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NORTH OF SR 750 (SLM 1.19) TO BEGIN PROJECT (SLM 1.53) VARIOUS GUARDRAIL UPGRADES IN VARIOUS LOCATIONS. SEALING OF STRUCTURE DEL-257-3.08 WITH GRAVITY FED RESIN.

# EARTH DISTURBED AREAS

PROJECT DESCRIPTION

PROJECT EARTH DISTURBED AREA: N/A\* ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/4\* NOTICE OF INTENT EARTH DISTURBED AREA: N/A\* \*MAINTENANCE PROJECT

# 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 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

DISTRICT DEPUTY DIRECTOR

APPROVED\_

DIRECTOR, DEPARTMENT OF TRANSPORTATION

DATE\_

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

**DEL-257-1.53** 

LIBERTY TOWNSHIP CONCORD TOWNSHIP DELAWARE COUNTY

# INDEX OF SHEETS:

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TRAFFIC CONTROL PLAN	48 - 51
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# END PROJECT DEL-257 SLM 7.77

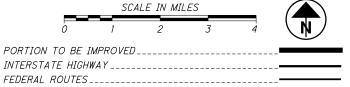
# LOCATION MAP

STATE ROUTES \_\_\_\_\_

OTHER ROADS

COUNTY & TOWNSHIP ROADS.\_\_\_\_\_

LATITUDE: 40°12′05″ LONGITUDE: 83°08′10″



DESIGN DESIGNATION

CURRENT ADT (2020)	9,200
DESIGN YEAR ADT (2032)	11,000
DESIGN HOURLY VOLUME (2032)	990
DIRECTIONAL DISTRIBUTION	56%
TRUCKS (24 HOUR B&C)	7%
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	SLM 1.05-4.35

35 O4 MINOR ARTERIAL (URBAN) SLM 4.35-5.69 O5 MAJOR COLLECTOR (URBAN) SLM 5.69-7.80 O5 MAJOR COLLECTOR (RURAL) NO

NHS PROJECT\_\_\_\_\_

DESIGN EXCEPTIONS

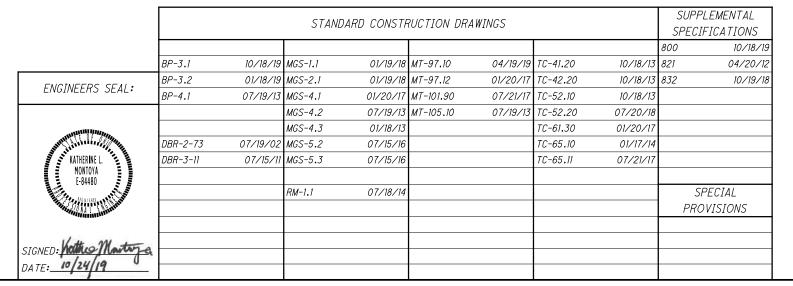
NONE

UNDERGROUND UTILITIES Contact Two Working Days Before You Dig **OHIO811.**org Before You Dla

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

PLAN PREPARED BY:



