ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN (CONT'D)

MARKER. AS PER PLAN. INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

RESURFACING OF THE TRANSITION AREAS SHALL BE PERFORMED AT THE TIME THAT THE SURFACE COURSE IS BEING APPLIED TO THE ENTIRE PROJECT. PRIOR TO APPLICATION OF THE SURFACE COURSE ON THE PROJECT, THE EXISTING PAVEMENT WITHIN THE TRANSITION AREA SHALL BE REMOVED TO A DEPTH NECESSARY TO REACH THE LEVEL OF THE INTERMEDIATE COURSE OF THE PAVEMENT. AS DETERMINED BY THE ENGINEER.

PAYMENT FOR RESURFACING WITHIN THE TRANSITION AREA SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEMS FOR THE WORK REQUIRED, AS PROVIDED FOR IN THE PLANS.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626. EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL. LABOR. INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THESE ITEMS.

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL: AND. ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL. LABOR. INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THESE ITEMS.

SEQUENCE OF OPERATIONS SUMMARY

THIS SUMMARY IS NOT INTENDED TO IDENTIFY EVERY CONSTRUCTION ELEMENT WITHIN EACH PHASE. NOR TO IDENTIFY THE MEANS AND METHODS OF THE CONTRACTOR.

THE NUMBER OF LANES AND THEIR RESPECTIVE DIRECTIONAL MOVEMENTS WILL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT'S CONSTRUCTION UNLESS APPROVED BY AND COORDINATED WITH THE ENGINEER.

PRE-PHASE:

TEMPORARY WIDENING ON THE OUTSIDE SHOULDERS OF I-90 WILL BE PERFORMED VIA SHORT-TERM STATIONARY TRAFFIC CONTROL WITH NO ANTICIPATED ENCROACHMENT INTO THE TRAVEL LANES. ONCE THE WIDENING HAS BEEN COMPLETED. WORK TO REMOVE SECTIONS OF THE MEDIAN BARRIER CAN BEGIN. THE REMOVAL OF TWO SEPARATE SECTIONS OF MEDIAN BARRIER WILL BE REQUIRED TO FACILITATE CONSTRUCTION AND FOLLOW-ON USE OF SINGLE-LANE CROSSOVERS IN LATER PHASES OF THE PROJECT.

WESTBOUND LANES WILL BE SHIFTED TO THE OUTSIDE. SEPARATED FROM A WORK AREA ON THE INSIDE LANE. SHOULDER, AND MEDIAN BARRIER BY A PROJECT-LONG RUN OF PORTABLE CONCRETE BARRIER (PCB). CONSTRUCTION ACCESS WILL LIKELY NEED TO BE FROM THE WESTBOUND DIRECTION.

ON THE EASTBOUND SIDE. WORK AREAS FOR THE TWO MEDIAN BARRIER SECTION REMOVALS WILL BE ESTABLISHED WITH SEPARATE RUNS OF PCB. CLOSING THE INSIDE SHOULDER. EASTBOUND LANES ARE TO REMAIN IN THEIR EXISTING CONFIGURATION.

PHASE 1:

TWO SECTIONS OF THE PROPOSED BRIDGE WILL BE CONSTRUCTED IN THIS PHASE. THE NORTHERN END (APPROXIMATELY 13.5 FEET OF BRIDGE WIDTH) AND THE SOUTHERN END (APPROXIMATELY 67.5 FEET OF BRIDGE WIDTH) WILL BE BUILT CONCURRENTLY.

WESTBOUND LANES WILL BE SHIFTED TO FIT BETWEEN THE IN-PLACE PRE-PHASE PCB LINE AND THE EXISTING CONCRETE CURB TRAFFIC DIVIDER SEPARATING THE WESTBOUND EXIT RAMP FROM THE WESTBOUND MAINLINE. RAMP Q (WESTBOUND 1-90 TO COLUMBIA ROAD) WILL BE SHIFTED TOWARD THE TRAFFIC DIVIDER TO GAIN ROOM TO CONSTRUCT THE NORTHERN END OF THE PROPOSED BRIDGE. ONCE THE BRIDGE SECTION IS COMPLETE, TEMPORARY SHOULDER WIDENING WILL BE USED TO CREATE ROOM FOR A LANE SHIFT OF THE RAMP FOR PHASE 3.

THE INSIDE-MOST EASTBOUND LANE CROSSES OVER TO THE WESTBOUND SIDE. RIDING BETWEEN THE PCB LINE AND THE EXISTING MEDIAN BARRIER. THE REMAINING EASTBOUND LANES SHIFT TOWARD THE INSIDE TO ALLOW ROOM FOR CONSTRUCTION OF THE SOUTHERN SECTION OF THE BRIDGE.

