

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF TWO LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON U.S. 33 BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, COMPLETED BRIDGE, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC AND ITEM 615 ROADS FOR MAINTAINING TRAFFIC. THIS EXCLUDES TEMPORARY LANE CLOSURES TO FACILITATE CONSTRUCTION, WHICH INCLUDES BUT IS NOT LIMITED TO THE INSTALLATION AND REMOVAL OF FALSEWORK AND MOT PHASE CHANGES. TEMPORARY LANE CLOSURE TIMES SHALL CONFORM TO ODOT'S PLCS AND SHALL BE AT THE APPROVAL OF THE ENGINEER.

ALL LANES SHOULD BE MINIMUM OF 10 FEET IN WIDTH AS MEASURED TO THE NEAR FACE OF THE CHANNELIZING DEVICES. WHERE THE OPPOSITE SHOULDER IS SUITABLE FOR CARRYING VEHICULAR TRAFFIC AND OF ADEQUATE WIDTH, LANES SHALL BE SHIFTED BY USE OF CLOSELY SPACED CHANNELIZING DEVICES, PROVIDED THAT MINIMUM LANE WIDTH OF 10 FEET IS MAINTAINED.

ALL RAMPS WILL REMAIN OPEN, EXCEPT FOR NORTHWEST PKWY (CR 133) LOOP ENTRANCE RAMP FOR A PERIOD NOT TO EXCEED 90 CONSECUTIVE CALENDAR DAYS DRING PHASE 3 CONSTRUCTION. THE RAMP TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.18. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$2500 PER DAY FOR EACH CALENDAR DAY THE RAMP REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON RAYMOND ROAD (C.R. 119) AND WALDO ROAD (C.R. 114), EXCEPT FOR A PERIOD NOT TO EXCEED 1 CALENDAR DAYS DURING FALSE WORK INSTALLATION, OR 21 CONSECUTIVE CALENDAR DAYS DURING PAINTING WORK. DURING THESE TIMES THE THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.17. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$1000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING OR COVERING DETOUR SIGNS BETWEEN CLOSURES.

WHEN RAYMOND ROAD IS CLOSED THE CONTRACTOR SHALL PROVIDE EMERGENCY ACCESS FROM THE NORTH AT ALL TIMES.

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.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 33 M. GAL.

MEDIAN WIDENING CONSTRUCTION

DURING THE HOURS SPECIFIED AS LISTED IN THIS PLAN, NIGHTTIME LANE CLOSURS SHALL BE IMPLEMENTED PER ODOT SCD 95.30 FOR SHOULDER WORK AND TEMPORARY PAVEMENT WORK ADJACENT TO US 33. SEE THE WORKING AND NON-WORKING HOURS TYPICAL SECTIONS ON SHEET P.14 FOR DETAILS.

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(S)	COUNTY-ROUTE-SECTION(S)	DIRECTION(S)
WZ-35810	UNI-33-9.1-11.5	EB/WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) 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 THIS 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 OMUTCD 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		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65*	55*	60*	50	60
60	55	60	50	60
55	50	55	45	55

*PROJECT DESIGN CRITERIA

THE FOLLOWING TABLES HAVE BEEN PROVIDED FOR INFORMATION ONLY TO DISPLAY THE NUMBER OF DSL SIGNS USED IN EACH PHASE. REFER TO THE MAINTENANCE OF TRAFFIC PLAN SHEETS FOR SIGN LOCATIONS.

SECTION 1

	SIGNS	MONTHS	TOTAL SIGN-MONTHS
PHASE 2	9	5	45
PHASE 3	8	5	40
PHASE 4	9	5	45
PHASE 5	9	5	45

SECTION 2

	SIGNS	MONTHS	TOTAL SIGN-MONTHS
PHASE 2	4	5	20
PHASE 3	4	5	20
PHASE 4	4	5	20
PHASE 5	4	5	20

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

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
255 SIGN MNTH

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 SHUT-DOWNS.

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 R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

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, WORK ZONE INCREASED PENALTIES SIGN 35 EACH

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A

THE PAVEMENT COMPOSITION FOR THE PAVEMENT FOR M.O.T. SHALL MATCH THE REQUIREMENTS SHOWN ON SHEETS P.59 - P.60 AS WELL AS P.63 - P.64 AND DESCRIBED IN C&MS 615.05.

