# GENERAL NOTES

FHWA STATE PROJECT 12

5 OHIO 35

LAKE COUNTY LAK-44-711

# TRAFFIC MAINTENANCE

## PARAPET RECONSTRUCTION - GENERAL

WHENEVER ANY WORK IS BEING DONE DIRECTLY OVER A TRAVELLED LANE OR SHOULDER THE CONTRACTOR SHALL SUPPLY SUFFICIENT SAFETY EQUIPMENT AS APPROVED BY THE ENGINEER TO PROTECT THE TRAVELING PUBLIC FROM ANY CONSTRUCTION DEBRIS.

### PUBLIC SAFETY

THE PERIOD OF TIME THAT A HAZARD IS LEFT UNPROTECTED BY THE REMOVAL OF GUARDRAIL SHALL BE HELD TO AN ABSOLUTE MINIMUM AND IN NO CASE SHALL SUCH PERIOD BE LONGER THAN ONE WORKING DAY. IF, AFTER ONE DAY, THE ENTIRE RUN OF GUARDRAIL CONSTRUCTION IS NOT COMPLETED, THE FOLLOWING SHALL APPLY:

- A. IN AREAS WHERE EXISTING GUARDRAIL HAS BEEN REMOVED OR THE GUARDRAIL IS IN A PARTIAL STAGE OF COMPLETION THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TYPE II BARRICADES WITH TYPE C (STEADY BURNING) WARNING LIGHTS WITHIN THE LIMITS OF THE UNPROTECTED AREA. THE BARRICADES SHALL BE PLACED AT 50' INTERVALS AND OFFSET AT LEAST TWO FEET FROM THE EDGE OF TRAVELED ROADWAY AND IN CLOSE PROXIMITY TO THE CONSTRUCTION. THE APPROACH END OF A PARTIALLY COMPLETED RUN OF GUARDRAIL SHALL BE FASTENED AT GROUND LEVEL TO A STEEL DRUM.
- B. IF THE EXISTING GUARDRAIL IS FOR THE PROTECTION OF AN OBSTACLE (I.E. SIGN SUPPORT,
  BRIDGE PARAPET, ETC.) THE CONTRACTOR SHALL ERECT TEMPORARY CONCRETE BARRIER FOR A MINIMUM LENGTH OF 50 FEET PRECEDING THE OBSTACLE IN THE DIRECTION OF TRAFFIC AND PLACED
  BETWEEN THE OBJECT AND THE ADJACENT LANE. THE REQUIREMENTS OF PAR. I (A)
  SHALL APPLY TO THE REMAINING GUARDRAIL WITHIN THE RUN. TEMPORARY
  BARRIER SHALL BE FLARED AT A 5:1 TAPER RATE, AND SHALL INCLIDE A TEMPORARY END TERMINAL
  AS PER MC-9A. (EACH PIER IS CONSIDERED AN INDIVIDUAL OBSTACLE).
- C. THE REQUIREMENTS STATED IN (A) AND (B) SHALL APPLY AT ALL TIMES INCLIDING WHEN THE ADJACENT LANE IS CLOSED. WHEN THE ADJACENT LANE IS OPENED (OR RE-OPENED) AND THE CONSTRUCTION OF ANY RUN OR GUARDRAIL OR CONCRETE BARRIER IS NOT COMPLETED WITHIN ONE WEEK, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY CONCRETE BARRIER IN THE INTERIM\*TIME IT TAKES TO COMPLETE THE WORK. THE APPROACH END OF THE CONCRETE BARRIER SHALL BE FLARED 10 FT. (SEE SHEET NO. 34-) AND SHALL INCLUDE A TEMPORARY END TERMINAL AS PER MC-9A. IN ADDITION, A TYPE II BARRICADE WITH TYPE B (HIGH INTENSITY FLASHER) WARNING LIGHT SHALL BE PLACED IN FRONT OF THE INITIAL BARRIER SECTION.

THE TERM "GUARDRAIL" AS USED HEREIN SHALL BE UNDERSTOOD TO COVER ALL TYPES OF GUARDRAIL, EXISTING OR PROPOSED FOR THE PROJECT INCLUDING BARRIER DESIGN GUARDRAIL.

THE COST OF COMPLYING WITH THESE SAFETY PROCEDURES SHALL BE INCLUDED IN THE LLMP SUM BID FOR ITEM\_614, MAINTAINING TRAFFIC.

