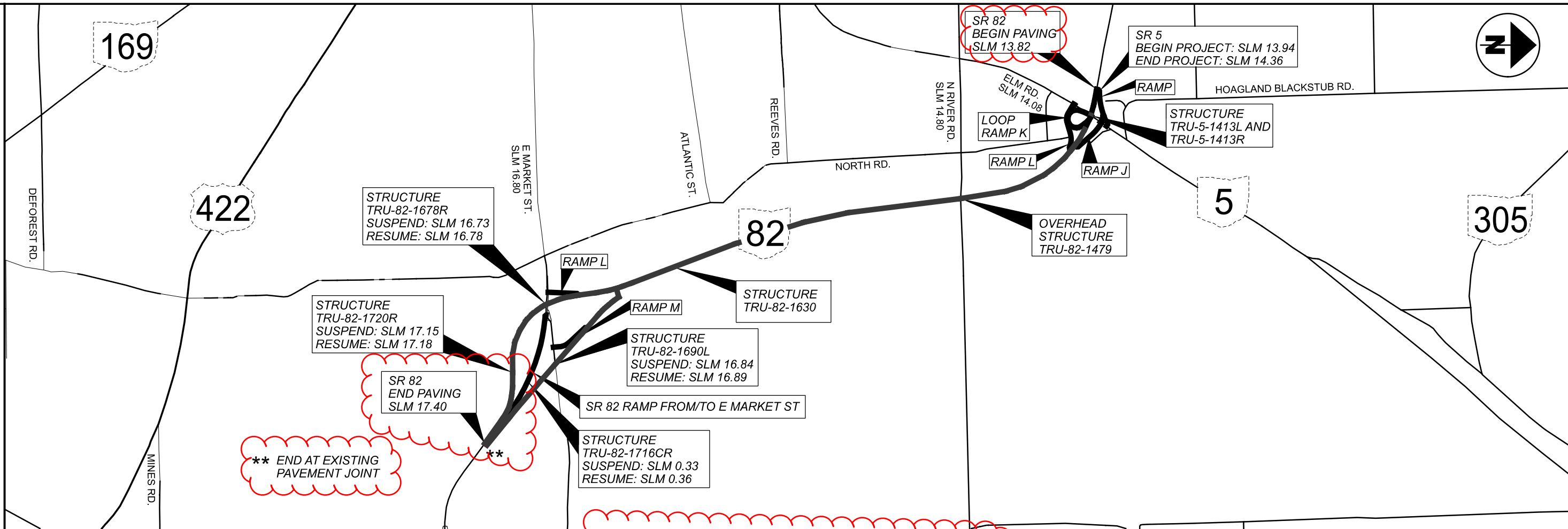
PROJECT ID

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SHEET TOTAL

P.8 17




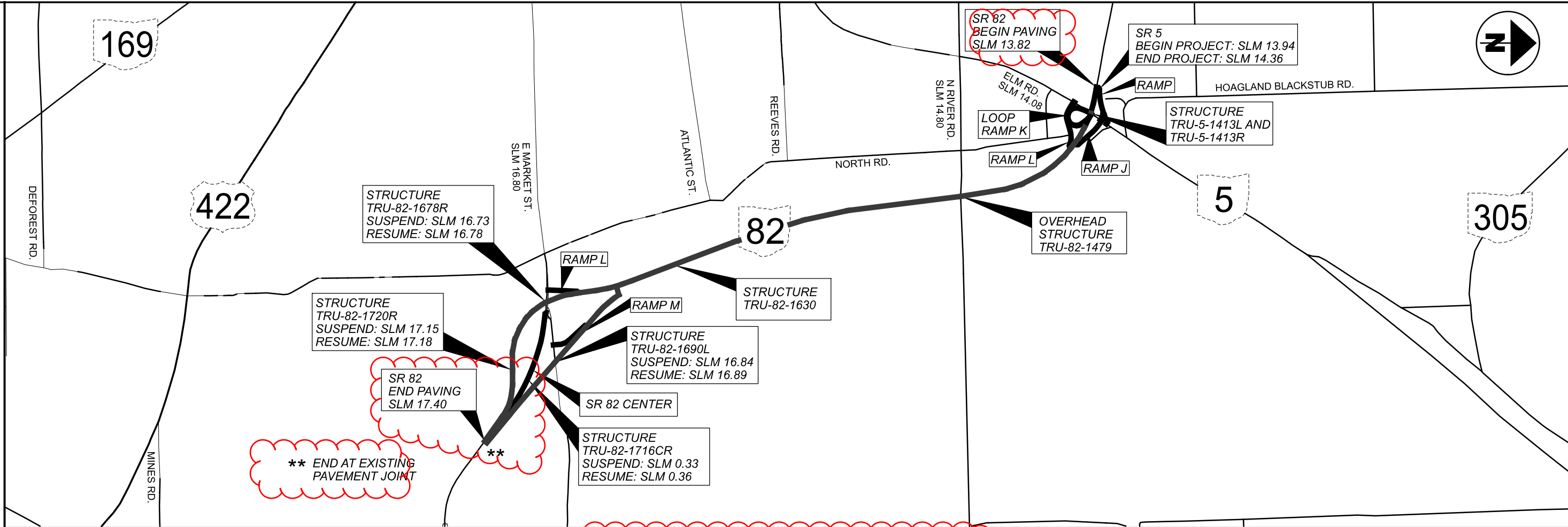


\*\* END AT EXISTING PAVEMENT JOINT \*\*

SLM RANGE	TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=D*W/9	CADD GENERATED AREA	254	407	408	441	442	617	618																												
							PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5')	NON-TRACKING TACK COAT @ 0.05 GAL/SY	PRIME COAT, AS PER PLAN @ 0.4 GAL/SY	ANTI-SEGREGATION EQUIPMENT	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN (T=1.5')	COMPACTED AGGREGATE, AS PER PLAN (T=2')	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	SY	GAL	GAL	CY	CY	CY	FT																					
FT	FT	SY	SY	SY	SY	SY	GAL	GAL	CY	CY	CY	FT																													
<b>SR 82</b>																																									
13.88 TO 16.72	1	EB	14995.20	36.00	59980.80		59980.80	2999.04	2665.81	1527.29	2499.20	399.87	29990.40																												
16.79 TO 17.14	1	EB	1848.00	36.00	7392.00		7392.00	369.60	328.53	188.22	308.00	49.28	3696.00																												
17.19 TO 17.40	1	EB	1108.80	36.00	4435.20		4435.20	221.76	197.12	112.93	184.80	29.57	2217.60																												
13.82 TO 15.65	1	WB	9662.40	36.00	38649.60		38649.60	1932.48	1717.76	984.13	1610.40	257.66	19324.80																												
15.65 TO 16.55	1	WB	4752.00	48.00	25344.00		25344.00	1267.20	844.80	748.00	1056.00	126.72	9504.00																												
16.55 TO 16.88	1	WB	1742.40	36.00	6969.60		6969.60	348.48	309.76	177.47	290.40	46.46	3484.80																												
16.96 TO 17.27	1	WB	1636.80	36.00	6547.20		6547.20	327.36	290.99	166.71	272.80	43.65	3273.60																												
<b>RAMPS</b>																																									
ELM RD TO W SR 82	2	WB	2062.39	23.00	5270.55		5270.55	263.53	366.65	171.87	219.61	55.00																													
W SR 82 TO ELM RD	2	WB	1648.81	22.00	4030.42		4030.42	201.52	293.12	129.77	167.93	43.97																													
