

**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 I-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.

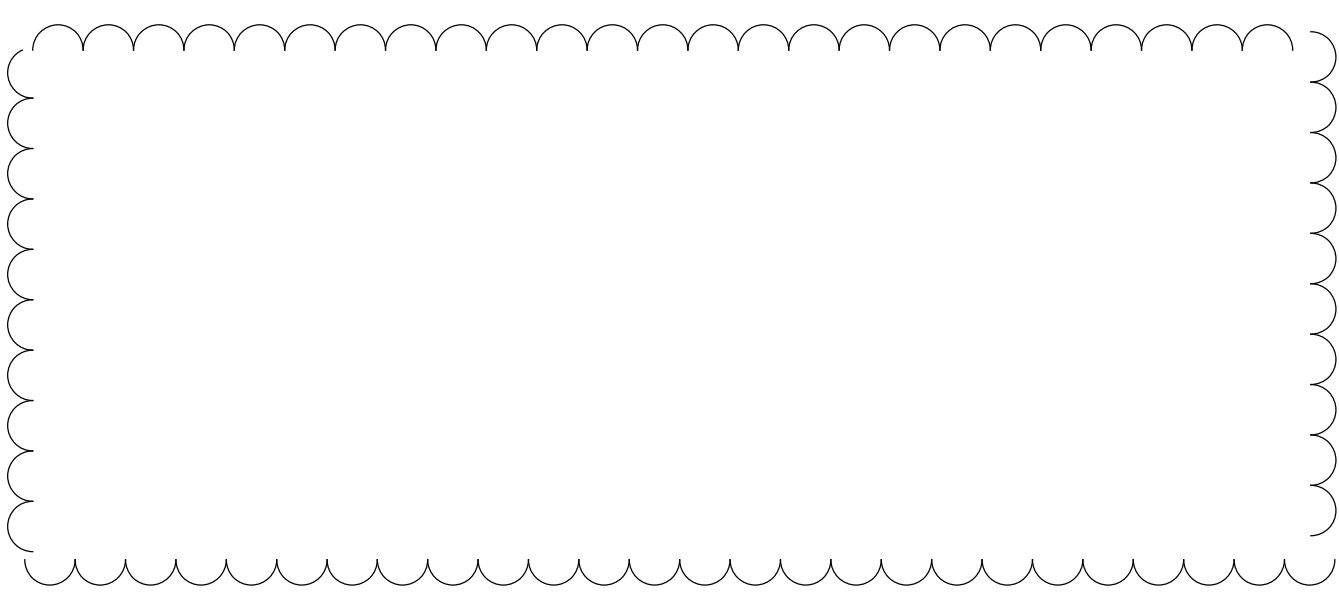
THE INSIDE-MOST EASTBOUND LANE CROSSES OVER TO THE WESTBOUND SIDE, RIDING BETWEEN THE PCB LINE AND THE EXISTING MEDIAN BARRIER. THE REMAINING EASTBOUND LANES SHIFT TOWARD THE INSIDE TO ALLOW ROOM FOR CONSTRUCTION OF THE SOUTHERN SECTION OF THE BRIDGE.

**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.



**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, ALL TRAVEL LANES CAN BE RESTORED TO THEIR PERMANENT POSITIONS. MILL AND PAVE THE SURFACE COURSE. INSTALL PERMANENT PAVEMENT MARKINGS AND RPMS.



REVISION RECORD:		
NO.	DATE	DESCRIPTION
1	10/31/22	DELETE WINTER NOTE & BARRIER PROTECTION DETAIL

DESIGN AGENCY	
DESIGNER	JFM
REVIEWER	FR 01/15/21
PROJECT ID	102435
SHEET	TOTAL
P.8	97