

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

COL-39-7.19
446 2-LANE RESURFACING

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI		NET LENGTH MILES	VILLAGE
				BEGIN	END		
1	COL	SR 39	(7.19)	7.19	13.60	6.41	WELLSVILLE
2	JEF	SR 152	(25.86)	25.86	26.23	0.41	EMPIRE

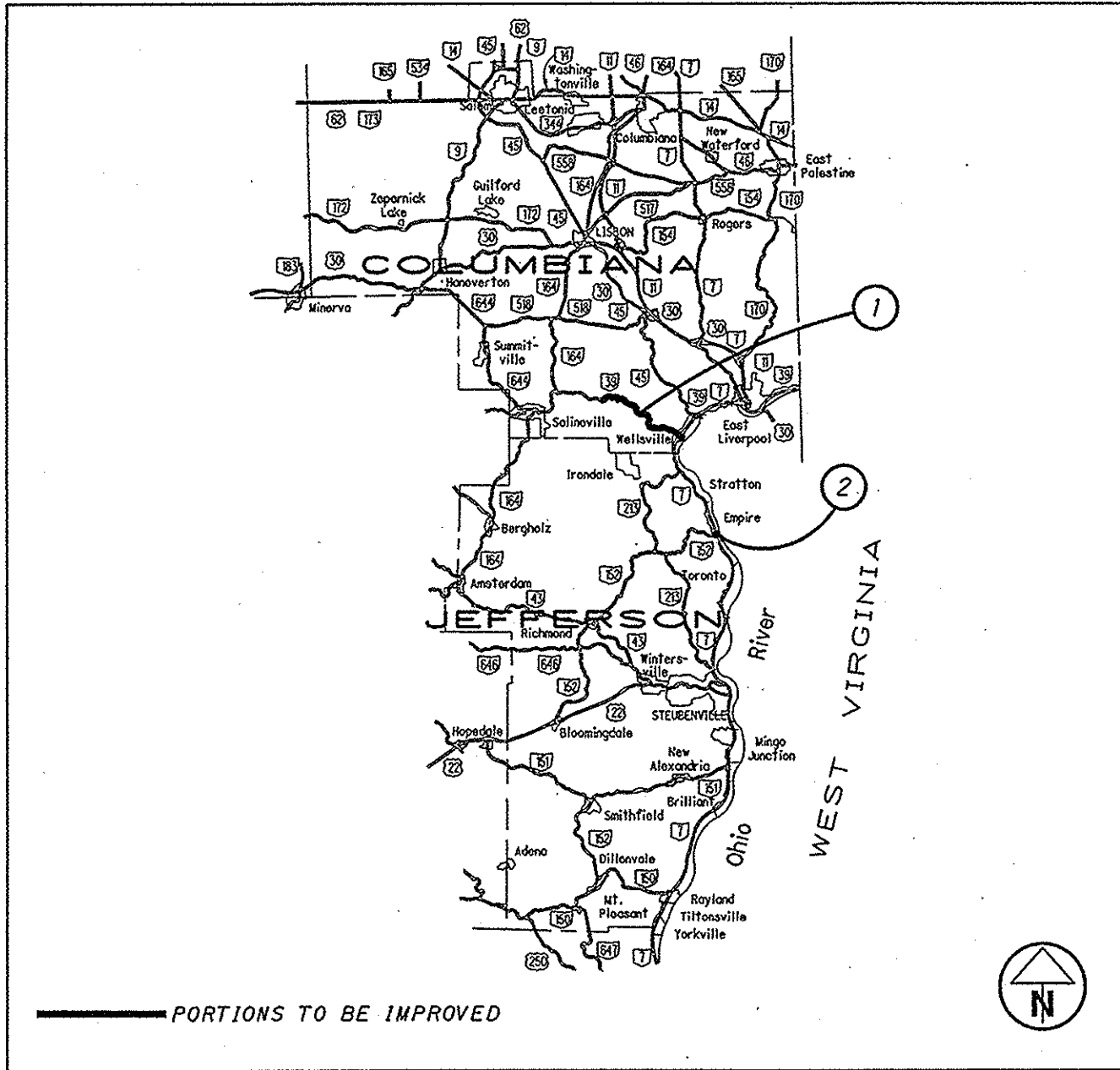
PROJECT EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)

THE 2010 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 THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAYS TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED DATE 8/6/12 Doug V. MacAdam
DISTRICT DEPUTY DIRECTOR

APPROVED DATE 8-13-12 Gregory J. ...
DIRECTOR, DEPARTMENT OF TRANSPORTATION



LOCATION MAP

LATITUDE: N 40° 36' 00" LONGITUDE: W 80° 39' 45"

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: **1-800-925-0988**

PLAN PREPARED BY:
ODOT DISTRICT II

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	4-20-12	MT-97.10	7-20-12	TC-41.20	1-19-01	800	7-20-12
BP-4.1	7-16-04			TC-42.20	1-21-11	832	5-5-09
		MT-97.12	7-20-12	TC-52.10	1-19-07		
		MT-99.20	7-20-12	TC-52.20	1-19-07		
				TC-65.10	4-20-12		
		MT-101.90	10-21-11	TC-65.11	4-20-12		
DM-4.3	7-20-12	MT-105.10	7-20-12	TC-71.10	1-21-11		
DM-4.4	7-20-12			TC-73.10	4-20-12		
							SPECIAL PROVISIONS

ENGINEER'S SEAL:

SIGNED: [Signature]
DATE: 8/3/12

INDEX OF SHEETS

TITLE SHEET	-----	1
GENERAL NOTES	-----	2-3
GENERAL SUMMARY	-----	4
PAVEMENT DATA	-----	5-6
SHOULDER DATA	-----	7
SAFETY EDGE DETAIL	-----	8
PAVEMENT REPAIR	-----	9
AUXILIARY PAVEMENT MARKING	-----	10-11
RPM AND PAVEMENT MARKING SUB-SUMMARY	-----	12

COL - SR-39-7.19
120601 PID - 83993
Dist 11 11/8/2012

Contract Proposal Available @www.contracts.dot.state.oh.us/home

FEDERAL PROJECT NO. E080 (343)
PID NO. 83993
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT
NORFOLK SOUTHERN
COL-39-7.19
1/12

ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES PER ITEM 614 AND AS PER SCD MT-97.12. THE LENGTH OF RESTRICTED TRAFFIC LANES SHALL BE KEPT TO A MINIMUM CONSISTENT WITH THE CMS REQUIREMENTS FOR THE PROTECTION OF WORK ITEMS, WHICH NECESSITATE THE RESTRICTION. THE LIMITS AND DURATION OF LANE CLOSURES SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

THE PLANING AND RESURFACING WILL PROCEED CONTINUOUSLY A MINIMUM OF FIVE (5) DAYS PER WEEK, WEATHER PERMITTING, EXCEPT FOR THE HOLIDAYS AND EVENTS LISTED BELOW. ANY OPEN PAVEMENT TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR PORTABLE CONCRETE BARRIER, PER SCD MT-101.90.

THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN W-8-HIS "GROOVED PAVEMENT" SIGNS PER CMS 614.055.

THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN SIGNS W8-1 (48"x48") "BUMP" AND W8-2 (48"x48") "DIP" WITH W13-1 (24"x24") ADVISORY SPEED PLAQUE WITH SPEEDS APPROVED BY THE ENGINEER FOR ALL BUTT JOINT LOCATIONS, WHILE THE BUMP OR DIP CONDITION EXISTS.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

MEMORIAL DAY, FOURTH OF JULY, LABOR DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 12:00N MONDAY
MONDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
TUESDAY	12:00N MONDAY THROUGH 12:00N WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 12:00N THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 12:00N FRIDAY
FRIDAY	12:00N THURSDAY THROUGH 12:00N MONDAY
SATURDAY	12:00N FRIDAY THROUGH 12:00N MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 108.07.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

WHEN RAISED PAVEMENT MARKERS ARE TO BE INSTALLED, THE REQUIRED LANE CLOSURE SHALL REMAIN IN EFFECT UNTIL THE EPOXY IS DRY AND ALL FOREIGN MATTER OR DEBRIS CREATED BY THE INSTALLATION OF THE RPM CASTING IS REMOVED FROM THE ROADWAY.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

SURFACE COURSE COMPLETION REQUIREMENTS

ANY GIVEN LENGTH OF WORK ON WHICH RESURFACING OPERATIONS HAVE BEEN STARTED IN A CONSTRUCTION SEASON SHALL HAVE THE SURFACE COURSE PLACED THAT SAME SEASON.