#### GENERAL CONSTRUCTION SEQUENCE

THE CONTRACTOR IS REMINDED THAT, IN THE CONDUCT OF THIS PROJECT, HIS SEQUENCE OF OPERATIONS SHALL BE PLANNED AND EXECUTED IN SUCH A WAY AS TO MINIMIZE THE NUMBER OF LANE REDUCTIONS AND/OR LANE WIDTH REDUCTIONS REQUIRED TO MAINTAIN TRAFFIC THROUGH THE PROJECT. (IN THIS REGARD, WHEN A TRAFFIC LANE IS CLOSED, ALL OPERATIONS TO THAT LANE (EXCEPT THE FINAL PAVEMENT MARKINGS) SHALL BE PERFORMED IN AN ORDERLY SEQUENCE SUCH THAT IT WILL NOT BE NECESSARY TO AGAIN CLOSE THAT LANE UNTIL THE PAVEMENT MARKING OPERATIONS BEGIN.

IT IS THE INTENT OF THIS PROJECT TO MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION ON THE MAINLINE PAVEMENT UNLESS OTHERWISE NOTED. ALSO, THE CONTRACTOR IS REMINDED THAT THE FLOW OF TRAFFIC SHALL NOT BE "SPLIT" WHEN BEING DIVERTED AROUND A WORK AREA UNLESS THE WORK IS BEING DONE IN THE GORE AREAS OF AN EXIT RAMP.

IN ADDITION TO THE <u>CONSTRUCTION AND MATERIAL SPECIFICATIONS</u>, THE FOLLOWING SPECIFIC PROVISIONS ARE MANDATORY.

#### MAINTAINING VEHICULAR TRAFFIC

#### GENERAL PROVISIONS

- 1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE SCHEDULE OF ONE LANE IN BOTH DIRECTIONS AS DESCRIBED IN THESE PLANS. THE CONTRACTOR SHALL SET UP AND OPERATE HIS EQUIPMENT IN SUCH A MANNER AS TO MINIMIZE ENCROACHMENT UPON THE TRAVELED WIDTH OF PAVEMENT.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE RESPONSIBLE LAW ENFORCEMENT AGENCY NOT LESS THAN TWENTY-FOUR (24) HOURS PRIOR TO A SCHEDULED DISRUPTION OF TRAFFIC.
- 3. NO STOPPAGE OF TRAFFIC OR ESTABLISHMENT OF LANE RESTRICTIONS SHALL OCCUR WITHOUT LAW ENFORCEMENT PERSONNEL AT EACH LOCATION TO DIRECT TRAFFIC.
- 4. DURING OVERHEAD CONSTRUCTION THE CONTRACTOR SHALL PROVIDE, IF DEEMED NECESSARY BY THE ENGINEER, SAFETY NETS AND/OR OTHER SAFETY DEVICES UNDER THE STRUCTURES TO PROTECT TRAFFIC IN THE AREA OF CONSTRUCTION.
- 5. DURING NON-WORKING PERIODS, OPEN UNDERDRAIN EXCAVATIONS SHALL BE COVERED WITH STEEL PLATES AND DELINEATED WITH WARNING FLASHERS AND/OR OTHER APPROVED DEVICES AS DEEMED APPROPRIATE BY THE ENGINEER. STEEL PLATES SHALL BE ANCHORED AS DIRECTED BY THE ENGINEER.
- 6. EXISTING SIGNS LOCATED WITHIN THE ROAD WORK AREAS WHICH ARE NECESSARY FOR INTERIM OR PERMANENT TRAFFIC CONTROL SHALL BE REMOVED AND REFRECTED IN LOCATIONS AS APPROVED BY THE ENGINEER.
- 7. THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NEW WARNING AND INFORMATION SIGNS NECESSARY FOR MAINTAINING TRAFFIC. THE CONTRACTOR SHALL DETERMINE WHAT SIGNS ARE NEEDED AND ADVISE THE ENGINEER TWO (2) WEEKS IN ADVANCE OF HIS DETAILED PLANS. (SEE "Sheef 35 and drawing AS 7K-4 by the Bureau of Traffic For minimum signing application.)
- 8. TRAFFIC CONTROL DEVICES SHALL BE SET UP PRIOR TO THE START OF CONSTRUCTION, AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH SPECIAL CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS THEY
  ARE NEEDED AND SHALL BE IMMEDIATELY REMOVED THEREAFTER. WHERE OPERATIONS ARE PERFORMED IN STAGES, THERE
  SHALL BE IN PLACE ONLY THOSE DEVICES THAT APPLY TO THE CONDITION PRESENT DURING THE STAGE IN PROGRESS.
  ALL SIGNS WITH MESSAGES WHICH DO NOT APPLY DURING A CERTAIN PERIOD SHALL BE COVERED OR SET ASIDE OUT OF
  THE VIEW OF TRAFFIC.
- 9. PAVEMENT REPAIR EXCAVATIONS SHALL BE PROTECTED WITH WARNING FLASHERS AND FOUR 55 GALLON WATER DRUMS IN ADVANCE OF THE EXCAVATIONS. THE DRUMS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER.

