ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET. RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

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PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE, AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

US-35 REST AREAS PCMS

US-35 REST AREAS SHALL BE CLOSED TO ALL TRAFFIC DURING CONSTRUCTION OF THE REST AREA PARKING LOTS AND RAMPS. EACH REST AREA SHALL BE COMPLETED IN 7 DAYS. WORK ON ONE REST AREA SHALL BE COMPLETED BEFORE STARTING THE OTHER REST AREA AND SHALL NOT OCCUR SIMULTANEOUSLY WITH US-35 MAINLINE CONSTRUCTION. 1 MESSAGE BOARD SHALL BE PLACED IN THE UPSTREAM TRAVEL DIRECTION OF THE CLOSED REST AREA, NOTIFYING THE TRAVELING PUBLIC OF THE REST AREA CLOSURE, 10 DAYS IN ADVANCE OF THE PLANNED

ASSUMING 2 PCMS SIGN(S) FOR 1 MONTH(S) 2 SIGN MONTHS CARRIED TO THE GENERAL SUMMARY

1 PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) SHALL BE PLACED ON US-35 IN EACH TRAVEL DIRECTION, 1 MILE IN ADVANCE OF THE SR-850 / US-35 EXCHANGE, 1 PCMS SHALL BE PLACED AT THE INTERSECTION OF CR-35 (JACKSON PIKE) AND SR-850 AND 1 PCMS AT THE INTERSECTIONS OF SR-850 AND SR-554. THE PCMSS SHALL NOTIFY THE TRAVLEING PUBLIC OF THE ESTIMATED CONSTRUCTION DATES, AND TO EXPECT POSSIBLE TRAVEL DELAYS WHEN USING THE SR-850 / US-35 EXCHANGE. THE MESSAGE BOARDS SHALL BE PLACED 10 DAYS PRIOR TO BEGINNING CONSTRUCTION AND SHALL REMAIN IN PLACE THROUGH ALL PHASES OF THE MAJOR REHABILITATION OCCURING ON SR-850.

ASSUMING 4 PCMS SIGN(S) FOR 2 MONTH(S) 8 SIGN MONTH CARRIED TO THE GENERAL SUMMARY

ITEM 614 - WORK ZONE LIGHTING SYSTEM

LIGHTING SHALL BE PROVIDED AT EACH END OF THE LANE CLOSURE FOR THE CLOSING OF ONE LANE OF A TWO-LANE HIGHWAY.

LIGHTING SHALL BE BY CONVENTIONAL METHODS, WITH LU-MINAIRE ARMS ATTACHED TO THE SIGNAL SUPPORTS. AREA ILLUMINATION SHALL BE PROVIDED BY USING 150 WATT MINIMUM HIGH PRESSURE SODIUM LUMINARIES OR 250 WATT MINIMUM MERCURY LUMINARIES. THE MINIMUM HEIGHT OF THE LUMINAIRE SHALL BE 27 FT FROM THE GROUND SURFACE.

PAYMENT FOR LIGHTING SHALL INCLUDE DELIVERY, ERECTION, MAINTENANCE AND REMOVAL AS CALLED FOR IN THE PLANS. PAYMENT SHALL BE PER EACH.

2 WORK ZONE LIGHTING SYSTEMS INSTALLED 13 TIMES 26 EACH CARRIED TO THE GENERAL SUMMARY

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUTDOWNS.

THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, INCRESED PENALTIES SIGN

13 SIGNS WITH 4 INSTALLATIONS = 52 EACH 52 EACH CARRIED TO THE GENERAL SUMMARY

ITEM - 614, WORK ZONE MARKING SIGN, AS PER PLAN

FURNISH, INSTALL, MAINTAIN, AND SUBSEQUENTLY REMOVE WORK ZONE MARKING SIGNS AND THEIR SUPPORTS WITHIN THE WORK LIMITS AS SHOWN ON PLAN SHEETS 8, 10 & 27. ALL APPLICABLE PORTIONS OF C&MS 614 APPLY TO WORK ZONE MARKING SIGN, AS PER PLAN.

THE FOLLOWING SIGN TYPES SHALL BE USED IN WORK ZONE MARKING SIGN, AS PER PLAN.

R3-1-24 X 1 INSTALLED 1 TIME R3-5R-30 X 1 INSTALLED 1 TIME

ITEM 614 - WORK ZONE MARKINGS AND SIGNS

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATION FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

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 C&MS 614.04 AND 614.11.

SIGN W8-H12A R4-1 R4-2 SPLIT 2 *32 EACH* 6 EACH 4 FACH

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:

WHILE WORKERS ARE ON THE PROJECT SITE THE APPROVED SPEED LIMIT SHALL BE 55 MPH

WHILE TEMPORARY TRAFFIC CONTROL DEVICES RESTRICT NORMAL TRAFFIC OPERATIONS THE SPEED LIMIT SHALL BE 65 MPH.

