

ITEM 614- MAINTAINING TRAFFIC

ALL LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE TIMES NOTE, BY USE OF THE EXISTING PAVEMENT AND COMPLETED PAVEMENT.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPT. OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THESE PERSONS SHALL BE RESPONSIBLE FOR PLACING OR REPLACING NECESSARY TRAFFIC CONTROL DEVICES TO MAINTAIN THE TRAVELED PAVEMENT SAFELY.

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

CHRISTMAS	FOURTH OF JULY
NEW YEAR S	LABOR DAY
MEMORIAL DAY	THANKSGIVING
EASTER	

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 HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$330 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

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.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERRECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

THE SIGNS SHALL BE ERRECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERRECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERRECTED ANYWHERE ON RAMP AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMP, THE SIGN SHALL BE ERRECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO
PUBLIC RAMP & CLOSURE	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
ROAD CLOSURE	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
CLOSURES TO CLOSURE	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 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.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC (PLAN NOTE 642-2).

PERMITTED LANE CLOSURE TIMES

SHORT TERM LANE CLOSURES ARE THOSE WHICH ARE PERMITTED BY THE PERMITTED LANE CLOSURE NOTE. THESE TIMES SHALL NOT BE REVISED WITHOUT PRIOR APPROVAL FROM THE DISTRICT 8 WORK ZONE TRAFFIC CONTROL MANAGER. SHORT TERM LANE CLOSURES SHALL ONLY BE IMPLEMENTED WHEN WORK IS BEING CONTINUOUSLY PERFORMED IN THE LANE. THE CLOSURE SHALL BE REMOVED AS SOON AS POSSIBLE AFTER WORK HAS STOPPED. PERMITTED LANE CLOSURES SHALL ONLY BE ALLOWED DURING THE TIMES SPECIFIED IN THE LANE VALUE CONTRACT TABLE INCLUDED IN THESE PLANS. NO LANE OR SHOULDER CLOSURE SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED.

LANE VALUE CONTRACT TABLE

DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT PER LANE
SB I-75: ALL LANES OPEN TO TRAFFIC		1 MINUTE	\$430
4 LANES REDUCED TO 3 (4:3)	6 AM - 9 PM		
4 LANES REDUCED TO 2 (4:2)	5 AM - 9 PM		
4 LANES REDUCED TO 1 (4:1)	5 AM - 11 PM		
NB I-75: ALL LANES OPEN TO TRAFFIC		1 MINUTE	\$430
FROM I-71 OR I-75: 2 LANES REDUCED TO 1 (2:1)	6 AM - 8 PM		
4 LANES REDUCED TO 3 (4:3)	6 AM - 8 PM		
4 LANES REDUCED TO 2 (4:2)	6 AM - 10 PM		
4 LANES REDUCED TO 1 (4:1)	5 AM - 12 PM		
ALL RAMP OPEN TO TRAFFIC	5 AM - 10 PM	1 MINUTE	\$430

- NOTES:
1. MAINTAIN A MINIMUM OF 1 LANE ON ALL ENTRANCE AND EXIT RAMP AT ALL TIMES; REDUCED RAMP WIDTHS, MAINTAINING 1-11' LANE, ARE PERMITTED DURING THE TIMES ALLOWED FOR A LANE CLOSURE SPECIFIED IN THE PERMITTED LANE CLOSURE SCHEDULE.
 2. ALL RAMP MAY BE CLOSED A MAXIMUM OF 2 TIMES EACH. ONLY ONE RAMP MAY BE CLOSED AT A TIME. PROVIDE A PCMS AT THE CLOSED RAMP DIRECTING TRAFFIC TO THE NEXT LOGICAL EXIT. PROVIDE A SECOND PCMS AT THAT LOCATION TO CONFIRM THE DETOUR AND TO PROVIDE THE INFORMATION NECESSARY TO RETURN MOTORISTS TO THEIR ORIGINAL DIRECTION OF TRAVEL.
 3. NO SHOULDER CLOSURE BETWEEN THE HOURS OF 6AM TO 9AM AND 3PM TO 7PM MONDAY THROUGH FRIDAY.
 4. NO LANE CLOSURES 2 HOURS BEFORE TO 2 HOURS AFTER EVENTS AT GREAT AMERICAN BALL PARK, PAUL BROWN STADIUM, OR US BANK AREA. THIS RESTRICTION ALSO APPLIES TO ANY OTHER LOCAL VENUE GENERATING AN EVENT ATTENDANCE OF 10,000+.
 5. SOUTHBOUND I-75, DURING 4:1 AND 4:2 LANE CLOSURES: MAINTAIN A MINIMUM OF 1 LANE ONTO THE BRENT SPENCE BRIDGE AT ALL TIMES. MAINTAIN A MINIMUM OF 1 LANE TO I-71/FORT WASHINGTON WAY AT ALL TIMES BY USE OF AN EXIT OPENING. EXCEPT THE EXIT OPENING MAY BE CLOSED AFTER 10 PM WHEN ACTIVELY WORKING IN THE GORE AREA.