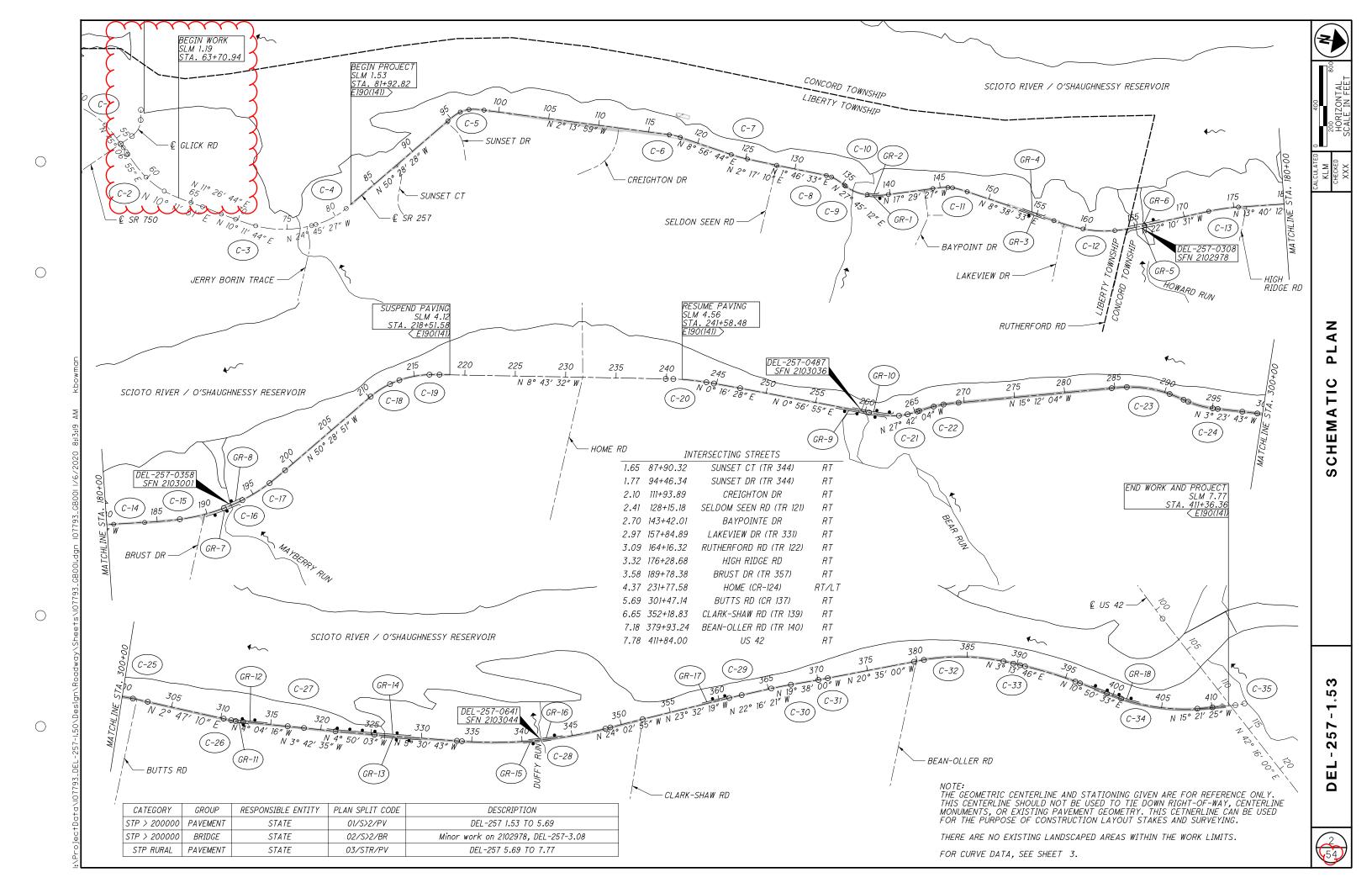


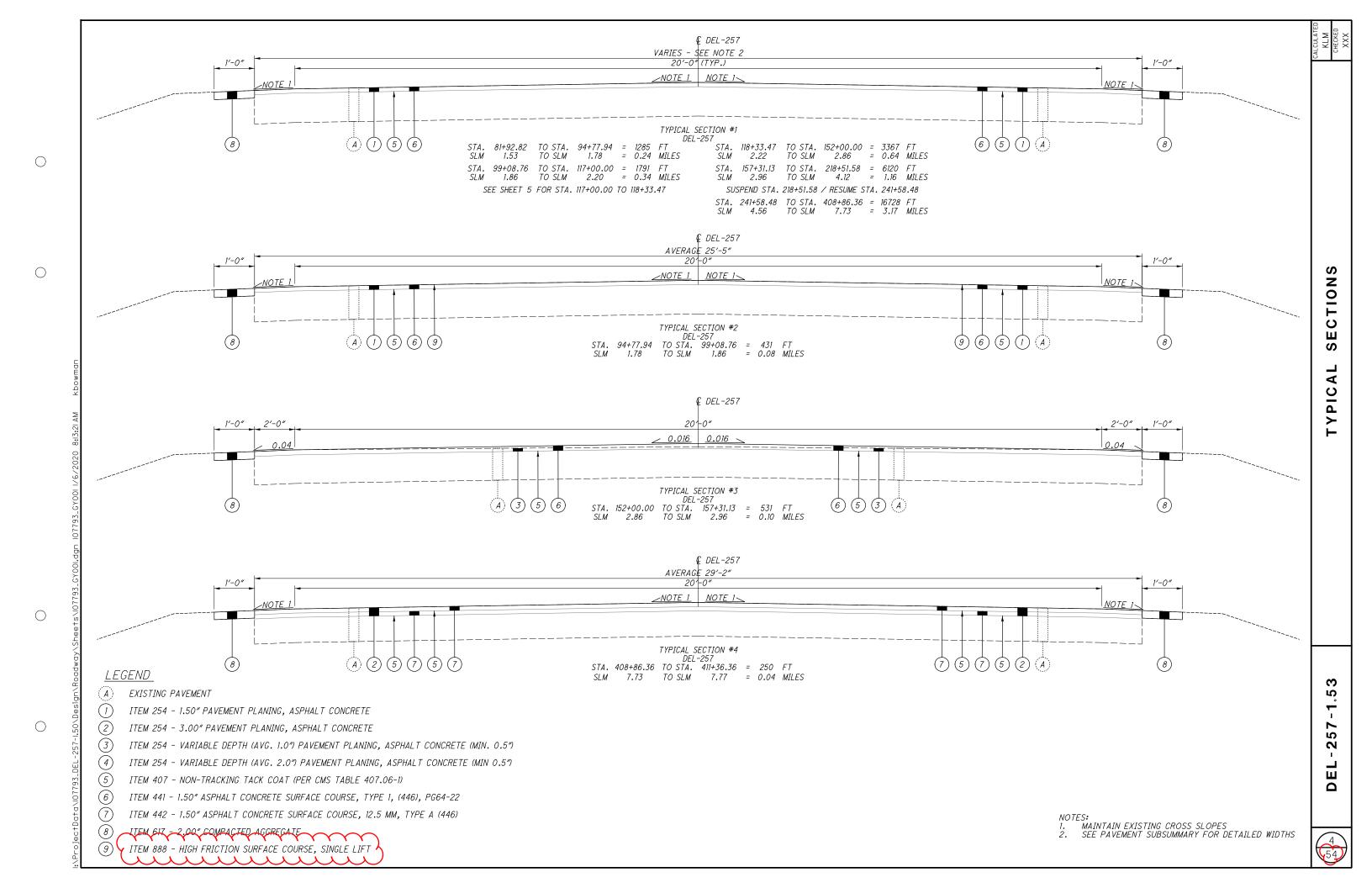
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