ITEM 614 - WORK ZONE PAVEMENT MARKINGS AND SIGNS

THE CONTRACTOR SHALL INSTALL ITEM 614 - WORK ZONE CENTER LINE, CLASS 1, 642 PAINT PRIOR TO OPENING THE LANE TO TRAFFIC, OR WHEN THE EXISTING MARKINGS HAVE BEEN COVERED OR DAMAGED, AS PER CMS 614.11.

IN THE EVENT THE CONTRACTOR CANNOT INSTALL THE WORK ZONE CENTER LINE, CLASS 1, DUE TO CONDITIONS BEYOND HIS CONTROL, AN ESTIMATED CONTINGENCY QUANTITY OF "DO NOT PASS" (R4-1) AND "PASS WITH CARE" (R4-2) SIGNS HAVE BEEN PROVIDED BELOW.

WORK ZONE CENTER LINE, CLASS 1 MARKINGS SHALL BE PLACED, AND THE ABOVE SIGNS REMOVED BY THE END OF THE CONTRACTOR'S NEXT WORK DAY. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

(PART 1) 614, WORK ZONE CENTER LINE, CLASS 1, 642 PAINT - 11.92 MILE (STP)
 (PART 1) 614, WORK ZONE CENTER LINE, CLASS 1, 642 PAINT - 0.99 MILE (STP-URBAN)
 (PART 2) 614, WORK ZONE CENTER LINE, CLASS 1, 642 PAINT - 1.23 MILE (STP)

14.14 MILE

THE CONTRACTOR SHALL ERECT "NO EDGE LINES" (W8-H12a) SIGNS IN ADVANCE OF ANY SECTION OF ROADWAY LACKING CMS STANDARD EDGE LINE MARKINGS, AS PER CMS 614.04.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR WORK ZONE MARKING SIGNS PER THE REQUIREMENTS ABOVE AND ITEM 614 OF THE SPECIFICATIONS.

(PART 1) 614, WORK ZONE MARKING SIGN - 56 EACH (STP)
 (PART 1) 614, WORK ZONE MARKING SIGN - 30 EACH (STP-URBAN)
 (PART 2) 614, WORK ZONE MARKING SIGN - 30 EACH (STP)

116 EACH

WORK ZONE MARKING SIGN TABLE			FUNDING
"NO EDGE LINES"	PART 1	36	(STP)
"NO EDGE LINES"	PART 1	10	(STP-URBAN)
"NO EDGE LINES"	PART 2	10	(STP)
"DO NOT PASS"	PART 1	10	(STP)
"DO NOT PASS"	PART 1	10	(STP-URBAN)
"DO NOT PASS"	PART 2	10	(STP)
"PASS WITH CARE"	PART 1	10	(STP)
"PASS WITH CARE"	PART 1	10	(STP-URBAN)
"PASS WITH CARE"	PART 2	10	(STP)
	TOTAL	116	

NOTIFICATION OF WORK ZONE LANE RESTRICTIONS

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST EIGHTEEN (18) DAYS PRIOR TO IMPLEMENTING ANY WORK ZONE RESTRICTIONS THAT WILL REDUCE THE WIDTH OR VERTICAL CLEARANCE OF ANY LANE ON WHICH TRAFFIC WILL BE MAINTAINED DURING CONSTRUCTION.

THE ENGINEER SHALL IMMEDIATELY NOTIFY THE DISTRICT ROADWAY SERVICES MANAGER TO ADVISE THE OFFICE OF HIGHWAY MANAGEMENT OF THE RESTRICTIONS.

ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 (SPOT LEVELING)

LONGITUDINAL AND TRANSVERSE IRREGULARITIES ARE INTERMITTENTLY PRESENT THROUGHOUT THE EXISTING PAVEMENT SURFACE, BUT THE PAVEMENT DOES NOT REQUIRE A FULL-WIDTH LEVELING COURSE. IRREGULARITIES SHALL BE FILLED WITH 448 IN A MANNER THAT WILL RESULT IN SURROUNDING PORTIONS OF THE EXISTING SURFACE REMAINING EXPOSED AFTER THE SPOT LEVELING COURSE IS PLACED. THE SPOT LEVELING COURSE SHALL BE A VARIABLE DEPTH COURSE WITH A MINIMUM THICKNESS OF 0". THE MATERIAL SHALL BE PLACED IN A SEPARATE OPERATION DIRECTED BY THE ENGINEER.

ITEM 446 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN

MATERIALS FURNISHED FOR FINE AND COARSE AGGREGATES USED IN THIS ITEM SHALL EXCLUDE ALL STONE AND CRUSHED CARBONATE STONE.

446 DENSITY ACCEPTANCE WITH FLAGGER CLOSING OF A 2-LANE HIGHWAY FOR PAVING OPERATIONS

THIS PLAN NOTE APPLIES ONLY TO A FLAGGER CLOSURE OF ONE LANE OF A 2-LANE HIGHWAY DURING PAVING OPERATIONS WHEN USING STANDARD CONSTRUCTION DRAWING MT-97.11 OR MT-97.12, AND ALLOWS A PAVING OPERATION TO PROCEED CONCURRENTLY WITH THE MARKING AND CUTTING OF CORES REQUIRED FOR 446 DENSITY ACCEPTANCE.

IN ALL CASES THE CONTRACTOR SHOULD LENGTHEN THEIR LANE CLOSURES TO THE MAXIMUM PERMISSIBLE LENGTH DETAILED IN THE ABOVE REFERENCED STANDARD CONSTRUCTION DRAWINGS TO ALLOW THE ENGINEER ADEQUATE TIME TO MARK THE REQUIRED CORE LOCATIONS AND FOR CORE CUTTING OPERATIONS.

THE CONTRACTOR WILL PROVIDE TO THE ENGINEER THE PLANNED QUANTITY THAT WILL BE PLACED FOR THE DAY'S PRODUCTION. EACH DAY'S PRODUCTION WILL BE CONSIDERED ONE LOT AND INCLUDES SHOULDERS. TEN CORES WILL BE OBTAINED BY THE CONTRACTOR FOR EACH LOT AT RANDOM LOCATIONS DETERMINED BY THE ENGINEER. THE ENGINEER WILL DIVIDE A LOT INTO FIVE EQUAL SUBLOTS AND CALCULATE TWO RANDOM CORE LOCATIONS IN EACH SUBLOT AS DESCRIBED IN C&MS 446.05.

THE ENGINEER WILL MARK THE CORE LOCATIONS AFTER THE PAVING OPERATION (INCLUDING THE FINISH ROLLER) HAS COMPLETELY PASSED THE RANDOMLY SELECTED CORE LOCATION. THE CORE DRILL OPERATION CAN BEGIN CUTTING CORES WHEN THE NEWLY PLACED SURFACE TEMPERATURE IS LESS THAN 140°F. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LANE CLOSURE DURING ALL PAVING, MARKING, AND CORING OPERATIONS PER THE REQUIREMENTS OF THE STANDARD CONSTRUCTION DRAWING USED FOR THE PAVING OPERATION.

ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF PAVING ALL EXISTING DRIVEWAYS AND INTERSECTING PUBLIC ROADS NOT OTHERWISE INDICATED. AN AVERAGE THICKNESS EQUAL TO THE SURFACE COURSE THICKNESS SHALL BE PLACED ON THE EXISTING PAVED DRIVES AND APPROACHES, FOR AN APPROXIMATE DISTANCE OF 10 FEET FOR DRIVEWAYS AND 20 FEET FOR PUBLIC ROADS FROM THE EDGE OF PAVEMENT OR PAVED SHOULDERS, WHICHEVER IS APPLICABLE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. UP GRADE DRIVEWAY PAVING SHALL BE PLACED TO THE BEGINNING OF THE UPSLOPE OF THE DRIVEWAY, AS DIRECTED BY THE ENGINEER. ALL GRADING, TACK COAT, PRIME COAT, TOOLS, EQUIPMENT AND INCIDENTALS REQUIRED TO LAYOUT AND PAVE THE DRIVEWAYS AND INTERSECTING PUBLIC ROADS SHALL BE INCLUDED IN THE CU. YD. PRICE BID FOR ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN. THE CONTRACTOR'S ATTENTION IS DIRECTED TO CMS 107.10. ALL DRIVEWAYS SHALL BE PAVED WITHIN (5) WORKING DAYS AFTER PLACING OF THE SURFACE COURSE ON THE MAINLINE PAVEMENT. MATERIALS FURNISHED FOR FINE AND COARSE AGGREGATES USED IN THIS ITEM SHALL EXCLUDE ALL STONE AND CRUSHED CARBONATE STONE.

EXTRA FOR WIDENING (PAVEMENT AREA)

AN ADDITIONAL QUANTITY HAS BEEN ADDED TO THE PAVEMENT DATA SHEETS TO BE USED AS DIRECTED BY THE ENGINEER, TO COVER AREAS THAT HAVE BEEN WIDENED ON CURVES OR ON PREVIOUS MAINTENANCE ACTIVITIES BEYOND THE AVERAGE PAVEMENT WIDTH SHOWN.

COORDINATION OF RESURFACING AND PLANING OPERATIONS

ONCE THE PAVEMENT PLANING OPERATIONS HAVE BEGUN, IT SHALL PROCEED CONTINUOUSLY UNTIL ALL ELEMENTS OF THE WORK ASSOCIATED WITH THE PAVEMENT PLANING OPERATIONS ARE COMPLETED. THE PAVEMENT PLANING OPERATION SHALL BE COMPLETED IN A TIMELY MANNER AS DIRECTED BY THE ENGINEER. PAVING MUST START WITHIN THREE DAYS OF THE START OF THE PLANING OPERATIONS. IF PAVING THE ASPHALT CONCRETE DIRECTLY ONTO PORTLAND CEMENT, CONCRETE OR BRICK PAVEMENT, TACK THE PAVEMENT WITH RUBBERIZED ASPHALT EMULSION CONFORMING TO CMS 702.13.

ALL GRINDINGS SHALL BECOME THE PROPERTY OF THE CONTRACTOR EXCEPT WHAT IS REQUIRED TO BE USED FOR SHOULDER MATERIAL.

SHOULDER PREPARATION

THIS WORK WILL BE IN ACCORDANCE WITH CMS ITEM 617, WITH SPECIAL ATTENTION GIVEN TO SECTION 617.04. THE WORK DONE WILL BE IN REASONABLY CLOSE CONFORMITY WITH THE LINES AND TYPICAL SECTIONS SHOWN ON THE PLANS OR AS ESTABLISHED BY THE ENGINEER.

ITEM 408 - PRIME COAT, AS PER PLAN

THE CONTRACTOR WILL 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, AS PER PLAN.

SHIELD

THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF THE PAVEMENT OR EDGELINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

THE CONTRACTOR WILL UTILIZE MATERIAL (I.E. GRINDINGS) OBTAINED FROM THE PAVEMENT PLANING, ASPHALT CONCRETE, OPERATION. THIS MATERIAL WILL BE PLACED IN LIEU OF THE COMPACTED AGGREGATE. IF THE AMOUNT OF GRINDINGS MATERIAL IS NOT SUFFICIENT TO COVER THE COMPACTED AGGREGATE QUANTITY IN THIS PLAN, THEN ADDITIONAL MATERIAL MEETING SPECIFICATION 617 SHALL BE USED. ALL SPECIFICATIONS FOR ITEM 617 APPLY.

ITEM 209 - PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

ITEM 642 - TRAFFIC PAINT

THE CONTRACTOR SHALL REPLACE THE EXISTING PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS WITH NEW PAVEMENT MARKINGS AT THE SAME LOCATIONS AS PER CMS 641.06. SEE STANDARD DRAWINGS TC-71.10 AND TC-73.10 FOR PAVEMENT MARKING DETAILS.