PHASE 2:

ONE SECTION OF THE PROPOSED BRIDGE WILL BE CONSTRUCTED IN THIS PHASE. THIS SECTION (APPROXIMATELY 32.5 FEET OF THE BRIDGE WIDTH) WILL CONNECT TO THE SOUTHERN SECTION FROM PHASE 1.

WESTBOUND LANES WILL BE SHIFTED TO FIT BETWEEN THE IN-PLACE PRE-PHASE PCB LINE AND TRAFFIC DIVIDER SEPARATING THE WESTBOUND EXIT RAMP FROM THE MAINLINE.

THE INSIDE-MOST EASTBOUND LANE IS STILL CROSSED OVER TO THE WESTBOUND SIDE. RIDING BETWEEN THE PCB AND THE EXISTING MEDIAN BARRIER. THE REMAINING EASTBOUND LANES SHIFT TOWARD THE OUTSIDE TO ALLOW ROOM FOR THE BRIDGE SECTION'S CONSTRUCTION.

REV	ISION R	ECORD:									
NO. DATE DESCRIPTION											
1	10/31/22	DELETE WINTER NOTE & BARRIER PROTECTION DETAIL									
2	11/07/22	REVISE PHASE 5/6 NOTES. ADD RPM NOTE.									

PHASE 3:

ONE SECTION OF THE PROPOSED BRIDGE WILL BE CONSTRUCTED IN THIS PHASE. THIS SECTION (APPROXIMATELY 51 FEET OF BRIDGE WIDTH) WILL CONNECT TO THE NORTHERN SECTION CONSTRUCTED IN PHASE 1.

USING THE TEMPORARY WIDENING CONSTRUCTED IN PHASE 1. RAMP Q WILL BE SHIFTED TO THE OUTSIDE.

THE INSIDE-MOST WESTBOUND LANE CROSSES OVER TO THE EASTBOUND SIDE. RIDING BETWEEN A NEWLY PLACED PROJECT-LONG RUN OF PCB ON THE EASTBOUND SIDE AND THE EXISTING MEDIAN BARRIER. THE REMAINING TWO WESTBOUND LANES ARE SHIFTED TOWARD THE EXISTING MEDIAN BARRIER, CREATING ROOM FOR THE BRIDGE SECTION'S CONSTRUCTION.

ALL EASTBOUND LANES ARE SHIFTED TO THE OUTSIDE.

PHASE 4:

THE LAST SECTION OF THE PROPOSED BRIDGE WILL BE CONSTRUCTED IN THIS PHASE. THIS SECTION (APPROXIMATELY 31 FEET OF BRIDGE WIDTH) WILL CLOSE THE GAP BETWEEN THE SECTIONS PREVIOUSLY CONSTRUCTED.

THE INSIDE-MOST WESTBOUND LANE WILL REMAIN CROSSED OVER AS IN PHASE 3. THE TWO WESTBOUND THROUGH LANES ARE SHIFTED TOWARD THE TRAFFIC DIVIDER TO GAIN ROOM FOR THE BRIDGE SECTION'S CONSTRUCTION.

THE EASTBOUND LANES REMAIN PUSHED TO THE OUTSIDE AS IN PHASE 3.

PHASE 5:

UPON COMPLETION OF THE PROPOSED BRIDGE. RECONSTRUCTION OF THE REMOVED CONCRETE MEDIAN FOR THE CROSSOVERS WILL PROCEED USING THE EASTBOUND PCB TO CREATE A WORK AREA ON THE EASTBOUND INSIDE LANE AND SHOULDER.

ON THE WESTBOUND SIDE. WORK AREAS FOR THE TWO MEDIAN BARRIER SECTION RECONSTRUCTIONS WILL BE ESTABLISHED WITH SEPARATE RUNS OF PCB. CLOSING THE INSIDE SHOULDER. WESTBOUND LANES WILL USE THEIR EXISTING CONFIGURATION.

ONCE MEDIAN BARRIER WORK IS COMPLETE. THE RAISED PAVEMENT MARKER REFLECTORS SHALL BE INSTALLED AND ALL TRAVEL LANES CAN BE RESTORED TO THEIR PERMANENT POSITIONS.

ALL PHASE 5 WORK SHALL BE COMPLETED WITH ALL LANES RESTORED BY 10/15/2023.

PHASE 6:

MILL AND PAVE THE SURFACE COURSE AS SHOWN IN THE PLANS. ∠INSTALL PERMANENT MARKINGS AND RPMS.