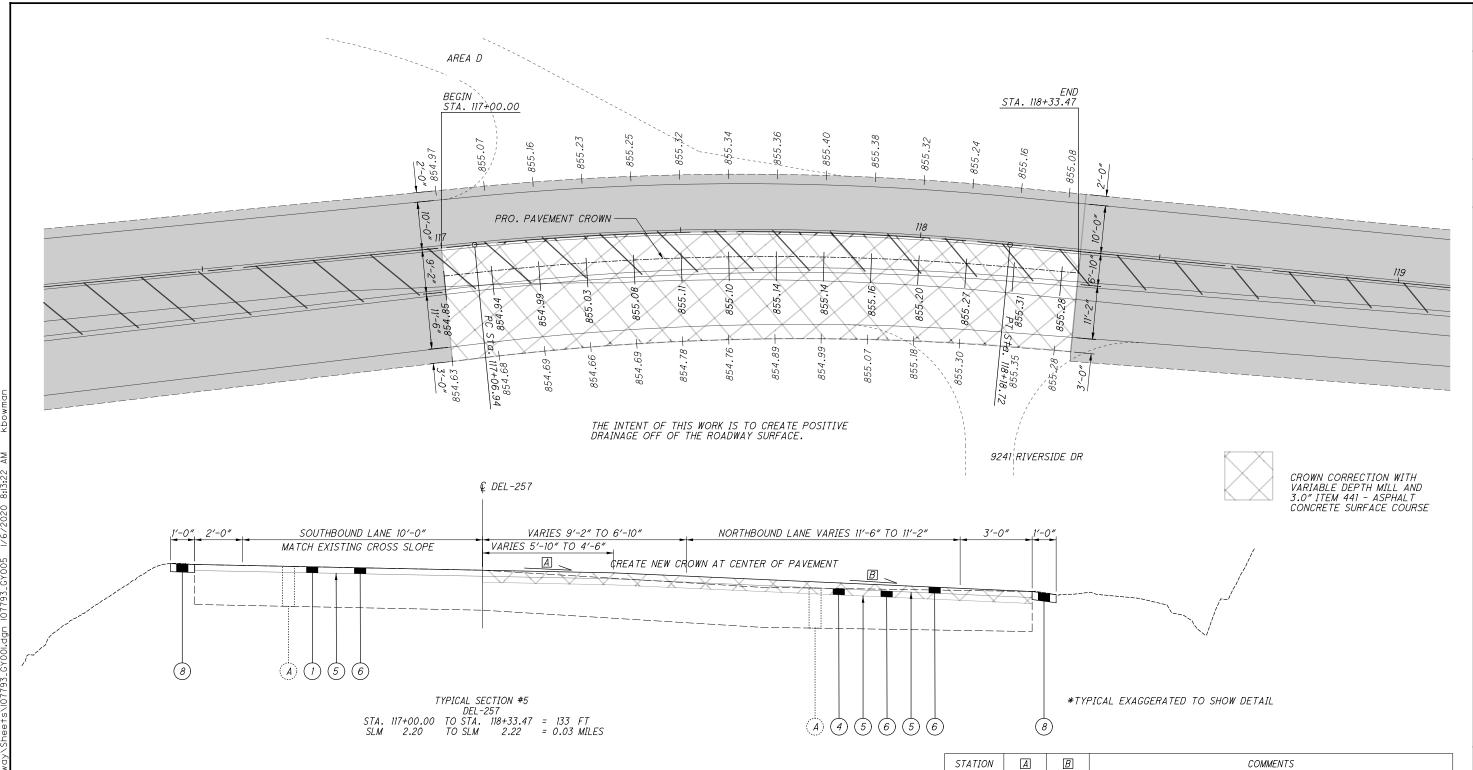
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257