10. PLACEMENT OF FINAL ROADWAY PAVEMENT MARKINGS SHALL BE ACCOMPLISHED ONLY MONDAY THRU FRIDAY BETWEEN THE HOURS OF 9:00 A.M. AND 3:00 P.M. WITH A MAXIMUM OF ONE LANE EACH DIRECTION CLOSED AT ANY ONE TIME.

THE CONTRACTOR SHALL PROVIDE TWO (2) TRAILING VEHICLES PLIS A POLICE CRUISER WITH FLASHING BEACON FOLLOWING THE PAVEMENT MARKING EQUIPMENT WHEN MARKINGS ARE PLACED IN ORDER TO PROVIDE ADVANCE WARNING TO THE MOTORIST OF THE TEMPORARY LANE CLOSURE AND CONSTRUCTION. THE TWO (2) TRAILING VEHICLES SHALL TRAVEL 500 FEET APART WITH THE REMOTE VEHICLE TRAVELING ON THE SHOULDER (LEFT OR RIGHT AS APPLICABLE) WHERE USABLE SHOULDER IS AVAILABLE. THE INTERMEDIATE TRAILING VEHICLE SHALL TRAVEL IN THE CLOSED LANE 500 FEET BEHIND THE PAVEMENT MARKING EQUIPMENT. THE POLICE CRUISER SHALL TRAVEL 500 TO 1000 FEET BEHIND THE REMOTE TRAILING VEHICLE.

EACH TRAILING VEHICLE SHALL HAVE YELLOW FLASHING BEACONS PLUS ORANGE AND BLACK CONSTRUCTION WARNING SIGNS MOUNTED ON THE BACK FACING TRAFFIC WITH STANDARD TYPE MESSAGES ADVISING MOTORISTS OF THE WORK AHEAD, ADVISORY WARNING SPEED, AND WHICH LANE IS CLOSED.

- 11. THE CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT NECESSARY TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE PRECEEDING REQUIREMENTS.
- 12. ALL LABOR, MATERIALS, EQUIPMENT AND ANY INCIDENTALS REQUIRED TO COMPLETE THE WORK AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614-MAINTAINING TRAFFIC, EXCEPT THAT PAYMENT FOR THE 6" ITEM 301 CONSTRUCTED FOR TRAFFIC MAINTENANCE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 301 BITUMINOUS AGGREGATE BASE, AS PER PLAN.

#### MAJOR WORK ITEMS

THE FOLLOWING MAJOR WORK ITEMS WILL REQUIRE TRAFFIC MAINTENANCE PROCEDURES WHICH SHALL BE INCORPORATED INTO THE CONTRACTOR'S SEQUENCE OF OPERATIONS:

REPAIR OF PAVEMENT JOINTS AND PANELS
REPAIR OF BRIDGE PARAPETS
ASPHALT CONCRETE OVERLAY
PAVEMENT MARKING

		31-24		<b></b>	
	Δ[	OVANCE	WA	R	NING SIGNS
_	DISTANCE	SIGN	SIZE		DESCRIPTION
LEFT LAVE CLOSED	500′	OW-123 MOD	48" X	18"	LEFT LANE CLOSED 500 FT.
		QV-143		30"	35 MPH
	1000′	OW-125 MOD	48" X	H8"	LEFT LAME CLOSED 1000 FT.
	2000′	OW-123 MOD	48" X	48"	LEFT LANE CLOSED 2000 FT.
	3000°	OW-134	48"X	<b>48</b> "	ROAD WORK AHEAD
			1		
RIGHT Lave Closed	500′	0H-122 MOD	188/X	18	RIGHT LANE CLOSED 500 FT.
		04-143	30" X	80"	35 MPH
	1000′	OW-122 MODE	48" X	18"	RIGHT LANE CLOSED 1000 FT.
	2000′	OW-122 MOD	48" X	18"	RIGHT LANS CLOSED 2000 FT.
	3000′	0H-134	48" X	18"	ROAD WORK AHEAB
		-			
T RAMP ROSS C. LANE	GERE	OW-SPEC.	48" X	<b>.</b> 8	EXIT RAMP A
F 6.00 5.00 J	500'	OW-SPEC	48"X	8"	EXIT RAMP 500 FT.
Z Z	1000 <u>,</u>	OW-SPEC	48"X	8"	EXIT RAMP 1000 FT.