PROFILE AND ALIGNMENT

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

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

GENERAL NOTES

COL - 39 - 7.19

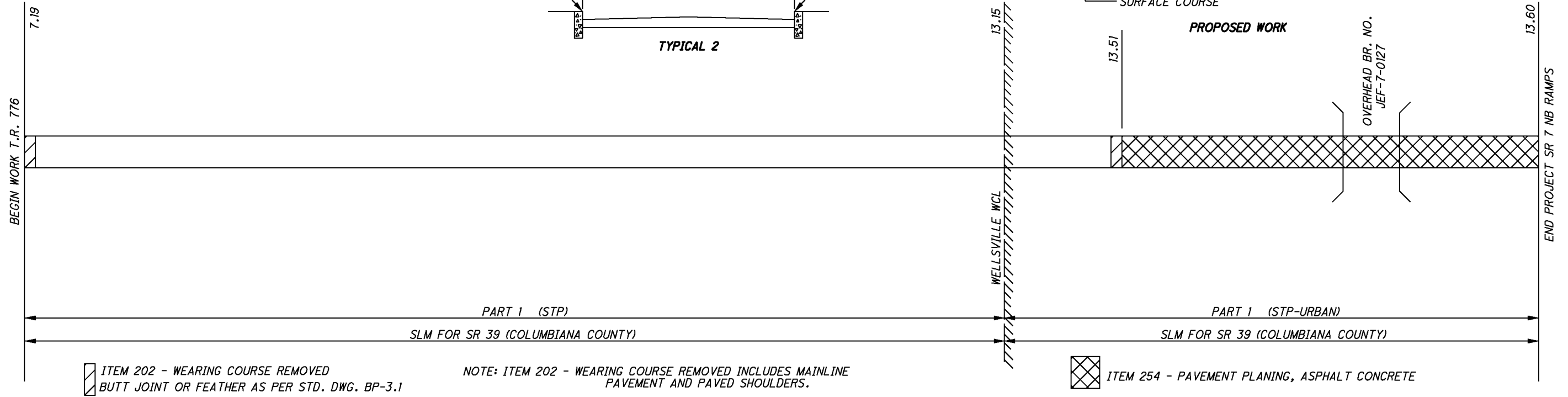
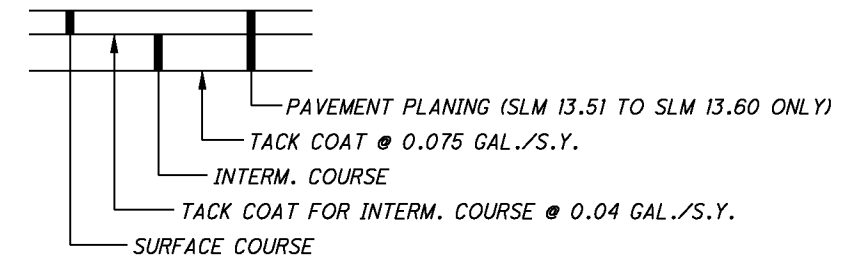
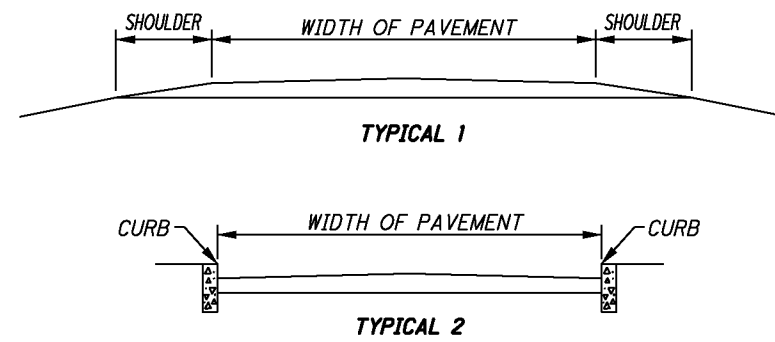
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SHEET NUMBER								FUNDING		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
2	5	6	7	8	9	12	STP	STP-URBAN							
ROADWAY															
	471						280	191	202	23500	471	SQ YD	WEARING COURSE REMOVED		
			13.02				12.30	0.72	209	72051	13.02	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	3	
EROSION CONTROL															
							900	100	832	30000	1000	EACH	EROSION CONTROL		
DRAINAGE															
						564	550	14	605	31101	564	FT	AGGREGATE DRAINS, AS PER PLAN	9	
PAVEMENT															
						282	275	7	253	02000	282	CU YD	PAVEMENT REPAIR	9	
	2667	8313					8313	2667	254	01000	10,980	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE		
	6898	490	1145				7886	647	407	10000	8533	GALLON	TACK COAT		
	3679	261	559				4188	311	407	14000	4499	GALLON	TACK COAT FOR INTERMEDIATE COURSE		
			6110				5772	338	408	10001	6110	GALLON	PRIME COAT, AS PER PLAN	3	
	3192	228	549	134			3787	316	446	47029	4103	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN	2	
	107	90					90	107	448	46020	197	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 (SPOT LEVELING)	2	
	4092		680				4772		448	46050	4772	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22		
	581	63					611	33	448	48021	644	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN	2	
			1229				1188	41	617	10101	1229	CU YD	COMPACTED AGGREGATE, AS PER PLAN	3	
			15277				14432	845	617	20000	15277	SQ YD	SHOULDER PREPARATION		
TRAFFIC CONTROL															
							788		621	00100	788	EACH	RPM		
							788		621	54000	788	EACH	RAISED PAVEMENT MARKER REMOVED		
							13.02		642	00100	13.02	MILE	EDGE LINE, 4", TYPE 1		
							6.82		642	00300	6.82	MILE	CENTER LINE, TYPE 1		
							181		642	00500	181	FT	STOP LINE, TYPE 1		
							2		642	01000	2	EACH	RAILROAD SYMBOL MARKING, TYPE 1		
MAINTENANCE OF TRAFFIC															
116							86	30	614	12460	116	EACH	WORK ZONE MARKING SIGN		
14.14							13.15	0.99	614	21100	14.14	MILE	WORK ZONE CENTER LINE, CLASS 1, 642 PAINT		
LUMP							LUMP	LUMP	614	11000	LUMP		MAINTAINING TRAFFIC		
							LUMP	LUMP	624	10000	LUMP		MOBILIZATION		

GENERAL SUMMARY

COL -39 - 7.19

BRIDGE TREATMENT
NO BRIDGE WORK



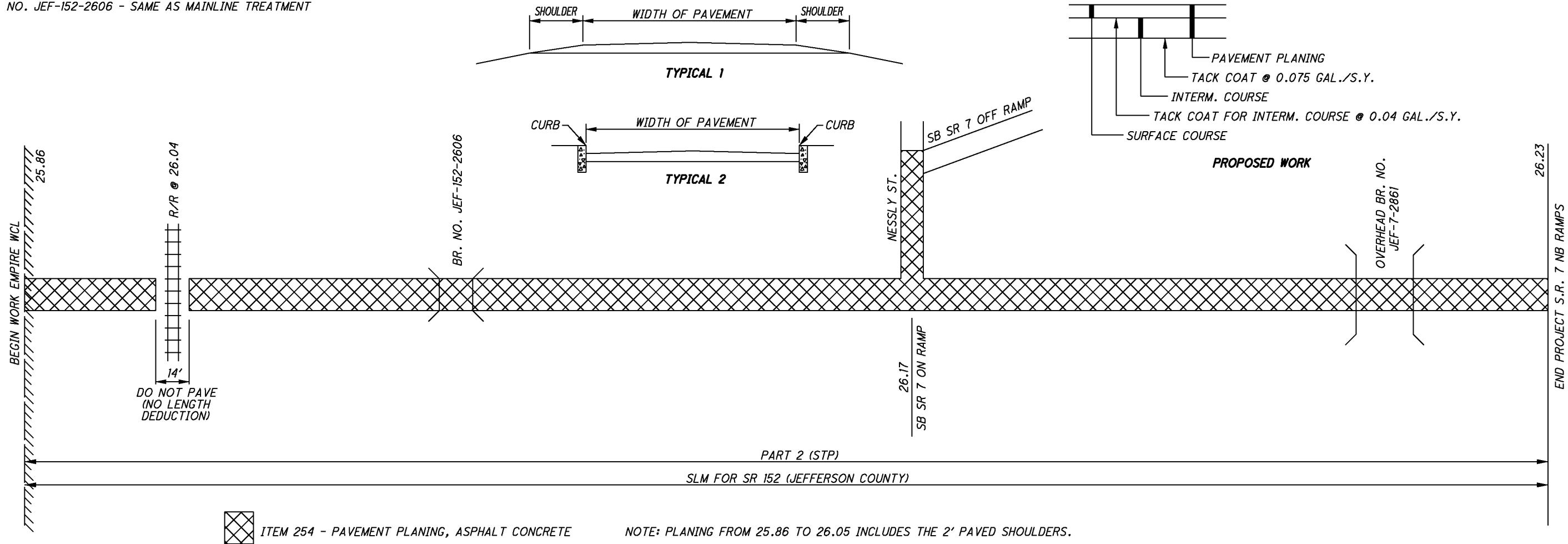
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PART	ROUTE	LOG POINT TO LOG POINT (STRAIGHT LINE MILEAGE)	LENGTH		WIDTH OF PAVEMENT FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YDS.	407		448		446		448		202		254		FUNDING				
			MILES	FEET					TACK COAT @ 0.075 GAL/S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.04 GAL/S.Y.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22, 1 3/4" THICK	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN 1 1/4" THICK	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 (SPOT LEVELING) 1/2" THICK	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (DRIVEWAYS), AS PER PLAN	WEARING COURSE REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE 1 1/2" THICK	PAVEMENT PLANING, ASPHALT CONCRETE 1 1/2" THICK								
									GALLON	GALLON	CU YD	CU YD	CU YD	CU YD	SQ YD	SQ YD	SQ YD								
1	SR 39	7.19 - 10.89	3.70	19,536	20	1	ASPHALT	43,413	3256	1737	2110	1507					280				STP				
1	SR 39	10.89 - 13.15	2.26	11,933	24	1	ASPHALT	31,821	2387	1273	1547	1105									STP				
1	SR 39	13.15 - 13.51	0.36	1901	24	1	ASPHALT	5069	380	203		176	70				191				STP-URBAN				
1	SR 39	13.51 - 13.60	0.09	475	40	2	ASPHALT	2111	158	84		73	29						2111		STP-URBAN				
EXTRA FOR WIDENING (10%)								7523	564	301	366	261										STP			
EXTRA FOR WIDENING (10%)								507	38	20		18	7										STP-URBAN		
EXTRA FOR PAVED DRIVES (4185' x 10') ÷ 9 =								4650						323									STP		
EXTRA FOR PAVED DRIVES (350' x 10') ÷ 9 =								389						14										STP-URBAN	
EXTRA FOR PAVED PUBLIC ROADS (1460' x 20') ÷ 9 =								3244						225										STP	
EXTRA FOR PAVED PUBLIC ROADS (250' x 20') ÷ 9 =								556						19							556			STP-URBAN	
EXTRA FOR MAILBOX TURNOUTS (71 EA. x 20 S.Y./TURNOUT) =								1420	107	57	69	49													STP
EXTRA FOR MAILBOX TURNOUTS (5 EA. x 20 S.Y./TURNOUT) =								100	8	4		3	1												STP-URBAN
(STP FUNDING)									6314	3368	4092	2922		548			280						STP		
(STP-URBAN FUNDING)									584	311		270	107	33		191	556	2111						STP-URBAN	
TOTALS (CARRIED TO GENERAL SUMMARY)									6898	3679	4092	3192	107	581		471	2667								