>ITEM 621 - RAISED PAVEMENT MARKER REMOVED, AS PER PLAN

 $^{ imes}$ THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING RAISED >PAVEMENT MARKER REFLECTORS FROM THE EXISTING RAISED PAVEMENT MARKERS PRIOR TO EACH MAINTENANCE OF TRAFFIC PHASE. AS APPROPRIATE.

ALL LABOR. MATERIALS. EQUIPMENT. AND INCIDENTALS REQUIRED TO REMOVE THE EXISTING RAISED PAVEMENT MARKER REFLECTORS SHALL BE INCLUDED WITH ITEM 621 -RAISED PAVEMENT MARKER REMOVED. AS PER PLAN.



DESIGNER JFM REVIEWER FR 01/15/21 ROJECT ID 102435

P.8 97

DESIGN AGENCY

	SUMMARY	TRAFFIC SUB	ENANCE OF 1	MAINT		DESIGN AGENCY	REVIEWE GF 01/PROJECT ID 10243
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PORTABLE BARRIER, 98 NANCHORED	570 100 890	1748	987	200 650	610	680	7035
PORTABLE BARRIER, "Y" CONNECTOR S2							
PORTABLE BARRIER, 50", AS S PER PLAN	690 1400 1400 550			660 1400 1400 460			8820
RAISED PAVEMENT MARKER REMOVED, AS PER PLAN L	402						402
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621 EACH				426			426
PAVEMENT FOR MAINTAINING 9 TRAFFIC, CLASS A	284 1 85 185	308					863
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WORK ZONE GORE MARKING, 9		214	109	61 126		239	
WORK ZONE DOTTED LINE, 9	400 372			4367 400 1224		356 392	7511
WORK ZONE CHANNELIZING H LINE, CLASS I, 12"		650 350		150 852			TE
WORK ZONE CHANNELIZING H LINE, CLASS I, 8"	800 3556 2800 4081 3909	3547 1400 1475 1456	2835 1400 2750 2942	3839 6217 4200 6192 7279	698 1750 1400 1632	690 1324 REVISIO	NO. DA
WORK ZONE EDGE LINE, 9 CLASS I, 6" (YELLOW)	0.08 0.37 0.27 0.27 0.19	0.24 0.82 0.56 0.23	0.12 0.47 0.29 0.10	0.65 1.02 0.81 0.54	0.01 0.33 0.48 0.22	0.07 0.37 0.27 0.27 0.25	11.77
WORK ZONE EDGE LINE, 9 CLASS I, 6" (WHITE)	0.09 0.37 0.27 0.17 0.19	0.09 0.75 0.54 0.06	0.19 0.48 0.16 0.18	2.48 0.09 0.70 1.02 0.86 0.49	0.32 0.48 0.12	0.07 0.37 0.27 0.27 0.25	11.33
WORK ZONE LANE LINE, 9 CLASS I, 6"				4.80 0.13 0.02	0.03 0.04	0.13 0.53 0.53 0.27 0.74	7.22
HOBJECT MARKER, TWO WAY	14 28 28 18			14 28 28 10			168
DBJECT MARKER, ONE WAY P19	12 4 7 18	36	43	4 30 1 3	13	12	197
BARRIER REFLECTOR, TYPE 2 9 1-WAY)	4			15 1			20
BARRIER REFLECTOR, TYPE 1 9 (BIDIRECTIONAL)	39 63 58 40	36	43	30 72 54 22	13	12	496
WORK ZONE RAISED DAVEMENT MARKER, AS PER PLAN	40 126 24 114 196	280 218 227 150	210 26 64 220	6 398 235 65 271 10	35 139 120 165	6 24 24 33 33	3459
MORK ZONE IMPACT ATTENUATOR, OVER 24" AND LESS THAN 36" WIDE HAZARDS, (UNIDIRECTIONAL)	2						
WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	1 1 1	3	2	1 2	1	1	14
PHASE	PRE PRE PRE PRE PRE PRE PRE PRE PRE	1 1 1 1 1 1	2 2 2 2 2 2 2	3 3 3 3 3 3 3 3	4 4 4 4 4 4	5 5 5 5 5 5 5	ARRIED TO
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						7,035 7,035		41100	7,035		PORTABLE BARRIER, UNANCHORED		4
					22	180 180 22	622 808	41110 18700	180 22		PORTABLE BARRIER, ANCHORED DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY		4
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						LS	614	11000	LS		MAINTAINING TRAFFIC FIELD OFFICE, TYPE B		4
						18 LS	619	16010	18 LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		-
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