ALL OTHER REQUIREMENTS OF CMS 614 SHALL APPLY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED FOR INFORMATION ONLY. THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO, AND INCLUDED WITHIN, THE LUMP SUM PAYMENT FOR ITEM 615 ROADS AND PAVEMENTS FOR MAINTAINING TRAFFIC.

TEMPORARY EXCAVATION	1646 CU. YD.
TEMPORARY EMBANKMENT	4120 CU. YD.
REPAIR SEEDING & MULCHING	10743 SQ. YD.

ITEM 618 – RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN, REMOVED

THE CONTRACTOR SHALL MILL 2 INCHES BY 2 FEET WIDE OF THE EXISTING ASPHALT CONCRETE SHOULDER IN ORDER TO REMOVE THE EXISTING RUMBLE STRIPS ALONG THE OUTSIDE SHOULDERS OF US 33 IN THE AREA WHERE TRAFFIC IS SHIFTED. THE CONTRACTOR SHALL COAT ALL MILLED SURFACES HORIZONTAL AND VERTICAL WITH APPROVED AC LIQUID AND PLACE 2 INCHES OF ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-28.

ALL COSTS ASSOCIATED WITH THE REMOVAL OF THE EXISTING PAVEMENT AND PLACEMENT OF THE SURFACE COURSE SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT OF ITEM 618 – RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN, REMOVED.

AN ESTIMATED QUANTITY OF 11,100 FEET HAS BEEN CARRIED TO THE GENERAL SUMMARY.

SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.8	P.9	P.10	P.11	P.12	P.13						01/NHS/ 13	EXT	TOTAL				
					1,325						1,325	SPECIAL	61412200	1,325	FT	MAINTENANCE OF TRAFFIC	P.10
			10	8	8						26	614	12384	26	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	
35	LS										LS	614	12420	LS		DETOUR SIGNING	
											35	614	12484	35	EACH	WORK ZONE INCREASED PENALTIES SIGN	
		4									4	614	12756	4	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
			460	450	296						1,206	614	13310	1,206	EACH	BARRIER REFLECTOR, TYPE 1, 1 WAY	
			72	69	79						220	614	13350	220	EACH	OBJECT MARKER, ONE WAY	
			1.46	1.53							2.99	614	20056	2.99	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
		6.2									6.2	614	20366	6.2	MILE	WORK ZONE LANE LINE, CLASS I, 6", 648	
			15.13	15.18	8.95						39.26	614	22056	39.26	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
		11.7									11.7	614	22336	11.7	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 648	
			4,013	3,890	9,731						17,634	614	23100	17,634	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 807 PAINT	
			5,437	5,165	1,622						12,224	614	24102	12,224	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
LS				5,182	4,633						9,815	615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
											9,815	615	20000	9,815	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
33											33	616	10000	33	MGAL	WATER	
11,100											11,100	618	40101	11,100	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN, REMOVED	P.8
		13,510	9,923	9,580	5,383						38,396	622	41011	38,396	FT	PORTABLE BARRIER, 50", AS PER PLAN	P.9
			3,910	3,720	2,900						10,530	622	41110	10,530	FT	PORTABLE BARRIER, ANCHORED	
255											255	808	18700	255	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
																STRUCTURE OVER 20 FOOT SPAN (UNI-33-9.10 & UNI-33-11.50)	
																SEE SHEET P.143 FOR UNI-33-9.10 STRUCTURE SUMMARY	
																SEE SHEET P.186 FOR UNI-33-11.50 STRUCTURE SUMMARY	
																INCIDENTALS	
											LS	108	10000	LS		CPM PROGRESS SCHEDULE	P.7A
											LS	614	11000	LS		MAINTAINING TRAFFIC	
											39	619	16020	39	MNTH	FIELD OFFICE, TYPE C	
											LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS	624	10000	LS		MOBILIZATION	
											LS	878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	

GENERAL SUMMARY

DESIGN AGENCY



BERGMANN
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340 BRIMFIELD BLVD, STE C, WARE, OH 45377

DESIGNER
 JTO

REVIEWER
 XF 07/15/24

PROJECT ID
 115675

SHEET TOTAL
 P.68 | 227