PAVEMENT DATA

COL-39-7.19

BRIDGE TREATMENT
BR. NO. JEF-152-2606 - SAME AS MAINLINE TREATMENT



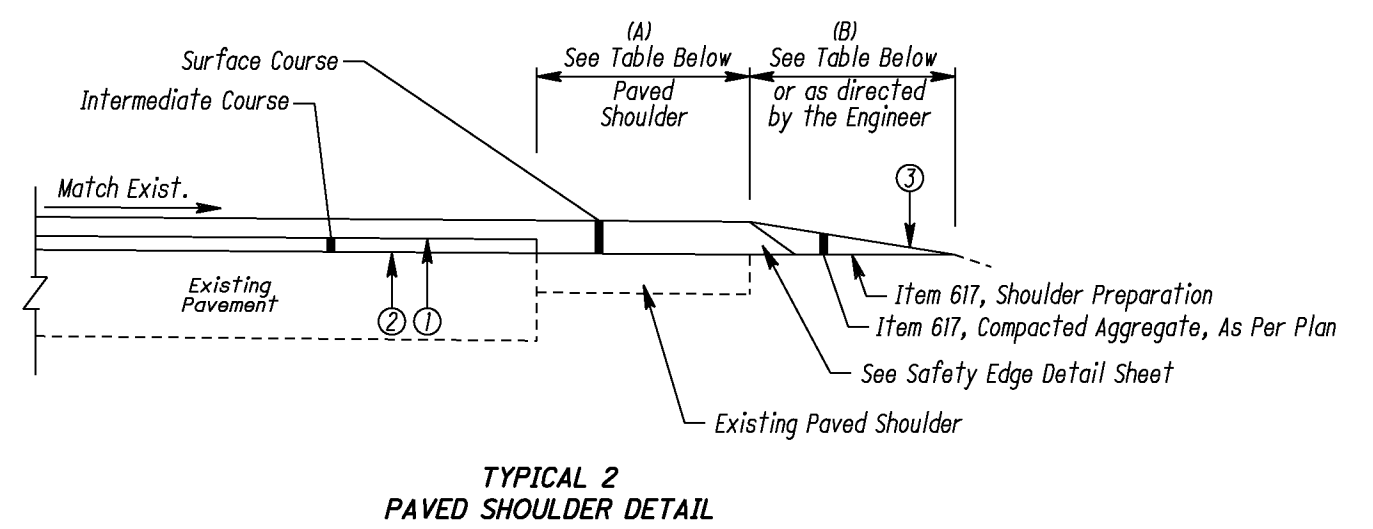
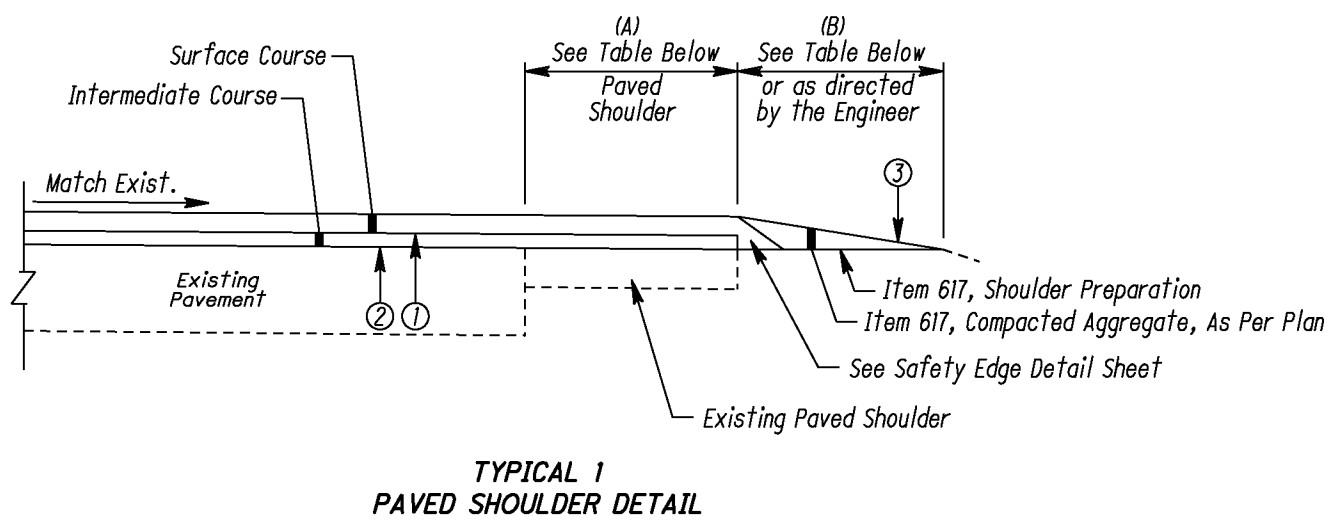
ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE

NOTE: PLANING FROM 25.86 TO 26.05 INCLUDES THE 2' PAVED SHOULDERS.

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PART	ROUTE	LOG POINT TO LOG POINT (STRAIGHT LINE MILEAGE)	LENGTH		WIDTH OF PAVEMENT FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YDS.	407		446		448		254		FUNDING
			MILES	FEET					TACK COAT @ 0.075 GAL/S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.04 GAL/S.Y.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN 1 1/4" THICK	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 (SPOT LEVELING) 1/2" THICK	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (DRIVEWAYS), AS PER PLAN	PAVEMENT PLANING, ASPHALT CONCRETE 1 1/4" THICK	PAVEMENT PLANING, ASPHALT CONCRETE 1 1/4" THICK		
																GALLON	
2	SR 152	25.86 - 26.05	0.19	1003	22	1	ASPHALT	2452	184	98	85	34				2898	STP
2	SR 152	26.05 - 26.23	0.18	950	28	2	ASPHALT	2956	222	118	103	41				2956	STP
2	NESSLY ST. QUANTITIES		0.06	317	25	2	ASPHALT	881	66	35	31	12				881	STP
	EXTRA FOR WIDENING (10%)							245	18	10	9	3				245	STP
	EXTRA FOR PAVED DRIVES (450' x 10') ÷ 9 =							500					17				STP
	EXTRA FOR PAVED PUBLIC ROADS (600' x 20') ÷ 9 =							1333					46		1333		STP
TOTALS (CARRIED TO GENERAL SUMMARY)									490	261	228	90	63		8313		

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PAVEMENT DATA
COL-39-7.19
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PROPOSED LEGEND