-0.004

-0.007

-0.010

-0.011

-0.010

-0.012

-0.013

-0.015

-0.013

-0.007

0.002

0.009

0.016 | 0.000 | MATCH EXISTING

117+00.00

117+10.00

117+20.00

117+30.00

117+40.00

117+50.00

117+60.00

117+70.00

117+80.00

117+90.00

118+00.00

118+10.00

118+20.00

118+30.00

-0.013 MATCH EXISTING

-0.014 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

-0.017 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

-0.021 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

-0.022 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

-0.019 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

-0.020 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

-0.015 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

-0.009 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

-0.005 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

-0.001 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

0.002 CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

0.002 | CROSS SLOPE A TO MATCH EXISTING SOUTHBOUND CROSS SLOPE

# LEGEND

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- EXISTING PAVEMENT
- ITEM 254 1.50" PAVEMENT PLANING, ASPHALT CONCRETE
- ITEM 254 3.00" PAVEMENT PLANING, ASPHALT CONCRETE
- ITEM 254 VARIABLE DEPTH (AVG. 1.0") PAVEMENT PLANING, ASPHALT CONCRETE (MIN. 0.5")
- (4) ITEM 254 - VARIABLE DEPTH (AVG. 2.0") PAVEMENT PLANING, ASPHALT CONCRETE (MIN 0.5")
- ITEM 407 NON-TRACKING TACK COAT (PER CMS TABLE 407.06-1)
- ITEM 441 1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22
- ITEM 442 1.50" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)
- ITEM 888 HIGH FRICTION SURFACE COURSE, SINGLE LIFT

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# ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE:

THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE CONTRACTORS EQUIPMENT THAT MAY RESULT FROM THE PLANING OPERATION, INCLUDING DAMAGE CAUSED BY CASTINGS AND LOOP DETECTORS. THE DEPTH OF PLANING CLOSE TO THE CASTINGS SHALL BE AS DIRECTED; TO ACHIEVE A SMOOTH RIDING FINISHED PAVEMENT. GREAT CARE SHALL BE TAKEN TO PREVENT THE REMOVAL OF THE EXISTING PAVEMENT CROSS-SLOPE (CROWN) DURING THE PLANING OPERATIONS.

THE CONTRACTOR SHALL LIMIT THE PLANING OPERATION TO ONE LANE AT A TIME AS TO ENSURE THAT THE PROPOSED SURFACE COURSE IS BUTTING UP TO EITHER PROPOSED OR EXISTING ASPHALT.