6. SOUTHBOUND I-75, DURING 4:3: LEFT (MEDIAN) LANE CLOSURES MAY BEGIN AT 7 PM.
7. NORTHBOUND I-75, DURING 2:1/4:2: IT IS PERMISSIBLE TO HAVE 2:1 FROM I-71 AND FROM I-75 AT THE SAME TIME. LANE CLOSURES EXTENDING NORTH OF STRUCTURE HAM-75-1.24WM (FREEMAN AVENUE ENTRANCE RAMP BRIDGE) SHALL FOLLOW 4:2 TIMES.

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:

- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
- AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
- AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC. WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
- THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
- OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 1000 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614- WORK ZONE MARKINGS (WZ)

THE CONTRACTOR SHALL PLACE THE ASPHALT INTERMEDIATE COURSE AND ALL WORK ZONE PAVEMENT MARKINGS, INCLUDING WORK ZONE EDGE LINE, UPON COMPLETION OF THE PAVEMENT PLANING PRIOR TO OPENING THE ROADWAY TO TRAFFIC. THE CONTRACTOR SHALL PLACE ALL WORK ZONE PAVEMENT MARKINGS OR PERMANENT MARKINGS UPON COMPLETION OF THE ASPHALT SURFACE COURSE PRIOR TO OPENING THE ROADWAY TO TRAFFIC.


- INTERMEDIATE COURSE:
- ITEM 614-WZ LANE LINE 6", CLASS I, 642 PAINT - 11.5 MILES
 - ITEM 614-WZ EDGE LINE 6", CLASS I, 642 PAINT - 13.22 MILES
 - ITEM 614-WZ CHANNELIZING LINE 12", CLASS I, 642 PAINT - 14.725 FT
 - ITEM 614-WZ DOTTED LINE 12", CLASS I, 642 PAINT - 880 FT
 - ITEM 614-WZ CHEVRON MARKING, CLASS I, 642 PAINT - 2,792 FT
 - ITEM 614-WZ LANE ARROWS, CLASS I, 642 PAINT - 4 EA
 - ITEM 614-WZ MERGE ARROWS, CLASS I, 642 PAINT - 2 EA
 - ITEM 614-WZ WORD ON PAVEMENT (MERGE), CLASS I, 642 PAINT - 2 EA

- SURFACE COURSE:
- ITEM 614-WZ LANE LINE 6", CLASS I, 807 PAINT - 11.5 MILES
 - ITEM 614-WZ EDGE LINE 6", CLASS I, 807 PAINT - 13.22 MILES
 - ITEM 614-WZ CHANNELIZING LINE 12", CLASS I, 807 PAINT - 14.725 FT
 - ITEM 614-WZ DOTTED LINE 12", CLASS I, 807 PAINT - 880 FT
 - ITEM 614-WZ CHEVRON MARKING, CLASS III 642 PAINT - 2,792 FT
 - ITEM 614-WZ LANE ARROWS, CLASS III, 642 PAINT - 4 EA
 - ITEM 614-WZ MERGE ARROWS, CLASS III, 642 PAINT - 2 EA
 - ITEM 614-WZ WORD ON PAVEMENT (MERGE), CLASS III, 642 PAINT - 2 EA



SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	5	8	9						01/IMS/PV	02/IMS/BR						
EROSION CONTROL																	
										1,000		832	30000	1,000	EACH	EROSION CONTROL	
DRAINAGE																	
1										1		611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE	
PAVEMENT																	
650			207,619							650		253	02000	650	CY	PAVEMENT REPAIR	
			2,087							207,619		254	01000	207,619	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3.25"	
			31,143							2,087		254	01600	2,087	SY	PATCHING PLANED SURFACE	
			13,289							31,143		407	20000	31,143	GAL	NON-TRACKING TACK COAT	
										13,289		442	00100	13,289	CY	ANTI-SEGREGATION EQUIPMENT	
			8,651							8,651		442	10300	8,651	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), PG76-22M	
			355							355		617	10100	355	CY	COMPACTED AGGREGATE	
			8,514							8,514		617	20000	8,514	SY	SHOULDER PREPARATION	
			7							7		617	25000	7	MGAL	WATER	
			14.54							14.54		618	40600	14.54	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
			10,093							10,093		861	11100	10,093	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
WATER WORK																	
1										1		638	10800	1	EACH	VALVE BOX ADJUSTED TO GRADE	
TRAFFIC CONTROL																	
1,130										1,130		621	00100	1,130	EACH	RPM	
1,130										1,130		621	54000	1,130	EACH	RAISED PAVEMENT MARKER REMOVED	
			2,792							2,792		644	00720	2,792	FT	CHEVRON MARKING	
			4							4		644	01300	4	EACH	LANE ARROW	
			2							2		644	01350	2	EACH	LANE REDUCTION ARROW	
			2							2		644	01410	2	EACH	WORD ON PAVEMENT, 96", MERGE	
			0.56							0.56		807	12010	0.56	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"	
			0.86							0.86		807	12110	0.86	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	
			13.22							13.22		807	14010	13.22	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"	
			11.5							11.5		807	14110	11.5	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	
			14,725							14,725		807	14310	14,725	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"	
			880							880		807	14430	880	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 12"	
			24.72							24.72		850	10010	24.72	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	
			15,605							15,605		850	10130	15,605	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)	
			1.42							1.42		850	20010	1.42	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)	
STRUCTURE REPAIR SFN: 3109127																	
8										8		519	12300	8	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
STRUCTURE REPAIR SFN :3109275																	
20										20		519	12300	20	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
STRUCTURE REPAIR SFN:3109305																	
30										30		519	12300	30	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
STRUCTURE REPAIR SFN:3109364																	
136										136		519	12300	136	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
STRUCTURE REPAIR SFN: 3109429																	
32										32		519	12300	32	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
STRUCTURE REPAIR SFN: 3109399																	
58										58		519	12300	58	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	

DESIGN AGENCY

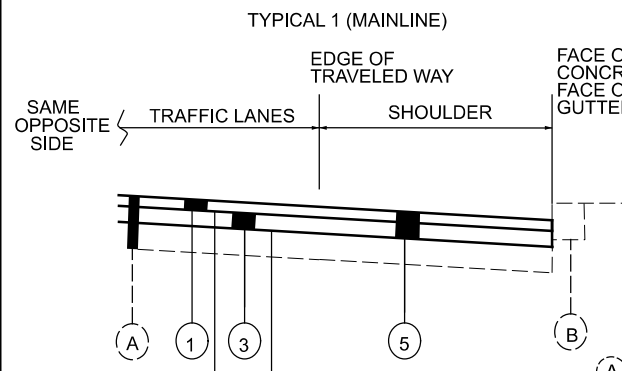


DESIGNER
WWH

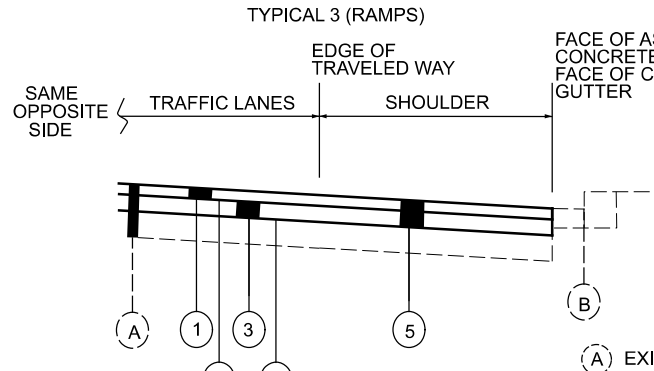
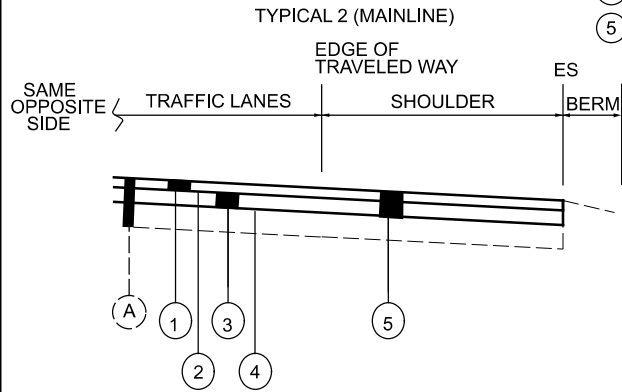
REVIEWER
JDO 10-17-21