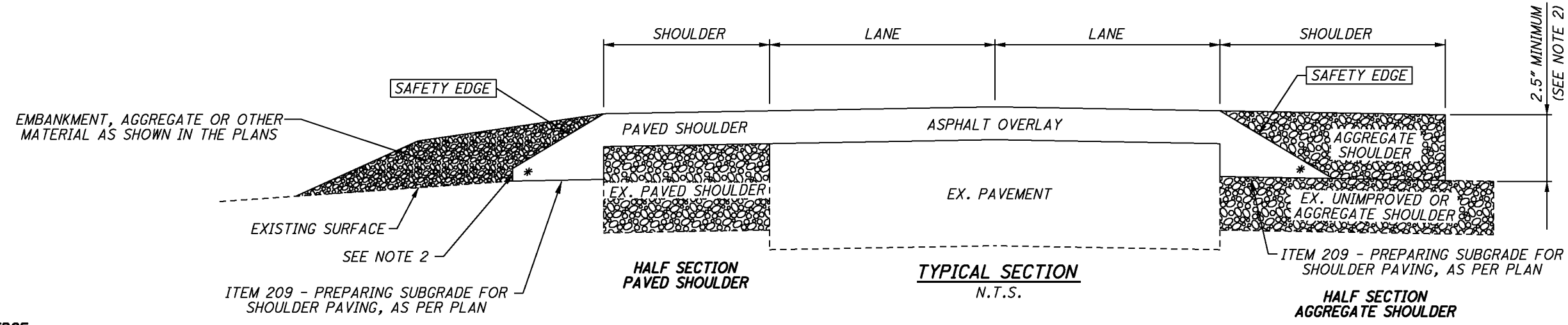
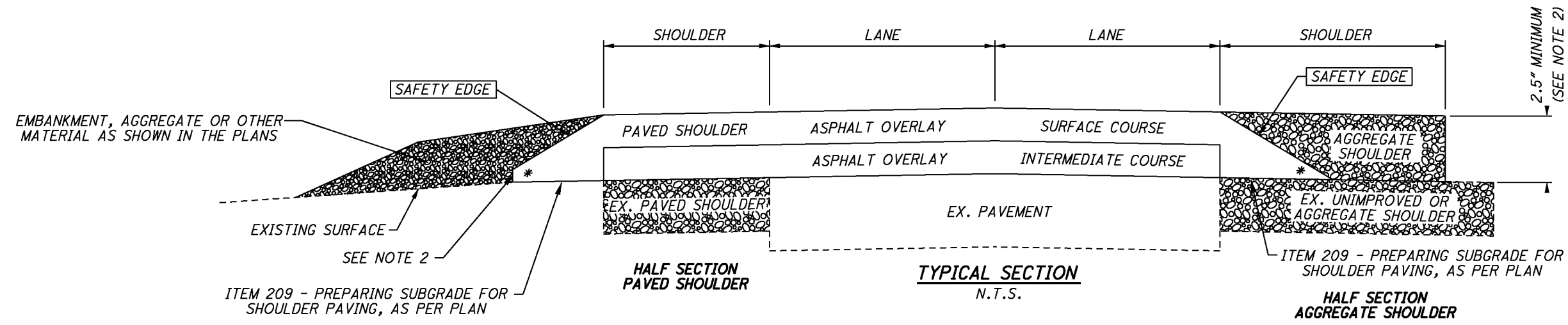
- ① — Item 407 - Tack Coat for Intermediate Course
- ② — Item 407 - Tack Coat
- ③ — Item 408 - Prime Coat, As Per Plan

PART	ROUTE	LOG POINT TO LOG POINT (STRAIGHT LINE MILEAGE)	LENGTH		TYPICAL	PROPOSED WIDTH FEET				SHOULDER AREA SQ. YDS.	407		448		446		408		209		617		FUNDING			
			MILES	FEET		LEFT		RIGHT			TACK COAT @ 0.075 GAL/S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.04 GAL/S.Y.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 1 3/4" THICK	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN	PRIME COAT, AS PER PLAN @ 0.40 GAL/SQ. YD.	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	COMPACTED AGGREGATE, AS PER PLAN 3" AVG. THICKNESS	COMPACTED AGGREGATE, AS PER PLAN 1 3/4" AVG. THICKNESS	SHOULDER PREPARATION							
						A	B	A	B											GALLON	GALLON	CU YD		IN.	CU YD	GALLON
1	SR 39	7.19 - 13.15	5.96	31,469	1		2		2	13986								5594	11.92	1166		13986	STP			
1	SR 39	7.19 - 13.15	5.96	31,469	1	2		2		13986	1049		559		680	1.25	486						13986	STP		
1	SR 39	13.15 - 13.51	0.36	1901	2		2		2	845								338	0.72			41	845	STP-URBAN		
1	SR 39	13.15 - 13.51	0.36	1901	2	2		2		845	63					1.75	41							845	STP-URBAN	
2	SR 152	25.86 - 26.05	0.19	1003	2		2		2	446								178	0.38			22	446	STP		
2	SR 152	25.86 - 26.05	0.19	1003	2	2		2		446	33					1.75	22								446	STP
(STP FUNDING)											1082		559		680		508		5772	12.30	1166		22	14432	STP	
(STP-URBAN FUNDING)											63								338	0.72			41	845	STP-URBAN	
SHEET TOTALS (CARRIED TO GENERAL SUMMARY)											1145		559		680		549		6110	13.02	1229		15277			

SHOULDER DATA

COL-39-7.19

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SAFETY EDGE

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANSTECH SHOULDER WEDGE MAKER, THE CARSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

- | | |
|---|---|
| TRANSTECH SYSTEMS, INC.
1594 STATE STREET
SCHENECTADY, NY 12304
1-800-724-6306
WWW.TRANSTECHSYS.COM | ADVANT-EDGE PAVING EQUIPMENT LLC
P.O. BOX 9163
NISKAYUNA, NY 12309-0163
518-280-6090
WWW.ADVANTEDGEPAVING.COM |
| CARLSON SAFETY EDGE END GATE
18425 50TH AVENUE EAST
TACOMA, WA 98446
253-875-8000 | TROXLER ELECTRONIC LABORATORIES, INC.
3008 E. CORNWALLIS RD.
RESEARCH TRIANGLE PARK, NC 27709
1-877-TROXLER
WWW.TROXLERLABS.COM |

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES (200 TO 300 MM) AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

NOTES:

- SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).
 - CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150MM).
 - BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.
- * 40° MAX.

ITEM 446 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN

- (PART 1) 0.054 S.F. x (31,469' x 2 SIDES) ÷ 27 = 126 CU. YD. (STP)
- (PART 1) 0.038 S.F. x (1901' x 2 SIDES) ÷ 27 = 5 CU. YD. (STP-URBAN)
- (PART 2) 0.038 S.F. x (1003' x 2 SIDES) ÷ 27 = 3 CU. YD. (STP)

134 CU. YD. TOTAL

(TOTAL CARRIED TO THE GENERAL SUMMARY)

NOTE: AVERAGE OF 0.054 SQ. FT. IS BASED ON A TOTAL ASPHALT OVERLAY THICKNESS OF 3" AND A 30° ANGLE FOR THE SAFETY EDGE.
(SLM 7.19 TO 13.15) PART 1 (STP)