ELM RD TO E SR 82	2	EB	1731.43	24.00	4617.15		4617.15	230.86	307.81	152.30	192.38	46.17																													
E SR 82 TO ELM RD	2	EB	1632.67	24.00	4353.79		4353.79	217.69	290.25	143.61	181.41	43.54																													
E SR 82 TO E MARKET ST	2	EB	1511.63	23.00	3863.05		3863.05	193.15	268.73	125.97	160.96	40.31																													
E MARKET ST TO W SR 82	2	WB	1797.69	20.00	3994.87		3994.87	199.74	319.59	124.84	166.45	47.94																													
<b>TURNAROUNDS</b>																																									
						810.74		810.74	40.54				33.78																												
<b>SUBTOTALS</b>							0.00	176258.97	8812.95	8200.93	4753.11	7344.12	1230.14	71491.20																											
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>							0	176259	8813	8201	4754	7345	1231	71492																											

PAVEMENT CALCULATIONS

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SLM RANGE	TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	PAVEMENT CALCULATIONS							
							254	407	408	441	442	617	618	
			FT	FT	SY	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5")	NON-TRACKING TACK COAT @ 0.05 GAL/SY	PRIME COAT, AS PER PLAN @ 0.4 GAL/SY	ANTI-SEGREGATION EQUIPMENT	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN (T=1.5")	COMPACTED AGGREGATE, AS PER PLAN (T = 2")	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
							SY	GAL	GAL	CY	CY	CY	FT	
<b>SR 82 RAMP FROM/TO E MARKET ST</b>														
0.00 TO 0.33	3	EB	1584.00	32.00	5632.00		5632.00	281.60	140.80	198.00	234.67	21.12	1584.00	
0.36 TO 0.57	3	EB	1214.00	32.00	4316.44		4316.44	215.82	107.91	151.75	179.85	16.19	1214.00	
0.00 TO 0.33	3	WB	1584.00	32.00	5632.00		5632.00	281.60	140.80	198.00	234.67	21.12	1584.00	
0.36 TO 0.57	3	WB	1214.00	32.00	4316.44		4316.44	215.82	107.91	151.75	179.85	16.19	1214.00	
<b>SR 5</b>														
13.94 TO 14.01		EB	369.60	36.00	1478.40		1478.40	73.92	65.71	53.04	61.60	9.86	739.20	
SUBTOTALS							0.00	21375.29	1068.76	563.13	752.54	890.64	84.47	6335.20
TOTALS CARRIED TO GENERAL SUMMARY							0	21376	1069	564	753	891	85	6336

