

ITEM 614, MAINTAINING TRAFFIC

NO WORK AND ALL RAMPS ON SR 412 INTERCHANGE MUST BE OPEN DURING THE SANDUSKY COUNTY FAIR. AUGUST 25TH THROUGH AUGUST 30TH, 2020.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$50 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.

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.

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF CMS 614.04 AND 614.11.

ITEM 614 - WORK ZONE MARKING SIGN	21 EACH
ITEM 614 - WORK ZONE EDGE LINE, CLASS III, 6"	69 MILE
ITEM 614 - WORK ZONE LANE LINE, CLASS I, 6"	33 MILE
ITEM 614 - WORK ZONE CENTER LINE, CLASS I	3 MILE
ITEM 614 - WORK ZONE STOP LINE, CLASS III	627 FT
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 12"	15093 FT

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ODOT NOTIFICATION CONTACT INFORMATION

THE ODOT PROJECT ENGINEER SHALL FORWARD THE CONSTRUCTION NOTIFICATION INFORMATION THE FOLLOWING DEPARTMENTS WITHIN THE TIMELINE OUTLINED IN TEM PART 642-58 TO ENSURE COMPLIANCE WITH FEDERAL NOTIFICATION REQUIREMENTS:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY PHONE AT: (419) 373-4428 OR EMAIL AT: D02.PIO@DOT.OHIO.GOV

DISTRICT PERMIT SECTION BY PHONE AT: (419) 373-4301 OR EMAIL AT: D02.PERMITS@DOT.OHIO.GOV

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, 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 ERECTED 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 ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

Item	Duration of Closure	Sign Displayed to Public
Ramp & Road	>= 2 weeks	14 calendar days prior to closure
Closures	> 12 hours & < 2 weeks	7 calendar days prior 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.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

MAINTENANCE OF TRAFFIC CLOSURES AND DETOURS

U.S. 20	MAINTAIN TRAFFIC WHILE PERFORMING PART-WIDTH CONSTRUCTION.
S.R. 412	RAMPS MAY BE CLOSED FROM FRIDAY 6PM TO MONDAY 6AM. ONLY ONE RAMP AT THE SR-412 INTERCHANGE CAN BE CLOSED AT A TIME.
STATE ST.	CLOSE EASTBOUND STATE ST. FOR A MAXIMUM OF 14 CONSECUTIVE DAYS TO COMPLETE PAVING WORK. STARTING AT STA. 24+68.14 TO U.S. 20 EAST. DETOUR: CR 198 TO EASTBOUND U.S. 20

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

PAVEMENT TYPE SHALL BE FLEXIBLE AND SHALL BE LEFT IN PLACE. THIS IS TO BE PLACED ADJACENT TO THE EXISTING SHOULDERS IN THE VICINITY OF CULVERT AT SAN-20-22.53 PRIOR TO IMPLEMENTING MOT PHASE 1. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR THE PURPOSE OF MAINTENANCE OF TRAFFIC DURING THE BRIDGE PHASES.

ITEM 615 - PAVEMENT MAINTAINING TRAFFIC, CLASS A
1778 SQ YD

WORK ZONE PORTABLE BARRIER

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR PORTABLE BARRIER.

ITEM 614 - OBJECT MARKER, ONE WAY	41 EACH
ITEM 614 - BARRIER REFLECTOR, TYPE 1	41 EACH
ITEM 614 - WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	8 EACH
ITEM 622 - PORTABLE BARRIER, 32"	2,040 FT

WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER	COUNTY-ROUTE-SECTION	DIRECTION
WZ-15205	SAN-20-19.32	EAST BOUND
WZ-15206	SAN-20-19.32	WEST BOUND

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRECONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THE NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN ODOT PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION WORKERS PRESENT	WITHOUT POSITIVE PROTECTION WORKERS PRESENT
65	55	60
60	55	60

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

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
84 SIGN MNTH
ASSUMING 14 DSL SIGN ASSEMBLY(IES) FOR 6 MONTH(S)

Deleted Item 614

Changed from 6 to 84

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SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
10	11	13	15	19	20	21	01/NHS/PV	02/NHS/CV									
						113				113	304	20000	113	CY	AGGREGATE BASE		
				36,679		70				36,679	407	20000	36,749	GAL	NON-TRACKING TACK COAT		
		5,400								5,400	409	30000	5,400	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS		
	12,536									12,536	442	00100	12,536	CY	ANTI-SEGREGATION EQUIPMENT		
55				11,004		26				11,059	26	442	10001	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN , PG 70-22		
		200		12,670		31				12,870	31	442	10101	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446), AS PER PLAN , PG 70-22	13	
				2,281		4				2,281	4	617	10100	CY	COMPACTED AGGREGATE		
										LS	SPECIAL	69098400	LS		PAVER MOUNTED THERMAL PROFILING	11,12,13	
				58,765						58,765		872	10000	FT	VOID REDUCING ASPHALT MEMBRANE (VRAM)		
															TRAFFIC CONTROL		
		23								23		618	40600	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)		
				725						725		621	00100	EACH	RPM		
				725						725		621	54000	EACH	RAISED PAVEMENT MARKER REMOVED		
						1					1	630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL		
						1					1	630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL		
						23				23		642	00094	MILE	EDGE LINE, 6"		
						11				11		642	00194	MILE	LANE LINE, 6"		
						1				1		642	00290	MILE	CENTER LINE		
				5,031						5,031		644	00404	FT	CHANNELIZING LINE, 12"		
				234						234		644	00500	FT	STOP LINE		
						803				803		644	00700	FT	TRANSVERSE/DIAGONAL LINE		
						588				588		644	00720	FT	CHEVRON MARKING		
						16				16		644	01300	EACH	LANE ARROW		
						4				4		644	01360	EACH	WRONG WAY ARROW		
						2,074				2,074		644	01510	FT	DOTTED LINE, 6"		
															MAINTENANCE OF TRAFFIC		
		100								100		614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			8								8	614	12336	8	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	
			21							21		614	12460	21	EACH	WORK ZONE MARKING SIGN	
			5							5		614	12500	5	EACH	REPLACEMENT SIGN	
			5							5		614	12600	5	EACH	REPLACEMENT DRUM	
											41	614	13310	41	EACH	BARRIER REFLECTOR, TYPE 1, UNIDIRECTIONAL	
											41	614	13350	41	EACH	OBJECT MARKER, ONE WAY	
											33	614	20010	33	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
											3	614	21000	3	MILE	WORK ZONE CENTER LINE, CLASS I	
											69	614	22360	69	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
						15,093				15,093		614	23690	15,093	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
						627				627		614	26610	627	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
						1,778				1,778		615	20001	1,778	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	16
						2,040				2,040		622	41000	2,040	FT	PORTABLE BARRIER, 32"	
						84				84		808	18700	84	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
															TRAFFIC SIGNALS		
4										4		625	31510	4	EACH	PULL BOX REMOVED	
8										8		632	26500	8	EACH	DETECTOR LOOP	
															INCIDENTALS		
										LS		108	30000	LS	CPM PROGRESS SCHEDULE SHORT DURATION PROJECTS		
										LS		614	11000	LS	MAINTAINING TRAFFIC		
										LS		623	10000	LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING		
										LS		624	10000	LS	MOBILIZATION		

Deleted Item 614, work zone speed limit Sign

Changed Quantity

GENERAL SUMMARY

SAN - 20 - 19 .32