PROJECT ID
94238

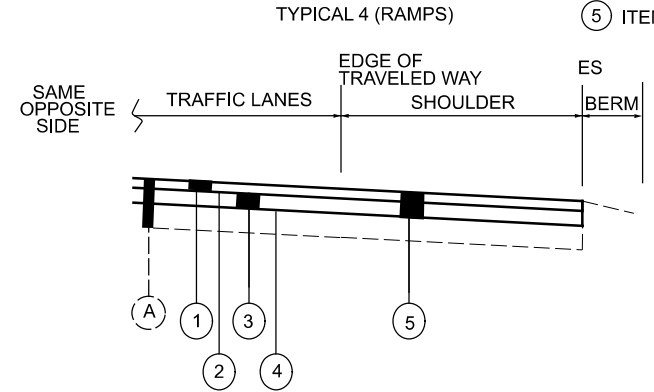
SHEET 6 TOTAL 9



- (A) EXISTING ASPHALT CONCRETE PAVEMENT
- (B) FACE OF ASPHALT OR CONCRETE CURB OR FACE OF CONCRETE CUTTER
- (1) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), PG 76-22M
- (2) ITEM 407 - NON-TRACKING TACK COAT
- (3) ITEM 861 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- (4) ITEM 407 - NON-TRACKING TACK COAT
- (5) ITEM 254 - 3.25" PAVEMENT PLANING, ASPHALT CONCRETE



- (A) EXISTING ASPHALT CONCRETE PAVEMENT
- (B) FACE OF ASPHALT OR CONCRETE CURB OR FACE OF CONCRETE CUTTER
- (1) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), PG 76-22M
- (2) ITEM 407 - NON-TRACKING TACK COAT
- (3) ITEM 861 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- (4) ITEM 407 - NON-TRACKING TACK COAT
- (5) ITEM 254 - 3.25" PAVEMENT PLANING, ASPHALT CONCRETE



RAMP LOG POINTS ARE FOR REFERENCE ONLY AND ARE USED TO DETERMINE RAMP LENGTHS.