WZSZ REVISION # CTY-RTE-SECT DIRECTION GAL-35-3.53-13.42 EAST WZ-55273 WZ-55273 GAL-35-3.80-13.69 WEST

THE FOLLWOING SIGNS SHALL BE PLACED IN ADVANCE OF ENTERING THE WORK ZONE

ITEM 614, SPEED ZONE AHEAD SYMBOL SIGN 8 SIGNS WITH 2 INSTALLATIONS = 16 EACH

THE FOLLWOING SIGNS SHALL BE PLACED AFTER EXITING THE WORK ZONE

ITEM 614, RESUME LEGAL SPEED SIGN 2 SIGNS WITH 2 INSTALLATIONS = 4 EACH

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

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY 1 SIGN / MILE @ 9.62 MILES = 10 EACH 1 SIGN / RAMP = 3 EACH 13 SIGNS, 2 @ A TIME FOR 4 MONTHS = 104 EACH TOTALS CARRIED TO THE GENERAL SUMMARY

ITEM - 614 MAITENANCE OF TRAFFIC, LUMP SUM

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCRODANCE 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 SEPERATELY ITEMIZED IN THE PLAN.

SHEET NUM.											PART. ITEM					GRAND	UNIT	DESCRIPTION	
	7	25	26	27	28	29	31	33	34	01/NHS/PV	02/STR/PV	03/NFP/PV	04/SAF/OT	1 EM	EXT	TOTAL	OINTI	DESCRIPTION	SHEET NO.
																		TRAFFIC CONTROL	
					2,211					1,661	550			621	00100	2,211	EACH	RPM	
+			38		2,211					1,661 38	550			621 626	54000 00102	2,211 38	EACH EACH	RAISED PAVEMENT MARKER REMOVED BARRIER REFLECTOR, TYPE 1 (1-WAY)	
+			38				6			38	6			626	00102	44	EACH	BARRIER REFLECTOR, TYPE 1 (I-WAT)	<u> </u>
\dashv			113							113	0			626	00110	113	EACH	BARRIER REFLECTOR, TYPE 2 (1-WAY)	
\top										1						,,,,			
			80				8			80	8			626	00110	88	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)	
\perp				8							8			630	85100	8	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
\perp					10.08						10.08			642	00104	10.08	MILE	EDGE LINE, 6", TYPE 1	
-					5 . 23						5.23 630			642 644	00300 00404	5.23 630	MILE FT	CENTER LINE, TYPE 1 CHANNELIZING LINE, 12"	
+					030						030			044	00404	030	Г	CHAINIVELIZING LINE, 12	
\top					495					280	215			644	00500	495	FT	STOP LINE	
					250						250			644	00700	250	FT	TRANSVERSE/DIAGONAL LINE	
					735					735				644	00720	735	FT	CHEVRON MARKING	
								2,142	2,258			4,400		644	01200	4,400	FT	PARKING LOT STALL MARKING	
_					9			1			9			644	01300	9	EACH	LANE ARROW	
-					400						100			0.14	0.4540	100		DOTTED LIVE OF	
+					100			1	-		100	1		644	01510	100	FT	DOTTED LINE, 6"	
+						45		2	2			4	45	644 807	01600 14010	4 45	EACH MILE	HANDICAP SYMBOL MARKING WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"	
+						20,28							20.28	807	14110	20.28	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	
\top						8,800							8,800	807	14310	8,800	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"	
						7,000							7,000	807	14410	7,000	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"	
╀								1										MAINTENANCE OF TRAFFIC	
+	10			26				-		10	26			614	12384	26	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	
+	16 42									16	42			614 614	12410 12460	16 42	EACH EACH	SPEED ZONE AHEAD SYMBOL SIGN WORK ZONE MARKING SIGN	
+	42			2							2			614	12461	2	EACH	WORK ZONE MARKING SIGN WORK ZONE MARKING SIGN, AS PER PLAN	7
+	52									52				614	12484	52	EACH	WORK ZONE INCREASED PENALTIES SIGN	<u> </u>
	4									4				614	12490	4	EACH	RESUME LEGAL SPEED SIGN	
┸	26										26			614	12740	26	EACH	WORK ZONE LIGHTING SYSTEM	
\bot							14				14			614	13360	14	EACH	OBJECT MARKER, TWO WAY	
+	10					00.40				2	8			614	18601	10		PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	7
+						38,48				38,48				614	20110	38.48	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
+				9.83							9.83			614	21100	9.83	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
t				9,83							9,83			614	21500	9,83	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT	
				0.5		85.48				85.48	0.5			614	22110	85.98	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
				0.78						0.38	0.4			614	22210	0.78	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I	
_				1.58							1.58			614	22360	1.58	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
+						47.000				47.000				044	00040	47.000		WORK TONE CHANNELTING LINE OF ACCULAGE OVER DAILY	
+				600		17,600				17,600	600			614 614	23210 23690	17,600	FT FT	WORK ZONE CHANNELIZING LINE, CLASS II, 12", 642 PAINT	
+				600 3,120						3,120	600			614	23690	600 3,120	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I	
+				12						3,120	12			614	26400	12	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	
T				655						280	375			614	26610	655	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
				1,182.5							1,182.5			615	20000	1,182.5	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
\bot				3,200							3,200			622	41100	3,200	FT	PORTABLE BARRIER, UNANCHORED	
+	104									104				808	18700	104	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
+																		INCIDENTALS	
+	LS									LS	LS			614	11000	LS		MAINTAINING TRAFFIC	7
t										LS	LS			623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	4
										LS	LS			624	10000	LS		MOBILIZATION	
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SUMMARY GENERAL

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