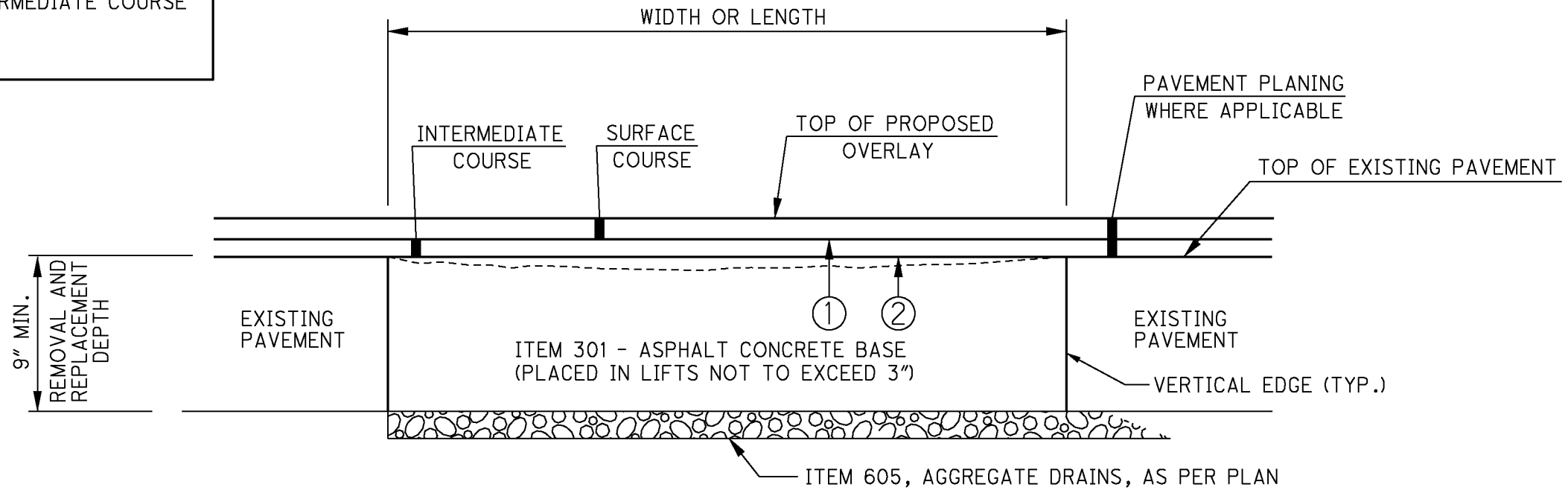
NOTE: AVERAGE OF 0.038 SQ. FT. IS BASED ON THE MINIMUM THICKNESS OF 2.5" AND A 30° ANGLE FOR THE SAFETY EDGE.
(SLM 13.15 TO 13.51) PART 1 (STP-URBAN) (SLM 25.86 TO 26.05) PART 2 (STP)

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LEGEND

① ITEM 407, TACK COAT FOR INTERMEDIATE COURSE

② ITEM 407, TACK COAT



PAVEMENT REPAIR TYPICAL

ITEM 253 - PAVEMENT REPAIR

THIS ITEM SHALL MEET THE REQUIREMENTS OF ITEM 253, PAVEMENT REPAIR, AND THE ABOVE TYPICAL SECTION.

THE ESTIMATED QUANTITIES ARE TO BE CONSIDERED APPROXIMATE. A FINAL FIELD REVIEW WILL BE PERFORMED BY ODOT PRIOR TO CONSTRUCTION AND FINAL LOCATIONS WILL BE GIVEN TO THE CONTRACTOR PRIOR TO CONSTRUCTION.

IF NEEDED, AN AGGREGATE DRAIN, AS PER PLAN SHALL BE INSTALLED IN ACCORDANCE WITH CMS 605.07.

ALL PAVEMENT REPAIRS ARE TO BE COMPLETED PRIOR TO THE PAVING OPERATIONS.

THE ESTIMATED QUANTITIES FROM THIS SHEET HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. FINAL PAYMENT FOR THESE ITEMS SHALL BE FOR THE ACCEPTED QUANTITY COMPLETED IN PLACE.

ITEM 605 - AGGREGATE DRAINS, AS PER PLAN

THIS ITEM SHALL BE USED TO CONSTRUCT AGGREGATE DRAINS IN CONJUNCTION WITH ITEM 253, PAVEMENT REPAIR, AND SHALL MEET THE REQUIREMENTS OF ITEM 605, AGGREGATE DRAINS, EXCEPT THAT AGGREGATE SHALL BE NO. 57 SIZE GRAVEL.

ESTIMATED QUANTITIES

PART 1, ITEM 253 . . . PAVEMENT REPAIR -	268 CU YD (STP)
PART 1, ITEM 253 . . . PAVEMENT REPAIR -	7 CU YD (STP-URBAN)
PART 2, ITEM 253 . . . PAVEMENT REPAIR -	7 CU YD (STP)

	282 CU YD TOTAL

PART 1, ITEM 605 . . . AGGREGATE DRAINS, AS PER PLAN -	536 FT (STP)
PART 1, ITEM 605 . . . AGGREGATE DRAINS, AS PER PLAN -	14 FT (STP-URBAN)
PART 2, ITEM 605 . . . AGGREGATE DRAINS, AS PER PLAN -	14 FT (STP)

	564 FT TOTAL

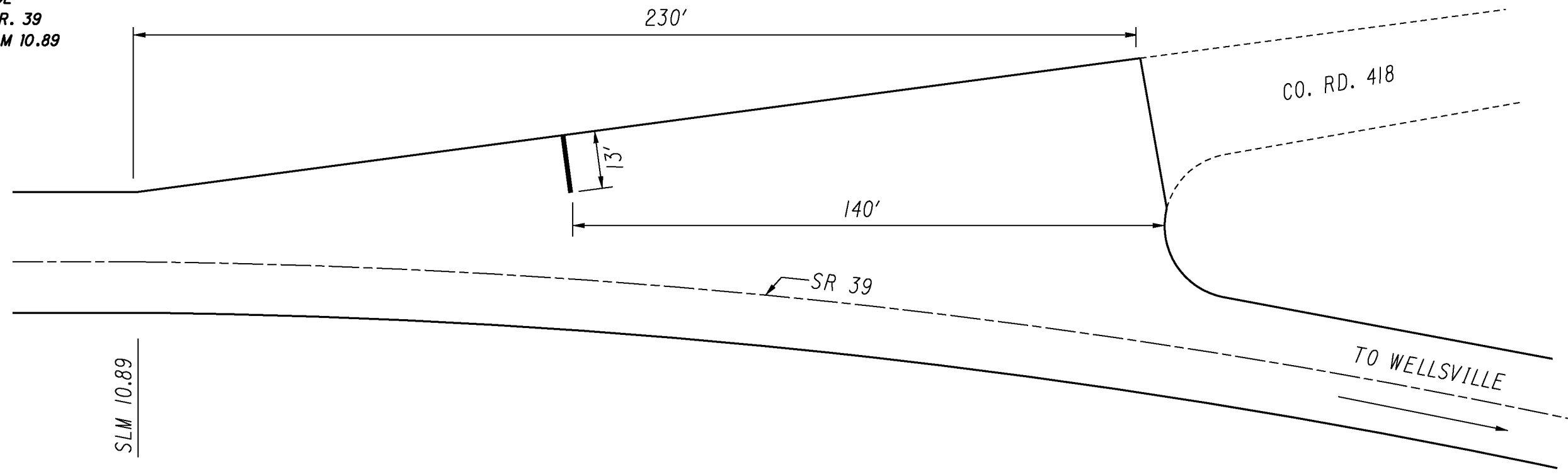
(TOTALS CARRIED TO GENERAL SUMMARY)

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PAVEMENT REPAIR

COL-39-7.19

COUNTY COL
 ROUTE S.R. 39
 SECTION SLM 10.89
 (PART 1)