PLANED PAVEMENT SHALL NOT BE EXPOSED TO TRAFFIC FOR MORE THAN 7 CALENDAR DAYS. FAILURE TO MEET THIS REQUIREMENT WILL SUBJECT THE CONTRACTOR TO A DISINCENTIVE OF \$600/DAY FOR EACH DAY THE PLANED SURFACE IS NOT RESURFACED.

BUTT JOINTS SHALL BE PROVIDED AT THE BEGINNING AND END OF PAVING LIMITS AND AT THE APPROACH SLABS OF ALL STRUCTURES NOT BEING PAVED.

# ITEM 617 - WATER:

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 617 - WATER = 2 MGAL

# ITEM 630 - SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION:

THIS ITEM SHALL INCLUDE THE REMOVAL AND REERECTION OF THE ADDRESS AND PARK AREA WOODEN MARKER POSTS. FOLLOW C&MS 630.12.

THIS ITEM IS NOT INTENDED FOR POSTS WHICH BECOME DAMAGED BY THE CONTRACTOR. GREAT CARE SHALL BE TAKEN TO PREVENT DAMAGE TO ANY OF THE EXISTING POSTS DURING THE CONSTRUCTION OPERATIONS. ANY POST WHICH BECOMES DAMAGED BY THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S FXPENSE.

THIS ITEM SHALL INCLUDE THE COST OF ALL MATERIAL, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE REMOVAL AND REERECTION.

### ITEM 621 - RPM:

THE RPMS FROM STA. 94+77.94 TO STA. 99+08.76 SHALL BE INSTALLED AFTER THE PLACEMENT OF ITEM 888, HIGH FRICTION SURFACE COURSE.

# ITEM 642 - REMOVAL OF PAVEMENT MARKING:

THIS ITEM IS TO BE USED TO REMOVE THE WORK ZONE PAVEMENT MARKINGS FROM STA. 94+77.94 TO STA. 99+08.76, WHERE ITEM 888, HIGH FRICTION SURFACE COURSE IS USED, AS PER SS888.03.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 642 - REMOVAL OF PAVEMENT MARKINGS

= 0.25 MILE

### PROPOSED NO PASSING ZONES:

THE PROPER PLACEMENT OF THE PASSING AND NO PASSING ZONES AS SHOWN ON PLAN SHEETS 14-47 SHALL BE CONFIRMED BY THE CONTRACTOR AND PLACED BY USING THE CONTROL POINTS SHOWN ON THE PLAN SHEETS.

SLM'S ON THE PASSING ZONE SHEETS COULD BE DIFFERENT THAN THE SLM'S SHOWN ON THE PAVING PLAN. ALL START AND STOP SLM LOCATIONS SHALL BE WITHIN 0.005 MILES OF THE LOCATIONS SHOWN ON THE PLAN SHEETS LISTED ABOVE. A LETTER OF VERIFICATION OF ALL PASSING AND NO PASSING ZONES SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR PLACEMENT IN THE PROJECT RECORDS. ANY IMPROPERLY PLACED PASSING OR NO PASSING ZONES SHALL BE IMMEDIATELY CORRECTED.

# ITEM 644 - PAVEMENT MARKING ITEM 646 - PAVEMENT MARKING:

WITH THE EXCEPTION OF THE PROPOSED PASSING ZONES, IT IS THE INTENT OF THE PROPOSED PAVEMENT MARKINGS TO BE THE SAME AS EXISTING. ANY DEVIATION FROM EXISTING WILL BE IDENTIFIED WITHIN THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE AND SHAPE OF THESE EXISTING PAVEMENT MARKINGS BEFORE THE RESURFACING WORK OBLITERATES THEM. ANY PAVEMENT MARKING WHICH IS PLACED AT THE WRONG LOCATION SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN PROVIDED FOR USE AS DIRECTED BY THE ENGINEER IN AREAS DISTURBED BY PAVEMENT REPAIRS OUTSIDE OF THE RESURFACING LIMITS. THE TOTALS HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 644 - EDGE LINE, 6"

= 0.10 MILE

ITEM 644 - CENTER LINE

= 0.10 MILE

ITEM 644 - DOTTED LINE, 6"

= 500 FT

# ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN:

THE ITEM SHALL CONSIST OF STATION USING 3 FT LATH STAKES OR PAINT MARKINGS. THE STAKES OR PAINT MARKINGS SHALL BE SPACED EVERY 200' FOR THE ENTIRE LENGTH. PLACEMENT OF THE STAKES OR PAINT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED, MISSING STAKES, OR PAINT MARKINGS. PAINT MARKINGS SHALL BE PLACED ON CURBS AND USED IN AREAS WERE THE PLACEMENT OF STAKES IS NOT POSSIBLE AND APPROVED BY THE PROJECT ENGINEER.