COUNTY-ROUTE	LOG POINT (MILE)		LENGTH		PAVEMENT AREA (Micro-Station Generated Area)	PAVEMENT AREA WITH NO SHOULDERS	PAVEMENT AREA	254		407		407		442		861		441		617		618		NOTES	
	FROM	TO	MILES	FT				DEPTH	PATCHING PLANNED SURFACE	NON TRACKING TACK COAT @ 0.09 GAL/SQ YD	NON TRACKING TACK COAT @ 0.06 GAL/SQ YD	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (447), PG76-22M	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A, (446)	ANTI-SEGREGATION EQUIPMENT	COMPACTED AGGREGATE, 1.5" DEPTH, 12" WIDTH	SHOULDER PREPARATION	WATER @ 20 GAL/CU YD	SHOULDER, RUMBLE STRIPS (ASPHALT CONCRETE)					
								INCHES	SQ YD	SQ YD	GAL	GAL	INCHES	CU YD	INCHES	CU YD	CU YD	CU YD	SQ YD	MGAL	MILES				
HAM-75-SB	0.22	2.39	2.17	11458	658439	492384	73160	3.25	73159.9	732	6584.4	4389.6	1.50	3048.3	1.75	3556.4	4939.0	106.1	2546.1	2.1	4.34	4.34	OMIT CONCRETE BRIDGE DECKS		
HAM-75-NB	0.22	2.39	2.17	11458	642541	461520	71393	3.25	71393.4	714	6425.4	4283.6	1.50	2974.7	1.75	3470.5	4629.4	106.1	2546.1	2.1	4.34	4.34	OMIT CONCRETE BRIDGE DECKS		
RAMP A	0.00	0.09	0.09	486	9020	6493	1002	3.25	1002.2	11	90.2	60.1	1.50	41.8	1.75	48.7	65.1	4.5	107.9	0.1	0.18	0.18			
RAMP B	0.00	0.07	0.07	391	7793	5642	866	3.25	865.9	9	77.9	52.0	1.50	36.1	1.75	42.1	56.6	3.6	86.8	0.1	0.14	0.14			
RAMP C	0.00	0.14	0.14	713	21781	16831	2420	3.25	2420.1	25	217.8	145.2	1.50	100.8	1.75	117.6	168.8	6.6	158.4	0.1	0.28	0.28			
RAMP D	0.00	0.10	0.10	549	14023	10823	1558	3.25	1558.1	16	140.2	93.5	1.50	64.9	1.75	75.7	108.6	5.1	122.0	0.1	0.20	0.20			
RAMP E	0.00	0.27	0.27	1426	60870	38546	6763	3.25	6763.3	68	608.7	405.8	1.50	281.8	1.75	328.8	386.6	13.2	316.8	0.3	0.54	0.54			
RAMP F	0.00	0.20	0.20	1030	26247	16440	2916	3.25	2916.3	30	262.5	175.0	1.50	121.5	1.75	141.8	164.9	9.5	228.8	0.2	0.40	0.40			
RAMP G	0.00	0.12	0.12	607	20895	12981	2322	3.25	2321.7	24	209.0	139.3	1.50	96.7	1.75	112.9	130.2	5.6	134.9	0.1	0.24	0.24			
RAMP H	0.00	0.13	0.13	665	19012	11967	2112	3.25	2112.4	22	190.1	126.7	1.50	88.0	1.75	102.7	120.0	6.2	147.8	0.1	0.26	0.26			
RAMP I	0.00	0.18	0.18	935	30752	20531	3417	3.25	3416.9	35	307.5	205.0	1.50	142.4	1.75	166.1	205.9	8.7	207.7	0.2	0.36	0.36			
RAMP J	0.00	0.14	0.14	755	30963	18041	3440	3.25	3440.3	35	309.6	206.4	1.50	143.3	1.75	167.2	181.0	7.0	167.8	0.1	0.28	0.28			
RAMP K	0.00	0.10	0.10	509	18976	11858	2108	3.25	2108.4	22	189.8	126.5	1.50	87.9	1.75	102.5	118.9	4.7	113.1	0.1	0.20	0.20			
RAMP L	0.00	0.10	0.10	518	15167	8740	1685	3.25	1685.2	17	151.7	101.1	1.50	70.2	1.75	81.9	87.7	4.8	115.2	0.1	0.20	0.20			
RAMP M	0.00	0.28	0.28	1468	93312	52095	10368	3.25	10368.0	104	933.1	622.1	1.50	432.0	1.75	504.0	522.6	13.6	326.2	0.3	0.56	0.56			
RAMP N	0.00	0.34	0.34	1785	100463	74318	11163	3.25	11162.6	112	1004.6	669.8	1.50	465.1	1.75	542.6	745.5	16.5	396.6	0.3	0.68	0.68			
RAMP O	0.00	0.47	0.47	2492	72032	49034	8004	3.25	8003.6	81	720.3	480.2	1.50	333.5	1.75	389.1	491.9	23.1	553.8	0.5	0.94	0.94			
RAMP P	0.00	0.04	0.04	227	3998	3013	444	3.25	444.2	5	40.0	26.7	1.50	18.5	1.75	21.6	30.2	2.1	50.5	0.0	0.08	0.08			
RAMP Q	0.00	0.16	0.16	845	22283	13527	2476	3.25	2475.9	25	222.8	148.6	1.50	103.2	1.75	120.4	135.7	7.8	187.7	0.2	0.32	0.32			
TOTALS CARRIED TO GENERAL SUMMARY									207619	2087	31143		8651		10093	13289	355	8514	7	14.54					

PAVEMENT CALCULATIONS

DESIGN AGENCY

DESIGNER: WWH
 REVIEWER: JDO 10-17-21
 PROJECT ID: 94238
 SHEET 8 TOTAL 9