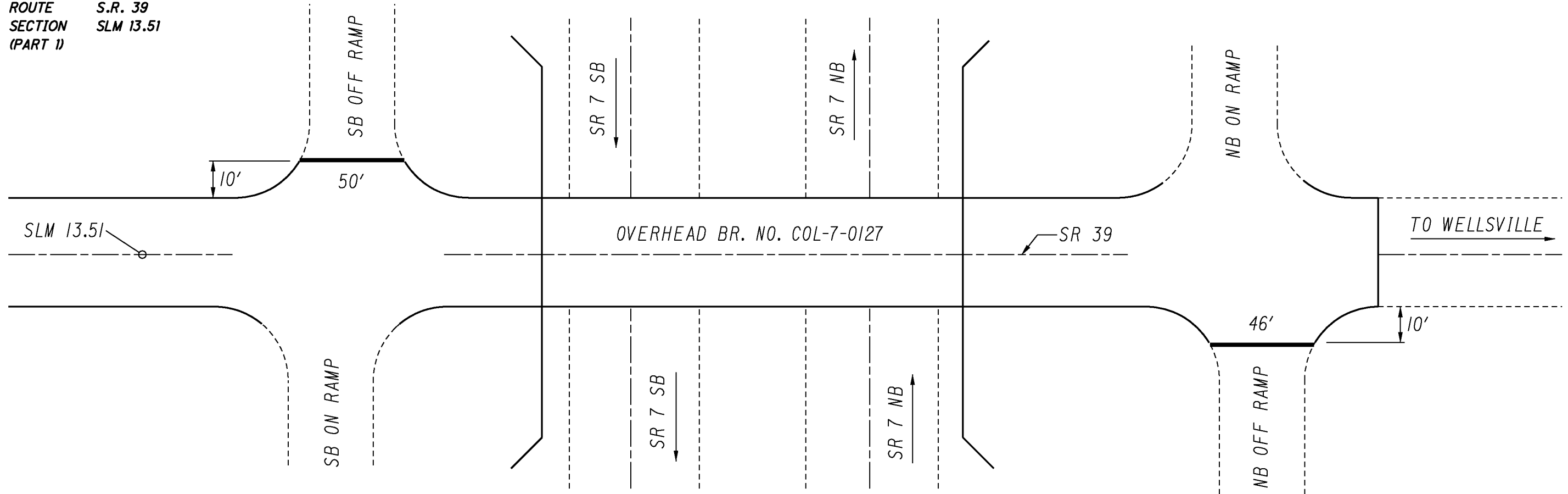


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AUXILIARY PAVEMENT MARKING

ITEM 642 - STOP LINE, TYPE 1 - 13 FT (STP)

COUNTY COL
 ROUTE S.R. 39
 SECTION SLM 13.51
 (PART 1)



ITEM 642 - STOP LINE, TYPE 1 - 96 FT (STP-URBAN)

NOTES: 1. FOR PAVEMENT MARKING DETAILS NOT SHOWN, SEE STANDARD CONSTRUCTION DRAWING TC-71.10 AND TC-73.10. 2. ALL QUANTITIES CARRIED TO PAVEMENT MARKING SUB-SUMMARY.

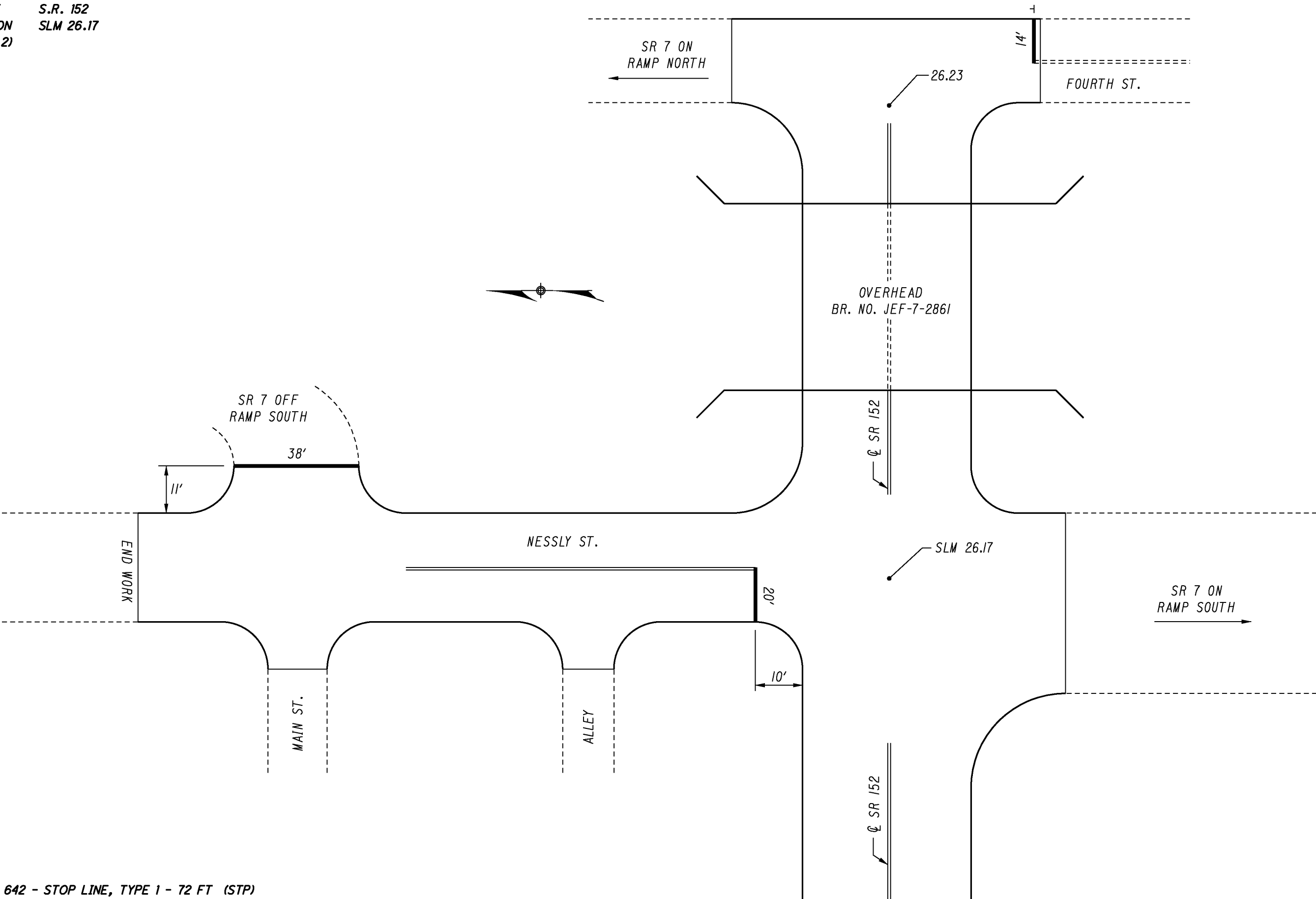
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COUNTY JEF
 ROUTE S.R. 152
 SECTION SLM 26.17
 (PART 2)

CALCULATED
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 CHECKED
 SKW



AUXILIARY PAVEMENT MARKING

COL - 39 - 7.19

ITEM 642 - STOP LINE, TYPE 1 - 72 FT (STP)

NOTES: 1. FOR PAVEMENT MARKING DETAILS NOT SHOWN, SEE STANDARD CONSTRUCTION DRAWING TC-71.10 AND TC-73.10. 2. ALL QUANTITIES CARRIED TO PAVEMENT MARKING SUB-SUMMARY.

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PART	COUNTY	ROUTE	SLM		SPACING FT	RAISED PAVEMENT MARKER REMOVED EACH	621			642			FUNDING	REMARKS	
			FROM	TO			RPM			EDGE LINE, 4", TYPE 1 MILE	CENTER LINE, TYPE 1 MILE	STOP LINE, TYPE 1 FT			RAILROAD SYMBOL MARKING, TYPE 1 EACH
								YELLOW/ YELLOW EACH							
1	COL	SR 39	7.19	13.15	40	788		788		11.92	5.96	13		STP	
1	COL	SR 39	13.15	13.51						0.72	0.36			STP-URBAN	
1	COL	SR 39	13.51	13.60							0.09	96		STP-URBAN	
2	JEF	SR 152	25.86	26.05						0.38	0.19		2	STP R/R SYMBOLS @ SLM 25.90 AND SLM 26.16	
2	JEF	SR 152	26.07	26.23							0.16	34		STP	
2	JEF	EXTRA FOR NESSLY ST.									0.06	38		STP	
SHEET SUB-TOTAL FOR STP FUNDING						788		788		12.30	6.37	85	2	STP	
SHEET SUB-TOTAL FOR STP-URBAN FUNDING										0.72	0.45	96		STP-URBAN	
TOTALS (CARRIED TO GENERAL SUMMARY)						788		788		13.02	6.82	181	2		

RPM AND PAVEMENT MARKING SUB-SUMMARY

CALCULATED
JAS
CHECKED
SKW

COL-39-7.19