THIS ITEM SHALL ALSO BE USED TO ESTABLISH THE EXISTING RIGHT OF WAY TO VERIFY THAT ALL WORK (OUTSIDE THE ROADWAY) IS CONTAINED WITHIN THE EXISTING RIGHT OF WAY LIMITS.

### STREAM IMPACTS:

THE CONTRACTOR SHALL NOT IMPACT ANY STREAMS/RIVERS WITH THIS PROJECT (SCIOTO RIVER OR O'SHAUGHNESSY RESERVOIR). THE CONTRACTOR SHALL UTILIZE APPROPRIATE BMPS TO AVOID ANY IMPACTS TO RESOURCES SUCH AS, INCORPORATE BUFFERS AND CATCHMENT MECHANISMS TO ENSURE NO DEBRIS OR HAZARDOUS WASTE ENTERS THE AFOREMENTIONED WATER BODIES.



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				SHF	ET NUM	1BER			TICIPATION		TEM	ITEM	GRAND	UNIT	DESCRIPTION	SF
	9 12 13-15 18 19 20 21 42 43 48		01/S>2/PV	03/STR/PV		I I E IVI	EXT	TOTAL			NO.					
9	12	13-15	18	19	20		42 43 48									
																$\pm$
						7171.05		1500.75	1500.50		000	70001	7171.05		ROADWAY	$\perp$
						3131 <b>.</b> 25		1568.75 18	1562.50 14		202 202	38001 42001	3131 <b>.</b> 25 32	FT EACH	GUARDRAIL REMOVED, AS PER PLAN  ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	-
						3		1	2		202	42041	3	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	+
						18		12	6		202	47001	18	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	
	1								1	, a	202	53101	1	EACH	MAILBOX REMOVED, AS PER PLAN	$\perp$
						1			1		202	98100	1	EACH	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	+
	1					1		1			202	98100	1	EACH	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION  REMOVAL MISC.: BUSH	+
	52							52			202	98200	52	FT	REMOVAL MISC.: STONE WALL	+
	5							5			202	98200	5	FT	REMOVAL MISC.: WOOD FENCE	
	28								28	Ž	202	98300	28	SY	REMOVAL MISC.: LANDSCAPING	-
						2137		1191	946		203	20001	2137	CY	EMBANKMENT, AS PER PLAN	+
						70		33	37		209	60200	70	STA	LINEAR GRADING	+
						1881.25		418.75	1462.50	(	606	15050	1881.25	FT	GUARDRAIL, TYPE MGS	
						2975		1687.5	1287.5		606	15100	2975	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
						1		1		- (	606	25550	1	EACH	ANCHOR ASSEMBLY, MGS TYPE A	_
						20		8	12		606	26151	20	EACH	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	+
						14		11	3		606	26550	14	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
						19		12	7		606	35141	19	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	
	150					1		62.5	1 07.5		606	35141	150	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	+
	150							62.5	87.5		606	98000	150	FT	GUARDRAIL MISC.: ALTERNATE GUARDRAIL PLACEMENT	+
						137.5		112.5	25.0		606	98000	137.5	FT	GUARDRAIL MISC.: PANELS REMOVED AND REPLACED	+
	3							1	2		623	39500	3	EACH	MONUMENT BOX ADJUSTED TO GRADE	
	1								1		623	39600	1	EACH	MONUMENT BOX RECONSTRUCTED TO GRADE	+
	1					1			1				1	EACH EACH	MAILBOX SUPPORT  MAILBOX REMOVED AND RESET	+
						,			,	31	LUIAL	00000000		LACIT	MATERIAL NEW OVER AND NESET	+
															EROSION CONTROL	
	711							400	311		659	00300	711	CY	TOPSOIL	+
	404 320							3575 179	2829 141		659 659	10000	320 320	SY	SEEDING AND MULCHING  REPAIR SEEDING AND MULCHING	+
	320							179	141		659	15000	320	SY	INTER-SEEDING	+
0	.86							0.48	0.38	(	659	20000	0.86	TON	COMMERCIAL FERTILIZER	
	70							2.74	0.50		050	71000	. 70	1005	Live	+
	.32 34							0.74	0.58		659 659	31000 35000	1.32 34	ACRE MGAL	LIME WATER	+
	34							668	332		832	30000	1000	EACH	EROSION CONTROL	+
									_							
	0.7		000	22				F70	100		251	01041	007	611	PAVEMENT	$\perp$
	63 461		602 2004	22 2690				579 3839	108 1316		251 251	01041	687 5155	SY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 3.0"  PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.0"	+
	171		1141	513				1768	57		253	01001	1825	SY	PAVEMENT REPAIR, AS PER PLAN, 7.5"	+
					86324			56633	29691		254	01000	86324	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.50"	工
					812				812		254	01000	812	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3.00"	$\perp$
					1416			1416			254	01000	1416	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH (1.00" AVG.)	+
					325			325			254	01000	325	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH (2.00" AVG.)	+
					7758			5069	2689	4	407	20000	7758	GAL	NON-TRACKING TACK COAT	
					3708			2464	1244		441	10000	3708	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	$\perp$
					68				68		442	10000	68	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	+
					404			264	140		617	10100	404	CY	COMPACTED AGGREGATE	+
	2							1	1						#AJER HIGH FRICTION SURFACE COURSE, SINGLE LIFT	本
					1215			1215	1		888	10000	1215	SY	HIGH FRICTION SURFACE COURSE, SINGLE LIFT	
																$\uparrow$
																+
															1	-