PAVEMENT CALCULATIONS

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COUNTY	ROUTE	LOCATION		621 RPM (YELLOW/YELLOW)	621 RPM (WHITE/RED)	621 RPM (WHITE)	621 RPM (YELLOW/RED)	621 RAISED PAVEMENT MARKER REMOVED	REMARKS
		FROM	TO						
TRU	82 EB	13.88	17.40		295			236	
TRU	82 WB	13.82	17.27		219			175	
TRU	RAMP F/T E MARKET	0.00	0.57		25			20	
TRU	RAMP F/T E MARKET	0.00	0.57		25			20	
TRU		ELM RD TO W SR 82			47		38	68	PER SCD TC-73.20
TRU		W SR 82 TO ELM RD			41		30	57	PER SCD TC-73.20
TRU		ELM RD TO E SR 82			55		38	75	PER SCD TC-73.20
TRU		E SR 82 TO ELM RD			47		38	69	PER SCD TC-73.20
TRU		E SR 82 TO E MARKET ST			42		28	55	PER SCD TC-73.20
TRU		E MARKET ST TO W SR 82			39		39	63	PER SCD TC-73.20
TRU	5 EB	13.94	14.01		9			7	
SUBTOTALS					845		212		
TOTALS CARRIED TO GENERAL SUMMARY								845	
						1057			

RAISED PAVEMENT MARKING SUB SUMMARY

DESIGN AGENCY



DESIGNER

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TRU-5/82-13.94/13.88

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 5/2/2022 TIME: 8:38:48 AM USER: sckudek  
 p:\vohobol-pw-bentley.com\shobol-pw-02\Documents\01 Active Projects\District 04\Trumbull\101248\400-Engineering\Roadway\Sheets\101248\_GS001.dgn


EDGE LINE												GENERAL SPEC: 640
												MATERIAL TYPE: 646
CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	WHITE EDGE LINE, 6"			YELLOW EDGE LINE, 6"			COMMENTS
						TOTAL	HIGHWAY	RAMP	TOTAL	HIGHWAY	RAMP	
TRU	SR 82 EB	13.88	JCT. ELM ST.	17.40	EAST SIDE RAMP FROM E. MARKET ST.	4.42	3.52	0.90	4.08	3.52	0.56	INCLUDES EB RAMPS
TRU	SR 82 WB	13.82	JCT. ELM ST.	17.27	EAST SIDE RAMP FROM E. MARKET ST.	4.24	3.45	0.79	4.04	3.45	0.59	INCLUDES WB RAMPS
TRU	SR 82 CR	0.00	EB/WB RAMPS FROM/TO E. MARKET ST.	0.57	E. MARKET ST.	1.14		1.14	1.14		1.14	
TRU	SR 5 EB	13.94	BEGIN PROJECT	14.01		0.07	0.07		0.07	0.07		
TOTAL						9.87	7.04	2.83	9.33	7.04	2.29	

LANE LINE											
CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	TOTAL MILES	6" LANE LINE		COMMENTS		
							DASHED	SOLID			
TRU	SR 82 EB	14.02	JCT. ELM ST.	17.40	EAST SIDE RAMP FROM E. MARKET ST.	3.38			INCLUDES RAMPS		
TRU	SR 82 WB	14.02	JCT. ELM ST.	17.27	EAST SIDE RAMP FROM E. MARKET ST.	3.99					
TRU	SR 82 CR	0.00	EB/WB RAMPS FROM/TO E. MARKET ST.	0.57	E. MARKET ST.	1.14					
TRU	SR 5 EB	13.94	BEGIN PROJECT	14.01		0.07					
TOTAL						8.58					

CENTER LINE											
CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	TOTAL MILES	EQUIVALENT SOLID LINE	COMMENTS			
TOTAL											

AUXILIARY																					
CTY	ROUTE LOCATION	TRUE LOG	CHANNEL LINE, 8"	CHANNEL LINE, 12"	STOP LINE	CROSS WALK LINES, 24"	TRANSVERSE DIAGONAL LINES		ISLAND MARKING	SYMBOL MARKINGS			LANE ARROWS				REDUCT. ARROW	WORD ON PVMT ONLY		DOTTED LINES, 6"	COMMENTS
							WHITE	YELLOW		RxxR	SCHOOL		TURN LEFT	TURN RIGHT	THRU	WRONG WAY		72"	96"		
											72"	96"									
TRU	SR 82 WB RAMPS @ SR 82/ELM	13.960		550	38								7	7							
TRU	SR 82 EB RAMPS @ SR 5/ELM	14.000		190	26								2		2						
TRU	SR 82 GORE @ SR 5/ELM	14.071		480															620		
TRU	SR 82 GOES @ SR 5/ELM	14.171		1180															1210		
TRU	SR 82 GOES @ E MARKET ST	16.660		1050															1150		
TRU	SR 82 GOES @ E MARKET ST	17.470																	2220		
TRU	SR 82 WB TO E MARKET ST	0.547													4						
TOTAL				3450	64								9	7	2	7			5200		

PAVEMENT MARKING SUB SUMMARY

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