		HEET NUMBER	03/S72/PV 03/S7R/PV	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED KLM CHECKED XXX
0	9 12 13-15 18 19	20 21 42 43 48 474 63 474 51	373 164 361 164	621 621	00100 54000	537 525	EACH EACH	TRAFFIC CONTROL  RPM  RAISED PAVEMENT MARKER REMOVED		  -  -
		95 25 50	36L 164 47 48 25 50	630	00110 02100 03100	25 25 50	FAGU FT FT	GROUND MOUNTED SUPPORT, NO. 2 POST  GROUND MOUNTED SUPPORT, NO. 3 POST  STON, SLAT SUEST.		- -
0	Q.25	10 2 46 0.58	34,3 8 2 46 0.83		30000	34.3 10 46 0.83		SIGN, FLAT SHEET  REMOVAL OF CROUND MOUNTED SIGN AND REERECTION  SIGNING, MISC. REMOVAL OF WOOD ADDRESS POST AND REERECTION  REMOVAL OF PAVEMENT MARKING  REMOVAL OF PAVEMENT MARKING	12	<b>*</b>
	0.10 0.10	11.56 6.11 571 95	7.50 4.16 4.69 2.08 666 45 19	644 644 644 644	00104 00300 00400 00500	11.66 6.77 666	MILE MILE FT FT	EDGE LINE, 6" CENTER LINE CHANNELIZING LINE, 8" STOP LINE		UMMAR
КЪомтап		1436 (II) 5	5 1 607	644 644	00700 01300 01350 01510	1547	FT EACH	TRANSVERSE/DIAGONAL LINE LANE ARROW		AL S
3:13:32 AM	500	0.02 0.01	0.02 0.01	644 646 646	01510 10010 10200	0.02 0.01	MILE MILE	EDGE LINE, 6"  CENTER LINE		GENER
1/6/2020 8	20		20	614	11110	20	HOUR	STRUCTURES OVER 20 FOOT SPAN  SEE STRUCTURE ESTIMATED QUANTITIES SHEET 52  MAINTENANCE OF TRAFFIC  LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
07793_66002	38 12.48 1142 118		12 26 8.32 4.16 1142 90 28	614 614 614 614	12461 21550 23680 26610	38 12.48 1142 118	EACH MILE FT FT	WORK ZONE MARKING SIGN, AS PER PLAN  WORK ZONE CENTER LINE, CLASS III, 642 PAINT  WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT  WORK ZONE STOP LINE, CLASS III, 642 PAINT	75	-
										    -  -
() heets\\0779										
NRoadway\S										53
O50\Design			LS LS LS LS	614	11000	LS		INCIDENTALS  MAINTAINING TRAFFIC		257-1.
)7793_DEL-25			LS	623 624	10001	LS LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN MOBILIZATION	12	DEL-3
jec+Da†a∖10										17 54
.\Pr										24